Competition Among Nations:

The Legality of Export Credits

Yannis Ailianos
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Competition Among Nations: The Legality of Export Credits

by

Yannis Ailianos

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Professor Constantine Stephanou

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Preface

In a globalizing world ever more dominated by economic exchanges, the study area of international trade has become a key field of discussion, debates and controversies, both in theoretical and in practical terms. My long-lasting activity in the aerospace industry and, particularly, in the field of exports, has stimulated my interest in the practices fueling international trade and, certainly, export finance counts among the fundamental ones. The interest to invest effort and dedication to study a sub-case of export finance, the practice of officially supported export credits, came as a natural result from the fact that various aspects of this practice – although widely praised - remained foggy, blurry and subject to public criticism. Not the least, the major confrontation in the 2000s between Airbus and Boeing, but also between the EU and the USA, on subjects related to subsidies further ignited the interest for such topic. In addition, a research in this area lays at the crossroad of three areas of studies i.e. international regimes, international law and international trade, satisfying my personal conviction on the value addition of inter-disciplinary research.

In this context, one of the major challenges in the development of the thesis was related to the balance between the various dimensions that needed to be addressed and their respective weight in the overall analysis. How much focus on international law versus international relations is required? What should the importance of the theoretical aspects versus the case study be? Which elements should be included and which left aside? Should side topics such as public choice or overlap of regimes, impacting the study area, be further developed or left for future research? Such queries were being addressed at each turning point of the research and I trust that the final result is well-balanced in the sense of giving an all-embracing view of the topic and supporting the reaching of suitable conclusions in the global picture. Perhaps an extension to a deeper analysis of the WTO practices, as the ‘second leg’ (the first being the Arrangement) dealing with the practices of officially supported export credits and subsidies could have been relevant.

In terms of research, a major issue that came up since the first steps of data collection was the lack of sufficient quantitative details of international transactions supported by the said practice. The original idea of making a series of quantitative analyses was, therefore, progressively

abandoned and replaced by more qualitative results, leading however to, what I believe are, very similar conclusions. Another striking aspect in the overall picture is the contrast between the apparent (and true) importance of the Arrangement in terms of mechanism for controlling nations' practice of export credits and thereby levelling the playing field in international trade and its eventually marginal role in quantitative terms resulting from the fact that: it impacts only medium and long term international transactions, affects de facto a restricted number of business areas and applies to a handful selection of nations. In that sense and despite the true vision of the Arrangement for a level playing field in international trade, the legality of this practice is questioned as it does not bind large economies such as China and India, it raises questions in terms of proper use of taxpayers' money and it generates a complex and unclear environment for international transactions for, finally, only a small share of the pie of international trade. The Arrangement may have, indeed, been a victim of its own success.

In the context of the research and challenges described above, I would like to extend my warmest and most genuine thanks to Constantine A. Stephanou, Professor of International Economic Law and European Integration, who supervised and guided my entire effort through the complex path of this thesis. I would also like to deeply thank the other members of the jury that confronted the presentation of my thesis – Professor Raftopoulos (International Law), Professor Tagaras and Associate Professor Meng-Papantoni (European Law), Professor Chrysochoou (International Relations), and Professor Papazoglou and Assistant Professor Antoniadis (International Political Economy) - for the very enlightening discussion on the various aspects (legal, trade, international relations, etc) and the interrelations between those aspects as well as for their always relevant comments that enabled further improving the quality of this work. Finally, I would like to thank my parents, Contantinos and Victoria, who inspired me and offered me the intellectual tools to undertake this research, my sister Evily who supported various aspects of researching, writing and editing and my son Pakos for his understanding and patience on the long hours of play that I missed spending with him over the last years.

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INTRODUCTORY PART

0.1 Scope

International trade has been the fuel of world economy throughout the 20th century. Reaching a volume in excess of US$ 18 trillion in 2011[1], increasing international trade is synonymous with more exports, more production, more development and eventually more wealth for exporting nations. Increasing international trade and in particular increasing exports implies increasing national wealth and the well-being of the people belonging to this nation. Governments have, naturally, been very interested in their industry exporting and inclined to put efforts and use national resources in order to support such wealth-generating activities labelled exports. However, the action of a government to support its exports with the aim of transferring an increased wealth to its own people also incites other governments to do the same. Following the same reasoning, ever more governments would put ever more resources to support exports with, as a result, a spiralling competition among nations to capture a bigger portion of the wealth generated by international trade.

Such practice may subsequently lead to a financial spiral whereby nations would use an increasing amount of taxpayers' money to secure ever more export deals. Nations have, thus, attempted to contain such possible war by sitting together and establishing some rules to be applied by the nations that have agreed to participate. This has led to the creation of international laws for, among other sectors, international trade. The main stakeholders for the generation, monitoring and maintenance of laws for international trade are the World Trade Organization (WTO), born from the transformation of the General Agreement for Tariffs and Trade (GATT), which ruled international trade for most of the period after World War II, and the Organization for Economic Cooperation and Development, hosting in fact the administration of the Arrangement.

[1] World Trade Organization International Trade Statistics 2012

Each nation or group of nations, in this joint effort to create and apply rules, naturally attempt to emphasize, promote and convince other nations of the well-founded of such rules that would primarily protect the interests of this nation or group of nations. The process of creating, monitoring and maintaining such rules falls under the scope of the relations among nations, or international relations.

As a result of the above, the construct of the Arrangement on Officially Supported Export Credits, the international gentlemen's agreement entered into among nations aiming at regulating officially supported export credits in international trade[2], finds itself at the crossroads of the three disciplines of international trade, international law and international relations. Elements of theories and practice of those disciplines will, therefore, be used to support the objectives, analyses and conclusions of this research.

With the aim to support their national industries export to the international marketplace, governments have traditionally been using a wide array of tools. The most straightforward tool takes the form of export subsidies, which consists in governments providing monetary and/or non-monetary benefits to exporters on the basis of the exports achieved or to be achieved. Such export subsidies, in any of their forms, were banned by international treaties on the grounds of biasing the international marketplace by artificially reducing the export prices of goods and services. One element, however, of support given by nations to their industries when they export are export credits, which have been exempted from the ban on export support. Export credits are widespread tools in international trade which are normally provided under specific terms granted by financial institutions operating in the free marketplace. In 2011, the total level of exports supported through export credits by public and private institutions was assessed at between US$ 6,5 trillion and US$ 8 trillion, representing a financing of 30%-40% of exports[3]. Governments have agreed that government-driven institutions can also provide such export credits, especially when the private sector is reluctant to do so, as in cases of medium and long-term export contracts. With the aim to avoid that the government-driven institutions, widely called Export Credit Agencies (ECAs), extend export credits under preferential conditions that can be assimilated to export subsidies, nations have come together and entered into a gentlemen's agreement, the Arrangement on Officially Supported Export Credits. The Arrangement, is therefore, the agreement that regulates and monitors the use of officially supported export credits with the primary aim to secure levelling the playing field among exporting nations and, thereby, to prevent

[2] See definition in Krasner, S., 1982. International Regimes. International Organizations, 36(2) – further analyzed in Paragraph 0.3.2
[3] Committee on the Global Financial System, 2014.

distortions in international trade. As such, the Arrangement co-exists, together with the WTO, as one of the two pillars of international law regulating officially supported export credits (WTO focusing more on aspects of subsidies).

In this context, the scope of this thesis is to evaluate the legality of officially supported export credits as regulated by the Arrangement on Officially Supported Export Credits today. The term 'legality' should be seen not only in the context of international trade, but also in the sense of whether officially supported export credits are justified in the wider context of international relations. To achieve this, the thesis will analyse both theoretical aspects of international relations that led to the creation and evolution of the Arrangement and the economic implications of the application of the provisions of the Arrangement. By using the Arrangement as the basis of its analysis, the thesis will therefore attempt to draw useful conclusions on theories of international relations, the practical economic implications of the Arrangement i.e. whether it actually secures the level playing field or creates biases in international trade, and the possible justification of the well-founded of governmental involvement in the area of export credits.

Existing literature covers the evaluation of individual aspects of the Arrangement and its impact on international trade. Generally the positive aspects of the Arrangement are praised, indicating that the Arrangement has considerably assisted in levelling the playing field in international trade when export credits are concerned. It is also praised as an example of international negotiations leading to a positive effect despite initial disagreements among international stakeholders. At the same time, other voices speak against an Arrangement that is pumping billions of taxpayers' money in a practice that remains non-transparent and seems to privilege some economic areas while undermining others. The practice of official support for export credits is also criticized for supporting projects harming in various aspects the beneficiary nation. No deep analysis has been found so far that can be used to assess the economic and political justification of official support in the area of export credits. This thesis will attempt to compile and balance the various views on the topic and bring light into the real implications of officially supported export credits on international trade by focusing as an example on the sector of the aerospace industry. It will, additionally, develop the knowledge of theories of international relations by applying existing theories on the case of the Arrangement and deriving related conclusions. Finally, it will draw recommendations with respect to possible evolutions or amendments that could benefit international trade in relation to officially supported export credits.

With the aim to dig deep in the mechanisms of the Arrangement and the possible implications in international trade, it was deemed necessary to focus on one particular industrial sector. The sector selected for this analysis is the aerospace industry on the grounds that, on the one side, it affects large amounts of export credits extended officially by a number of participating nations and, on the other side, it constitutes one of the key areas that have been consistently supported by governments, thus giving good insights into the wider practices of governments regarding subsidies and support. The analyses of this thesis will, thus, focus on the aerospace industry as an illustration of officially supported export credits, but will attempt in parallel to give a broader picture beyond the boundaries of the aerospace industry.

Historical Background

The OECD Arrangement on Officially Supported Export Credits ('the Arrangement') was developed in the 1970s with the aim of controlling the financial means provided by Governments to increase their national industry's exports. Such financial means and products, the officially supported export credits, were in fact assimilated to export subsidies, thus being deemed to bias competition on international export markets. The Governments were indirectly assimilating part of the cost of the products sold with the eventual effect of an indirect price dumping and a competition between Governments to increasingly support exports of their national industry. By doing so, an additional consequence resulted on the national budgets, as the costs for supporting export sales were to some extent paid by the national taxpayers.

In this context, a number of OECD nations came to negotiate an Agreement aiming at generating rules and procedures that would harmonize the practices of Governments on such officially supported export credits. The result of the negotiations took the form of a gentlemen's agreement, the Arrangement, under the auspices of the OECD, without however a binding or committing effect onto the participating nations to the Arrangement. Nonetheless, this framework for controlling the practices of officially supported export credits has constituted a major breakthrough among the participating nations not only in terms of result (an Arrangement was eventually concluded) but also in terms of negotiating process among the affected nations.

The Arrangement has since dramatically evolved and has been enhanced, amended, expanded, further detailed at several occasions but also used and applied by the participating Governments with only few exceptions.

The Arrangement has also developed in specific sectors of business and specified as such in corresponding annexes to the Arrangement. A key annex refers to exports of civil aircraft, which, only considering the volumes at stake, indicates the importance of the Arrangement in this area of international trade.

The topic of governmental support for export credits is directly embedded in the wider discussion on free trade and protectionism. The issue is highly controversial and the supporters of each of these positions present a number of arguments that appear in both cases to be solidly founded. As Gilpin[4] indicates, 'there is much room for disagreement over trade and its effects because most propositions have never been tested' and continues 'Indeed the issues may never be resolved because the assumptions and objectives of the two propositions are so different.'

Liberals, supporters of free trade, put forward the argument of historical records that show superiority of such proposition in nations that have adopted it. Their theories first appear with Adam Smith's The Wealth of Nations[5] in which it is argued that free trade without trade barriers would allow each nation to specialize in a sector where this nation has a comparative advantage over others in terms of land, capital and labour. If each nation specializes in this manner in the sector where it has a comparative advantage, this will lead to an optimal use of resources. In turn, the optimal use of resources will lead each nation to produce comparatively more wealth, increasing in parallel the overall wealth of all nations together. Benefits to the welfare are further generated through e.g. widen of consumer choice, increased competition, reduction of prizes, increased economies of scale. It is furthermore argued that, even a single nation applying principles of free trade within an international environment of protectionism will gain benefits compared to a situation in which this same nation also applied protectionist principles.

Nevertheless, Paul Barioch[6] points out that free trade has historically been the exception and protectionism the rule. Nations appear to be very willing to increase the development of their national industry and consequently their nation's wealth by developing the outbound international trade through reduced trade barriers, but remain ever reluctant to open up their own economies to foreign products thus imposing barriers in inbound trade. Supporters of protectionism argue that the debate over trade protection cannot be based on the sole argument of economic benefits. They see trade and economy as a means of achieving other political targets, thus the discussion has to be enlarged to a wider political debate. Apart from the argument of protection of infant

[4] Gilpin, R., 1987. The Political Economy of International Relations. Princeton University Press.
[5] Smith, A.,1976. Recherches sur la Nature et les Cause de la Richesse des Nations. Editions Gallimard.
[6] Barioch, P., 1993. Economics and World History: Myths and Paradoxes. Harvester Wheatsheaf.

industries, also accepted by the theories of free trade, protectionism can also bear benefits for nations such as less developed nations which, without protectionism, will not be in a position to develop their own economy and will permanently remain dependent on developed nations (Gilpin[7]). The developmental state of the nations, the difference of wages, the difference of natural resources and the level of technology create, they argue, an imbalanced system in which free trade cannot simply apply. Today, trade issues are seen in the wider context of national sovereignty, culture and other qualitative aspects which are hard to apprehend and exchange in negotiations.

After World War II and its devastating effects, substantial efforts were put into place in the direction of free trade. Robert Mulligan[8] traces the application of economic theories in international trade. He indicates that the 19th century, from the congress of Vienna until World War I, was an era of trade largely unobstructed by trade barriers in which 'merchants were able to buy and sell where they wanted, largely unimpeded by governmental action'. This changed after World War I and until World War II, the world economic environment was characterized by rapid inflation, increased nationalism, the rise of the US as a dominant economic player and, consequently, by the rise of trade protectionism. Mulligan states that, by the end of World War II, trade barriers of all kinds amounted to some 40% on manufactured products, leading to virtually reducing export growth to zero. In this context, leading nations agreed to collectively attempt to reduce the applicable export subsidies, tariffs and non-tariff barriers to international trade and increase its liberalization. The General Agreement on Trade and Tariffs (GATT) was thus created in 1947 and, after a number of significant and long-lasting negotiation rounds, achieved a reduction of average tariffs on manufactured goods down to 4,7%. The incontestable success of the GATT negotiations rounds in terms of reduction of tariffs, quotas, subsidies and other trade barriers, lead during the Uruguay Round to the decision to create the World Trade Organization (WTO), a wider organization on world trade incorporating the GATT discussions but expanding beyond its scope and, importantly, including means to enforce the trade agreements reached within the WTO.

In parallel to the efforts within the GATT to reduce tariffs and trade barriers, the Organization for Economic Co-operation and Development (OECD) was developing the structures to regulate another form of trade barriers, the government supported export credits. Such export credits are

[7] Gilpin, R.,2001. Global Political Economy – Understanding The International Economic Order. Princeton University Press.

[8] Mulligan, R. M., 2007. Export Credit Agencies: OECD Arrangement for Officially Supported Export Credits. Journal of Management Research.

granted by governments or financial institutions, the Export Credit Agencies (ECAs) empowered by governments to perform this role on their behalf. Export credits have been a source of debate in terms of export subsidies as governments can and have, through export credits, an additional tool to support the exports of their own industries by reducing a number of cost parameters that would affect the end-price to the export customer. Thus, regulation of export credits was seen as imperative to prevent trade distortions and unfair trade practices (factually, using taxpayers' money to reduce prices of export goods). In fact, Delio Gianturco[9] identifies not less than eleven different sorts of export credits. He estimates the volume that flows through export credit agencies at more than US$ 1 trillion per year, while more than 2/3rds of world's nations are today entitled to benefit from export credits. Export credits can be provided for a large variety of international trade transactions, including investments in major infrastructure projects but also major manufactured goods such as aircraft. Notably, the importance of exports and, consequently, of export credits is highlighted in a book edited by Hufbauer and Rodriguez[10], in which James Harmon, President and Chairman of the US Eximbank indicates that exports as part of US GDP has doubled from some 7% to 12% between the mid-'80s and 2000. In 2011, the Eximbank alone has supported over US$ 30 billion of export sales and 213.000 American jobs. This is the volume and scope of trade that OECD was called to regulate.

Export credits are, typically, not seen as a subsidy per se, as export credits are naturally involved in international transactions. However, government involvement in export credits leads to the notion of subsidy when such government supported export credits cannot be found on the commercial market. Such credits can also be linked to 'tied aid', which is governmental aid linked to the export of specific products (vs. 'untied aid', which consists of general aid from one nation to another). James Rude and Jean-Philippe Gervais[11] clearly qualify government involvement in export credit arrangements as one type of 'indirect export subsidy'. In this context, the OECD developed in the '70s the OECD Arrangement for Officially Supported Export Credits (the Arrangement, came into force on 1st April 1978), a gentlemen's agreement between participating nations ruling the manner that governments grant export credits, including interest rates, insurance premiums, down payments, duration, etc. In a special edition for the 20 years of application of the Arrangement[12], the contributors to the edition praised the results as well as the process that was applied in order to achieve the results. As Janet West puts it in this edition, the

[9] Gianturco , D. E., 2001. Export Credit Agencies – The Unsung Giants of International Trade and Finance. Quorum Books. p 21-34.
[10] Hufbauer, G. and Clyde et al., 2001.The Ex-Im Bank in the 21st Century – A New Approach?. Institute for International Economics. p. 39-46.
[11] Rude, J. and Gervais, J. P., 2007. An Analysis of a Rule-based Approach to Disciplining Export Credits in Agriculture. International Economic Journal, 21(3).
[12] OECD (1998) The Export Credit Arrangement, Achievements and Challenges 1978-1998. OECD Publishing, p 9-11.

'mission impossible' to align participating nations on the matter of officially supported export credits was turned into a 'mission accomplished', through dealing with the issue in the proper diplomatic and politically correct manner, achieving a minimum of rules that governments indeed agreed to apply. Based on the success of the Arrangement, the latter was further developed in various respects, including the creation of very specific attachments to the Arrangement for the regulation of individual fields of business. The most recent of those attachments is dedicated to export credits in the field of civil aviation.

However by 2011, criticism on the Arrangement and its effects has consistently been mounting and in a recent OECD edition on the occasion of 50 years of export credits (OECD[13]), many voices appeared less enthusiastic about the Arrangement and its future. Mike Roberts[14] titles his article 'OECD and Agricultural Export Credits: A Singular Failure', Kurt Schaerer[15] indicates that 'Failure to detect and accept the need for timely adaptation will inevitably result in high repair costs, including loss of political goodwill' and lists a number of issues and future challenges. Denis Stas de Richelle[16] indicates the concerns for a level playing field among nations. The current financial crisis is also addressed as well as the desire to link government supported export credits to environmental benefits. Robert Mulligan[17] specifically mentions the issue of Brazil, India and China as they have their own mechanisms to support exports. As they are not part of the OECD and do not abide by the respective rules, these nations have a larger room to offer more advantageous terms for export credits support thus creating distortions in international trade. More recently, and referring to internal issues rather than international competition, Jeb Hensarling[18] a Republican Congressman from Texas indicates that ‘Thus, it’s no surprise to learn that Ex-Im’s inspector general is investigating more than 30 cases of fraud involving the bank. Last month former Ex-Im employee Johnny Gutierrez pleaded guilty to accepting bribes on 19 separate occasions.’ In another occasion[19], Hensarling mentions ‘You received the subsidy. You believe it is necessary to your business model – I accept that. But how is that fair to other millions and millions of small businesses that sell to Americans but don’t get their products subsidized by the federal government?’ In Fraser Forum, Mark Milke[20] clearly attacks the provisions of the Aircraft Sector Undertaking on Export Credits for Civil Aircraft and shows that the Canadian

[13] OECD , 2011, Smart Rules for Fair Trade: 50 Years of Export Credits. OECD Publishing.
[14] OECD , 2011, Smart Rules for Fair Trade: 50 Years of Export Credits. OECD Publishing, p107-111.
[15] OECD , 2011, Smart Rules for Fair Trade: 50 Years of Export Credits. OECD Publishing, p112-115.
[16] OECD , 2011, Smart Rules for Fair Trade: 50 Years of Export Credits. OECD Publishing, p146-149.
[17] Mulligan ,R. M., 2007. Export Credit Agencies: Competitive Trends in G7, Emerging Economies and Reform Issues. Journal of Management Research, 7(1).
[18] Hensarling, J., 2015. An Open Letter to Republicans on the Ex-Im Bank. The Wall Street Journal. June 3.
[19] Weisman, J.,2015. Jeb Hensarling’s Fight Against Ex-Im Bank Successes, for the Moment. The New York Times, June 25.
[20] Milke , M., 2010. Aerospace Subsidies – The latest 'distortion of competition’. Fraser Forum. 12-13 March 2010.

government is applying export credits practices that do not comply with the Arrangement and further distort international competition, e.g. by giving additional advantages to the national companies or by accepting that such companies do not repay the national ECAs under the agreed terms.

The specific attachment to the Arrangement on civil aircraft is leading to large controversies. As a duopoly for civil aircraft (Airbus and Boeing) or oligopoly if regional jets are also included, the specific sector presents a number of unique characteristics. The sector is seen by, probably, all nations involved in aircraft manufacturing as strategic and thus the governments' attempt through various means to support their national actors. Both US and EU have addressed to the WTO what they consider as an unfair trade practice of, respectively, the other player. The adherence of Brazil to the Arrangement and the participation of Canada, both involved in regional aircraft manufacturing, is creating an environment in which the two traditional players attempt to further strengthen their positions while the new entrants want to have their share of benefits. The issues at stake are of such importance that Paul Krugman and Maurice Obstfeld[21] use the example of Airbus and Boeing to illustrate the needs of governments to support their national industries in this sector and the detrimental effects on competition through their dedicated strategic trade policies in this area. They demonstrate the effects of subsidies on international competition as an example of such detrimental effects. Furthermore, the volumes at stake, the impact on high technology, the effects on employment combined with much reduced profit margins achievable in this sector show that even limited subsidies or government supported export credits can create a price difference that has the potential to shift a customer's buy decision from one company to another. In particular during the current financial crisis, where credits are harder to find and more expensive, Robert Wall[22] argues that the role of the ECAs in the civil aircraft sector becomes even more crucial. The effects, however, of governmental supported export credits in the civil aircraft sector expand into the business of airlines. The sequence of events is simple: an airline based in a country where it can benefit from government supported export credits means it will have access to cheaper (comparatively) aircraft prices compared to an airline based in a developed country in which government supported export credits are not allowed. Consequently, this airline will have the potential to offer even marginally better prices to its customers compared to the airline based in the developed country. As the business of air traffic is global, the first airline will have an advantage over the second and, thus, it can be argued that the provisions of the Arrangement itself create a trade distortion. This effect is also to be seen in the perspective of

[21] Krugman, P. and Obstfeld, M., 1992. Economie Internationale. De Boeck-Wesmael. p. 321-325.
[22] Wall, R., 2011. Banking on Support. Aviation Week and Space Technology, 173(37).

aircraft leasing companies that may constitute intermediates for airlines to have access to undue benefits.

The questions on the Arrangement are multiple. Beyond its compatibility with other international treaties and agreements such as the WTO and the EU, questions such as the extent of regulation that the Arrangement provides versus trade distortion need to be examined. An equally important issue arises from the fact that the Arrangement is only a gentlemen's agreement without further legal base. One can also ask whether a complex and foggy mechanism regulating the government supported export credits is finally beneficial to international trade. The issue of the 'free ride' from countries not following the rules of the Arrangement is also key. Finally, the distortions that seem to originate from the attachment on civil aircraft export credits will need special attention. Today, many of the contributors to the existing literature on government supported export credits suggest modifications, amendments, further developments to the Arrangement. It is necessary to closely examine those thoughts and compile a comprehensive set of proposition for a more liberal trade system with respect to such export credits. This is especially important in an environment characterized by a variety of parameters beyond pure trade where the question of 'what is fair and what is unfair trade practice' is raised and reflected in what is named as the 'New Trade Agenda'.

Methodology, research context, structure

The thesis is based on analysis of publicly available information and data, collected from a broad range of source in an attempt to cover the largest scope of perspectives and approaches.

As a first tool, a review of existing literature and theories affecting the scope of the thesis is thoroughly examined, summarising the existing level of knowledge in related areas and identifying possible points of interest for the further development of the thesis.

With respect to international treaties and agreements, the analysis takes into account international references on the proceedings of analysing and comparing such documents and respective tools used in analysis of international law, including findings out of existing jurisprudence.

Statistical analysis will be used to draw results on the use and effects of the Arrangement on international trade and give an appropriate understanding of the real dimension of the Arrangement and its practice.

In terms of impact of the Arrangement on the aerospace industry, the analysis uses selected data on the economics of the airlines and aircraft manufacturers. Thus a main source of reference originating from data of international trade especially for the aerospace and aviation industries.

Due to the focus as a case study on the aircraft industry, the thesis will take as practical examples those nations and their export finance vehicles that are most relevant to the specific industry. Coincidentally, those nations also form the big bulk of international exporters for other sectors as well, thus this selection of nations is also deemed to be statistically relevant for the wider context of officially supported export credits.

To that extent, the thesis will combine various areas of knowledge such as international economics, international politics, law and business. The means to reach the objective will include review of existing bibliography, statistical analyses and correlations, qualitative interviews with selected representatives of the disciplines and, possibly, surveys with entities affected by the Arrangement.

The research for this thesis was performed by accessing public information such as research papers, PhD theses, journals, annual reports, internet information, books, statistics, etc. One of the limitations affecting the quality of the data presented in this thesis stems from the lack of transparency of data on officially supported export credits. Despite requirements for ECAs to disclose certain level of information, the data across publicly available source are not sufficient and not consistent across ECAs. Eurodad[23] states that 'Transparency in ECAs' operations and financial accounting is also a serious concern. Accessing data on ECA supported projects is extremely challenging and in many cases is an impossible mission.' Similarly, the National Association of Manufacturers[24] states that 'data on the size of total official export credit worldwide are not available'. Communication with the Secretariat of the Arrangement and with individual ECAs for the purpose of this research confirms this statement.

As a result, data on the activities of ECAs, when available, are often of different nature and quality and may also be bundled in distinctive manners. International reports on ECAs thus analyse, filter

[23] Brynildsen, O.S., 2011. Exporting goods or exporting debts? Eurodad.
[24] National Association of Manufacturers , 2014, The Global Export Credit Dimension.

and interpret available data in various ways, leading to results that are not necessarily aligned. This is for instance the case of the total authorizations as a share of each nation's GDP, for which different results appear from different sources. Therefore, quantitative data in this research may not be consistent throughout the document, depending on the source of the data. Nevertheless, the general orders of magnitude reflect broadly the same directions and, thus, conclusions of this research are not deemed to be affected by such lack of transparency. Nevertheless, the availability of more quantity and quality of data would have allowed the research to go into further depths in some aspects of analysis.

Aiming at bringing consistency to the data used in this research and, thereby, to the analyses and conclusions derived, it was deemed necessary to set a specific year of reference. The data are thus comparable at least in terms of time reference. The year of reference was selected to be 2011 as, at the time of data collection and analysis, this year was the most recent presenting sufficient amount of data such as ECAs Annual Reports. Therefore, throughout the document, reference is made to 2011 data wherever available. References to other years may be presented for various reasons such as a lack of data for the reference year, a supporting argumentation that may reference to another year or a sequence of years showing a trend.

With the aim of addressing the scope described above and deriving conclusions useful both on the theoretical and practical sides, the thesis will be structured as follows:

Introduction – The Issue of Export Credits

This introductory part will present background elements related to the broader context of export credits and necessary for the wider understanding of the analyses performed in Part 1 and Part 2. This part will cover topics such as the historical developments pertaining to official support in export credits that led to the establishment and evolution of the Arrangement, the wider issue of subsidies, the issue of strategic trade, the issue of free riding and hidden subsidies and, naturally, considerations on export credits.

Part 1 – The General Framework of Export Credits

Part 1 is aimed at presenting and analysing the current international framework for addressing and regulating export credits. A particular focus will be given to the Arrangement and the consequences of its enforcement. The analysis will look into, among other aspects, the

theories of international relations and how those apply to the establishment of the Arrangement for providing a clearer understanding of the current status and functioning of the Arrangement, the countries that are systematically using officially supported export credits, the type of products typically offered, a description of selected Export Credit Agencies and, as a practical example, the description of a real case of international contention in subsidies and export support, the case of Airbus vs. Boeing.

Part 2 – The Specific Framework of Export Credits in the Sector of the Aerospace Industry

Part 2 covers the core issue of this research i.e. whether officially supported export credits are a source of trade distortion and, in a wider sense, whether officially supported export credits can be deemed legitimate. The objective of this Part is to provide a broad view on the issue and thus three distinctive aspects of officially supported export credits are analysed. Chapter 1 sheds light on the economics of a particular sector, the aerospace industry, the mechanisms of officially supported export credits in this sector and derives conclusions on whether officially supported export credits may affect international trade in this area. Chapter 2 covers a comparison of ECAs and their functioning under various perspectives and analyses whether the actual set-up of ECAs may lead by itself to trade distortions. Chapter 3 assesses through various means the legitimisation of the practice of official support in export finance.

Conclusions – Conclusions, Issues and Recommendations

The analyses from previous Parts lead to conclusions on the economic impact of officially supported export credits on international trade, the perspectives and relevance of officially supported export credits, their legitimization in the wider international context and draws recommendations on possible future changes, adjustments and development of the framework on export credits and the application of related regulations.

0.2 Theoretical Environment on the issue of Export Credits

0.2.1 Export Credits - A brief historical overview

The OECD defines – officially supported - export credits as follows: 'Export credits are government financial support, direct financing, guarantees, insurance or interest rate support provided to foreign buyers to assist in the financing of the purchase of goods from national exporters.' They distinguish between suppliers' credits and buyers' credits: 'A loan extended to finance a specific purchase of goods or services from within the creditor country. Export credits extended by the supplier of goods—such as when the importer of goods and services is allowed to defer payment — are known as supplier's credits; export credits extended by a financial institution, or an export credit agency in the exporting country are known as buyer's credits.[25] Export credits are generally extended by private financial institutions, however Governments also do grant such export credits in support of national exports, typically for mid-and long-term high volume transactions. Such governmentally backed credits are known as officially supported export credits, which is the scope of this thesis.

Export credits are widely used financial tools of international trade – they are 'a form of trade finance – a loan issued by a government or a private bank to finance exports.' (Moravcsik[26]). In 2011, international trade finance including export credits supported exports of roughly 40% of the entire international trade of merchandises (excluding commercial services) representing some US$ 18,2 trillion[27]. 'Export credits are the lubricant that keeps the international trade system going' Moravcsik[28]. Export credits are typically extended by public, semipublic or private institutions known as Export Credit Agencies (ECAs). Historical records show that first export credits appeared in 1906 when Federal of Switzerland insured a Swiss export transaction. By 1919 the first official agency the UK Export Credit Guarantee Department was established with the aim to insure private bank loans for exports. 'Within 20 years, similar export guarranty agencies were created in most European countries, and the United States had launched the Export-Import Bank,

[25] IMF, 2003.
[26] Moravcsik, A., 1989. Disciplining Trade Finance: The OECD Export Credit Agreement. International Organization, 43(1).
[27] WTO, 2012.
[28] Moravcsik, A., 1989. Disciplining Trade Finance: The OECD Export Credit Agreement. International Organization, 43(1).

capable of extending direct loans as well as insuring export credits.' Ray[29]. In 2013, more than 200 ECAs are operating in more than 100 countries around the globe.

Gianturco[30] praises the role and achievements of ECAs: 'The ECAs have performed the invaluable function of making credit available to many countries where commercial banks and other private lenders are not willing to make transborder loans, and of making credit available to most developing countries at interest rates and repayment periods that are more favorable than alternative private sources of funds. This has enabled the developing world to purchase much more of the equipment, goods, and services that the industrial countries have to offer, with a resulting dramatic improvement in social welfare, the standard of living and investment in new infrastructure and the productive sector.' He continues on summarizing the reasons of existence of export credits: 'Six types of economic justification, or rationales, have been advanced in support of export credit agencies. The first is that they are a means of responding to imperfections in the capital and money markets, which distort all assistance to exporters. Second, ECA programs are viewed as a response to capital market deficiencies, which are biased against the extension of medium- to long-term assistance as opposed to short-term credit. Third, ECAs are justified by their direct contribution to wages, production, and employment and their indirect contribution to linkage industries, tax revenues, and so on. Fourth, ECAs are justified for their special assistance to new and small firms, new products, and new export markets, which would otherwise be neglected by private finance. A fifth rationale for some ECAs is that they serve in lieu of aid programs for developing countries. The sixth justification for each national ECA is that it is required to meet the competition offered by other national ECAs and thus 'level the playing field' for all exporters. The main rationale for official export credit agencies is, of course, to facilitate the expansion of a country's exports and foreign exchange earnings based on comparative advantages of the country, by improving access to financing for exporters and encouraging banks to make that financing available on reasonable terms.'

In the context described above, the actual existence of export credits in the international trade system seems justified without controversies and shows they have substantially contributed to the development of international trade. The first distortionary effect of export credits appears as per Gianturco's sixth rationale for export credits, namely the need to re-establish a 'level playing field' against the practices of other ECAs. He continues that 'official' ECAs aim 'of course' at creating a

[29] Ray, J., 1995. Managing Official Export Credits: the Quest for a Global Regime. Institute for International Economics. p. 123-154
[30] Gianturco, D. E., 2001. Export Credit Agencies – The Unsung Giants of International Trade and Finance. Quorum Books, p 4.

comparative advantage for the national industry and, thereby facilitate and expand exports. Ray[31] also notes that 'Both export credit agencies and aid agencies are instruments of national policy. The US Export-Import Bank (Eximbank) succinctly delineated their roles in its 1989 annual report to the Congress: whereas the primary purpose of the US official support for export credits is 'to facilitate US exports' (US Eximbank[32]), the underlying objectives of foreign aid are 'to further US political, strategic, economic and humanitarian goals' (US Eximbank).' Moravcsik states: 'The political issue raised by export credits stems from the fact that many governments subsidize them in order to promote exports. Official support may take the form of guarantees and insurance for bank loans ('pure cover') or direct government finance, such as direct loans, interest rate subsidies, and public refinancing. Government-supported export credits are usually offered at rates below those that would be charged on the market for similar loans, if such loans are available at all.' In a context of a considerable international competition to capture export markets, 'When private bids, foreign aid, and government export credits are evaluated as a package, even modest government credit subsidies can be decisive.' Moravcsik[33].

The issue of export credits, thus, concerns the aspect of official support granted by governments for the sustainment of their political goals and in particular for the expansion of exports by capturing international markets that, otherwise, would have been won by industries of other nations. By supporting capturing such markets, governments aspire at shifting into their national economies profits that, without such support, would flow to other nations, thereby increasing the national welfare to the disadvantage of other nations. Such governments' acts, naked from the dressing-up of 'export credits', consist in governmental direct or indirect money flows and risk taking with the specific objective of promoting exports, and thus can be assimilated to export subsidies. In the frame of the liberalisation process of international trade in the second half of the 20th century, nations have also attempted to regulate the use of such officially supported export credits through the 1978 Arrangement on Guidelines for Officially Supported Export Credits ('The Arrangement'). The difficulty to put a frame around the area of officially supported export credits can be highlighted by the fact that a definition in the 1978 Arrangement was still debatable and needed to be clarified in the 1982 amendment in a compromise that 'did not solve the problem of defining what is and what is not official support' (Ray[34]). The perimeter of application is, thus, understood today as medium- and long-term credits (short-term credits are still addressed by the Berne Union or formally the International Union of Credit and Investment Insurers), with a

[31] Ray, E. J.., 1995. Managing Official Export Credits: the Quest for a Global Regime. Institute for International Economics, p 5.
[32] Export-Import Bank of the United States -Annual Report 1989.
[33] Moravcsik, A., 1989. Disciplining Trade Finance: The OECD Export Credit Agreement. International Organization, 43(1).
[34] Ray, J., 1995. Managing Official Export Credits: the Quest for a Global Regime. Institute for International Economics, p 55.

repayment period of two year and more (The Arrangement, Article 5), including financing support, pure cover and aid.

0.2.2 Subsidies types

The following paragraphs attempt to provide a classification of existing types of subsidies with the aim of understanding the specific case of export subsidies in the wider context of subsidies. This classification is not unique and other manners to classify subsidies are also available.

Grants and other direct payments

The most basic form of a subsidy, and the one that still defines a subsidy in some dictionaries, is a cash payment or grant. Although few grants are paid out in currency any more (most are paid via cheque or bank transfer), it is still common to refer to them as "cash" grants, payments or subsidies.

Normally, a grant refers to a time-limited payment, either in connection with a specific investment, or to enable an individual, company or organization to cover some or all of its general costs, or costs of undertaking a specific activity, such as research.

Other direct payments may be linked to the volume of production or sales. In previous centuries, and still in Australia, these types of subsidies were called bounties. They are far from archaic, however. In some states of the United States, for example, companies producing liquid biofuels receive direct subsidies for every gallon of ethanol they produce. Cash payments to producers are also sometimes linked to prices. The main form is a deficiency payment, which makes up the difference between a target price for a good (typically an agricultural commodity) and the actual price received in the market.

Various cash subsidies are paid to workers. Canada, for example, provides targeted wage subsidies to assist individuals to prepare for, obtain and maintain employment. Many countries provide grants in order to encourage people who are out of work to undergo training in new skills, or to relocate.

Consumers also benefit from direct payments or vouchers, particularly for the purchase of necessities, like food, medicine or heating fuels. Alternatively, a government may regulate the consumer price for a good or service, and instead pay a subsidy to the supplier of that good or service, to cover its losses.

Tax concessions

In countries with well-developed tax systems, subsidies provided by reducing companies' tax burdens are commonplace. Examples include tax exemptions (when a tax is not paid), tax credits (which reduce a tax otherwise due), tax deferrals (which delay the payment of a tax) and a host of other instruments. In common language these preferential tax treatments are called tax breaks or tax concessions; public-finance economists refer to them as tax expenditures. They should not, however, be confused with general tax reductions.

Generally, when a government provides a tax break its budget is affected in much the same way as if it had spent some of its own money. The exception is a tax credit, which is worth more to a corporate recipient (and costs a government more) than a direct payment of an equivalent nominal value, as a direct payment raises a company's taxable income and therefore is itself taxable.

Besides adding complexity to tax systems, tax concessions are often criticized by economists as being less transparent than grants, and more resistant to change. Several national governments, and even a few sub-national governments, produce annual tax expenditure budgets. But the information contained in these "budgets" is often reported at a highly aggregate level. Information on the value of tax breaks received by particular industries or companies is usually much more difficult to find.

When creating a new tax break, lawmakers sometimes set a limit on how long it may be used. But many tax breaks, once incorporated into the tax code, continue indefinitely. In contrast with a grant or similar subsidy, which has to be re-approved with each budget cycle, a tax break requires an active decision by lawmakers to eliminate it.

In-kind subsidies

The phrase "in-kind" means provided in a form other than money. Typical in-kind benefits provided by governments are subsidized housing, specific infrastructure (like a road servicing a single mine or factory), the services required to maintain that infrastructure, and various services to help exporters. They may be considered subsidies if they involve expenditure (or foregone revenue) by a government and they confer a specific benefit on the recipient. However, government provision of general infrastructure - e.g., highways and ports - is often excluded from the definition of an in-kind subsidy, as is the case in the WTO's general agreement on subsidies, the Agreement on Subsidies and Countervailing Measures.

The value of an in-kind benefit depends on the price charged for the resource, good or service. When a government undercharges for something, the unit subsidy is usually considered equal to the difference between the price paid and the market price. When it charges a market price, the transaction is considered commercial, and not a subsidy. Often, however, the government is a monopoly supplier of a good or service - i.e., there is no private market against which the government's prices can be compared - which increases significantly the difficulty of determining whether a subsidy is involved.

One important variant of an in-kind subsidy is privileged access to a government-owned or controlled natural resource. Primary industries benefit greatly from such access - e.g., to public lands for mining or grazing livestock, to state forests for logging, to rivers for irrigation, and to foreign seas (through so-called "access agreements") for fishing - for free or at a below-market price. International disputes over the subsidy element of privileged access to natural resources have been among the most contentious and long-running.

Cross subsidies

A cross subsidy is a market transfer induced by discriminatory pricing practices within the scope of the same enterprise or agency. Typically it exists when a government-owned enterprise, such as a public utility, uses revenues collected in one market segment to reduce prices charged for goods in another. Some definitions also include similar practices carried out by private firms, as when an integrated airline allocates part of the costs of its activities in a highly contested geographical or product market (e.g., the transport of freight) to another market (e.g., passenger transport) that is better able to bear those costs. For example, some airports cross-subsidize costs associated with serving airline passengers through sales on duty-free goods.

One of the most common forms of cross subsidy is that between consumers of electricity and consumers of irrigation water. Managers of large hydro-electric works that store and channel water for irrigation as well as generate electricity have to decide how to allocate the costs that are common to both activities (notably, the construction and maintenance of the dam and reservoir) between farmers and buyers of electricity. Government regulations will often dictate that an even smaller portion of the costs be allocated to irrigation than would be efficient according to established pricing principles.

Not all instances of price discrimination are evidence of cross subsidies, however. For example, differences in the volume (if there are economies of scale in delivery) and interruptibility of service, among other factors, can lead to different price schedules for different classes of customers.

Credit subsidies and government guarantees

Many subsidies that have budgetary implications - that is, can create financial obligations for governments in the long run - never actually appear in budgetary statements. These "hidden" subsidies are common whenever a government takes on the role of a banker or insurer to a company or industry (see Chapter 0.2.7).

When a government loans money to a company at a lower rate of interest than a commercial bank would offer, or requires less collateral to back up its loan, defers repayment or allows for a longer period to pay off the loan, the company saves money.

Governments also sometimes guarantee loans taken out by companies or individuals through commercial banks. That means that the government assumes the risk of default on the loan, rather than the bank, which in turn means that the bank can offer the borrower more favourable lending terms, such as a lower rate of interest.

Governments also serve as an insurer of last resort for private investments. All OECD governments with nuclear power plants, for example, are signatories to an agreement that limits the financial liability of power-plant owners in the event of a catastrophic accident. Similarly, many governments would be stuck with part of the bill following the failure of a large hydro-electric dam. For this type of support, years may pass before a government incurs any actual costs. But when an accident does occur, the financial burden (not to mention human cost) can be huge.

Hybrid subsidies

Economic systems can be likened to ecological systems. In the steaming jungle that defines the borderland between private industry and government, camouflage and parasitism are common adaptive responses to competition. Subsidy hybrids, particularly instruments that exploit the tax system to lower the costs of private investment, are an inevitable result of those evolutionary forces.

At the base of the evolutionary ladder are tax-free government bonds. A bond is a financial instrument that promises its holder a fixed annual dividend over a specified period of time, typically 10 to 20 years. National governments issue bonds to help finance their general activities. Municipalities, sub-national governments and their agencies (e.g., air-pollution control districts) also issue bonds, more commonly tied to specific projects, like water-treatment plants. The dividends paid to holders of such bonds are not taxed. Since tax-free status raises the net return on investment, particularly for bond holders in high marginal income-tax brackets, the bonds can offer a lower rate of interest than would have to be offered to buyers of private, commercial bonds in the same risk category.

Tax-free bonds are used also in some places to finance private investment: a corporation borrows money from a private lender, the bond buyer, which is issued by a public authority to become tax free.

Higher up the evolutionary ladder are instruments like tax increment financing (TIF), a peculiar form of subsidy found in the United States. Tax-increment financing enables a city to split off future additional property tax revenues associated with a designated development and to provide a loan to the company undertaking that development, using the future incremental tax revenues as collateral. In effect, this revenue stream is diverted away from normal property tax uses, such as the funding of schools, and into the TIF district.

Derivative subsidies

Subsidies have a tendency to beget other subsidies. Some of these are described below:

- Sympathetic support: When support is used to influence the direction of technological developments, it often does so in a manner designed to benefit domestic producers. Many examples of this can be found in the energy sector, such as when governments support the construction of coal-fired "demonstration" power plants that are dependent on coal from high-cost domestic mines rather than on imported coal, or for biofuel refineries that use domestic feedstocks.

- Compensatory or countervailing support: When support leads to higher input prices for downstream consumers, especially those that derive a significant proportion of their sales from exports, compensation is often provided in order to keep them buying domestically produced raw materials. Subsidies to food processing industries and to biofuel producers are common examples.

- Subsidy clusters: when support - or failure to consider opportunity costs - leads to lower prices for natural resources, a chain reaction can take place, whereby new investment occurs to take advantage of the cheap input. Often downstream consumers receive additional incentives from governments to do so. Hence aluminium plants are attracted to major hydroelectric projects, which are then followed by airframe manufacturers, and so forth.

Taken together, these derivative subsidy forms lend support to the notion that bad subsidies tend to chase out good ones. Political economy also suggests that the "good" subsidies will over time be politically outmanoeuvred by the established groups to redirect public spending to themselves.

Subsidies through government procurement

The WTO Agreement on Subsidies and Countervailing Measures (ASCM) recognizes that a subsidy can exist when a government purchases goods "and a benefit is thereby conferred." The benefits the drafters of the ASCM had in mind were those resulting from purchases that take place under circumstances that do not accurately reflect normal market conditions.

Governments practice preferential purchasing routinely, expressly favouring domestic over foreign suppliers of similar-quality goods - e.g., by paying domestic suppliers higher prices or offering special financing arrangements. The conflict of interest faced by governments is understandable.

They are expected by taxpayers to be savvy buyers, but are also under constant pressure to support domestic producers.

The magnitude of government procurement is enormous. A study from 2000 estimated that each year OECD countries spend US$ 4,733 billion procuring goods and services, particularly for state-run health services, public works, and the military. Much of these purchases are made at market prices, but it is believed that a significant fraction of them include an element of subsidy.

The WTO has been trying to establish ground rules for government procurement since the 1980s. The latest rules are set out in the Agreement on Government Procurement (AGP), signed in 1994. Being a "plurilateral" agreement it applies only to its signatories, which are mainly OECD economies. By establishing recommended procedures for tendering, negotiating and awarding government contracts, it outlines a desirable system of government procurement. However, monitoring and enforcement of the AGP is weak, and there are many ways in which governments can bypass its disciplines, such as by excluding certain types of purchases (e.g., for the military) or setting thresholds - higher than the lower limits contained in the Agreement itself - below which the AGP does not apply.

Market price support

Transfers of money to producers are typically divided into two broad categories: those provided at a cost to government, such as grants and tax concessions, and those provided through the market as a result of policies that raise prices artificially. The latter, called market price support (MPS), may derive from a domestic price interventions (for example, a minimum-price policy), and is usually supported by foreign trade barriers such as a tariff or quantitative restriction on imports. The OECD defines MPS formally (for agriculture) as "an indicator of the annual monetary value of gross transfers from consumers and taxpayers to agricultural producers arising from policy measures creating a gap between domestic producer prices and reference prices of a specific agricultural commodity measured at the farm-gate level."

MPS is an element that is included in many studies of support to particular goods or sectors, and is added together with other subsidies to yield an estimate of total support.
The concept of market price support is simple enough. By maintaining an import tariff on a good, for example, a government raises the price of that good above what it could sell at in the absence of the tariff. From the producers' standpoint, the revenues they will receive would be similar to

those they would receive were the government instead to pay them an equivalent premium per unit produced. The main difference is that MPS raises domestic prices, and may therefore dampen demand compared with a budget-financed price premium, especially if there are close substitutes that, as a result of raising the price of the targeted good, become relatively cheaper. In such situations, such as for coal for power generation, governments have sometimes solved the problem of changed relative prices by constraining the ability of consumers to shift to the competing product.

From the government's perspective, the advantage of providing support indirectly, through a market intervention, is that it is less transparent, and the transfers do not appear in its budget. Rather than taxpayers, consumers bear the burden. For this reason, MPS is considered by economists to be one of the most market-distorting forms of support provided through government policies. Unfortunately, it is also still one of the largest elements of total support, especially in agriculture.

0.2.3 Are subsidies really evil?

Literature on subsidies and barriers to trade is very large, covers both general issues and specific facets of subsidies and evaluates those from various perspectives such as legal, economic, social, etc. The intent of this paragraph is to bring up some concepts and theories regarding subsidies and their treatment in order to introduce the flavour of the debate on this issue, in a particular focus on aspects related to international agreements. The following has, thus, no ambition of providing an exhaustive understanding of theories of subsidies and their impacts.

The wider question of subsidies is complex. What can be considered a subsidy? Up to what level of direct linkage should a subsidy be considered? To what extent is it justifiable for a nation to subsidize? Although the above are in some cases very theoretical considerations, they can have a concrete impact on the actual trade. For instance, technological spin-offs generated by US-funded defence programmes and benefitting Boeing have been viewed as unfair subsidies to Boeing. A nation providing free education to its people is however not considered as subsidy. The question on what measures can be taken, in a legitimate and justifiable manner, by governments in order to develop the local industry are, thus, debatable.

One of the main schools of thought in economics since Adam Smith's [35] first economic theories in 1776, is that of trade liberalization. Ricardo, Porter and others have further defined the content and scope of liberal trade. In particular, in late 20th century, Porter[36] has shown the benefits of each nation specializing in what it can do better compared to other nations. According to Porter, this leads to a global optimization of the use of resources and consequently maximizes the global wealth, each of the nations thereby being better off in comparison with a situation where each nation would produce also goods which other nations are more efficient at producing. This specialization, however, brings its fruits when the productive sector is left without government interferences, otherwise such interferences would distort the market and government resources would thus lead to sub-optimized results. The conclusion of the corresponding theories is that the markets and trade should be left totally without government interference, meaning without tariffs, duties, other barriers to trade, subsidies, support to production etc.

The western nations, especially after World War II, have largely followed the principles of such liberal theories, and after the fall of the socialist bloc in Europe, most of the world's nations abide more or less by liberal principles. International agreements have also been structured around liberal principles and free trade, and global arrangements such as the GATT have specifically aimed at reducing governments' interferences such as tariffs with widely recognized impressive results.

Despite liberal theories and the convincing results of related international agreements, the case of subsidies is not settled. Lawrence and Stankard[37] argue that 'It is accepted that subsidies can serve a variety of valid policy goals.' and continue that 'the best domestic commercial policies are often driven by careful subsidiazation.' thus putting a question mark on the actual credibility of the concept that all state interferences need to be completely eliminated. On the contrary, they argue that 'the treatment of subsidies in the world trading system has been marked by the struggle to differentiate permissible subsidies from impermissible ones.' Alan O. Sykes[38], analysing the 'Economics of WTO Rules on Subsidies and Countervailing Measures', finds that 'Economic theory offers no general objection to the use of subsidies. As suggested above, a 'subsidy' needs not have any effects on the behavior of a private actor. And even where a 'subsidy' program can be deemed to confer a net benefit, any effect that it has on the economic activity of its recipients

[35] Smith, A., 1976. Recherches sur la Nature et les Cause de la Richesse des Nations. Editions Gallimard.
[36] Porter, M., 1990. The Competitive Advantage of Nations. New York: The Free Press.

[37] Lawrence, Z. R. and Stankard, N., 2005. Should Export Subsidies be Treated Differently?
[38] Sykes, O. A., 2003. The Economics of WTO Rules on Subsidies and Countervailing Measures. The Law School of the University of Chicago.

may well be socially desirable.' Placing the debate in a more concrete perimeter, Timothy Besley and Paul Seabright[39] indicate that 'State aids fall under the domain of international law' and continue that 'International law does not proscribe government support of industry outright, but it does require such support not to distort competition.' The key parameter is, therefore, the distortion of trade. In that respect, Mario Monti, EU commissioner, has associated some types of tax systems among EU nations as 'a form of state aid'[40]. However, here again, the definition of state aid is 'notoriously difficult to define precisely', according to Besley and Seabright, who describe the four general guidelines used by the EU for identifying what is a state aid:

- ‘Aid must be granted from state sources – directly or indirectly
- Aid must provide recipients with a certain economic advantage over others that they would not have enjoyed in their normal course of business
- Aid must favour certain undertakings in the production of certain goods
- Aid must affect or distort trade between member states'

Along similar lines as the positions described above, and most relevant in the context of this research, is the definition of a subsidy provided in the SCM Agreement under Article 1.1:

'

1.1 For the purpose of this Agreement, a subsidy shall be deemed to exist if:
(a)(1) there is a financial contribution by a government or any public body within the territory of a Member (referred to in this Agreement as 'government'), i.e. where:

(i) a government practice involves a direct transfer of funds or liabilities (e.g. loan guarantees)

(ii) government revenue that is otherwise due is foregone or not collected (e.g. fiscal incentives such as tax credits)

(iii) a government provides goods or services other than general infrastructure, or purchases goods

(iv) a government makes payments to a funding mechanism, or entrusts or directs a private body to carry out one or more of the type of functions illustrated in (i) to (iii) above which would normally be vested in the government and the practices, in no real sense, differs from the practices normally followed by governments

[39] Besley ,T., Seabright, P., Rockett, K. and Soerensen , P. B., 1999. The Effects and Policy Implications of State Aids to Industry: An Economic Analysis. Economic Policy, 14(28).
[40] Financial Times, 29 July 1997.

or

(a)(2) there is any form of income or price support in the sense of Article XVI of the GATT 1994
and
(b) a benefit is thereby conferred.'

Under the above definition, two conditions need to be met for qualifying a subsidy: a financial contribution from a government and a benefit conferred. Therefore, also as referenced above, 'Not every financial flow between a state and a firm constitutes state aid.' Besley and Seabright[41]. A main question therefore remains on how to clearly identify a subsidy from an activity or transaction that does not constitute a state aid. A manner to evaluate whether a government action is actually a subsidy, and also used by the EU Commission consists in using as a basis for comparison the 'funds provided to a private or public undertaking on terms that are more favourable than a private investor operating under normal market conditions would have provided to a private undertaking in a comparable financial and competitive position'. A similar approach is used by the Appellate Body in the Canada-Aircraft dispute[42], where it states that a financial contribution will only confer a benefit if it was provided on terms more beneficial than those the recipient could have obtained on the market.

Another issue for identifying a subsidy relates to the term 'specific'. Green, Trebilcock and Milat[43] indicate that 'While the SCM Agreement does not clearly define the term 'specific', it states that a subsidy must be specific to 'certain enterprises' which includes 'an enterprise or industry or group of enterprises or industries.' This specificity requirement is intended to capture subsidies that are targeted at a few industries and to exclude generally available government-provided benefits such as transportation infrastructure or public education. In part this requirement is intended to identify distortionary or protectionist measures.' To that extent, Keith Marsden[44] in a Taxpayers' Alliance Occasional Paper, mentions that 'Only subsidies that are *specifically* provided to an enterprise or industry, or groups of enterprises or industries, are subject to multilateral disciplines and countervailing measures allowed. Yet *general* subsidies also satisfy the three elements in the

[41] Besley, T., Seabright, P., Rockett, K. and Soerensen, P. B., 1999. The Effects and Policy Implications of State Aids to Industry: An Economic Analysis. Economic Policy, 14(28).

[42] WTO Appelate Body, United States -Dispute Settlement: Canada - Export Credits and Loan Guarantees for Regional Aircraft. Dispute DS222, February 2010.

[43] Green, A., Trebilcock, M. and Milat, V., 2007. The Enduring Problem of WTO Export Subsidies Rules". American Law & Economics Association Annual Meetings, Paper 9.

[44] Marsden, K., 2004. Reforming WTO Subsidy Rules: A Better Deal for Taxpayers. The Taxpayers' Alliance. Occasional Paper 2.

SCM definition of a subsidy: (i) a financial contribution (ii) by a government or any government body within the territory of a member (iii) which confers a benefit.' and continues 'The level of government expenditure […] on general subsidies is often much larger, and can therefore distort competition and global trade to a greater extent than specific subsidies.'

Despite the existence of a definition of a subsidy and some methodologies to evaluate what, in the frame of financial transactions between a state and an industry, constitutes a subsidy and what not, the reality seems to remain that it is in many cases very difficult to assess whether a government transaction or activity is a subsidy and whether such transaction or activity distorts international competition and trade. The conclusions of the trade dispute between Airbus and Boeing (see Chapter 1.7) highlight the difficulties faced in this area especially in view of the broad range of government activity that needed to be evaluated. In particular, the time required for the dispute settlement body to come to conclusions and the fact that the respective Appellate Bodies have often overturned positions of the dispute settlement body, demonstrate there is large room for interpretations of the corresponding definitions and regulations and a position with respect to the individual government activities is far from being straightforward.

Finally, it can be argued that the definition of subsidy does not take into account a number of other parameters such as the fundamental role of governments, e.g. which to a larger or lesser extent needs to focus on redistributional aspects of national wealth, the level of internal taxes compared to other nations, decisions on the educational system, etc. By defining a taxation system that may privilege the one or the other area, by investing or developing infrastructure in particular areas or indirectly benefitting specific businesses, by electing to use taxpayers' money to promote specific educational areas, by managing the currency policy etc the governments do have a wide array of means to support individual productive sectors. Indeed, there may be a number of general subsidies or governments' activities that are not addressed by international subsidy agreements by the fact that they remain 'general', however indirectly supporting specific economic areas.

Interestingly, in an international environment supporting trade liberalization, Bagwell and Staiger[45] come to the conclusion of their in-depth economic analysis of the WTO subsidy rules, that: 'Though GATT subsidy rules were seen as weak and inadequate while the WTO subsidy rules are viewed as a significant strengthening of multilateral disciplines on subsidies, we find that the

[45] Bagwell, K. and Staiger, R., 2004. Subsidy Agreements. NBER Working Paper Series, Working Paper 10292.

key changes introduced by the WTO subsidy rules may ultimately do more harm than good to the multilateral trading system, by undermining the ability of tariff negotiations to serve as a mechanism for expanding market access to more efficient levels.' This, additionally, puts ambiguity on the legitimation of the international regimes on subsidies.

0.2.4 The issue of export subsidies

The issue of export subsidies naturally falls within the context of and debate on the wider issue of subsidies. Compared to other types of subsidies, however, it seems that export subsidies are treated differently. While international efforts aim at progressively and continuously reducing barriers to trade, exports subsidies have been simply prohibited. The SCM Agreement presents a specific set of rules for export subsidies that are not applicable to other types of subsidies. Lawrence and Stankard[46] mention that the SCM Agreement 'bans such transfers outright, demands that inconsistent measures be withdrawn 'without delay', and authorizes 'appropriate countermeasures' if a Member persists in providing a subsidy.'

A fair explanation for this special treatment, already apparent in GATT Article XVI reviewed in 1954-55, is given by Green, Trebilcock and Milat[47]: 'This deemed specificity [all export subsidies are deemed specific thus prohibited] reflects a consistent concern about distortion and protectionnist action.[…] export subsidies in general are distortionary (on both a global and domestic level). Moreover, the most plausible general explanation for export subsidies is protectionism – the desire to promote domestic industry at the expense of foreign competitors.' In a similar line of thought, Fernald concludes that ‘many export credits that comply with the Arrangement are subsidized…’

Perhaps an additional reason lays in a key difference between other categories of subsidies and export subsidies: the latter are more easily identifiable and seem to have a more direct impact on international trade (price reduction). The fundamental economic distorting effect of export subsidies is also different: as indicated by Bagwell and Staiger[48], 'Export subsidies, however, are different from production subsidies, and it is well-known that the economic effects of the two forms

[46] Lawrence, Z. R. and Stankard, N., 2005. Should Export Subsidies be Treated Differently?

[47] Green J. A., Trebilcock, M. and Milat V., 2007. The Enduring Problem of WTO Export Subsidies Rules, American Law & Economics Association Annual Meetings, Paper 9.

[48] Bagwell, K. and Staiger, R., 2004. Subsidy Agreements. NBER Working Paper Series, Working Paper 10292.

of intervention are fundamentally different (export subsidies, like tariffs, distort both producer and consumer decisions).' The means to provide government backed export facilitations in the cases of export sales are also generally restricted to a handful known mechanisms.

The effects of export subsidies on consumer decisions are relatively straightforward in situations of perfect competition: by reducing the offered international price, price-sensitive export customers will privilege the more cost-effective solution, other factors being equal. The higher the export subsidy, the lower the international price, therefore the higher the chances to attract the export customer. Taxpayers' money is, therefore, used to support the specific exporting enterprise, the profits of which will be (partially) distributed to this enterprise's stakeholders. The consumers of the state offering such facilitation to the exporting enterprise will be, additionally, impacted by the enterprise's production or costing decisions. Government support to the enterprise's exports are equivalent to output-based production subsidies leading to a reduction of the short-term marginal costs for the exported quantities. Lower marginal costs for the export quantities may induce the enterprise to make less efforts to reduce its production costs in comparison with a situation of direct price competition with foreign producers (or respectively a higher motivation to increase its profit margin). The prices on the domestic, non-subsidized, market may then increase (or not reduce as much as, otherwise, possible). For domestic consumers, the prices for the specific goods would then remain higher than in a situation without export subsidies. On the producer's side, the export subsidy will have an additional effect on its production capacity: by lowering the prices for international markets, the demand for the products will increase. In order to satisfy this demand, the enterprise's output will need to increase, or remain at a level above the production output justified by a market not affected by government intervention.

In case of imperfect competition or in the event that an exporting nation is sufficiently large to affect world prices, the mechanisms and impacts of export subsidies are more complex. When a large country applies export subsidies, the domestic welfare may on the contrary increase. Linking export subsidies to the theories of import tariffs, Lawrence and Stankard[49] come to the conclusion that 'If the impact of improving the terms of trade outweighs the deadweight losses due to imposing the tariff, the welfare of a country imposing a tariff could actually increase. Indeed, economic theory tells us that there is an optimal tariff that maximizes the difference

[49] Lawrence, R. Z. and Stankard, N., 2011. Should Export Subsidies be Treated Differently?

between the efficiency costs of a tariff and the terms-of-trade gains. The same logic suggests that for large countries there will be an equivalent optimal tax – rather than subsidy – on exports.'

The question then arises why smaller countries in a situation of perfect competition would subsidize their exports if the domestic welfare is reduced as described above.

There are theories that oppose to the widespread idea that export subsidies reduce domestic welfare, such as Wang[50] who counter argues that 'It is shown that the welfare of the exporter with low costs of production is higher when export subsidiazation is permitted than when it is prohibited. Furthermore, the world as a whole is better off when exporting countries subsidize their exports.' He analyzes a model of two exporters from two different countries exporting to a third nation and finds that, independently from whether one nation elects free trade vs export subsidies, the welfare will always be increased if the other (or both) nations decide to subsidize exports. In this sense, he argues that only considerable penalties applied to the violating nations would induce them not to select subsidizing exports.

There are also theories supporting export subsidies in specific cases, such as strategic trade in conditions of imperfect competition (see Chapter 0.2.5), where Brander and Spencer[51] prove that export subsidies may shift profits from foreign to domestic companies. Feenstra[52] shows that export subsidies by lowering the prices can generate additional demand for exports of other products, thereby achieving an overall increase of domestic welfare. Other theories take into account additional factors such as political benefits by redistributing wealth through export subsidies to specific domestic sectors.

Overall, despite a wide array of theories indicating that export subsidies may be economically beneficial for both the foreign consumers and the domestic welfare, they mainly remain confined within the limits of very specifically defined assumptions. Broad theories explaining at large the functioning of international trade more convincingly demonstrate the negative impacts on welfare from export subsidy. This seems to confirm Green, Trebilcock and Milat's[53] assumption quoted above, that reasons for applying export subsidies are possibly related to protectionism and

[50] Wang, Y. T., 2003. Export Subsidy Competition and the WTO Agreement. Journal of Economic Development, 28(1).

[51] Brander, J. and Spencer, B., 1985. Export Subsidies and International Market Share Rivalry. Journal of International Economics 18:83-100.

[52] Feenstra, R. C., 1986. Trade Policy with Several Goods and Market Linkages. Journal of International Economics, 20:249-267.

[53] Green, J. A., Trebilcock, M. and Milat, V., 2007. The Enduring Problem of WTO Export. American Law & Economics Association Annual Meetings, Paper 9.

certainly move away from pure national welfare considerations. Historical data have additionally proven that the amounts spent by governments on export subsidies, if export credits below market conditions can be considered as such, can hardly be explained by welfare reasons. Thereby, the decision accepted by governments to completely ban export subsidies seems to rely more on a sentiment of self-protection than on potential benefits that the opposite could confer, as a total ban prohibits other states to subsidize their own exports towards the domestic market and limits the impacts of an export subsidy war.

Having analyzed in depth the economic and legal consequences of a ban 'per se' of export subsidies compared with the treatment foreseen for other types of subsidies, Lawrence and Stankard[54] make a case that export credits should be treated differently than they are today. They claim that 'Such a categorical rule is rare in the WTO, with most obligations being part of an exchange of 'concessions'' In fact, they claim the economic theories, as described above, do not fully back a simple ban of export subsidies 'While there may be some presumption that these subsidies could reduce global welfare, there are examples where they could be beneficial.' They also put forward the legal consequences including the application of countervailing measures, poorly defined and arbitrarily applied by the relevant bodies with the main purpose of imposing compliance instead of linking retaliation with the damage caused by a violation. They argue that 'arbitrators have imposed such high levels of retaliation in part because of the illegality or stigma of export subsidies.' They further describe legal implications of arbitration from a total ban in export subsidies in a dispute settlement environment which is not adequately shaped for such cases. They present the Canada-Aircraft II dispute with Brazil, in which the arbitrators authorized a retaliation of $ 206 million, to which 'they added an additional 20 percent to reach a level of countermeasures which they thought could reasonably induce compliance, accordingly authorizing suspension of $ 248 million. But why 20 percent and not e.g. 40 percent?'

0.2.5 Strategic trade

As presented by Lawrence and Stankard above, there are considerations and cases where subsidies and in particular export subsidies can have beneficial consequences, certainly for the domestic but also for the global welfare. As seen above, after World War II, nations consistently worked towards the direction of reducing trade barriers of any kind and progressively developed a

[54] Lawrence, Z. R. and Stankard, N., 2011. Should Export Subsidies be Treated Differently?

set of international agreements aiming at reducing tariffs, subsidies, and other hurdles to free trade. Free trade theories seemed to have taken a clear victory over protectionism and the positive results of international trade in a progressively more liberal environment contributed to further spreading the conviction of its prevalence. In such environment, nations would be expected to abide by the principles of free trade and to welcome and adhere to agreements promoting free trade.

However, after a long process of fight against trade barriers, nations seem to have somewhat lost their appetite to advocate free trade and the attitude of nations rather indicate their intention to move in some cases in the opposite direction: avoid free trade or even not comply with free trade treaties agreed upon. In this environment contrasting the free trade theories and the actual behaviour of nations, the New Trade Theories were developed in the late 1970s by leading economists such as Krugman, Stiglitz and Dixit, taking into account a more pragmatic industrial reality, integrating aspects of industrial policy such as economies of scale and of international trade such as trade between developed countries producing similar products. In this context, Brander and Spencer[55] proposed the theory of strategic trade, which, against the pure free trade theories, suggest that it may be legitimate for nations to take measures protecting their industry in specific situations, within an otherwise free trade environment. Brander states that 'It is the conviction that the classical theory, whose pattern is determined by the comparative advantage and the assumption that free markets are the best way of exploring comparative advantage, does not describe the reality sufficiently'. Along the same line of criticism to traditional free trade, but under a different angle of attack, Krugman[56] indicates 'Instead, trade seems to reflect arbitrary or temporary advantages resulting from economies of scale (using large scale production) or shifting leads in close technological races (R&D and experience).' The model of strategic trade apply to selected industries and under specific conditions, however when such conditions are met, it brings additional clarity to protectionist policies practiced in reality by nations.

In brief, the theory of strategic trade is based on the assumption of imperfect market conditions in a situation of oligopoly. It states that nations with industries exporting to third countries may have a benefit to support their domestic industry, whereby the funds allocated to such support would be recouped by shifting profits to the domestic economy. Krugman and Obstfeld[57] illustrate the theory by giving an explicit example from the aircraft trade sector, in which specifically two firms

[55] Brander, J.and Spencer, B., 1985. Export Subsidies and International Market Share Rivalry. Journal of International Economics, 18: 83-100.
[56] Krugman, P., 1986. Strategic Trade Policy and the New International Economics. The MIT Press.
[57] Krugman, P. and Obstfeld, M., 1992. Economie Internationale. De Boeck-Wesmael, p 321-325.

(Airbus and Boeing) from two distinct nations (Europe and US) export to the rest of the world. The results are summarized on the basis of the following figure:

Figure 0.2.5 -1 Illustration of Strategic Trade (derived from Krugmann and Obstfeld, 1991)

	Airbus			
Boeing	Produce		Not produce	
	Boeing	Airbus	Boeing	Airbus
Produce	-5	-5	100	0
Not produce	0	100	0	0

subsidy to Airbus of 25

	Airbus			
Boeing	Produce		Not produce	
	Boeing	Airbus	Boeing	Airbus
Produce	-5	20	100	0
Not produce	0	125	0	0

- It is assumed that a market for a new 150-seat aircraft is accessible to Airbus and Boeing
- Each company can decide to enter the market and produce or not enter the market
- The market is not large enough for both companies to enter, if both decide to produce, both will make losses (-5)
- If one company enters the market and the other not, this company will make profits (100), the other remains neutral (0)
- Under these conditions, the first deciding to produce takes the whole market as the second will not take a decision to make losses
- However, if European governments provide a subsidy of 25 to Airbus if Airbus produces, Airbus will always have a benefit to produce, but Boeing will have no benefit to produce
- Thus Airbus will produce and benefit from the entire market
- The benefits for the European economy will be of 100 with a subsidy of 25.

Oerguen[58] attempts a definition of strategic trade, indicating that 'the strategic trade policy refers to trade policy that affects the outcome of strategic interactions between firms in an actual or potential international oligopoly'. He points out that 'Strategic interaction requires that firms recognize that their payoffs in terms of profit or other objectives are directly affected by the decisions of rivals or potential rivals.' Brander also mentions that 'implementing strategic policies allow the country to capture returns that would otherwise go elsewhere.' Further on Brander and Spencer analyze in their reference paper export subsidies as a tool of strategic trade and come to the conclusion that export subsidies in situations and conditions as set above can indeed be justified.

[58] Orgen, B. O., 2012. Strategic Trade Policy Versus Free Trade. Procedia - Social and Behavioral Sciences, 58:1283 – 1292.

The theory of strategic trade is particularly important in the context of international aircraft trade, because it appears to reflect much more accurately the behaviour of states than free trade theories. It has been very clear since the outset of the development of the aerospace industry, both in the US and in Europe, that governments have been backing the specific sector with a number of means – sometimes very creative. As foreseen by the strategic trade theory, the sector functions in a factual duopoly, the decisions of one firm are directly impacted by the decisions of the other and the spin-off effects to the wider economy are, today, estimated to be of a considerable nature. This theory can possibly better explain the behaviour of the affected governments over the past decades and the harsh battles they have accepted to give to protect their respective industries. It can also justify the high level of motivation of involved nations to violate whatever agreements concluded in order to secure additional benefits on the back of the other nations.

The cases of dispute settlement under the WTO (see Chapter 1.7) between the US and EU on aircraft trade highlights on the one side the level of commitment of the two actors to defend their domestic industries and on the other side the large portfolio of means they have developed to do so, in compliance or not with international agreements. It should be, however, recognized that the European civil aircraft industry had had no chance to develop without the large sums of support provided by governments due to the significant investment needed in infrastructure, the very long and costly development phase of an aircraft and the heavy economies of scale required to compete with a much larger and established company (GAO[59]). The question that can then be raised is the following: in which situation would the world and its welfare be better off – a. without government support to the European aircraft industry with, as consequence, a world monopoly of the aircraft industry by a US firm or b. with government support to develop EU industry and, as consequence, today's duopoly in this area? By carefully looking at the price wars currently taking place in the civil aircraft deals and at the passionate technological developments to always be one step ahead of the other firm, one can fairly assume that the duopoly serves the global welfare much better than a situation of monopoly. It can be put forward, that the government support has increased the welfare of worldwide consumers, certainly in the export countries benefitting from much lower prices and advanced products with no taxpayers' money spent for this purpose, but also very possibly, without yet a confirmation of corresponding models and calculations, the welfare of consumers in the countries supporting the domestic aircraft industries.

[59] GAO (United States General Accounting Office) 1994, International Trade Long-Term Viability of U.S.-European Union Aircraft Agreement Uncertain. GAO/GGD-95-45, Dec 9.

The consequences of characterizing the aircraft industry as a case of strategic trade go further. If today the market operates in a duopoly, it is clear that tomorrow more players will attempt to enter the sector. In particular, forecasts of global aircraft needs over the next two decades indicate a high level of growth, possibly raising the appetite of nations such as Russia and China to grab a share of the pie. Those two nations already have aerospace expertise in their respective territories, both in the military and the civil area. In order to address very high barriers to penetrate the world market in this sector, it can be assumed the two states will invest considerable amounts of funds to support their respective industry. This would be fully justified under a strategic trade model, and, under this view, it can naturally be expected that the two nations will avoid entering into commitments to reduce government support in specific industries and at the same time will attempt to breach or 'interpret' international agreements that may be limiting their ability to develop their aircraft industry.

0.2.6 The issue of 'free riding'

In the context described above, it appears natural that governments will be tempted either not to participate in agreements that would limit their means to support their national industry, or to bypass, ignore, infringe such agreements entered into with peer nations. It comes as no surprize that the Arrangement was initially only concluded by a handful of participants (the EU counting altogether as one) and that, since its formation, only exceptionally have other nations joined. The Arrangement itself encourages other nations to join and participant countries have indeed supported other nations to join, with poor results. Certainly, the participating nations to the Arrangement formed the core of the exporting nations at the time of its conclusion, thereby ensuring that the largest share of international trade would fall under its provisions. However since 1978, international trade has substantially evolved, both in terms of exporting / importing nations (e.g. south-south trade) and in terms of business model. Thus this issue of free riding may take a different importance in today's environment. Free riding can take the form either of non-participating in international regimes, or of participating but infringing aspects of such regimes.

Free riding from non-participation

A fundamental question is why any government would elect to join the Arrangement when it appears so much more convenient to keep in their own hands the tools for supporting national exports. There are mainly two directions for answering this question: international pressure and

own interest. International pressure can be viewed in the frame of realists theories of international relations, in which a hegemon, or in case of multipolar world a few powerful nations, has sufficient influence to apply pressure onto the free riding country in the direction of joining an agreement or regime or simply abiding by the same rules. Such activity is well supported by today's increasingly dense regime environment, where pressure can result not only from bilateral interactions but also, not to say mainly, from interactions in the frame of such other international agreements or regimes. The image of a country in such other fora, the negotiations on other topics, measures and repercussions under such other regimes can progressively shape an environment in which the target country may elect as more beneficial to follow the path indicated by the powerful instead of opposing to them.

However, a pre-requisite for such mechanisms to be effective lays on the desire and interest of such target nation to cooperate and interface with the 'hegemonic nations'. When it comes to smaller economies that wish to have privileged relations with powerful nations such as the US, the international pressure may prove successful. In cases of larger or large economies, such as China or Russia, the implications of having privileged ties to other large economies are of totally different nature, and any discussions are conducted under a 'same level, same power' understanding. Indeed, it is questionable whether in today's context China has a higher interest to have privileged ties with e.g. the US or the other way around. In the case of officially supported export credits, China benefits from a very present state, particularly large budgets and opaque government practices meaning that it is unclear how much exports are officially supported. Latest estimations indicate that the funds allocated by China for export support have boosted to first position by far, and growing exponentially. According to the National Association of Manufacturers[60], 'Total export credit authorizations in China have expanded from US$ 15,9 billion in 2005 to US$ 153,8 billion in 2013, an 867 percent increase.' 'The Commission and EU member states are very concerned by the increased amount of cases where EU export credit agencies, who adhere to the disciplines of the (OECD) arrangement, cannot match the credit terms of countries that are not bound by the arrangement – such as China.' said John Clancy, spokesman of EU trade commissioner Karl De Gucht, after a high level talks with China in December 2010[61]. Similarly, a European Parliament briefing paper[62] finds that 'Chinese export credits have become a competitive threat to exporters from the OECD. China is not a member of the OECD and is therefore not obliged to comply with the OECD guidelines'. Under this perspective, a fair question

[60] National Association of Manufacturers, 2014. The Global Export Credit Dimension.
[61] Financial News, 15 January 2011.
[62] Export Finance Activities of the Chinese Government, 2011. Directorate-General for External Policies Policy Department, European Parliament, EXPO/B/INTA/FWC/2009-01/Lot7/15.

to ask is why China should follow the rules of the G-7 nations and not the other way around i.e. that the G-7 nations adopt Chinese practices? In support of the aforementioned, China recently accepted to initiate discussions on officially supported export credits, however not in the direction of joining the Arrangement but rather for establishing a fundamentally different regime in this area. The coming developments will certainly be of great interest for evaluating corresponding theories of international relations.

Notwithstanding international pressure, a nation may wish to join a regime such as the Arrangement for a set of reasons stemming from what it believes is in its own best interest. Weighting the pros and cons of participating in a regime, such nation may come to the conclusion that benefits are superseding potential disadvantages from its participation. The case of Brazil is characteristic. Brazil has traditionally been opposing to the Arrangement. However, when the discussions were initiated for reforming the Aircraft Sector Understanding in 2004, Brazil was invited to join the discussions and eventually became part of the Aircraft Sector Understanding with the signature of the amendment to the arrangement in 2007. Brazil membership to the Arrangement's specific sector understanding is noteworthy for two main reasons: the first is that Brazil is the first non-OECD nation to join the Arrangement, an otherwise OECD-led agreement and the second is that Brazil joined only the Aircraft Sector Understanding but not the rest of the Arrangement. Why would a nation proceed this way? Brazil found beneficial on the one side to be part of the discussions shaping the 2007 Aircraft Sector Understanding, thereby being in a position to influence the shaping of the agreement. On the other side, Brazil saw positively the access to the practices and experience of the other participants to the Aircraft Sector Understanding with regards to its own potential export nations as well as the terms extended by competing nations for similar deals. It should be reminded that Brazil had previously faced dispute settlement processes against Canada under the WTO rules on aircraft related subsidies[63].

It should be stressed that, in spite of the above and despite the fact that participating nations have been encouraging other nations to join the Arrangement, in some 35 years of existence only South Korea adhered to the full Arrangement and Brazil to the Aircraft Sector Understanding, demonstrating a general reluctance from nations to follow officially supported export credits' rules. In particular, the participation to the Arrangement of major exporting nations such as China and Russia would considerably increase the Arrangement's credibility and impact on international trade. Especially in the area of the Aircraft Sector Undertaking, OECD Secretary General Angel Gurria invited again at the signing ceremony of the sector undertaking in 2011, the two nations to

[63] e.g. DS 46, DS 70 and DS 71.

join the Arrangement (OECD[64]): 'Russia is becoming a prominent commercial aircraft producer and China will begin production in the next few years. It is in everyone's interest that all aircraft manufacturing countries join this new agreement so the market can function on a level playing field.'

Free riding from infringing agreements

Once a nation has joined an agreement or regime, the question may arise to which extent it is prepared or it wishes to comply with the terms agreed. Non-compliance with an agreement would certainly bring (possibly short term) benefits in the event the other member-states do comply with the respective terms. Two considerations may affect the view of possible benefits that could derive from non-compliance: reputational issues towards the infringing nation's peers and an explicit enforcement scheme including for instance penalties for non-compliance, retaliatory actions from affected nations or a dispute settlement mechanism to address issues or disagreements, which would restrict the foreseen benefits from non-compliance.

Reputational considerations can be seen in the sense that the image of a country in a wider international environment would affect, for instance its discussions in other fora, negotiations on other topics, measures and repercussions, which eventually may drive a possible infringing country to rather comply with its commitments. However, it is by nature almost impossible to find cases where countries decide to comply with their commitments, or rather not to infringe them, because of reputational considerations, as complying with their agreements is precisely what is expected from them.

Dispute settlement mechanisms or retaliatory actions are also powerful enforcement arguments. Nations can expect that, if they do not abide by the agreed rules, the corresponding penalizing consequences could be imposed onto them or their industries. The number of cases addressed by the WTO Dispute Settlement mechanism since its establishment demonstrates that nations still decide to infringe agreements (or rather 'duly interpret' it) in order to secure benefits. Three possible explanations can be put forward. The first suggests that a nation, having duly calculated the expected benefits from infringing an agreement and the possible consequences, comes to the rational conclusion that expected benefits exceed possible consequences and therefore that infringement is a better option. The second explanation relates to lobby, in the sense that infringing an agreement in support of a specific sector may lead to consequences in other national

[64] OECD , 2012, Aircraft Sector Understanding Signing Ceremony. Remarks by Ángel Gurría, Secretary General of the OECD.

sectors, the role of the lobby would then be to direct a state to infringe such agreement while knowing that other sectors could suffer the consequences. This also relates to the theories of public choice, further examined in Paragraph 1.1.5. Finally a last explanation may be related to the possible time line. The breach of an agreement brings benefits on the short term. Possible consequences could be triggered in the longer term, thus either ensuring some immediate political benefits for the politicians in place or securing benefits that could have a domino effect, in which case the longer term benefits could be significantly higher than possible consequences. This would be the case for instance where breaching an agreement would give a national company a better positioning also for future tenders e.g. a monopolistic position or a privileged position in the event of strategic trade.

In the specific case of the Arrangement, however, no enforcement mechanisms are embedded in the agreement or referred to. The Arrangement is a Gentlemen's agreement in the sense that participating members are not obliged to follow the rules conceded. Infringing nations do not have direct consequences stemming out of the Arrangement. However, practice for over 30 years has shown that participants to the Arrangement do seem to keep up to the terms of the Arrangement. In fact, while lacking an enforcement mechanism, the Arrangement is based on an extensive information and notification system (see Chapter 1.5). Thereby, participants share with their peers their intentions on the terms to be agreed on specific officially supported export credits deals. Peer nations have then the option to match more advantageous terms in case they support their own industry for the same tender. This notification system lays at the heart of the effective functioning of the Arrangement. If a participating nation fails to duly notify its peers in accordance with the notification provisions, it may face a corresponding attitude from its peers, meaning that in a next case(s), the breaching nation may not be notified and may not be in a position a. to receive the information as such and b. to subsequently match potential better terms extended. Such notification mechanism seems to be holding together participating nations under the Arrangement without a need for explicit enforcement provisions.

Despite the nature of the Arrangement, a Gentlemen's agreement, indications converge that the level of free riding from participating nations to the Arrangement is limited, at least when it comes to the terms extended for specific export deals. It should be noted that, due to the lack of enforcing mechanisms and to the establishment of notification procedures, no systematic records are available on possible breaching of the Arrangement from participating nations, which are rather disclosed on a case-by-case basis. Cases of infringement or ‘free riding’ however exist. A publicly disclosed case is the one practiced by Canada during the actual implementation of the

officially supported deal. The breaching element was not the terms extended to the recipient Canadian companies but the actual follow-up of the repayment terms agreed between Canada's ECA, EDC, and the recipients. Mark Milke[65] reports: 'Two of the highest-profile recipients of subsidies and guarantees are Pratt&Whitney and Bombardier. Bombardier has never publicly disclosed its repayment record' and continues 'authorized assistance to Bombardier from April 1, 1982 to May 12, 2009, amounted to $ 750,2 million; it is not clear how much of that had been repaid as of the latter date. The author's 2007 study on corporate welfare found […] that Bombardier had repaid just $ 188 million of the assistance as of 2005 (Milke, 2007).' Similarly, Pratt&Whitney appears to have received some $ 1,4 billion since 1982 and repaid $ 325 million as of October 2009.' Brynlidsen[66] suggests that 'non-compliance is accepted as long as the ECA provides a justification in the case that benchmark standards were not met or the required information is not disclosed.'

0.2.7 Hidden subsidies and export credits

The previous chapter hints at the fact that, despite international agreements regulating issue areas such as the use of officially supported export credits, governments will often attempt to circumvent such agreements and provide their industry with benefits that may place them in an advantageous position in international markets. Such means used by governments fall typically under the sphere of subsidies and are also usually forbidden and, if not, strictly regulated. In this context, some governments have been applying an array of other measures to support their national industries, outside the given scope of regulated subsidies and export credits. A World Bank Working Paper prepared by Lev Freinkman, Gohar Gyulumyan and Artak Kyumrumyan[67], mentions that governments 'try to protect, support and subsidize domestic industries to make them more competitive and financially viable, and often they do it through implicit subsidization, such as various tax benefit schemes.' Such measures can be generally labelled 'hidden subsidies' as they constitute in fact subsidies but do not appear as such in the governments' financials. An illustration of such hidden subsidies and the complexity to identify them and to assess their impact on international trade is presented in Chapter 1.7. It should be noted that hidden subsidies may be the result of conscious governmental decision-making or the effect of

[65] Milke , M., 2010. Aerospace Subsidies – The latest 'distortion of competition. Fraser Forum. 12-13 March 2010.
[66] Brynildsen, O.S., 2011. Exporting goods or exporting debts? Eurodad.
[67] Freinkman, L., Gyulumyan, G. and Kyurumyan, A., 2003. Quasi-Fiscal Activities, Hidden Government Subsidies, and Fiscal Adjustment in Armenia. The World Bank, World Bank Working Paper no.16.

historical developments. For instance, Arno Schroten[68], in a presentation on 'Hidden subsidies: external costs of transport', estimates the subsidy element by calculating the difference between the total transport costs and the income from taxes and charges. The costs however include elements such as environmental costs, climate change, congestion and noise, beyond the infrastructure itself. This paragraph rather focuses on voluntary hidden subsidies as a result of governments' action.

In this area, literature is relatively scarce, possibly due to the difficulty to collect concrete data. A concise and accepted definition is possibly unavailable. It can be generally stated that hidden subsidies are such subsidies burdening governmental budgets, as cash transfer, in-kind provisions or non-cash financial support, which are neither labelled as subsidies nor recouped by the end beneficiary. A major source of reference is the above World Bank Working Paper analyzing the topic on the basis of the example of Armenia. The paper distinguishes between three types of 'inter-related phenomena' and defines them as follows:

'(a) *Hidden budget subsidies* represent an ultimate cash transfer from the Government to the enterprise and household sectors that is either not identified as a subsidy in the Government's accounts or not reflected in these accounts at all. The hidden subsidies include, for example, direct budget credits, tax exemptions and tax arrears, enterprise transfers from state extra-budgetary funds, enterprises' gains from import and export quotas, and recapitalization of troubled SOEs. In some particular cases, hidden subsidies are reflected (but more frequently they are not), in the official budgetary documents (while they are not called "subsidies"), and often they are used to clear debts (that is, finance them) that emerge as a result of either: quasi-fiscal subsidies provided earlier or accumulation of contingent liabilities (CLs).

(b) *Quasi-fiscal activities/subsidies* represent provision of implicit subsidies by public sector entities that operate outside of the regular Government budget such as a Central Bank, state-owned commercial banks, state enterprises in energy and public utilities, etc. In the case of public utilities and other "important" state-owned enterprises, they usually finance such subsidies through a heavy debt accumulation. There is an implicit assumption by creditors and suppliers that the Government will step up and bail out these companies if necessary to prevent their insolvency.

[68] Schroten, A., 2010. Hidden subsidies: external costs of transport. Presentation at the Green Budget Europe Annual Conference 2010., Budapest, Hungary, 08-09/07/2010.

(c) *Contingent liabilities* represent liabilities that potentially may (or may not) become explicit claims on the government budget in the future periods. The real value of CLs is usually known only ex post, while the real time estimates for CL levels are often derived from stochastic models. Traditional examples of CLs include government guarantees on commercial credits, operations of public social and medical insurance funds, risks/costs associated with the collapse of banking systems, as well as costs of possible currency crises.'

The World Bank's report analyses, by comparing the country's actuarial deficit to the conventional deficit, the dimension of such hidden subsidies in the case of Armenia and estimates an order of magnitude in the period between 1995 and 2001 that can exceed 7% of the GDP (e.g. in year 1995) compared to a budget deficit slightly above 8%. A level above 1,5% of GDP is seen as common across developing countries, where the practice of hidden subsidies seems to be more present, as indicated in the same paper: 'Developing and transition economies are quite different, the incidence of QFAs is higher, their fiscal implications often remain non-quantified, and building contingent liabilities to finance QFAs is rather common.' Nonetheless, the much higher GDP of developed countries means that a small percentage of GDP directed to hidden subsidies still constitutes a significant amount in monetary terms. Ashley Balls[69] summarizes the sectors benefitting from hidden subsidies in New Zealand as a result of legislation, which include utility companies, education, housing and health. Similar types of legislation can be easily found in most developed countries as a result of public policies including social policies.

Some sectors seem to be keener on benefitting from hidden subsidies, such as energy and transportation. The World Bank paper[70] shows that, in the case of Armenia, the largest share (some 70%) of hidden subsidies eventually ends up to the benefit of the wider population, whereas the remaining 30% goes to industry. The mechanism for transferring subsidies to their beneficiaries is mainly based on channeling the benefits through the national energy and utility companies, which did not appear on the government's budget: 'However, privatization of the Armenian gas distribution network in 1998 was structured in such a way (gas-for-equity swap) that its financial results remained outside of the country's fiscal system.' Focus on the energy sector is explained in the World Bank's paper, which states that 'This happened due to three major reasons […]: (a) the sector was dominated by large state-owned companies with weak corporate governance structures and heavy political influence; (b) the Government was not prepared for radical reforms in the Energy and Utility sector because of the concerns regarding

[69] Balls, A., 2014. Addicted to Subsidies. New Zealand Business, 28(11):64.

[70] Freinkman, L., Gyulumyan, G. and Kyurumyan, A., 2003. Quasi-Fiscal Activities, Hidden Government Subsidies, and Fiscal Adjustment in Armenia. The World Bank, World Bank Working Paper no.16.

the possible social and political implications of such a reform; and (c) technical peculiarities of the inherited infrastructure networks led to additional obstacles to improvements in sectoral performance, in particular making it difficult to cut-off non-paying customers.' Subsidiazation from non-payment has been the main means of transferring the benefits to the end users. This culture of non-payment has also been used as the main channel for extending such support to industry in the form of 'soft low-interest budget credits' that are eventually not repaid by the beneficiary. This mechanism is also similar to the one described in the previous paragraph on export credits extended to Canadian industries.

The transport sector is also largely affected by hidden subsidies. As indicated above, a presentation by Arno Schrotten[71] shows the elements and level of the hidden subsidies for transportation in the EU. The sources he refers to state uncovered transport costs of some € 150 billion in 2008[72] and direct subsidies for road transportation equal to some € 16 billion[73]. Air transportation is also at the focus of hidden subsidies, as the regulation of the market is strongly linked to governmental policies. As such, Ronald Dean Scott and Martin Farris[74] already indicate possible mechanisms for governments to transfer hidden benefits to airlines. They refer that 'the benefits received from Washington are cloaked in complicated and difficult-to-understand devices such as tax concessions, depletion allowances, air mail payments, and the like.' They also quote Clair Wilcox who makes reference to 'rendering services for which the government makes no charges, by selling goods and services for less than they are worth, by buying goods and services for more than they are worth and by exempting some enterprises from taxes that others must pay.' Finally, they mention other types of hidden subsidies such as loan guarantees, research and development grants, and federal research.

On a wider scale, Brynildsen[75] makes a direct link between officially supported export credits and bilateral debts, revealing the mechanism of transforming export credits into hidden subsidies. Brynildsen indicates, in line with point (a) above that poor countries often provide support to their national industries by assuming their debts and bailing them out, either when such industries are

[71] Schroten, A., 2010. Hidden subsidies: external costs of transport. Presentation at the Green Budget Europe Annual Conference 2010., Budapest, Hungary, 08-09/07/2010.
[72] Button, K., 2008. The Impacts of Globalisation on International Air Transport Activity.Global Forum on Transport and Environment in a Globalising World, 10-12 November 2008, Guadalajara, Mexico, OECD.
[73] Ecologic et al, 2006.
[74] Scott, R. D. and Farris, M. T., 1974. Airline Subsidies in the United States. Transportation Journal, American Society of Transportation and Logistics,13.
[75] Brynildsen, O.S., 2011. Exporting goods or exporting debts? Eurodad.

state owned or when such industries are large and important for the local economies and their governments decide not to let them fail. Thus companies' debts turn into governments' debts. When richer nations cancel debts of poorer nations, they usually use aid budgets to do so and, among other purposes, transfer to their ECA the amounts owed by the poorer nation which are cancelled as part of the aid. Through this mechanism, governments are able to fund their national ECA for such officially supported export credits that the poorer nations' industries would default. This gives a clear ex post subsidy element to the exports of the richer nation as coverage for the exported goods is eventually borne by the government budget. In fact, Brynildsen suggests that 'Eurodad research shows that 85 percent of the bilateral debts cancelled from 2005 to 2009 were debts resulting from export credit guarantees.' He specifies that 'the main bulk of developing country debt to other governments is created by export credit guarantees, and ECAs receive significant transfers from aid budgets every year as a result of export credit debts cancelled by donor countries and paid with Official Development Aid (ODA)'.

Other areas linked to public policy are also concerned with hidden subsidies, for instance health, education and the environment. The purpose of this research is not to open up a debate on hidden subsidies but rather to raise the awareness of these governmental mechanisms that are used to bring benefits to certain sectors of the economy in a covert manner, financed in fact by taxpayers' money. In a sense, this affects export credits in the cases where such officially supported credits are subsidized. More importantly, it shows that governments have a wide array of means to provide benefits to certain sectors, through infrastructure, tax exemptions, funding for research, spin-offs from governmental research, grants, pricing policies, subsidization of intermediary sectors and many more. As further analyzed in Chapter 1.7, such hidden benefits to sectors such as the aerospace may have considerable effects on the competitiveness of the affected companies, certainly in the internal markets but mainly on international markets especially for export oriented sectors. The debate remains to define which of such subsidies create in fact a bias in international trade or constitute natural elements of competitiveness of national industry.

0.3 Theories of International regimes – A critical overview

0.3.1 Overview

'We live in a world of international regimes' states Young[76] in 1980. After World War II, the exponential development of international cooperation and globalization in a vast number of areas has generated the need for international actors such as nations to structure their understanding of their relations with other actors. International regimes have, thus, emerged in a diversified range of areas variating from topics of worldwide reach such as economy, environment or trade to local issues such as the protection of species in certain areas or the management and exploitation of waters and rivers. Hopkins and Puchala[77] note that 'regimes exist in all areas of international relations, even those, such as major power rivalry, that are traditionally looked upon as clear-cut examples of anarchy'. International regimes today are present as constituent elements of a wide array of discussions among nations or actors and, to some extent, are tasked to regulate the behaviour of such actors in dedicated issue areas. Young continues 'What is more striking, however, is the sheer number of international regimes. Far from being unusual, they are common throughout the international system'. Participating actors in international regimes can be very limited comprising only a few actors in some cases or extremely wide including most nations in the world. Actors are typically assumed to be states, although non-state actors become ever more present, as recognized by O'Neill, Balsiger, VanDeveer[78] 'NSA influence on international cooperation is here to stay and represents a shift of agency away from states.' In this context, understanding the theoretical fundaments of international regimes appears as a justified endeavour. Questions such as what are international regimes, when do they emerge, how do they function, what is their role in the wider context of international relations, to what extent do they bind the actors, what are the consequences of not complying or of not participating in a regime and many others are fair and valid and answers to such questions are the subject of the research in theories of international regimes. Extended research programmes and a rich literature on international regimes appeared especially in the 1980s and 1990s. Today, the researcher that dives into the world of theories of international regimes will face a stimulating atmosphere that can

[76] Young, O., 1980. International Regimes: Problems of Concept Formation. World Politics, 32(3).
[77] Puchala, D. and Hopkins, R., 1982. International Regimes: Lessons from Inductive Analysis. In Krasner, ed. International Regimes. International Organizations, 36(2).
[78] O'Neill, K., Balsiger, J. and Van Deveer, D. S., 2004. Actors, Norms and Impact: Recent International Cooperation Theory and the Influence of the Agent-Structure Debate. Annual Reviews. 2004.

be characterized by a unique combination of mystery, passionate antagonisms, and a sense of incompleteness.

Mystery

First steps in theories of international regimes emerge in the 1960s. They naturally follow the boost in research on international relations that accompanied the efforts of the international community to strengthen their ties as a consequence of the disastrous effects of World War II. Various aspects of international relations and international economics are being examined and explored in the after-war period and, in the context of an increasing number of international agreements and understandings, theories of international regimes appear as a separate branch of international relations. The bricks of the theories of international regimes developed in the subsequent two decades are largely affected by various schools of thought of international relations such as liberalism, structuralism, realism. These two decades are characterized by an intensification of the research programme in international regimes, a burgeoning of findings and progress in the understanding of the discipline. Protagonists of this newly established discipline include names such as Keohane, Young, Strange, Grieco, Ruggie, Krasner, Haas and many more. Their research programme includes topics such as the definition and delimitation of international regimes, aspects on their formation and evolution, role in international relations, impact from the international actors involved, etc. Krasner's[79] International Regimes aims to collect into a single volume the positions and interpretations of the main protagonists at that time, after they contributed to a conference on the topic in 1982. After that, major books and papers were published throughout the 1980s and 1990s further developing the ideas and theories established.

In this stimulating environment, at the apparent peak of its development, the discipline of international regimes suddenly falls into a coma in the late 1990s. Since that time, and despite that many issues are still inconclusive in the area of international regimes, theoretical research has dropped to an insignificant level. Several papers use, interpret and capitalize on established aspects of theories of international regimes for instance Mueller, Mathiason, and Klein's [80] 'The Internet and Global Governance: Principles and Norms for a New Regime' on the creation of international regimes. However little is noted in terms of further development of the theory itself

[79] Krasner, S., 1982. International Regimes. International Organizations, 36(2).
[80] Mueller, M., Mathiason, J. and Klein, H., 2007. The Internet and Global Governance: Principles and Norms for a New Regime. Global Governance, 13(2).

after the attempt by Hansenclever, Mayer and Rittberger[81] to unify the major schools of thought in this area. Various suppositions can be brought forward in that respect. A first thought relates to the protagonists themselves. The debate on international regimes was animated throughout the period of its culmination by a constrained number of main protagonists as indicated above. As those progressively left the front stage of theory development, they left a void that eventually was not filled by follower researchers. Another view considers the trends of research. Young[82] stated that 'But is the resultant surge of scholarly work on international regimes any more likely to yield lasting contributions to knowledge than have other recent fads or fashions in the field of international relations?' With the international shake-up caused by the events of 9/11/2001, researchers in international relations may have found a more exciting and attractive ground for their research curriculum and, thus, potential contributors to the theories of international regimes may have found more inspiration in other related fields. Naturally, another valid thought may simply be, as Strange[83] defends, that, eventually 'international regimes are an epiphenomenon of international relations and power relations'. If Strange is right, the question then arises on whether any further research in this area can validly contribute to the knowledge in international relations. Observing the fact that international regimes do exist and are increasing in quantity and complexity, whether as a epiphenomenon of international relations or as shaper of international relations, it can be concluded that research in international regimes is indeed value creating for the knowledge and understanding of international relations.

Passionate antagonisms

Passionate antagonism and debate on international regimes cover mainly two dimensions of the theories. A first aspect that has led to numerous discussions relate to the role and importance of international regimes within the frame of international relations. The debate opposes the critics of international regimes, who advocate the position that research in international regimes is a 'waste of resources' as per the quote of Strange above, and the supporters of research in international regimes. The former fundamentally argue that the international power system among international actors is such that theories of international regimes in the facts do not bring any further clarity in the wider context of theories of international relations. They base this position on the belief that international regimes are merely a consequence of the international power structure and a concrete demonstration of such power structure and, thus, under this perspective analysing

[81] Hasenclever, A., Mayer, P. and Rittberger, V., 2000. Integrating Theories of International Regimes. Review of International Studies, 26(1).
[82] Young, O., 1986. International Regimes: Towards a New Theory of Institutions. World Politics, 39(1).
[83] Strange, S. 1982. Cave! Hic Dragones: a critique of Regime Analysis. In Krasner, S. ed, International Regimes. International Organizations, 36(2):337-354.

theories of international regimes becomes irrelevant. The supporters of the theories of international regimes argue on the contrary that regimes do shape and influence the relations between international actors, as self-determining and independent constructions, not the least due to the ethical and moral standing they generate to the participating actors but also to the ones that consciously decide not to join.

However, supporters of international regimes, despite their alignment on the benefits of analysing international regimes, bear their own passionate debates. Due to different beliefs, traditions and schools of thought on the wider aspects of international relations, therefore on the starting point of international regimes, their views diverge on the functioning of the international system as a whole and, consequently, on international regimes as a subpart thereof. Liberal, structural, rationalist, cognitivist and their derivative theories of international relations, just to name a few, bring, each, a different perspective on the theories of international regimes. As such, the different perspectives on international relations have a concrete impact on the analysis on theories of international regimes, for instance how and when regimes are formed, their role in international relations, their anticipated evolution and perspective, etc. Efforts from scholars in international regimes have focused on attempting to bridge the differences between the main schools of thoughts, not so much at the level of the basic drivers of their underlying beliefs on international relations but rather at the much more practical level of formulating elements of theories that can be acceptable to all. In this sense, the work of Hansenclever, Mayer and Rittberger displays probably the latest and most recognized effort in this direction. Working towards such a unified theory has proven uneasy probably for reasons that cover the difficulty of understanding international relations in general as a social discipline, the fact that little concrete empirical proof can be brought for any of the theories and maybe also due to the, somewhat strong, sense of belonging of scholars in the one or the other school of thought. Today, debate on international regimes and underlying schools of thoughts seems to have appeased, as explained above, and recent literature mainly uses the practical findings of past research rather than develops new theoretical aspects.

Incompleteness

Looking back at the findings resulting from the research and debates as indicated above, the researcher of the 2010s may perceive a sense of incompleteness. Work on international regimes has indeed significantly structured and delimited aspects of the discipline, such as the definition of international regime, thoughts on when and how they emerge, their role in international relations etc. However, a large variety of parameters of more practical importance remain unresolved and,

maybe more importantly, a comprehensive theory of international regimes does not seem to exist as of today. Scholars and researchers have often clarified that their work affect only 'part' or 'aspects' of international regimes, that aspects 'remain unclear', that 'their work is initial' and certainly that any hypothesis put forward still lacks empirical confirmation. Also, despite of various attempts to bring together existing elements of international regimes under one theory, the prevailing feeling is that such efforts have resulted in a compilation of opinions rather than their alignment and unification. For instance, today, researchers can refer to certain views on when international regimes may emerge but have no clear understanding on whether they will actually emerge, they can assess some elements that may influence the evolution of regimes but do not avail from a systematic and structured approach of such parameters that may predict regime evolutions and their possible impacts, they may perceive some consequences of non-participation in international regimes ('free riders') but do not benefit from a concrete framework on the meaning of non-participation, they will peep into the interrelation among international regimes but will see only a few elements in terms of overlap and density of regimes and their consequences. Additionally, as the overall reference framework of international relations is shifting towards an environment in which non-state actors play an increasing and more decisive role, it would be beneficial to review such theories of international regimes within this evolving context.

The time between the late 1990s and the 2010s has seen the application of the theories developed previously rather than the generation of new ideas. At the stage where research for this discipline was standing in the late 1990s, this path may have brought the greatest value added as the application of aspects of the theories have crystallized their validity and use. On the basis of a more mature discipline, it is felt, that a considerable research programme can be proposed and implemented in the area of international regimes. It may now be the right moment to implement such programme with the aim to develop one concrete and clear theory in this area.

The above paragraphs summarize the generic context of the progress of research in the area of international regimes as perceived by the author. This is the wider theoretical frame within which the analysis of the concrete case study of this thesis will be analyzed. Based on this context, the next paragraphs attempt to shed some light, more concretely and practically, on certain aspects of theories of international regimes that are relevant to and will be used for the analysis of the case study. These aspects have been selected for their contribution to the specific case study and are not intended to cover a comprehensive analysis of the theories of international regimes. They also do not have the ambition of being comprehensive of the positions and ideas developed so far but rather give indications on the understanding of these aspects for practical use in this thesis.

0.3.2 Definition

Several efforts have been made to formulate a sound and commonly acceptable definition of international regimes. The first recorded attempt belongs to Ruggie[84] who first introduced in 1975 the concept of international regimes as 'a set of mutual expectations, rules and regulations, plan, organizational energies and financial commitments which have been accepted by a group of states.' A few years later, the question 'what is an international regime' was the first of many questions Krasner attempted to respond in International Regimes. Despite being 'only' a definition, the task has proven certainly challenging and has raised several debates. Notwithstanding, the original definition formulated by Krasner seems today recognized and accepted as a consensus, maybe because it 'seeks a middle ground between 'order' and explicit commitments' (Haggard and Simmons)[85]. The definition reads:

'Regimes can be defined as sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations'.

Krasner continues by defining the individual terms used as follows:

'Principles are beliefs of fact, causation, and rectitude.
Norms are standards of behavior defined in terms of rights and obligations.
Rules are specific prescriptions or proscriptions for action.
Decision-making procedures are prevailing practices for making and implementing collective choice.'

This definition, with very little variations, is already proposed in 1983. It is widely used since that time and papers and literature on international regimes accept and refer back to it as the standard definition. Recent papers such as 'The Internet and Global Governance: Principles and Norms for a New Regime' referenced above take this definition as the fundamental theoretical constituent of international regimes. In this specific case, the structure and content of the paper is following the logic and structure of the definition. Many other references focus on the constituents as

[84] Ruggie, J., 1975. International Responses to Technology: Concepts and Trends. International Organization, 29.
[85] Haggard ,S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.

introduced by Krasner such as Martin and Simmons[86] referring to international regimes 'defined as rules, norms, principles and procedures that focus expectations regarding international behavior' or Rosendal[87] indicating that 'Regimes are often defined as 'implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given issue-area'.

Other definitions have also been proposed at various times. For instance, Keohane and Nye's[88] definition state that international regimes are 'sets of governing arrangements' that include 'networks of rules, norms and procedures that regularize behavior and control its effect'. Later, and after the establishment of Krasner's definition as a consensus, Keohane[89] attempted another leaner definition, closer to the actual nature of a regime: 'Regimes are institutions with explicit rules, agreed upon by governments that pertain to particular sets of issues in international relations.' Others, such as Haas and Bull have hinted to somewhat different spirit in the definition of regimes, where Haas[90] insists on the 'mutually consistent' aspect of the norms, rules and procedures and Bull[91] focuses on the aspects of adherence to rules 'by formulating, communicating, administering, enforcing, interpreting, legitimating and adapting them.'

From the cognitive school of thought, Kratochwil and Ruggie[92] intend to delink the definition of regimes from its constituent elements, as did Keohane, and propose 'International regimes are commonly defined as social institutions around which expectations converge in international issue-areas. The emphasis on convergent expectations as the constitutive basis of regimes gives regimes an inescapable intersubjective quality. It follows that we know regimes by their principled and shared understanding of desirable and acceptable forms of social behavior. Hence, the ontology of regimes rests upon a strong element of intersubjectivity.' Despite the beauty of this definition that goes straight into the heart of the issue of regimes and basically assumes that 'you recognize one when you see one', it remains very subjective and totally dependent on individuals' interpretations and perceptions. In fact, it raises more questions than it actually solves, apart from the aspect of belonging to social institutions.

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[86] Martin, L. and Simmons, B., 1998. Theories and Empirical Studies of International Institutions. International Organizations, 52(4): 729-757.
[87] Rosendal, G. K., 2001. Impacts of Overlapping International Regimes: the Case of Biodiversity. Global Governance, 7(1):95, p23.
[88] Keohane , R. and Nye, J., 1989. Power and Interdependence: World Politics in Transition. Pearson Education Inc., p19.
[89] Keohane, R., 1989. International Institutions and State Power; Essays in International Relations Theory. Boulder, Colo; Westview Press, p1-20.
[90] Haas, M. P., 1980. Technological Self-Reliance for Latin America: the OAS Contribution. International Organization, 34(4)..
[91] Bull, H., 1977. The Anarchical Society: A Study of Order in World Politics. New York, Columbia University Press, p 54.
[92] Kratochwil, F. and Ruggie, G. J., 1986. International Organization: A State of the Art on an Art of the State. International Organization, 40(4):753-775 .

Further definitions have appeared and variably been considered and retained. In several cases, such additional definitions are very much aligned with Krasner's consensus definition, albeit giving different weight on certain of the other constituent of the definition. Some further definition have attempted to capture the progress in research in this area and the criticisms of Krasner's definition. In any event, they have never fundamentally shadowed the consensus definition proposed by Krasner in 1983, which remains the main reference definition in this area.

Critics

Despite its wider acceptance as a 'consensus', Krasner's definition has been widely challenged and criticized. This has led to a number of attempts for alternative definitions of international regimes, some of which appear in the previous paragraph. Proposing new definitions has further matured the ideas and concepts behind international regimes and has shed light onto other facets which, according to each individual author, are more prevalent for the understanding of regimes.

A major aspect of Krasner's definition which has been attacked by several researchers is the fact that it does not address the actual nature of regimes but rather its constituents. Young criticized Krasner's definition on three grounds, the first of which is precisely that the consensus definition is 'really only a list of elements that are hard to differentiate conceptually and that often overlap in real-world situations'. Keohane has attempted to rectify this point by adding in the definition what international regimes actually are. However in his early definition he postulates that 'regimes are sets of governing arrangements …'[93] whereas later on, he mentions that 'regimes are institutions'. In his former definition, an explicit indication of the constituents is still present, which disappears in his later formulation. Along the same lines, Kratochwil and Ruggie define regimes fundamentally as 'social institutions'. Whereas the lack of defining the nature of regimes has raised many questions among scholars, it seems that this deficiency has not been sufficiently powerful to change the definition altogether.

A second element of concern with Krasner's definition is that is lacks precision. Strange[94] addresses this point in the following terms: ''Regime' is yet one more woolly concept that is a fertile source of discussion simply because people mean different things when they use it.' She also makes the point that, even among the contributions to Krasner's[95] 'International Regimes', '…

[93] Krasner, S., 1982. International Regimes. International Organizations, 36(2):2.
[94] Strange, S., 1982. Cave! Hic Dragones: a critique of regime analysis. In Krasner, S., ed., International Regimes. International Organizations, 36(2):337-354.

[95] Krasner, S., 1982. International Regimes. International Organizations, 36(2).

'regime' is used to mean different things.' and continues 'there is no fundamental consensus about the answer to Krasner's first question 'What is a regime?''. Young[96] follows the same line when he states that the definition 'exhibits a disconcerting elasticity when applied to the real world of international relations'. Indeed, the application of Krasner's definition leaves a vast room of interpretation of the nature, content and, eventually, the existence or not of a regime. Do we always have a regime when we face a set of principles, norms, rules and decision-making procedures? How are those terms to be interpreted?

Another criticism focuses on the definition of the individual terms. Krasner attempts in a few words' explanation to give the essence of each of the terms used in the definition: principles, norms, rules, decision-making procedures. However, each one of these terms can be conceptually and philosophically discussed over several pages or chapters and, probably, each scholar involved in the discussion will have a different, own perception and understanding of the terms. Haggard and Simmons[97] indicate that the various constituents are seen as elements that are 'hard to differentiate conceptually and that often overlap in real world situations' with one element shading off into another. Thus, instead of providing more clarity by attempting to define the terms used, the explanations provided rather open up the interpretations and debate on the actual issue of regimes.

Other criticisms have appeared over time with reference to Krasner's definition, both in terms of imprecision and linkage to wider concepts of international relations such as 'power', 'interdependence', 'states', 'system'. But attempts to propose a definition which would be more accurate and at the same time acceptable by the major schools of thought has actually failed. The benefits of Krasner's definition seem to have defeated the criticisms and thus have established it as the point of reference in this area.

0.3.3 Analysis

Krasner's consensus definition as described in the previous paragraph can be further analysed with the aim to derive additional understanding on the meaning and functioning of international regimes. A selection of elements are presented in the following paragraphs.

[96] Young, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.

[97] Haggard, S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.

Regimes vs institutions vs organizations

The definition of regimes makes reference to 'principles, norms, rules and decision-making procedures' without further specifying the organizational, agreement or structure aspects for conveying and applying such elements. In fact, the definition indicates the possibility that such elements remain 'implicit', in which case no formal arrangement will need to be put in place among the participating actors. As such, regimes can exist without any organizational dimensions, underlying agreement or structure. Young[98] specifies that 'regimes may be more or less formally articulated, and they may or may not be accompanied by explicit organizational arrangements.' and Hasenclever, Mayer and Rittberger[99] mention that ''international regimes' and 'international organizations' are neither synonymous nor co-extensional'.

This opposes to organizations, which typically need a structure, a staffing and thereby some type of agreement or understanding among its members. In this sense, international organizations differ and cannot be assimilated to regimes and vice versa, although international organizations usually do represent the organizational aspects of a regime and regimes often are structured in some sort of organizations. Haggard and Simmons[100] explain that, depending on regime definition and on the ideas of specific schools of thought, 'Regimes are *examples* of cooperative behavior, and *facilitate* cooperation, but cooperation can take place in the absence of established regimes. A recent example was the package of measures adopted by the advanced industrial states at the 1978 Bonn summit.' and they continue ''Convergent expectations' may or may not be tied to explicit agreements'.

They additionally distinguish regimes from 'institutions' arguing that 'Regimes must also be distinguished from the broader concept of 'institutions', the essential feature of which is 'the conjunction of convergent expectations and patterns of behaviours of practice.' However, other scholars view regimes as being closer to or assimilated to institutions, which can be defined as:

'An institution is any structure or mechanism of social order and cooperation governing the behavior of a set of individuals within a given community — may it be human or a specific animal

[98] Young, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.
[99] Hasenclever, A., Mayer, P. and Rittberger, V., 1997. Theories of International Regimes. Wiley on behalf of the Royal Institute of International Affairs .
[100] Haggard ,S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.

one. Institutions are identified with a social purpose, transcending individuals and intentions by mediating the rules that govern cooperative living behavior'.[101]

Without going in a detailed debate on the definition of 'institution', it appears relatively acceptable, despite opposing views, to state that a 'regime' would fall under the wider definition of 'institution', as a sub-part thereof. Young [102] clearly states 'Regimes are social institutions governing the actions of those interested in specifiable activities' and would also be supported by the definition of regimes given by Kratochwil and Ruggie (see above). Furthermore, it may also be confirmed by the fact that the term 'institution' is widely used as a synonym of 'regime' – although not necessarily is the term 'regime' used to replace 'institution'. In this sense, Hansenclever, Mayer and Rittberger conclude after a long theoretical debate that 'it would seem to be *not* necessary for (formally defined) regimes to be institutions.'

Explicit vs implicit

The consensus definition of regimes includes the statement that constituent elements of a regime can be 'implicit or explicit'. Thus, it can be assumed that scholars accepting the above definition are in agreement with this aspect of regimes. Nevertheless, it does appear that the 'implicit' nature of regimes has been debated and still opinions diverge on the sense of this feature. Keohane as an example has regularly opposed to the concept. The question is how a factual regime can be identified and labelled as such when its constituent elements remain implicit and what would be the actual consequences. If a set of implicit principles, norms, rules and decision-making procedures are not consciously shared and agreed upon, towards which elements can actors' expectations converge. Following, what is the level of compliance among actors with such elements if they are not clearly defined. Any actor can at any time behave in a manner outside the context of expectations. Finally, in case of divergence of understandings, what would be the nature of an implicit decision-making procedure. Haggard and Simmons[103] observe that 'focusing on 'implicit regimes' … begs the question of the extent to which state behavior is, in fact, rule-governed.' The mechanics behind the theoretical idea of implicit regimes seem to contradict the definition of regimes itself.

[101] Wikipedia.
[102] Young, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.
[103] Haggard, S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.

Along different lines, it is mentally effortless to understand that actors may progressively and unconsciously be guided to accept and adopt a common set of principle, norms and rules (perhaps also decision-making procedures) in issue areas. In such event, and on the basis of the definition, it can be stated that a regime is in place. Assuming this is correct, it remains questionable whether such an implicit regime can be of any value added before having been identified as such. As Young[104] indicates 'International regimes do not exist as ideals or essences prior to their emergence as outgrowths of patterned human behavior. It is therefore pointless to think in terms of discovering regimes.' and also that 'Serious problems of identification will still arise, however, where actors have little conscious awareness of the social conventions that guide their activities.' Young, in his definition of regimes, remains silent on the implicit or explicit nature of regimes.

Keohane, also, progressively develops his definition of regimes. In 1993[105], he proposes an amended definition that states 'but it must be recognized as continuing to exist' and proceeds 'Using this definition, regimes can be identified by the existence of explicit rules that are referred to in an affirmative manner by governments, even if they are not necessarily scrupulously observed.' It would appear that, as research in international regimes has progressed, the nature of 'implicit' associated with regimes has faded away. Despite this acknowledgment, Krasner's definition has not lost in recognition and validity.

Regimes and agreements

The distinction between regimes and agreements in the area of international relations can result from interpreting the underlying meaning of the constituents of regimes' definition and is not necessarily straightforward. Besides the discussion on the 'implicit or explicit' nature of regimes, which would constitute a first difference with agreements, the constituent elements of regime definition hint at a 'higher' level understanding than agreements. 'Principles and norms' for instance can indeed be part of an agreement but would not actually form part of the nature itself of an agreement. Rather, when an agreement refers to some principles or norms, it typically does so in the pre-amble or introduction to such agreement which can be seen as a reference precisely to the underlying norms and principles of a regime. This would mean that such agreements are attached to such regimes but the norms and principles actually would fall outside the strict

[104] Young, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed. International Regimes. International Organizations, 36(2):93-114.
[105] Keohane, R., Nye, J., S. and Hoffmann, S., 1993. After the Cold War: International Institutions and State Strategies in Europe, 1989-1991. Center for International Affairs Series.

perimeter of the agreements. Thus it can be assumed that agreements are more concerned by operative aspects, concrete actions and/or results to be implemented by the parties concerned.

Regimes also appear to be longer-term 'constructions' than agreements due to the nature of their constituents – principle, norms, rules and decision-making procedures are both more likely to be setup for and to survive in the longer run than the actual specifics of an agreement, whereby agreements can also have similar or longer life cycles. Krasner indicates that 'Regimes must be understood as something more than temporary arrangements that change with every shift in power or interests'. He continues by quoting Keohane 'notes that a basic analytic distinction must be made between regimes and agreements. Agreements are ad hoc, often 'one-shot' arrangements. The purpose of regimes is to facilitate agreements.'

Despite the above statements that attempt to capture the nature of regimes, the distinction is somewhat blurred and possibly a matter of definition and content of a specific regime or agreement. For instance, states increasingly engage in Free Trade Agreements (FTAs). Such FTAs are named 'agreements' but often display characteristics much more akin to regimes than agreements in terms of 'level', constituent elements and life cycle. Many partial agreements or understandings can be concluded under such FTAs and, thus, FTAs can be seen as the 'facilitators', as an ‘umbrella’ for further agreements as per Keohane's statement on regimes. Consequently, lacking a clear fundamental distinction for the delimitation of agreement and regime, it is then dependent on the actual characteristics of the individual 'constructions' whether they would fall under regimes or agreements, notwithstanding what name they are given.

Hierarchy

A commonly accepted benefit of Krasner's definition is its direct focus on the constituent elements of regimes. This gives, on one hand, clarity with respect to the nature and functioning of regime, and on the other hand insinuates a level of hierarchy of its constituents. The elements used by Krasner should thus be seen as an order of hierarchy. Hierarchy of constituents seem to be important for the understanding of both regime formation as such and process of regime changes. As Hansenclever, Mayer and Rittberger[106] mention 'the hierarchy of regime components implied in the consensus definition had enabled Krasner to categorize two kinds of regime changes and, at the same time, specify the identity conditions of a regime in terms of these components'.

[106] Hasenclever ,A., Mayer, P. and Rittberger, V., 2000. Integrating Theories of International Regimes. Review if International Studies, 26(1).

Also Keohane[107], adhering to the four constituents of Krasner's regime definition, describes the relation among constituents: 'The principles of regimes define, in general, the purposes that their members are expected to pursue. … Norms contain somewhat clearer injunctions to members about legitimate and illegitimate behaviour, still defining responsibilities and obligations in relatively general terms. … The rules of a regime are difficult to distinguish from its norms; at the margin, they merge into one another. Rules are, however, more specific: they indicate in more detail the specific rights and obligations of members. Rules can be altered more easily than principles or norms, since there may be more than one set of rules that can attain a given set of purposes. Finally, at the same level of specificity as rules, but referring to procedures rather than substances, the decisionmaking procedures of regimes provide ways of implementing their principles and altering their rules.'

Along the same rationale of hierarchy of constituents, it is noteworthy referring to Milton Mueller, John Mathiason and Hans Klein[108], who show in 'The Internet and Global Governance: Principles and Norms for a New Regime' that the hierarchy of components needs to be observed when attempting to form an international regime and, consequently, failing to do so can certainly lead to a malfunctioning or abortion of the effort. They claim that, if rules and decision-making procedures are defined prior to principles and norms, as was practiced for the internet global governance, the result can be flawed: 'However, little progress was made toward an international agreement. This reflected policymakers' illadvised attempt to shortcut regime construction: they attempted to define regime rules and procedures without first defining underlying principles and norms.'

Expanding the above, it can be argued that efficient regime formation needs to follow the hierarchy of constituents and address each of them in sequence. By their nature, the hierarchy of constituents as provided by Krasner starts off with the most conceptual and 'highest level' elements (principles), moves on to the next level (norms) and finishes with more practical, concrete and operational elements (rules and decision-making procedure). This sequence appears to be senseful and should be retained on issues relating to regime analysis.

[107] Keohane, O. R., 1984. After Hegemony. Princeton University Press, p58.

[108] Mueller, M., Mathiason, J., and Klein, H., 2007. The Internet and Global Governance: Principles and Norms for a New Regime. Global Governance, 13:237–254.

0.3.4 Schools of thought

Part of social sciences, the discipline of international relations and more specifically international regimes can be observed from a variety of perspectives. The different schools of thought thus analyze the theories of international regimes each through a different context of principles regulating the interrelations among state actors, international order and more generally, view of the world. The schools of thought related to regime analysis are mostly deeply rooted in the theories of international cooperation and as such can be seen as today's representatives of a long and strong tradition. Perhaps this is also a reason for the heated debate on international regimes that took place in the '80s and '90s.

Interestingly, a large number of terms characterizing the different nature between schools of thought have appeared in the literature, such as liberalism, Grotian, realism, rationalism, neoliberalism, institutionalism, modified structuralism, structuralism, functionalism, cognitivism, eco-environmentalism, eco-reformism, egalitarianism, mercantilism, hegemonism to name only a few. It appears that all such terms eventually converge towards a limited number of basic ideas, aggregated differently between authors. According to Hasenclever, Mayer and Rittberger[109], three basic ideas of international structure prevail: interest-based, power-based and knowledge-based representing the core considerations of respectively neoliberal, realist and cognitivist schools of thought. Understanding the fundaments of these ideas is key for distinguishing the environment within which the related theories of international regimes are constructed and therefore their principles and outcomes. It should be highlighted, however, that theories of international regimes so far have only been able to analyze ex post the results of regime formation and evolution but have failed to predict the precise circumstances within which a regime will be formed or will evolve in a certain manner. Thus the interest of understanding the schools of thought remains somewhat theoretical as none of such schools has, so far, demonstrated a concrete practical and empirical edge over the others.

Nevertheless, Hasenclever, Mayer and Rittberger[110] have performed a thorough analysis of the three prevailing schools of thought indicated above, their commonalities and their divergences, and have attempted to propose a unified theory of international regimes by combining individual ideas proposed in each of them 'an attempt to combine elements of neoliberal, realist and

[109] Hasenclever, A., Mayer, P. and Rittberger, V., 1997. Theories of International Regimes. Wiley on behalf of the Royal Institute of International Affairs.
[110] Hasenclever, A., Mayer, P. and Rittberger, V., 2000. Integrating Theories of International Regimes. Review if International Studies, 26(1).

cognitivist approaches to international regimes to form a more complex theory'. They claim that 'each of the three schools offers a coherent and plausible vision of international regimes and is capable of bolstering its preferred interpretation with considerable empirical support, while none of this evidence is compelling, or strong enough to establish one school as a clear winner. This ambiguous state of affairs suggests the possibility that the variables separately emphasized by the three schools – interests, power, and knowledge – somehow interact in bringing about and shaping international regimes.' The following paragraphs aim at reviewing key aspects of the schools of thought representing the above three basic ideas. They should, however, be appreciated under the critical filter of Newell[111] who reviewed the research of the aforementioned authors and indicated 'As the authors are aware, numerous problems attend the plausibility of a fusion of all three approaches on epistemological and ontological grounds. Given this, they arrive at the (predictable) conclusion that 'each [approach] explains different aspects of the phenomenon under consideration and consequently neither one is indispensable.'

Despite the fact that various authors have elected to analyse schools of thought of international regimes in a number of different categorizations, it is necessary to select one them for the sake of this research. Due to the senseful distinctions presented by Hasenclever, Mayer and Rittberger and their effort to unify the related theories, their categorization will be retained and each of the schools of thought briefly presented below.

Realism (Power-based)

Realism was the prevailing school of thought in international relations at the time when theories of regimes first appear. With regime theories, realism becomes increasingly challenged and other schools of thought seem to gain ground in terms of recognition and validity. The realist tradition views international cooperation as based on the relative power of state actors. Actors are viewed as 'rational egoists' as pointed out by Keohane[112]: ‘Realists are at least clear about their assumptions: states, the principal actors in world politics, are rational egoists.' As such, actors under power-based considerations will primarily seek to secure relative benefits compared to other actors – more than a pure search of absolute gains. The aspect of comparison to other actors is a key feature of realists' world, as they see that an ever evolving international environment create the conditions for a permanent potential change of alliances and partnerships

[111] Newell, P., 1998. Review of 'Theories of International Regimes”. International Affairs, Royal Institute of International Affairs, 74(2).
[112] Keohane, O. R., 1982. The Demand for International Regimes. In Krasner, S. ed. International Regimes. International Organizations, 36(2):146.

among state actors. This means that, notwithstanding absolute benefits, relative benefits become more important as a criterion for shaping international cooperations.

Realism conceives that an international regime securing benefits to all actors involved may not be formed on the grounds that the balance of benefits is not suitably distributed among actors, thus allocating relatively more benefits to an actor versus another. In this context, they rather see international regimes as a means used by powers in order to establish their positions in issue-areas and gain benefits versus other actors. Keohane[101] indicates that 'Realists imagined that the end of the Cold War would lead to the decline or collapse of international institutions, which they saw as reflections of superpowers conflict rather than as devices by which states could achieve mutual beneficial cooperation in functionally defined issue-areas.'

Hasenclever, Mayer and Rittberger[113] point out that 'the lack of common government involves states in a constant struggle for survival and independence denying them the luxury of being egoists who, by definition, are indifferent to how well others do.' This statement clearly highlights the difference of perception between neoliberals and realists on the nature and behaviour of state actors, which naturally shapes the resulting theories of international cooperation and regimes.

Realist believe that the distribution effect of a regime is key to the possibility of such a regime being created and sustained. The nature of the regime that will result will also be fundamentally affected by the distribution of benefits. According to Keohane[101] 'Relationships of power and dependence in world politics will therefore be important determinants of the characteristics of international regimes.' Without at least one powerful leading state or group of states convincing other actors of the merits of a regime in a specific issue-area, the actual process of creation and sustainment may not be conclusive. Keohane's realist (or 'functional') theory of hegemonic stability[114] views regimes as 'international public goods that are short of supply unless a dominant actor (or hegemon) takes the lead in their provision and enforcement.' This same hypothesis has been disputed from a number of scholars, especially from ones adhering to other schools of thought. In a very practical paper published on non-proliferation regimes, Smith[115] concludes that 'the theory of hegemonic stability and the functional theory cannot adequately explain the nuclear

[113] Hasenclever, A., Mayer, P. and Rittberger, V., 2000. Integrating Theories of International Regimes. Review if International Studies, 26(1).
[114] Keohane, O.R., 1984. After Hegemony. Princeton University Press, p85-109.
[115] Smith, R. K., 1987. Explaining the non-proliferation regime: anomalies for contemporary international relations theories. International Organizations, 41(2):253-281.

non-proliferation regime; both theories suffer from premature exhaustion in their search for independent variables to explain regimes.'

This leads to another key distinction compared to neoliberals: realists see the creation and sustainment of an international regime more difficult than under neoliberal tradition as, apart from the absolute benefits, the distribution of such benefits must also be acceptable to the actors involved. In their overall consideration, realists credit a lower importance to regimes as key elements shaping international cooperation than neoliberals do. This reflects the deeper tradition of realists who 'have paid little attention to international institutions, which they see as affecting international politics only on the margin' (Hasenclever, Mayer and Rittberger)[116].

Neoliberalism (Interest-based)

Neoliberalist tradition of international politics is fundamentally constructed around the belief that international actors, as states, are rational egoists who primarily care for their own absolute gains. Actors are thus seeking to maximize their benefits, independently from the benefits that other actors may be in a position to extract. In their search to maximising their own benefits, they see uncertainty and risks in their interrelations to other state actors as a possible hurdle which, if addressed suitably, can further increase the sought-after well-being. In this sense, state actors will seek cooperation with other actors in order to reduce risks, increase transparency and thereby increase the level of reliability of their peers. By developing cooperation in a variety of areas with other actors, they also look for an environment of networked interrelations which reduces the risk that a partner may attempt to cheat or bypass an agreement and increases the probability that such actors will develop further cooperation of mutual advantage.

In this context, neoliberals see international regimes as a major contributor to international cooperation and constitute stronger supporters of international regimes compared to the other schools of thought. However, they view regimes as a means of achieving specific results on the basis of specific costs and thus their consideration of regimes is very much following investment approaches: actors would engage in a regime if the overall benefits exceed the overall costs. The authors state 'Neoliberals have drawn heavily on economic theories of institutions focusing on the role of information and transaction costs.' They consider that, eventually, regimes should support coordination among states with the aim to avoid suboptimal situations and increase benefits.

[116] Hasenclever, A., Mayer, P. and Rittberger, V., 2000. Integrating Theories of International Regimes. Review if International Studies, 26(1).

Following this line of thought, neoliberals view the costs for creating and sustaining international regimes as 'sunk costs' if the formed regimes no longer bring expected benefits and argue that, sustaining an existing regime may still be interesting 'even when the factors that brought them into being are no longer operative.' for instance by adapting its scope or individual elements. This would give regimes a stability through time as the related 'political investments 'cannot easily be recovered and put to other uses.' Finally, due to their strong association with investments, neoliberals deem that the likelihood of non-compliance to the provisions of a regime is moderate, as a loss of credibility will make it more difficult for a deficient actor to be accepted as partner in other regimes, thus reducing its possible overall benefits.

Neoliberals beliefs on international regimes has made their school of thought be seen as the mainstream theory of international regimes. They are however criticized on various grounds from scholars of the other schools. Realists mainly argue that interest alone cannot be a sufficient condition for states to come to the formation of regimes. As constructing regimes is a complex activity, the formation and sustainment of a regime requires at least a strong, powerful state to lead the path. Cognitivists, on their side, 'criticize realists and neoliberals alike for treating actors' preferences and (perceived) options as exogenous 'givens', i.e. as facts which are either assumed or observed, but not theorized about.'

Cognitivism (Knowledge-based)

Cognitivist theories are based on a different appreciation of the nature of international cooperation. Whereas neoliberals and realists are following an overall rationalist view of cooperation, cognivists take a sociological route to apply on the analysis of international regimes. Rationalists see state actors as self-interested and goal-seeking, taking decision on the basis of calculation of their benefits and advantages, whether absolute or relative to other actors. They perform such calculations on the basis of identified preferences, which are viewed as generally deep-rooted and relatively stable over time. Cognitivists theories of international politics on the other side focus their analysis on the basis of explanatory variables such as ideas and knowledge. They perceive actors as sensitive to such ideas and knowledge and that the latter in issue areas can, by themselves, influence the decision-making direction as the providers of ideas and knowledge can shape the scope of the knowledge provided. Haggard and Simmons[117] indicate that 'Where functional theories see regimes as more or less efficient responses to fixed

[117] Haggard, S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.

needs, cognitive theories see them as conditioned by ideology and consensual knowledge and evolving as actors learn. Cognitivists argue that 'there is no fixed national interest and no optimal regime." They further on argue that 'The core cognitive insight is that cooperation cannot be completely explained without reference to ideology, the values of actors, the beliefs they hold about the interdependence of issues and the knowledge available to them about how they can realize specific goals.'

Cognitivist theories are usually divided into two trends, the strong and the weak cognitivism. They argue that the behavioural model of actors is that of role player. Role playing is based on the assumption that actors involved perceive their obligations towards other actors as real, and decision making is merely based on the consideration of what is appropriate to do in a given situation towards peer actors rather than on the basis of pure maximization of benefits. Thus social knowledge plays a deep role in the interrelations among actors, as this knowledge built up through time creates a context of a durable pattern of interaction which in turn shapes actors' understanding of themselves and of peer actors. The basis of cooperation will be one of increasing respect resulting from an increasing understanding of each other, more than one resulting from the appreciation of the individual actors' interests. 'States are as much shaped by international institutions as they shape them.' Strong cognitivists in particular go that far as to reject the overall conception of states as rational actors. Eventually, this brings cognitivists to view regimes as a fundamental element of international cooperation, in particular as regimes, explicit or implicit, shape the pattern of behaviour of actors in accordance with expectations, which in fact reflects the sociological approach of cognitivists per se as described above.

Regime formation, evolution, change

Oye[118] asks 'Why does cooperation emerge in some cases and not in others?' Adherence to the beliefs of the various schools of thought also affects the primary question of regime formation. Each school views the context, probability and reasons for the formation and the development of a regime differently. The triggering effects and the conditions for regime formation are, thus, debatable and can range, also depending on the school of thought, for instance from the recognition of a need for cooperation with the aim to generate mutual benefits, the drive of an hegemon to form or not a regime or the adherence to a same set of beliefs. Young[119] states about

[118] Oye, K. A., 1986. Cooperation under Anarchy. Princeton University Press.
[119] Young, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.

regime formation that 'In a general way, social institutions and their constituent behavioral conventions constitute a response to coordination problems or situations in which the pursuit of interests defined in narrow individual terms characteristically leads to socially undesirable outcomes' thus taking the wider position that regimes may appear for rectifying such situations and optimizing mutual benefits. He identifies three distinct categories for regime formation: spontaneous, negotiated and imposed regimes. These three categories also largely cover the ideas of the schools of thought on regime formation as presented above.

Spontaneous regimes appear as the result of coordination among actors, not necessarily in a conscious or dedicated effort to create a pattern of activity. Hayek[120], as quoted by Young, states that spontaneous regimes are 'the product of the action of many men but … not the result of human design'. Spontaneous regimes can be seen as the result of iterative coordination, which eventually generates the level of convergence of behavioral expectations among the actors that can be characterized as regime. Negotiated regimes are characterized by a conscious and dedicated effort from a number of actors to settle on a desirable and acceptable set of behavioral patterns, thus creating an expectation of converging behavior, in an issue area in which they expect mutual benefits. The outcome of their efforts takes usually the form of formal engagement to explicitly formulated principles, norms, rules and decision-making procedures – even if those are not necessarily labelled as such. In terms of the process of formation, Young[121] indicates that 'Any efforts to understand the formation of negotiated orders requires a careful analysis of bargaining. This means that the existing theoretical and empirical work pertaining to bargaining can be brought to bear on the study of regime dynamics.' For instance, imposed regimes are the product of the effort of a powerful actor or a group of powerful actors to shape the acceptable and desirable by them behavior of a number of other, usually weaker, actors. This type of regime formation can take both an explicit and an implicit form, especially as the 'weaker' actors may not have the option to openly accept the imposed behavior or may not wish to explicitly do so.

Young proposes that each of these types of regime formation will prevail in different social and political environments and will also evolve in a different fashion. However, it is clear that the wider context in which regime theories are currently being developed assumes state actors are independent and self-sufficient entities, taking rational and conscious decisions and explicitly negotiating and approving them through their individual political systems. It follows that, in this context, regime formation in the practical terms of 21st century international cooperation is mainly

[120] Hayek, F., 1973. Law, legislation and liberty, Volume 1 – Rules and Order. University of Chicago Press.
[121] Young, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.

represented by the aspects of negotiated regimes, although it can be recognized that also some negotiated regimes may be the result of imposition by more powerful actors or of a preceding spontaneous activity. As per the theories of bargaining, regime formation would then take a rational approach from the individual actors, seeking to achieve an optimized or better situation for the actors, always depending on the bargaining theory (e.g. 'prisoners' dilemma', 'battle of sexes', 'Pareto-optimisation', etc) and the school of thought used (e.g. concerned about absolute gains, concerned about relative gains, concerned about overall relation to other actors, etc). This also means that regimes may eventually not be created in the cases where e.g. bargaining fails to lead to a common ground of understanding or when the benefits foreseen are not proportionate to the expected costs of a regime.

Further on, and independently from the categorization of international regimes, experience can be drawn from the theories of international agreements on regime formation. Theories of international agreements show the possibility that the density of agreements among same actors and/or in specific issue areas generate an environment supporting additional agreement creation. Thus the higher the density, the higher the probability to see additional numbers of agreements in related areas or with related actors. It can be argued that this principle may also apply to international regimes. If so, the level of density of international regimes in issue areas could be somewhat assessed and used as an indication for potential future regime formation. Keohane[122] specifies 'The incentives to form international regimes will be greater in dense policy spaces than in areas with lower issue density, owing to the fact that *ad hoc* agreements in a dense policy space will tend to interfere with one another, unless they are based on a common set of principles and rules. Where issue density is low, ad hoc agreements may well be sufficient; but where it is high, regimes will reduce the costs of continually taking into account the effect of one set of agreements on others.'

When addressing the issue of regime change, Young[123] argues that 'international regimes do not become static constructs even after they are fully articulated. Rather, they undergo continuous transformations in response to their own inner dynamics as well as to changes in their political, economic, and social environments.' Accepting Young's position as empirically sound, the question arises what is a regime transformation. More concretely, what type and magnitude of changes need to be brought to a regime in order to acknowledge that such regime has changed.

[122] Keohane, O. R., 1984. After Hegemony. Princeton University Press, p79.
[123] Young, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.

The question applies both to the type and to the magnitude of such changes and to the relation between the two. With respect to the type of changes, reference to Krasner's definition can be made. The question then becomes: which of the constituent elements of a regime can drive a change in the regime? Naturally, a change of principles or norms can be seen as a change in main regime variables, therefore if a principle or a norm of a regime is adjusted, the regime may no longer be deemed the same. In contrast, a change in a rule or in a decision-making procedure may not be sufficient to indicate the transformation of the subject regime. In both cases above, the magnitude of a potential change naturally also plays a significant role to determine whether a regime has actually been transformed.

Major reasons for regime transformation can be found in the origin of the potential change: endogenous or exogenous. Endogenous reasons consist in cases where the actual provisions of a regime do not meet the overall purpose of the regime or generate internal contradictions. In the course of the implementation of the regime, such endogenous reasons will progressively create an environment of tension or frictions among actors, who at some point will recognize a need to adjust provisions of the regime. The actors participating in the regime will supposedly then initiate discussions in order to address the areas that create tensions or frictions and find solutions. Obviously, this process of transformation will again be the subject of bargaining as per the regime formation itself. It may lead to a new arrangement, backed by all the actors of the regime or not. Free-riders, disagreeing with the changes to be made may take advantage of the disagreement in regime transformation to gain own benefits.

Exogenous reasons for regime transformation are changes in the environment in which the regime is being operating. Social, economic, international structure, interests of actors are some examples of possible exogenous factors, whereas possibly the most influential factor is a change in power balance among actors. Exogenous reasons may thus progressively shift the understanding of the regime among participating actors or even render the actual scope of a regime no longer relevant to its actors. In the case of change in power balance, the more powerful actor may influence the interpretation or the actual operations of the regime to his benefit. This may also lead to a formal change in the regime provisions. The process, as per the endogenous factors of change, will follow a path of negotiations and bargaining, with potential outcomes as indicated above.

A special case of regime change is the situation where a regime is abandoned altogether. Such regime 'death' is a possibility but considered as an exception as it is recognized that costs borne

by actors related to the formation and maintenance of regimes are high and therefore it would be more beneficial to transform a regime rather than cross it out altogether in order to avoid related sunk costs. Keohane[124] considers that 'international regimes can be maintained even after the conditions that facilitated their creation have disappeared' and explains 'It is precisely the costliness of agreements, and of regimes themselves, that make them important. The high costs of regime-building help existing regimes to persist.'[125]

0.3.5 Further considerations

As indicated in the introduction of this section, a number of questions pertaining to international regimes have only lightly, if at all, been researched. Practical questions on international regimes, their actors, their formation, their functioning, their relation to other regimes have remained unanswered or often unsearched. In a few cases, literature from sister-disciplines can conveniently support the understanding of such questions and possibly structure elements of considerations for seeking their answers. Although the ambition of this thesis is not to fundamentally develop the knowledge on international regimes, some further considerations need to be made on respective questions in order to better scope the case study and put it into suitable perspective. The following paragraphs address such questions, selected on the basis of their relevance for the case study, for which theories and knowledge borrowed from other disciplines can be applied, with due care, to international regimes. It would generally be beneficial for the research programme in international regimes to go deeper in the understanding and application of such aspects onto international regimes and derive corresponding theories for regimes.

Domestic politics, public choice, lobby

Fundamentally, theories of international regimes view the actors involved in international cooperation mainly as state actors. Lately, non-state actors that form international regimes have appeared and developed in certain areas. In both cases of state and non-state actors, international regime theories consider such actors will act for the protection and promotion of their interests – according to the realists, they will act as 'rational egotists', as per Keohane.

[124] Keohane, O. R., 1984. After Hegemony. Princeton University Press, p85.
[125] Keohane , O. R.., 1984. After Hegemony. Princeton University Press, p103.

In spite of actors acting autonomously and selfishly, the focus and origins of actors' self-interests remains largely unexplored. It is recognized quite early in the development of theories of international regimes that they represent in fact two-level co-operation schemes, or 'two-level games' as per Putnam[126] where, on one side, international state actors attempt to find solutions to issue-areas with peer state actors and, on the other side, in-country private actors and politics are affected by the application of such solutions. Haggard and Simmons[127], in the conclusion of their subject paper, clearly emphasize that 'Current theories of international regimes have ignored domestic political processes' and continue 'More broadly, there have been few studies of the domestic political determinants of international cooperation.' They argue that ''Domestic' political issues spill over into international politics and 'foreign politics' has domestic roots and consequences.' Despite this finding, theories of international regimes have little evolved in this direction and generally fall short from examining where the interests of state actors stem from and how the interests of the domestic private actors affected may interrelate with the preferences of state actors in their cooperation with other state actors. Two disciplines may assist the understanding of the underlying mechanisms: internal politics, lobby and public choice considerations, without excluding that further disciplines may bring additional understanding in relation to this aspect.

Public choice theories, initiated in the early 1960s' by James Buchanan and Gordon Tullock in 'The Calculus of Consent' [128], present politicians as largely motivated by self-interest, rather by the interest of the people or voters. At the heart of public choice theories lays the concept that any public official 'acts at least partly in his own self-interest, and some officials are motivated solely by their self-interests'[129]. As Buchanan states, 'Public choice is nothing more than common sense, as opposed to romance'. If this logic is applied, then Keohane's strict 'rational egoistic' behaviour of state actors can be basically seen as the reflection of the interest of the second level of the two-level cooperation scheme: the private actors affected by the regimes. Starr, in 'The meaning of privatisation' mentions 'Coalitions of voters seeking special advantage from the state join together to get favourable legislations sanctioned. Rather than being particularly needy, these groups are likely to be those whose big stake in a benefit arouses them to more effective action than is taken by the taxpayers at large over whom the costs are spread.' Starr concludes 'In addition, when government agencies give out grants, the potential grantees expend resources in lobbying up to the value of the grants – an instance of the more general 'political dissipation of

[126] Putnam, R., 1988. Diplomacy and Domestic Politics: The Logic of Two-Level Games. International Organization, 42:427-460.
[127] Haggard, S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.
[128] Buchanan, J. M. and Tullock, G. C., 1962. The Calculus of Consent: Logical Foundations of Constitutional Democracy. Liberty Fund.
[129] Downs, A., 1967. Inside Bureaucracy.

value' resulting from the scramble for political favors and jobs.' Along the same lines, Shughart and Tollison[130] note that 'the business of governments … is mostly about wealth redistribution. Pressure groups lobby for the many benefits the state can supply – subsidies, tax relief, protection from competitive market forces – and self-interested politicians, who rely on these groups for campaign contributions and other forms of support to ensure election or re-election to office, rationally cater to their demands.' This may indicate the nature of self-interest of politicians and, therefore, of the decisions they may be led to take. Thus it is relevant and interesting to explore how this relationship between state actors and affected private actors function. In particular, in some business areas of significant political weight or considerable economic dimension, such as aerospace, the interrelation between such local actors becomes important for understanding the theories of international regimes.

The field of theories of trade agreements can additionally enlighten the theories of international regime with respect to lobby. Despite the fact that trade agreements cannot, per definition, be assimilated to regimes as the latter are the 'facilitators of agreements', trade agreements are, as regimes, two-level schemes involving on the one side state actors negotiating with peer state actors and on the other side private actors affected by the behavior of the state actors. We can take as an assumption that, due to this similarity, the underlying mechanisms of trade agreements with respect to the interrelation between state and private actors can be applied to regimes. Maggi and Rodriguez-Clare[131] in 'A Political-Economy Theory of Trade Agreements', show that 'politics is very much at the center of trade agreements' and explain the process of trade liberalization through the interrelation between politics and capital, or between the state actor and private actors affected. The logical development of their paper leads to the statement that 'On their own, governments would want to implement free trade immediately, so it is costly for lobbies to 'convince' them otherwise. The lobbies, which are composed of capital owners currently 'stuck' in the import competing sectors, are willing to offer contributions in order to keep some protection'. They clarify that 'most of our insights follow from our structural modelling of the lobbying game, in which interest groups and governments exchange contributions for trade protection.' and confess 'If we modelled political pressures with a reduced form approach, by assuming that governments attach a higher weight to producer surplus than to the other components of welfare, and we keep lobbies and contributions in the background, we would lose most of our results.' One of their findings regarding lobby is that 'if the agreement takes the form

[130] Shughart, W. F. and Tollison, R. D., 2005. The Unfinished Business of Public Choice. Public Choice, 124(½). Policy Challenges and Political Responses: Public Choice Perspectives on the Post-9/11 World, p237-247.
[131] Maggi, G. and Rodriguez-Clare, A., 2007. A Political-Economy Theory of Trade Agreements. The American Economic Review, 97(4):1374-1406.

of an E(xact) T(ariff) C(ommitment), the lobbying game effectively ends with the agreement, since governments are left with no discretion and hence there is no scope for lobbying ex post; if, on the other hand, the agreement takes the form of a tariff ceiling, then lobbying may not end with the agreement'. This consideration puts lobbying in the perspective of time sequences, whereby the intensity of the lobbying activity will be a variable of the various steps of the political decision making process.

The question is then unavoidable: how does this affect theories of international regimes? Without going in deeper analysis of the mechanics and their impacts of the above theories of public choice and of lobby, it appears relatively clear that corresponding mechanics may be put into play in the cases of regimes. Assuming this is correct, political and lobby aspects will have impact on a series of elements of regimes, including regime formation, regime evolution, decision-making procedures, applicability and compliance with the rules set in regimes, negotiations and formation of agreements falling under a certain regime, etc.

A few outcomes deriving from the analysis of the above elements are presented below for inciting further research and investigation to:

- State actors factually behave on the basis of a balance among the individual behaviors of officials and decision-makers representing them. Decision-makers may lean towards the opinions of individual voters or interest groups. If this is true, the behaviour of egoistic self-interested states can be described as a compilation of the behaviours of egoistic self-interested decision-makers, thus, more prone to support the interests of individual groups than the ones of the voters representing the collective good. The decisions on potential interactions with other state actors may therefore be motivated or biased by the behaviour of such officials. Naturally, as indicated above, such motivation or bias may have a certain cost for the interest groups promoting related ideas.

- An initial impact from the above concerns the actual formation of specific regimes. If the scope and content of a regime is to the detriment of a specific interest group, such group may intend to apply efforts in order to bias or motivate the decision-makers in a direction supporting their interests. In such case, the formation of a regime or its content / scope may be hindered by such interests. Similarly, the participation of a state in a specific regime being formed may also be to such interest groups.

- Apart from the regime formation process per se, interest groups may also affect the evolution of regimes in the sense of progressively promoting their interests and shifting the actual implementation of a regime towards the direction of their own choice. For instance, individual elements of a regime, interpretation of such elements or agreements concluded under such regime may be affected and biased towards the support of such interest groups. This can extend to the level that an interest group of a powerful state actor may have the means to shape the wider implementation of a regime in accordance with his own interest.

- Naturally, the actual level of compliance of state actors to elements of agreed regimes may also be driven by interest groups: in spite of a state being bound by the provisions of a regime, it may be preferred for the decision-makers to bypass, ignore or move away from adherence to such provisions to the benefit of specific interest groups. As per Haggard and Simmons[132] 'A fit between regime rules and national behaviour may not occur for three reasons… A final possibility, and a more common and politically interesting one, is what Robert Putnam[133] has called 'involuntary defection'. This defection happens when a party reaching or supporting an international agreement is unable to sustain commitments because of domestic political constraints.'

- Eventually, the balance of power of individual interest groups within a nation will influence shaping the participation but also the content / scope of a regime during its formation and implementation. Naturally, better organized, powerful and resourceful interest groups may achieve greater impact of decision-makers with respect to regimes and their consequences. The position of a state actor with respect to a specific regime towards its peer state actors may, eventually, be impacted by the balance of power between such domestic interest groups.

- Following the above, it may appear as a natural consequence that, in certain cases of high impact of a regime's decisions on interest groups, the actual negotiations among state actors may be performed in the facts as a two-level process: an official process of negotiations among state actors represented by state officials and an internal process with each nation between the officials and the interest groups.

[132] Haggard, S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.
[133] Putnam, R., 1986. Political System and Change. Princeton University Press.

As indicated above, the formulation of the individual conclusions presented may be of a preliminary nature. However, the important finding is that the mechanisms for regime formation, implementation and evolution may divert from the ideal situation of state actors behaving in an independent manner with the aim to protect and promote the collective good at any price. This means in turn that, to understand the mechanisms of regime practice, the second level of in-country interests needs to be taken into due consideration.

Regimes overlap

In an era where regimes are proliferating in an exponential manner, it appears as unavoidable that regimes may overlap with each other in specific issue areas. A situation of regimes overlap can affect various aspects of regimes theories and practice, their formation, evolution, efficiency, compliance, problem solving etc. Despite both the theoretical and practical interest that such situation may generate, research and literature in this area seem to be scarce. Nevertheless, it is felt that addressing this issue is essential for understanding some mechanisms related to regimes. A key paper covering the analysis of regimes overlap was published by Rosendal[134] in 2001 'Impacts of overlapping international regimes: the case of biodiversity', from which this section is directly inspired. The analysis below is limited to overlapping regimes and does not cover the wider issue of regimes interlinkages defined by Young as embedded, nested and clustered regimes.

As per Rosendal, regimes overlap can be conceived in the following two main dimensions: overlap of the essence of the actual issue-area addressed by regimes and overlap of functions of regimes pertaining to different issue-areas. The first dimension is addressed by Rosendal as 'overlap of norms' while the second one 'overlap of rules'. An example of overlapping regimes in same issue-areas can be the following: a regime regulating subsidies (SCM) and another regulating export credits (the Arrangement) for the same industry would have an overlapping part, as export credits can be seen as a type of export subsidies. Overlap of regimes in different issue-areas can be given by the case study used in the above paper: the Convention on Biological Diversity (CBD) and the trade-related aspects of intellectual property rights under the WTO (TRIPs), whereby the issue areas concerned are different but they overlap in some of their function when implemented.

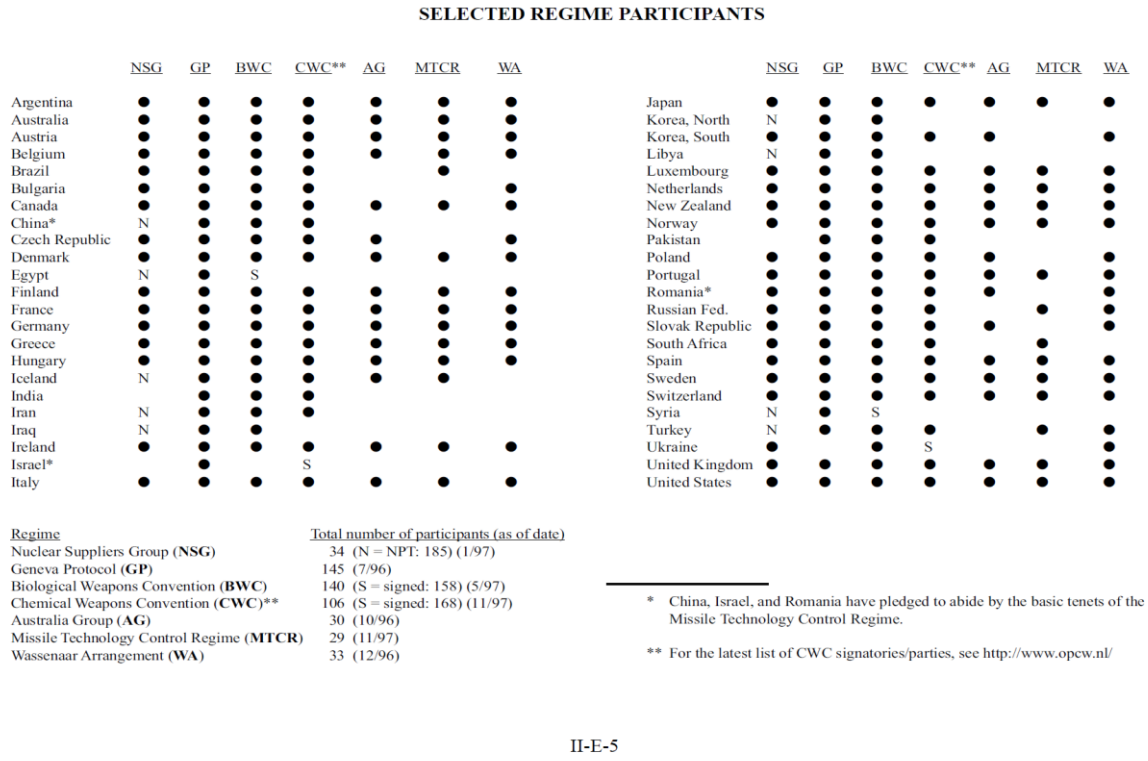
[134] Rosendal, K., 2001. Impacts of overlapping international regimes: the case of biodiversity. Global Governance, 7(1):95, p23.

Rosendal continues by distinguishing between the nature of the overlap, 'with possibilities of synergetic or conflicting effects on international cooperation'. The author defines 'Synergy is characteristic of a situation where the two institutions are largely pulling in the same direction, where they are mutually reinforcing, and where wasteful duplication may be avoided through coordination. Conflict is a more likely result when the overall policy objectives as well as the obligations emanating from overlapping international agreements fail to complement and enhance each other – or worse, when they are mutually exclusive.'

Some clarifications need to be presented on the above.

- First, a prerequisite for having a situation of regime overlap is, additionally to an overlap of norms or rules, the overlap of the set of actors affected by the said regimes. Indeed, two regimes presenting overlapping norms or rules but affecting two completely different sets of actors would, in reality, be irrelevant in terms of impact of regime overlap on actors. Following the same logic, the discussion widens up to the issue of actors participating in different regimes. At the other extreme of the case described above lays the case of overlapping regimes affecting exactly the same set of actors. It remains to be examined what happens also in the intermediate cases, i.e. when only a subset of actors is common in the overlapping regimes. Indicatively, the US Department of Defence shows in 1998 a list of seven different regimes in the area of security and the participation or not of some 45 nations to each of them as per the table below:

Figure 0.3.5-1 Selected Regime Participants [135]



SELECTED REGIME PARTICIPANTS

	NSG	GP	BWC	CWC**	AG	MTCR	WA
Argentina	●	●	●	●	●	●	●
Australia	●	●	●	●	●	●	●
Austria	●	●	●	●	●	●	●
Belgium	●	●	●	●	●	●	●
Brazil	●	●	●	●		●	
Bulgaria	●	●	●	●			●
Canada	●	●	●	●	●	●	●
China*	N	●	●	●			
Czech Republic	●	●	●	●	●		●
Denmark	●	●	●	●	●	●	●
Egypt	N	●	S				
Finland	●	●	●	●	●	●	●
France	●	●	●	●	●	●	●
Germany	●	●	●	●	●	●	●
Greece	●	●	●	●	●	●	●
Hungary	●	●	●	●	●	●	●
Iceland	N	●	●	●	●	●	
India		●	●	●			
Iran	N	●	●	●			
Iraq	N	●	●				
Ireland	●	●	●	●	●	●	●
Israel*		●		S			
Italy	●	●	●	●	●	●	●
Japan	●	●	●	●	●	●	●
Korea, North	N	●	●				
Korea, South	●	●	●	●	●		●
Libya	N	●	●				
Luxembourg	●	●	●	●	●	●	●
Netherlands	●	●	●	●	●	●	●
New Zealand	●	●	●	●	●	●	●
Norway	●	●	●	●	●	●	●
Pakistan		●	●	●			
Poland	●	●	●	●	●		●
Portugal	●	●	●	●	●	●	●
Romania*	●	●	●	●	●		●
Russian Fed.	●	●	●	●		●	●
Slovak Republic	●	●	●	●	●		●
South Africa	●	●	●	●		●	
Spain	●	●	●	●	●	●	●
Sweden	●	●	●	●	●	●	●
Switzerland	●	●	●	●	●	●	●
Syria	N	●	S				
Turkey	N	●	●	●		●	●
Ukraine	●		●	S			●
United Kingdom	●	●	●	●	●	●	●
United States	●	●	●	●	●	●	●

Regime	Total number of participants (as of date)
Nuclear Suppliers Group (**NSG**)	34 (N = NPT: 185) (1/97)
Geneva Protocol (**GP**)	145 (7/96)
Biological Weapons Convention (**BWC**)	140 (S = signed: 158) (5/97)
Chemical Weapons Convention (**CWC**)**	106 (S = signed: 168) (11/97)
Australia Group (**AG**)	30 (10/96)
Missile Technology Control Regime (**MTCR**)	29 (11/97)
Wassenaar Arrangement (**WA**)	33 (12/96)

* China, Israel, and Romania have pledged to abide by the basic tenets of the Missile Technology Control Regime.

** For the latest list of CWC signatories/parties, see http://www.opcw.nl/

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- Second, the distinction presented by Rosendal talks about overlap of norms or overlap of rules. It can be conceived that overlap between regimes may also address other elements for instance principles, decision-making process or enforcement mechanisms. In particular the last point may have great impact on the efficiency of regimes even though the norms and rules may be similar among regimes. Indeed enforcement mechanisms constituted one of the major developments in the institutional evolution which brought the GATT to become the WTO, displaying a much higher level of adherence.

- Third, the discussion of regimes overlap needs to be placed in the context of the dynamic evolution of international relations in general and regimes in particular. Regimes are formed, evolve, sometimes 'die', new regimes are formed on the basis of existing ones or independently. This implies that the case of regimes overlap necessarily assumes that a certain regime is already in place and another one is formed or evolves in a manner to overlap the first one. Similarly, actors participating in regimes also evolve over time,

[135] United States Department of Defence (USDOD) -The Militarily Critical Technologies List Part II: Weapons of mass destruction technologies (Washington, DC: Office of the Under Secretary of Defence for Acquisition and Technology, February 1998.

> therefore it can be conceived that a situation of overlapping regimes with no overlapping actors may evolve into a situation of overlapping regimes with overlapping actors. Emphasizing the importance of the dynamics of regime formation, Rosendal indicates that 'the normative sway is likely to be apparent from the early stages of regime formation. Explicit rules tend, however, to appear later in the regime formation process.'

On the basis of the theoretical background summarized above, the question arises on what are the practical implications of regimes overlap. A first element that needs to be analysed is why, how and when can the situation occur where overlapping regimes appear. Two main directions can be explored: intentional and unintentional overlap.

It can be argued that in most cases, regimes overlaps appear unintentionally, as it is assumed that actors involved in a regime may rather avoid the situation of regimes overlap creating complexity, additional costs and loss of regime efficiency. This is the case for instance of regimes covering divergent issue-areas, divergent norms, but where functional sub-elements or rules may be overlapping as presented in the table above. It may also occur in the event where an overlap is not perceived initially, but identified ex post during the course of the forming of the rules or, later-on, during their implementation. Unintentional regime overlap can also occur for a same issue-area or same norms, when the initial set of actors of each of the overlapping regimes are different. If additional actors decide later-on to join the one or the other regime, it may bring to the situation in which such regimes overlap for certain actors. For instance, the CBD and the TRIPs are covering different issue-areas and thus could be formed without consideration the one for the other. Or, the case of water protection in South America and water protection in Europe may not have an overlap in terms of actors notwithstanding that both address a similar issue-area.

There can also be situations in which actors intentionally or simply consciously form overlapping regimes. Many factors can contribute to such situation. An overlapping set of actors in a specific issue-area may decide to form another regime in the same issue-area for complementing, changing, specifying norms or rules, controlling or simply replacing the former regime. This may be the result of a consensus among the actors of the original regime. However, there may be cases where a powerful actor or group of actors in a regime may decide to form an overlapping regime for the purpose of imposing a de facto change of the original regime. The association of ICAO and the IATA can be cited as an example. By means of forming a new regime (ICAO), the real responsibilities of the first regime (IATA) may somewhat be constrained and placed under the

supervision of the newer regime. Nayar[136] explains 'Finally, in the late 1970s, the United States succeeded in undermining IATA's fare-setting function. The effort in effect reduced IATA's status to that of a trade association.' Furthermore, it can be argued that forming a new regime in a different issue-area but with conflicting sub-elements, such as rules, and with a different set of participants, a powerful actor may attempt to unilaterally adjust the provisions of a regime that no longer suit its interests. Finally, in some cases of divergent issue-areas, a regime of more global reach or higher conceptual nature may overlap with regimes that are in fact more restricted in their perimeter. As Rosendal indicates '… some institutions may have a strong normative sway – a high degree of legitimacy – even in the absence of powerful states pushing for the implementation of stronger compliance mechanisms.'

A second element worth exploring is the following: once it is recognized that two regimes overlap with each other in any of the manners reviewed above, what are the mechanisms to pursue their implementation. Naturally, if the overlapping elements present synergetic characteristics, be it in terms of norms or rules, it can be assumed that the affected actors will attempt to align such norm or rules or their interpretations. This can further strengthen the applicability of the norms or rules that are reinforced by means of repetition or overlap in more than one regime. The case of overlapping rules might be easier to address as the dynamics of regime formation would indicate that norms are first agreed and later-on the rules are shaped. Thus, if the overlap is identified prior to settling on the rules of the newly formed regime, its adaptation to the elements of the existing regime is manageable. In general and without entering in sub-cases, it can be fairly assumed that in case of synergetic overlaps, the affected actors will work in good faith to find workable and pragmatic solutions.

The case of overlaps among conflicting regimes is more complex. Various factors will influence possible courses of actions: quantity and power of actors in each of the regimes, intensity of the interests at stake, level of legitimacy of the regimes, perimeter of applicability, enforcement mechanisms, intentional or unintentional formation. Starting off from the last of those points, an unintentional formation of an overlapping regime with conflicting elements will, with high level of probability, bring the actors to the negotiations table for attempting to streamline the conflicting elements. When such negotiations are decided, then the theories of negotiations apply with all implications this may have in terms of interactions among actors. Power, coercion, arguments stemming from other areas of international cooperation may well be used during negotiations,

[136] Nayar, B. R., 1995. Regimes, Power, and International Aviation. International Organization, 49(1).

always depending on the interests at stake for the various actors. If no specific course of action such as negotiations is decided for streamlining the conflicting elements, and the conflicting overlapping regimes continue their independent existence, then issues will arise on a case-by-case basis. Solutions ad hoc and creating precedents will be shaped at those points in time. A major criterion in such cases will be the enforcement and arbitration mechanisms foreseen in or associated to each of the overlapping regimes. Regimes with stronger enforcement mechanisms, with higher level of international legitimacy, with higher impact on international relations are assumed will prevail. In the event of intentional formation of a conflicting regime, the initiating actors are probably pursuing specific targets or objectives as described above. In such case, it can be proposed that the initiating actors will consider in advance the potential course of action depending on the situation with the aim to reach their targets. It can be assume that in such case, negotiations will possibly not be part of the intentions or path to resolve such intentional conflicts.

In both synergetic and conflicting regimes, the implications of overlap can eventually take the following forms: evolution of one or both of the regimes, extinction of one of the regimes or merger between regimes. For synergetic regimes, the evolution of both regimes appears to be a probable outcome of the attempt in good faith to find solutions. Conflicting regimes may lead to the evolution of the one of the regimes and, in extreme cases, in the de facto extinction of the operations of such regime.

Free Riders

Engaging in an international regime creates, by definition, expectations as to the behaviour of the participating actors, thus constraining their freedom to a predetermined converging behavioural pattern. Some actors see such restrictions as an obstruction to their interests and thus may elect not to comply with the provisions of impeding international regimes. As Stephanou and Gortsos[137] indicate, certain nations decide to remain outside the frame of specific international regimes, for reasons that are usually related to national political priorities, however benefiting from the actual effects of such regimes. Free riders can be considered both the actors that decide not to join an international regime in an issue-area affecting them and the ones that, despite joining, decide not to comply with the specified rules. Free riders are, thus, such actors avoiding internationally devised rules for the sake of protecting their own interests or generating additional benefits in particular to the disadvantage of those actors who do comply with such rules. In the context of

[137] Stephanou, C. A. and Gortsos C., 2006. Droit International Économique. Nomiki Vivliothiki. p 2

study of international regimes, it is important to understand the issue of free riders, the level of flexibility they take for not complying and the recourses available for the complying actors in order to render non-compliance more difficult to sustain.

The first case of free rider is the case where an actor that has taken some obligations towards peer actors by joining an international regime decides to ignore his obligations and not comply with the agreed principles or rules. This represents a clear case of breach of obligations and, increasingly frequently, the provisions of regimes include some mechanisms to enforce compliance and allow affected actors to retaliate or take recovery measures. In the same spirit, regimes can also foresee arbitration or litigation among participants in the event of divergent interpretations or implementation of the rules. However, actions from affected actors may go beyond the recourses foreseen in the regime's provisions: they can spill over to the wider cooperation between the non-compliant actor and the affected one – called issue linkage. For instance, a trivial case would be when a non-compliant actor is receiving some kind of aid, financial or political, from the affected actor. The affected actor may then use this interlinkage with the non-compliant actor to redress issues of non-compliance on a bilateral basis. Naturally, this would also imply that actors would not stand equal in front of the enforcement mechanisms and dispute settlement procedures. Powerful states will thus be more prone to non-compliance than weaker states that depend on powerful states, especially if non-compliance affect the interests of the powerful states. Additionally, the non-compliant actor may be affected by reputational considerations in the context of the wider international relations. As state actors are participating in a variety of international regimes, consequences from non-compliance in one regime may well appear in another regime with the same or other actors. Thus, going beyond bilateral cooperation and measures, free rider or non-compliant actors may be faced with adverse behavior from affected actors through other regimes or agreements. Keohane[138] stated that 'egoistic governments may comply with rules because if they fail to do so, other governments will observe their behavior, evaluate it negatively, and perhaps take retaliatory action. Sometimes, retaliation will be specific and authorized under the rules of a regime; sometimes it will be more general and diffuse.' Finally, non-compliance can stem from domestic politics, for instance when some interest groups are negatively affected by provisions of a regime and therefore exercise their own influence onto decision-makers to avert compliance to the regime for their own benefit – 'involuntary defection' as Putnam puts it.

[138] Keohane, O. R., 1984. After Hegemony. Princeton University Press, p103.

Deriving from the above, it can be concluded that an actor participating in an international regime will have the tendency to attempt diverting from its obligations in those areas where it will find own benefits of doing so. Naturally, one actor's non-compliance will probably be to the detriment of other actors and such affected actors will attempt to protect their own interests against the non-compliant actor. Thus the consideration of potentially non-compliant actors may be formulated as follows: what can I gain from non-compliance and what do I risk to lose in the wider picture of international relations? The consideration of the potentially affected actors may be: what should I do to ensure the losses from non-compliance are greater than the gains for the potentially non-compliant actor? The balance between the two, taking into consideration factors such as the enforcement mechanisms, the dispute settlement procedures, the bilateral or multilateral relations, will eventually constitute a key criterion for an actor to decide to act (or not) in a non-compliant manner. Capturing the above under the concept of 'rational egoist' actors, Keohane[55] explains that 'Each time that they seem to have incentives to violate the provisions of regimes, they could calculate whether the benefits of doing so outweigh the costs, taking into account the effects on their reputations as well as the probability of retaliation and the effects of rule-violation on the system as a whole.' Naturally, as indicated previously, this affects the wider international cooperation of actors, and it can be assumed that the more powerful a state the easier it is to get away with non-compliance in some issues.

The other case of free riders consists in the situation where an actor, despite being affected by an issue-area, decides not to join a regime in such issue-area, which peer nations have adhered to, thus rejecting any or all of the constituents of such regime. A derivative thereof consists in not joining the evolution of a regime in which it is already engaged. This case differentiates from the previous one particularly in the sense that the free-riding actor has not taken any obligations by participating in a regime. Thus, the actor can neither be blamed for breaching his obligations nor enforcement measures can be applied against him. The considerations indicated above for the non-compliant actor and for the actors affected by his behavior will largely remain the same. Issue linkage will possibly constitute the main recourse for affected actors. However the context will be different and the mechanisms for facing such non-compliant actors as well, in particular reputational issues may not apply.

In the absence of a common regime to address the issue of free riding, the wider environment that prevails is the one of generic international relations. The balance of power between the free riding state and the affected actors will be a key determinant of the developments in that area. By means of power, affected actors can certainly motivate or convince the free riders either to simply

join the regime and thus be bound with the corresponding obligations or to follow the norms even without joining a regime. If, however, the free riding state is powerful, then the leverage of other states or actors may not be sufficient to curb the behaviour of the free rider. This is the case for instance when the US do not sign up for environmental principles or rules resulting from the Tokyo Round or Russia not abiding by some international export and trade rules. As Stephanou[139] explains, 'Perhaps as Shemiatenkov pointed out, the West is demanding too much. At any rate, in terms of 'relative economic gains', Russia may gain less than its partners from free and fair trade and it may be in its interest to remain a 'free rider'.' In such cases, the equation between 'potential gains' and 'potential damage' may be leaning in favour of the powerful free rider, who may then decide to maintain its policy despite potential measures against it.

Another consequence of free riding on theories of international regimes is that it may impact regime formation itself or its evolution. If a powerful nation does not have an interest in regime formation, the fact that this actor does not back a regime may be sufficient for the regime to fail. This is particularly true if the regime is intended in an issue-area strongly affecting a few major players, without which the regime would remain de facto inactive. Furthermore, the situation may arise where 'Collective action may not occur because of the free-rider problem' (Haggard and Simmons)[140] in the sense that the free riding may impact the functional aspects of a regime, rendering its perceived outcome less significant than the costs and efforts to set it up. Neumayer[141] explains, in an example related to emission reduction that 'the only mechanism left is to threaten not to undertake any emission reduction in order to deter external free-riding, or to decrease emissions by less than required by the agreement in order to punish non-compliant countries and to deter internal free-riding', factually reducing or nullifying the effectiveness of the scope of the regime.

A number of aspects regarding free riders have been introduced, addressed or covered in a variety of literature in this area. However, it is felt that a comprehensive theory in that respect is still not available and it may be beneficial that a research programme is initiated to collect and analyse the various aspects and implications of free riding.

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[139] Stephanou, C. A. ed., 2006. Adjusting to the EU Enlargement: recurring issues in a new setting, Edward Elgar Publishing Ltd. p 130

[140] Haggard ,S. and Simmons, B., 1987. Theories of International Regimes. International Organization, 41(3):491-517.

[141] Neumayer, E., 2001. How regime theory and the economic theory of international environmental cooperation can learn from each other. Global environmental politics, 1(1):122-147.

1 THE GENERAL FRAMEWORK OF EXPORT CREDITS

This Part 1 is aimed at presenting and analysing the current international framework for addressing and regulating export credits and particularly the dedicated regime in this issue-area, the Arrangement, with a special focus on the Aircraft Sector Undertaking, wherever applicable. The analysis will highlight, among others, wider aspects of the debate on export credits, countries systematically using export credits and the functioning of their respective export credit agencies, export volumes affected, the functioning of the Arrangement and the institutional environment in which it operates and other relevant aspects. This analysis will provide the framework for evaluating the impact and consequences of the Arrangement on trade and in particular the impact of the Aircraft Sector Undertaking on trade in civil aircraft (Part 2). Part1 will be structured as follows:

Chapter 1.1 - The OECD Arrangement – An example of International Regime
Chapter 1.2 - The OECD Arrangement – International institutional environment
Chapter 1.3 - The OECD Arrangement – Origins, negotiations, evolution
Chapter 1.4 - The OECD Arrangement – How does it work?
Chapter 1.5 - The Export Credit Agencies
Chapter 1.6 - Airbus vs. Boeing WTO Dispute - Analysis of panel & appellate body findings

1.1 The OECD Arrangement – an example of International Regime

'The status of the Arrangement is difficult to characterize precisely. As it has never been submitted to the OECD Council for approval, it is not an 'act of the organization.' It is an arrangement between certain participants, one of which, the European Union, is not a member of the OECD (although all of its member states are members). The Arrangement provides for membership for non-OECD countries, although none have yet applied for membership. […] Thus the Arrangement is clearly *sui generis*.' (Ray[142]).

There is no doubt that the Arrangement displays an untypical status within the frame of international regimes: it is not a part of existing international institutions such as the OECD or the GATT, it is not an international organization of its own, however it is operating under the provisions of an international agreement and makes use of the services of the OECD Secretariat. Under this view, not only the Arrangement falls within the definition of International Regimes but it also exemplifies the type of international regimes that are not organized within or managed by a dedicated institution / organization. Additionally, participants to the Arrangement do not conform with participants to other organizations such as the OECD and also includes as a separate participant an other international institution, the European Union. In spite of the 'structural' uniqueness of the Arrangement, it is widely recognized that it is a successful regime in the sense that it is generating the type of benefits it is expected to.

The next paragraphs focus at understanding the Arrangement from an international regime viewpoint and, therefore, intend to analyse the Arrangement under the theoretical framework presented in the previous chapter.

1.1.1 The Arrangement under Regime Definition

The definition of International Regimes retained for this research and presented in the section Introduction states that:

[142] Ray, E.J., 1997. Managing Official Export Credits: The Quest for a Global Regime. (Review by: Zhen-Kun Wang). The Economic Journal, 107(442):823-825.

'Regimes can be defined as sets of implicit or explicit principles, norms, rules and decision-making procedures around which actors' expectations converge in a given area of international relations'.

with the individual terms to be understood as:

'Principles are beliefs of fact, causation, and rectitude.
Norms are standards of behavior defined in terms of rights and obligations.
Rules are specific prescriptions or proscriptions for action.
Decision-making procedures are prevailing practices for making and implementing collective choice.'

Furthermore, the discussion on the definition in the Introduction indicates that, preferably, the sequence of the individual constituents needs to be followed for a sound regime formation and understanding. The effort in this paragraph is, thus, to apply the individual aspects of the definition on the specific case study of the Arrangement in the given sequence.

Finally, for the purpose of setting the framework of the analysis of the Arrangement, it is assumed that 'issue-area' pertaining to the Arrangement is the 'unregulated governments' practice in the use of Officially Supported Export Credits'. The analysis is based on the 2013 amendment of the Arrangement, excluding the annexed Sector Understandings unless explicitly referenced. Indeed, the individual Sector Understandings constitute, in fact, entire stand-alone agreements, sometimes aligned with the clauses of the Arrangement (main body), sometimes diverging from them and often foreseeing additional provisions applicable only to the specific sector. Thus analysing the Arrangement together with its annexes would equate analysing a number of similar but different agreements in parallel.

1.1.2 The Question of Goals, Objectives, Purposes

Before engaging in the analysis of the Arrangement according to the terms of the definition, it is worth indicating a preliminary consideration that a scholar may stumble over: the definition of regimes does not explicitly refer to any information about the actual goal, objective or purpose of a regime. However, the Arrangement as well as a multitude of other explicit regimes formalized or

not in agreements need and do clearly indicate the purpose of cooperation among participants. The goal or purpose of a regime seems to be a key parameter in regime formation as convergence on the goals of what the involved parties wish to achieve is a shaper of the constituents of the regime itself.

In this context, two questions can be raised:

- Is there actually a need to explicitly indicate the purpose of a regime in order to define it, or adherence to the four constituent elements is sufficient even if no explicit goal is referenced?
- Is the goal of a regime implicitly part of one of the four constituent elements of the definition?

With respect to the question on expliciting the goal of a regime, there seems to be a contradiction between definition and practice. In the discussion on regime definition in the Introduction, the question of 'goal' appears in none of the definitions proposed by the various researchers on international regimes and, furthermore, criticisms of Krasner's definition do not touch upon the issue of 'goal'. It can be hinted that, from the perspective of researchers, the 'goal' of a regime is non-relevant for the actual definition of a regime. Perhaps, the 'goal' itself is of no, or of lesser importance, than the four constituent elements defining a regime due to the fact that adherence to the four elements is sufficient to assume a regime is in place independently from the actual goal. Under such consideration, it would be of theoretical interest to evaluate whether adherence to a same set of principles, norms, rules and decision-making procedures in a similar issue area would necessarily guide towards the same goal or, alternatively, it could lead to a variety of goals.

Referring to the possibility that the 'goal' of a regime may be part of one of the four constituent elements of the definition, the individual elements can be analysed as follows:

- 'Principles are beliefs of fact, causation, and rectitude': it can be argued that a 'goal' may be a 'belief', as the parties involved in a regime certainly need to believe in the rectitude of a goal. As Tarzi[143] states 'General principles of international conduct are those beliefs of fact, causation and morality that collectively serve to promote a broader goal'. Therefore, he makes a bridge, even indirect, between principles and goals. However 'beliefs' are possibly much broader and potentially much more theoretical than 'goals'. Indeed a goal is by nature very concrete and, it can be argued, measurable, which is not in the nature of a principle of belief. It would, thus, be difficult

[143] Tarzi, M. S., 1998. The Role of Norms and Regimes in World Affairs: A Grotian Perspective. International Relations, 14:71-84.

to associate a 'goal' to 'principles and beliefs' in a systematic manner, despite the fact that, in some cases, principles or beliefs could also include a 'goal'.

- 'Norms are standards of behavior defined in terms of rights and obligations': the concept of norms or of standards of behavior direct to the idea of the manner how to act, which does not include a 'goal' in itself. Rather, the manner how to act should be such as to ensure that a specific goal is achieved.

- 'Rules are specific prescriptions or proscriptions for action' & 'Decision-making procedures are prevailing practices for making and implementing collective choice.': these two constituents obviously do not hint at any specific 'goal', although they are necessary in order to ensure that the acts of the parties will eventually lead to the goal.

Finally, the definition states '… around which actors' expectations converge in a given area of international relations'. Here again, there is no clarity on the 'goal' but hints to actors' expectations of one another's behaviour in a given area. Naturally, convergence of actors' expectations can be seen as a direction towards which the actors wish to evolve, so a weak link to a 'goal' may be indirectly included in the actual wording. But such goal, as the link is indirect and weak, can be interpreted and assumed differently by involved parties.

The above short analysis concludes that the idea of a 'goal' is not really present in the regime definition. Would there be a need to include it? On the one side, the concept of regime is of a 'higher nature', more conceptual, more theoretical than a 'goal' or 'purpose'. There can be a regime without an explicit goal. In particular, in the cases of implicit regimes, where a patterned behavior among involved parties is progressively shaped and followed with no explicit agreement or arrangement, for instance by reaction and reciprocity, the regime thus in place would not be addressing a specific goal. But again in this case, the goal would be implicit and possibly shared among the actors. The subcases of reaching an agreement (conscious or unconscious) on principles, norms, rules and decision-making procedures without agreement on a specific goal and, vice versa, reaching an agreement on the goals of a regime without agreeing on the four elements can also be analyzed. In any event, it can be suggested that, should there exist a reference to a 'goal' in the definition be it explicit or implicit, it would certainly clarify the purpose of the efforts of the actors to agree on a patterned behavior.

Additionally, agreement among actors on a 'goal' would surely affect the shaping of the principles, norms, rules and decision-making process in manner to align them with the end-purpose of this effort organized around a regime. Tarzi[144], referring to Grieco, notes that '… as Grieco has observed, the very existence of a regime indicates a prior series of decisions by states to cooperate. Thus, regimes reflect an earlier bargain among states to cooperate as well as to distribute benefits and rewards through cooperation rather than war.' Taking Grieco's position, it can be assumed that states have already agreed on a specific goal before entering into the details of a regime. If this is the case, then it would additionally be helpful to indicate the existence of a goal in the definition of a regime.

Moving away from the regime definition itself, the reference to the idea of an objective that is shared among interested actors may also affect other aspects of regimes such as the process of regime formation. For instance, whereas actors may follow, in the cases of regime formation, a negotiations strategy of 'prisonner's dilemma' for the purpose of shaping the goal to their individual interests, a preliminary agreement on the goal of a regime may possibly shift such strategy to one akin to the 'battle of genders'. This, in turn, would change the mechanisms and dynamics of regime formation, possibly by streamlining the positions and argumentation lines of involved actors.

Coming to the particular case of the Arrangement, the purpose agreed among the parties is explicitly laid out in Article 1 of the agreement and states:

'The main purpose of the Arrangement on Officially Supported Export Credits, referred to throughout this document as the Arrangement, is to provide a framework for the orderly use of officially supported export credits.'

The purpose is, thus, referring to two broad concepts: the one incited by the term 'framework' and the other from the term 'orderly'. Clearly, the purpose of the Arrangement does not clarify the details of the 'framework' and those qualifying what is an 'orderly' use, as those are in fact the scope itself of the Arrangement. Nevertheless, the explicit purpose worded as per above sets the stage on the task undertaken by the parties. Once such objective is set and agreed, the perimeter of the work to shape the details on how to reach the objective are factually delimited. One can argue that the apparent success of the formation of the Arrangement may partially be due to the

[144] Tarzi, M. S., 1998. The Role of Norms and Regimes in World Affairs: A Grotian Perspective. International Relations, 14:71-84.

fact that the purpose was clear, recognized and shared among the actors a long time before the Arrangement was agreed and similarly was the need to find a solution to reach the goal. Thus, the participating nations in this effort were working towards a common set of requirements, thereby attempting to sort out the details of a solution acceptable to the parties.

1.1.3 Principles

Principles, beliefs of fact, causation, and rectitude are rarely explicitly introduced in agreements. They constitute those broader aspects of the mindset of the actors that actually make them come together and attempt a solution, an alignment in an issue-area.

The Arrangement remains broadly silent on the 'principles', with possibly one exception. In Article 1 'Purpose', it is stated that 'The Arrangement seeks to foster a level playing field for official support, as defined in Article 5a), in order to encourage competition among exporters based on quality and price of goods and services exported rather than on the most favourable officially supported financial terms and conditions.'

Despite the fact that the above statement is included in the article 'Purposes', it can be interpreted in a broader sense i.e. indicating the belief of the participants to the Arrangement that competition among exporters should not be based on or biased from favourable officially supported export credits, thus establishing a level playing field in this area (issue-area). The overall ideology behind the principle of level playing field stems from the liberal beliefs of the involved actors, that is, exporting companies should compete on international markets without the interference of Governments. As subsidies and in particular export subsidies had already been regulated in other international agreements such as the GATT (in particular Article XVI (4) and SCM), the area of export credits remained a unique tool in the hands of Governments to support their exports. As Moravcsik[145] indicates, such export credits can be a part of 'subsidized export promotion' whereby 'The political issue raised by export credits stems from the fact that many governments subsidize them in order to promote exports'. Self-constraining the use of such export credits, certainly for the self-interests of the parties involved, constitutes a further step in the direction of liberalizing the international marketplace.

[145] Moravcsik ,A., 1989. Disciplining Trade Finance: The OECD Export Credit Agreement. International Organization, 43(1).

An interesting question in the search for principles is the level at which the principles need to be found. In the case of the Arrangement, a principle of 'highest' level can be considered the liberalization of trade. At 'lower' level, the principle can focus on creating a level playing field in the area of exports. Further 'down', the principle can be that of regulating the officially supported export credits. The distinction between levels and quality of principles or beliefs makes it difficult to achieve a unanimous understanding on the meaning of this term and its translation into reality. In particular, the question of the relevance of the 'level' at which the principles are determined can further lead to confusion. For instance, many states may believe in liberalization of international trade but be against regulating officially supported export credits, as was the position of the USA according to Pearce[146]: 'credit terms were an element of competition comparable to cheaper labor or higher productivity.'

Overall, the search for the principles applicable to the Arrangement highlights the limits in practical terms of this specific aspect of Krasner's regime definition. Recognizing though that regime norms, rules and decision-making procedures need to be placed under a common 'higher level' overarching consideration and context, the practical aspect of determining the principles of a regime may be of lesser importance than the theoretical aspects of having the element 'principles' in the definition. Possibly, if regime definition would not contain the element 'principles', the definition would still remain valid and regimes would similarly be formed and operating. Nevertheless, the broader concept of regime would lose of its spirit and qualitative dimension.

1.1.4 Norms

Norms are standards of behavior defined in terms of rights and obligations, that is, there is a patterned behavior that is expected from the involved parties. As the borders between norms and principles are not always clearly defined, the two concepts can be differentiated from their level and perimeter of application. Whereas principles can refer to wider beliefs, encompassing ideas that can also be the subject of an agreement in an issue-area, norms rather refer to the behaviors attributed to or derived from such an agreement. Tarzi[147] distinguishes between norms in terms of 'content' and norms in terms of 'process', both being clearly related to a specific agreement or regime.

[146] Pearce, J., 1980. Subsidized Export Credits, In International Economics and Monetary Issue. The Chatham House Annual Review, Royal Institute of International Affairs, 1:166.
[147] Tarzi, M. S., 1998. The Role of Norms and Regimes in World Affairs: A Grotian Perspective. International Relations, 14:71-84.

It may be suitable to address the issue of participation to the Arrangement under this chapter, as the term 'norm' refers to a behavior which refers to the participants and it is from those participants that a patterned behavior is expected. Participation is addressed under Article 3, which lists the states (or institutions such as the EU) that are parties to the Arrangement. Interestingly, the list of Article 3 applies to the entirety of the Arrangement, whereby it has also occurred that states can adhere only to selected sector understandings such as the case of Brazil who is party to the Sector Understanding for Civil Aircraft without being part of the Arrangement. For those cases, Article 6 clearly notes that 'A participant to a Sector Understanding may apply its provisions (…) Where a Sector Understanding does not include a corresponding provision to that of the Arrangement, a Participant to the Sector Understanding shall apply the provision of the Arrangement.' Without further analysing the content of the Sector Understanding for Civil Aircraft, the case of a participant to the Sector Understanding without participating to the Arrangement could lead to a certain level of confusion on the applicable terms. Additionally, Article 3 opens up to inviting other nations to participate, as the target was set to expand the Arrangement to a wider circle. However, as of today, only few additional members have joined and, today, the very significant share of exported values worldwide originates from countries not participating to the Arrangement, in particular China. This is a major concern on international trade level playing field and further analysed in Chapter 0.2.6 on free riding.

Norms of behaviour applicable to the participants identified above can be derived from the spirit of the Arrangement generated through a number of Articles. For instance Article 4 defines a norm of reciprocity with non-members in the sense of responding them in the same manner as if they would be participants: 'A Participant shall, on the basis of reciprocity, reply to a request from a non-Participant in a competitive situation on the financial terms and conditions offered for its official support, as it would reply to the request from a Participant.' This norm of reciprocity, underlying in most international regimes, is a cornerstone in the Arrangement and possibly one of the reasons why it has been functioning efficiently over the years. This norm is extended to non-participants, which outlines a pattern of behavior of its participants, despite the fact that it is not a 'right or obligation' per se. As hinted by Keohane and Snidal[148], reciprocity is key for continued cooperation as, especially in iterative cooperation schemes, an actor failing to pursue reciprocity knows it will be punished by other actors. This is also applicable to the case of the Arrangement

[148] Snidal, D., 1981. Coordination versus Prisoners' Dilemma: Implications for International Cooperation and Regimes. The American Political Science Review, 79(4):923-942.

where failing states know the other states will take countermeasures with potentially higher losses than the expected gains from defecting.

A second norm contained in the Arrangement quite explicitly relates to communication, information exchange, notification. One of the key goals of the Arrangement is to ensure in time and in quality information exchange among participants so that peer states can match the terms offered by another member state, thus contributing to levelling the playing field. Under 'Chapter IV Procedures' (Articles 43-66), the Arrangement defines a very detailed set of communication, notification, discussion and consultation mechanisms that participants need to abide by (that is, these mechanisms are 'rights and obligations'). This includes different procedures and time lines depending on the export credit product offered that need to be respected. Interestingly, the procedures need to be followed, however, there is no enforcement mechanism embedded in the Arrangement. The actual extensive procedures that also cover cases of disagreements or cases where 'A Participant that has grounds to believe that financial terms and conditions offered by another Participant (the initiating Participant) are more generous than those provided for in the Arrangement…' (Article 46a) already address cases of non-compliance to the provisions of the Arrangement. It can thus be assumed, as a norm or behaviour, that consultation procedures defined therein will suffice to solve potential issues. Associated to the norm of reciprocity described above, such procedures have proven very efficient to ensure compliance to the Arrangement, without any further enforcement mechanisms.

Eventually, the combination of the above norms creates an environment of extended and seemingly honest cooperation among participants, and it can be hinted that additional norms are established not so much directly out of the provisions of the Arrangement but rather through the spirit and practice of cooperation among the participants. Honesty, proximity, openess, join development of ideas, etc. are some of the additional norms that can be mentioned. In particular for the latter, Article 67 foresees the 'The Participants shall review regularly the functioning of the Arrangement. In the review, the Participants shall examine, inter alia, notification procedures, implementation and operation of the DDR system, rules and procedures on tied aid, questions of matching, prior commitments and possibilities of wider Participation in the Arrangement.', which has led to more than ten amendments of the Arrangement from 1978 to 2013, and recently on a yearly basis, with an ever increasing scope and improved rules.

1.1.5 Rules

Unlike principles and norms, the definition of rules is certainly less controversial. Indeed, rules must be clear if the participants to an agreement wish to minimize possible misunderstandings and interpretations. In the particular case of the Arrangement, the rules initially agreed in 1978 – with true difficulty – have been amended, detailed, expanded and clarified in the course of the years. This seems to indicate a healthy and functional cooperation among participants with a genuine shared willingness to conceive mechanisms for attaining the desired goal. Francois de Ricolfis indicates that 'Beginning with the success of the OECD work, a striking long-term development alongside the constant deepening and expansion of the rules …'. Also interesting to note is the fact that, through the aforementioned mechanisms, the actual scope of the Arrangement has been extended to regulate additional related practices such as the highly contested rules covering tied aid, agreed in the Helsinki package in 1991, the Sector Understanding on Export Credits for Civil Aircraft agreed in 1986, the rules on project financing sector understanding agreed in 2005 or the recent decisions and recommendations on bribery (see more details on history in Chapter 1.4).

Today, after 35 years of development, the Arrangement's rules mainly regulate the following areas:

- determination of minimum interest rates, premium rates and other fees
- determination of maximum repayment periods
- determination of repayment terms
- coverage of tied aid
- matching procedures

which in turn are affected by a number of clearly defined parameters such as:

- countries eligibility
- classification of countries for repayment terms, credit risks, sovereign risks, etc
- market interest rates
- premium credits for risk
- type of product or service exported

The combination of the above, together with the individual Sector undertakings, shape the framework of what is permissible and what is not allowed under the rules of the Arrangement. A detailed analysis of the provisions and rules of the Arrangement is provided in Paragraph 1.4.1.

1.1.6 Decision-making procedures

Similar to rules, there is a preference that decision-making procedures present a concise and detailed way of operating. To that extent, both rules and decision-making procedures are operational constituents for the sound functioning of a regime. Perhaps this constitutes a reason why the two may be interlinked or their boundaries unclear: where do rules end and where do decision-making procedures start? Aren't decision-making procedures actually part of the rules? In which category would 'procedures' fall if they are not decision-making?

In the case of the Arrangement, the question is very concrete when it comes to the matching procedures. Indeed, the option to match another participant's terms of offered export credits constitutes one of the key – if not the most important – features of the Arrangement. Matching can thus fall under the rules of the agreement but simultaneously clearly consists in a procedure that needs to be followed. This example on its own highlights the concept that rules and decision-making procedures might not differ that greatly to be considered separately in Krasner's definition, although still recognising the benefits of explicitly mentioning both.

'Matching', whether belonging to rules or decision-making procedures, is deliberately covered under procedures as its content is possibly more akin to one. Also, Article 45 falls under the chapter 'Procedures' and is titled Procedures for matching, which supports the idea to cover 'matching' under this constituent element of Krasner's definition.

Overall, procedures constitute an important aspect of the Arrangement, in particular as there is no dispute settlement mechanism foreseen and thus procedures are established in a manner to ensure solutions are found among participants through direct interraction. From the main body of the Arrangement, procedures cover some one third of its length, demonstrating the aforementioned. Procedures cover aspects such as:

- matching
- notifications

- consultations
- enquiries
- common lines
- review

Procedures and in particular decision-making procedures foreseen in the Arrangement are very detailed and specific to individual situations. It would appear that a lot of experience and practice is needed in order to naturally follow the procedures without checking the corresponding provisions. However, they allow participants to have the same level of transparency and information and sufficient time to react in case of another participant breaching the rules. This, in turn, is fundamental for ensuring that all participants have the opportunity to neutralize what they could see as advantageous financial terms offered by another participant. Without an explicit dispute settlement mechanism, the procedures additionally take the burden of sorting out disagreements among participants.

A detailed analysis of the procedures of the Arrangement is provided in Paragraph 1.4.1.

1.2 The OECD Arrangement – International institutional environment

The Arrangement is not the sole international agreement covering the wider area of export credits – a number of other initiatives have been put in place by nations to cover various related aspects. It is, thus, relevant to map the international institutional environment related to export credits, in particular those affecting the aerospace sector, and understand the corresponding positioning of the Arrangement in order to look into the mechanisms that led to its formation and evolution. The following paragraphs provides an overview of organizations and agreements that are linked to the purpose of the Arrangement. These should also be considered under the light of the theories of regimes overlap and density of agreements as presented in Paragraph 0.3.5.

1.2.1 The Berne Union (International Union of Credit and Investment Insurers)

While the first export credits appeared in the early 20th century, the idea of financially supporting export activities expanded rapidly in the industrial nations of that time. Within years, the UK, France, Italy, Spain and other nations established their own facilities for export finance. The bodies extending such financial products were typically governmental driven private entities or, in some other cases, part of the governmental authorities such as the UK Export Credits Guarantee Department (ECGD). The need for international cooperation and coordination among export credit agencies appeared early and became a necessity during the years of the Great Depression and the devastating economic impacts. In this context, the export insurance agencies of the above-mentioned four nations agreed on a cooperation scheme called the International Union of Credit and Investment Insurers better known as the Berne Union, where the organization is based.

The purpose of the Berne Union was primarily to address issues of coordination among export credit agencies and in particular in the frame of international competition. It was recognized that extending insurances covering export activities reduced the risk of export credits and, as a natural consequence, export credits would be issued without any restrictions. The concern was, thus, that such practice would incite unrestricted export credits leading to an export credit race. The export credit agencies decided to coordinate their practices in order to regulate, control or restrict the issue of export credits. At the same time, coordination of export credit agencies brought the

additional benefits of exchange of information and experience on risks in specific countries. Ray[149] states that 'The Union's primary aim is the promotion of sound principles of export credit and investment insurance.' and continues 'To achieve these aims, members have agreed that they will furnish information to each other and to the Union, consult among themselves on an on-going basis, carry out studies and other projects, and cooperate with each other and with other international institutions concerned with these matters.'

However, restrictions of the Berne Union stem from the fact that, as Mulligan[150] puts it: 'the Berne Union's ability to exert effective control over the ever-expanding competition in export credit was always limited because of its being a non-governmental organization of credit insurers'. Also, the Berne Union has been addressing issues of credit periods and down-payments but not interest rates. Finally, its perimeter of application was clarified in 1961 under the terms that 'its future application was limited to supplier credits; buyer credits could be guaranteed for any length of time.' Mulligan[151]. It remains a non-binding understanding, where the members can unilaterally deviate from its provisions.

On the grounds of the benefits brought by the Union on export credit insurance issues, the Union was assigned in 1974 the additional role to address issues related to investment insurance. It has since also being closely cooperating and exchanging information and experience with the OECD. However, the Berne Union '… has 49 member companies from around the world. The membership is diverse – member organizations may be private or state linked, small or large. They represent all aspects of the export credit and investment insurance industry worldwide.[152] Thus major differences between the Berne Union and the Arrangement is that a. the latter's members are states or state organizations, politically engaging the nations in international relations, and b. the Arrangement deals exclusively with one dedicated aspect of international trade finance ie Government supported finance.

[149] Ray, E. J., 1997. Managing Official Export Credits: The Quest for a Global Regime. (Review by: Zhen-Kun Wang). The Economic Journal, 107(442):823-825. .
[150] Mulligan, M. R., 1982. A study of officially supported export insurance and finance systems. Journal of Management Research, 7(2):103-116.
[151] Mulligan, M. R., 1982. A study of officially supported export insurance and finance systems. Journal of Management Research, 7(2):103-116.
[152] Berne Union website, 19 January 2015

1.2.2 Organization for European Economic Cooperation / Organization for Economic Cooperation and Development

After World War II, the international economic environment evolved in a context of heavy capital needs by nations and industries and instability in the currency market. Exports appeared as a natural way out for the economic development of nations, and export credits became an indispensable tool (in fact a policy) to fuel such exports. The common goal of industrial countries to capture the demand of specific export markets led to the natural effort by nations to support the exports of their national industries using, among other means, export credits. New export credit agencies appeared and the role and products offered to industries developed considerably, terms of export credits became longer, interest rates dropped significantly. It was soon acknowledged that a competition among industrial nations for export credits would only benefit the recipient nations but destroy value and welfare in their own countries, especially in view of risky longer term guarantees.

Affected governments decided that an intergovernmental agreement is necessary to regulate the use of export credits by nations. In 1955, the Council of the OEEC settled on the principles that member nations should follow and specify measures that were explicitly prohibited such as charging of premiums that were not in accordance with sound insurance practice, charging premiums inadequate to cover long-term operating costs, granting of export credits at rates below their cost or bearing by governments of all or part of the risks undertaken by exporting companies. In that sense they also agreed to exchange the financial results of the national export credit agencies.

The principles regulating export credits thus agreed were however transferred to the GATT when the OEEC was converted to the OECD in 1960 and the OECD no longer was in control of export credits regulations. However it remained involved in related issues.

Maybe the most significant contribution of the OECD to the issue of export credits comes from the establishment in 1963 of a permanent group on Export Credits and Credit Guarantees. Mulligan[153] mentions that 'its purpose was to evaluate national policies relating to export finance and insurance, examine problems which arose and seek to relieve or mitigate these problems by

[153] Mulligan, M. R., 1982. A study of officially supported export insurance and finance systems. Journal of Management Research, 7(2):103-116.

multinational discussions and cooperation.' This Group has the merit that it proposed the rules that formed in 1978 the Consensus and later on the Arrangement.

1.2.3 General Agreement on Tariffs and Trade (GATT) / World Trade Organization (WTO)

In the same spirit as the discussions on the OEEC described above, the members nations of the GATT came already in 1955 to the conclusion that all export subsidies (except for primary products) should be forbidden. Article XVI (4) (General Agreement on Tariffs and Trade, July 1986) indicates: 'Further, as from 1 January 1958 or the earliest practicable date thereafter, contracting parties shall cease to grant either directly or indirectly any form of subsidy on the export of any product other than a primary product which subsidy results in the sale of such product for export at a lower price than the comparable price charged for the like product to buyers in the domestic market.'

Despite this general prohibition of export subsidies, member nations to the GATT never really complied with the rule and, in lack of enforcement mechanisms, the provision was never properly applied. When the obligations agreed by the OEEC nations on prohibited measures were transferred to the GATT in 1960, the debate on the application of Art XVI (4) and its interface to the measures originating from the OEEC was re-opened. The nations concluded that the OEEC measures were already covered by the more general Art XVI (4) and thus the measures prohibited under the OEEC were indicated in an annex to the GATT as examples rather than an exhaustive list. Even though the OEEC restrictions were integrated into the GATT, their application continued to remain an illusion. In particular, the example stating the 'The provision by governments … at premium rates, which are inadequate to cover the long-term operating costs and losses of the programmes.' has, according to Ray[154], never been tested and thus there is no case law or guidance on the interpretation of the terms 'inadequate' and 'long term losses'.

The Uruguay Round that established the World Trade Organization (WTO) on the fundaments of the GATT however significantly progressed the general issue of use of subsidies, including export subsidies, under the annex named Agreement on Subsidies and Countervailing Measures (SCM),

[154] Ray, E. J., 1997. Managing Official Export Credits: The Quest for a Global Regime. (Review by: Zhen-Kun Wang). The Economic Journal, 107(442):823-825.

which became effective in 1995. This Agreement extended the principles already settled in the GATT Tokyo Round and, also, expanded the list of countries affected, as all WTO member states are bound by its provisions. More importantly, the WTO agreement, compared to the GATT, introduces enforcement mechanisms that can be used by member states when other member states fail to comply with the provisions of the WTO. Stephanou and Gortsos[155] mention that the establishment of such enforcement mechanism constitutes one of the most significant achievements of the Uruguay Round. Such mechanisms have widely been used to date thus supporting the sound application of relevant provisions on subsidies and export subsidies in particular. As such, the SCM, which maintains the GATT general prohibition on export subsidies for industrial products (Art 3.1a), has become the main international agreement for regulating export subsidies.

In the context of the existence of the Arrangement since 1979, the SCM suitably makes a linkage or a bridge to the Arrangement, in order to avoid contradictions and overlaps. It specifies that: 'Provided, however, that if a member is a party to an international undertaking on official export credits to which at least twelve original members to this Agreement are parties as of 1 January 1979 (or a successor undertaking which has been adopted by these original members), or if in practice a member applies the interest rates provisions of the relevant undertaking, an export credit practice which is in conformity with those provisions shall not be considered an export subsidy prohibited by this Agreement.'

Under this provision, the Arrangement represents an exception to the general principles of the SCM and thus the application of each of the agreements is clearly regulated. Interestingly, the application of this exception is not only granted to the members of the Arrangement but also to states applying the same principles without being party to the Arrangement. This was particularly important at the time of the SCM negotiations, as the rules provided under the Arrangement appeared to be more flexible than the ones under the SCM. Since that time, the Arrangement has evolved in many respects, displaying today features that are certainly more stringent than the SCM, thus the practical value of this differentiation remains theoretical.

[155] Stephanou, C. A. and Gortsos C., 2006. Droit International Économique. Nomiki Vivliothiki. p 45

1.2.4 The European Union

Since its inception and as part of its founding principles, the European Union (EU) (formerly European Economic Community - EEC) is focusing its efforts on creating a barrier-free internal market and consequently on removing any obstacles to trade within the Union. The Treaty of Rome establishing the EEC in 1958 already prohibited any national export subsidies that could distort competition among member states. It also systematically reviewed the export credit policies and practices of member states in order to ensure adherence to the EU principles. In 1973, the EU established a notification procedure under which member states were allowed to extend export credits under favourable terms in the exceptional case of exports outside the EU countries and for matching terms offered by other nations.

Considering that the EU constitutes a supranational organization with bodies that maintain a wide autonomy in decision-making and policy-making versus the participating nations[156], and that consequently, the EU is playing a leading role in guaranteeing the applicability of its export subsidies prohibitions and controlling the practices of its member states, it was agreed that the EU, as a separate entity, would be the sole EU party to the Arrangement. Currently, none of the EU member states are parties to the Arrangement but are represented by the EU. This arrangement was agreed despite the fact that one of its member states, namely France, was a key contributor to the negotiations that led to the establishment of the Arrangement, and that the other EU members being part of the G5 and later the G7 were participants to the said negotiations. Noteworthy, the Arrangement does not, in principle, apply within the Single European Market, within which government guarantees are regarded as subsidies and are prohibited under article 107 paragraph 1 of TFEU. The Arrangement, thus, should primarily be seen in the context of exports outside the EU.

The EU has traditionally played a role in favour of trade liberalisation and the EU members states have been pushing for long to come to terms of an international agreement on officially supported export credits. It is of no surprise that the EU has adopted the provisions of the Arrangement and has imposed them, as part of the EU legislation, on the member states. In fact, the competence of the EU in the area of export credits is exclusive, as being part of its exclusive competence in the area of common commercial policy (Art. 207 of TFEU). As participant to the Arrangement, the EU had originally implemented the entire Arrangement as a Directive (Council decision 4 April 1978 extended indefinitely on 14 December 1992), merely as a goal that member states must achieve

[156] Stephanou, C. A. and Gortsos C., 2006. Droit International Économique. Nomiki Vivliothiki. p 7

leaving to each member state to select its own path to achieve the goal. This Directive was later on replaced by 2001/76/EC (22 December 2000), which retained the same legislative form of Directive. Nevertheless, in 2011, the EU took the next step and modified the form of legal act from Directive to Regulation (Regulation 1233/2011, 16 November 2011). Since 2011, all the provisions of the Arrangement are thus included in the EU legislation in the form of Regulation and thereby mandatory. This contrasts naturally with the nature of the Arrangement as a Gentlemen's Agreement. Although the difference is theoretical as the Arrangement in practice is followed by the participating nations, it does give a different spirit to the obligations of such nations. Additionally, as indicated above, the Directive and, later-on the Regulation, falls under the Art. 113 TEC (207 TFEU), which means it is implemented as an instrument of common trade policy and is not related to the regulation of the Single European Market.

1.2.5 Bilateral and multilateral free trade agreements

The EU and especially its ancestor the EEC can be considered as a free trade zone regulated by a free trade agreement (originally the Treaty of Rome). Such agreements establishing free trade zones have increased in number and diversity over the last decades and especially after the 1970s. The example of the European Free Trade Agreement, the North America Free Trade Agreement, Mercosur, and the Asia Free Trade Agreement are only some examples of major regional agreements in the issue area of free trade. At a higher expansion pace than multilateral or regional trade agreements, bilateral free trade agreements have been regulating bilateral trade relations between specific countries. Free Trade Agreements (FTAs) are perhaps less relevant with respect to the subject of export credits or export subsidies stricto sensu. However, FTAs shape the relationship between international players and also include, on a case-by-case basis, provisions related to duties, taxes, attitudes and principles of cooperation that may indirectly affect the wider environment of free trade. Also, as there exist today more than 200 such FTAs McMahon[157] with this number always increasing, their importance should not be undermined.

McMahon[61] defines FTAs as follows: 'Free trade agreements, many of which are bilateral, are arrangements in which countries give each other preferential treatment in trade, such as eliminating tariffs and other barriers on goods. Each country continues its trade policies, such as tariffs with countries outside the FTA.' In fact, FTAs are tools of economic and political

[157] McMahon, R., 2006. The Rise in Bilateral Free Trade Agreement. Council on Foreign Relations.

cooperation and policy. Apart the economic aspect, which is explicitly described in the FTAs themselves, the political aspect is perhaps of more important nature, as the FTAs basically grant the nations to the agreement an advantage that is not granted to other nations, sealing a special relationship compared to others. The fact that the US have largely focused on concluding such bilateral FTAs against spending additional resources to negotiate multilateral FTAs is an indication of the political dimension of FTAs. The geopolitical aspects can be duly apprehended through the statement of Hotlz-Eakin McMahon[158] that 'If you surround [US competitors] with FTAs, the US gets broad strategic gains.' FTAs may also provide the stronger partner with additional advantages balanced against an easier access to the local market. McMahon[62] referring to Jagdish Bhagwati, a senior fellow in international economics at the Council on Foreign Relations, says that such agreements entered into by the US are used to 'bully smaller states, which want access to the large American market' and that in exchange, the US can 'insist on tough labor standards and intellectual property rules far in excess of the requirements of the World Trade Organization.'

The proliferation of such FTAs, which overall seem to bring recognizable advantages to the nations involved, has also implications on the WTO. A core principle of cooperation under the WTO is the most-favored nation clause, which basically forces a nation to apply to all other members the lowest tariffs applied to any one member. The question is then raised how such FTAs are implemented in the wider WTO environment. Despite possible adverse effects, it is widely seen that such agreements eventually are promoting trade liberalization at least on a bilateral basis, even if the actual trade and economic benefits are hard to quantify. Interestingly, since the US started concluding such FTAs in the mid-1980s (EU much earlier), it has already entered into or in the process of negotiating some 25 such bilateral agreements, mainly with South American nations, but also with developed countries such as Australia and Israel and middle-east nations such as Oman and Bahrain.

The US in particular has seemingly embraced the concept of bilateral trade agreements in its foreign economic policy. The number of agreements entered into and in current negotiations is recently fast expanding. As a tool of economic policy, the bilateral trade agreements remain typically at the level of principles of cooperation and at a relatively unbinding level. Also enforcement is usually not addressed. In particular bilateral trade agreements entered into between the US or other developed nations and less developed countries are merely aimed at

[158] McMahon, R., 2006. The Rise in Bilateral Free Trade Agreement. Council on Foreign Relations.

restricting possible barriers to trade in the transactions towards the less developed nations and not so much in restricting the economic measures available with the developed nation. Under such perspective, the developed nations, e.g. the US, make use of their power to impose onto less developed countries terms favourable to their own trade, exemplifying the realists' theories of hegemonic stability.

In this context, issues related to measures affecting international trade such as tariffs or export credits may also be addressed in multilateral or bilateral trade agreements. For instance, since 1995, the EU has signed bilateral 'Association Agreements' for agricultural products with some seven Mediterranean countries, in which among other things tariff concessions, tariff rate quotas and other barriers to trade are addressed[159] in a manner compatible with the WTO rules (which, in its Agreement on Agriculture, does permit export subsidies). Of course, such agreements do not exempt the signatories from their obligations arising out of other international engagements. As the provisions of the WTO, the SCM and the Arrangement are quite strong and enforceable in case of breach, it is doubtful that stronger provisions would be included in bilateral or multilateral agreements. The case of the EU which has integrated in its legislation the entire Arrangement, therefore giving it a higher level of legal importance compared to the Arrangement's nature of 'gentlemen's agreement', should be seen as an exception.

1.2.6 GATT Tokyo Round Agreement on Trade in Civil Aircraft

As early as the GATT Tokyo Round negotiations concluded in 1973, governments had identified the issue of trade in civil aircraft as one area that was requiring special attention. In conjunction to the Tokyo Round provisions for liberalizing trade and reducing trade barriers, participating governments concluded a separate international agreement dedicated to trade in civil aircraft, with the intention to eliminate related subsidies and trade barriers by 1st January 1980.

Interestingly, the Preamble of the agreement explicitly recognizes 'the importance in the civil aircraft sector of their overall mutual economic and trade interests;' and 'Recognizing that many Signatories view the aircraft sector as a particularly important component of economic and industrial policy;' highlighting the strategic nature of this sector. It continues by stating: 'Desiring that their civil aircraft activities operate on a commercially competitive basis, and recognizing that

[159] Rudloff, B. and Simons, J., 2004. Comparing EU free trade agreements : Agriculture. (InBrief 6A). Maastricht : ECDPM with CTA - the Technical Centre for Agriculture and Rural Cooperation ACP-EU.

government-industry relationships differ widely among them;', which gives a clear picture on the functioning of the sector at that time i.e. with governmental involvement, and a clear target for the future i.e. banning governmental interference for this sector. In order to achieve the paradigm shift in this industry, signatories allow some seven years transition period.

The agreement attempts to eliminate the key trade distorting practices, which it reviews article by article. It provides that the signatories shall eliminate such practices and, where applicable, also make reference to the generic obligations of the signatories to do so as per the general GATT provisions or provisions of other international agreements. Such trade distorting practices include e.g. customs, duties or other charges levied on imports (Article 2), technical barriers to trade (Article 3), government directed procurements and mandatory subcontracts (Article 4), trade restrictions such as import quotas or export licensing (Article 5), government support, export credits and aircraft marketing assistance (Article 6) etc.

In particular, export credits are referenced through the linkage to the SCM Agreement (see above) and the obligation of signatories to honour its provisions:

'6.1 Signatories note that the provisions of the Agreement on Interpretation and Application of Articles VI, XVI and XXIII of the General Agreement on Tariffs and Trade (Agreement on Subsidies and Countervailing Measures) apply to trade in civil aircraft. They affirm that in their participation in, or support of, civil aircraft programmes they shall seek to avoid adverse effects on trade in civil aircraft in the sense of Articles 8.3 and 8.4 of the Agreement on Subsidies and Countervailing Measures. They also shall take into account the special factors which apply in the aircraft sector, in particular the widespread governmental support in this area, their international economic interests, and the desire of producers of all Signatories to participate in the expansion of the world civil aircraft market. '

Perhaps more importantly, Article 6.2 indicates the general principle for defining aircraft pricing:

'6.2 Signatories agree that pricing of civil aircraft should be based on a reasonable expectation of recoupment of all costs, including non-recurring programme costs, identifiable and pro-rated costs of military research and development on aircraft, components, and systems that are subsequently applied to the production of such civil aircraft, average production costs, and financial costs.'

which attempts to give a full commercial basis for setting such prices. Thereby, the governments signing the agreement should be interfering with their industries' price setting mechanisms in order to ensure these are conducted in accordance with the government's agreement.

Generally, this agreement has not been honoured by its signing parties, in particular the US and the EU. This may have been caused by the lack of enforcement mechanisms of the GATT, in conjunction with the fact that the provisions may have been too ambitious to be implemented at that time. Perhaps, the fact that most of the provisions of this agreement reflect also general provisions of the GATT and other international accords, such provisions have more broadly been followed but not necessarily for the aircraft sector. In any event, the agreement was taken over into the WTO treaty and amended in 2001. Since the entry into force of the WTO and the Dispute Settlement Agreement, disputes that have arisen in the aircraft trade area have rather been related to other WTO provisions such as the SCM Agreement (see above) than referred to under the agreement on trade in civil aircraft. Overall, the merits of this agreement can be appreciated for formally noting, for a first time, the intentions of the governments to liberalize this sector and limit government interventions.

1.2.7 US-EU agreement on trade in Large Civil Aircraft

The agreement reached under the GATT Tokyo Round on trade in Large Civil Aircraft affected mainly the US and the EU (European Economic Community at that time) with respect to their 'national' aircraft manufacturers Boeing and Airbus. Other nations such as Brazil and Canada also had a civil aircraft industry, however rather limited to regional aircraft than to what is labelled 'Large Civil Aircraft' (aircraft of 100 seats or more), which, in comparison, generate substantially higher international trade volumes. In the 1980s, and following the entry into effectivity of the GATT Tokyo Round, it appeared that the agreement on trade in large civil aircraft was ignored by the signatories. Perhaps the lack of an enforcement mechanism contributed to such attitude. Possibly, also, the provisions of the GATT Tokyo Round agreement were too ambitious to be realistically followed. In particular, declining international aircraft sales exacerbated the tensions between the EU and the US. Indicative of the prevailing climate at that time can be given by the statement in the US Government Accountability Office report[160]: 'Despite the 1979 aircraft agreement, trade tension between the United States and the European Union (EU) regarding the

[160] GAO (United States General Accounting Office) 1994, International Trade Long-Term Viability of U.S.-European Union Aircraft Agreement Uncertain.

civil aircraft industry continued during the 1980s and early 1990s, due especially to U.S. concerns about continuing government support to EU large civil aircraft manufacturers.'

In this environment, the two parties initiated discussions in the mid-1980s in order to shape an accord, on the basis of the GATT Tokyo Round agreement, which would be viable and complied with. More importantly, each party was accusing the other of infringing the Tokyo Round agreement on particular aspects that had as a consequence the distortion of trade in this sector: the US was wary of EU governments' support provided to the development and production of the Airbus products, whereas the EU, with France as a leader, were pointing at the US for the indirect support in the form of spill-overs from grants to military programmes and access to R&D outcome and facilities. Also, France was concerned about the ability of the US Government to extend export credits and insurances under repayment terms that itself could not match.

The initiator of the discussions in the mid-1980s were the US, which insisted in reaching an agreement. France was rather reluctant as its national interests seemed to be better supported by the status quo. In this context, the US exercised various types of pressure and were prepared to initiate trade action against Airbus under US trade laws. They actually initiated a GATT dispute settlement procedure against the German government on the grounds of exchange rate guarantees extended in the frame of an Airbus export sale. The discussions were continuing without results and eventually broke down in 1991 after which the US initiated a second GATT dispute settlement procedure against France for overall subsidies previously granted to Airbus. In order to put France to reach an agreement, the US had to demonstrate their hegemonic power towards France. By continuing extending export credits for sales in civil aircraft with longer terms that France could match, and under the feeling of threat coming from the ‘war chest’ established by the US Government in 1985, the EU (or rather France) came to settle on an agreement with the US in 1992.

The 1992 agreement attempted to balance individual points of blame that each side had against the other. In particular, the agreement fundamentally foresees:

- a total prohibition of governmental production support (art. 3)
- a limitation of governmental support for aircraft development programmes at a cumulative 33% of the total development costs (art. 4)

- a limitation of indirect government support at 3% of the yearly 'commercial turnover' of the total civil aircraft industry or at 4% of the yearly commercial turnover of any single civil aircraft industry (art 5)
- a set of communication, consultation and transparency principles whereby the parties will exchange relevant information for the sound implementation of the agreement

Additionally, the agreement between the parties was conditional upon the US withdrawing all the dispute settlement procedures it had initiated until that time on related topics.

The agreement was aiming at clarifying and complementing the GATT Tokyo Round agreement on trade in civil aircraft. However, since its entry into force, it quickly became apparent that the parties had divergent interpretations of the individual clauses and their application: exchange of information was not at the level of allowing the control over the provisions of the agreement, the interpretation of 'yearly commercial turnover' was unclear and the term 'indirect support' was assessed differently. Even seemingly straightforward provisions such as 'production support' led to different positions among the parties, the EU assuming it referred to support for particular programmes whereas the US for any support, be it specific to a programme or not. As the GAO report[161] indicates: 'According to a Commerce Department official, the US Government views production support as anything other than development or research support. The EU, in contrast, has indicated that the agreement pertains only to support that is dedicated to the production of a specific aircraft program.'

Consequently, discussions between the EU and the US were undertaken to clarify the interpretations of the agreement. The GAO report[70] concluded, only two years after the agreement was signed, that 'Certain provisions of the bilateral agreement are the source of ongoing disagreement between the two parties, and GAO believes the parties may disagree over a number of other provisions in the future. The bilateral agreement does not contain a formal dispute settlement mechanism, but rather calls for consultations between the two parties when there is disagreement. Thus, the effectiveness of the agreement depends on the two parties acting in good faith to implement their commitments. Because of this, and given the on-going and potential disagreements, GAO believes the long-term viability of the agreement is uncertain.' Proving the well-founded conclusions of the GAO, the US denounced the agreement in the early

[161] GAO (United States General Accounting Office) 1994, International Trade Long-Term Viability of U.S.-European Union Aircraft Agreement Uncertain.

2000s' when it also filled a WTO dispute settlement procedure against the EU on Airbus-related government support.

1.2.8 Internal legislation

The institutional environment related to the Arrangement needs also take into consideration national legislations. In many instances national legislations are not totally (or not at all) aligned with the obligations of nations arising out of the Arrangement. For instance, the US Tariff Acts of 1890, 1897, 1972 and 1974 gave the US the right to impose countervailing duties on imports of foreign products that were subsidized by the exporting nation and that provoked harm to the national manufacturers. These provisions were opposing to the more recent US international agreements under negotiations such as the SCM and thus the US needed eventually to adjust their own legislation in order to have a consistent set of rules internally and internationally.

Another example of inconsistent internal legislation is the case in the US Eximbank, which, unlike other ECAs, has 'a statutory duty to consider the impact of its export credits on US industries and jobs' Knibb[162]. Indeed US Eximbank 'is explicitly focused on creating domestic jobs through exports' (GAO)[163] and needs to make an economic impact analysis before extending export credits. On this basis, Airlines for America has asked a federal court in Washington DC to block the export credit guarantee given by the Eximbank to Air India. The argument presented by Airlines for America is that extending those credits would place Air India, which is competing on some routes against US airliners, in an advantageous position that, in turn, has led to reduction of US airliners' pilots.

Also on the EU side, legislation limits the ability of export credit agencies to extend short-term export credits. This may, as such, not have a direct impact on officially supported export credits offered, focused on mid- and long-term arrangements, however it does impact the access to some markets and certainly the overall economic and financial situation of such export credit agencies. Issues of differences between ECAs are further analysed in Part 2.

[162] Knibb, D., 2012. Export Credit under Scrutiny Again. Airline Business , 28(1).
[163] GAO (United States General Accounting Office) 1994, International Trade Long-Term Viability of U.S.-European Union Aircraft Agreement Uncertain.

Finally, case laws in the frame of dispute settlements under the SCM has also highlighted several cases of diverging legislation between internal law and international obligations. This is for instance the case of the dispute between Brazil and Canada on export credits for the sales of regional aircraft[164], in which Canada brought Brazil to dispute settlement on the latter's PROEX programme. Brazil, among a variety of other points, raised the issue of the commitments already given through PROEX under domestic law. Green, Milat and Trebilcock[165] argued that 'The WTO has not concerned itself with the domestic legal issues that might arise from its recommendations reflecting a principle in international law that domestic law cannot be an excuse for not performing treaty obligations. This principle is laid out explicitly in Article 27 of the Vienna Convention on the Law of Treaties and states that “A party may not invoke the provisions of its internal law as justification for the failure to perform a treaty.” See Goh and Ziegler.'[166]

The Appellate Bodies recognized this principle and concluded adamantly that internal legislation of a country can not relieve or constitute an argument to disregard its international obligations. In those cases, the outcome of the dispute settlement enforced the international agreements against the national legislation by recommending the failing nations to waive the divergent national legislations.

[164] WTO Appelate Body, United States -Dispute Settlement: Brazil - Export Financing Programme for Aircraft. DS46, February 2010.
[165] Green, A., Trebilcock, M. and Milat, V., 2007. The Enduring Problem of WTO Export Subsidies Rules. American Law & Economics Association Annual Meetings, Paper 9.
[166] Goh, G. and Ziegler, A., 2003. Retrospective Remedies in the WTO after Automotive Leather. Journal of International Economic Law, 6(3):545-564.

1.3 The OECD Arrangement – origins, negotiations, evolution

1.3.1 Origins

Young[167] states that 'In a general way, social institutions and their constituent behavioral conventions constitute a response to coordination problems or situations in which the pursuit of interests defined in narrow individual terms characteristically leads to socially undesirable outcomes'. This statement seems to apply in the case of the Arrangement. As presented in the previous paragraphs, nations had been debating the issue of officially supported export credits long before the actual decision to agree on specific rules. Analysing the formation and evolution of the Arrangement, one needs to look back to the history of the efforts to address the issue-area of 'unregulated governments' practice in the use of Officially Supported Export Credits'.

Moravcsik[168] indicates that 'International cooperation to manage export credit policy began in 1934' in the frame of the Berne Union and seeking to reduce commercial risk on short term transactions by exchange of information. After World War II, nations started extending long term credits to export markets and seemingly using them for politically influencing the decision-making process of buyers. The Berne Union was asked to 'broaden its scope from exchanges of credit information to the establishment and maintenance of discipline in the terms of credit for international trade' (Moore)[169]. However, the Berne Union and its participating agencies, dealing primarily with short-term credits, failed to reach an agreement on the issue. Failing to reach an agreement was to be expected under the consideration that the union's participants are not governmental bodies but merely independent agencies and any outcome of their work neither represents the positions of their respective governments nor engages their governments in any manner. According to Moravcsik[67], 'the issue was discussed during the 1950s at the OEEC'. However at that time, former colonial nations, France and Britain in particular, were struggling against US efforts to expand their exports as one of the major means for economic growth. Strong governmental support, low US interest rates combined with an economy that was booming facilitated the US to increase their market share in global markets including formerly protected

[167] Young, R.O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Organizations, 36(2):93-114.
[168] Moravcsik, A., 1989. Disciplining Trade Finance: The OECD Export Credit Agreement. International Organization, 43(1).
[169] Moore, J. L. Jr., 1983. Export Credit Arrangements, in Seymour J. Rubin and Gary Clyde Hufbauer, ed., Emerging Standards of International Trade and Investment: Multinational Codes and Corporate Conduct (Rowman & Allanheld Publishers: New York), p142.

colonies. A reaction to the US approach was mainly possible through extensive export credit support programmes, costing the European nations enormous funds.

An accord on officially supported export credits, used as a means to promote or subsidize exports, was thus against the US interests but strongly advocated by Europe. Despite pressures from European nations, the US position was maintained for more than two decades. When the OEEC became the OECD in 1960, the issue was transferred to a GATT working group on export subsidies, which had been discussing the implementation of Article XVI (4) of GATT, totally prohibiting any direct export subsidies including export credits below market rates. The working group was initially set-up to look into means of improving the implementation of this provision, which the US were simply ignoring. In fact, the US claimed that 'credit terms were an element of competition comparable to cheaper labor or higher productivity' (Pearce)[170], showing not only the clear intention to circumvent Article XVI (4) but also their lack of interest to regulate officially supported export credits. Later on, the OECD Trade Committee took the issue back into its court and established a Group on Export Credits and Credit Guarantees with the aim 'to negotiate better procedures for the exchange of information on offers, and to reduce export credit competition.' (Moore)[171].

US position changed in 1973, assumingly as a result of the oil crisis, under the fear that the latter would 'exacerbate balance-of-payments pressures and provoke an export credit war[172]. The US took the lead of informal ad hoc meetings during international fora that, eventually, resulted in an informal agreement in 1974 and 1975 among the seven participating nations on the avoidance of subsidized export credits for ground stations, civilian airliners and nuclear power plants. In 1976, the same nations turned the original agreement into a non-binding set of guidelines known as 'the Consensus', before developing it into the non-binding 'Arrangement on Guidelines for officially supported export credits' in 1978, which was unilaterally adopted by a number of nations.

The historical process that led to the formation of the Arrangement shows a long period of discussions among nations, aware of the problem of subsidized export credits. The length of the process and the continuous change of fora in which the issue-area was discussed hint towards a restlessness of the respective governments at times when concrete action was required. The

[170] Pearce, J., 1980. Subsidized Export Credits, In International Economics and Monetary Issue. The Chatham House Annual Review, Royal Institute of International Affairs, 1:166.
[171] Moore, J. L. Jr., 1983. Export Credit Arrangements, in Seymour J. Rubin and Gary Clyde Hufbauer, ed., Emerging Standards of International Trade and Investment: Multinational Codes and Corporate Conduct (Rowman & Allanheld Publishers: New York), p139-173.
[172] Moravcsik, A., 1989. Disciplining Trade Finance: The OECD Export Credit Agreement. International Organization, 43(1).

issue-area being primarily political, any solution developed at working levels needed governmental backing. In spite of number of debates and discussions, working groups and proposals for approval, there appeared to be political reluctance to come to a solution, despite the fact that the problem was largely recognized. However, after the US interests in 1973 shifted in favour of such agreement, discussions led within five years to a solution that had unsuccessfully been debated over more than three decades.

1.3.2 Negotiations and formation

Aiming at clarifying the mechanisms of international relations that eventually led to the formation of the Arrangement, it will be assumed in the following analysis that there are two parties in the game: the supporters of an agreement on export credits led by France and its opponents led by the US. Thus, except if explicitly indicated, the position and decisions by France are assimilated to the positions and decision of all supporters. The position of the US generally reflects their own position as other opponents to an agreement appear too weak to play a key role. Although this can be seen as simplifications of a complex reality, it can validly serve the purpose of highlighting the functioning of the said mechanisms. The positions of the parties can be summarized as follows:

- France: as indicated above, France was using export credits as a tool to promote trade with former colonies. As colonies progressively became formally and practically independent, France was seeking measures to defend its economic influence and in particular against the rising influence of the US. With the support of the French export credits agency COFACE, France was pouring significant funds to facilitate French exports to those and other countries.
- US: the US has been a driver for regulating the international practice on export credits. Despite its apparent intention to agree common rules, its attitude merely demonstrated reluctance to effectively conclude such agreement. By using large export credits funds in support of exports, extended by its export credit agency the Eximbank, and also due to other factors such as a favourable dollar exchange rate, the US was rapidly increasing its presence on the international markets. Its position that export credits and subsidies are one of many elements of competitiveness, thus not requiring regulation, clearly shows a positioning against an agreement, which would restrict its comparative advantage in extending generous export subsidies. It is assumed that the reluctance of the US to find

> agreeable terms was the main reason why an agreement was not being concluded over decades and that, when the US changed this position, an agreement was then easily reached.

Tirole[173] identifies three negotiating models that can apply to international relations: 'battle of sexes', 'matching pennies' and 'prisoner's dilemma'.

If France and the US were genuine in their intentions to come to a common set of rules for export credits, the negotiation strategies could follow the 'battle of sexes' model. Under this model, the overarching principle that the parties want or need to cooperate prevails over the actual terms of cooperation. The parties would sit together and debate the options, the possibility of including past or future other balances in the scope of discussions if this would facilitate a decision, and conclude a scheme. The pure strategies of each of the parties would lead to more than one possible equilibrium and one of these equilibria would be selected. This could have occurred after 1973 ie after the US shifted their discourse in favour of an arrangement on export credits. However, as shown above, it can hardly be estimated that the US and France shared a same desire to conclude an agreement and the US attitude was more one of a hegemon or powerful partner, blocking at will the progress towards an agreement to protect their own interests. The US knew very well that any agreement excluding them would have no real applicability due to the fact that they were the major exporting nation with the largest export credit budgets available and that the remaining negotiating nations were all European, marking an agreement without the US as a purely European solution. A 'battle of sexes' negotiating strategies, therefore, appears to be weak in explaining the negotiations model that prevailed.

A 'matching pennies' negotiations between France and the US would illustrate a possible shift of interests of a party to match the interest of the other party in a mixed-strategy game. In the case of the Arrangement, there was indeed a clear shift of interest from the US side. However, the shift of US position can hardly be attributable to a willingness to match France's positions as it is most likely that US position shift is due to changes in the international environment. The US positions at any time remained such to protect their own interests, as it is expected by nations. Therefore the fundamental aspect of a 'matching pennies' model i.e. an amicable shift towards the other party's position so that a solution can be found, can not really be seen in the history of negotiations of the Arrangement.

[173] Trilole, J. 1988. The Theory of Industrial Organization. The MIT Press, p432-450.

The 'prisoner's dilemma' model is the most widespread for explaining international cooperation for instance issues of arms races and arms controls. In an attempt to maximize own absolute interests, each nation takes decisions on the basis of the possible decisions of the other nation and the resulting outcome, or payoff, of each pair of decisions. This pattern can then be extended to a sequence of decision-makings and thereby to a tree of possible solutions and corresponding negotiation strategies. The model of 'prisoner's dilemma' presents the advantage of systematising a sequence of possible pay-offs within clearly defined model parameters and leading to clear decision patterns. In the case of France and US negotiations on the Arrangement, it can be assumed that the preferred solution of both nations is to cooperate for settling an agreement on regulating export credits, as cooperation is the only option that will maximize pay-offs (both nations will spend much less taxpayers' money in supporting exports). However, such cooperation did not occur until the change of the US position. It can be assumed that, until that moment, US' benefits originating from the use of government supported export credits exceeded the internal cost of using taxpayers' money for that purpose.

In this context, Grieco[174] enhances the traditional 'prisoner's dilemma' model by proposing to place it in the context of a realist political theory (see Paragraph 0.3.4). According to Grieco, 'Realist political theory finds that states are positional in character. Thus, states prefer that relative achievements of jointly produced gains not advantage partners, and their concerns about relative gains may constrain their willingness to cooperate.' He indicates later that 'Realists observe a deep-rooted tendency in states to assess their level of achievement in any domain of activity – whether it be military power, industrial prowess, or educational excellence – by comparison of their own individual performance to the performance of other states.' Therefore, Grieco attempts to amend the 'prisoner's dilemma' model and embed the issue of relative gains, associated to that of pure pay-offs, as a key driver of state's decision-making factors. The issue of relative gains also reflects the core drivers in the negotiations between France and US on the Arrangement, as described above. The basic assumption is that the negotiations strategies will not only be affected by the individual gains that each state may achieve but, even more, by the distribution of the pay-offs. States will be driven not so much by the question 'Will both of us gain?' but rather by the question 'Who will gain more?' The difficulty of Grieco's attempt lays fundamentally on the issue of the sensitivity of states to relative gains. Whereas in terms of absolute gains, the game model can largely be quantitative, e.g. how many billion dollars will be spared in case of cooperation

[174] Grieco, M. J., 1988. Realist Theory and the Problem of International Cooperation: Analysis with an Amended Prisoner's Dilemma Model. The Journal of Politics, 50(3):600-624.

between US and France, the sensitivity of states to relative gains is purely qualitative. Assuming it is possible to calculate that the distribution of the pay-offs is shared at 30%-70% between France and US, how would each party react? Is this sufficient for both to come to an agreement? What is the appropriate level of distribution? What is the minimum level for one of the states to give prevalence to the absolute gains over the relative gains? Also, an analysis of the other state's qualitative positions is very difficult, thus leaving a blurry picture for each player of the intentions of the other player. Grieco additionally identifies that the time line may also play a role, as short-terms vs long-term relative advantages may also impact the model, in particular as relative gaps may be transformed into relative gains over time. To address the aforementioned issues, Grieco introduces in the amended 'prisoner's dilemma' model a ratio reflecting the relative gains of the players.

Information on absolute and relative pay-offs in the case of France and US for concluding an agreement regulating export credits at the time of their negotiations is not available and also it is unrealistic to take any assumptions with respect to their sensitivity to relative gains. The exercise of using Grieco's amended 'prisoner's dilemma' model against quantitative information is therefore not possible in the frame of this research. Nevertheless, it can be assumed that relative gains, in addition to absolute gains, have been at the centre of the decision-making of the two players. In can be argued that the relative gains of France were larger than the ones that the US could achieve in the period to 1973. With the changes in the international environment, the distribution of the pay-offs may have shifted towards the US, facilitating negotiations. Additionally, the sensitivity of both nations, particularly the US, to the absolute gains vs relative gains may have also impacted on its willingness to cooperate. Indeed, in times of financial constraints, absolute gains of saving billions of dollars in export support may have taken precedence over the issue of 'Who gains more?'

Negotiated vs Imposed

The developments described above beg the theoretical question whether the Arrangement can be considered a negotiated regime or an imposed one. Certainly, the affected nations had initiated corresponding discussions long before the Arrangement was concluded. It can be conceded that the principle content and rules of the Arrangement are the product of long negotiations. Under this perspective, the Arrangement can be seen as a negotiated regime, which in fact it is. Nevertheless, the Arrangement itself would have never come to life if one nation, the US, would have not agreed to it. The fact alone that the US reluctance blocked the conclusion of the

negotiations for some two decades demonstrates the hegemonic position of the US in this respect. On the contrary, once the US interests dictated that an agreement would be beneficial, the first concrete alignment among nations on the issue-area was achieved within two years and a broader understanding on aligned practice concluded two more years later. To that extent, can it be argued that the Arrangement is an imposed regime, because it appeared only when a hegemon decided so? In other terms, can the fact that a hegemon uses his power to block an agreement and then un-block it at will be a characteristic of an imposed regime? The other nations were in favour of an agreement in the issue-area and, thus, once the US accepted to sign up to such agreement, there was of course no further obstacle for its conclusion. The question is why the nations wishing to conclude the agreement did not proceed without the US and until the US accepted to do so? This can be attributed to the fact one major goal was to regulate the practice of the major exporters, meaning including the US. Without the acceptance of the US, the Arrangement would have had a very limited scope of application and additionally would have further disturbed the level playing field as the European nations would impose onto themselves stricter conditions compared to the US who would have maintained the freedom to take any measures. In that sense, it is hard to argue that the US played the role of a hegemon and imposed a regime to other nations, unwilling to do so. In that sense, Young[175] argues that imposed regimes ' typically do not involve explicit consent on the part of subordinate actors' which is not the case for the Arrangement. Reversing the situation, the European nations may have rejected a US proposal to enter into such an Arrangement if their interests were not supporting it. Would then the European nations be considered as a hegemon?

Under the light of the above analysis, it can be argued that the Arrangement is fundamentally a negotiated regime, however with the characteristic that a powerful, influential nation has clearly played a leading role in, initially, blocking and then enabling the formation of the regime. Although it is difficult to argue that the Arrangement presents characteristics of an imposed regime, it is important to recognise the key role of one player that has the power to block its formation. Perhaps the theory of imposed regimes could be further enhanced with the subcase where a powerful player has the potential to block the formation of a regime that a vast number of other players may wish to conclude.

[175] Young, R, O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.

Another consideration that derives from the above is that the theory of regime formation may appropriately differentiate the significance of 'spontaneous, negotiated and imposed' in accordance with the phases or the aspects of development of a regime. It is shown above that the content of the Arrangement hints towards a negotiated regime whereas the process to conclude it includes an element of imposed regime. This pattern seems to be applicable also to other phases of the Arrangement's evolution, as the different amendments came to life. In particular, the package on tied-aid was introduced for discussions, negotiated among nations, but, eventually, required strong political backing by a leading player before it could be accepted by the participating nations and integrated as part of the Arrangement. The theories of international regimes could further benefit from additional clarity on the above topic.

Schools of thought

The previous paragraph highlights the fact that the Arrangement is basically a negotiated regime with, however, the characteristic that its conclusion was conditioned upon the willingness of one single player, the US. Apart from enabling the conclusion of the Arrangement, the US also played a fundamental role in determining the extent and scope of the agreement. The final document produced still remains the result of lengthy negotiations among the affected parties. The prevailing international context at the time of negotiations and formation of the Arrangement is characterized by the strong development of the US economy, their lower interest rates, the increasing share of US global market share against those of the traditional powers France and the UK leading to an overall imbalanced cash situation between the US and the European nations. In this context, the European nations felt an additional considerable cash pressure by offering attractive export trade financing solutions in support of their national industries. The US had only limited pressure in that direction, in particular as the dollar interest rates remained significantly lower than the ones of the European currencies and consequently, the US companies could benefit from more advantageous export credits.

The realist theory of international relations, prevailing at the time of the Arrangement formation, could well explain the historical developments that took place from an US viewpoint. According to realists, states are 'rational egoists' caring essentially for securing comparatively more benefits than their peer states and, consequently, for the distributional effects of the benefits of an agreement. An agreement on the regulation of export credits – in fact export subsidies – would clearly generate global benefits for the nations adopting such agreement. Controlling export subsidies was seen as a beneficial concept, as the states would no longer rush into a 'export

credit war' and would be able to use the freed funds for other purposes, more attractive to taxpayers. Only the buying / importing nations were actually benefitting from such export credit war by securing lower-than-market prices and conditions and playing the one exporting nation against the other. The US generally accepted this principle and thus always participated in the year-long negotiations for the formation of the Arrangement. However they did not allow the actual formation of the regime until an environmental change (the oil crisis) modified the parameters on which the US state preferences had been shaped. It can be put forward that the US were reluctant to the terms of an agreement on export credits, as such terms would have restricted the cash and interest rate advantages of the US over their European peers, and this despite the fact that the US would have also benefited, in absolute terms, from such regulated export credits practices. When the environment changed adversely for the US, with the oil crisis heavily impacting the US economy through, among others, an increase of interest rates and a reduction of available cash, the US felt the need to proceed with an agreement on export credits. Possibly, the change of the international environment modified the US perception on their potential future benefits compared to the European nations. In view of expected diminishing comparative benefits, the US position changed from opposer to supporter of an agreement on export credits. However, the US only accepted at this time a very generic and partial agreement, focusing merely on information exchange and few principles on acceptable credit terms. Under this light, the US have used their power to secure a continuing competitive advantage over other nations, as long as this advantage was perceived, and conceded to an agreement only when the distribution of benefits appeared to be to their advantage. This basis of explanation would also be aligned with the previous paragraph, which highlights the key role of one single player, the US, in a context of Keohane's functional theory of hegemonic stability.

It can be argued that the realist concept of international relations can also explain the positions of the European nations. Accordingly, France's and the UK's persistence to converge towards an agreement could be seen as an egoistic attempt to reduce the US comparative advantages in the issue area of export credits and consequently ensure a comparatively more favourable distribution of benefits. If this assumption would be correct, the question arises on why the European nations eventually accepted an agreement on the terms proposed by the US once the US decided the environment was sufficiently beneficial to enter into one. If the European nations' primary interpretation of international relations was based on the realist theory, they would accept an agreement with the US only if they could foresee a comparatively improving position versus the US. The conclusion of an agreement would then be possible if at the same time, the US and the European nations would expect an improvement of their respective positions versus their

peers, which could be foreseen in two cases: either in the event that the distribution of benefits is evaluated differently by each party or in the event that the importance attributed to the generated benefits is different. As by its nature, the issue area of export credits can easily be assessed in economic terms, none of the aforementioned two cases appear as possible options. Perhaps, the neoliberal theories of international relations are more suited to explain the European nations' views. Under neoliberal theories, the European nations could arguably have been insisting on an agreement on export credits because they saw that such agreement would generate benefits to all the affected nations. Regulating states' practices on export credits would limit the credit wars among exporting nations and thus, overall, the exporting nations would disburse less money to secure export sales and, consequently, the importing nations would have to pay a fairer price for the materials they buy. Under this concept, the distribution of benefits or, in other words, the fact that one nation may position itself more favourably compared to the others, would remain an irrelevant parameter as long as all nations can benefit from the agreement. This could also explain why, despite the US securing a possibly more favourable position versus the European nations, the latter accepted to conclude the Agreement at the time when the US shifted their position. Additionally, an agreement on export credits would increase cooperation and coordination among exporting nations, thereby reducing uncertainty and risks in their interrelations with other actors. Maybe, the history and tradition of European nations especially after WWII has shaped a wider belief in the benefits of cooperation and coordination among nations for a better common welfare. In that sense, European nations might be stronger supporters of international cooperation and corresponding regimes, as can be demonstrated by the numerous organizations established in Europe, starting from the EU. In general, the spirit of international discussions handled by European nations seems to be based on 'what's good for all' rather than 'what's better for me', which seems to be US traditional approach.

Nonetheless, in the mid-1980s, when the US wished to raise the minimum aid component in mixed credits to 50%, some EU nations such as France rejected the offer. Their position remained unchanged until the US Congress in 1986 decided to authorize a US$ 300 million war chest to be used against the practices of nations opposing the increase in minimum aid component. The war chest is seen as the decisive argument that made France accept the US proposal and capitulate. However, as Blair[176] reveals, ‘a closer examination of the events suggests that this conclusion is incorrect. The initial French reaction to the American offensive was to declare that it would match any new concessionary finance offered by the US if this was necessary to win contracts in developing countries. While admitting that the French government

[176] Blair, D. J.,1993. Trade Negotiations in the OECD, Routledge. p. 1950

would find it difficult to match all the grant element in US offers, given its own budgetary problems, the French Minister of Industry and External Trade, Edith Cresson, noted that there were other means of promoting exports besides mixed credits.' Blair continues 'Rather than simply yielding the American power, the shift in the EC position seemed to be more the result of a change in the interest structure of France'.

Cognitivist theories of international relations would suggest that convergence of exporting nations towards the idea of an agreement on export credits is progressively developed in time through a process of exchange of ideas and knowledge which conditions the actors to a common set of principles on what is right to do. The lengthy process of negotiations that led to the formation of the Arrangement might well be supporting this approach. By regularly exchanging on the issue-area, the parties progressively shaped a common view on suitable solutions to the recognized issue-area. In this lengthy process, a suitable solution may have matured to the point where the US became convinced of the solution discussed and therefore shifted their position. In that sense, cognitive elements may have contributed to the development of the discussion among exporting nations. Nevertheless, explaining the formation of the Arrangement primarily on the basis of cognitivist theories seems to ignore the radical change of environment that has apparently modified the position of the US. Applying the cognitivist theory to the formation of the Arrangement would rather have foreseen a progressive convergence of positions, but hardly a radical shift of the US position associated to taking a leading role for the swift conclusion of the negotiations.

Using the schools of thought of international relations to explain the formation of the Arrangement, it appears that each one of them can contribute differently depending on the starting viewpoint and that none can, alone, suitably explain its formation. Taking the US vision of world relations, a realist theory would be well suited to explain and, maybe also predict, the US interests and positions. The European approach to international relations seems to be rather based on neoliberal considerations. The environment which led to the formation of the Arrangement can thus be described as one of clashing theories across the Atlantic. Perhaps this is also what eventually enabled the conclusion of the agreement. Should the exporting nations view international relations in terms of comparative benefits, a regime on export credits might have never emerged. On the contrary, if neoliberal considerations were more present in the US environment, an agreement might have been reached well before it was actually achieved. In the frame of these rational discussions, however, the contribution of the cognitive elements such as a

long term exchange of views, ideas and knowledge should also not be underestimated as an underlying process aligning the actors and thus supporting the outcome.

The above analysis shows that, possibly, a combination of the interpretation of reality across different schools of thought may constitute the most appropriate manner to explain reality. A different view of the various players in terms of theories of international relations and the resulting interpretation of reality may also have contributed to the eventual sealing of the Arrangement. Thus the various schools of thought could well co-exist and contribute each their different perspective to the understanding of reality and its implications for the future. The inherent difficulty of such approach remains, however, that it cannot be used precisely to make any projections on future events as he actual importance of the elements contributed by the various schools of thoughts differs in each situation depending on the environmental parameters of each case
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1.3.3 Regime evolution

The Arrangement has often been presented as a successful example of regime creation and evolution. Moravczik [177] talks about 'the formation, maintenance and success' of this regime and that this regime has been 'repeatedly strengthened' since its creation. The fact is that the original 1978 agreement has been 'overhauled' and amended a number of times, more crucially in 1983, 1985, 1987 and some 10 times more since then. It also seems to operate relatively smoothly and is widely recognized as efficiently regulating states' practices in the issue area. 35 years after the original Arrangement was concluded, Young's[178] position appears as prophetic: 'international regimes do not become static constructs even after they are fully articulated. Rather they undergo continuous transformations in response to their own inner dynamics as well as to changes in their political, economic and social environments.' Endogenous and exogenous factors have shaped the Arrangement to become the comprehensive regime it represents today. A few reasons can be proposed for this regime success.

[177] Moravcsik, A., 1989. Disciplining Trade Finance: The OECD Export Credit Agreement. International Organization, 43(1).
[178] Young, R. O., 1982. Regime Dynamics: the Rise and Fall of International Regimes. In Krasner, S., ed., International Regimes. International Organizations, 36(2):93-114.
[178] Keohane, O. R., 1984. After Hegemony. Princeton University Press, p103.

A first purely economic consideration is the costs for regime creation. Keohane[179] considers that the costs themselves for regime creation and operation is a sufficient reason to maintain a regime after it was created, even if the content of the regime is transformed: 'The high costs of regime-building helps existing regimes to persist.' Taking the long history of the Arrangement creation, it can indeed be assumed that the creation costs have been quite considerable. However, in comparison with the actual export volumes and costs at stake, it can be argued that the formation and operational costs have been amortized many times. In this context, would the participating states maintain the Arrangement only because of its formation and operational costs? This appears to be a weak argument in this direction.

Another view can be given by the neoliberal theories of international cooperation: that cooperation and regimes engender an exchange of views, information, knowledge and thereby reduce the uncertainty and risks of cooperation in an, otherwise, chaotic international environment. One of the key features of the Arrangement, especially at its origins, consists in the information exchange among members. This information exchange on practices and export customers is already an invaluable source for the participating states. Not only can they learn from each other, but they can also protect themselves against possible customers that could play one nation against the other. This mechanism completely embedded in the Arrangement can, thus, already be seen as a sufficient reason to maintain such regime.

More importantly, the participating nations seem to have progressively adhered to the idea that subsidized export credits offered at below-market rates can indeed cost a lot of taxpayers' money, which is probably difficult to justify in terms of national welfare. Independently from relative positioning on export markets, the benefits arising out of the Arrangement are substantial. Along the same lines, the regular amendments of the Arrangement have addressed a number of issues that did not support a level playing field, starting from the establishment of the minimum interest rates considering a wide array of parameters to the regulation of tied-aid, which was used to 'compensate' the restrictions of the Arrangement.

Perhaps equally significant is the feeling of belonging and of reciprocity. The Arrangement being in nature a gentlemen's agreement, nations are not forced to follow it. However it seems that in a large majority of cases, the nations do comply with the Arrangements' rules and provisions. The application of the Arrangement becomes in a way a type of moral obligation of the nations, to which they adhere to, among other reasons due to the wider cooperation frame among

themselves. According to theories of regimes overlap, failing obligations under an international regime or agreement may have implications on the cooperation of the affected nations in other constellations of international cooperation. Nations thus have an interest to 'behave' and maintain an overall balanced relationship with their peer states. Along the same lines, the Arrangement seems to create a level of solidarity of the participating nations, especially as a united group against, on the one side, importing nations and, on the other side, non-participating exporting nations such as China, India, Brazil, etc.

In terms of regime evolution, the number of amendments and additional provisions are impressive. Perhaps due to regime creation costs, the Arrangement has evolved in a manner to cover other associated issues, including sector undertakings, provisions on tied-aid, etc. The developments have not necessarily been easy and, after its formation, negotiations have continued for each of the subsequent amendments. The theories of regime formation presented in the previous chapter could very well be applied in each negotiation process for each amendment. Of course, behind the beautiful window of compliant, cooperating, harmonic states, each has been trying to use the agreed provisions to their own benefit. As such, France has shifted support offered to importing nations from export credits to tied-aid, which is aid provided conditionally upon the purchase of the importing nation of certain products or services. Tied-aid was thus regulated but so have the length of credit terms extended by the US as could have been anticipated under realists' theories. Similarly, the Civil Aircraft Sector Undertaking was introduced together with the original Arrangement in 1978 but it took several amendments until the 2011 one to transform it into a useful and operational agreement, efficiently regulating the issue-area.

The Arrangement maintenance and evolution fully supports the theories that predict the persistence of regimes after their creation. A functional and efficient set-up, such as the Arrangement, not only keep on operating due to their costs, the benefits they provide and the historical inertia, but will also be enhanced to progressively include further related issues or address additional issue areas. To that extent, a dense 'issue-area' environment will certainly support the use of existing structures in order to address related issue-areas. Therefore, by mapping the issue-areas in international relations and the existing regimes addressing them, it could be possible to derive useful results in terms of predicting regime evolutions and changes.

1.4 The OECD Arrangement – How does it work?

Mulligan[180] indicates that 'These attempts [at controlling subsidized export credits] have proceeded along two lines, ie firstly, to reach agreement about what the terms of subsidised export credits should be regarding credit periods (maturities), down payments, interest rates, local costs, exchange-rate guarantees, etc; and secondly, to reach agreement on the exchange of information among the various export-credit agencies so that none need make false assumptions about what the others were doing.' This statement summarizes the two main roles of the Arrangement: a regulatory and an information exchange role. Often, the Arrangement is presented merely under its regulatory angle, the information aspect being shadowed or undermined. Perhaps the information aspects being procedural, they attract less attention than the regulatory aspects which address the core of the export credit issue. However, especially at the time of establishment of the Arrangement, the issue of information exchange was possibly even more prominent than the regulation of export credit practices. The fundamental reason behind this lays on the fact that the individual terms extended by the export credit agencies to their national exporters were kept in absolute confidence and also the export credit agencies were generally not liable to issue annual reports or other information relating to the terms of credit offered.

This lack of transparency or information shaped an environment in which exporters as well as export credit agencies were assuming, possibly with great suspicion, the terms that competing export credit agencies were offering. Consequently the one export credit agency was competing with other agencies on the basis of assumptions, leading to offering ever more advantageous terms for their national industries thus exacerbating further the export credit war. Also, the lack of information exchange meant that the importing nations could easily play the one agency against the other and, further, that the export credit agencies did not learn from each other's practice on the risks and reliability of importing nations or companies.

The following paragraphs should give an in-depth analysis of the provisions of the Arrangement as well as the products affected and its functioning. It is based on the main body of the 2013

[180] Mulligan, M. R., 1982. A study of officially supported export insurance and finance systems. Journal of Management Research, 7(2):103-116.

Arrangement, but relevant elements of the Sector undertaking on civil aircraft are also covered where deemed appropriate.

1.4.1 The main features of the OECD Arrangement

As explained above, the Arrangement focuses on two aspects: regulatory and information exchange. In the course of evolution of the Arrangement, additional provisions expanding the scope of the regulatory aspects were added and amended, whereas the information exchange aspects remained relatively stable. Today's structure of the Arrangement thus presents a stronger focus on the regulatory aspects. The main features provided by the Arrangement are explained, in a compiled manner below.

Downpayment: Article 10 provides that a minimum of 15% downpayment (20% in the Sector Understanding for Civil Aircraft, for Risk I category low risk countries) of the export contract value shall be required to the foreign purchase of goods – the maximum official support allowed to be provided is 85% (respectively 80%), except for provisions regarding insurrance against pre-credit risk and local costs (paragraphs b) and d) accordingly).

Repayment terms: Article 12 regulates the maximum repayment terms to be 5 years for Category I countries and 8,5 years for Category II countries while exceptions and special cases are provided. Article 13 is an exemption for the specific case of non-nuclear power plants. Individual sector undertakings may also have specific repayment terms different that those under Article 12 & 13. Article 14 describes the details of repayment of principal and of payment of interests i.e. that the principal has to be repaid in equal instalments and that principal and interests have to be repaid starting maximum 6 months after the starting point of the credit and every 6 months at a maximum, with an exceptional extension to 12 months. The Sector understanding for civil aircraft foresees repayment terms of up to 12, extendable to 15 years.

Interest rates: Articles 15-22 describe how interest rates are determined. Article 15 defines that premiums, banking fees and taxes are excluded from interest rates. As per Article 19, Minimum interest rates are based on the Commercial Interest Reference Rates (CIRRs) and calculated in accordance with the principles enumerated 1-5 of this Article for the currency of the transaction. Article 20 details the construction of the CIRRs as a maximum of 100 basis points above the three-, five- or seven-year government bond yields depending on the maturity. Such CIRRs,

according to Article 21, are valid for a maximum period of 120 days. Finally, Article 22 indicates that for floating rates, the highest of the CIRR and the short-term market rate shall be applied.

Risk premiums: In addition to the interest rate, participants can charge a risk premium for the risk of non-repayment. Article 23 defines the principles applicable to the establishment of the risk premiums and in particular that those 'shall not be inadequate to cover the long-term operating costs and losses.' The establishment of Minimum Premium Rates (MPRs) is detailed in Article 24, on the basis of factors enumerated under paragraph a) and in particular linked to the country risk classification. The length of Article 24 alone is comparable to the one of Articles 15-23 together, showing the importance but also complexity of the matter, especially as participants attempt to shape clear rules for a topic (risk assessment and related premiums) which is typically relatively unconcise and subject to a variety of parameters as well as interpretations and opinions. This is a key issue in the Arrangement in order to contain a permanent debate on applicable risk premiums. The linkage to objective, external and respected sources such as the sovereign risk assessment described in Article 26 and the Model to assess the risk of individual categories, gives a precise framework and solid reference basis for calculating risk premiums that should converge among participants for a same country. Interestingly, Article 29 also provides that MPRs are differentiated also depending on the financial product offered as export credits and covers them in three categories 'below standard product', 'standard product' and 'above standard product'.

Country classifications: Country classifications are important in the sense of the Arrangement as the various categories of receiving (or even providing) countries are subject to different rules or percentages of interest rates and risk premiums. Country classifications appear at various locations in the Arrangement and for different types of classifications. For instance Article 11 classifies countries according to two categories, which relate to the maximum repayment terms. Article 25 determines the country risk for all countries according to eight categories, one of which is considered 'risk-free' and the remaining seven covering the range of low risk to very high risk countries. The article also describes the methodology to classify the individual countries. MPRs are then calculated for each category of countries. Article 27 further qualifies the buyer's risk classification which are linked to the country risk classification. Furthermore, Article 28 classifies multilateral and regional institutions according to the eight categories indicated above - it remains unclear why this categorization is provided and is assumed for the event such an institution actually procures some products or services with the support of export credits. Finally, Article 36

referring to tied aid classifies the countries in relation to their GNI according to the World Bank data. The classification determines the eligibility of a nation to receive tied aid or not.

Tied Aid: As indicated above, the coverage of tied aid under the Arrangement was agreed under the Helsinki package in 1991, and thus forms a separate consolidated Chapter of the Arrangement. Chapter III and articles 33-42 of the Arrangement determine the linkage between export credits and tied aid (Article 33), the various forms of tied aid (Article 34), the country and project eligibility for tied aid (Articles 36 & 37 & 39), the concessionality levels, how they are calculated and how this affects the export credits (Article 38 & 40), validity (Article 41) and finally procedures for matching the offerings of a nation by others.

Matching: three Articles cover the topic of matching, Article 18, 42 and 45, whereby the Articles 18 and 42 make reference to the procedures of Article 45. Matching represents the right of any participant to offer similar export credits (Article 18) or tied aid (Article 42) terms to an export customer as another participant or non-participant to the Arrangement. Whereby notification and consultation procedures should make clear what financial terms are offered by a participant, the matching procedure is based on the assumed financial terms offered by another nation. The matching procedure foresees that the initiating party notifies the other parties of its intentions, consults with the party offering the financial terms to be matched and informs the parties of its final decision to match or not. Despite being a procedure, this feature of the Arrangement supports in fact a level playing field as it allows any party to match the terms offered by another and, thereby, neutralizes the impact of export credits on a buyers' decision.

Notification & Information: the Arrangement foresees a variety of notifications and information exchanges among participants. Articles 43, 44, 47, 48, 49 and 50 cover topics such as notification, prior notification, prompt notification, prior notification with discussion, and how to pursue them, which shapes the expected behaviour of participants in a range of situation for export credits and trade aid. The core principle of the notification procedures is that the participants need to inform each other as well as the Secretariat when they intend to commit to specific financial terms towards an export customer, which are beyond a certain threshold for each situation.

Consultation: in the context of the Arrangement, consultation is foreseen when a party seeks clarifications on the financial terms offered by another party for export credits or trade aid, especially when a party believes the financial terms offered by another are not in line with the

provisions of the Arrangement. Consultation procedures are regulated through Articles 46, 51, 52, 53 and 57, which define the purpose, timing, format, scope, procedure and outcome of consultations. It is noted that, despite a consultation procedure, there is no dispute settlement mechanism in case of disagreement. The threat of reciprocity and questions of image versus the other participants are deemed to be sufficient for a nation to comply with the obligations arising out of the Arrangement. The Sector undertaking for civil aircraft has a dedicated disagreement resolution procedure regarding countries risk classification.

Enquiries: additionally to notifications and consultations, the Arrangement enables participants to ask other participants about their experience and practices in specific countries. This is also regulated in detail in terms of how, when, what and the corresponding responses by the triggered participants, through Articles 55 and 56.

Common lines: the Arrangement allows the classification of countries to diverge from the reference classification of the World Bank as foreseen under Article 36. Any participant may propose such a reclassification in accordance with the procedures of Articles 58-63 of the Arrangement, which describe how to file a proposal, what information to provide, the required communication to the other participants, time of response, what happens in the various cases of response etc. The other participants may, tacitly or explicitly, accept such country reclassification, or explicitly reject it. A re-classification becomes effective only if no participant has rejected such proposal.

Review: Articles 64-69 address issues of review of the Arrangement as well as review and communication of minimum interest rates, classification of countries, MPRs, etc, the procedures for their communication to the participants and their effectivity. Interestingly, Article 67 foresees a regular review of thr Arrangement itself and its functioning in order to capitalize on participants' experiences gained and improve its 'operation and efficacy'. This has indeed been applied and, as indicated in the introduction above, the Arrangement is being recently modified on a yearly basis. Also, the Arrangement does not include any formal amendment procedures, despite detailed procedures on a large variety of questions as described above. As per the mechanisms of common line, a consensus on proposed changes should apply. Interestingly, the Sector understanding for civil aircraft additionally includes a specific article on the future work to be pursued.

The above analysis shows that the rules and mechanisms provided by the Arrangement are quite detailed and strict in terms of both regulatory and information exchange aspects. It is noteworthy that, for instance, the common line approach includes very specific deadlines and procedures for each possible subcase. In general, by practice and experience, the Arrangement has reached a level of maturity that allows it to cover in a pragmatic and effective manner the cases faced with in the export credit world. The fact that the rules are improved in a regular fashion (Article 67 foresees a yearly review) leads to a contractual arrangement relatively complex in terms of set-up and interrelations of individual clauses, which reflects the historical development of the Arrangement and a sense of compromise among participating nations. Amendments to the Arrangement have indeed been implemented on a very regular manner with the aim of improving provisions, clarifying issues, adjusting to a developing socio-economic environment and adding as required sector specific annexes. The most recent amendment to the Arrangement was agreed in November 2015 with the addition of a specific Sector Understanding on Export Credits for Coal-Fired Electricity Generation Projects. Overall, practice of the export credit agencies in applying the terms of the Arrangement seems to show that the participating nations have adopted a common spirit of interpretation and implementation of the Arrangement and, possibly, 'living' the Arrangement does not require a frequent check of its clauses.

1.4.2 Scope of products covered by the Arrangement

The Arrangement does not specify the type of financial products or services it is applied to. It covers by default 'all officially support provided by or on behalf of a government for exports of goods and/or services, including financial leases' as postulated by Article 5 'Scope of Application'. Article 5 however limits the scope to medium or long term financial products 'which have repayment terms of 2 years or more'. Supplier credits, extended by the exporter to the foreign importer, display usually short or, sometimes, medium repayment terms, allowing the use by the exporter of a range of financial tools offered by normal banks to cover related export finance needs e.g. domestic loans, overdrafts, revolving credits etc. The Arrangement is thus merely aimed at buyer credits, granted directly to the foreign buyer, usually on medium or long repayment terms and for large amounts. Such financial products are created and offered by the export credit agencies of the exporting nation directly to the foreign buyer or to a credit institution in the foreign buyer's country under a specific financial agreement, covering mainly guarantees and pure cover. Article 5 gives indications with respect to the types of financial products covered: ' direct credits/financing, refinancing, interest rate support, guarantee and insurance' and extends

its applicability to 'official support in the form of tied aid.' The product portfolio of each agency can vary significantly among agencies. Also, agencies are innovative in terms of financial products offered and therefore their product portfolio is developing over time. The role of the export credit agencies and in particular the impact of differentiated product offerings is further analysed in Chapter 2.2 ' Comparison of Export Credit Agencies – Impact on International Trade '. In this context, the analysis below attempts to explain the main types of financial products offered on the international markets, focusing on those relevant to the Arrangement, largely inspired by the categorization provided by Gianturco[181]. The following overview is not limited to those financial tools covered by the Arrangement in order to provide a wider understanding of available financial means affecting exports and usually offered by export credit agencies. It is however not exhaustive and tools less used or less relevant in the context of government supported export credits such as inflation risk insurance, exchange rate insurance or trade fair insurance were purposefully left out.

Pre-shipment insurance

Pre-shipment insurance is extended to exporters to cover risks associated to the situation in the importer's country, mainly political risks, in the period between the conclusion of a contract and the shipment of the goods. This type of coverage typically does not include cancellation of contract by the buyer or non-acceptance of the goods offered and mainly relates to issues unrelated to the will of the buyer such as insolvency, war risks, government interventions and embargoes. The insurance usually covers the production costs borne by the exporter that will eventually not be paid by the buyer due to reasons as described above. The use of such insurance is not very frequent and affects mainly large value contracts with long manufacture periods. The period of coverage is typically less than 180 days, sometimes more, but rarely exceeding the 2 years, thus this type of export finance is generally not covered by the Arrangement.

Short-term post shipment insurance

Unlike pre-shipment insurance, short term post shipment insurance is widely used by exporters to cover the risk of non-payment by the buyer after the shipment of goods has been performed. It is extended by most export credit agencies worldwide and this type of insurance makes up the bulk

[181] Gianturco ,D. E., 2001. Export Credit Agencies – The Unsung Giants of International Trade and Finance. Quorum Book. p21-34.

of the agencies turnover. This type of insurance is either extended in the form of a whole turnover policy, covering all export transactions of an exporter to selected countries in one policy, or on a transaction basis. The insurance covers 80% to 90% of the exporter's short terms credits turnover, but can sometimes go up to 100%. Short term post shipment insurance is typically extended for a period not exceeding 1 year, and thus does not fall under the provision of the Arrangement.

Medium- to long-term post shipment insurance

As per short term post shipment insurance, medium- to long-term post shipment insurance covers an exporter's future receivables to be paid by a foreign buyer, however for cases where payment terms are longer. This type of insurance is typically used for large export contracts, where medium- or long-term payment terms are justified. Due to the period of coverage, such insurance type is regulated by the Arrangement. Article 10 'Down Payment, Maximum Official Support and Local Costs' specifies that 'The Participants shall require purchasers of goods and services which are the subject of official support to make down payments of a minimum of 15% of the export contract value at or before the starting point of credit'. In the Sector Understanding on Export Credit for Civil Aircraft, the down payment requirement is more stringent, set at 20% of the contract value for specific (low risk or Category 1 Risk countries). This means that the financed part represents a maximum of 85% (respectively 80% for aircraft) of the contract value. The insurance normally covers some 80% - 90% of such financed part. The terms of payment of the financed part are usually related to the size of the transaction, with larger transactions justifying longer terms. The maximum repayment terms are also regulated by the Arrangement under Article 11 'Classification of Countries for Maximum Repayment Terms' and Article 13 'Maximum Repayment Terms', which in fact link the maximum repayment terms to the classification of countries defined by the World Bank. In any event, repayment terms are limited to 10 years. Specifically for the acquisition of new aircraft, the Sector Understanding on Export Credit for Civil Aircraft allows maximum repayment terms of 12 years, and exceptionally up to 15 years with a surcharge of the interest rate. The longer repayment terms can be justified by the large amount of the transactions for the acquisition of aircraft. It should be noted that, whereas medium-term post shipment insurances are generally treated similarly by private and official insurers, private insurers are imposed stricter terms in particular with respect to the maximum repayment terms, leaving factually the long-term insurance segment to the official insurers.

Overseas investment insurance

Overseas investment insurance covers direct equity investments or participations of a national company in a foreign country. It usually covers the national company against political risks such as wars, expropriations, etc and is based on the cash element of in kind element of the equity investment for instance goods or services that account against equity. Despite the fact that insurers may extend possible medium- or long-term coverage, this type of financial products do not fall under the Arrangement as it is directly linked to an export activity but rather to an investment one.

Overseas lease insurance

Overseas lease insurance is extended by some insurers for coverage of operating or financing lease contracts with industries in export countries. Such insurances cover the possible non-payment of the lease fee by the foreign contractor. This type of insurance is however rarely used due to the fact that overseas lease contracts are not common for most types of goods or services. They are more often used for transport equipment such as aircraft. For financial leases extended for periods of more than 2 years, the provisions of the Arrangement apply, in particular the requirement of a downpayment of at least 15% of the contract value, as also explicitly referred to in Article 5.

Performance bond coverage

Performance bond coverage represents a form of insurance for the possible mis-use of performance bonds, standby letters of credit or advance payments extended to foreign customers, usually governments. It insures the exporter in case, for instance, the bond is wrongly drawn while the conditions to do so are not met. It typically involves that a dispute resolution mechanism is included in the contract and that such mechanism is applied before the insurance coverage is paid to the exporter. The period of coverage of the insurance is normally aligned with the term of the letter of credit or performance bond. As such insurances are offered for both short and long term contracts, they are to a very large extent used for terms under one year but can also expand to more than 10 years. They are not covered under the provisions of the Arrangement despite possible maturities beyond two years, as they do not directly relate to payments or insurance of payments but rather to customers' wrongdoings.

Pre-shipment guarantees

Pre-shipment guarantees are usually offered to commercial banks to help them finance working capital needs of exporters who are manufacturing the products to be shipped to the buyer. This type of guarantees is typically used when the exporter is a small or medium enterprise. It covers the commercial bank in the case of default of the exporter, not the foreign buyer. The guarantee is usually offered for a period not exceeding one year. Pre-shipment guarantees are thus not affected by the Arrangement.

Post-shipment guarantees

As per pre-shipment guarantees, post-shipment guarantees represent coverage extended to commercial banks in this case that finance the foreign buyer, on the account of the exporter. Post-shipment guarantees can be used for short-, medium- or long-term loans but usually short-term transactions do not utilize such guarantees. According to the principles of the Arrangement, for medium- and long-term cases, the buyer is required to make a cash payment of minimum 15% of the contract value. Also the commercial bank is required to take share of the risk for the loans extended to the buyer. Post-shipment guarantees are usually offered for individual transactions with one buyer and one exporter, however they can also apply in the case of major projects where one buyer buys from numerous exporters.

Local cost and third country cost insurance

This type of insurance covers possible losses from non-payments by foreign buyers. It covers on the one side the costs of the local activity of the exporter and on the other side the costs that would be transferred to a third country for purchase of parts or components. In case the third country part is large, then usually the structure of the export finance involves also the export credit agency of that country for the share of the export contract allocated to the third country's industry. The cover of local or third countries costs usually reflects the payment terms agreed with the foreign buyer, thus typically a downpayment or cash payment of 15% of the contract value. These insurances are often used by export credit agencies, in particular in large export sales with medium- or long-term payment terms and where export finance is one of the competitive elements for an attractive financial offering to the foreign buyer. The period of coverage for the

local content is usually reflecting the initial period of the local activity, rarely exceeding five years, whereas the third country coverage is normally extended for the entire period of the contract.

Buyer credits

Buyer credits represents a major activity of official export credit agencies. They extend financing directly to the foreign buyer of the goods or services and the foreign buyer retains the entire responsibility to repay the loan. The financed amounts are paid by the credit agency to the exporter or exporters as directed by the foreign buyer. Buyer credits are usually used for large products or projects sold to the foreign buyer, with medium- or long-term repayment terms. In those cases, the provisions of the Arrangement apply and therefore a cash payment of 15% is required to be made by the foreign buyer to the exporter before or when the credit is agreed. Similarly, accorded interest rates need to follow the provisions of the Arrangement and are typically charged at a fixed rate during the period of the credit. Payments of the principal of the loan and of the interests are due semi-annually on the basis of the reducing principal.

Lines of credits

Lines of credit represent loans given by export credit agencies to a buyer country's financial institutions, which in turn will finance exporters from the agency's country. The line of credit is generic and it is the financial institution in the buyer's country that decides for which transactions the line of credit will be used. The terms of the loan are agreed between the export credit agency and the financial institution and apply for all transactions that will be financed through this mechanism. Payments of the loan is disbursed directly by the export credit agency to the national exporter, as directed by the foreign financial institution. The repayment of the loan is due by the financial institution to the export credit agency, independently of whether the foreign buyer has actually honoured his own payment to the financial institution. This type of credit is often used in the case where several exporters are intending to sell to one foreign buyer.

Tied aid credits

Tied aid represents a form of aid to a foreign buyer through which the cost of credit is lowered compared to a standard export credit in order to motivate the foreign buyer to purchase the goods or services from the specific country. Tied aid is directly associated to the purchase of goods or services by the foreign buyer and is often used for large products where international competition

is harsh with the aim to render the financial offering more attractive. It can take the form of longer repayment periods, grants or concessional loans or lower interest rates. Tied aid is administered by the national export credit agencies, both in case of pure aid and in case of aid linked to export credits, so called mixed credits. They are usually extended to public buyers and in particular in developing countries. Tied aid is clearly regulated by the Arrangement with specific provisions added under the Helsinki package in 1992.

The above overview of financial tools available in international trade for facilitating export transactions demonstrate the diversity of means reflecting the complexity of export trade. In comparison to domestic trade, Mulligan[182] indicates that export finance needs to cater for additional elements 'which can be defined as:

(1) assessing additional risk;
(2) establishing the currency of sale;
(3) determining payment methods;
(4) ensuring correct shipping documentation;
(5) determining export credit financing methods;
and (6) meeting exchange control regulations.'

In order to remain competitive and offer ever more attractive products, the export credit agencies are capable of creating new and more sophisticated tools. The Arrangement, as shown above, regulates only a few of the available pool of tools, such as buyer's credits, medium- and long-term post-shipment insurance and tied aid. However, by focusing on medium- and long-term financing schemes, the Arrangement captures the lion's share of large, international export deals, which often can present a strategic nature for the exporting nation and, thereby, can attract the attention of governments and their official support for export credits. Finally, focusing on large and long-term transactions means that the Arrangement also regulates such export finance schemes that would not be available by private institutions.

1.4.3 The 2011 Sector Understanding on Export Credits for Civil Aircraft

[182] Mulligan, R. M., 1982. A Study of Officially Supported Export insurance and finance systems. University of Bradford. p 2.

The most recent evolution of the Arrangement has taken the form of the updated Aircraft Sector Understanding (ASU) concluded in 2011. The ASU is part of the Arrangement but in fact functions as a separate agreement as it includes the relevant provisions of the main body Arrangement, as adjusted for the ASU. There are today 10 nations participating in the ASU: Australia, Brazil, Canada, the EU, Japan, South Korea, New Zealand, Norway, Switzerland and the US. Brazil joined the ASU in 2007, without however joining the Arrangement altogether. Russia and China have been invited to join the Arrangement, however, so far, have not yet decided to participate.

The ASU regulates the use of export credits by participating nations for the export of any type of aircraft to any buyer or country, including new aircraft, used aircraft as well as spares and associated services. With the recent financial crisis, commercial financing conditions deteriorated while civil aircraft demand progressed, thereby increasing the need of governmental backed financial contributions. The ECAs extended export credits, mainly guarantees, of a value representing some 30% - 40% of the value of total aircraft exports. The ASU regulates officially supported export credits for repayment terms of two years and more. In particular, it applies to financial products such as loan insurance or guarantees, direct financing, refinancing, interest rate support mechanisms, etc., tailored to the specific needs of international aircraft trade. The ASU regulates the maximum credit terms, set at 12 years (extendable to 15 years with a significant premium surcharge), minimum premium rates and minimum interest rates, which are revised on a monthly basis.

The main impact of the 2011 ASU consists in the closer-to-market conditions permissible for ECAs to finance civil aircraft exports, thus increasing the cost of financing and the final costs of the products or services sold. Reuters[183] reports that airliners 'are finding it harder to fund or refinance their aircraft via the traditional route of export credit agencies and commercial bank lending. Beginning in January, higher fees and equity requirements mandated by the OECD went into force, according to Boeing Capital Corp., which in a note to investors said that, barring any severe shock, export credit support for new aircraft deliveries is expected to keep declining.'

[183] Reuters, 11 October 2013.

1.5 The Export Credit Agencies (ECAs)

It has clearly emerged from the previous sections that the ECAs constitute the organizations that are called to manage officially supported export credit issues and extend corresponding credits accordingly. The ECAs are the key players in the international context of export credits. Most nations, certainly all developed nations, have today an ECA. Worldwide, more than 100 ECAs share the task to 'lubricate' international trade. They are called today to handle billions of credits, guarantees and insurances. Gianturco[184] characteristically titles his book 'Export Credit Agencies – The Unsung Giants of International Trade and Finance'. However, despite their common name and role, ECAs often display a diverging set of characteristics. For instance all ECAs are government-driven when it comes to official support, but their legal status can vary among private company, semi-governmental entity, governmental entity or even department of the government itself ie department of a ministry. Their stated missions are usually different, giving them a diverging approach and applied principles to export credits and the financial product mix they offer is also unique, some ECAs extending a comprehensive range of financial products whereas others are restricted to a handful.

The US Government Accountability Office (GAO)[185] shows that the US Eximbank presented in 2010 a bit over US$ 20 billion of new business from which some two thirds in medium- and long-term areas (thus falling under the Arrangement), whereas Canada displayed more than US$ 80 billion of new business from which more than 90% unrelated to medium- and long-term. Also within the EU the differences are notable, e.g. France capturing more than three quarters of its US$ 25 billion new business in medium- and long-term activities compared to Germany where some half of its US$ 40 billion is in medium- and long-term transactions. It can be stated that the various ECA organizations, governance, legal limitations may vary substantially, making the international pool of ECAs an heterogeneous group of organizations, thereby also affecting their ability to cooperate and compete (see Chapter 2.2).

While international trade has grown from US$ 1,9 trillion in 1993 to US$ 13 trillion in 2007[186], export credits have risen from US$ 0,35 trillion to US$ 1,3 trillion[187] in the same period, reflecting in 2007 a 10% ratio compared to international trade. However, the medium- and long-term

[184] Gianturco, D. E., 2001. Export Credit Agencies – The Unsung Giants of International Trade and Finance. Quorum Books. p 1-7.
[185] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.
[186] WTO, 2010.
[187] Berne Union, 2010.

officially supported credits extended by ECAs 'as share of total exports is in the range of 1-2% of the respective national exports for G-7 nations (see Chapter 2.3).

Nevertheless, the volumes behind the percentages are considerable and typically cover a small number of large transactions compared with the overall export trade of each nation. For instance, the US Government Accountability Office[188] indicates that 'However, ECAs do play a large role in certain sectors, such as aircraft. According to Ex-Im, at its peak in 2009, ECA financing represented about 40% of the total worldwide market for aircraft financing.'

The above highlights the need to understand the internal functioning of the ECAs in order to apprehend the wider context of the operational world of export credits. Due to the large number of ECAs operating today, the following paragraphs will only focus on a selection of the main official ECAs, from OECD and non-OECD nations, and especially from nations featuring a domestic aerospace industry.

1.5.1 US Export-Import Bank (Eximbank)

The US Eximbank is an independent US government agency with the goal to facilitate the financing of US export goods and services. Its mission state: ' Supports U.S. domestic jobs through exports by providing export finance that is competitive with support offered by other governments' thus has an explicit orientation towards job creation. It was founded in 1934 and in the period until 2004 it had supported US exports worth in excess of US$ 350 billion. In 2000, it facilitated US$ 15,5 billion worth of exports (Delphos[189]) whereas the value in 2012 was more than double, reaching some US$ 32,7 billion (GAO)[190]. From the latter, roughly one third relate to short-term export finance and other financing and some two thirds or some US$ 22 billion cover medium- and long-term projects. It has today a total exposure to export credits close to its mandated limit of US$ 100 billion. Eximbank extends export credits to US exporters as well as foreign buyers of US products. It offers a wide array of financial products including short-term products, medium- and long-term credits, special programs, project and structured finance as well as aid finance programs.

[188] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation

189 Delphos, W. A., 2004. Inside the world's export credit agencies. Ohio : Thomson South-Western, p108-132.

[190] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.

Activities falling under the OECD Arrangement as officially supported are the ones extended on medium- and long-terms. Medium- and long-term, however, are defined under the Eximbank regulations as ranging from 1 year up to a maximum of 20 years, with maturities of 10, 12 or 14 years being common. These definitions are contrasting with the provisions of the OECD Arrangement, which defines medium- and long-term maturities starting at 2 years (Art. 5 of the Arrangement) and up to, normally, 8,5 years or maximum 15 years in exceptional cases (for instance aircraft financing).

Eximbank's medium- and long-term product offerings are summarized as follows:

- Direct loans
- Insurances / guarantees
- Credit guarantees
- Project finance
- Grants
- Insurance policies for special programs
- Tied-Aid

Interestingly, Eximbank has a category of financing named 'Special programs' which is specifically aimed, among others, at export credits for aircraft sales. Delphos[191] indicates that 'The export credit insurance program help US exporters develop and expand their overseas sales by protecting them against loss should a foreign buyer or other foreign debtor default for political or commercial reasons. The purpose of this program is to provide foreign credit risk protection for exporters and lenders against political and commercial risks of default, political violence, government intervention and transfer or inconvertibility risk.'

The US Eximbank further on has limitations on its operations. As applicable to other ECAs, it is not allowed to finance or help finance the sales of military products (with a few exceptions though). More restrictive is the regulation on local content: the Eximbank can only extend export credits in relation to the US content of the products exported. If the US content is 85% of the product or more, then a full coverage is possible, which corresponds to 85% of the value of the product as the exporter is required to self-finance at least 15% of the deal. It has also a clear

[191] Delphos, W. A., 2004. Inside the world's export credit agencies. Ohio : Thomson South-Western. p108-132.

focus on job creation and is required to perform economic impact analyses before authorizing export credits. It is further on specifically directed to promote sales in specific regions such as sub-saharian countries, promote small and medium enterprises, comply with a unique among ECAs carbon policy and apply regulations on shipping requirements i.e. that officially supported export products need to be transported on US-flagged ships. On the other side, the Eximbank disposes of a powerful product which the EU ECAs do not have: extending direct loans. Particularly during financial crisis or periods of lower financial liquidity, the ability to transfer cash is of significant importance. In the recent crisis, Eximbank direct lending exploded from some 0% of total authorizations in 2007 to some 20% of the total authorizations in 2011.

The aerospace business constitutes by far the largest sector supported by the Eximbank. From a total authorized volume of US$ 32,7 billion in loans, guarantees, and insurances, some US$ 22 billion were extended for long term loans and guarantees corresponding to a total of 103 individual transactions. From those 103 transactions, 52 affect the wider aerospace sector out of which 41 were offered to the Boeing company for sales of commercial aircraft, the rest being provided for business jets (Hawker Beechcraft, Cessna, Learjet), helicopters (Sikorsky), aeronautical equipment (L-3 Communication), satellite systems (Boeing Satellite, Loral, Orbital Sciences) and aircraft engines (General Electric). The value of guarantees to Boeing only accounts for more than 75% of the total value of long-term guarantees extended by the Eximbank in 2011 - some US$ 12 billion out of a total of US$ 15 billion. Loans extended to the aerospace sector affect mainly satellites and count only 2 transactions for a bit over 10% of the total value of loans extended in that year, the majority provided to the Boeing Satellite company. Thus the Boeing Company alone absorbed around 40% of the total export credits extended by the Eximbank in 2011. Interestingly, a majority of financed exports of commercial aircraft are destined to low-risk developed countries such as Australia, Ireland, Republic of Korea, The Netherlands, Norway, etc.

1.5.2 France Compagnie Francaise d'Assurances pour le Commerce Exterieur (COFACE)[192]

COFACE was established by the French government in 1946 with a mission to manage ' State guarantees on behalf of, and with the guarantee of, the French State, with the aim of promoting and supporting French exports in the medium and long term and foreign investments.' It was

[192] Coface -2011 Activity Report, May 2012.

later-on converted to a private company and is today specifically contracted by the French government to manage officially supported export credits under a separate account, which reports to the Ministry of Finance. Delphos[193] mentions that 'COFACE has been a world leader in export credit insurance and it also leads the way in credit information and trade receivables management.' It operates in some 100 countries and offers its services to close to 100.000 companies. It focuses mainly on large export contracts with medium- to long-term financing for which private insurers would not cover. COFACE thus plays a role of 'insurer of last resort', as several other official ECAs. As practiced in the EU, official ECAs are not entitled to offer short-term products, which fall under the responsibility of private financial institutions. For medium- and long-term activities, COFACE offers a comprehensive range of products.

COFACE main medium- and long- term product offerings are as follows:

- market survey insurance
- export credit insurance
- foreign investment insurance
- exchange risk insurance
- interest makeup
- bond issuance and pre-shipment financing (working capital)

In addition, COFACE offers loan guarantees for aviation products. This specially designed financial product was available only to Airbus till 2013, however the French Parliament passed a law allowing all aerospace companies to benefit from such loan guarantees for instance Dassault Falcon, Eurocopter and others. COFACE offers no direct loans. Interestingly, COFACE also offers support for military sales. Any information on such COFACE activities are, nevertheless, not disclosed or published. They represent though a large share of the COFACE guarantees as indicated by a report issue from 'Les Amis de la Terre' in 2009: 'The 'military issues' guaranteed by COFACE on behalf of the State are not published on the COFACE website, not even in their total amount. Yet, in 2002, they represent exactly 50% of all guarantees.' It can be assumed that the share of military guarantees has diminished over time, but the general issue of opacity remains.

[193] Delphos, W. A. 2004. Inside the world's export credit agencies. Ohio : Thomson South-Western. p 28-30.

COFACE has regulatory limitations on the official export credits extended. For instance, a transaction needs to contain more than 20% French domestic content to be considered, whereas for transactions below 50% local content some restrictions apply. It also follows a generic guideline for supporting small and medium enterprises with a target set at 10.000 such enterprises supported in 2012 and needs to abide by the environmental rules concluded under the OECD Agreement.

Generally, information on the activity of COFACE regarding the part associated to officially supported export credits is available in some form on the official website. The report of 'Les Amis de la Terre' brings some additional light with respect to some aspects of COFACE's operations for the covered period 2001-2008. It indicates that State guarantees for exports have benefitted only five Least Developed Countries, the rest being developed or developing nations. Also, the total number of French exporters benefitting from such guarantees amount to 72 companies over the same period, from which Airbus is the largest with some 37% of the total value guaranteed.

The COFACE website[194] lists the transactions guaranteed above € 10 million. There is a clear distinction between general transactions and the ones affecting the aeronautical sector, namely Airbus and ATR. The latter are not listed but presented in a compiled manner for each calendar term, also without indicating the recipient country but only the name of the buying company. The values presented for the aeronautical sector are given in US$ compared to euro for the other transactions. For 2011, the total value of guarantees extended by COFACE for civil transactions above € 10 million amounted to some € 10 billion (the US$ values were converted with the exchange rate of the end of each term). From this amount, some 58% relate to aeronautical products (satellites excluded) and 56% to Airbus alone. Since the change of legislation allowing loan guarantees to be extended to the wider aeronautical industry, the share of Airbus is expected to be reduced, while the overall share of the aeronautical industry as a share of total COFACE guarantees will most certainly increase. For instance, COFACE will be in a position to provide support to the international sales of Russian regional jets (100 seaters) as a substantial part of the aircraft will be produced in France.

[194] http://www.coface.com/

1.5.3 United Kingdom Export Credits Guarantee Department (ECGD)

ECGD was the first export credit agency, established in 1919 and set-up as separate Government Department. It remains today a Government Department, operating under an Act of Parliament with the aim to 'complement the private market by providing assistance to exporters and investors, principally in the form of insurance and guarantees to banks.'[195] According to Delphos[196], ECGD role is to facilitate 'UK exports and development by providing insurance and guarantees to UK exporters against the risk of non-payment by buyers, to banks against non-payment of the financing that they advance for exporters, and to overseas borrowers for the purchase of exports.' ECGD extends both short- and medium- and long- term products. It extended in 2010-2011 (reporting period ends March 31st) total guarantees of some GBP 2,9 billion, up 33% from one year before. It remains one of the smallest ECAs reviewed in this analysis, especially for medium- and long-term transactions.

ECGD medium- and long-term products include:

- Bond insurance policy, contract bonds and guarantees
- Export insurance policy, insurance for exporters
- Supplier credits finance
- Buyer credits finance
- Overseas investment insurance
- Project finance.

Additionally, in 2011, ECGD decided to enhance its product offerings to 'meet gaps in the provision of support to exporters, especially SMEs, from private sector providers.' [197] Those new products include a contract bond support scheme, an export working capital scheme and a foreign exchange credit support scheme. ECGD does not provide loans, neither direct nor untied. It is however financing military exports, although in 2010-2011 only 2 military related transactions were reported, one of which is based on Airbus products (an Airbus military transport aircraft export to the UAE). It does have a suggestive guidance to support small and medium enterprises, although the current share of export credits extended to support such small and medium enterprises is extremely limited. Finally, according to the GAO report (2012), supported

[195] ECGD Annual Report 2010-2011.
[196] Delphos, W. A., 2004. Inside the world's export credit agencies. Ohio : Thomson South-Western, p103-107.
[197] ECGD Annual Report 2010-2011.

transactions need to have a minimum 20% domestic content to receive full funding, otherwise the support is limited to the domestic content of the transaction.

Airbus alone accounts for more than 61% of the export credits and, particularly, guarantees extended by ECGD in 2010-2011. An analysis of Airbus and more generally aerospace business financed by ECGD is described in the Annual Report 2010-2011 as follows:

'ECGD continued to support the export of Airbus commercial aircraft in 2010-11 along with the French and German export credit agencies (ECAs), each in proportion to their respective workshares. Of the total aircraft delivered by Airbus the proportion supported by the ECAs was 34 per cent; before the onset of the economic downturn the proportion was around 17 per cent. The continuing high level of support by the ECAs reflected the lack of sufficient capacity in commercial bank markets.

Over the period ECGD issued insurance policies and financial guarantees for aerospace business to the value of GBP 1.8 billion, generating premium of GBP 54.2 million. The support provided in 2010-11 represented 158 aircraft compared to 166 in 2009-10. The aircraft were delivered to 32 airlines and operating lessors in Abu Dhabi, Australia, Austria, Bahrain, Bermuda, Brazil, Chile, China, Dubai, Egypt, Finland, Ireland, South Korea, Kuwait, Malaysia, Netherlands, Oman, Philippines, Russian Federation, Singapore, Tunisia, Turkey, Sharjah, United States. For over 50 per cent of the aircraft ECGD also provided additional support to take account of the supply of engines fitted to the aircraft from Rolls-Royce or its subsidiary company IAE. Support was also provided for the direct sale of a Rolls-Royce spare engine to Egyptair.'

The report foresees that the 'high level of demand' is expected to continue, especially as 'support for new aircraft types is not easily obtained from the commercial banking market; this puts further weight on the availability of support from the ECAs.'

1.5.4 Export Development Canada (EDC)

Export Development Canada (EDC) is Canada's ECA with a role to 'support and develop Canada's export trade by helping Canadian companies respond to international business

opportunities.' and 'that operates at arm's length from the Government.' [198] EDC is fully owned by the Canadian government and the latter's Ministry of International Trade appoints the members of the EDC board of director, selected mainly from the private sector. Despite its public sector's characteristic, it has a commercial market orientation and operates like a commercial institution without relying on governmental support. As such, its products offerings and business models are divergent from the ones of other ECAs, which is also reflected by the almost insignificant share of its medium- and long-term business – some 2,5% of a total value of 80 billion US$ export credits extended in 2010 (GAO report)[199]. EDC supported, in 2011, some 7.787 Canadian companies export in 195 countries, out of which 6.189 were small and medium enterprizes.

EDC offers a very diversified product portfolio covering insurance, financing, bonding and guarantees, indicatively [200]:

- Accounts receivable insurance
- Single buyer insurance
- Contract frustration insurance
- Performance security insurance
- Political risk insurance
- Export guarantees
- Foreign buyer financing
- Foreign investment financing
- Supplier financing
- Structured and project financing
- Account performance security guarantee
- Foreign exchange facility guarantee
- Surety bond insurance

Similarly to other ECAs, the fact that EDC offers direct loans has proven particularly beneficial in the times of cash-crunch after 2007, which can also explain the exceptional growth of EDC's medium- and long-term activities between 2007 and 2011. EDC does not have any restrictions or guidance to follow on individual points such as environmental policies or support to small and medium enterprizes or domestic content. It has a significantly different

[198] EDC website, October 2013.
[199] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.
[200] EDC website, October 2013.

and more comprehensive approach in assessing eligible transactions: EDC has implemented a Canadian Benefits model, which 'measures its contribution to Canada's economy through the economic benefits generated' (GAO report)[201]. Transactions are allocated to 6 'base grade' categories based on the GDP generated vs the level of support requested, and then 'upgraded' to a higher of those categories based on factors such as above average R&D spending, access to global markets, employment impact, support to small and medium enterprizes and environmental benefits. The result of the assessment determines the category of the transaction and the corresponding applicable terms – however do not force rejection of a transaction.

With respect to support to the aerospace industry, Canadian industry is basically active in the regional and private jets market as integrators but also in the supply chain of commercial aircraft such engines. As these business sectors typically generate globally lower turnover than the business sector of large commercial aircraft (such as Airbus and Boeing), it is to be expected that the level of support provided by Canada for exports of aircraft is not so prominent compared to other sectors. Reference values in EDC Annual Report 2011 are focused on exposure per industry rather than export credits extended in the year. On this basis, the aerospace sector is the largest sector on financing assets representing some 35% of total financing assets, but represents only 16% of the total EDC exposure in 2011, beyond the business sector 'Extractive' (22%) and at the same level as the business sectors 'Infrastructure and environment' and 'Financial institutions'.

1.5.5 Brazil Banco Nacional de Desenvolvimento Economico y Social (BNDES Exim)

The officially supported export finance activity in Brazil, BNDES-Exim, is organized as a separate department of the Brazilian Development Bank BNDES. As part of the Brazilian Development Bank, no separate reports are available specifically on the export credit division. A BNDES presentation 'The BNDES Export Credit Division'[202] provides some insight into the bank's official export credit activities. It indicates that the sectors aimed are principally higher value added sectors such as engineering and construction services, machinery and equipment and

[201] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.

[202] BNDES -The BNDES Export Credit Division, 2013.

transportation including aircraft. Values of total disbursement reaches in 2011 some 6,7 billion US$, however this value does not give indications on the value of the transactions officially supported. Additionally to the activities of BNDES Exim, another government program for export finance named PROEX extends financial facilities to exporters. PROEX was established 'to provide export finance for Brazilian conditions equivalent to the international market.[203]PROEX extends supplier's credits, buyer's credits, interest rate equalization as well as pre-shipment financing. Brazil is not participant to the Arrangement as such but joined the Aircraft Sector Understanding and thus aircraft-related transactions fall under the corresponding rules.

BNDES Exim offers mainly two product lines:

- pre-shipment including working capital financing for producers in Brazil and
- post-shipment financial support which include:
    - supplier's credits
    - buyer's credits
    - project finance.

Pre-shipment are short-term transactions, post-shipment are medium- and long-term thus falling under the provisions of the Arrangement for aircraft related transactions. Under this scope, the presentation (BNDES)[204] explicitly indicates that 'Civil aircraft financing is based on OECD guidelines', making a direct connection to the Arrangement. Despite lacking information on individual transactions, the presentation features a world map displaying examples of aircraft financing transactions, which inlcude: LOT (Poland), Aldus (Ireland), BA City Flyer (UK), KLM (Netherlands), Regional CAE (France), Air Europa (Spain), Montenegro Airlines (Montenegro), Jetblue (US), Republic (US), Aeromexico (Mexico), Aerolineas (Argentina), Al Jaber Aviation (UAE), Government of Angola, Government of Guatemala, JAL (Japan), etc. Also, Delphos (2004) mentions that 'In 2000, Brazil's largest exporter, aerospace giant Embraer, made exports worth US$ 2,7 billion. Of these exports, 52 percent, approximately US$ 1,4 billion, were financed by BNDES under the post-shipment credit lines.'

[203] Brazilian Secretariat for International Affairs website, October 2013.
[204] BNDES -The BNDES Export Credit Division, 2013.

1.5.6 Spain Compania Espanola de Seguros de Creditos a la Exportacion (CESCE)[205]

CESCE was established in 1970 and is currently state-owned at 50,25% with 49,75% of its shares belonging to private owned banks such as BBVA or Santander Group and private owned insurance companies. According to ECA Watch[206], 'CESCE's main objective is to facilitate the internationalization of the private sector, by covering the risk involved in the sale of Spanish companies' products and services in foreign markets.' CESCE indicates that it insures some 150 transactions worth € 1,5 billion per year, whereas ECA Watch[207] mentions that the transactions insured on behalf of the Spanish state by CESCE reached some € 7,6 billion in 2011. There are no published lists of the transactions covered and thus it is hard to assess the content of the total value of transactions extended in 2011. Nevertheless, according to ECGD, at least one large transaction was supported by CESCE in the aerospace sector for the sale of a military transport aircraft to the UAE. Also, as Spain has a developed aerospace industrial infrastructure, as part of Airbus or otherwise, it can be assumed that CESCE has been extending export credits for a larger number of exports of aircraft.

Medium- and long-term export credit products offered to Spanish companies include:

- Buyer Credit Policy
- Individual Supplier Credit Policy
- Works and Jobs Abroad Insurance Policy
- Surety bonds execution policy for guarantors
- Surety bonds execution policy for exporters
- Bank Guarantee Policy
- Compensation Transaction Insurance Policy
- Project-Finance Transaction Insurance
- Foreign Investment Insurance Policy

[205] CESCE, Annual Report 2011.
[206] ECA Watch. -Aircraft-backed bonds grow as ECA and commercial bank finance slows, 11 October 2013.
[207] ECA Watch. -Aircraft-backed bonds grow as ECA and commercial bank finance slows, 11 October 2013 .

1.5.7 China Eximbank

China features various state-owned institutions offering export credits, the major being the Export-Import Bank of China (China Eximbank), the China Export and Credit Insurance Corporation (Sinosure), China Development Bank and China Agricultural Development Bank. Altogether, they have extended in 2005-2008 over 3% of the total value of merchandise exports through medium and long-term financing[208]. From the above four organizations, the two first are mainly relevant with respect to officially supported export credits, without undermining however the role of the other two. China Eximbank was founded in 1994 and focuses on loans, whereas Sinosure focusing on insurances, was founded in 2001, in connection with China's accession to the WTO. Information on both are scarce and, as non-participants to the Arrangement, the two institutions do not need to share or publicize any information on their activities. A short overview is provided in this analysis due to the late progress of China in the aerospace area and in particular in upcoming commercial jets.

As per China Eximbank website[209], its mission is to 'facilitate the export and import of Chinese mechanical and electronic products, complete sets of equipment and new- and high-tech products, assist Chinese companies with comparative advantages in their offshore project contracting and outbound investment, and promote international economic cooperation and trade.' Unlike other ECAs, the mission already indicates the type of products that are scoped and also puts some 'theoretical' limitations to the Chinese beneficiaries, i.e. the ones that have a comparative advantage. The Financial Times[210] estimates that in 2009 and 2010 China Eximbank extended loans of over 100 billion US$ to other countries, more than what the World Bank lent in the same period. Sinosure insured in 2009 some 116 billion US$ of Chinese exports worldwide.

Its products offerings are akin to other ECAs and are listed in the official website (October 2013) as follows (selection):

- Export credit and import credit
- Loans for offshore contract and overseas investment
- Chinese Government concessional loans
- International guarantees
- On lending loans from foreign governments and international financial institutions

[208] European Union, Directorate General for External Policies 2011.
[209] Eximbank website, October 2013. (http://www.exim.gov/)
[210] Financial Times, 17 January 2011.

- Other business approved or entrusted

The above list is complemented with the short-, medium- and long-term insurance products from Sinosure such as medium- and long-term buyer's credit and supplier's credit insurance programs.

As state-owned entities, restrictions and limitations for extending export credits are not easily available. CC Solutions[211] indicates 'For export products, Chinese content should be no less than 50%, and for foreign contracting, Chinese content should be at least 15% of the contract value.' Maximum repayment periods for loans is 15 years, whereas for insurances 10 years. Both agencies benefit from strong governmental support and, as CC Solutions indicates[212], Chinese government injected in the capital of Sinosure an additional US$ 3,1 billion and more than US$ 12 billion in China Eximbank[213].

1.5.8 Germany Euler Hermes (Hermes)

Germany's ECA usually called Hermes is in fact a consortium of two private companies: Euler Hermes Kreditversicherung AG and PriceWaterhouseCoopers AG. According to Delphos[214], 'Hermes was founded in 1917 as a specialist for all branches of credit, guarantee, and fidelity insurance in Germany.' After World War II, Hermes together with PriceWaterhouseCoopers were contracted by the German Government to act on its behalf for managing officially supported export credits. Its mission, as reported by the GAO report[215], states that Hermes 'Promotes German exports; insures against the risk of non-payment for commercial and political reasons; opens new markets, especially in emerging countries; and supports foreign countries, particularly those in difficult phase of development and restructuring.' The Hermes consortium manages officially supported export credits under the control of the Government: an interministerial committee with the participation of the Ministries of Economics and Technology, Finance, Economic Cooperation and Development and the Federal Foreign Office are responsible for approving all transactions above € 5 million. Hermes is one of the largest ECAs with export credits extended in 2011 of a total value of € 29,8 billion from which medium- and long-term

[211] April 2012.
[212] April 2012.
[213] Bloomberg, 11 November 2009.
[214] Delphos, W. A., 2004. Inside the world's export credit agencies. Ohio : Thomson South-Western, p31.
[215] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.

official export credits of some € 15,6 billion, rougly 50% more than those extended by the US Eximbank (Hermes Annual Report[216] and GAO[217]).

Hermes is offering a full range of financial products supporting exports. In particular, the Hermes 2011 Annual Report mentions:

- Buyer credit cover (buyer credit cover express)
- Contract bond cover
- Constructional works cover
- Counter-guarantee
- Export credit cover for service providers
- Framework credit cover
- KfW refinancing programme
- Leasing cover
- Manufacturing risk cover
- Revolving buyer credit cover
- Revolving supplier credit cover
- Securitisation guarantee
- Supplier credit cover
- Wholeturnover policy (& wholeturnover policy light)

In addition, Hermes can also offer untied loans but does not offer any direct loans. Also, it does not support exports of military products. There are no guidance for small and medium enterprises or for environmental beneficial transactions, except for those applicable to the participants to the Arrangement. However, Hermes introduced in 2011 a 'fast-track' policy for supporting small and medium enterprises through a mechanism for quicker and less administrative applications and approvals for transactions below € 5 million. Restrictions for approving transactions are limited and are mainly impacted by a sophisticated local content rule accounting for the wider supply chain: for receiving full coverage, the German exporter needs to have at least 70% domestic content and his tier 1 suppliers more than 51%. Lower tiers with less than 51% domestic content are eligible, after justification of the exporter and approval of the interministerial committee.

[216] Annual report 2011 -Export Credit Guarantees of the Federal Republic of Germany, 2011. Hermes Cover.
[217] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.

Hermes extended in 2011 export credits for exports to some 182 countries worldwide, with some 75% of the total value addressed to non-industrialized nations. Most industrialized countries, such as the US, Switzerland, Australia and South Korea benefitted from export credits linked to export of Airbus aircraft.

Shipbuilding and aircraft exports have accounted for a bit more than half of the export credits extended in 2011 (Hermes Annual Report)[218], whereas for the first time shipbuilding has overtaken the aircraft sector (€ 4,8 billion vs € 4,7 billion). Aircraft finance covered some 144 aircraft, down from 196 one year earlier, and was performed together with the ECAs of France and the UK mainly. The value of cover offered by Hermes remained at the same level than in 2010, despite a drop in the number of aircraft supported.

1.5.9 Eximbank of Russia

The Eximbank of Russia was established in 2003 and is one of the youngest ECAs. It is not a member of the Arrangement. It is included in this analysis on the grounds of the national historical aerospace industry, which has lately re-entered a phase of growth and international expansion. Eximbank of Russia is a state company belonging to the state 'Bank for Development and Foreign Economic Affairs' and 'acts as an agent for the Government of the Russian Federation in providing government financial support for Russian exports[219]. The Eximbank of Russia is relatively small compared to the size of its economy and the size of competing nations' ECAs, with a total value of extended guarantees in 2011 of US$ 272 million and loans of RUB 3536,3 million RUB (some US$ 100 million), but is also the organizer of several syndicated loans with other banks.

Eximbank of Russia offers a portfolio of loans and guarantees such as:

- guarantees to Russian exporters of industrial products
- tender guarantees
- pre-payment return guarantees
- proper performance guarantees

[218] Annual report 2011 -Export Credit Guarantees of the Federal Republic of Germany, 2011. Hermes Cover.
[219] Export-Import Bank of Russia -Annual Report, 2011.

- pre-export loans
- medium- and long-term loans to importers of Russian industrial products
- market promotion of industrial products
- tied loans to foreign banks
- project financing

As the Eximbank of Russia is not a member of the Agreement, the terms offered for extending export credits can vary from other ECAs. For instance, one of the major export deals supported by the Eximbank of Russia, the Angosat project in Angola, has a term of 13 years. Additionally, the types of products and support may also differ in their description with those of other ECAs, making a direct comparison sometimes inappropriate.

Areas in which export credits were extended in 2011 include power engineering, transport machinery, shipbuilding, wood processing, pulp and paper production, tannery and textile industry. The share of the aerospace sector in Eximbank of Russia's activities is relatively limited and only one case is explicitly referred to in the Eximbank of Russia Annual Report 2011: 'The two loans of US$ 250 million arranged by Eximbank of Russia were used by the Republic of Cuba to purchase several Russian Il-96-300 and Tu-204 aircrafts. The government guarantees securing the transaction was valued at a total of US$ 419 million.'

It is expected that export of Russian aerospace products will grow in the next years as a result, among others, of the development of a new regional Superjet. It should be noted that, apart from Eximbank of Russia, other corporations have also responsibilities in promoting and supporting Russian exports, such as JSC Rosoboronexport.

1.6 Airbus vs. Boeing WTO Dispute - Analysis of Panel & Appellate Body Findings

1.6.1 Background

The European civil aircraft industry was born in the 1960s by the concerted efforts of leading European nations to challenge the monopolistic position of the US in this area. Just like the US, the European leaders had appreciated the strategic nature of this industry: ties with defence, technological advancements, jobs creation, trade surplus, prestige, control over air traffic and corresponding international agreements are some of the key considerations for channelling resources into this industry. The industrial legacy of Germany, France, the UK and Spain stemming from individual nations' activities to develop and produce military aircraft during WWII constituted the basis for building up the European civil aircraft ambitions. Necessarily, the respective governments also had to support the embryonic industry, in the form of the Airbus consortium, in order to develop it to a level consistent with the goals in view. Due to the capital and technology intensive nature of the industry, government assistance was needed in order to cope with long development times and reach sufficient production quantities. On the other side of the Atlantic, the US government was supporting the continued development of their respective aircraft champions Boeing and McDonnell-Douglas (later on bought by Boeing). Especially the strong ties between civil and defence activities allowed large spill-overs from defence research into spendings for the development of new civil aircraft.

Progressively, the European and the US governments realised that ever more aggressive practices to support their respective aerospace industries led to tensions and unfair competition. The parties achieved a first agreement to regulate their practices and liberalize world trade in that area in the 1979 Agreement on Trade in Civil Aircraft under the umbrella of the GATT, Tokyo Round. Despite the agreement, concerns of the parties on the practices of the other party remained, especially regarding continuing governmental support to EU manufacturers. The US considered trade action against Airbus in the1980s and, thereby, brought the EU to the negotiations table in 1986. By 1991, no agreement had yet been reached, triggering the US to initiate a GATT dispute settlement, which eventually led to an agreement in 1992 between the EU and the US. The agreement banned all future production support, limited government support for

development of new platforms, limited identifiable indirect support through government- funded research and required that repayment terms of past support not be improved.

A 1994 report from the US General Accounting Office on the viability of this agreement already placed certain doubts on its long-terms perspectives and concluded that 'the effectiveness of the agreement depends on the two parties acting in good faith' in particular due to the lack of formal dispute settlement mechanisms. In 2004, without apparent reason, the US government stepped out of the agreement and requested consultations with the EU on matters relating to EU subsidies provided to Airbus companies inconsistent with GATT1994 and the Subsidies and Countervailing Measures (SCM) Agreement. In 2005, the US requested the establishment of a panel to review their claims for dispute settlement (DS316). Later in the same year, the EU requested consultations with the US concerning prohibited and actionable subsidies provided to US producers and subsequently, in 2006, requested the establishment of a panel for the same (DS353).

1.6.2 Dispute Settlement Procedures overview

The WTO dispute settlement procedures constitute an attachment to the WTO, forming a separate understanding, the Dispute Settlement Understanding. The SCM Agreement includes its own dispute settlement procedures under Article 4, Article 7 and Article 9, which follow the same logic as the DSU and makes explicit reference to the DSB and the DSU procedures. In both the SCM Agreement and the DSU, dispute settlement takes a step approach that can be summarized as follows:

- a complainant having a claim against another nation (the respondent) can ask for consultations with the other party on the issue of contention
- if no result occurs after consultations, the complainant can request the DSB to establish a dispute settlement panel in order to review and prepare a report on the issue of contention – the panel can be assisted by a Permanent Group of Experts as required
- after the panel report is prepared, it is circulated to the members for potential observations and thereafter the panel's final report is then adopted by the DSB unless one of the

members notifies that it intends to appeal - any of the parties and third parties affected can thus appeal the report to an Appellate Body

- the Appellate Body reviews the reasons of appeal and takes a final decision, confirming or reversing the panel's findings on individual issues
- when the report of the panel as amended by the Appellate Body is adopted by the DSB, the respondent to the claims needs to follow the recommendations of the report within a specific period of time
- failing to implement measures following the recommendations of the report, the complainant has the right to ask, and the DSB to grant, authorization to take appropriate countermeasures
- the respondent can request arbitration regarding the countermeasures to be taken by the complainant under paragraph 6 of Article 22 of the DSU
- the outcome of the arbitration is then binding to the parties that will need to comply accordingly.

The SCM Agreement defines a subsidy in a manner that contains three basic elements: (i) a financial contribution (ii) by a government or any public body within the territory of a Member (iii) which confers a benefit. All three of these elements must be satisfied in order for a subsidy to exist. Consequently, the work of the panel and Appellate Bodies consists in reviewing and ruling whether some measures taken by a government fall under the provisions of the SCM Agreement and in particular:

- whether measures constitute subsidies and whether they confer a benefit in the meaning of Article 1 of the SCM Agreement
- whether subsidies as determined under Article 1 are specific to an enterprise, in the meaning of Article 2 of the SCM Agreement
- whether such subsidies are legal or inconsistent with the provisions of the agreement e.g. are prohibited subsidies, actionable or non-actionable subsidies in the meaning of Article 3 and Part II and Part III of the SCM Agreement

- whether the subsidies have generated adverse effects, injury or a serious prejudice to the complainant nation such as loss of business, impedance or displacement of sales etc, in the meaning of Articles 5 and 6 of the SCM Agreement.

The findings and conclusions on the above finally determine the recommended measures proposed by the DSB to the infringing party or, in case of non-compliance with the measures, the level of countermeasures deemed appropriate for the complainant to take against the infringing nation.

It is of interest to note that each of the above steps needs to be completed, according to the provisions of the SCM Agreement and the DSU, within very specific time constraints. In the case of both DS316[220] and DS353[221], the panels and subsequently the Appellate Bodies were not in a position to conclude their work within the provided time frames and regularly informed the DSB of delays due to the complexity of the matters to be examined and the quantity of material as well as the number of hearings and consultations required. Overall, the procedures in this specific case have taken close to 10 years.

The analysis of the two dispute cases DS316 and DS353 presented below focuses on the findings and rationale of the panel and Appellate Body for individual measures challenged by the other party. For convenience, the evaluation below considers the measures grouped in categories. After the analysis on the panel's and Appellate Bodies' positions on the individual points of contention, some additional information on the case and the findings are presented. The procedural aspects are purposefully not covered as they do not relate to the actual findings. In both cases, the parties reached the stage of arbitration but eventually decided by common agreement not to proceed further.

1.6.3 Dispute settlement DS316 - EU Large Civil Aircraft

Complainant is the US against respondent the EU (European Communities) on measures affecting trade in large civil aircraft and in particular on breaching of the following:

[220] WTO Appelate Body, United States -Dispute Settlement: European Communities - Measures Affecting Trade in Large Civil Aircraft. DS316, February 2012.
[221] WTO Appelate Body, United States –Dispute Settlement: Measures Affecting Trade in Large Civil Aircraft -Second Complaint, DS353, October 2012.

- from the SCM Agreement: articles 1, 2, 3.1, 3.2, 5, 6.3 and 6.4
- the GATT1994: articles III:4, XVI:1 and XXIII:1.

Individual points of contention refer to more than 300 individual subsidy elements, grouped in categories, with panel and Appellate Body outcomes as follows:

1. The provision of financing for design and development to Airbus companies ('launch aid') – which in seven cases appear to be illegal export subsidies in contravention of Art 3 of the SCM Agreement

> The panel found that each of the alleged launch aid measures constitutes a specific subsidy. However, the panel found the US had failed to establish the existence of a commitment of launch aid for the A350 constituting a specific subsidy. The panel also found that the German, Spanish and UK A380 launch aid measures are subsidies contingent in fact upon anticipated export performance and therefore prohibited by Art 3.1(a) of the SCM Agreement export subsidies, but not for the four other measures challenged.
>
> The Appellate Body upheld the panel's findings that certain financing arrangements under the form of launch aid provided by France, Germany, Spain and the UK for the development of a range of Airbus aircraft are incompatible with Art 5(c) of the SCM Agreement and constitute specific subsidies. However the Appellate Body reversed the panel's findings that the financing provided by Germany, Spain and the UK to develop the A380 was contingent upon anticipated export performance and thus a prohibited export subsidy under Art 3.1.(a) and footnote 4 of the SCM Agreement.

2. The provision of grants and government-provided goods and services to develop, expand and upgrade Airbus manufacturing sites for the development and production of the Airbus A380

> The panel found that the provision of (i) the Mühlenberger Loch industrial site (ii) the lengthened runway at the Bremen airport, (iii) the ZAC Aeroconstellation and (iv) the grants provided by national and regional authorities in Germany and Spain for the construction of manufacturing and assembly facilities constituted the provision of specific

goods and services and were specific subsidies. The road improvements related to the ZAC Aeroconstellation, GBP 19,5 million provided to Airbus UK and a grant provided by the Government of Andalusia were not specific subsidies.

The Appellate Body upheld the panel's findings that the measures described above and provided by France, Germany, Spain and the UK are incompatible with Art 5(c) of the SCM Agreement and constitute specific subsidies. However, the Appellate Body excluded those measures from the scope of the finding of serious prejudice.

3. The provision of loans on preferential terms

The panel found that each of the 12 challenged loans provided by the European Investment Bank to various entities is a subsidy, but that none of these subsidies was specific, and therefore dismissed the US claims in respect of the European Investment Bank loans from further consideration.

The panel also found that the acquisition by Kreditanstalt für Wiederbau of a 20% interest equity in Deutsche Airbus that a private investor would have not otherwise acquired and the subsequent sale to MBB at a price considerably lower than its market value, both constituted specific subsidies.

The panel furthermore found that settlement by the German government of Deutsche Airbus accumulated debt to the German government did not confer a benefit on Deutsche Airbus and dismissed the US claim in this regard.

The panel finally found that 4 capital contributions by the French government and Credit Lyonnais to Aerospatiale constitute specific subsidies to Airbus because they were inconsistent with usual investment practices of private investors at that time in France.

The Appellate Body upheld the panel's findings that certain equity infusions provided by French and German governments to Airbus companies are incompatible with Art 5(c) of the SCM Agreement and constitute specific subsidies. However, the Appellate Body excluded the transfer in 1998 of a 45,76% interest in Dassault Aviation to Aerospatiale from the scope of the finding of serious prejudice.

4. The assumption and forgiveness of debt resulting from launch and other large civil aircraft production and development financing

Covered under points 1, 3 and 4 above.

5. The provision of research and development loans and grants in support of large civil aircraft development, directly for the benefit of Airbus, and any other measures involving a financial contribution to the Airbus companies

The panel concluded that (i) research and technological developments (R&TD) grants under the 2nd, 3rd, 4th, 5th and 6th EC framework programmes, (ii) French government R&TD grants (iii) German Federal government R&TD grants under the LuFo I, LuFo II and LuFo III programmes (iv) German sub-federal grants from Bavaria, Bremen and Hamburg authorities (v) loans under the Spanish PROFIT and PTA programmes and (vi) UK government grants under the CARAD and ARP programmes are specific subsidies. The German Federal government's commitment to provide Airbus with a certain R&TD grant and certain R&TD grants under the UK technology programme were not found to be specific subsidies.

The Appellate Body upheld the panel's findings however excluded them from the scope of the finding of serious prejudice.

Overall, the panel and Appellate Body judged that the effect of the subsidies was to displace exports of Boeing products from the EU, Chinese and Korean markets but the Appellate Body reversed the panel's position of displacement in the cases of Brazil, Mexico, Singapore and Chinese Tapei as well as the threat of displacement in India. Furthermore, the panel and Appellate Body confirmed that the subsidies caused Boeing to lose sales in a variety of campaigns. Based on the DSB report, the EU will have six months to take appropriate action and eliminate those measures that were found to be inconsistent with the EU obligations under the SCM Agreement. The EU presented such measures and claims that these will be sufficient to cover all the points addressed by the DSB.

1.6.4 Dispute settlement DS353 - US Large Civil Aircraft

Complainant is the EU (European Communities) against respondent the US on measures affecting trade in large civil aircraft and in particular on breaching of the following:

- from the SCM Agreement: articles 3.1(a), 3.2, 5(a), 5(c), 6.3(a), 6.3(b) and 6.3(c)
- from GATT1994: article III:4
- from the 1992 bilateral Agreement on trade in large civil aircraft

Individual points of contention grouped in categories, panel findings and appellate body outcome:

1. Tax and non-tax incentives provided by the State of Washington for programme 787

2. Property and sales tax breaks and interest payments provided by the State of Kansas

3. Tax and non-tax incentives provided by the State of Illinois for Boeing Headquarter relocation

> For issues 1-3 above, the panel upheld EU claims that some of the measures constituted specific subsidies.
>
> For 1 above, the Appellate Body upheld the panel's findings that the reduction in the tax rate constituted a financial contribution under article 1.1(a)(1)(ii) of the SCM Agreement and found that the tax rate reduction is a specific subsidy under article 2.1(a) of the SCM Agreement.
>
> For 2 above, the Appellate Body upheld that the support provided by the State of Kansas through the issuance of Industrial Revenue Bonds constituted specific subsidies within the meaning of article 2.1(c) of the SCM Agreement.

4. NASA payments, access to government facilities, equipment and employees provided to Boeing under 8 R&D contracts and agreements

5. Department of Defence payments, access to government facilities, equipment and employees provided to Boeing under 23 DOD R&D, test and evaluation programmes

6. Department of commerce payments, access to government facilities, equipment and employees provided to joint ventures and consortia in which Boeing participated under the Advance Technology Programme

> For issues 4-6 above, the panel upheld EU claims that some of the NASA and DOD measures constituted specific subsidies but characterized the contracts in interpretation of article 1 of the SCM Agreement, as purchase of services therefore excluded from the scope of application of article 1.1(a)(1) of the SCM agreement. The Appellate Body overturned the panel's interpretation and found that the payments, access to facilities, equipment and employees provided to Boeing constitute financial contribution within the meaning of the aforementioned article. The same was applied to the corresponding measures provided by the DOD and DOC.

7. NASA and DOD waivers and transfers of intellectual property rights to Boeing

> The panel found that the transfer or allocation of patent rights under contracts and agreements between NASA, DOD and Boeing is not explicitly limited to certain enterprises and therefore is not specific under article 2.1(a) of the SCM Agreement. The Appellate Body found however that the panel's finding did not consider EU argument that the allocation is specific under article 2.1(c) of the same, and thus the panel's finding could not be sustained. However the Appellate Body declined to find that the allocation is specific within the meaning of the aforementioned article.

8. NASA and DOD independent R&D and bid and proposal reimbursement

9. Department of Labor workers training grants for the 787

> For issues 8-9 above, the panel upheld EU claims that some of the measures constituted specific subsidies.

10. Tax breaks exemptions relating to Foreign Sales Corporations and the Extraterritorial Exclusion Act

> The panel upheld EU claims that the measures constituted prohibited export subsidies and recommended Boeing to take measures to eliminate the subsidies or its adverse effects.

In its rationale, the Appellate Body assimilated the cooperation between Boeing, NASA and the DOD to a joint venture or consortium in which only one of the participants i.e. Boeing received the benefits of the common effort. This interpretation is at the basis of some of the findings on qualifying some of the measures as subsidies. The values associated with the de facto joint venture cover more than half the total value of subsidies confirmed by the panel and Appellate Body. Furthermore, the panel and the Appellate Body determined the value of subsidies at some US$ 5,3 billion vs. the value of US$ 19,1 billion claimed by the EU with additional US$ 2 billion to be still received by Boeing in State aid and local subsidies. The subsidies have created serious prejudice to Airbus, impedance and displacement of orders and loss of campaigns and subsequently business. The DSB findings give six months to US government to take action and eliminate the measures that were found to be inconsistent with the US obligations under the SCM Agreement. Due to the variety and the diversified source of such subsidies, it is anticipated that it will be difficult for the US government to take appropriate action within the given time line.

1.6.5 Some conclusions

The trade competition between the US and the EU on large civil aircraft has been lasting for over 4 decades. It is clear that, for both parties, the specific industrial activity constitutes a strategic area, which needs to be protected internally and promoted on the international marketplace. As the market is a duopoly, any benefit of one party is automatically a disadvantage to the other.

In this context, the two parties have been trying to confer to their own industries a series of advantages to support them against the other. Such measures have taken a wide variety of forms and content since the first times of competition among the affected nations. Naturally, each party has been complaining about the practices of the other party, and thus have regularly attempted to and finally entered into a number of agreements to regulate each other's practice, such as the 1979 GATT agreement on trade in civil aircraft, the bilateral agreement of 1992 and the separate sector understanding on civil aircraft under the Arrangement for officially supported export credits. Notwithstanding the agreements reached, the parties have both demonstrated sufficient flexibility

in by-passing the provisions of the agreements and finding new manners to protect their respective industries.

The facts arising out of the two disputes analysed here clearly show practices from both sides that go against the provisions of relevant agreements. Perhaps, the findings may indicate that the wrong-doings on the EU side are of a lesser importance or extent than the ones pursued by the US. This may or may not be correct, but the key finding is that both parties have consistently and over a long period of time infringed their obligations. Naturally, those practices have continued over the period of the dispute, some 10 years from the initiation of the procedures, which shows that none of the parties is genuinely prepared to give up its positions, probably until the other party also moves. Additionally, the formalistic approach followed has shown that many more measures have been taken by the respective governments but have been dismissed from falling under the provisions of the agreements either due to the nature of the measures or due to their impact.

In fact the claims presented by each side are very different in nature and 'mechanism'. The major claims on the Boeing side refer to launch aid, financing support and the provision of some facilities upgrade whereas on the Airbus side claims focus more on technology co-operation, development and use of such technologies. There are some (few) common aspects such as direct or indirect (tax breaks, etc) capital injections and the support in building / developing infrastructure which in both cases were judged as incompatible with the provisions of the SCM Agreement. But those constitute rather marginal issues in terms of values in the wider context of the disputes. Perhaps the common spirit of the panels in the two disputes consists in appreciating in great detail the real market impacts of the respective governments' measures and doing so by staying as close to the provisions of the SCM Agreement as possible. Still, the divergent views of panels and Appellate Bodies show the difficulty of an objective assessment. The borderline between subsidies or not, serious prejudice or not, prohibited subsidies or not is often blurry and can easily shift from one interpretation to another. These divergent interpretations, though, can have considerable money impacts for the companies involved.

Additionally, as there is little jurisprudence on such issues, the corresponding rulings create a precedence for future disputes. For instance:

- The Appellate Body in DS316 found that a subsidy is considered as an export subsidy within the meaning of Art 3.1(a) only if it is 'geared to induce the promotion of future

export performance by the recipient'. Thus subsidies given in relation to future export sales such as some Repayable Launch Aids granted by European governments, but not with the intention to promote such sales may not necessarily be considered as export subsidies. As such, the Repayable Launch Investment for the A380 granted by the EU Nations is not considered a prohibited export subsidy despite the fact that its repayment is linked to export performance.

- The Appellate Body also took the position that a panel's decision based on a complainant's market and product structure showing a measure was causing serious prejudice under Art 5(c) in relation to some Launch Aids was not acceptable, and a separate product and market research needed to be performed on behalf of the DSB as foreseen under Art 6.3 in order to establish an independent view on the market structure.
- The Appellate Body found that all EU R&D programmes, National and European, are compliant with WTO rules as non-specific, however the manner the US R&D funding was pursued is inconsistent, in particular in relation to transfer of Intellectual Property Rights and to the use of governmental infrastructure.

The two reports adopted by the DSB will constrain both the EU and the US to take measures in order to comply with their obligations, as those have been highlighted by the DSB. However, it can be anticipated that both will attempt to find other means, not covered by the findings of the two disputes, with the aim to continue conferring advantages to their industries. In fact, already some of the measures currently being implemented, have been cleared by the DSB report as being compliant, which gives good indications of what can actually be pursued under the SCM Agreement. More measures will probably follow, even if the parties do eventually comply with the DSB recommendations. To that extent, both parties have proposed measures that, each claims, are fully compliant with the DSB recommendations, but both sides challenged the other in respective litigations to demonstrate the proposed measures are not sufficient and proposed to take countervailing measures against each other. In any event, following settlement of the Airbus vs Boeing case, the largest and possibly most complex case of Dispute Settlement, disputes in the area of aircraft trade have in fact faded with no such disputes recorded in 2012 and 2013. In 2014, the EU filed a request for consultation with the US with respect to conditional tax incentives established by the state of Washington, which are against the SCM[222]. A panel was established in 2015 and a report is expected within 2016.

[222] WTO Appelate Body, United States –Dispute Settlement: Conditional Tax Incentives for Large Civil Aircraft. DS487, April 2015.

For future considerations, the tug-of-war between Boeing and Airbus should be placed in a different context. The actual foundations of this market, a duopoly, are expected to be substantially disturbed as emerging countries develop their own civil aircraft platforms. Nations such as China, India and South Korea constituting the largest markets for the products of Boeing and Airbus, have already shown their clear intentions to progressively penetrate this market. With impressive rates of technology absorption, high levels of education, a focus on their goals and still significantly lower labour costs, it is anticipated that their industries will soon be in a position to offer competitive products on the respective Boeing – Airbus markets. Their compliance with agreements they have not signed is certainly not a given and it can be expected that their respective governments' practices and measures will considerably distort trade in this area. The question will then come up how to address disputes outside the perimeter of agreed dispute settlement and/or with nations that do not necessarily abide by the same rules – and in which Airbus and Boeing will be in the same boat. Evidence shows that, indeed, the focus of disputes in the aircraft business in the future will shift from the traditional US vs EU confrontation to an attack against China and other nations outside the US and the EU. A first concrete case is the request for consultation issued by the US to China in December 2015[223] regarding tax exemptions and tax policies in relation to the sale of domestically produced aircraft in China. The EU, Japan, and Canada have expressed interest to join the consultations as they all claim to have substantial trade interests in the issue. The case may rise as a key political clash between powers at a time when China displays a clear ambition to become a world player in this market.

[223] WTO Appelate Body, United States -Dispute Settlement: China -Tax Measures Concerning Certain Domestically Produced Aircraft. DS501, December 2015.

2 IMPACT OF THE OECD ARRANGEMENT ON INTERNATIONAL TRADE

This Part intends to analyse the issue of export credits in the particular sector of civil aviation. It will address the rationale for coming up with a specific framework for this field of business. It will clarify the specific aspects of this framework within the overall export credit regulation, and will particularly analyse possible interrelations between the export credit regulations and the actual discussions on civil aircraft subsidies. Based on those findings, an analysis of the regulatory impact on this sector will provide further light to the adequacy of regulations in the specific area of civil aviation.

This Part will thus focus on three dedicated areas:

Chapter 2.1 – The Aircraft Industry – Specifics of a Unique Sector, will analyse specifics of the aircraft industry in the context of international trade and export credits and shed light on how the Arrangement may impact trade in this sector
Chapter 2.2 – Comparison of Export Credit Agencies – Impact on international trade, will compare, in a wider sense, the ownership, regulatory and operational aspects of ECAs and their impact on trade in civil aircraft
Chapter 2.3 – The Arrangement – Real Dimension in International Trade, will expand to other sectors and bring in this research the significance of the civil aircraft sector compared to other business sectors, and the resulting impact of the Arrangement onto this sector as well as the impact of this sector onto the Arrangement.

Through the above analysis, it is attempted to bring an all-embracing view of the impact of OECD Arrangement on Trade in Civil Aircraft.

2.1 The Aircraft Industry – Specifics of a Unique Sector

This Chapter explores in detail selected aspects of the aircraft industry relevant to international trade and discusses the resulting impact that officially supported export credits may have.

The paragraph starts with a brief overview of the new civil aircraft market containing useful information for a sound understanding of the next paragraphs.

The first aspect analyzed relates to the airlines' procurement options for the acquisition of aircraft and the possible trade biases that officially supported export credits may generate.

The second aspect addresses the supply chain of aircraft manufacturers and highlights considerations on officially supported export credits in particular in the context of a vastly internationalized supply chain.

The third aspect looks into the consumer chain in the aircraft industry and compares it to other sectors explicitly covered by the Arrangement, demonstrating that the Arrangement cannot necessarily suitably fit all industries.

The section is concluded by summarizing the findings and highlighting the possible trade distortions that officially supported export credits may induce on international trade in civil aircraft.

2.1.1 Civil Aircraft Market Overview

For understanding the implications of the Arrangement on trade in civil aircraft, it is required to consider some key data on the global new aircraft market. This paragraph is not aimed at presenting a thorough analysis of the specific market but at providing an overview of relevant information useful for the analysis below.

A large number of sources of information is available and can be referred to, including inputs from Airbus and Boeing. For consistency with other information of this paragraph, the study from Frost

& Sullivan[224] ROSM-Global Commercial Aircraft Programs-Revenue Opportunities and Stakeholder Mapping is often used.

Civil Passengers Aircraft Market

The global aircraft market can be divided in the following segments (new aircraft, freighters excluded):

- Regional Jets, below 100 passenger seats, dominated by Embraer and Bombardier
- Single Aisle / Narrow Body Jets, dominated by Airbus A320 and Boeing 737
- Double Aisle / Wide Body Jets, dominated by Airbus A330/A350 and Boeing 777/787
- Very Large Aircraft, dominated by Airbus A380 and Boeing 747.

The analysis below will focus on the duopoly between Airbus and Boeing as market quantities and prices for Regional Jets are, both, significantly lower (less than 2% of the total future market according to Boeing Current Market Outlook[225]. Examples will thus also largely use Airbus and Boeing. However, it is viewed that similar conclusions also largely apply to the Regional Jets market.

The Single Aisle market is dominated by the Airbus family of jets (A318, A319, A320 and A321) and the Boeing competing aircraft (737 and derivatives). These aircraft carry between 110 and 200 passengers, dispose of one aisle and are twin-engined. This segment is by far the largest in aircraft trade with more than 5.000 such aircraft on order and more than 20.000 additional aircraft forecasted for the next 20 years[226] representing some 70% of the civil aircraft market. With a price tag ranging between US$ 50 million and US$ 100 million each, the total market value is estimated a bit below US$ 2 trillion by 2032, with Boeing Current Market Outlook[227] being slightly more optimistic. This market is to be mainly shared between Airbus and Boeing, nevertheless, due to the attractiveness of this segment, new entrants are already developing competing products that will make their appearance in the marketplace in the coming years. These include China's COMAC C919, expected to have its maiden flight in 2015 and first deliveries in 2016, and the ARJ21, deliveries of which will start soon; the Russian Irkut MS21, expected to be available for delivery from 2017 onwards and Sukhoi's Superjet100 (Regional Jet, extendable to more than

[224] ROSM-Global Commercial Aircraft Programs-Revenue - Opportunities and Stakeholder Mapping. Frost & Sullivan, M596-22 July 2010.
[225] Boeing Current Market Outlook 2013-2032.
[226] Leahy, J., Airbus Global Market Forecast 2013-2032.
[227] Boeing Current Market Outlook 2013-2032.

100 seats), Embraer's EMB-195X after 2017, Bombardier CS300 to be available from 2014 and Japan's Mitsubushi Regional Jet (extendable to more than 100 seats).

The segment for Double Aisle aircraft has always been smaller than single-aisle. Sales forecasts for these 200-400 seaters are in the 7.000 units range, representing some 25% of the passenger's market but with a value of the same order of magnitude as for the single-aisle aircraft i.e. a bit below US$ 2 trillion in the next 20 years. Only Airbus and Boeing are present on this segment and no entrants are foreseen in the mid-term, as potential entrants are mainly the manufacturers that will enter the Single Aisle segment as described above, and will first have to prove their performance in this segment before evolving in the Double Aisle one. Airbus offerings include the A330 family which is progressively being replaced by the A350 family, expected to enter service in 2014. Boeing is represented by the ageing 767, the 777 and the recently introduced 787, a largely composites based aircraft (some 50% of the structure) expected to gain market share due to its lighter characteristics. The A350 and 787 are seen as direct competitors and the sole representatives in this segment when the A330 family and 777 will go out of the market.

The Very Large Aircraft segment has long been the monopoly of Boeing with its famous 747 Jumbo Jet until the entry into the market of the A380 full double-deck aircraft in 2005. This segment of > 400 passenger seats has been dominated by the A380, with some 90% of all orders since it was introduced in the market. Airbus estimates the market to more than 1.700 units in the next 20 years, representing only 6% of total aircraft deliveries and, with a unit price exceeding US$ 300 million, a value of some US$ 0,7 trillion. Boeing on the contrary sees this market substantially smaller, with some 760 units forecasted. It is not foreseen that Boeing will develop a competing aircraft in this segment as the economics seem to suggest there is only (barely) room for one such aircraft even if Airbus forecast is taken into account. Two products on this segment would allow none of the aircraft manufacturers to break-even / amortize their development costs.

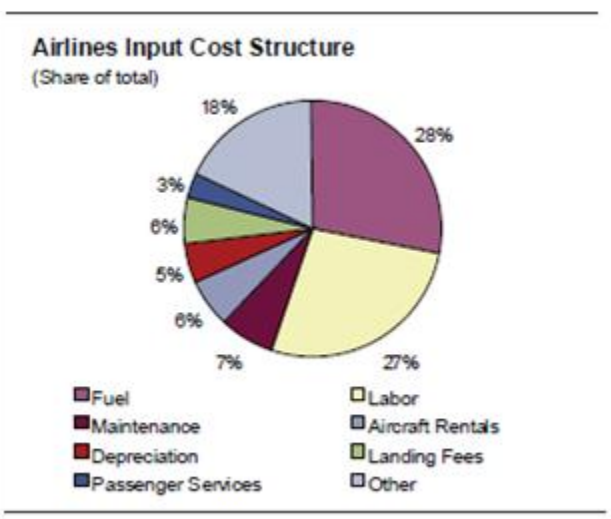
Market Drivers

Cost pressure

Civil passenger aircraft customers are the airlines (or the lessors to airlines) - airlines sell to their own customers, the passengers, aircraft seats kilometres, also seen as a commodity e.g. by the

organization Airlines for America in a complaint against Eximbank (David Knibb)[228]. Due to fierce international competition among global airlines for this commodity, passengers' pressure generates a strong price and consequently cost pressure on airlines. Profit margins of the industry are often as low as 2-3% with some years showing average losses of as much as 6% in 2008[229] which need to be compensated during the profitable years. Profit margins are further squeezed by the emergence of low cost carriers, driving prices and costs significantly down. Also, the continuing liberalization of air traffic (the '9 Freedoms') means more competition is engendered on an increasing number of routes.

Figure 2.1.1-1 Airlines Input Cost Structure (Le Flaneur, 2012)



Some 75% of airlines' costs consist of the three elements: fuel, personnel and aircraft acquisition, taking the form of a lease rate to a lessor or a depreciation rate of owned aircraft[230]. The cost structure naturally largely depends on the routes – domestic, international, long haul – and the number and type of aircraft operated in the fleet. Also, various analyses show divergence of the respective share of each cost element. Nevertheless, overall, the above three cost elements are widely recognized as the most relevant for the majority of airlines. This cost pressure thus clearly also shapes the decision-making process for aircraft type selection. Aircraft consumption is a key consideration, leading to preference for newer technologies for both engines (more fuel-efficient) and structures (lighter). Aircraft price is another main decision-making criterion and, due to the duopolic situation in most segments, price pressure from airlines to aircraft manufacturers is considerable. This is even more true as both manufacturers strive for market share as this is a key indicator for their respective performance.

According to Frost & Sullivan[231], cost pressure as a market driver will remain very high in the next years. This effect will be further amplified by the accumulated losses of airlines over the past years, reducing financing opportunities for new aircraft.

[228] Knibb, D., 2012. Export Credit under Scrutiny Again. Airline Business, 28(1).
[229] Pearce, B., 2013. The outlook for commercial air transport. IATA.
[230] Flying Below The Clouds - A Common Sense Analysis Of Airline Investing Opportunities, 2012. The Wall Street Flaneur, 17 Oct.
[231] ROSM-Global Commercial Aircraft Programs-Revenue - Opportunities and Stakeholder Mapping. Frost & Sullivan, M596-22 July 2010.

Technology and development

Aircraft technologies have not seen a radical shift over the last years. However, technological developments are essential in many different aspects for addressing the major cost elements and thus are considered as a main market driver for the coming years. As an example, mastering composite technologies allows building lighter aircraft. The 787 with some 50% of its structure in composite materials ensures a 20% increase in fuel efficiency. Also more fuel-efficient engines affects fuel costs and the impact of new engines is demonstrated by the success of the Airbus A320 NEO (New Engine Option) the sales of which have boosted the Airbus market share in the Single Aisle segment. Managing manufacturing technologies and design processes has enabled the A380 to get airborne, where the technical challenges to make an aircraft of this size fly were considerable. Technological developments for systems, avionics and electrical equipment are also essential. New generation batteries allow for more electrical systems compared to hydraulic ones, leading to weight decrease and security increase (despite initial failure of the 787 batteries). More automation could also mean reduction of personnel in the future.

Considerable amounts of investments are flowing into research and development in order to achieve those market arguments. Considerable amounts are also needed for funding new aircraft development programmes, which can often exceed € 10 billion for a new platform. Especially due to the long development times, ranging between 6-8 years but easily extending to over 10 years, and the risks associated to aircraft development, financing of aircraft development programmes is certainly one of the barriers to potential entrants. It is fair to assume that, without some sort of governmental support, new entrants would fail to convincingly enter the market. Along the same assumption, without governmental support, Airbus initial steps into the aircraft market may well have had failed: 'According to a September 1990 study prepared by Gellman Research Associates, Inc., for the U.S. Department of Commerce, Airbus would not have been commercially viable without the substantial amount of direct support it had received from its member governments since it was established[232]. To that extent, the business of aircraft manufacture seems to be intrinsically related to government interests and policies.

[232] GAO (United States General Accounting Office) (1994), Report: Long-Term Viability of U.S.-European Union Aircraft Agreement Uncertain.

Legislation and international agreements

Legislation and international agreements constitute a market shaper in the sense that they are susceptible to influence competition and cost issues. For instance legislation on carbon footprints and related fees lead to a cost impact and a consequent shift towards lower-carbon emission aircraft. Additionally, international agreements in particular on liberalization of air traffic are also shaping competition and, thereby, prices and cost structures. Air service agreements, bilateral or multilateral, regulate the rights and conditions of airlines of specific countries using the air space and territory of other countries, the so-called nine 'freedoms'. According to (Oum, Zhang and Fu)[233], more than 10.000 such bilateral agreements are in place today and the number is increasing. They claim that '1) liberalization has led to substantial economic and traffic growth. Such positive effects are mainly due to increased competition and efficiency gains in the airline industry, as well as positive externalities to the overall economy; 2) liberalization allows airlines to optimize their networks within and cross continental markets. As a result, traffic flow patterns will change accordingly. Strategic alliance is a second best solution and will have reduced when ownership and citizenship restrictions are relaxed; 3) there is a two-way relationship between the expansion of Low Cost Carriers (LCCs) and liberalization. The fast growth of LCCs leads to increased competition and stimulated traffic, calling for the removal of restrictions and capacity, frequency and pricing. In addition, development of LCCs in domestic market can promote liberalization policy by increasing the competitiveness of a national aviation industry. On the other hand, existing regulations hindered the growth of LCCs. Further liberalization is needed for the full realization of associated benefits.'

The above examples clearly highlight the role of legislation and international agreements on the aviation industry and, in turn, on the aircraft manufacturers and aircraft trade.

2.1.2 Analysis of sales options, situations affecting trade

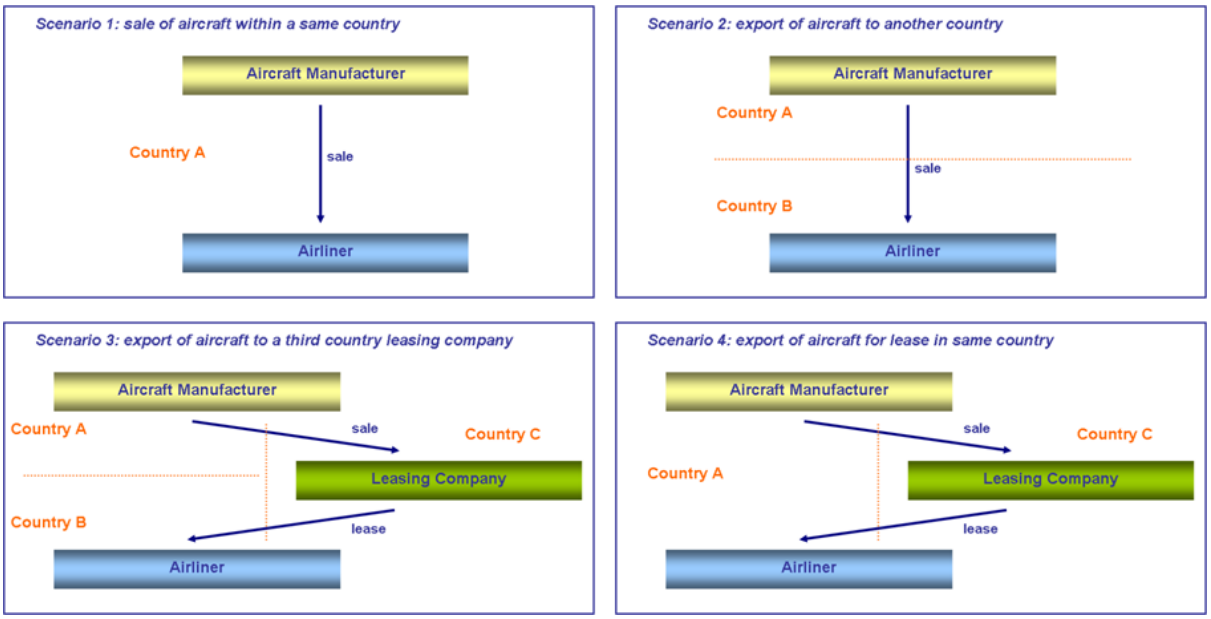
The topic addressed in this paragraph regards the available procurement routes for airlines to procure aircraft and their impact on competition, especially in the context of officially supported export credits.

[233] Oum, T.H., Fu, X. und Zhang, A., 2009. Air Transport Liberalization and its Impacts on Airline Competition and Air Passenger Traffic. International Transport Forum ITF, Forum Paper.

Aircraft acquisition mechanisms

There are fundamentally four types of procurement routes available for an airline for acquiring aircraft, and a number of derivatives. The graph below depicts the four main procurement routes, which are further explained below.

Figure 2.1.2-1 Aircraft Acquisition Routes



- Scenario 1: an airline procures aircraft from an aircraft manufacturer based in the same country as the airline. For instance Air France buys a number of Airbus planes. This scenario affects naturally only a few nations, the ones hosting an aircraft industry. In this scenario, no exports occur and thus officially supported export credits are not relevant.

- Scenario 2: an airline procures aircraft from a manufacturer based in another country. For instance TAM Brazilian Airlines buys a number of Boeing planes. This is possibly the most

common scenario. In this case, officially supported export credits could be granted, depending on the airline's home country and with associated conditions e.g. interest rates.

- Scenario 3: an airline acquires aircraft from a leasing company, which in turn has procured them from an aircraft manufacturer in another country. If the leasing company is based in a different country than the aircraft manufacturer, the leasing company can benefit from officially supported export credits and flow down the benefits to the airline based in a third country. This is a common scenario in particular as leasing companies are often located in suitable countries, attempting to optimize their financial benefits. For instance ECGD supported aircraft exports to the Aviation Lease and Finance Company (ALAFCO) based in Kuwait, which in turn leases them to All Nippon Airlines based in Japan. Also, several airlines pursue a strategy of mixed-fleet, i.e. consisting of a mix of own aircraft and of leased aircraft.

- Scenario 4: an airline acquires aircraft from a leasing company, which in turn has procured them from an aircraft manufacturer based in the same country as the airline. Depending of the home base of the leasing company, it can benefit from officially supported export credits and flow down the benefits to the airline based in the same country as the aircraft manufacturer. Following the example above, Air France leases Airbus aircraft from Lease Corporation International, Singapore office. This is a more unusual scenario than Scenario 3 as it only affects airlines based in the same country as an aircraft manufacturer.

Analysis of competitive situations

From the scenarios described above, a bias at airlines level already appears by simply comparing scenario 1 and scenario 4: in both cases airlines procure aircraft from manufacturers based in their same country, however in scenario 1 export credits do not apply whereas in scenario 4 they do apply, as a leasing company situated in a third country could actually benefit from official support and could flow the benefits down to the buying airline. To that extent, the Arrangement in clause 5d. provides that 'Official support shall not be provided if there is a clear evidence that the contract has been structured with a purchaser in a country which is not the final destination of the goods, primarily with the aim of obtaining more favourable repayment terms.' Despite this clause, it can be argued that leasing companies, by the nature of their business objective, do buy goods for use by companies in other countries. In such cases however, the contracts are not structured 'primarily with the aim of obtaining more favourable repayment terms', but rather the more favourable conditions are a (positive) side-effect of the leasing business model. Acceptability of

extending officially supported export credits to leasing companies is anyhow demonstrated, for instance, by the transactions to ILFC and ALAFCO funded by ECGD or the ones to ICBC or the Aviation Capital Group Corp. supported by the US Eximbank in 2011.

A second impact from the available procurement routes appears by comparing scenario 1 and 2 in the sense that an airline based in the same country as an aircraft manufacturer could find better financing conditions if it buys its aircraft from the foreign manufacturer. In this case, the airline could benefit from officially supported export credits, which is not the case when buying from its national aircraft manufacturer. In other words, an airline would basically be encouraged to procure from a foreign aircraft manufacturer due to the existence of officially supported export credits. Governments hosting aircraft manufacturers have recognized this issue and agreed, informally, that their national ECAs would refrain from financing any of the airlines based in corresponding countries namely the US, France, Germany, UK and Spain. Jane Cavanaugh[234] indicates that 'Airlines in these countries have long complained that their ineligibility for export credit agency-supported financing has distorted the market by forcing them to obtain more expensive, non-export credit agency supported commercial financing, while financially sound airlines from other countries have reaped the benefits of lower-cost export credit agency supported financing.'

The so-called 'home market rule' addresses the issue by placing the airlines based in aircraft manufacturing countries at a level playing field, but this rule only worsens the situation comparing those airlines with airlines based in other countries, where officially supported export credits can apply. This third market distortion is particularly relevant in the EU, where air traffic liberalization is considerably advanced and where airlines from EU countries fiercefully compete against each other. In this scenario, the airlines from France, Germany, UK and Spain remain disadvantaged compared to airlines based in other EU countries as they cannot benefit from officially supported export credits neither from their own nation nor – as a result of the home market rule – from competing nations. On the occasion of UAE's carrier Emirates securing ECA support in 2011, Thomas Kropp[235], stated: 'We are at a total disadvantage and have appealed to the OECD, the European Commission and the German government to end this unprecedented advantage for airlines from these countries.' (Aviation Week & Space Technology)[236] demonstrating the frustration from market distortions in favour of airlines accessing ECA export credits. On the same issue, Airlines for America 'has asked a federal court to block the export credit guarantee given by

[234] Cavanaugh, J., 2011. In search of a level playing field: the 2011 Aircraft Sector Understanding. International Law Office.
[235] SVP for International Relations and Government Affairs at Lufthansa.
[236] Unnikrishnan, M., 2011. Prisoner's Dilemma. Aviation Week & Space Technology, 173(8):37-37, 1p.

Eximbank to Air India on a 3,4 billion US$ aircraft order covering 787 and 777 aircraft' on the grounds that 'these allowed Air India to flood the USA-India market with extra capacity and crowd out competitors such as Delta Airlines. As a result, Delta dropped the route and furloughed 64 pilots.' (David Knibb)[237].

A further inherent issue in aircraft financing generally, and in officially supported export credits specifically, stems from the different conditions extended to different categories of countries. Countries risk classifications in 8 categories and their related applicable rates as well as the risk mitigants to be provided for the lowest risk categories imply that airlines based in different countries operating same routes will be treated differently. For instance Polish airline LOT and Ukrainian airline UIA both flying Warsaw-Kiev will have access to different financing rules:

- Poland belongs to risk classification 0 and has access to officially supported export credits at a minimum premium rate of 7,72% (2011),
- Ukraine belongs to risk classification 7 and has access to officially supported export credits at a minimum premium rate of 14,45% (2011) and additionally needs to provide risk mitigants.

With air traffic liberalization and specifically the 7th and the 9th freedoms allowing airlines to fly between or within countries independently from the nationality of the airline, this effect will have further implications on competition: a foreign airline could access more attractive finance and fly national routes in a higher risk category country. This effect is naturally independent from officially supported export credits per se as an airline in a higher risk country will possibly find less attractive financing solutions than an airline in a lower risk country. However, officially supported export credits do accept and amplify this distortion in international trade, in particular by defining the divergent risk premiums to be applied for each risk category. Additionally, in the absence of officially supported export finance, airlines would each seek financing solutions from their national lenders or other international financial institutions. Due to the lack of political risk embedded in the financing conditions of a national bank, it can be expected that the gap of rates between countries may be smaller, limiting the trade distorting effect. Other conditions would, naturally, also need to be considered in order to evaluate the overall competitive situation, for instance a lack of liquidity or credit possibilities in higher risk countries could render acquisition of aircraft simply impossible. Notwithstanding, the simple fact that official support is offered under divergent conditions to

[237] Knibb ,D., 2012. Export Credit under Scrutiny Again. Airline Business, 28(1).

airlines of different countries that are competing on same routes constitutes, by itself, a bias in the market.

Impact

The selection of a contracting route associated to the existence of officially supported export credits has thus the potential to generate trade distortion at airline level and, in turn, on international aircraft trade. However, it is fair to point out that in this context, the Arrangement attempts to put some discipline in export finance. For instance, in the most frequent aircraft acquisition mechanism i.e. a direct competition between Airbus and Boeing for sales to a specific airline (see scenario 2 above), the Arrangement foresees that conditions extended by ECAs will have no, or limited, impact on the airline's decision-making, effectively levelling the playing field between manufacturers.

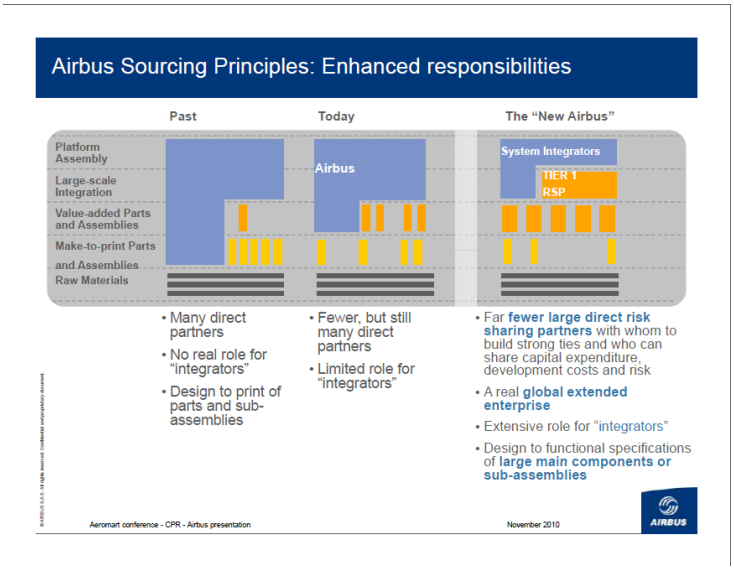
Finally, it is important to evaluate the level of impact officially supported export credits may have on the users of aircraft i.e. the airlines: assuming an airline's average cost structure showing a share for the aircraft acquisition of some 20%, and a delta between commercial and ECA rates of e.g. 5%, the total impact on the operating costs of an airline represent some 1% of total operating costs. Although such difference may appear almost insignificant, in a cost-driven duopoly yielding profit margins just over zero, this delta can make the difference between a profitable and a non-viable airline.

2.1.3 Analysis of supply chain, impact on export credits

This paragraph intends to analyse officially supported export credits from a different perspective: where the money is flowing to. Both Airbus and Boeing are currently outsourcing the lion's share of their aircraft manufacturing. Airbus claims that 70% of its latest aircraft, the A350, is outsourced to an international network of suppliers whereas Boeing says that more than 65% of the new 787 structure is bought out, mostly internationally. This tendency is further intensifying. This context begs the question of the role of officially supported export credits on such a supply-driven industry and their impact on competition.

Supply chain in aircraft manufacturing

Figure 2.1.3-1 Airbus Sourcing Principles (Cauquil, 2010)



The role of aircraft manufacturers has significantly shifted in the recent decades. Originally, companies such as Boeing, McDonellDouglas, Airbus, etc were designing, developing and largely producing on their own the airframe of their airplanes. Systems and components were bought out, according to a build-to-print concept, i.e. the aircraft manufacturer was delivering the requirements and plans and the subcontractor was responsible for the related production. Production was very much limited geographically to national companies, for cost, cooperation and political reasons.

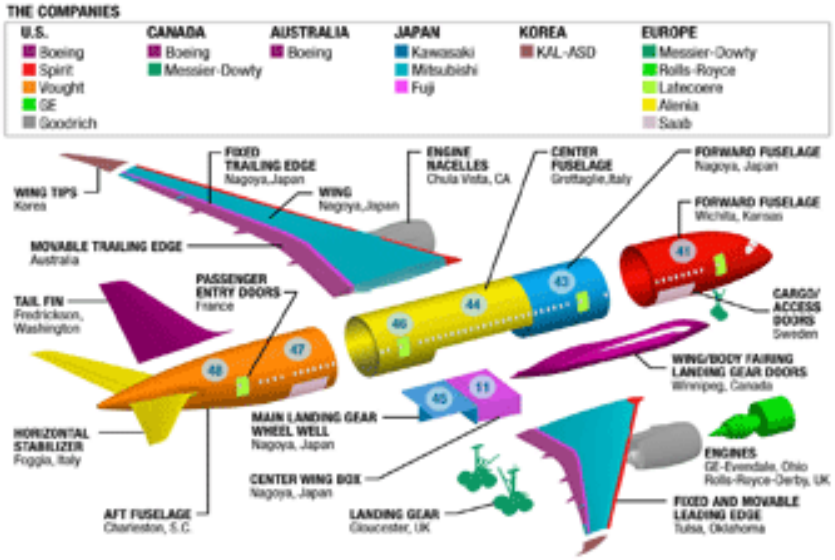
This supply chain paradigm has significantly evolved over time. Today, aircraft manufacturers focus on the development of the aircraft, the overall programme management, final assembly and, naturally, sales. The airframe is now largely outsourced, in addition to systems and components. Tier one suppliers cooperate closer than before with the aircraft manufacturers, not only for the manufacturing of components but, also, for the design in a concept of risk-sharing partnership. In 2010, Olivier Cauquil[238] presented the 'New Airbus' Sourcing Principles, foreseeing only a few selected Tier one suppliers who also become risk-sharing partners with sub-integration responsibilities[239].

Supported by IT developments and focusing ever more on the global market access and cost considerations, the supply chain also evolves internationally. The new Boeing 787 airframe is built indistinctively from companies located in the US, Canada, Australia, Japan, South Korea and Europe[240]. In the above mentioned presentation, Cauquil shows Airbus' plans to outsource more than half of the total outsourced value outside Europe, mainly in the US with a growing share in the rest of the world.

238 SVP Procurement Strategy & Business Operations at Airbus.
239 see Figure 2.1.3 – 2.
240 see Figure 2.1.3 – 2.

Both aircraft manufacturers put tremendous pressure on the supply chain to grow bigger and ensure further synergies by undertaking responsibility for larger and more complex work packages. This has led to a wave of industry consolidation, which is still continuing today. Mergers and acquisitions have created suppliers with a broader reach, generating economies of scale and technology specialization that eventually serve all aircraft manufacturers.

Figure 2.1.3-2 Boeing 787 Supply Chain (Boeing, 2011)

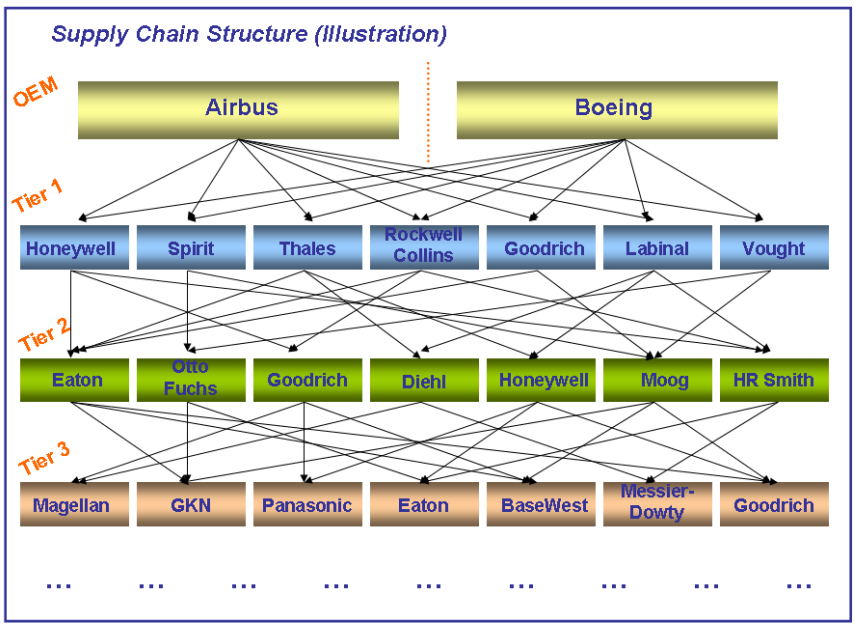


A common supply chain

As a result of the above, the supply chain of Airbus and Boeing have become largely common. The table in the next pages shows the commonality of suppliers between the Airbus A350 and Boeing 787 programmes. Apart from the airframe, where Airbus and Boeing share fewer suppliers due to historical (airframe Tier 1 suppliers are often spin-offs of aircraft manufacturers themselves or evolution of former aircraft manufacturers) and technical reasons (aluminium vs composites), most other subcontractors are common to the individual programmes and, if not part of the specific programmes, are certainly part of both manufacturers other programmes. Major subcontractors have emerged as global players, with locations in various sites across borders. Such corporations are for instance Goodrich, Honeywell, Vought, Rockwell Collins, Thales, Hamilton Sunstrand and others.

Further on, due to the industry consolidation described above, a large number of those companies subcontract at a lower tier level to their peers, which in turn can subcontract back to them[241]. depicts a fictive illustration (but with actual names) of a supply chain up to tier 3 suppliers.

Figure 2.1.3-3 Supply Chain Structure (Illustration)



As a consequence, a significant share, largely more than half, of the money from international aircraft trade flows outside the two aircraft manufacturers, into the global supply chain. This money flow mostly ends at common suppliers, whether directly from the aircraft manufacturers or through other subcontractors. Eventually, it can be put forward that today's and future aircraft from both Airbus and Boeing are developed and built from broadly the same teams of companies.

[241] Figure 2.1.3 – 3.

Figure 2.1.3-4 Supply Chain Overview For A350 and B787 Programmes

SUPPLY CHAIN OVERVIEW FOR A350 AND B787 PROGRAMMES (SELECTED COMPANIES, TIERS 1-3)

Systems	Subcomponents	A350 Suppliers	B787 Suppliers
Design	Design	Peters Engineering Solutions GmbH	Composites Innovation Centre Manitoba Inc
	Software	Priestman Goode	
Materials	Metals	ALCOA	Alcan
		Latrobe Speciality Steel Company	**Latrobe Speciality Steel Company**
		VSPMO-Avisma Corporation	TIMET Titanium Metals Corporation
	Composites	**Hexcel Composites**	**Hexcel Composites**
		M Torres Disenos Industriales SA	Hexcel Structures
			Alcore Inc
			Hitco Carbon Composites Inc
			J.D. Lincoln Inc
			M.C. Gill Corp
			Toray Composites Inc
			Victrex Plc
			Cytec Engineered Materials Inc
Components	Actuators	CIRCOR Aerospace	Arwin Industries Inc
		Moog Inc	Claverham Limited
		Rockwell Collins Electro Mechanical Systems	Curtiss-Wright Controls Inc
			Danaher Motion Aerospace & Defence
			GE Aviation Systems, Flight Controls
			Moog Controls
			Moog Inc
			Triumph Actuation Systems
	Electrical Components	**HR Smith Ltd**	**HR Smith Ltd**
		Labinal	**Labinal**
			Mid-Continent Engineering Inc
	Fasteners	**Ateliers de la Haute Garonne**	**Ateliers de la Haute Garonne**
		Diehl Aerospace GmbH	Avibank Mit freundlichen Grüßen. Inc
			Ho-Ho-Kus Inc
			Spiralock Corporation
	Lighting	Diehl Aerospace GmbH	**Diehl Luftfahrt Elektronik GmbH**
		Diehl Luftfahrt Elektronik GmbH	Goodrich Interiors
		ECE	Honeywell Lighting & Electronics
			IDD Aerospace Corporation
			Schott-Lighting
	Mechanical components	**ECE**	Aerofit Inc
		Goodrich Sensors and Integrators	Bell-Memphis Inc
		Voss Industries	**ECE**
			Flexfab Div
			GKN Aerospace Services
			Hartwell Corp
			HBD/Thermoid Inc
			Loos & Co Inc
			Porvair Filtration Group Ltd
			RWM Casters Co
			Thermion Systems International Inc
			Triumph Aerospace Systems
			Tuthill Controls Group
			Triumph Composite Systems
			Ultra Electronics Controls Division
			Unison Industries
			Voss Industries
	Structural components	Magellan Aerospace (UK) Ltd	AJR Industries Inc
		Otto Fuchs KG	Asco Aero Industries NV
			California Drop Forge
			DASCO Engineering Corp
			Ducommun Aerostructures NY Metal Structures
			EADS Composites Altantic Ltd
			GKN Aerospace - Stellex
			Howmet Castings
			Israel Aerospace Industries Ltd
			Korean Air Aerospace Business Division
			Noranco Inc
			Otto Fuchs KG
			RTI Intl. Metals Inc
Production	Measurements	Kahn Industries Inc/ Kahn & Co	
	Tools	Lomas Engineering Ltd	
		M Torres Disenos Industriales SA	

Airframe Systems	Airframe assemblies	Adams Rite Aerospace Inc	Alenia Aeronautica SpA
		AERnnova	ASCO Aerospace Canada
		Aerolia	BHA Aero Composite Parts Co., Ltd
		Aries Complex SA	Boeing Aerostructures Australia
		GKN Aerospace Services	Boeing Fabrication Services
		Premium Aerotech GmbH	Chengdu Aircraft Industrial (Group) Co. Ltd.
		Ratier Figeac	CTRM Aerocomposites Sdn Bhd.
		SABCA	Fischer Advanced Composite Components AG
		Spirit Aerosystems Europe Ltd	Fuji Heavy Industries Ltd.
		Spirit Aerosystems Inc	Hafei Aviation Industry Co., Ltd.
			Hamilton Sundstrand Corporation
			Hartwell Corp.
			Israel Aerospace Industries Ltd.
			Jamco Corp
			Kawasaki Aerospace
			Korean Air Aerospace Business Division
			Latecoere
			M.C. Gill Corp.
			Mitsubishi Heavy Industries Ltd.
			Premium AEROTEC GmbH
			Rockwell Collins
			Saab Aerostructures
			Spirit AeroSystems, Inc.
			Triumph Composite Systems Inc
			Turkish Aerospace Industries Inc.
			Vought Aircraft Industries
			Vought Aircraft Industries (Contour Aerospace)
	Cabin interiors	B/E Aerospace	Jamco Corporation
		Panasonic Avionics Corp	**Panasonic Avionics Corp.**
		Recaro Aircraft Seating GmbH & Co	Koito Industries Ltd.
	Environmental systems	CTT Systems AB	Hamilton Sundstrand Corporation
		General Ecology Inc	MTI Polyfab
		Triumph Insulationn Systems	**Triumph Insulation Systems**
		Honeywell Aerospace	
	Landing system	**Goodrich Aircraft Wheels & Brakes**	Crane Aerospace & Electronics
		Liebherr-Aerospace Lindenberg GmbH	**Messier-Dowty**
		Messier-Bugatti	Goodrich
		Messier-Dowty	
	Oxygen system and equipment	**B/E Aerospace**	**B/E Aerospace Commercial Aircraft**
		Carleton Technologies inc	Intertechnique
	Safety and security systems	**BaseWest**	**BaseWest**
		Goodrich Sensors & Integrated Systems	**Goodrich Sensors**
		Kidde Aerospace and Defence	Securaplane Technologies, Inc.
		Lufthansa Technik	
		Pacific Scientific Aerospace	
		Meggitt Safety Systems Inc.	
Power Systems	Auxiliary power	Honeywell Aerospace	Hamilton Sundstrand Power Systems
	Electrical power systems	Astronics Advanced Electronic Systems (AES)	California Instruments Corp.
		ECE	**ECE**
		Fokker Elmo BV	Crane Aerospace & Electronics
		Hamilton Sundstrand Electric Systems	**Hamilton Sundstrand Electric Systems**
		Hamilton Sundstrand Power Systems	**Thales Avionics Electrical Systems**
		Thales Avionics Electrical Systems	
		Vermillon Inc	
Avionics	Avionic components	L-3 Communications Aviation Recorders	
	Communication	Cobham Avionics	**HR Smith (Technical Developments) Ltd**
		HR Smith Ltd	**Rockwell Collins**
		Rockwell Collins	
	Flight and data management	**Honeywell Aerospace Electronic Systems**	GE Aviation Systems - Digital
		L-3 Communications Aviation Recorders	**Rockwell Collins**
		Rockwell Collins	**Honeywell Aerospace**
		Thales Avionics	
	Indicators and instruments	Goodrich Sensors & Integrated Systems	**Rockwell Collins**
		Korry Electronics Co	
		Rockwell Collins	
		Thales Avionics	

Colour code	
Company Name	supplier to both A350 and B787 programmes, for similar types of products
Company Name	supplier to both A350 and B787 programmes, for different types of products
Company Name	supplier to both Airbus and Boeing, for different programmes
Company Name	supplier only to either Airbus or Boeing

Source: derived from Frost & Sullivan 'ROSM-Global Commercial Aircraft Programs-Revenue Opportunities and Stakeholder Mapping', July 2010

Impact on export credits

The considerations referring to the supply chain raise questions regarding the legality of officially supported export credits in the sense of using taxpayers' money for financing exports of largely foreign activities and, additionally, to companies that would receive support for their exports with any of the aircraft manufacturers, the opacity of the ECAs mechanisms and, finally, possible impacts on international competition.

The issue of export credits related to local content is not new and ECAs use two mechanisms to address the question. First, various ECAs have local content restrictions for extending officially supported export credits. Thus, if the local content falls below a certain share of the product price, the ECA may extend only a corresponding share of the financing, or in some cases, not at all. For instance, US Eximbank fully finances exports if the US content is higher than 85%, otherwise the financial support applies only to the US content. Second, ECAs have developed cooperation models whereby they jointly financed export activities in line with the respective participation of national industries in the final product (national workshare). This is often the case for Airbus aircraft exports from Europe as industries from four nations, France, Germany, UK and Spain, have a significant involvement in the production of those aircraft. Interestingly, European ECAs are also supporting exports of the Russian Sukhoi Superjet, as the involvement of the respective European industries is large, despite the fact that the aircraft manufacturer is no European industry. As reported on the ECA Watch website quoting the Moscow Times[242], 'European credit agencies will help finance the sales of Russia's Superjet 100 aircraft, Vedomosti reported Thursday. A source close to Sukhoi Civil Aircraft, which produces the planes, said the Superjet has been deemed a European product because 70 percent of its components are European.'

Combining the two mechanisms above means, in principle, that each nation may fund the contribution of its industry in the export of a product. However this remains theoretical, as practice shows that international trade of aircraft subsystems typically does not call for official export credits.

A first issue stems from the fact that some ECAs finance much more than their national share. For instance French COFACE funds export activities for products containing above 20% local content, with some restrictions applying between 20% and 50%. This gives room for funding export activities for goods mainly produced abroad. Assuming a nation interested in buying an aircraft

[242] Moscow Times, 13 September 2013.

from Airbus or Boeing and assuming the local content is 50% for Airbus in France and 60% for Boeing in the US. COFACE would then grant officially supported export credits for the full value of the Airbus (minus own financing set at 15%) whereas US Eximbank would only support Boeing at the level of the US content i.e. 60%. This creates a clear market bias, as other divergent rules among ECAs (the issue of comparison among ECAs is much wider and covered more thoroughly in Chapter 2.2). The other implication of the above is that French taxpayer's money is used to finance foreign products. This effect does not, as such, impact competition, but puts in question the political legality of this mechanism in the sense that the ECA in a home country is supporting the generation of jobs in a different country.

Another issue relates to the supply chain flow: a tier 3 supplier exports to a tier 2 supplier aircraft related components, those are integrated in a wider product which in turn is exported to its tier 1 supplier and, there on, to the aircraft manufacturer. Such components or subassemblies are not considered as falling under the Aircraft Sector Undertaking as per Article 4a defining the perimeter of applicability. If applicable at all though, as seems to be the case with Sukhoi's Superjet, officially supported export credits would then be extended at different conditions than the export of the aircraft to the end customer e.g. in case the latter resides in a higher risk country. In such cases, there seems to be some lack of clarity on the conditions, the ECAs, the local content related to the values of these products in the event such products are funded for aircraft exports to third countries.

As indicated above, the ECA of the aircraft manufacturer can support the export finance under certain conditions. Also the national ECAs of other industries involved in the aircraft production can join forces in accordance with their national work share e.g. for Airbus products between France, Germany and the UK. This mechanism partially addresses the questions raised above but does not sort them suitably, as there is no guidance in terms of tier depth, the values and the cooperation mechanism of the ECAs. In fact, the Arrangement remains silent when it comes to joint financing activities among more than one ECA. In the fictive example presented in figure 2.1.3-4 'Supply Chain Structure (Illustration)', the supply chain flows from Messier-Dowty in France to Eaton in the UK, Goodrich in the US and finally to Airbus in France. For those transactions, in principle no ECA support can be granted. Thus, in case of export of this aircraft, which and how would the ECA cooperate, for which values and to what level of tier. Also, if each ECA is supporting the export financing in accordance with the national workshare, it remains unclear how this national content is quantified for instance up to which level of tier and what aspects of intra-corporate trade are taken into account. Considering the fact that the aircraft

manufacturer takes the risk of the export activity, the question can be discussed whether it is legitimate that other ECAs jointly support credits and, if convincingly addressed, how other ECAs related to the locations of component manufacturing should be involved to address the entire supply chain. For instance, in the example described above, COFACE would also be entitled to support financing of Boeing exports for the workshare of e.g. Thales and Messier-Bugatti-Dowty.

In the context of the above considerations and the increasing consolidation of the aircraft supply chain industry, a further aspect needs to be evaluated: the issue of intra-corporate trade. Companies have developed into international corporations, with production sites spread across several countries. In this environment, the trend is for primes to subcontract large integrated packages to their suppliers through one entry point or contract. The supplier then manages internally the allocation of work among sites. This means that local content considerations are affected by intra-corporate trade, as the nation where the contract is held is not necessarily reflecting the place of actual production work. This also means that there can be arrangements in order to benefit from more favourable export finance conditions, for instance in the event such production work is taken into account for calculations of local content.

The mechanism of joint funding further raises the question of opacity of some ECAs. Examining publicly available information of ECAs, such as annual reports, press releases, etc, it is rarely possible, if at all, to cross check the cases of joint funding. For instance, UK ECGD does indicate in its Annual Report 2010-2011 that ' ECGD continued to support the export of Airbus commercial aircraft in 2010-11 along with the French and German export credit agencies (ECAs), each in proportion to their respective workshares.', however corresponding statements are not to be found in the Annual Reports of COFACE or Hermes. COFACE simply indicates the compiled value of aircraft sold per term and the beneficiaries, without breakdown. Hermes only mentions that 'The governments of Germany, France and Great Britain covered 144 Airbus aircraft', without indications on individual transactions or beneficiaries. Comparing the COFACE and ECGD officially supported transactions, there is indeed a large convergence but also some clear cases unique to each ECA. For instance, ECGD has supported sales to the Gulf Air Company, Finnair Oyj, AirAsia, which have not been supported by COFACE and, in turn, COFACE has supported sales to Vietnam Airlines, Interjet, Cathay Pacific, Avianca without the support of ECGD. Perhaps some of those transactions were covered additionally by Hermes, however there is no evidence in this direction. In the above context, the principle that Airbus aircraft exports are jointly supported by the three ECAs according to their individual workshares leaves room for interpretations on the specific mechanism. Also the conditions associated to the corresponding officially supported

export credits are consequently not transparent and possibly divergent among the affected ECAs. In this context, it is hard to evaluate if the overall conditions extended for an export case comply with the rules of the Arrangement and do not generate market distortions. For instance, it could theoretically be possible that the conditions extended through a joint funding are more attractive than the ones offered by any ECA separately. Finally, if an aircraft export is not supported by all affected national ECAs according to the workshare principle, it remains open under which conditions a single ECA may support the specific export and, importantly, how this compares with the conditions extended by competing ECAs such as the US Eximbank.

The above analyses highlight theoretical and practical difficulties associated with officially supported export credits due to the complex and global supply chain structure of aircraft manufacturing. Although some of the questions raised may be suitably answered by ECAs or the OECD Secretariat responsible for the Arrangement, it remains that the overall picture can lead to interpretations and thereby biases in the application of the rules of the Arrangement. The political question referring to taxpayers' money being used for jobs generated in other countries has also not been addressed convincingly so far but, naturally, remains a national policy issue. Finally, in view of the fact that the supply chain for both major aircraft producers today is to large extent overlapping, with a tendency to further converge, it is questionable whether governmental support overall is a sensible approach to such exports.

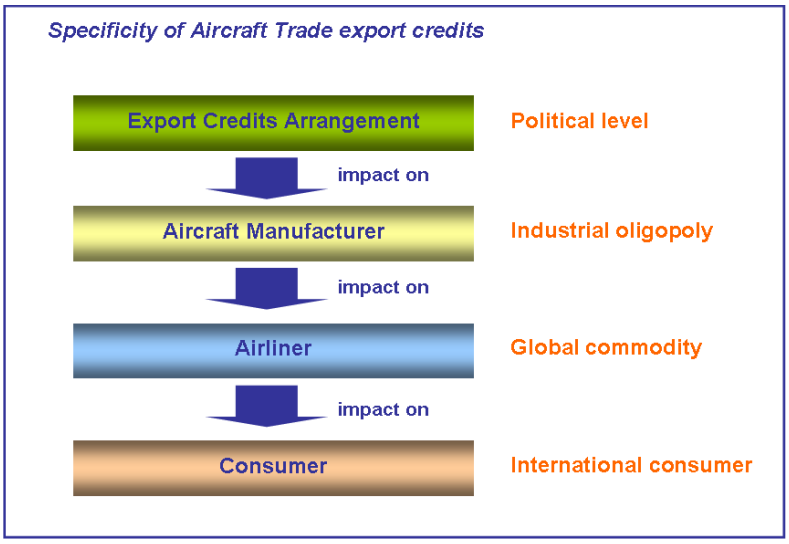
2.1.4 Consumer chain – comparison among sectors

This paragraph aims at showing that the aircraft business model and in particular its consumer chain is different than other sectors covered under the Arrangement in specific sectors undertakings, in the sense that it impacts international trade to a much greater dimension than other sectors. The 2014 version of the Arrangement features five different sector undertakings, namely for civil ships, nuclear power plants, renewable energies, rail infrastructure and aircraft, which will be used as a basis of comparison in this analysis.

Specificities of the aircraft consumer chain

Decision-making on officially supported export credit regulations falls under the responsibility of the political world. In particular, it is politicians' liability to allocate taxpayers' money. This is common to all sectors covered under the Arrangement. Such decisions impact the national exporters, therefore impact international trade for the individual sectors. Figure 2.1.4 – 1 presents the specificity of Aircraft trade export credits.

Figure 2.1.4-1 Specificity of Aircraft Trade export credits



As presented in previous paragraphs, the aircraft industry is a high-tech industry operating today in a de facto global duopoly. International competition for the other sectors is also strong, even if the number of competitors is in most cases larger. Comparing the five sectors, it appears that the ship industry presents a difference in the sense that the major shipyards competing on the international market are located in lower labour cost developing countries such as India or China. To a large extent, such nations are not participants to the Arrangement and therefore do not need to abide by the corresponding rules, potentially generating unfair competition with the shipyards from participating nations. In reference year 2011, records show there was only one officially supported export extended for ship exports by COFACE and a handful by Hermes.

The main difference between the said sectors reside in the type of buyers of the related goods. By nature, energy related exports such as nuclear power plants or renewable energies take the form of constructions or goods sold to power companies, most frequently state-owned companies. The number of customers is largely limited to a handful state actors and few private players. Large power construction projects are usually a tool for governments to develop their economies and thus are very much politically motivated. It can be argued that in such cases, pure price

competition is not the predominant consideration and other factors may have a bigger weight in the decision-making, such as performance of the supplier, political convergence with the providing nation, security of support for longer periods, etc. In that sense, export finance is certainly important for the buying governments, however divergence in conditions may not constitute a key parameter for decision-making. The railway sector, despite a lack of historical data due to its recent addition to the Arrangement, can be considered operating in a similar manner, where the buyers are typically states, a limited number of state-owned companies or national monopolies. On the contrary, the international environment for ship customers would converge with the one of the aircraft industry featuring a multitude of international private buyers spread around the globe and viewing the product – ship or aircraft – as a means for pursuing business objectives i.e. providing their services to their own customers.

The different characteristics of buyers and their use of the goods acquired has a follow-on impact on their own customer base. This is precisely where lays a fundamental difference between the aircraft industry and the other sectors undertakings covered by the Arrangement. By nature, the power companies acquiring nuclear power plants or renewable energy products have a relatively local customer base. Power production and distribution is typically a national topic, both for political and technical reasons. Political reasons include the natural responsibility of a state to secure power to industry and citizens. Technical reasons include the fact that energy cannot be carried over too long distances due to the infrastructure required and the considerable losses of energy during transportation. Therefore it can be realistically argued that the end users of the power generated by the acquisition of internationally procured equipment are mainly customers within the buying nation. This of course excludes limited cases of cross-border power distribution. Overall, the issue of power generation and distribution, be it from nuclear power plants, renewable energies or coal-fired power generators, remains a local, national issue and therefore does not directly affect international trade. To a lesser extent, the railway sector is also a sector with a relatively low potential impact on international trade as the rail passenger and freight activities can, indeed, affect cross-border but not global activities.

On the contrary, the ship and aircraft industries address a global marketplace, where airlines and shipping companies compete with companies from any other nation, and their own customers have also the choice from global companies. A business based in Argentina can indistinctively select a Greek or a Korean shipping company to transport goods from China to the US. Similarly, assuming the appropriate air traffic freedoms are in place, an Australian passenger can select an Emirati or a Turkish airline to fly from Singapore to Germany. Thereby, any bias in the acquisition

of ship or aircraft has an impact on the international trade of these goods but also, as domino effect, on the international trade of their customer base. Indeed an airline benefitting from more favourable financing conditions may well offer, even if marginally, better prices to its international customers. This applies to both the aircraft and the ship industries, however a key difference lays in that the ship industry (except for passenger carrying vessels) serves mostly businesses whereas the aircraft industry mostly individuals.

Impact on export credits

The impact of officially supported export credit regulations on the end customer, the passengers for instance, is naturally minimal, as other factors will influence much more heavily the end price offered. Nevertheless, from a conceptual point of view, the officially supported export credits do have a domino effect to the end customer and thereby do affect international trade in the aircraft sector at the different levels i.e. aircraft, airline, passenger and different conditions extended for the acquisition of aircraft by airlines have the potential to affect the passengers.

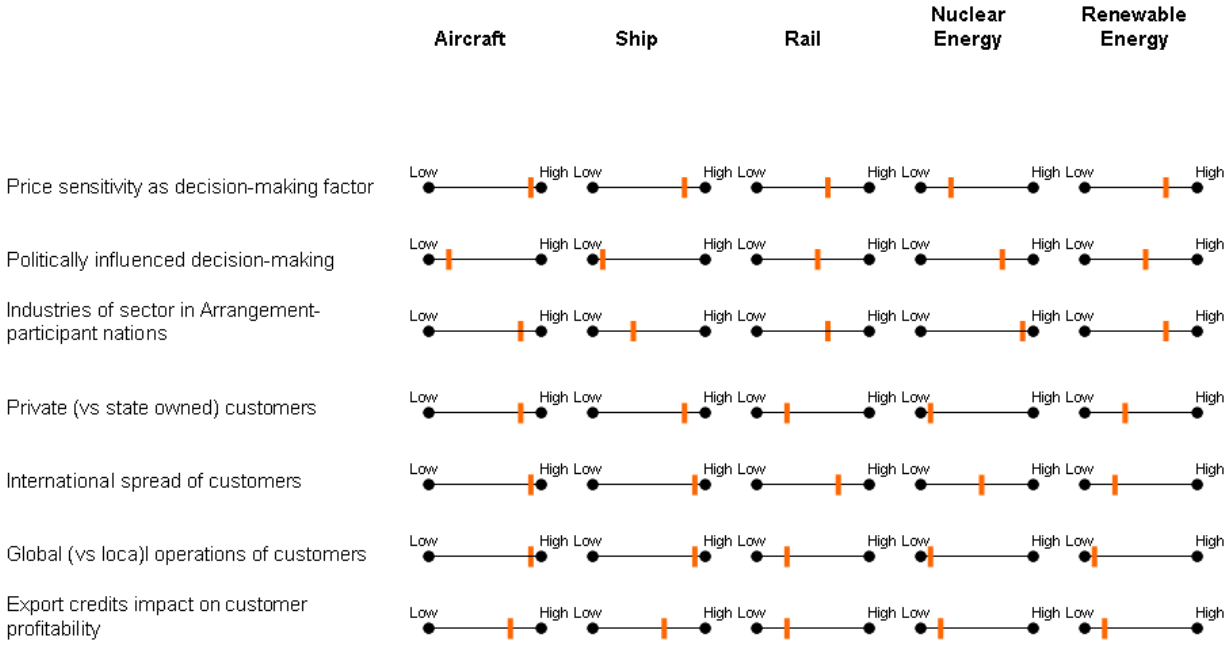
In order to summarize the differences among sectors of the consumer chain and understand the impact of the Arrangement, a number of relevant assessment criteria were selected and applied for the individual sectors. The assessment is performed from the perspective of the buyers' industries, i.e. the airlines in the case of the aircraft sector, in order to account for the entire consumer chain from the providers of the goods and equipment to the respective customer bases. The criteria selected are the following:

- Price sensitivity as decision-making factor: its relevance stems from a possible market bias through the impact of price differences resulting from divergent conditions extended by ECAs
- Politically influenced decision-making: it highlights the importance of officially supported export credits compared to another frequently important decision-making criterion for large investments/procurements – political influence would reduce the influence of officially supported export credits
- Industries based in participant nations: it affects the role of officially supported export credits in the case of free riders, generating unfair competition
- Private (vs state owned) customers: private customers would usually be more focused on business and profit making whereas state owned actors rather on developmental and societal needs

- International spread of competitors: it affects the impact of export credits on international trade among customers of the equipment officially supported
- Global (vs local) operations of customers: local operations would not affect international trade and remain a national issue whereas global operations would be an indication of possible impact on international trade
- Export credits impact on customer profitability: shows the significance of potential divergent export credit conditions on beneficiaries' business results.

Figure 2.1.4 - 2 below summarizes the findings of the individual criteria on a scale from Low to High, for the selected sectors – the results are illustrative and show a tendency rather than an accurate result and individual evaluation can, naturally, be debated:

Figure 2.1.4-2 Comparison of industrial sectors according to selected criteria



From the analysis and findings of this paragraph, it can be argued that officially supported export credits can have different levels of impact on the consumer chain of specific sectors. The one sector most significantly affected though is the consumer chain of the aircraft industry, due to the fact that the sector is characterized by price-sensitive international competition at each of the

levels of the consumer chain. The specificities of each sector and in particular the divergent characteristics of the aircraft international consumer chain raises the question of addressing this sector differently, also in the context of the substantial level of authorizations extended for this sector (e.g. US$ 12,6 billion extended in 2011 by the US Eximbank, some 60% of total authorizations).

The evaluation above shows that each sector functions in a unique manner in terms of consumer chain. However, the aircraft sector presents features that render it more susceptible to divergent officially supported conditions with larger impact on international trade throughout the consumer chain.

2.1.5 Findings

This section has highlighted a number of considerations related to the impact of officially supported export credits on the international aircraft trade. The analysis covers on the one side the entire aircraft manufacturing supply chain, on the other side the consumer chain including the impact on the airlines and the passengers, as the end users of the aircraft. Three main findings can be derived:

1st finding: there is clear evidence for potential distortions in international civil aircraft trade as a result of officially supported export credits. This is evidenced by the varying applicability of officially supported export credits among the mechanisms available to airlines for acquiring their aircraft, in particular disadvantaging airlines from aircraft manufacturing nations or airlines from high risk nations, operating international routes open to competition. The impact of the distortion may appear to be limited, nevertheless in a highly price-sensitive industry, any trade distortion even if limited could make the difference between a profitable and a loss-making airline, thus affecting the viability of disadvantaged companies.

2nd finding: the structure of the aircraft manufacturers' supply chain raises questions with respect to the legality of officially supported export credits. In the context of aircraft manufacturers having a limited share of the overall aircraft value, questions comprise the unclear framework of joint official support, the convergence of international supply chain, the extension of export credits to sub-tiers components manufacturers, work share considerations, the issue of intra-corporate trade and the frequent opacity of ECAs' activities. Although there was no clear evidence of

practiced trade distortions, the overall structure and functioning of the aircraft supply chain begs the question of whether the applicability of officially supported export credits in the specific sector is a judicious practice.

3rd finding: officially supported export credits have a much deeper and broader effect on the entire consumer chain, compared to other sectors, due to the characteristics of the specific industry. This comes as a result of the cost sensitivity of each of the consumer levels, the genuinely global aspect of the airlines industry, where airlines from any nations can compete on international routes, the very low levels of profitability of airlines due to market conditions of perfect competition and the very high number of airlines as well as passengers.

The above considerations demonstrate the extremely difficult balance the Aircraft Sector Understanding is called to find in order to maintain the benefits it can bring to international trade and, in parallel, address potential side-effects. The virtues of the Arrangement in general and of the Aircraft Sector Understanding in particular should in no case be undermined and it is widely recognised that these agreements have substantially contributed to disciplining officially supported export finance. Participating nations attempt, on a quasi-yearly basis, to adjust the Arrangement in order to improve the achievement of a level playing field in export finance. For instance, the latest changes in the Aircraft Sector Undertaking (2011) have featured a significant increase of the minimum premium rates to a level much closer to the commercial markets. This naturally limits the possible subsidized element of officially supported export credits and renders finance for aircraft acquisition more expensive. It is seen as a measure that further levels the playing field, in particular addressing the issue of airlines located in aircraft manufacturing nations. Still Doug Cameron in The Wall Street Journal dated November 19th, 2013, writes in relation to the sales achieved during the Dubai AirShow: 'Proponents such as Boeing Co.—a big winner at the show—maintain they are a crucial part of doing business, and competing with overseas rivals such as Airbus. Critics insist they distort industries, since not all airlines can access the support, while proponents of small government in the U.S. reckon they should be closed down.'

Furthermore, it is important to keep visibility of the amounts at stake in the specific sector. It was presented in Section 1 that some 40% of aircraft exports are officially supported and additionally, that aircraft exports constitute the largest share of ECAs activities in terms of both number of transactions and values. The financial effects are significant, especially if taken in a mid-term horizon of 20 years: a top-down calculation shows that, taking the future market forecast of some US$ 4,4 trillion, a share of 40% of new aircraft being officially supported at 85%, the total

authorizations will reach some US$ 1,5 trillion. Assuming an officially supported rate 2% lower than commercial rates, this would lead to a market bias at a mere US$ 30 billion, showing the dimension of the possible distortion.

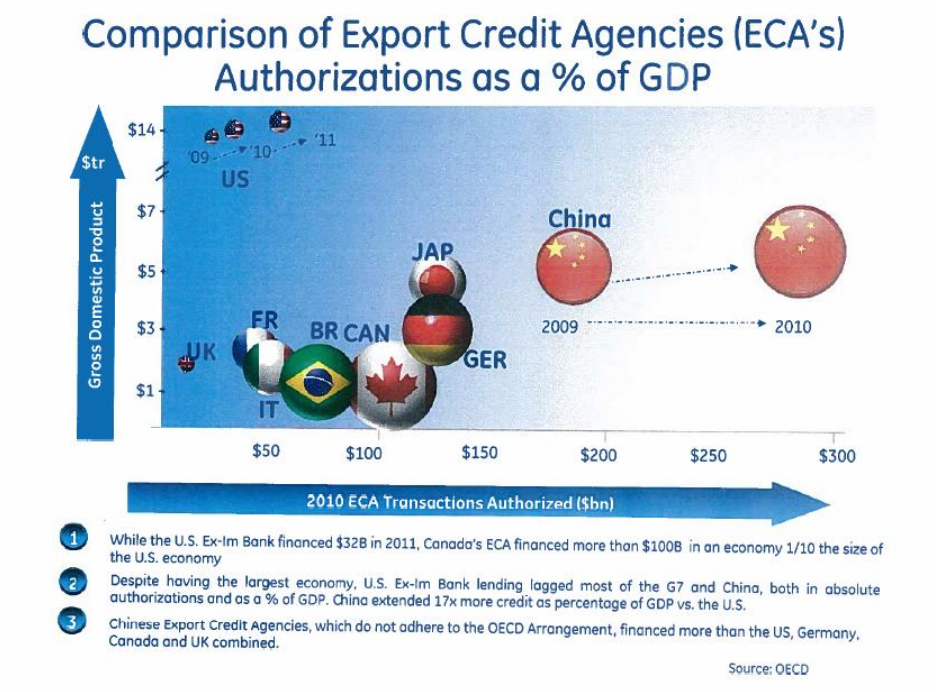
Finally, the questions raised by officially supported export credits for aircraft trade are, today limited to the current aircraft manufacturers and their nations, which are all members of the Arrangement and the Aircraft Sector Undertaking. With the expected entry in the international market of companies belonging to non-member nations, especially China and Russia, further thorny questions will emerge. In particular, the practices and comparison of ECAs will play a major role. This topic is addressed in the next section.

2.2 Comparison of Export Credit Agencies – Impact on International Trade

The Export Credit Agencies (ECAs) are the vehicles responsible to translate export credit policies (the Arrangement or others) into actual practice. Their operations are therefore of paramount importance in ensuring an international level playing field. However, the environment in which each ECA operates is different and the ECAs present diverging characteristics. This can potentially result in offering a different level of support to export finance, even if the actual conditions are compliant with the provisions of the Arrangement.

In this context, a detailed comparison of the features and practices of ECAs is key to understanding possible biases in international trade. As a first indication of potential implications, Figure 2.2 - 1 below illustrates the fact that ECAs present different patterns of authorizing export credits – China, not member of the Arrangement, appears to be supporting export credits to a much larger extent than other exporting nations such as the US and the UK. Also Canada, compared to the size of its economy, displays a trend of wider export support in relation to the size of its economy.

Figure 2.1.5-1 Comparison of Export Credit Agencies[243]



[243] OECD, 2011.

The topic of divergences among ECAs appears in Chapter 1.5, where selected ECAs were individually presented. Building on this basis, this Chapter aims at exploring the regulatory environment of key ECAs in more details and evaluate differences that have the potential to impact on ECAs' operations and, further on, on international trade. The various aspects are clustered into three categories:

- Ownership aspects
- Regulatory aspects
- Operational aspects.

As literature and analyses on the above aspects are pursued and publicized mainly in the US, the respective comparisons among ECAs are often US focused. Reports from the Government Accountability Office and from the US Eximbank itself are major sources of information.

2.2.1 Ownership aspects

Chapter 1.5 presents key characteristics of the major ECAs and clearly shows the variety of ownership options among ECAs, assigned with the tasks of managing officially supported export credits. Ownership schemes include for instance:

- private-owned company (e.g. COFACE)
- fully state-owned company (e.g. EDC)
- partially state-owned company (e.g. CESCE)
- independent government agency (e.g. US Eximbank)
- consortium of private companies (e.g. Hermes)
- department of a Ministry (e.g. ECGD)
- department of a state-owned company (e.g. BNDES-Exim)

Despite a convergence in the general task to manage officially supported export credits on behalf of their respective governments, the ownership scheme as such shows how governments perceive the role of their ECAs which, in turn, generates differences in the overall spirit of operations. The following aspects constitute direct or indirect reflections of the differences among ownership structures.

Mission

A fundamental characteristic of ECAs which impacts on their overall strategy and modus operandi in the longer term is their respective missions. Most ECAs include a clear mission statement in their constituting bylaws or other policy documents. The mission statement of each ECA is affected by the ownership structure on the one hand through the implied proximity of the government in export credits' topics and on the other hand through the role the ECA is called to undertake.

US Eximbank mission statement is clearly focused on job creation through exports in the context of competitiveness with other governments. It is implied that US Eximbank has a mission to be more competitive than other ECAs with the goal to generate more jobs in the US. This, despite the compliance to the provisions of the Arrangement, the goal of which is explicitly to level the playing field in officially supported export finance. As such, US Eximbank is closely monitoring the performance of other ECAs in order to maintain its level of competitiveness, which no other ECA is actually doing. In contrast to the US drive for competitiveness, Brazilian program[244] seeks to provide 'conditions equivalent to the international market'. Other ECAs do not focus on competitiveness or comparison to other international conditions offered on the market, but rather restrict their mission statement to export support lato sensu. For instance COFACE mission indicates 'with the aim of promoting and supporting French exports', CESCE mission mentions 'to facilitate the internationalization of the private sector' and Hermes mission states 'Promotes German exports'. The implication of such statements clearly demonstrate a different approach and spirit among ECAs, whereby some ECAs introvertly work to support their own industry, others are set to use export finance as a tool for achieving a better positioning of national industry on international markets.

The ECGD mission statement also focuses on facilitating UK exports and development however also defines a clear limitation under the stated aim 'to complement the private market'. The question of the ultimate role of ECAs is thereby raised. Under UK mission statement, ECGD may only provide officially supported export finance in the cases the private market is unable to offer suitable services. This clearly marks the ECGD as an insurer of last resort. Other ECAs such as US Eximbank and COFACE claim a similar role, however a limitation on their role is not

[244] BNDES -The BNDES Export Credit Division, 2013.

regulated. In particular, GAO[245] mentions that 'Ex-im's role as a lender of last resort is emphasized in its charter. It must report the purpose of each transaction it supports, either to provide financing where private sector financing is unavailable or to meet foreign competition.' In times of liquidity restrictions, it can be fairly assumed that ECAs take up more than a role of insurer of last resort, especially if one of the ECAs is initiating this approach. On the other side, other ECAs are more commercially oriented for instance EDC, entitled to extend export credits for a much wider array of export activities. The implication of the role and positioning of ECAs in that respect is quite crucial for international competition as eligible transactions may be different depending on the ECA and, thus, exporters of more favourable nations would be privileged by accessing officially supported finance in comparison with exporters from other nations. This may also explain the graph in the introduction of Chapter 2.2 above where the size of the UK export credit authorization in percentage of GDP is significantly smaller than the corresponding figure for Canada.

Governance

Governance issues include the nomination of a board of directors, the authorization levels approved and the transaction approval process and, as such, are directly affected by the ownership scheme. Generally, GAO[246] suggests that 'The ECAs that are managed by private companies, such as those in France and Germany, experience more direct political oversight, as their governments take a more direct role in approving transactions and can take policy considerations into account on an individual transaction basis.' This principle is clearly reflected when comparing the US Eximbank's approval process with the Hermes one: Eximbank requires a board approval for transactions above US$ 10 million compared with an interministerial committee combining representatives from four different ministries for approval of transactions above € 5 million in the case of Hermes. In the case of ECGD, the approval process is more streamlined as a dedicated ECGD subcommittee approves the transactions. EDC on the other side of the spectrum of governance options is managed by a board appointed by the Minister for International Trade consisting of representatives from the private sector, which suggests a modus operandi closer to the practices of the private market.

[245] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.

[246] GAO (United States General Accounting Office) , 2012, U.S. Export-Import Bank Actions Needed to Promote Competitiveness and International Cooperation.

Another key governance aspect differentiating ECAs is the total level of authorizations allowed. In particular, the US Eximbank has a yearly ceiling approved by the White House whereas other ECAs have no restrictions. This has led to a constant debate in the US on the appropriate level of authorization and, beyond the level of authorization itself, on the question of the existence of the US Eximbank overall. Opponents to the practice of officially supported export credits and, thus, to the Eximbank, are not rare and lead by the Chairman of the House Financial Services Committee Jeb Hensarling. Hensarling, together with a group of Republicans, is known as having the target to 'kill' the US Eximbank. Thus, Hensarling promoted the blocking of a bill to allow re-authorization of the US Eximbank in 2015. The consequence was the total stop of authorizations of new export credits by the US Eximbank starting July 1st, despite active lobbying against such blocking by companies such as Boeing, General Electric and Caterpillar. US Eximbank ability to extend export credits was restored on December 4th, 2015, after the US House of Representatives used a rare legislative procedure to bypass the blocking from the Finance Committee. In the period between July 1st and December 4th, the US Eximbank was therefore pursuing only existing business without extending any new export credits, demonstrating the implications of governance on the competition between ECAs.

Differences in governance as described above have possibly a limited impact on the overall practice of ECAs, as such cases of limited ability to extend official export credits are exceptional. On the transaction approval side, the implications are mainly focused on the speed of the approval process, the overall autonomy of transactions approval and flexibility in adjusting to individual situation. Thereby, the eligibility rather than the conditions of transactions would thus be at stake.

However, governance issues are not limited to the actual approval of transactions and affect the entire life-cycle of the transactions until repayments of funds or closing of the exposure. ECAs are responsible to decide on transaction and offered conditions, but also to follow-up the progress of implementation of individual transactions. ECAs are thus liable for ensuring appropriate payments from customers, especially in the cases of loans, and for evaluating cases of default and amounts to be reimbursed. Little is made public on those aspects of governance and certainly ECAs annual reports remain blurry in that respect. The widespread assumption is that the conditions extended for individual transactions are fully complied with. However, indications that this is not necessarily true have come to public awareness. For instance, EDC was allegedly found to have in some cases a very poor track record for payments due by exporters. Mark Milke [247] covers two

[247] Milke, M., 2010. Aerospace subsidies -The latest "distortion of competition". Fraser Forum, 12-13 March 2010.

cases affecting the aerospace sector, one with Bombardier and one with Pratt & Whitney. In the first case, Milke reports that 'authorized assistance to Bombardier from April 1, 1982 to May 12, 2009 amounted to $ 750,2 million; it is not clear how much of that had been repaid as of the latter date.' He mentions that 'Bombardier has never publicly disclosed its repayment record' and he found that 'Bombardier had repaid just $ 188 million of the assistance as of 2005.' In the case of Pratt & Whitney, the company told that 'it had received $ 1,4 billion from various Industry Canada programs since 1982 and that $ 325 million in royalties had been paid to the federal government.' Lacking a clear position from either EDC or the respective companies on the above claims, it would be delicate to make any judgement on a potential infringement of rules. Nevertheless, the two cases clearly raise the issue of governance not only during the actual decision-making on export credits but also in the period of implementation of the individual arrangements. To that extent, a public-owned ECA may feel a higher level of ‘flexibility’ because the control of a government entity over another government entity may be directed by the government’s wider policies in comparison with a government entity monitoring a private entity. Also, it may be more convenient for a government to 'merge' financial data thus allowing less public transparency of its books, as demonstrated by the fact that Milke required to go through a formal Access to Information request in order to find the above data. In summary, the cases above evidence that a government, through its ECA, has granted a benefit to a local company by accepting the non-repayment of money due. This, in turn, can be seen as a prohibited export subsidy infringing international agreements and biasing international competition. Noteworthy, the bias that has presumably happened in international competition originated from officially supported export credits and occurred more than a decade after the grant of export credits and the actual export sales.

Transparency, accountability, financial results

The previous paragraph hints at the fact that the ownership scheme as well as the governance of ECAs may have an impact on the transparency of their activities and results. A fact is certain, that in some nations, detailed information on ECA activities are scarce. This is certainly true for non-OECD nations such as China, however also OECD ECAs are often silent on details of their operations. Even for ECAs that adopt a practice of sharing details of their individual transactions, the conditions offered remain confidential, thus preventing a direct comparison among ECAs. Taking into account that both state-owned ECAs such as the US Eximbank and private ones such as Hermes are open to share a significant amount of information on their respective activities, it can be suggested that the divide between 'sharing' and 'non-sharing' ECAs is not related to the

public/private aspect of the ownership. On the contrary, ECAs that form part of a wider group such as CESCE or BNDES show a lower propensity to disclose information, which would imply that the ownership model selected by governments can also affect transparency. In any event, it can be assumed that, in a majority of cases, the level of transparency is following government guidance.

Transparency of operations and financial results is a fundamental tool to ensure a level playing field among ECAs for two main reasons: first to allow checking that the ECAs are not breaching their commitments or other regulations and second to evaluate whether ECAs are offering additional products, not covered by such commitments or regulations. The case of Canada presented in the previous paragraph is a clear example of a possible infringement leading to a bias of competition by giving a de facto benefit to the Canadian contender in international trade. Possibly other cases would emerge if further details of ECAs' operations were known. Transparency in ECA operations has since long been identified as a topic for discussion and already some measures have been taken to improve the situation. Trade Finance[248] reports that 'The European Parliament has adopted a proposal to transfer the OECD arrangement into EU law, as it moves to make export credit agencies more transparent.' and continues 'The amendments presented to the Council are fourfold: the ECAs of member states must report annually on their activities, all support must adhere to the EU's sustainability agenda, they must clarify how they calculate environmental risk and pricing , and they must publish all off-balance sheet transactions in order to declare all their assets and liabilities.' Such developments are welcome and it remains to be seen how they will be implemented in practice. It would bring additional positive results if adopted by all ECAs, beyond the EU.

In terms of finance offered by ECAs and not covered by the OECD Arrangement, the testimony of Eric Siegel[249], hints at alternative financing means: 'The Canada Account is separate from EDC's corporate account, and the decision to use these funds rests with the federal Cabinet, but the funds are administered by EDC. This model is unique to Canada and allows the government to take on certain transactions where the amount or the risk is higher than what EDC would normally take on its own books. The Canada Account has played a strategic role in the development of Canada's aerospace industry.' US Eximbank names such alternative financing means 'unregulated', not falling under the OECD Arrangement. The total volume of such unregulated export finance for OECD countries was in 2012 equivalent to the volume of authorizations

[248] Trade Finance, 18 April 2011.
[249] President and CEO of EDC.

extended under the OECD Arrangement, with a significant growing trend (+70% from 2011 to 2012 versus +10% for regulated financing). They are categorized in untied aid, market windows activities and overseas investment support provided by the OECD ECAs. The development of such alternative financing means has been amplifying since the beginning of the financial crisis in 2008, also due to the market liquidity constraints and the adjusted role that the ECAs were called, or forced, to play. As a consequence, US Eximbank comes to the conclusion that 'there continues to be a significant amount of financing in the world that could – in any individual purchase or project – be an alternative source of funds use to source goods' and specifies 'pursuant to the 'national interest' of the provider.'

Type of products offered

The ECAs ownership model has further on implications on the type of products they offer to their customer base. It is recognized that the product mix is not only an issue purely deriving from ownership aspects but also from policies and regulations. In any event, decision on the mix of products extended by the ECAs may lead to detrimental effects on the competition among ECAs. ECAs extend, by definition, financial products covering medium and long term support as covered by the Arrangement. Some ECAs offer also short term solutions and, in some cases, ECAs operate as commercial entities in direct competition with the private sector. Finally, some ECAs offer medium and long term financial products not covered by the Arrangement, as presented above. The consequences of a different product mix concern mainly the WTO rule on ECAs long term profitability, the accessibility and attractiveness to customers for broader product mixes and ECAs liquidity and their ability to adapt to a changing environment. Whereas European ECAs are constrained to medium and long term financial support, other ECAs such as US Eximbank and EDC offer short term solutions as well.

A first implication of different product mixes relates to WTO rule indicating that 'premium fees should not be inadequate to cover long-term operating costs and losses.' As indicated in the introduction, ECAs seem to be reluctant to disclose detailed information on their operations. The most open ECAs show their transactions, however do not clearly indicate the conditions and cash flows related to each transaction separately. The condition described above is thus difficult to check per transaction. The only means to assess compliance with this condition consists in analysing the profit and loss statements of ECAs. As the profit and loss statements refer to the entire group of transactions undertaken by an ECA, this implies that, on average, more profitable transactions may be compensating loss-making ones. In the event ECAs are only entitled to offer

medium and long term products, covered under the Arrangement, the compensating mechanism will very unlikely be able to support loss-making transactions, as the profit margins of profit making ones are extremely limited – if existing at all. In the event of ECAs extending short term and commercial products in addition to products covered under the Arrangement, it can be argued that profit margins of the former may support possible losses that the latter may generate. Despite the relatively theoretical aspect of the mechanism explained above, it may however allow ECAs more flexibility either in the conditions extended – that other ECAs have the opportunity to match – or in the actual implementation of individual transactions such as the case of EDC above.

An additional aspect to consider in the frame of the different product mixes offered by ECAs is the accessibility and attractiveness to their customers. A wider product mix means that a larger number of exporters would be in regular contact with their ECA thereby understanding their functioning and the opportunities offered for medium and long term financing. Also ECAs with larger product portfolios can address more global needs of exporters, short term, long term and others. Such a closer cooperation between exporters and their respective ECA may lead to situations where a transaction would be both eligible for officially supported export credits and actually pursued in one country but either not eligible or not pursued in another, thereby granting one contender an advantage over the contender from another nation.

Finally, liquidity issues and the ability of ECAs to adapt to a changing environment is also affected by a divergent product offering. Especially in the wake of the recent financial crisis and the liquidity squeeze, the competitiveness of ECAs has been affected differently depending on their product portfolio. US Eximbank report[250] comes to a clear conclusion 'the European sovereign debt crisis has created a very un-level playing field among OECD ECAs.' This has to do on the one side with the availability of direct lending and on the other with the evolving sovereign debt ratings especially with the European ECAs. Reference to the direct lending, the US Eximbank report indicates: 'ECAs with direct loan capacity are more agile and can more readily adjust to the new financing environment. Those ECAs that can lend in dollars at CIRR flat without capacity constraints have a significant competitive advantage over all other ECAs, particularly on large, long-term non-aircraft cases (e.g. project finance).' This is due to the limited liquidity and related unattractive conditions that commercial banks can extend in the time of the financial crisis. ECAs with direct lending tools and without capacity restrictions can partially cover this need, whereas the other ECAs will not be in a position to do so, thereby exporters from one nation would be privileged compared to the ones from other nations. Reference to the issue of sovereign debt

[250] Annual Report 2013. Export-Import Bank of the United States.

ratings, the ratings of some European nations have been downgraded with resulting higher financing costs. ECAs that offer capital market funding have the ability to offer more attractive conditions, even if marginally.

2.2.2 Regulatory aspects

Ownership and regulatory aspects are necessarily tightly interlinked and somehow overlap with each other, as for instance in terms of type of products offered, covered in the previous paragraph.

This paragraph aims at highlighting divergences among ECAs of regulatory aspects ie of such aspects that, on one side, are established by the respective governments either within the formal documents establishing the ECAs or as independent government decisions on the rules applicable to the ECAs and, on the other side, are formally and explicitly formulated in written.

The aspects covered below represent the main areas of divergence among ECAs, which may have a significant impact on the competition on international markets.

Foreign content considerations

The US Government Accountability Office's report states that: 'For many years, eligibility and cover criteria for foreign content have been identified by many exporters as their number one concern.' and continues 'Thus, exporters have most frequently identified foreign content as an area where ECA policies and practices substantially diverge as they are driven by the political and economic environment in which each ECA operates.'

The main point of divergence among ECAs is the level of support offered in relation to the share of the exported products manufactured in the country, thus in support of the domestic economy. In principle, all ECAs have as an intrinsic or explicit interest to support domestic economy and job sustainment and, consequently, their activity which is financed by taxpayers' money should benefit local companies. Nevertheless, the ECAs follow different rules or paths to achieve this, and the divergences can be significant. For instance US Eximbank allows for a full coverage of the exported goods only when US content exceeds 85% of the product value, otherwise it covers only the share of the exports related to the US content. In contrast, Canada's EDC has no given

linkage between domestic content and level of support provided. Also, France's COFACE considers a limit of 20% domestic content, although this limit can also be bypassed.

Other regulatory aspects on domestic content and the consequent level of support are also diverging among ECAs. For instance, the assembly activity of a product to be exported renders this product domestic and thereby eligible for support as a domestic product in most ECA nations. In the case of US, the local assembly activity does account value-wise in terms of domestic content, however there is no further differentiation on the domestic content rule and such product will only be supported up to the level of the US share. Furthermore, costs incurred in the buyer's country are differently accounted for in terms of official support. US accepts a cap of 30% that can be supported in addition to the US content, whereas other ECAs do not apply a different policy in the case where foreign content is generated in the buyer's country or not.

The divergent rules on foreign vs domestic content may generate a bias of international competition from two distinct perspectives. The first affects the supply chain of the products exported, the second the actual competition for the export deal per se.

The supply chain is affected in various manners. Firstly, a manufacturer of exportable goods, with an interest in officially supported export credits, will seek to maximize its domestic content and, thus, may be inclined to privilege a domestic company compared to a foreign company for the provision of a given subcomponent. This means that, even if marginally, domestic companies would have a higher chance than foreign companies to receive a corresponding contract, which constitutes a bias in international competition. Additionally, if only the criteria of official support is considered, the level of motivation to identify a domestic supplier will be different from ECA nation to ECA nation, as the impact on the level of official support achievable would vary among ECAs. Furthermore, assuming similar rules between ECAs on the level of support offered in relation to domestic content, the nation in which a larger share of the supply chain may be located would have a benefit compared to a nation in which fewer subcomponents are produced. This implicitly provides a benefit to more industrialized nations that are able to provide nationally a combined higher value share of the products to be exported.

The competition regarding the export deal per se is affected due to the different levels of export credits granted by the various ECAs. For instance a US exporter of a good manufactured only at 50% in the US would be limited to 50% official support, whereas a competitor in France with a

domestic share of 50% could benefit from export credits related to the 100% of the value of the goods.

Naturally, the effects described above may, for both perspectives, be limited in case of cooperation among ECAs for supporting the export credits. However, such cooperation is not always feasible or practical and, additionally, in a globalized economy with a scattered supply chain, the share of each nation in the manufacture of a good may be very limited thus not qualifying for official support.

Despite a clear theoretical description of the bias of competition due to foreign content considerations, the practical impact on competition today seems to be limited. The US Government Accountability Office mentions that 'a little more than 70% of the cases (or 90+ deals) with foreign content were eligible for maximum 85% support.' However, with the continuation of globalization combined with the development of new industrial nations and an always higher degree of specialization of companies, the issue of foreign content may generate more important competition biases in the future. In particular, for highly sophisticated products such as aircraft, it can be assumed that the international supply chain for the major exporters will further converge, outside the national boundaries of the manufacturers. Therefore, the domestic content can be foreseen to decrease, increasing in parallel the bias in competition from foreign content considerations.

Small and Medium Enterprises (SMEs)

An OECD report on 'Officially-supported export credits and small exporters'[251] notes that 'Many OECD countries have introduced into their official export credit systems special schemes and services provided through export credit agencies to assist smaller exporters.' as a response to 'Complaints from smaller firms [including] burdensome procedures and paperwork, the high cost and complexity of policies, the lack of adequate risk coverage, insufficient export credits, and the need generally for more support for small exporters.' For instance, US Eximbank has been required by the US Congress to 'make available a certain percentage of of its export finance for small business.'[252] which was set at 20% since 2002. COFACE was required by the French Ministry of Finance to support 10.000 small and mid-sized exporters by 2012. Canada's EDC has

[251] OECD website, 15 February 2013.
[252] GAO (United States General Accounting Office) (2010), Observations on the Export-Import Bank's Efforts to Achieve U.S. Policy Goals. GAO-10-1069T, Sept 29.

committed itself and has also set to practice to support as many SMEs as possible. Other ECAs such as ECGD do have broad directives to support SMEs without quantitative targets

The means used by the respective ECAs to increase the support provided to SMEs differ widely. As per the OECD report, 'Some export agencies have special units or teams devoted to small exporters. For example, the US Eximbank has the *Small and New Business Group.* […] EDC of Canada has established two teams to support small firms'. Hermes from Germany has established a dedicated hotline for SMEs, whereas other ECAs such as UK's ECGD are following a more promotional approach towards SMEs including road shows, regional seminars and distribution of information letters and documentation. Many of such ECAs have also 'introduced streamlined or simplified application and review procedures' or similar 'fast track system for processing applications.' and have designed special products for SMEs such as Small Buyer Credits by Hermes, the Recourse Indemnity Policy in the UK and special Pre-shipment Financing Guarantees offered by EDC.

'The share and type of export credits extended to SME exporters varies across OECD countries, largely due to differing rules.'[253] In fact, the broader situation in the various nations in terms of how to address SMEs in the frame of officially supported export credits may raise concerns for international competition:

- The quantity of SMEs / exporting SMEs as a share of the total number of a nation's companies widely varies from one nation to another, with larger and more industrialized nations having proportionally less SMEs than smaller countries. This fact, by itself, means that official support is naturally more focused on SMEs in the nations with a larger share of them compared to nations with proportionally less SMEs. It can be assumed that support to SMEs will thus be more effective in such 'SME-rich' countries and that, by comparison, SMEs in more industrialized nations may be less able to access the same level of official support in terms of credits granted, costs for applying and procedural delays.
- The definition of small exporters (or exporting SMEs) is different from country to country. As such, a US exporting SME needs to have a maximum number of 500 employees whereas the Netherlands limit the number to 99 employees and nations as France or Spain do not define exporting SMEs at all. Under such situation, the access to specific SMEs' products for export credits is different from one nation to another,

[253] OECD Report

thereby possibly granting special treatment to the SME of one nation compared to the SME of another e.g. in terms of products or procedure.

- There is no harmonized approach with respect to special facilitation for SMEs across nations. Naturally, the ECA nations participating to the Arrangement need to follow the respective Arrangement rules for mid and long term official support. Beyond the provisions of the Arrangement, though, each ECA seems to be treating SMEs differently. For example, a UK SME may benefit from the Recourse Indemnity Policy providing 'compensation to ECGD where an exporter has defaulted under his contract and the buyer may default on the loan.' whereas a competing German SME could use the Small Buyers Credits scheme, allowing cover up to € 5 million in maximum 4 days.
- The special facilitation to SMEs may impact the ability of two exporters of different size to compete on a level playing field. It is certainly intuitive that if SMEs have access to specific benefits that are not available to larger companies either from the same nation or from a different one, such SMEs may be privileged for specific international export deals.

The above elements are examples that show that the treatment of SMEs in terms of receiving officially supported export credits differ substantially from one ECA nation to another. The different treatment, although falling under the Arrangement rules, may place such SMEs in a non-level playing field on the international markets as a result of possibly: a different access to officially supported credits, divergent costs for applying and following-up, longer processing delays, a different set of benefits and products and, beyond competition among SMEs, a possibly uneven treatment compared to large companies. Despite the divergences invoked above, the application of the provisions of the Arrangement in the wider international context should reduce potential impact on competition.

Finally, the impact of the above considerations in the context of the aerospace industry are viewed as marginal, as international competition is driven by large companies.

Other regulatory divergences

In addition to the main regulatory parameters able to bias competition as presented above, a number of other regulatory aspects have also the potential to distort the level playing field of

ECAs on the international markets. Selected aspects, mainly affecting US exports, are briefly evaluated in the next paragraphs.

- Military products. Some ECAs such as the US Eximbank are clearly banned from supporting the export of military products, whereas others such as UK's ECGD have no apparent restrictions and actually do finance military deals. Nevertheless, military export nations usually have other means for supporting the financing of exports, beyond the involvement of their ECAs, for instance through FMS arrangements in the case of the US. Due to the very specific functioning of the international military market, often bypassing competition regulations, this aspect will not be further taken into consideration in this analysis.

- US Flag shipping requirements. This is a very specific rule applicable today to the US Eximbank only. It forces US exporters to use US-flag vessels for transporting the goods to their destination, unless such US-flag vessels are not available as required for the corresponding transportation. On the one side, this rule implies that the costs of transportation of the goods can be covered by US Eximbank support, as part of the US content. On the other side, it clearly biases competition in terms of both the selection of cargo service and the price of the goods sold, as this requirement leads to price increases and possible delays. US exporters report that this rules does have a negative impact on their international competitiveness. However, large civil aircraft are flown rather than shipped and, consequently, for this share of ECAs' activity, the US Flag shipping requirement has no impact on competition.

- Environmental policy. Further to public concerns over the environmental impact of ECA supported projects, the US followed by other nations established a dedicated environmental policy, which was eventually incorporated in the Arrangement in 2003 and further revised until 2012. Notwithstanding, the US Eximbank is the sole ECA following a dedicated carbon policy. This policy aims at evaluating the carbon impact of officially supported projects and at developing means to promote low carbon emission activities. Despite the fair objectives of such carbon policy, it does put US exporters at a disadvantageous competitive position due to the delays and the additional administrative burden generated by the carbon impact analysis. On a broader scope, the US have achieved that an environmental policy is incorporated in the Arrangement, however the US Eximbank one is more restrictive than the ones of

other ECAs leading to subsequent impact on competition. In particular, the US views that any environmental analysis needs to be carried out by the ECA whereas other ECAs task the exporters to do so.

- Currency risks. Currency considerations are not regulated by the Arrangement and therefore each ECA can apply its own policy. That is, the international transaction may be quoted in the domestic currency, in which case currency risks are nil, another hard currency such as the US dollar, the euro and the yen, or a soft currency such as the ones from emerging nations. Currency fluctuations can be taken in charge by some ECAs, however often by adjusting the transaction risk premium. Nevertheless, some ECAs such as the US Eximbank do not accept currency exchange risks, neither for hard nor for soft currencies. Consequently, this puts additional pressure on the exporters to undertake the foreign currency risk, as the officially supported export credits are denominated in a different currency than the actual export deal. This places exporters of such nations at disadvantage compared with the ones from nations accepting foreign exchange risks. In terms of impact, the US Government Accountability Office estimates that more than 96% of aircraft-related official support provided by OECD nations were denominated in US-dollar whereby only about half of non-aircraft transactions.

- Economic impact. This is a requirement applicable to the US Eximbank only. According to the bank's Charter, all applications for export credits need to undergo an economic impact review. This review aims at establishing whether the transaction to be supported may have an adverse economic effect on other US business interests. Although a large portion of applications only undergo a screening, some of the transactions, in particular those related to export of capital equipment, are analysed in detail. A negative economic impact analysis may lead to a decision to deny official support the specific transaction, thus putting foreign companies in a better competitive position for the specific export deal. Economic impact analysis has, for instance, affected the export of Boeing aircraft to the UAE airliner Emirates under the argumentation that such export supported by official export credits would negatively affect the business of Delta airlines as a consequence of the preferential conditions Emirates had access to. Furthermore, the economic impact analysis leads to heavier administrative procedure and corresponding delays in officially supported export credits, leading to corresponding implications for the applying exporter.

These additional requirements, regulations or guidance on ECAs, mainly focusing to the US Eximbank, indicate that several regulatory aspects are far from being aligned across ECAs. This recognisably creates biases in the treatment of exporters in terms of officially supported export credits, distorts the competition on international markets and induces a competition among ECAs. It is thus not surprizing that the US Government Accountability Office is periodically evaluating the competitive positioning of the Eximbank compared to other ECAs and puts forward recommendations on how to improve the US competitiveness in the area of officially supported export credits. Such practice may lead to the perception that, despite the provisions of the Arrangement, competition among ECAs continues with the aim to privilege national companies on international deals.

2.2.3 Operational aspects

Paragraphs 2.2.1 and 2.2.2 above analyze in depth the formal aspects of the context in which ECAs operate i.e. the ownership and the regulatory aspects, as well as their potential impact on international competition.

An important aspect in evaluating divergences between ECAs is also the 'how' the ECAs apply the formal aspects and, in fact, how they operate. Indeed, a divergent modus operandi may, by itself, generate trade distortion even under similar formal aspects. Brynildsen[254]indicates that 'Not least monitoring and reporting mechanisms are insufficient to ensure duly implementation of the numerous guidelines. Concerns about non-compliance have also been echoed by sources within ECAs who fear that weak reporting requirements are hindering the actual implementation of the guidelines.'

With the objective to shed light on the operational characteristics of ECAs, the following paragraphs attempt to analyse specific angles, which were selected for their relevance in the context of international competition.

It is noted that operational considerations, although important, are difficult to be assessed as no formal documentation or evidence can exist. The analysis is, thus, rather based on facts that are

[254] Brynildsen, O.S., 2011. Exporting goods or exporting debts? Eurodad.

interpreted in order to reach corresponding conclusions. Therefore, the paragraphs below are subject to further debate. Notwithstanding, the overall conclusion, independently from any potential points of contention, remains valid in the wider frame of this thesis.

Promotion and role of export credits in national exports

Officially supported export credits are put at the service of all exporters (unless otherwise specified by the Arrangement) and all exporters have access and the chance to use such services. However, statistical data indicate that the role of officially supported export credits in the overall export activity of a nation varies substantially among ECAs.

As indication thereof, the following steps have been taken:

- First, the overall value of export credits granted in a specific year is put in relation to the total volume of exports for the individual nations, thereby showing the overall role of export credits in the export activity
- Second, the value of export credits granted in a specific year and in specific sectors is put in relation to the corresponding export volumes for such sectors, with the objective to indicate the role of export credits in sectors typically using ECAs for exports

Figure 2.2.3-1 Ratio of New Official EC to National Exports

Country	Exports 2011 (US$ billion)	New Official Export Credits (US$ billion)	Ratio (%)
Brazil	*256.0*	*4.8*	*1.88*
Canada	452.1	1.7	0.38
China	*1,899.2*	*48.5*	*2.55*
France	584.7	12.2	2.09
Germany	1,477.0	20.3	1.37
India	*302.9*	*11.4*	*3.76*
Italy	523.3	8.6	1.64
Japan	822.6	6.0	0.73
UK	478.5	3.8	0.79
US	1,480.3	21.4	1.45

The results presented in Figure 2.2.3 – 1 above show that the level of officially supported export credits in relation to the total exports of each nation range widely among industrialized nations, however they are generally maintained at a level below 2%. BRIC countries such as China or India clearly show the additional resources used by those nations to support exports with ratios exceeding those of industrial nations. As per Hufbauer[255] , who conducted a similar calculation for the average of the years 2005-2008, the industrial nations remain below 2% whereas Brazil, China and India largely exceed the 3% mark.

In terms of sector diversification and focus on the aerospace industry, Figure 2.2.3 - 1 below summarizes the performance of individual ECAs.

Figure 2.2.3-2 Diversification and focus on Aerospace per selected ECA

ECA	Nber of transactions supported (2011)	Nber of companies supported (2011)	Sectors diversification	Focus on Aerospace
US Eximbank	68	39	high	main focus
COFACE	30 w/o Airbus	17	medium	main focus
Hermes	46	27	high	strong focus
ECGD	42	18	medium	main focus
EDC	823	7787	high	limited
CESCE	n/a	n/a	medium	limited
BNDES	53	n/a	medium	main focus
Russia Eximbank	few	Limited	low	insignificant
China Eximbank	large	Large	high	insignificant

Despite an overall similar magnitude of official support to exports among industrialized nations, the diversification of exporters is different between nations. A common characteristic among aircraft producing nations is a clear focus on the aerospace industry. The large majority of transactions in France, UK, US and Brazil relate to aircraft exports, which is also large in the case of Germany and Canada.

Significantly, 79% of UK officially supported export credits total value relate to Airbus sales for more than half of the total number of transactions. Each of the other 17 companies were granted export credits in only one case over the year (except for one company, reported with two

[255] Hufbauer, G. and Rodriguez, R., 2001. The Ex-Im Bank in the 21st Century – A New Approach? (Special Report, 14). Institute for International Economics.

transactions). The total low percentage of exports officially supported combined with the large predominance of one specific company (Airbus) shows that officially supported export credits are not widely promoted or not widely used in other sectors.

In the US, 75% of the total value of medium and long-term export credits representing 2/3rds of transactions go to Boeing. The diversification is however much larger than in the UK as a more considerable number of companies benefit from export credits in a much diversified number of industrial sectors. It should be noted that Eximbank has a target of supporting SMEs to a minimum of 20% of the total export credits value, which implies a higher effort from Eximbank to promote officially supported export credits across the economy.

60% of the total value of export credits granted were in support of Airbus exports in France. Apart from the aerospace sector, the fields of power plants and of industrial constructions are also strongly supported. The 3 companies with the highest value of support cover, combined, more than 80% of the total value of export credits, with 14 companies benefitting from the remaining 20%.

In the case of Germany, aircraft exports are traditionally at the top of the list of sectors financed despite the fact that in 2011 the sector of ship took the top position due to a specific large contract. Aircraft exports represent some 15% of the total value of export credits granted, with a number of other sectors being strongly supported as well such as ship building, industrial constructions, industrial equipment and machines. A much larger number of companies have access to officially supported export credits and the diversification among sectors shows that officially supported export credits are widely known and used.

Canada shows a different presence in export finance due to the fact that EDC covers other types of export credits beyond officially supported medium- and long-term. In particular, EDC grants also short-term credits and finances as well Canadian national transactions. From more than 800 transactions for exports supported by EDC, less than 100 are assumed to be related to medium and long-term support, eligible for official support. Thereby, EDC covers a very extensive network of companies, in particular SMEs, which have an easy access to export credits. From officially supported companies, Bombardier certainly plays a major role in terms of value, whereby with a relatively small share of the overall transactions.

Available information on China officially supported export credit activity is limited, however the values spent in official support would suggest that the number of beneficiaries and the diversification of sectors is large. Aircraft industry is not mature and thus supported exports in this area are insignificant. The same applies in the case of Russia. Brazil is reporting limited data on its export credits, in which it appears that a few sectors are mainly the focus of export credits, from which a large number of transactions focus on Embraer exports. Finally, Spain does not provide detailed information on individual transactions.

The analysis above shows a different approach and a different presence of ECAs in the national economies. Different origins can be put forward as the source of this effect:

- the structure of the national economies justifies a different role of each national ECA,
- there are restrictions imposed on the operations of the ECAs such as limitations of the total value granted per year or a target of SMEs as a share of total
- some ECAs are more active to promote the support they can offer or are more present in the operational practice of exporters.

The first and second cases above represent external factors to the operations of the ECAs and are, thus, covered in previous paragraphs. The third case would, however, suggest a different level of pro-activity from some ECAs to promote their services to potential exporters. This is in particular the case of Germany and Canada, for different reasons each. Both nations do display a higher level of diversification of their customer base and sectors of involvement. This may, in turn, imply that their national exporters have a higher likelihood to have access to ECA services and, thus, to benefit from officially supported export credits whereas possible competitors from other nations may not. For instance a Canadian exporter in the area of timber processing machinery would have a higher likelihood to be informed, access and request support from EDC than a potential UK competitor from, respectively, ECGD.

This argumentation is further backed by the fact that specific sectors are differently supported in terms of export credits. The aircraft sector displays a certain stability, where the ratio of support level vs export value in the sector is across the affected ECAs in the order of some 20%. In other sectors, e.g. trains and related equipment, this ratio ranges between 0% in the case of some 4,8B$ exports from Germany to some 18% related to US$ 3,19 billion exports and to more than 36% in the case of France.

Naturally, it is unreasonable to assume that e.g. German companies in the train business were unaware of or had no access to officially supported export credits, and the above results may simply reflect a different product range in the national economies which might not be eligible for official support. Available data today cannot lead to conclusive results on the topic of ECAs' attitude and a deeper analysis is required to better understand a possible different attitude across ECAs in terms of supporting different sectors. However, the preliminary results presented above clearly hint at a different level of support and, in some cases, biasing attitude of ECAs with respect to supporting different sectors. This phenomenon might be even more present when comparing ECAs from major exporting nations compared to smaller countries with a weaker role of the national ECA in the export business. In any event, the analysis of this Chapter renders irrefutable the fact that major aerospace nations focus by and large on supporting the export finance of their aerospace exports.

Processing, applying and related costs

Comparing ECAs operations and the respective businesses they support brings up the issue of accessibility to the ECAs services as well as their performance in terms of time and costs. This has already been briefly addressed above, therefore the focus in this paragraph will be placed on evaluating ECAs geographical coverage and resources working on officially supported export credits as well as on the time and costs of ECAs operations.

The geographical coverage of ECAs varies substantially due to a number of factors such as:

- offered services only focusing on officially supported export credits or wider
- ownership structure of ECA
- geographical spread of in-country industrial activity
- size of supported export business.

Despite the fact that harmonized information on those topics is not publically available, available data show that ECAs have a different presence and geographical approach, in-country and internationally. For instance UK's ECGD has only offices in London and a small team supporting export business, whereas COFACE is spread across France, employs some 4.600 people and features offices in 66 other countries. Brazil's BNDES, being a bank, is present all over Brazil, as is EDC in Canada. Hermes is also international with direct presence or through joint ventures in more than 50 nations and 6.000 employees.

Certain trends can be derived through common sense. For instance, a limited in size and presence ECGD can certainly not support as many companies as an international COFACE, leading to lower ratio of supported exports vs total exports for the UK. A centralized ECA in Germany seems to be supporting exports in a diversified number of sectors for companies established across German territory. EDC, geographically very present, also supports a wide array of sectors and companies. COFACE is internationally more present than EDC but seems to be supporting a more limited number of sectors and companies. BNDES, also being apparently very accessible, seems to focus on a limited number of sectors in terms of official support.

Similarly with the lack of information of the organizational aspects of some ECAs, little information is only available on costs and performance issues. The question is two-fold: whether the processing time has an impact on the availability of officially supported export credits across countries and whether the costs borne by the exporters for applying and processing requests for officially supported export credits may provide benefits to some vs other companies, nationally and internationally.

In terms of processing time, it can be argued that the processes and specific time lines foreseen in the Arrangement under Chapter IV Procedures leave only little room for a bias. It would appear unreasonable that, in the frame of the Arrangement, a company from a specific nation would be penalized in an international competition due e.g. to a long response time from its national ECA. International literature remains silent on this point, which may lead to believe that no issues are raised by processing performance.

On the cost side, the impact may be more significant. Assuming the costs for applying and processing requests for officially supported export credits are the same for a specific export opportunity in one country and assuming the entire costs are included in the export opportunity business case, then two companies from a same nation would have no bias in terms of this specific opportunity. Naturally, the effort put into preparing the application may be significantly different in case of an SME and of a large corporation compared to their respective turnovers. However under the assumption that the costs are all covered in the offered price, there should be no bias towards the end customer.

The question arises for companies from different nations. The processing costs of an application in a small nation with an ECA focusing on national SMEs would be different than the costs of a larger ECA in a nation with large corporations. In such case, an SME of one nation compared to a

corporation of another nation may have an advantage in terms of costs of the officially supported export credits and, consequently, a potential benefit in terms of price offered for a specific export opportunity. Also, different labour costs across nations could also lead to a possible differentiation of price offered in an international tender to the end customer. Despite this theoretical construction, lack of information on costs of the administrative process of officially supported export credits does not allow to draw any conclusions on the real existence of a bias and on the actual quantitative impact of such bias. However, considering the large volumes of exports typically involved in medium and long-term official support, any processing costs and divergences between nations are seen as marginal and potential resulting biases too small to affect the decision-making of an international customer.

2.2.4 Findings

This section explored in detail ownership, regulatory and operational aspects of ECAs to draw conclusions on whether the different national environments as well as the regulations guiding the functioning of ECAs may have distorting effects on international trade.

It was shown that, on the ownership side, the vision, role and mandate given to the ECAs by their respective nations may lead to divergent considerations on export finance with potential implications on international trade. In particular, it was shown that the ECAs may be assigned different roles and missions in their respective environments with,a resulting different attitude with respect to the type of exports that are officially supported.

On the regulatory side, clear evidence was brought that national rules may diverge from country to country. Some divergent aspects, such as restrictions applied onto some ECAs vs others, do limit the benefits that can be granted to their respective national companies thus privileging other nations' exporters in a specific market. Such regulatory aspects are certainly biasing the level playing field in international competition.

Finally, operational considerations have proven extremely difficult to assess, mainly due to a general lack of information on the operational practices of the various ECAs. In general, operational aspects related to ECAs from participating nations are aligned due to the provisions of the Arrangement. Nonetheless, from limited information available, it can be hinted that the practices of some ECAs are stretching the perimeter of applicability of the Arrangement, leading

to potential distorting effects. Such cases, that certainly exist, are seen as limited and with a marginal potential bias in the results of international competition.

Taking the overall outcome of this Chapter, it can be concluded with little doubt that the functioning of ECAs do generate trade distortions among companies of different nations in international trade in a number of different ways. This seems to be the case even if ECAs comply with the provisions of the Arrangement. This originates largely from the different views of the policy-makers on the role and the rules applicable to their national ECA.

In spite of the general conclusion of existence of trade distortions as a result of officially supported export credits, quantitative data are largely missing in order to enable a deeper analysis of the level of bias and, therefore, the possible impact on the buying nation decision-making process. Indeed, a definite conclusion can only be drawn on the basis of comparing a buyer's decision in existence and in absence of officially supported export credits. If the decision is different, then this would constitute the definite proof of international trade distortions as a result of officially supported export credits. The lack of transparency of both the OECD Secretariat on officially supported export credits and the individual ECAs, lead to the strong suspicion of a lack of appetite from those entities to perform the deeper analyses indicated above. This fact further enhances the findings of this section, that officially supported export credits have a distorting effect on international competition, both in the frame of the Arrangement and, even more so, outside.

2.3 The Arrangement – Real Dimension in International Trade

The previous Chapters have focused primarily on the Arrangement itself, its functioning and the impact on international trade. This Chapter, in contrasts, aims at focusing on the wider environment of international trade and the role of the Arrangement in this broader context. This aspect is particularly important in order to link the complexity of the Arrangement to its contribution to international trade. Indeed, the Arrangement constitutes an exception to the WTO provisions stipulating that export credits are simply prohibited. As an exception to such overarching rule, the Arrangement should be generating concrete benefits to international trade, justifying both its existence as an international regime and the proper use of taxpayers' money.

The question on the justification of officially supported export credits and, therefore, of the Arrangement itself, can be addressed through the analysis of various facets. The first consists in exploring the overall level of exports facilitated by officially supported export credits in comparison to international trade as well as the number and characteristics of the sectors typically eligible for official support. Another facet refers to the recipient nations of the benefits generated by officially supported export credits and the real need for such nations to be supported. Finally, following the previous point, the question of the relation of international aid and officially supported export credits need to be explored.

This section will therefore be structured in accordance to the above questions, i.e.:

- The Arrangement within international trade
- Recipients of officially supported export credits
- The Arrangement and international aid

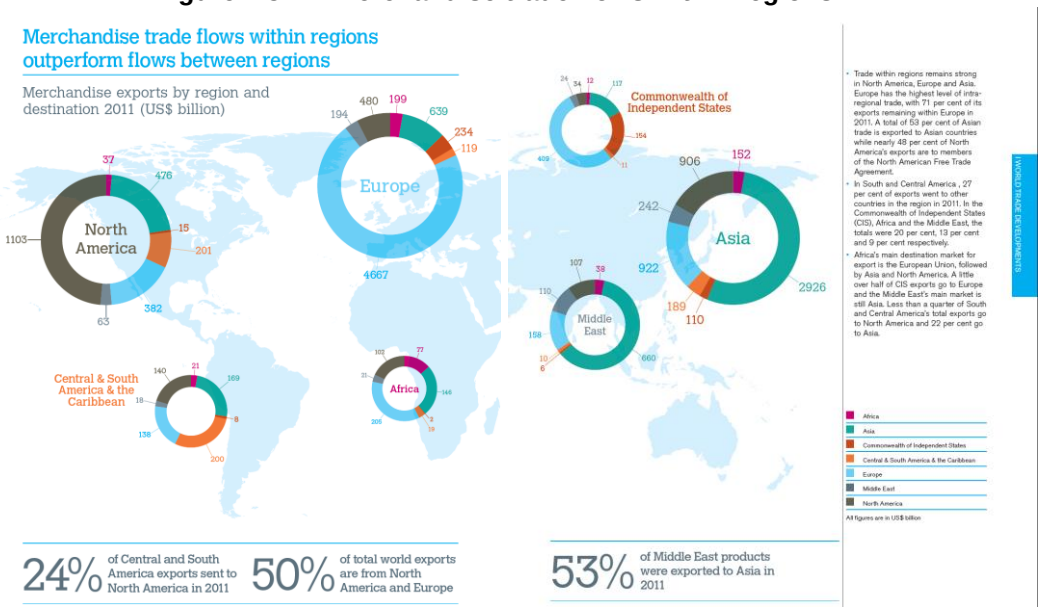
2.3.1 The Arrangement within international trade

According to the WTO International Trade Statistics 2012, international trade in the reference year 2011 amounted to some US$ 17.816 billion for exports in merchandise goods (exports of commercial services amounted to some additional US$ 3.765 billion). The growth of exports reached 20% compared to 2010 (11% for commercial services). China, United States and

Germany remain the top three exporters worldwide with, respectively, US$ 1.898 billion, US$ 1.480 billion and US$ 1.472 billion worth of exports. The 10 top exporting nations (the above three and Japan, Netherlands, France, Republic of Korea, Italy, Russia and Belgium) represent some US$ 9.000 billion or roughly half the total world exports of merchandise. Half of world exports are generated, similarly, from North America and Europe.

The destination of merchandise exports remain strongly regional i.e. more than 70% of European exports go to other European nations whereas roughly half the North American and half the Asian exports go to other nations in the respective regions. Africa, South America and the Commonwealth of Independent States export primarily to Europe and US whereas the Middle East exports mainly to Asia. Overall, Europe and North America absorb some 55% of world exports (see Figure 2.3.1 – 1 below)

Figure 2.3.1-1 Merchandise trade flows within regions [256]



US Eximbank's 'Report to the US Congress on Export Credit Competition and the Export-Import Bank of the United States[257] provides an analysis of new medium- and long-term official export credit volumes of the major exporting nations. It reviews data for the G7 i.e. Canada, France, Germany, Italy, Japan, the UK and the US and, separately, for Brazil, China and India. Russia is

[256] WTO, 2012.
[257] Annual Report 2012. Export-Import Bank of the United States.

not included due to the marginal activity it has so far developed. The sum of exports of the above 10 nations reaches close to US$ 8.300 billion, a bit less than half of world exports and can, thus, be considered as a solid reference for international trade.

Figure 2.3.1-2 New Medium- and Long-term Official Export Credit Volumes [258]

Figure 4: New Medium- and Long-term Official Export Credit Volumes, CY2006 – 2011 (Billions USD)

	2007	2008	2009	2010	2011
Canada*	0.5	1.5	2.0	2.6	1.7
France**	10.1	8.6	17.8	17.4	12.2
Germany	8.9	10.8	12.9	22.5	20.3
Italy***	3.5	7.6	8.2	5.8	8.6
Japan****	1.8	1.5	2.7	4.9	6.0
U.K.**	1.6	2.7	3.4	4.1	3.8
Total G6 (without U.S.)	26.4	32.7	47.0	57.2	52.6
U.S.	8.2	11.0	17.0	13.0	21.4
Total G-7	$34.6	$43.7	$64.0	$70.2	$74.0
U.S. % of G-7	24%	25%	27%	19%	29%
BICs^					
Brazil^^	0.6	0.2	6.1	3.5	4.8
China^^^	33.0	52.0	51.1	43.0	48.5
India^^^^	8.5	8.7	7.3	9.5	11.4
Total B,C,I	$42.1	$60.9	$64.5	$56.0	$64.7
B,C,I % of G-7	122%	139%	101%	80%	87%

*These figures have been adjusted to exclude Market Window and domestic financing.
**These figures have been adjusted to exclude defense.
***These figures have been adjusted from previous reports to exclude untied or domestic activity. The 2007 figure is a U.S. Ex-Im Bank estimate (comparable data not available).
****These figures include JBIC export loans and NEXI's medium- and long-term official export cover.
^ Russian MLT activity has been quite limited and is included in Vnesheconombank (VEB) activity. Activity for EXIAR, the recently founded Russian ECA, was not included but was also limited.
^^Brazilian data represents SBCE activity combined with an estimate of MLT BNDES export finance activity *without* SBCE cover.
^^^Refer to Chapter 8 for a detailed explanation of Chinese ECA activity.
^^^^Includes ECGC and India Ex-Im Bank activity.

In total, the Report estimates that officially supported export credits for those nations reach some US$ 138,7 billion, an average ratio of 1,7% of corresponding exports. This value is generally lower for the G7 nations, which average 1,3%, ranging from 0,4% (Canada) to slightly above 2%

[258] Annual Report 2012. Export-Import Bank of the United States.

(France). In contrast India exceeds 3,7%, China reaches 2,5% and Brazil some 1,8% of their respective exports.

In view of the above, it can be argued that, despite the large amounts at stake, exports officially supported represent, after all, a rather marginal share of international trade, on average lower than 2% of respective exports. This phenomenally low 'performance' certainly reflects the fact that officially supported export credits concern only medium and long-term transactions – short-term export credits being explicitly excluded from official support under the Arrangement. As a result, eligibility for such official support is linked to specific types of merchandise or projects featuring medium- and long-term life cycles, use or construction time. The medium- and long-term feature would mainly affect capital investments or strategic products. Thus consumer goods, agricultural products, oil and fuel and raw material, for instance, would typically fall outside the scope of officially supported export credits (naturally with exceptions) due to their usual short-term scope. As a result, it becomes relevant to analyse official support for exports in the various sectors in order to identify and understand which sectors are mostly eligible to receive official support and resulting implication in international trade.

Sector analysis

The relevance of officially supported export credits thus leads to exploring eligibility and possible use of export credits for individual sectors. For the purpose of analysing individual sectors, it was required to use a specific classification methodology and it was deemed appropriate to use, from various options, the HS 2007 classification for its explicit descriptions of sectors and its compliance with the reference year 2011. The complete two-digit HS 2007 classification is provided in the table below.

Figure 2.3.1 – 3 Two-digit HS 2007 classification [259]

Code	Description
01	Live animals; animal products
02	Meat and edible meat offal
03	Fish and crustaceans, molluscs and other acquatic invertebrates

[259] United Nations Statistics Division –Classifications Registry. Standard International Trade Classification, Rev.3

04	Dairy produce; birds' eggs; natural honey; edible products of animal origin, not elsewhere specified or included
05	Products of animal origin, not elsewhere specified or included
06	Live trees and other plants; bulbs, roots and the like; cut flowers and ornamental foliage
07	Edible vegetables and certain roots and tubers
08	Edible fruit and nuts; peel of citrus fruit or melons
09	Coffee, tea, maté and spices
10	Cereals
11	Products of the milling industry; malt; starches; inulin; wheat gluten
12	Oil seeds and oleaginous fruits; miscellaneous grains, seeds and fruit; industrial or medicinal plants; straw and fodder
13	Lac; gums, resins and other vegetable saps and extracts
14	Vegetable plaiting materials; vegetable products not elsewhere specified or included
15	Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes
16	Preparations of meat, of fish or of crustaceans, molluscs or other aquatic invertebrates
17	Sugars and sugar confectionery
18	Cocoa and cocoa preparations
19	Preparations of cereals, flour, starch or milk; pastrycooks' products
20	Preparations of vegetables, fruit, nuts or other parts of plants
21	Miscellaneous edible preparations
22	Beverages, spirits and vinegar
23	Residues and waste from the food industries; prepared animal fodder
24	Tobacco and manufactured tobacco substitutes
25	Salt; sulphur; earths and stone; plastering materials, lime and cement
26	Ores, slag and ash
27	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes
28	Inorganic chemicals; organic or inorganic compounds of precious metals, of rare-earth metals, of radioactive elements or of isotopes
29	Organic chemicals
30	Pharmaceutical products
31	Fertilisers
32	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter; paints and varnishes; putty and other mastics; inks
33	Essential oils and resinoids; perfumery, cosmetic or toilet preparations
34	Soap, organic surface-active agents, washing preparations, lubricating preparations, artificialwaxes, prepared waxes, polishing or scouring preparations, candles and similar articles, modelling pastes, "dental waxes" and dental preparations with a basis o
35	Albuminoidal substances; modified starches; glues; enzymes
36	Explosives; pyrotechnic products; matches; pyrophoric alloys; certain combustible preparations
37	Photographic or cinematographic goods
38	Miscellaneous chemical products
39	Plastics and articles thereof
40	Rubber and articles thereof

41	Raw hides and skins(other than furskins) and leather
42	Articles of leather; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)
43	Furskins and artificial fur; manufactures thereof
44	Wood and articles of wood; wood charcoal
45	Cork and articles of cork
46	Manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork
47	Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) of paper or paperboard
48	Paper and paperboard; articles of paper pulp, of paper or of paperboard
49	Printed books, newspapers, pictures and other products of the printing industry; manuscripts, typescripts and plans
50	Silk
51	Wool, fine or coarse animal hair; horsehair yarn and woven fabric
52	Cotton
53	Other vegetable textile fibres; paper yarn and woven fabrics of paper yarn
54	Man-made filaments; strip and the like of man-made textile materials
55	Man-made staple fibres
56	Wadding, felt and nonwovens; special yarns; twine, cordage, ropes and cables and articles thereof
57	Carpets and other textile floor coverings
58	Special woven fabrics; tufted textile fabrics; lace; tapestries; trimmings; embroidery
59	Impregnated, coated, covered or laminated textile fabrics; textile articles of a kind suitable for industrial use
60	Knitted or crocheted fabrics
61	Articles of apparel and clothing accessories, knitted or crocheted
62	Articles of apparel and clothing accessories, not knitted or crocheted
63	Other made up textile articles; sets; worn clothing and worn textile articles; rags
64	Footwear, gaiters and the like; parts of such articles
65	Headgear and parts thereof
66	Umbrella, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof
67	Prepared feathers and down and articles made of feathers or of down; artificial flowers; articles of human hair
68	Articles of stone, plaster, cement, asbestos, mica or similar materials
69	Ceramic products
70	Glass and glassware
71	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals cladwith precious metal, and articles thereof; imitation jewellery; coin
72	Iron and steel
73	Articles of iron or steel
74	Copper and articles thereof
75	Nickel and articles thereof
76	Aluminum and articles thereof
78	Lead and articles thereof
79	Zinc and articles thereof
80	Tin and articles thereof

81	Other base metals; cermets; articles thereof
82	Tools, implements, cutlery, spoons and forks, of base metal; parts thereof of base metal
83	Miscellaneous articles of base metal
84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles
86	Railway or tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signalling equipment of all kinds
87	Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof
88	Aircraft, spacecraft, and parts thereof
89	Ships, boats and floating structures
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof
91	Clocks and watches and parts thereof
92	Musical instruments; parts and accessories of such articles
93	Arms and ammunition; parts and accessories thereof
94	Furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified or included; illuminated signs, illuminated name-plates and the like; prefabricated buildings
95	Toys, games and sports requisites; parts and accessories thereof
96	Miscellaneous manufactured articles
97	Works of art, collectors' pieces and antiques
99	Commodities not specified according to kind

The above classification and the description of individual sectors show that a majority of sectors relate to consumer goods and raw materials. These represent goods and services of ‘short-term’ nature in the sense that the time from contracting to delivery and use is usually short and thus such sectors are unlikely to be eligible for medium and long-term financing support.

Filtering the table above in a way to exclude such areas that are assumed altogether as non-eligible for official financing support, the table below highlights those sectors that most likely can be subject to medium and long-term export credits. The filtering is not scientific as there are no specific criteria applied to the filtering except for the qualitative analysis of the nature of the products described and the practice of ECAs. The resulting table shows that, in fact, only 7 out of 97 categories under the two-digit nomenclature could potentially, and only partially, be eligible for such export credits and thus be relevant to the Arrangement. These sectors are presented in Figure 2.3.1 – 4.

Figure 2.3.1 – 4 Two-digit HS 2007 classification relevant for officially supported export credits

84	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof
85	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles
86	Railway or tramway locomotives, rolling-stock and parts thereof; railway or tramway track fixtures and fittings and parts thereof; mechanical (including electro-mechanical) traffic signalling equipment of all kinds
87	Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof
88	Aircraft, spacecraft, and parts thereof
89	Ships, boats and floating structures
90	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof

(note: category 93 Arms and Ammunition is excluded as military equipment are not eligible for officially supported export credits as per the provisions of the Arrangement)

Indeed, the above selection of assumed eligible sectors does conform to the individual transactions reported in the reports of the ECAs under examination. Also, for most of the above sectors, a specific Annex to the Arrangement applies, with divergent terms and conditions among sectors. Specifically, the Arrangement presents the following sectorial Annexes:

- Ships
- Nuclear power plants
- Civil aircraft
- Renewable energy, climate change mitigation and water projects
- Rail infrastructure
- Coal-Fired electricity generation projects (since 2015)

These sectors, altogether, cover most of the sectors potentially eligible for officially supported export credits, meaning that sectorial differentiation is already intrinsically accepted in the mechanisms of the Arrangement.

The above sectors are briefly analysed hereunder with respect to their relevance to official export support. The sectors are, in principle, analysed at top (two-digit) level and where necessary, reference is made to the next level of details, at four-digit classification.

84: The construction of nuclear reactors – as well as other power generating facilities - are often supported by long-term export credits for instance in the case of Germany's Delivery and erection of a turnkey combined cycle power plant unit in India and US exports to Mexico of Nuclear Fuel Rods and Other Power Equipment. Individual pieces of machinery and mechanical appliances do not appear in the list of transactions provided by the ECAs under consideration and would merely be considered as short-term and lower value items. In fact from the 66 sub-sectors in the four-digit classification, building of nuclear reactors is only part of category 8401, which includes also other items such as 'fuel elements' (typically not eligible for medium- or long-term export credits). For this sub-sector, total exports are valued at a bit more than US$ 6 billion for the reference year 2011. In broader terms, the sector of power generation, including the construction of power plants, the provision of wind power generation equipment and the export of solar power devices are frequently officially supported. German engineering and delivery of 27 windmills for 2 sub-projects to Chinese Taipei is an example of such transactions.

85: From the 48 four-digit classifications under sector 85, only a few may be eligible for medium- and long-term export credits. Category 85 relates mainly to electrical components and devices of consumable nature such as household appliances, phones and electrical sub-components. Only few of the categories would suggest an industrial investment, such as 8514 Industrial or laboratory electric furnaces and ovens or 8526 Radar apparatus, radio navigational aid apparatus and radio remote control apparatus, which could be subject to officially supported export credits. It is relatively difficult from the four-digit sub-sector descriptions to come to conclusions with respect to international trade eligible for officially supported export credits under classification 85 due to the equivocal titles and descriptions. Notwithstanding, the analysis of individual transactions from the ECAs under consideration shows that official support for this sector is relatively scarce.

86: Sector 86 and all of its 9 four-digit sub-categories relate the area of trains, tramways, metros which are typically eligible for medium- and long-term official support. It covers all related aspects including locomotives, wagons, tracks, signalling equipment etc. Under this description, all sub-categories could be eligible for officially supported export credits, despite the fact that under each of the categories, individual transactions may refer to short-term items and thus not eligible. In any event, exports of category 86 amounted to more than US$ 30 billion in reference year 2011. Major programmes were indeed covered with ECAs support such as locomotives exports from the US to South Africa guaranteed for some US$ 120 million or the export of tramway wagons from France to Morocco covered by COFACE for a value of € 115 million. However, as major exporters of equipment under sector 86 originate from nations outside the ones under consideration in this

study such as Sweden or nations that do not disclose details of individual officially supported transactions such as China, it is difficult to assess the overall share of total exports that have been subject to official support in this sector.

87: Sector 87 mainly covers all sorts of vehicles such as private cars, minivans, busses and trucks. From the 16 four-digit sub-categories, only four were assessed as potentially eligible for official support namely 8701 Tractors, 8705 Special purpose motor vehicles, 8709 Works trucks and 8713 Carriages for disabled persons. These four sub-sectors generate together exports worth some US$ 80 billion, whereas Tractors cover some US$ 60 billion and Special purpose motor vehicles some US$ 15 billion. Despite such large values of international trade, only few transactions were officially supported by export credits in this sector. A justification could be that vehicles mostly relate to goods with short contract to delivery times and, thereby, would only in exceptional cases qualify for medium- to long-term support.

88: This sector refers to aerospace products per se and contains 5 sub-categories from which only one, namely 8802 Other aircraft (for example, helicopters, aeroplanes); spacecraft (including satellites) and suborbital and spacecraft launch vehicles is seen as being subject to official support, the other categories relating to products such as parachutes, gliders, non-powered aircraft and parts and pieces thereof. Out of international exports of some US$ 250 billion for the entire sector 88, some US$ 95 billion refer to sub-sector 8802. As per the analyses of the aircraft sector presented in Chapter 2.1 of this study, a large portion of international aircraft sales are actually officially supported by all major aircraft exporting nations.

89: Ships, boats and floating structures are the subject of classification 89. From the 8 sub-sectors, mainly one could be seen as being subject to officially supported export credits, namely 8901 Cruise ships, excursion boats, ferry-boats, cargo ships, barges and similar vessels for the transport of persons or goods. The other sub-categories refer to lower value products with short term cycles. Official support is, indeed, requested in some cases of shipbuilding as for instance a cruise ship exported by France to Switzerland for a value of US$ 562 million or a ship delivered from Germany to the USA for a value of some US$ 300 million. Sector 8901 accounts for some US$ 150 billion of exports, although only few transactions thereof are actually seeking officially supported export credits. This sector is of high interest in Germany, where shipbuilding was the most supported sector in 2011 (2011 showed a particular peak in this sector, other years being significantly lower). It should be noted that major shipbuilding nations such as South Korea or

India are not part of the focus of this research and, thus, information on such transactions cannot be found in this document.

90: Sector 90 and its 33 sub-sectors mainly relate to consumer goods. However some of the sub-sectors could be viewed as covering medium- and long-term industrial transactions such as laboratory equipment, which could possibly be subject to official support. Considering the description of each sub-sector, it can be assumed that officially supported export credits could be applied in several sub-sectors but for marginal cases. For instance, US Eximbank provided a guarantee of some US$ 20 million for the export of Audio System and Components for Movie Theaters to Mexico. The total value of exports in this sector that may be subject to medium- and long-term export credits is, thus, considered limited. Also, no transactions from the ECAs under consideration cover merchandise of this classification in the reference year 2011.

The above classification gives a solid view on the main sectors deemed eligible for official support and the international trade values associated to them. The picture is of course more complex and a number of transactions in other sectors are also being supported. For instance, fuel and oil per se are fundamentally not eligible for medium and long-term export credits, however the drilling for oil or oil refinery is a combination of services and equipment indeed eligible and officially supported. This is, for instance, the case of US Eximbank support provided to CBI Americas and other US Suppliers under a loan of US$ 2,3 billion and a guarantee of US$ 500 million referring to an export to Columbian Refineria de Cartagena. Also, some untypical transactions for medium and long-term export credits can be found such as UK exports to Libya of wallpaper guaranteed at GBP 282.889 or UK exports to Russia for packaging for vodka guaranteed at some GBP 504.689.

Nonetheless, the high-level analysis above gives a feeling of the magnitude of potentially officially supported international trade and, respectively, the sectors affected. It shows that only a few sectors have a nature allowing them, as per the provisions of the Arrangement, to qualify under medium and long-term transactions. The associated volumes of international trade, on an aggregate level, represent only a very small portion of international merchandise trade, possibly in the area of 2%, and even smaller if trade of services is also considered. This analysis demonstrates on the one side the marginal role of officially supported export credits in international trade and on the other side the clear predominance of specific sectors to receive support from taxpayers' money in the frame of the wider economy.

2.3.2 Recipients of officially supported export credits

The previous paragraph highlights the overall limited value of exports officially supported within international trade and the fact that specific sectors are, by their nature, eligible whereas others are not relevant for such official support. Nevertheless, the values at stake might be relevant for the recipient nations, especially if those are financially constrained nations. Support to such nations, for instance to the group of Least Developed Countries (LDCs), may also bring additional justification and legitimation to officially supported export credits. As Gianturco[260] indicates: 'The ECAs have performed the invaluable function of making credit available […] to most developing countries'. Only limited attention to the distinction between wealthy and less developed countries is given in the Arrangement and the practice to preferably extend export credits to a certain category of nations is rather regulated (if at all) by individual ECAs such as the US Eximbank's initiative to privilege sub-Saharan countries. However, the latest amendment to the Arrangement in 2015, including a Sector Understanding on Coal-fired Electricity Generation Projects, for the first time distinguishes between countries: the maximum repayment terms and eligibility of export credits makes a distinction between International Development Association eligible countries and the rest. In this context, this paragraph aims at shedding light on the recipient nations of official support and, correspondingly, the role of officially supported export credits for these nations.

Classification of Nations

The unavailability of aggregate information for officially supported export credits in general and for the participant nations to the Arrangement in particular is an obstacle to a systematic analysis of the beneficiary nations of such official support. Therefore the analysis will focus on a selection of ECAs among the ones considered in this thesis, for which relevant information is available. The analysis of those ECAs will, thus, show some trends in terms of the flows of officially supported exports. In particular, export flows to specific group of nations is addressed i.e. flows towards developed nations, developing nations and LDCs, or rather low risk, medium risk and high risk nations.

For the purpose of this analysis, a classification of nations into the above three groups i.e. low risk, medium risk and high risk was performed, based on the country risk classifications of the participants to the Arrangement of the reference year 2011. This basis was used in order to

[260] Gianturco, D. E., 2001. Export Credit Agencies – The Unsung Giants of International Trade and Finance. Quorum Books.

ensure alignment between the classification and the official support provided. However, the results of the classification produced show a different set of nations for each group as compared to the UN categories for developed nations, developing nations and LDCs, which also reflects a different nature of analysis (i.e. risk categorization vs wealth categorization). References to the UN classification will also be used where appropriate. These discrepancies do not alter, however, the overall conclusions of the analysis.

The classification used is derived as follows:

- Low risk nations (i.e. developed nations): nations with a risk classification of 0 or 1
- Medium risk nations (i.e. developing nations): nations with a risk classification of 2-5
- High risk nations (i.e. least developed nations): nations with a risk classification of 6 or 7

Under the above classification, nations belonging to each category are as follows:

- Low risk nations (35 nations): Australia, Austria, Belgium, Canada, Chinese Taipei (Taiwan), Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong-Kong (China), Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Malta, Netherlands, New Zealand, Norway, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom, United States.

- Medium risk nations: all nations not covered in the categories Low risk nations and High risk nations.

- High risk nations (78 nations): Afghanistan, Albania, Angola, Antigua and Barbados, Argentina, Armenia, Bangladesh, Belarus, Belize, Benin, Bolivia, Bosnia and Herzegovina, Burkina Faso, Burundi, Cabo Verde, Cambodia, Cameroon, Central African Republic, Chad, Democratic Republic of Congo, Congo, Cote d'Ivoire, Cuba, Ecuador, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Georgia, Ghana, Guinea, Guinea-Bissau, Haiti, Honduras, Iran, Iraq, Jamaica, Kenya, Democratic People's Republic of Korea, Kyrgyzstan, Lao People's Democratic Republic, Lebanon, Liberia, Libya, Madagascar, Malawi, Maldives, Mali, Mauritania, Moldova, Montenegro, Mozambique, Myanmar, Nepal, Nicaragua, Niger, Pakistan, Rwanda, Senegal, Serbia, Sierra Leone, Somalia, Sri Lanka, Sudan, Swaziland, Syrian Arabic Republic, Tajikistan, Tanzania, Togo, Turkmenistan, Uganda, Ukraine, Uzbekistan, Venezuela, Yemen, Zambia, Zimbabwe.

The UN classification for LDCs is a subset of the above High risk nations (with the exception of Lesotho, considered an LDC but with a risk classification of 5) and including a number of small nations, such as island nations or Bhutan, which are not given a specific risk classification under the Arrangement. Also, the UN considers as 'economies in transition' the European high risk nations. Thus LDCs under UN definition consist of one American nation (Haiti), 33 African and 14 Asian nations. The UN list of developed countries is very similar to the Low risk countries listed above, with the addition of some European nations belonging to a higher risk category such as Romania and Poland and also including smaller nations such as Andorra, San Marino or Saint Pierre and Miquelon.

Recipients of officially supported export credits – overall picture

In its 2011 Annual Report, US Eximbank lists the total new authorisations for the year per benefiting nation or 'market'. The total value of authorizations reaches US$ 26,9 billion (excluding multibuyer and short term). From this amount, some US$ 11 billion or more than 40% of the total official support facilitated exports to Low risk countries. In contrast, the 78 High risk nations received export support worth in total some US$ 0,85 billion, or some 3,1% of total authorizations.

The overall picture in the UK is relatively similar, where from a total authorizations volume of some GBP 2,3 billion, Low risk countries covered more than 30% and High risk countries close to zero. The bulk of export support is thus allocated to Medium risk nations.

French COFACE provides individual data only for non-aircraft related exports, amounting to some € 4 billion (aircraft-related represents some additional € 5,8 billion). From this amount, in 2011, only three and two transactions affected, respectively, each category of Low risk countries and High risk countries. The respective authorizations totalled € 682,5 million and € 110 million respectively, i.e. some 16,7% and 2,7% of the non-aircraft authorizations. For this subset of authorizations, more than 80% is thus supporting exports to Medium risk nations. Naturally, as official support for aircraft exports represents more than 60% of total authorizations, related data for France need to be considered with due care.

Germany does not publicize specific values per transaction, thus an accurate allocation per the above categories of countries is not feasible. Nevertheless, in the Hermes report 2011, a split

between ‘industrialized countries’ and ‘emerging economies and developing countries’ is provided: out of € 29,8 billion total authorizations, € 7,4 billion or a quarter of authorizations were allocated to ‘industrialized countries’, whereas € 22,4 billion or three quarters of authorizations supported exports to emerging and developing countries. The list of top 10 markets for new guarantees include four Low risk countries, six Medium risk and no High risk countries.

Canada’s EDC provides detailed information for all 900+ transactions supported in 2011, including short term financing but also intra-Canada transactions. Excluding intra-Canada trade and transactions below CAD 15 million, 113 transactions are assumed as possibly officially supported (note that no information is provided on whether a transaction is facilitated by official support, thus the above reference is the result of a systematic filtering according to a number of specific criteria). Thereof, 64 transactions were directed towards Low risk countries, a large majority towards the US, whereas 4 transactions supported exports to High risk nations. Described transactions are given in value ranges, thus an accurate analysis of values supporting exports is not possible. Nevertheless, from the 30 high value transactions i.e. beyond CAD 100 million each, which are allocated to specific countries, the vast majority refer to Low risk countries (22 transactions), whereas Medium and High risk nations represent a minor share of those transactions (6 and 2 respectively).

Little detailed information is provided by the other ECAs under consideration in this study. Russia Eximbank, despite overall low values of authorizations, indicates support given to exports to mainly High and Medium risk nations such as Angola or Ecuador, but also some Low risk nations such as Sweden and Czech Republic. No exports towards the US, UK, Germany or France were officially supported. Brazil’s BNDES mainly supported exports of aircraft to Low risk countries such as the US, Japan and various EU countries. The focus for non-aircraft related exports is mainly on other Latin America countries including High risk Haiti and Argentina and African nations such as Angola, Mozambique, Ghana and South Africa.

Low risk countries

As briefly introduced above, the main ECAs in terms of total authorizations (China excluded as no detailed data are available) show that a significant portion of their authorizations are used to support exports towards Low risk countries.

US Eximbank authorized some 40% of total volumes or US$ 11 billion for Low risk nations. It is interesting to note that a volume of US$ 3,6 billion is allocated to the US – it is unclear what the value refers to, possibly exports to off-shore US territories or re-exports. The bulk of the remaining authorizations to Low risk nations is attributed to, outside the EU, Canada, Hong-Kong, Australia and South Korea and, within the EU, Ireland and the UK whereas the largest single beneficiary is - surprisingly - Luxembourg (US$ 1,1 billion). A large portion addresses aircraft sales for instance US$ 450 million guaranteed for Boeing exports to Norway and a similar value to the Netherlands, some US$ 493 million guaranteed for aircraft exports to New Zealand or US$ 687 million guaranteed for South Korea.

Similarly, UK's ECGD officially supported export credits towards Low risk countries, valued at a total of GBP 724 million, focus on aircraft sales, for instance GBP 141 million to Australia, GBP 84 million to France, GBP 150 million to Ireland or GBP 152 million to South Korea.

COFACE information on non-aircraft related exports cover three transactions to Low risk nations, namely a one-off export for the construction of a cruise ship for Switzerland supported at € 562 million, a satellite launch to the US and some hydraulic machinery to Australia. Nevertheless, the aircraft exports to Low risk countries officially supported can account for a many-fold value compared to all the non-aircraft related exports.

On Germany side, Hermes official support for Low risk nations (industrialized nations) represents some 25% of total authorizations. As per other ECAs, a share concerns aircraft sales, however the transaction types are more diversified and also cover construction of oil pipelines, construction of turnkey plants, ship building, solar power plants, etc. The US is topping the list of industrialized countries, followed by Switzerland, Australia and Korea. Supported exports to EU countries account altogether for some € 1,9 billion, at the same level as the US.

Canada is deemed officially supporting exports mainly to Low risk countries, as these absorb the large majority of such transactions, especially for higher volume items as indicated above. The US represents by far the largest beneficiary of such exports, accounting for more than half of the total transactions for Low risk countries, also the largest ones. The areas covered by transactions to Low risk countries are quite diversified, aircraft sales being one of several sectors of focus. Other sectors include telecommunication equipment, oil drilling services and related equipment and support to direct investments.

Brazilian export support to Low risk nations is mainly driven by aircraft sales. Exports from other sectors are mainly focusing on Medium and High risk countries.

Medium risk countries

All considered ECAs, possibly with the exception of EDC, offer the largest portion of their authorizations to the benefit of Medium risk nations. One of the reasons may come from the nomenclature itself of the three categories of nations, with Medium risk countries covering a wide range of risks from risk level 2 represented by countries such as China or Chile to risk level 5 for countries such as Kazakhstan or Vietnam. In any event, these countries cover the core of the world developing economies, with trade to and from those nations sharing corresponding values and trends.

In terms of Medium risk nations, which represent more than half the total authorizations of the US Eximbank, priority is explicitly given to specific 9 nations named 'Key Country Markets': Brazil, Columbia, India, Indonesia, Mexico, Nigeria, South Africa, Turkey and Vietnam. From those nations, Columbia appears to play a particular role in the specific reference year as, with some US$ 3,7 billion of authorizations including a US$ 2,3 billion loan, some 34% of US exports were supported (compared with 0,2% respectively in 2010). This exceptional portion of supported business, also contrasting with the related performance of 2010, may indicate a political motivation for this particular transaction. The other key markets present a significantly diversified picture: exports to Vietnam show a value of official support of US$ 1,4 million, Nigeria US$ 27,4 billion and Mexico, Turkey, India and South Africa each exceeding the US$ 1 billion mark.

Turkey is also the top recipient of export credits originating from Germany in 2011 with some € 4,8 billion or more than 15% of the total value of Hermes authorizations. Russia, China, Brazil and India follow, with authorizations exceeding € 1 billion each. African countries account for some € 2 billion of authorizations, with South Africa, Algeria and Egypt receiving a bit below € 0,5 billion each. Asian authorizations are dominated by China and India, representing together some € 3,5 billion, whereas Vietnam and Malaysia received each a bit below € 0,5 billion and other nations much lower amounts. Finally, in Latin America, apart from Brazil accounting for € 1,4 billion of supported exports, Mexico, Chile and Panama have benefited each of guarantees worth between € 200 - € 300 million.

Brazil alone absorbs roughly half of the total authorizations extended by UK's ECGD in 2011, with a value in excess of GBP 1,1 billion. This is due to one specific transaction worth GBP 920 million for Petrobras on the topic of oil and gas exploration and production facilities. The remaining half is mainly allocated to Low risk countries, with a diversity of Medium risk countries benefitting from export credits for relatively lower value exports, except for aircraft sales. The UAE, Bahrain, Azerbaijan, Malaysia, Mexico, Nigeria, Philippines, Qatar, Russia, Saudi Arabia, South Africa and Turkey are representatives examples of such countries with transactions starting from few thousands GBP to a bit over GBP 1 million, with the exception of a handful of transactions guaranteed at a level of two-digits million GBP. Aircraft exports to Medium risk countries is also strongly represented, accounting for the largest portion of the value not allocated to Brazil.

COFACE is mainly focusing on African and in particular North African nations. Apart from a few transactions with Russia and China, the large majority of non-aircraft related transactions benefit countries such as Algeria, Egypt, Morocco, Tunisia and South Africa as well as the Dominican Republic. Also some transactions are allocated to Saudi Arabia and one appears for Vietnam, Uzbekistan, Azerbaijan and Malaysia. Support for aircraft exports affect a slightly more diversified set of Medium risk nations as most such aircraft sales are either directed towards Low risk nations or towards the aforementioned Medium risk nations.

Brazilian supported exports are mainly viewed in the frame of south-south trade. Thus, apart from aircraft sales to Low risk countries, the rest of officially supported exported focus on Medium and High risk countries. In terms of Medium risk nations, aircraft financing to Mexico, Guatemala or Saudi Arabia can be provided as examples. Non-aircraft related exports cover transactions mainly in Latin America and Africa, such as the construction of Caracas (Venezuela) subway, the provision of train wagons to Chile, the construction of a water supply pipeline in Dominican Republic and the setup of an urban transportation system in South Africa. Values are not provided however in terms of number of projects, however a certain focus on Venezuela and Dominican Republic may appear.

As per the other risk categories' nations, estimations regarding Canada's EDC are difficult to make. After filtering the 900+ transactions of 2011, the resulting data show that, possibly, some 40 officially supported transactions were financed to the benefit of Medium risk nations. Latin America and in particular Chile, Mexico, Peru and Brazil account for the lion's share of such export credits, both in terms of number of transaction and in size of transactions. Russia also receives a strong focus, whereas India a much lesser and China is almost not present. Other non-

American countries include Kazakhstan and Indonesia, however no African nations seem to be represented in the set of benefitting countries. Possibly supported transactions typically include aircraft sales, telecommunication equipment and systems as well as various dedicated machinery e.g. for the oil industry.

High risk countries

The distribution of officially supported export credits among the three categories of nations as presented above shows a generally limited interest to support exports towards High risk countries, this however variably across ECAs.

High risk nations include most sub-Saharian nations and the US Eximbank has a specific mandate to give special attention to those countries. Indeed, authorizations to the sub-Saharian region have increased over the years, reaching US$ 1,4 billion in 2011, somewhat double the amount of 2010 and three times compared to 2009. Those authorizations supported exports to some 20 countries including Angola, Ghana, Kenya, Nigeria, Rwanda, South Africa and Uganda. However from the aforementioned nations, only a few are High risk countries and, for instance, most of sub-Saharian support goes to South Africa, which alone accounts for roughly US$ 1 billion out of the US$ 1,4 billion. The total value of US Eximbank support to High risk countries amounts to some US$ 0,85 billion, Angola and Bangladesh accounting each for some US$ 250 million while Argentina, Ecuador, El Salvador, Honduras, Jamaica, Kenya, Mauritania, Nicaragua, Serbia, Tajikistan, Ukraine and Zambia received each between US$ 1 million and US$ 80 million. It is notable that from these High risk countries, most are not considered as LDCs under the UN classification.

The UK supported in 2011 only two transactions towards High risk countries, a wallpaper export to Libya guaranteed at GBP 282.889 and weather stations sold to Zambia supported at GBP 49.498. The total support to High risk nations is thus statistically insignificant (less than 0,1% of total value of authorizations). Note that Libya is not considered an LDC.

Similar to the UK, France also only supported two export cases towards High risk countries, if aircraft related exports are not considered, an export sale for 14 power sub-stations to Libya supported for € 35 million and the delivery of a biometric passport system to Uzbekistan, supported to a level of € 75 million. These two project correspond to some 2,7% of the total non-aircraft related export credits provided by COFACE in 2011. None of these two nations is an LDC.

With respect to aircraft sales, the buying companies are referenced in the COFACE report and, at first analysis, none of the buying companies would be based in one of the High risk countries. If no aircraft exports were supported towards such countries, the share of export credits for High risk nations drops to some 1% of total authorizations for the specific year.

Hermes support to High risk nations cover 6 countries, Venezuela, Irak, Mauritania, Belarus, Georgia and Ecuador, from which only Mauritania is an LDC. Each of the above countries has benefited from one supported transaction, with the exception of Belarus that accounted for four transactions. Transaction values are given in ranges, whereby the majority of the transactions lay between € 15 million and € 50 million. On the basis of the available data from Hermes, it is not possible to calculate a more accurate contribution of export support towards High risk nations. However it can be fairly assumed that more support in terms of number of transactions is given by Germany than France or the UK for exports towards High risk nations. The total contribution remains, in any event, limited in comparison with the total number of authorizations.

In line with the other ECAs, EDC also presents an image of limited support towards High risk nations, with less than 4% of transactions representing a much lower contribution to the total value of authorizations. Haiti, Argentina and Jamaica benefited from EDC financing, whereby Argentina with two transactions. It should be reminded that this analysis is based on a filtering of the 900+ transactions in order to assume which ones are possibly officially supported. Outside this filter, a larger number of transactions, usually of low values, are destined to High risk countries. Despite this bias, the overall picture that EDC's support towards High risk countries is limited remains.

As stated above, Brazilian exports can be viewed in the larger scope of south-south trade. As such, Brazil also supports exports to High risk nations, especially for non-aircraft related sectors. Supported aircraft sales to High risk nations cover for instance Angola, Montenegro and Argentina. Non-aircraft related transactions to High risk countries cover in Latin America the construction of a subway in Venezuela, the construction of power plants in Ecuador, the construction of natural gas pipelines in Argentina and the provision of healthcare equipment to Cuba, and in Africa the construction of Nacala airport in Mozambique, infrastructure in Ghana and various projects in Angola. Although detailed information of BNDES transactions is not available, it appears that Brazil largely supports exports to High risk nations.

Limited available data on Russian supported exports also show that, to a large extent, Russia finances exports to High risk countries. However the marginal values allocated to export credits cannot allow any qualified conclusions.

2.3.3 The Arrangement and International Aid

International aid, as Official Development Assistance (ODA) or other forms of aid (Other Official Flows or OOF) is provided by developed to poorer nations under two fashions: tied and untied. Tied aid represents governmental aid provided to another nation linked to the procurement by that nation of goods or services originating from the donor state. Untied aid is aid provided for specific projects but with no formal requirement from the receiving nation to use such aid for buying from the donor state. Tied aid can and is also linked to officially supported export credits under the term ‘mixed credits’, whereby the donor nation extends to the export nation both international aid and export credits for the pursuance of specific export activities. Tied aid, as officially supported export credits, is regulated by the Arrangement, whereby untied aid is not.

The linkage between ODA and officially supported export credits is well described in Wikipedia as follows:

‘Officially supported export credit may be connected to official development assistance (ODA) in two ways. First, they may be mixed with ODA, while still financing the same project (mixed credit). As the export credit is tied to purchases in the issuing country, the whole package qualifies as a tied aid credit, even if the ODA part is untied aid. Second, tied aid credits are not very different from export credits, except in interest, grace period (the time when there is no repayment of the principal) and terms of repayment. Such credits are separated from export credit by an OECD requirement that they have a minimum degree of "softness". "Softness" is measured by a formula that compares the present value of the credit with the present value of the same amount at standardized "commercial" terms. This difference is expressed as a percentage of the credit and called "concessionality level". Thus a grant has a concessionality level of 100%, a commercial credit scores zero per cent. The higher the concessionality level, the more the tied aid credit looks like ODA, the lower, the more it looks like an export credit.’

Aid is typically structured in the following categories:

- Highly concessional tied aid: where the level of the grant is above 80%
- 'Helsinki'-type tied aid: where the level of the grant ranges between 35% and 80%
- Prohibited tied aid: where the level of the grant is below 35%.

Analysing officially supported export credits within the wider environment of international trade, it naturally becomes required to shed light on other options used by governments to support exports. The following paragraphs show the connection between officially supported export credits and international aid, structured around:

- Tied aid in the sense of 'Helisinki'-type of tied aid, covered by the Arrangement and
- Untied aid, or highly concessional tied aid
- Export Credits vs ODA

Tied aid

As per paragraph 33 a) of the Arrangement, 'The participants have agreed to have complementary policies for export credits and tied aid. Export credit policies should be based on open competition and the free play of market forces. Tied aid policies should provide needed external resources to countries, sectors or projects with little or no access to market financing. Tied aid policies should ensure best value for money, minimise trade distortion, and contribute to developmentally effective use of these resources.'

The Arrangement also makes the linkage, for aid in the form of ODA to the document regulating international aid 'DAC Guiding Principles for Associated Financing and Tied and Partially Untied Official Development Assistance (1987)' and addresses the issue of mixed credits while defining accurately the perimeter of applicability of the tied aid under the Arrangement. In particular, eligibility of projects is subject to a number of parameters including:

- The ability to finance the project on commercial or Arrangement terms
- The commercial viability of the project
- A minimum concessionality level between 35% (or 50% for LDCs)
- Specific exemptions in case concessionality level is above 80%
- A concessional component linked in law or in fact to a non-concessional component
- Country eligibility of lower middle income countries or lower as define by the World Bank
- A minimum level of tied aid under certain conditions

- Etc.

The calculation of the concessionality level is complex and derived from a number of parameters from the planned support provided to a foreign nation. In particular, relating to export credits, paragraph 40 c) indicates that 'For the purpose of calculating the overall concessionality level of an associated financing package, the concessionality levels of the following credits, funds and payments are considered to be zero: - export credits that are in conformity with the Arrangement'. This fundamentally implies that export credits are not concessional, in other words are not provided as a grant.

Apart from the calculation of the concessionality level of tied aid, tied aid and export credits are, in principle, not otherwise recouped. They are however linked from the perspective that the procedures under the Arrangement for notifying and matching tied aid are the same as the ones foreseen for officially supported export credits. Also, export credits can be considered as a form of aid, in particular OOF, in the event such credits are granted for an export transaction. Such export credits, however, represent only a marginal contribution to the overall international aid, accounting for some 1,5% of total aid.

Despite an explicit linkage between export credits and tied aid, statistical data as well as ECAs annual reports remain relatively silent with regards to mixed credits or tied aid. In particular, tied aid practice is relatively uncommon, for instance the last tied aid reported in the US Eximbank dates back to 2009 and for a very small amount. No references were found in COFACE, ECGD, CESCE annual reports either. In fact, OECD governments have consistently worked towards minimizing tied aid as it may have a potential for trade distortion in the sense of providing a trade subsidy. US Eximbank 'Report to the US Congress on Export Credit Competition'[261] states that 'The potential for trade distortion is most serious in cases where a donor government provides relatively low concessionality tied aid financing for 'commercially viable' projects. Under these circumstances, a donor government's tied aid offer may be used as an attempt to 'buy' a sale for its national exporter through the provision of an official subsidy to a recipient country.'

In accordance with the US Eximbank report[91], 'the volume of Helsinki-type tied aid increased slightly [in 2011] to approximately US$ 5,9 billion. This is down from some US$ 10 billion prior to 1992 when the Arrangement rules for tied aid came into application. Also, such tied aid is

[261] Annual Report 2012. Export-Import Bank of the United States.

increasingly provided in commercially non-viable sectors, thus supporting development rather than facilitating exports'. In terms of volume, Japan remains the largest practitioner of tied aid with close to 70% of the total volumes of tied aid notified in 2011. Volume-wise, Austria and Korea represent each around 10% whereas the other donors less than 3% each. In terms of number of transactions, Austria leads the way with more than half of the total number.

It is also key that explicit effort was made to limit the potential recipient nations of tied aid and exclude those ineligible for 17-year loans from the World Bank as a result of their Gross National Income, which excludes nations such as Botswana, Gabon, South Africa, Argentina, Columbia, Turkey, UAE, Russia and others (mainly Medium risk nations as described above) – although China, India and Ecuador are eligible. Similarly, projects financed by tied aid are also constrained when they are deemed commercially viable, for instance gas transportation and distribution pipelines, freight railroad operations (locomotives, cars, signaling), privately owned manufacturing operations, oil- and gas-fired power plants, etc.

The importance of the Arrangement with respect to tied aid is merely due to its contribution to reduce the actual practice of tied aid, which is considered as competition biasing. The current level of tied aid of some US$ 5 billion annually is relatively low compared to the overall volumes of officially supported export credits extended, and this mainly by Japan, a non-Participant to the Arrangement.

Untied aid

Untied aid, which is non-concessional aid at a level of at least 80%, is not covered under the scope of the Arrangement, contrarily to tied aid. Untied aid is fundamentally governed by the Development Assistance Committee (DAC) Guiding Principles for Associated Financing and Tied and Partially Untied Official Development Assistance (ODA) adopted in 1987. The preamble of the DAC Guiding Principles clearly focus on the avoidance of trade distortion, indicating 'the need to avoid the risk of distortion of aid and trade', 'be consistent with fair trade' and that these principles are 'particularly important where there may be a risk of aid and trade distortion'. The threshold of applicability, according to the definitions included therein, reflects a level of concessionality above 25%, thus covers principally the entire range of aid including the Helsinki-type aid but also higher levels of concessionality. It then governs mixed credits, as does the Arrangement, and cross references between the two documents are clearly indicated. However,

as the US Eximbank report mentions, ‘Such disparities create lengthy processing delays and result in US exporter frustration regarding the role and purpose of the Tied Aid Fund.’

The importance of untied aid with respect to officially supported export credits lays in the fact that there exist some similarities between the two activities, although fundamentally different in their original concept. On the one side, both ODA or untied aid and officially supported export credits represent a form of official activity and on the other side, both mechanisms are used to enable recipient nations undertake projects of, to some extent, similar nature. Some examples of projects funded by ODA include, in 2011, France’s ODA for used water collection and treatment in Lebanon or for Egypt’s modernization of the irrigation in the Nil’s delta, Germany’s fund for a hydro power plant in Bosnia and Herzegovina or for a safety program railway in China, Japan’s financing of Iraq’s health sector reconstruction project or of Philippines arterial road bypass construction project. The two mechanisms differ, however, on aspects as to the nature of the recipient – aid flowing only to public entities for aid – the sectors seen as commercially viable in each case and the list of allowed recipients. Naturally, the main difference is that aid is provided to cover the financing itself of projects whereas export credits are typically used to cover the guarantee of financing. Thereby, the scope of applicability of officially supported export credits is wider than the one for aid, which is more clearly shaped around support to be provided by the industrialized nations or mainly the Low risk nations as defined above to developing or LDCs. Also, the participating nations to the respective agreements are different, as are the nations actually using the tools of aid and export credits.

Overall in 2011, ODA net disbursement by the Development Assistance Committee (DAC) nations reached some US$ 135 billion. This value includes bilateral as well as multilateral aid. In addition, Other Official Flows (OOF) of aid reached some US$ 9 billion in the same year. From these amounts, some US$ 45 billion were directed towards LDCs whereas the remaining went to developing nations. Afghanistan and Congo received by far the largest contributions with US$ 6,9 billion and US$ 5,5 billion respectively. Bangladesh, Ethiopia, Haiti, Mali, Mozambique, Senegal, Somalia, Sudan, Tanzania, Uganda and Zambia each received more than US$ 1 billion worth of aid. From non-LDC countries, Vietnam received some US$ 3,6 billion, Turkey and India more than US$ 3,2 billion each, whereas Brazil and China under the US$ 1 billion mark.

In terms of contributors, focusing on the ECAs under review in this study, Canada spent some US$ 5,5 billion, France US$ 13 billion, Germany US$ 14 billion, Spain US$ 4 billion, UK US$ 14 billion and US US$ 30 billion. The table below shows for the above nations the relation between

the level of officially supported export credits in 2011 and the respective level of ODA provided. It should be noted that the OECD has set a target of ODA as a percentage of each DAC country's Gross National Income of 0,7%. Thus ODA is merely related to the performance of the local economies rather than the export performance of a nation. Figure 2.3.2 – 1 presents the ODA disbursement of selected countries and their respective new official export credits extended in 2011.

Figure 2.3.3-1 Selected countries and their ODA disbursement

Country	New Official Export Credits (US$ billion)	Net ODA Disbursement (US$ billion)
Canada	1.7	5.5
France	12.2	13.0
Germany	20.3	14.1
Italy	8.6	4.3
Japan	6.0	10.8
UK	3.8	13.8
US	21.4	30.9

Analysing the above figures, a few remarks can be formulated. First, the amounts spent for ODA are much larger than the volumes spent in support of national exports. A key difference between export credits and ODA as indicated above is the fact that the disbursement of ODA constitutes a pure monetary value, as the value of ODA refers to the actual amounts paid, whereas in the case of export credits, the volumes indicated correspond to the actual level of an export contract guaranteed or financed. These amounts are not actually disbursed and the cost/cash element originates from the delta cost vs a market-driven private agency or from the potential claims that may arise from a failed deal. Thus the actual comparison between ODA and officially supported export credit should be based on the latter, ie the amount eventually to be borne by the national taxpayers, which is however not known in the case of export credits. For instance, US total authorizations for official export support in 2011 of US$ 32 billion has an impact on the US taxpayer of only a small portion of this amount, which in turn should be compared to the entire ODA contribution of US$ 30 billion. To that extent, the impact of ODA seems to be of a different dimension than the impact of officially supported export credits. In terms of beneficiaries, one third

of the ODA spent in 2011 benefits LDCs whereas officially supported export credits are much less directed towards such LDCs (or High risk nations) and significantly more towards Medium and Low risk countries. Finally, the motivation for extending officially supported export credits lays merely on the wish from private entities to sell and export, whereas the motivation to offer ODA is certainly more shaped from the political / governmental environments of each donor nation and the commitments given to the international community to actually support LDCs and developing economies to a certain level of their GNI. This different nature of the 'raison d'etre' of ODA compared to officially supported export credits would also limit the possible competition among nations in terms of intending, through such official support, to achieve higher volumes of export sales for their national industries.

Export credits vs ODA

The roots and rationale of the existence of each of those two mechanisms are naturally different. In particular, the beneficiaries of the two mechanisms are different as ODA is provided to governments whereas export credits usually benefit private companies. Also, a main differentiator is the nature of the two initiatives, ODA being principally focused on supporting the development of poorer nations while 'Export Credit Agencies do not have a development mandate. On the contrary, they are often driven by purely commercial interests on the part of Northern governments.' (Brynildsen[262]). However, their linkage is well established and some of their similarities presented above. Gianturco[263] suggests that one of the rationale for the existence of ECAs 'is that they serve in lieu of aid programs for developing countries.' The main conceptual linkage is the official nature of support provided to foreign nations. In that sense, aid and export credits are often presented in conjunction with each other, not least as tied aid is part of the Arrangement.

The debate is, thus, open with respect to the allocation of governmental funds for international trade support. ODA has the clear benefit of appearing more transparent, as the actual funds are clearly indicated, recorded and monitored. In contrast, the actual cost of official support in the case of export credits is covert. The ODA has a clear developmental mission, whereas 'ECAs are important tools in government trade policies' (Brynildsen), thus seeking commercial benefits for the country. ODA is purposefully designed to support High and Medium Risk nations while

[262] Brynildsen, O. S., 2011. Exporting goods or exporting debts? Eurodad.
[263] Gianturco, D. E., 2001. Export Credit Agencies – The Unsung Giants of International Trade and Finance. Quorum Books.p1-7.

officially supported export credits are similarly (or more) extended to support export to low risk countries.

However, many voices argue that ODA is not as innocent as it may appear. Bergsten[264] suggests that 'In practice, "untied aid" is often an oxymoron. The recipient country knows very well who is providing the funds and places orders accordingly. Japan is the most important donor of untied aid. Peter C. Evans and Kenneth A. Oye provide a detailed case study of Chinese power plant purchases demonstrating that, for practical purposes, Japanese untied aid finances procurement from Japan.' This example seems to indicate untied aid is, in fact, tied aid ruled by the more beneficial rules of untied aid for the DAC countries. Brynlidsen[265] argues that export credits create debts for the beneficiary nations, which are thereafter financed by ODA through debt cancellation: 'the main bulk of developing country debt to other governments is created by export credit guarantees, and ECAs receive significant transfers from aid budgets every year as a result of export credit debt cancelled by donor countries and paid with Official Development Aid (ODA).' Assuming Brynlidsen is correct, that fundamentally means that ODA is used as a hidden subsidy for supporting exports. Along the same lines, Bergsten[266] indicates that 'Unlike tied aid, nominally untied aid need not have a minimum 35 percent grant element. And unlike normal export credits, untied aid need not observe minimum commercial terms of the OECD Arrangements (interest rate, down payment, and maturity terms). Putting these two loopholes together, untied aid amounts to a backdoor route for subsidizing export credits.' Possibly, however, the main criticism against ODA is that it represents a clear tool of foreign policy. ODA is often provided by nations to other nations in which the donor has a vested interest. Not only statistics support this trend, but ODA is also formally mentioned in the policies of the respective Ministries of Foreign Affairs (e.g. Japan or France). But here again, the link between support and foreign policy is, in practice, also applicable to export credits. Evans and Oye (2001) reveal that 'These figures provide clear illustrations of the interaction between general foreign policy goals and the levels of ECA and ODA support.' Finally, the areas supported by ODA appear to be more focused on non-viable sectors such as social, health and public utility. However the borderline between viable and non-viable as well as the policy decision by nations which areas to support is vague and applicable to both export credits and ODA.

[264] Bergsten, C. F., 2001. The US Export-Import Bank: Meeting the Challenges of the 21st Century. Peterson Institute for International Economics.
[265] Brynildsen, O.S., 2011. Exporting goods or exporting debts? Eurodad.
[266] Bergsten, C. F., 2001. The US Export-Import Bank: Meeting the Challenges of the 21st Century. Peterson Institute for International Economics.

2.3.4 Findings

This section evaluated the recipient nations, the sectors as well as other types of support that may be facilitating international trade in the form of aid.

The analysis performed first in terms of individual countries' exports and second in terms of merchandise classifications. The results show that officially supported export credits play a marginal role in international trade overall, but possibly an important role in specific sectors. Indeed such export credits support a marginal 2% of the export value of world's most exporting nations, but can reach 40% of exports in such sectors. As such, officially supported export credits play a marginal role in terms of overall merchandise classifications as it affects only a very limited scope of products. All in all, sectors that could possibly be subject to medium- and long-term export credits as a result of the nature of their respective products cover a compiled export value of less than US$ 400 billion, representing some 2% of international exports. From those sectors, only a portion is typically officially supported. Specifically for the aircraft sector, it covers alone a large portion of the value of exports eligible for officially supported export credits and a much larger portion of actually provided official support. As the analysis is based on limited information available and, to some extent, an interpretation of such data, it is judged that further study would be useful to detail and qualify the findings of this section. For instance the ECAs may classify the officially supported transactions per existing classification nomenclature.

Taking the analysis of the recipients of officially supported export credits, it can be fairly assumed that such export credits are largely directed towards the natural trade partners of each nation. As such, France widely supports exports towards nations with historical links such as North African countries, the US towards Latin American nations and specific Asian countries, Canada towards mainly the American continent, Germany to immigration-relevant Turkey, neighbouring Russia and Belarus and Brazil to Latin America and Portuguese speaking Angola. To that extent, the profile of allocated export credits by benefitting nation appears as a natural extension of trade and foreign relations. More surprising are the levels of official support given from most ECAs for exports towards Low risk nations. Indeed the rationale of official support should relate to the governments' wish to undertake part of the medium- and long-term risks that exporters may face in specific markets. In the case of Low risk nations, it is questionable why governments would attempt to undertake such - theoretical - risks. After all, by definition, such risks (at least the political element) are low, similar to the risks existing while selling within their same countries. It is

even so more questionable when the trade affects neighbouring countries such as the US and Canada or countries belonging to the same economic bloc such as the EU nations.

The financial rationale of official support in such cases can hardly be understood or justified. Under such perspective, officially supported export credits can only partially be legitimized as a means put at the service of weak economies that need support without which they would lack the financial means to procure equipment necessary for their development. In particular, the low volumes of such export credits extended towards High risk nations would indicate a low appetite from exporters to sell in those countries and a similarly low appetite of governments to support sales towards such nations. In addition, there exist other means to support other governments, such as ODA, which appears to have a much stronger positive impact on recipient nations. Naturally, the nature of officially supported export credits and of ODA is different and ODA would not be suited to support exports from specific companies based in an LDC. Nevertheless, the practice of other types of support of international trade for instance in the form of aid shows that mechanisms from such other types of support may present benefits or a level of legitimization which could also inspire their applicability to officially supported export credits.

In summary, this Chapter questions the legitimacy of official support in the practice of export credits. It also tacitly assumes that such official support uses taxpayers' money to promote exports and, thus, is assimilated to subsidies. On the one side, official support affects only a few business sectors, therefore, taxpayers' money is used to support a dedicated part of the economy to the detriment of other. On the other side, official support is largely extended for exports towards nations that present a low risk and high wealth, therefore, taxpayers' money is used to support, at least partially, nations that have no need. Finally, there exist other mechanisms for supporting other nations in need, such as ODA. Despite clear benefits of the Arrangement compared to ODA, the legitimization of ODA due to its stated mission seem to be stronger than that of officially supported export credits.

3 CONCLUSIONS, ISSUES, RECOMMENDATIONS

The research undertaken in this thesis aimed at examining the legality of export credits in the frame of a potential competition among nations in this area. As the reference document in international trade for officially supported export credits, the Arrangement on the Guidelines for Officially Supported Export Credits was analysed from various facets. The Arrangement was first analysed historically and legally under the applicable theories of international organizations and in the context of the wider international legal framework. Thereafter, the actually practice followed by the Export Credit Agencies, the vehicles for implementing the Arrangement, was examined in detail for evaluating both potential distortions of international trade and the actual legitimisation of such practices within international cooperation. In doing so, the focus was placed on the aerospace sector, as one of the key areas of international trade affected by officially supported export credits and certainly one of the most critical ones.

For delineating more accurately the research pursued, a number of assumptions and parameters were selected, summarized as follows:

- Focus was given to the ECAs from the major aerospace nations around the world, affecting both current and future aircraft sales, and including a mixture of OECD, non-OECD participants to the Arrangement and non-participants to the Arrangement for a broader basis for the analysis. The nations considered comprised the US, the UK, France, Germany, Spain, Canada, Brazil, Russia and China.
- As reference year, the year 2011 was selected as the most recent year with full available information such as ECAs Annual Reports at the time when the analysis was performed. It was explicitly intended to refer to the reference year for the various data sets used. Unless exceptions, such as the UK Annual Report which covers a period overlapping two years, the data then refer to the same basis.

- As per the Arrangement, only medium- and long-term export credits are eligible for official support from ECAs, short-term credits were considered only exceptionally and in the event they could contribute to the analysis.
- A number of aspects were purposefully not analysed in this research, either as considered not relevant for the goals set, or due to the general lack of data.

In this context, the following paragraphs attempt to capture the main conclusions, recommendations and further research that may be viewed as beneficial for the theoretical and practical advancement of knowledge, considering the three aspects references in the scope of research in the introduction part: theories of International Relations, the Arrangement and specifically the aerospace sector and recommendations for the further evolution of the regime regulating the practice of officially supported export credits.

This section is, thus, structured around the points indicated above, as follows:

- Main issue regarding the research performed
- Conclusions on Theories of International Relations
- Conclusions on the Arrangement and the practice of officially supported export credits
- Recommendations on the further evolution of the Arrangement
- Conclusive remarks on the research.

3.1 Main issue: lack of transparency

The research performed in this thesis has encountered a number of issues, some of them potentially having a significant impact on the conclusions reached. The main, by far, issue is the one of lack of transparency.

From the outset of the search for raw data, it appeared clear that information on the activity of the various ECAs is extremely difficult to collect. The optimum solution would naturally be that the OECD Secretariat, which supports the activities of the Arrangement, would collect, harmonize and disclose specific quantitative and qualitative information on the individual transactions. This would constitute a single source of information of same quality that may have a broader use for analysing the practice of officially supported export credits. However, the OECD Secretariat is not willing to disclose information on ECAs activities, apart from what is available on the official

website, which is relatively limited. On request for information, the Secretariat replied (November 3rd, 2014): 'Any publicly available information that we have concerning OECD officially supported export credit activity is available on our webpages. The information that you have requested may contain commercially confidential information which is usually not publically available. To the extent that it might be available, you should contact the official export credit agencies involved.' Individual ECAs disclose in their Annual Reports a diverging set and quality of data rendering a comparison extremely cumbersome. As confirmed by Brynildsen (2011) 'Eurodad worked under heavy constraints in terms of access to data and, more specifically, to comparable data from different European countries.' For instance:

- US Eximbank provides adequately detailed data for long-term transactions, medium- term are not detailed
- ECGD discloses a full list of transactions including their details – in some events where the exporter does not wish to be disclosed, the transaction is anyway listed while hiding this specific commercially sensitive information
- COFACE presents sufficient information on non-aerospace transactions but only aggregate for aerospace related
- Hermes gives a listing of transactions, however without volumes – when requested, another list was provided with a broadly incompatible list of transactions and only a range of volumes
- EDC, on request, provided the full list of transactions pursued, however without details on the terms of the transactions and whether they were subject to official support, also with only range of volumes
- CESCE does not provide any list of transactions
- BNDES shows in a separate presentation the individual transactions however without volumes
- Russia Eximbank describes in the Annual Report the – assumed –full range of transactions, however in a complex and un-harmonized manner
- China does not provide any details.

Furthermore, analyses performed by the US Eximbank and of the US Government Accountability Office on the practice of ECAs provide additional relevant sources of information. However, frequently, the information contained therein is inconsistent with the data disclosed by the individual ECAs. It is also unclear how the raw data are filtered into the values presented in the

corresponding documents. Finally, information can be found on the internet for very specific transactions, but this constitutes merely media coverage and as such is usually targeted information.

The lack of sufficient data and of data of similar quality has led to the need to take assumptions and make interpretations, which certainly weaken the quality of the results of the analysis. It is deemed that the overall conclusions reached remain valid, however with a lower level of granularity and with weaker argumentation streams.

The lack of sufficient quantitative and qualitative data creates, additionally, obstacles to research that would otherwise be very useful in this thesis. These are for instance the following:

- Impact on decision-making: it is shown in Chapter 2.2 that the governing framework and the actual practice may be different among ECAs resulting in potential biases of international competition. It would be extremely helpful to evaluate the potential impact of such biases on the decision-making behaviour of the relevant stakeholders and, thereby, on the real effect of the biases on competition. The lack of data and in particular of the terms extended for each transaction renders such evaluation impossible – therefore the market biases identified remain theoretical and cannot be further qualified.

- Subsidies or not: a particular crucial aspect in the discussion on officially supported export credits, an activity that can be argued should be left with the private sector, is whether such export credits constitute a subsidy and, in such case, what is the value of the subsidy. Methodologies exist that enable a quantification of such potential subsidies, for instance by calculating the net present value over the term of the credit of the delta between the granted insurance or loans conditions and the market ones. To examine this aspect, the terms and conditions extended for each transaction are required. Thus it has proven impossible to assess the level of potential subsidiazation of the corresponding transaction, even if through the matching practice the subsidy would have been the same from participating ECAs of other exporting nations.

- Competition among ECAs: the level of competition among ECAs in matching each others' terms offered to exporters can provide useful clarity on the actual level of competition among ECAs. If the matching procedures are used frequently, it would show a sound and healthy practice where, eventually, the same terms are indeed extended to exporters. A

lack of frequent use of matching procedures could indicate an environment where ECAs respect each others' terms without necessarily matching them, thus generating a type of tacit acceptance of terms that form a subsidy. Data on the matching practice may also give useful results in the general behaviour of the various ECAs.

- Adherence to the rules or free-riding: Paragraph 2.2.3 describes the potential bias of competition in the event that ECAs are 'free riding' on their obligations under the Arrangement. As the terms and conditions extended to potential exporters are strictly regulated, free riding in this pre-contracting phase appears difficult. Also, the risk of repercussions from other ECAs in cases to come reduces the appetite to free ride. However, free riding can certainly come in the implementation phase especially in the sense of not collecting the amounts due by the exporters in a sort of 'debt relieving' practice, which may constitute a hidden subsidy. One case by EDC was made public, and the Eurodad study (2011) shows that this practice is often applied, but it remains foggy which events in this direction are occurring. The data disclosed in the ECAs Annual Reports do not always provide clarity with respect to the amounts received or the amounts paid out as a result of defaults. Thus no conclusions can be drawn on post-contract practice and potential corresponding free riding and hidden subsidies.

- Classification: a sectorial analysis of officially supported export credits was performed in Paragraph 2.3.1. Despite clear conclusions on the overall trend of sectors privileged by the practice of officially supported export credits, further detailed conclusions could be reached if ECAs, when disclosing information on individual transactions, were using international classifications of the sectors affected. For comparing and drawing conclusions on such analysis, it was thus required in some cases to make interpretations with respect to the classification of each transaction.

In addition to the above aspects, the perceived general lack of transparency on the practices of ECAs raises questions and doubts as to the sound use of officially supported export credits. If ECAs – and their respective governments – would feel totally comfortable with the practice they follow and in particular on the impact on international competition, there would already be a comprehensive and available set of data on the above questions. Lack of such transparency thus enhances suspicions that the stakeholders involved in the discipline of officially supported export credits do not wish answers to be given.

3.2 The Arrangement and the theories of international regimes

It is undoubtable that the Arrangement has constituted a major success in terms of international relations and in terms of practical achievements. The contribution of the Arrangement for disciplining trade finance over the past decades has proven fundamental. The dramatic reduction of the subsidized element of export credits and thereby the reduction of the associated costs and impact on taxpayers' money was demonstrated at several instances, thereby supporting a fairer international competition. The theories of international relations have successfully explained ex post the mechanics for the formation and evolution of the Arrangement as an international regime. Notably, the Arrangement is not an international institution nor an international agreement or treaty. It is rather an expression of willingness from the participating nations to adopt a series of jointly agreed guidelines, rules and proceedings, which shall strive to reduce possible trade distortions in the extension of officially supported export credits. The observation of the applicability of those rules over the years has shown a particularly high level of adherence to those rules, which can be seen as surprising under the actually non-binding nature of the Arrangement. This can be due to the anticipated repercussions of a 'free ride' on future cases of export credits from competing nations. However it may also be due to the consensus built around the rules giving the sense of 'ownership' of those rules by the participating nations.

A unique feature of the evolution of the Arrangement is also its built-in ability and procedure for a continued improvement of its provisions and, indeed, the Arrangement is being revised on a very regular basis with the aim to address any issues that may appear distorting international competition. This practice has thus progressively created a solid international framework for controlling to a very large extent the use of officially supported export credits.

Nevertheless, this continuous improvement has also progressively shaped an environment increasingly difficult to understand and assess in terms of international trade. Indeed the rules become increasing complex in order to cater for individual issues appearing on the international trade and, at each iteration of adjusted rules, other topics seem to surface. The 'very mature' version of the Arrangement in its version applicable in 2011 is certainly significantly more levelling the playing field than the original version of the 1970s, but, as shown in this research, a number of biases still persist.

At the same time, the issue of justification and legitimization of official support in the area of export finance, a discipline that could be seen as the responsibility of private financial institutions,

has increased with the growing success of the Arrangement. In particular in specific sectors such as the aerospace and for specific beneficiary nations such as the industrialized ones, the practice of official support falls short of convincing their ‘raison d’etre’ (see next paragraphs). In fact, it appears that the Arrangement is becoming a victim of its own success. By addressing progressively the various issues on officially supported export credits, it is raising the fundamental question of the justification of the existence of officially supported export credits as such. It is also reducing the actual scope of its applicability and the, once, true reason of their existence which was the support governments wish to provide to their exporters.

In this context, and without taking any stance with respect to the future of the Arrangement, the question can be raised of life and death of international regimes especially in the cases where such regimes become irrelevant as a result of their own success in achieving their goals. Little literature was found in that area besides the references in Paragraph 1.3.3 on the evolution and the inertia of international regimes. Further research in this area of international regimes may well be worth pursuing. Additionally, further research on the aspects of regime overlaps with the practical example of the Arrangement compared to aid and to short-term export credits could be beneficially be explored. Finally, an area that appears to be still virgin in terms of international regime is the one regarding merging of regimes – in particular when and how such mergers may be beneficial and the mechanisms of international relations that would enable them.

3.3 Conclusions on the Arrangement and the practice of official support in the area of export credits

The core scope of this research referred to the analysis of the legality of officially supported export credits in the frame of the competition between nations in this area. Following the multifaceted approach applied for this research, a wide array of conclusions have been drawn throughout the thesis. The following paragraphs are intended to capture in a systematic manner such individual conclusions.

3.3.1 Justification of Officially Supported Export Credits

Export credits and, more widely, export finance is certainly a key element for facilitating and even stimulating international trade. However the official support provided by governments in this area remains a thorny question. Why would governments spend taxpayers' money on supporting exports? If the historical reasons for the appearance of officially supported export finance i.e. subsidising exports are excluded, two other arguments could be examined: the additionality and the assistance to developing countries or LDCs.[267] Naturally, those arguments can be retained only under the assumption that export credits do not distort competition.

Additionality appears in the case where an ECA operates as a lender or guarantor of last resort in the sense that commercial financial institutions do not accept to provide the necessary export credits for a transaction to take place and the governmental support kicks in to enable such transaction. The first question raised is that of governments interfering in the markets for enabling transactions that otherwise would not be viable. In the sense of the liberal theories of free markets, such practice should, in principle, not be accepted unless governments wish to assist other nations in need for such transactions. This would constitute a case of aid and the issue of the relation between export credits and aid is further described below. Additionality also means that, with governmental support, a specific market is becoming larger by the sole effect of enabling transactions that would otherwise fail to occur. If such growing markets were accessible to all nations in a similar manner, such growing markets would be seen as governmental support for the development of international trade and thus could be acceptable. The matching procedures foreseen in the Arrangement should satisfy this concern and, thereby, the additionality

[267] OECD, 2000.

would become an element of global growth. However, the intention always remains that such additional markets are actually captured by the exporter that initiates the support from its national ECA and thereby the real purpose of the related export credits is to create a market which is captured by the national exporter. This is a principle question rather than one of biasing competition and leads to the conclusion that, under this aspect, additionality due to export credits cannot be legitimate. Finally, additionality generated by governmental support is basically created in those sectors that are, in each country, soliciting governmental support. Thus governments do not support those sectors that they believe should be developed as part of a wider governmental policy but rather support those sectors that are requesting support. This represents a clear bias versus the other sectors, especially sectors that by their nature would not be eligible for official support in export credits. In total, additionality appears as a weak argument to justify and legitimize official support in export credits, which could only be claimed under very restrictive cases.

Assistance to developing nations would constitute the second argument for justifying officially supported export credits. In such event, governments use taxpayers' money for facilitating the provision of goods and services needed by a foreign nation which would not have the means to acquire them otherwise. Such practice would fall within the more general scope of governments providing aid to developing nations. Under this understanding, export credits can indeed be used to the benefit of the poorer nation and can soundly be justified as a governmental practice. This, however, would suggest that the practice of officially supported export credits should be perceived as an aid to other nations and, thus, also be limited to a well-defined list of nations. Extending export credits to, e.g., developed or industrialized countries would therefore not be legitimized.

From the above, it can be concluded that officially supported export credits can only be justified and legitimized in a limited scope of cases.

3.3.2 Officially supported export credits and bias of competition

This research was focused on the aerospace sector for examining in depth the effects of officially supported export credits in international competition. Chapter 2.1 showed that there are clear biases and potential biases in international competition from the official support provided in export finance. The distortion is traceable both at the level of the airliners and at the level of their own customers, the passengers (or freight). The examples are given of an airliner based in a

developing country easily benefiting from officially supported export credits, compared to an EU airliner based in an Airbus-producing nation that could access official support only if buying from another Airbus-producing nation, as is the case of Air France buying Airbus aircraft from the UK, or from the US, compared to an US based airliner that could claim official support only if buying Airbus aircraft. In fact the higher the risk of the country benefitting from officially supported export credits, the higher the benefit provided and thus the bigger is the trade bias. As, due to the 9 freedoms of air traffic, airliners can compete on most and growing number of international and national routes, the impact from accessing or not export credits is direct on competition.

As a result, it is suggested that the provision of official support for export credits should be restricted in terms of sectors. The analysis presented in Paragraph 2.1.4 shows a number of parameters against which the sectors can be assessed and, in cases of specific characteristics, individual sectors should be prohibited from official support altogether. This is particularly the case of industries the products of which compete on international markets and for which access to official support is not accessible under the same terms for buyers from different countries. This is particularly the case of sectors such as airliners but also other sector such as cargo vessels, which would affected directly or indirectly from such uneven access to official support. It was further on assessed that export credits in social, health and public policy areas such as construction works, power supplies, water treatment etc, typically commercially non-viable, would potentially and indirectly have an effect on international competition as they mainly serve the internal market of the beneficiary nations. The effect could be identified in case of cross-border activity such as train transportation or through the indirect effect of goods produced and transported internationally under more beneficial terms.

In any event, a deeper analysis sector by sector of the effect of officially supported export credits would be largely beneficial, in particular for examining whether such sectors should be excluded from eligibility for official support. A quantification of the impact should also be analysed in order to provide a clearer view on the relevance or not of the economic effect. In any event, the biases identified for the aerospace sector, by themselves, are sufficient to suggest that at least this sector should not be eligible for officially supported export credits.

3.3.3 Impact of officially supported export credits on the international trade

Paragraph 2.3.1 focused on analysing the real dimension of officially supported export credits in the frame of international trade. It was shown that, despite a widespread view that export credits are key in international trade, the actual officially supported ones affect only a limited number of sectors and volume of trade. In fact less than 2% of exported volumes can be eligible for official support in a handful of sectors, the ones that actually would qualify for medium- and long-term export credits, thus mainly major capital equipment or constructions. These results are based on today's criteria for eligibility of officially supported export credits. However, Paragraphs 3.3.1 and 3.3.2 above conclude that it may be beneficial that specific beneficiary countries and specific sectors should be excluded from eligibility for official support.

If the minimum suggested restrictions are applied, i.e. a ban of official support for exports towards Low risk countries and a ban of the aerospace sector, the impact on the role of official support would be significant. The volumes of official support extended by ECAs would reduce significantly, for instance more than 60% for COFACE, and possibly more than 80% in the case of ECGD. Excluding Boeing aircraft and support to Low Risk Nations would also reduce US Eximbank's contribution to export credits considerably and the same trend would be seen for the other ECAs. The remaining volumes of official support would then drop to a level below 1% of each country's exports. In this context, the overall presence of officially supported export credits and the role of the Arrangement in international trade would be even further marginalized.

3.3.4 Export credits and aid

The relation between officially supported export credits and aid provided from industrialized to developing nations is highlighted in Paragraph 2.3.2. Despite the fundamental difference in nature between the two types of support, they also present similarities and interconnections in particular their official character, the use of taxpayers' money, the direct or indirect linkage to exports, the type of projects supported and the international dimension. The list of participants to the DAC and to the Arrangement are, also, very similar.

The two types of activities are somewhat linked in the Arrangement in the form of tied aid and mixed credits. They are also covered in a variety of other documents of international applicability such as the DAC Guiding Principles for aid. In general, although a linkage is established between

the two disciplines, they are governed by a different and sometimes contradictory set of rules. For instance the minimum level of concessionality, the type of eligible transactions, the beneficiary countries are not necessarily aligned among the relevant documents. Cooperation procedures among nations are also different, as tied aid under the Helsinki-type of aid is covered under the Arrangement whereas other types of aid are covered in other agreements.

It appears necessary and is therefore strongly recommended to pursue an alignment of the two types of activities and a streamline of the coverage of such activities under different international regimes. For that purpose, the conclusions regarding the justification of official support for export credits as presented in Paragraph 3.3.1 could be used. The main justification and legitimisation is seen in the ability of such official support to assist developing countries and LDCs. If the actual character of officially supported export credits was clearly directed towards foreign assistance, the image and perception of officially supported export credits would be extremely clear. An alignment and streamline of the two types of activities would consequently be performed in the direction of assimilating officially supported export credits in the frame of the provision of aid.

For the sake of understanding the impact of such alignment, it could be considered that provisions of the DAC Guiding Principles could be made applicable for export credits. For instance an alignment of beneficiaries as per the DAC definitions would automatically exclude the provision of export credits to Low risk, developed and industrialized nations. Also, the DAC scope of eligibility of projects would certainly support a focus of official export credits towards developmental activities, thereby excluding activities typically undertaken by private companies, the support of which may distort international competition. Provisions and in particular procedures applicable to the Arrangement, in particular the entire matching mechanism which is seen as a fundamental element for transparency and avoidance of distortion of trade, could prove beneficial for the provision of international aid.

The 2015 Arrangement amendment including a new Sector Understanding on Coal-fired electricity generation projects distinguishes for the first time between recipient nations, providing a different set of eligibility and repayment terms for International Development Association eligible countries, i.e. a set of countries defined by the World Bank as being in need of development assistance. Such development is seen as particularly positive and the concept of focusing the Arrangement on less developed nations could, overall, benefit from such initiative.

Finally, considerations around the nature of ownership of the beneficiaries may also be aligned. If a state is a recipient of aid and, under the recommendations to be examined, also of officially supported export credits, the legitimisation may appear as of higher level than in case of private recipients, which can raise questions of transparency.

The purpose of such alignment should certainly not hinder the sound provision of officially supported export credits, on the contrary it could in some instances even broaden the scope of applicability such as include also officially supported short term export credits. In the direction of such alignment, a very detailed analysis of the impact for export credits and for international aid should be pursued. The strengths of each of the two regimes should be captured to the benefit of a more levelled playing field in international trade.

3.3.5 Non-compliance

Creating a genuine level playing field among nations in the area of export finance requires that stakeholders involved adhere to a same set of rules. In the specific political environment of international trade, the issue is rather limited to the main players, as on the one side smaller players cannot broadly impact competition in international trade due to the volumes of trade that they generate and on the other side smaller players will have the tendency to follow the rules instigated by the major players. However, the issue of non-compliance of major players such as China is one of the thorniest issues in the case of officially supported export credits.

The major players in international trade include the OECD nations, Brazil, Japan, China, South Korea and India, which altogether generate more than half of the international trade. While the OECD nations are all participants to the Arrangement and, assumingly, adhere to the specific set of rules, China, India and Japan do not follow or support such rules. Brazil and South Korea are associated members of the Arrangement and generally accept to comply with the set rules. The particular case of China is unique due to the size of its industry and the exponential development of its export activities over the recent years, which also plays a role in regulating officially supported export credits (see Chapter 1.2 on the international institutional environment).

The question of non-compliance to the rules of the Arrangement may take two forms: the first consists in the participating nations or associated nations not complying with the rules they have accepted, the other takes the form of not accepting the rules. The former is in fact the case of

'free riders' to the Arrangement, associated in fact to hidden subsidies, and its effects are presented in Paragraph 2.2.3 and, generally, assessed as existing but possibly of limited impact.

The fundamental question of the Arrangement comes from nations not accepting the rules, in particular China. As analysed in Paragraph 2.2.2, China, India and Brazil are deemed to have extended in 2011 roughly the same amount as the total volume of export credits of the G7 nations. The significant amounts of trade originating from China and the other non-participating countries are certainly a challenge to disciplining export finance practices. With the level of exports from such countries quickly growing, the potential bias of competition in case the OECD rules are not followed increases substantially. China has so far refused to adhere to the OECD rules and, on the contrary, is hinting at creating an alternative regulatory framework on officially supported export credits. Together with the growing political influence of China globally, it can be assumed that a Chinese initiative in this field will find a large number of followers. The US request for consultations to China submitted in December 2015 on tax related matters for aircraft manufacturing is a clear indication that the powers may well collide in such issue areas.

In this context, two main results can be derived. First is that despite the existence and enforcement of the Arrangement, there is no security that this protects international trade against diverging practices from non-participating nations. With the growing impact of exports from such nations, the distortion of competition can be assumed to grow accordingly. Second is that, should this trend materializes in the future, the role and legitimisation of the Arrangement will diminish and, possibly, if the nations adhering to it find it increasingly difficult to compete against non-participating nations, the Arrangement may be undermined or simply abandoned and, possibly, practices such as free riding and hidden subsidies will increase. In the meanwhile, nations such as China continue being the beneficiaries of officially supported export credits under the terms of the Arrangement while they extend similar credits for their own exports under more flexible terms.

3.3.6 Competition among ECAs

The Arrangement was developed with a clear intention to regulate the practice of officially supported export credits which, at that time, were systematically and overtly used to subsidize exports. As described in the historical development of the Arrangement, the provisions and mechanisms described therein progressively evolved towards an always fairer system limiting the actual distortion of competition through export credits. Despite an always more mature practice,

aligned among the participants to the Arrangement, there remains an aspect that puts at an uneven level the vehicles of the export credit policy, the ECAs. As examined in Chapter 2.2, the ECAs are all but a consistent and harmonized group of financial institutions. They present significant differences with regards to a large number of aspects and, although they are called to apply a same set of rules, their differences result, in dedicated cases, in a divergent approach to exporters of different nations. This, naturally, has the potential of biasing international competition, although it was not feasible in this research to conclude the actual impact of the aforementioned on actual decision-making and, thereby, their real effect on competition.

Differences between ECAs were identified in 3 categories:

- Ownership aspects
- Regulatory aspects
- Operational aspects

In terms of ownership aspects, major differences were found in the ownership structure of the ECAs, ranging from private entities mandated from their governments to undertake the role of ECA to fully governmental-owned organizations. The ownership structure has cascading effects on a number of other characteristics such as the mission, the governance, the types of products offered and the overall transparency of operations and results. In particular, starting from the mission, one can spot a very different philosophy with respect to officially supported export credits, from insurer of last resort to generator of employment or simply provider of similar conditions as other ECAs. It was shown that the above aspects have a detrimental indirect effect on international competition in the sense that the approach and consideration of exporters in each nation is different. In particular, the case of the US Eximbank losing its ability to extend officially supported export credits between July and December 2015 demonstrates the possible implications of governance in competition among ECAs.

Regulatory aspects present much more direct implications on competition among exporters. The, usually, most restrictive regulations can be found in the US where the granting of export credits is subject to a number of additional checks such as foreign content considerations, shipping conditions, focus on SMEs, environmental policies, military sales, currency risks, economic impact, etc. Such aspects have an impact in terms of eligibility of exporters for export credits but also in terms of conditions extended especially as a result of foreign content considerations.

The operational aspects of ECAs were also examined, whereby the limited information available made it difficult to reach quality conclusions, but limit to qualified assumptions. This does not necessarily mean that there are no impact from ECAs operations onto international competition, but rather that those, if any, are difficult to trace due to the subjectivity the considerations. In particular, it was attempted to check where specific sectors were privileged by the ECAs (or their governments) versus others. Also the processing time of application, the potential to cooperate with other ECAs, the accessibility of ECAs and the costs involved for the potential exporters were addressed. Despite noted differences, and without further research, it was judged that such aspects may not fundamentally be a differentiator for competition.

The issue that this analysis raises is the one of the standardization of the ECAs. Indeed, taking as an assumption that the actual rules of the Arrangement permit an unbiased international competition but that the actual characteristics of each ECA may generate trade distortions, the conclusion would lead to the idea of further standardization of the ECAs. This may constitute the next step of disciplining export finance. However, the overall concept of international regulations interfering with internal aspects such as ownership structure of ECAs may generate unsurmountable difficulties. This aspect, and more generally the consideration of standardizing the national vehicles of international regimes, may be worth further exploring both from a theoretical and a practical viewpoint.

3.3.7 EU ECAs

Analysing the framework of functioning of the ECAs, a specific issue relating to the EU ECAs has appeared across the paragraphs of this research. The issue is in fact the justification of the existence of separate ECAs for the individual EU nations. It is certainly clear that, from a historical perspective, each nation requires an own ECA corresponding on the one side to the promotion of its own exports, and on the other side to the specifics of its economy such as currency, banking system, etc. Nevertheless, the EU has evolved since the early days of the Arrangement, has grown in size and has further integrated the national economies and the national financial systems.

Today, the EU operates as a single economic block, with closely interrelated but not yet integrated financial systems. A common European currency gives the Eurozone an own identity

and autonomy of policy. A European Central Bank does indeed coordinate European monetary and financial policies but decision-making is still strongly in the hands of the national banks.

At ECA level, each nation is operating a separate institution, each with its own characteristics. All are obliged to follow the provisions of the Arrangement as those are integrated in the EU legislation in the form of a directive. Additionally, the EU itself is participant to the Arrangement as opposed to individual countries.

This situation begs the question whether a single EU ECA could be more justifiable than individual ones. This would certainly be supported by the common EU regulatory frame and the common participation to the Arrangement. Also, within this common framework, the EU ECAs present different characteristics but also show strong ties and cooperation among themselves in particular in the area of Airbus exports. To that respect, it is surprising to see that one ECA finances exports of aircraft to another EU nation. For instance, UK ECGD officially supports Airbus aircraft produced in France but exported from the UK to France. Similarly, Hermes supports the exports of Airbus aircraft from Germany to Ireland. Examples of such officially supported intra-EU trade abound. The situation can be compared to a potential sale of Boeing aircraft from one US state to another, officially supported by the local ECA. Such practices appear as illegitimate and unjustifiable, despite their legal conformity.

It can certainly be argued that intra-EU supported exports especially in the aerospace sector addresses the distortion of competition resulting from other nations benefiting from officially supported export credits. However, this biases even more the situation versus the US, where no mechanisms for intra-US trade are available.

In this discussion, the operational positioning of the EU, half way between an integrated state and a group of separate countries, suggests that both scenarios – separate or single ECA -could be argued for. Nevertheless, from a policy and international presence point of view, a unique ECA – or unique ECA frame with local subsidiaries - representing the exports of all EU nations would appear as justifiable. Unacceptable intra-EU supported trade would disappear, ECA policies and presence would become EU-wide more solid, the voice and representation of such unique ECA would be stronger and the current strong ties and cooperation among such ECAs would become an internal ECA issue.

It is well understood that, in the current political context, no EU nation would wish a single ECA, as this reduces the power of the EU as a result of the multiple participation to the Arrangement but also the political influence of each EU state. However, a unified EU ECA may appear as a legitimized solution for the future. It is, therefore, recommended that further research is pursued for examining in detail the theoretical, legal, international relations' legitimisation of separate EU ECAs and a framework for a possible unique EU ECA in the future, also examining the entity i.e. EU or Eurozone that may be most suitable for such ECA.

3.3.8 Regulatory framework

The regulatory framework surrounding officially supported export credits and its historical development constitutes also a consideration regarding its legitimisation. Officially supported export credits are internationally covered in a broad set of documents, part of different regimes and agreements. Interestingly, the intentions of the involved stakeholders over time has evolved, thereby creating a set of documents that are aimed to be interconnected through cross-references. As such, officially supported export credits are, principally, viewed as subsidies and therefore totally banned, however such ban was never followed by the nations, which subsequently led to regulating them. This indicates that official support for export credits has always been viewed as an area of questionable legitimisation. Clearly, a total ban would constitute the cleanest solution for avoiding any distortion in international competition, leaving the provision of export credits solely to the private sector. The fact that nations have bypassed the ban of officially supported export credits is relevant to their original intentions, which is supporting national exports. As governmental money paid to support exports, beyond the terms and conditions that the private sector would extend, is necessarily a type of subsidy, the intention of those governments not accepting the ban may, thus, be assimilated as to subsidize exports.

An additional question comes from the distinction in the regulatory framework between short-term and medium- and long-term export credits. Regulators have defined that the one category would cover export credits with terms up to two years, whereas medium- and long-term are defined as the export credits with terms beyond two years. Only the second category is eligible for official support. However, the distinction between the two categories seems arbitrary and artificial. The question raised is what were the intentions of the stakeholders when the categories were thus defined and what is the rationale behind the understanding that only medium- and long-term credits can be officially supported and not short-term ones. A suspicious thinking could suggest

that medium- and long-term transactions are the ones involving higher volumes and greater political weight – and that such transactions are more likely to be non-viable due to the longer terms extended. This, in turn, may indicate the real intentions of the regulators, meaning focusing on supporting primarily those higher volumes politically relevant exports, while disregarding the short-term ones. It can be argued that shorter term transactions may bear lower risks as the horizon is more predictable. But this does not preclude that, for other reasons, a short-term transaction would not be commercially viable and thus official support would facilitate or enable the transaction. According to the regulatory set up such support is not available for this transaction but available for a similar transaction with terms beyond two years.

Finally, the linkage between officially supported export credits and Free Trade Agreements (FTAs) is another aspect in the discussion on the legitimisation of export credits. The question is the conceptual suitability of official support in zones governed by FTAs. Indeed, the fundamental concept of a free trade zone is the reduction of a number of trade barriers imposed by governments in the trade among nations from this FTA with the primary aim of reducing trade distortions. Nevertheless, official support in export credits can, on the one side, be assimilated to an export subsidy, with consequences on the competition towards national industry, and on the other side a governmental interference in free trade. Although the real impact on trade distortions is possibly minimal, the actual conceptual suitability may be somewhat questionable.

3.4 Recommendations

The research performed in this thesis and the conclusions presented in the previous paragraphs lead to the clear position that the current regime on regulating the practice of official supported export credits cannot convincingly be justified and legitimized. The legality of export credits is questioned and the competition among nations in this issue area clearly demonstrated. The conclusion of the Government Accountability Office report (2012) stating that the 'level playing field is shattered' is confirmed in this study.

However, the benefits of the establishment of a regime for regulating such practices and the fact that such regime has continuously evolved in order to ever reduce potential trade distortions have also proven invaluable. Naturally, a pure ban of official support in export credits would constitute the clearest solution, both for the competition among participating nations and for the threat from rising nonparticipating countries such as China. A ban is, nonetheless, at the current state of international relations not seen as a realistic option as such ban needs first be negotiated among leading stakeholders including non-participating nations and then incorporated in international treaties to be signed by such nations. The politics of regime formation and transformation presented in Chapter 0.3 show that the interests of the key stakeholders need to converge, which does not seem to be the case in the current context. Past efforts to ban officially supported export credits have also failed.

As shown above, the current practice of officially supported export credits present a number of trade distorting effects, both on theoretical and practical aspects, in particular when focusing on the aerospace industry. Such trade distorting effects include:

- More beneficial financing terms for an exporting industry versus the local industry of the buying nation
- More beneficial terms for acquisition of capital equipment of companies in some nations, competing however on the international markets with such equipment
- Different ownership and regulatory framework as well as divergent practices among ECAs
- Free riding especially in the phase after the export credits have been extended
- Competition from non-participating nations, especially quickly growing developing nations.

In addition, a number of questions in terms of legitimisation of the overall practice of official support for export credits were raised. Such questions include:

- Practice of officially supported export credits among developed, industrialized, low risk nations and other nations without fundamentally political risk
- History and international regulatory frame attempting to ban official support for export credits
- Artificial separation of export credits in short-term and medium- / long-term
- Official support for exports benefitting private companies
- Official support privileging certain national sectors
- Overlap between official support for export credits and wider regimes for aid
- Practice of official support in the frame of FTAs
- General lack of transparency.

Excluding the option of banning officially supported export credits, the recommendations below aim at improving the practice, increasing its legimisation, further limiting its applicability and more effectively linking the practice to other applicable regimes in similar issue areas. These recommendations should, therefore, be seen in the context of regime evolution which should eventually lead to a stronger and more capable regime in the sense of supporting distortion-free international trade.

Such recommendations include:

- Streamline the applicability of officially supported export credits to a specific set of beneficiary countries. Official support for exports towards low risk, developed, wealthy or industrialized countries is seen as contradiction to the actual purpose of export credits. Beneficiary countries could, for instance, be determined under the same categories as for untied aid.
- Limit the applicability of officially supported export credits to such sectors which are seen as not distorting, directly or indirectly, international trade. Sectors such as utilities, public health, education, social policies would certainly justify official support in some kind of aid. A detailed study on sectors allowed should be performed in that sense.
- Align the regulatory framework / regime of aid and official support for exports, in the sense that such export credits constitute a form of aid. A first step was achieved by regulating tied aid, a complete merger between the two regimes, using the best practices of each, could be beneficial for transparency reasons, legitimisation purposes and practical implementation.

- Simplify the terms of the Arrangement, or any follow-on agreements. The complex mechanisms, resulting from years of negotiations and evolution, appear as producing the suitable outcome of cooperation between ECAs. However, they also lead to limited transparency and understanding and, thereby, a reduced level of acceptability.
- Explore regime provisions for short-term export credits which could be useful for use in medium- / long-term official support for export credits. In particular, evaluate the option of ECAs also extending official support for exports shorter than 2 years in particular conditions.
- Improve monitoring and reporting mechanisms to ensure the implementation of the various guidelines, in particular for after-contract practices, and create a harmonized reporting scheme for all ECAs including all key elements of individual transactions as well as classification into sectors.
- Impose higher levels of transparency so that the real practice of officially supported export credits can be quantified, including the evaluation of potentially subsidized portions,

The above key recommendations are targeted at evolving the current regime into one with less potential trade distortions, a clearer positioning in international regimes and a far higher level of legitimisation of official support for export credits. The relatively marginal impact of the Arrangement on international trade enhances the need of evolving it as, for a regime of low impact a large number of questions on its legitimisation are raised.

3.5 Conclusive remarks

Broadening the findings of this research, it is felt as a necessity to address again the wider issue of fair competition and level playing field in international trade. What can be seen as a natural competitive advantage of a nation and what as an interference in trade? It is deemed as a competitive advantage when a nation finds natural resources in its territory which are easily accessible and thus cheaper than similar resources from another nation. It is also considered as an interference or trade distortion when a government subsidizes exports. However the field in-between remains often open. For instance when a nation invests more than others in education leading to higher productivity and a better competitive positioning or when a nation invests in general infrastructure that, eventually, leads to lower production costs possibly more in some sectors than others, or even when the financial situation of a nation is more solid than others with more available liquidity to finance production and exports – how can these be taken into consideration in international trade? Can it be the willingness of nations to regulate or take into consideration such aspects?

The case of the Airbus-Boeing dispute has directed the dispute resolution body to settle on some of such aspects, qualifying governments' support directly linked to the production or promotion of aircraft as subsidies whereas other types of more generic support as acceptable. However the red line between the two categories is foggy and considered on a case-by-case basis. Spending governmental money to train aerospace engineers would be part of a general educational policy or rather a subsidy for the aerospace industry? Depending on the answer, the local industry may or may not be privileged compared to other nations.

This further raises the question of the level of 'depth' of potential trade distortion. The study has shown that officially supported export credits may generate second and third level biases to the end customers. For instance in the aerospace industry, better financing terms and conditions of aircraft bought by companies based in different countries will bias the international competition when such companies will compete with each other for passengers. Thus the clear impact on competition is not, in this case, focused on whether the airliner will acquire Airbus or Boeing but that one airliner will acquire any of those aircraft under better terms than competing airliners. Thus the question is to what extent should such interferences be regulated?

Finally, the example of the functioning of the ECAs and the alignment of their ownership and regulatory frameworks is another question in the same direction: to which extent should an

international regime interfere in the internal organization and functioning of a country for the sake of fair competition? In the specific case of the Arrangement, the ownership models and the specific national regulatory frame could be further aligned for an even fairer competition – however can such level of interference be acceptable?

Answers to those questions are, naturally, difficult to be formulated. They strongly depend on the context of each stakeholder, her/his beliefs and convictions on wider policies and, of course, on the prevailing interests. It boils down to fundamental questions of public policies and the role of governments in economics and trade. To align international stakeholders on such issues is a gigantic work that can only, if at all, be achieved by lengthy international negotiations. The theories of international relations and regimes offer, therefore, an appropriate theoretical framework for understanding and, possibly, leading the way to practical solutions in international issue areas such as official support for exports. A disruptive event, such as the freeze of the activities of the US Eximbank in 2015 or the slowdown of the economic development in China may constitute an opportunity to bring key stakeholders around the table of negotiations and further develop the discussions for required future regime evolutions.

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