
THE SUBSIDIES – AN INSTRUMENT OF TRADE POLICY. CASE STUDY: THE BOEING-AIRBUS “WAR”

ROVINARU Mihaela

“Babes-Bolyai” University, Cluj-Napoca, Romania

POP Larisa

“Babes-Bolyai” University, Cluj-Napoca, Romania

Abstract:

For decades, the problem of governmental intervention on the markets provoked significant debates, representing even nowadays a controversial matter. A prevailing form of intervention is represented by subsidies. Although subsidies are regularly used by less-developed countries to stimulate exports, they are not forgotten by the advanced economies. From several examples of controversies generated by subsidy use, we examine in this paper “The Boeing-Airbus war”. For a decade, US and EU are accusing each other of “helping” the aircraft producers through governmental funds. We try to see who is right, what are the arguments, and if there will be a winner.

Key words: *international trade policy, governmental intervention, subsidies, aircraft industry*

1. Introduction

The problem of governmental intervention on the markets has always provoked significant debates, representing even nowadays a controversial matter. With the beginning of the new millennium, there were many liberal oriented supporters who hoped that the role played by the state on the market would diminish. However, it seems that in the current globalized economic framework – still profoundly marked by the recent global economic crisis – the role of the state and the significance of its intervention are more pronounced than ever before (Bodea and Mihut, 2013, p. 31). International trade policy constitutes one of the main components of the economic policy of any nation. Through external trade, nations are able to obtain important gains and achieve economic growth. These policies involve a wide range of different actions and instruments, varying from taxes applied to some international transactions, to subsidies and financing for others, including also legal limitations on the value or volume of some particular imports. The most frequently met instruments of

international trade policy are represented by tariffs and import quotas, these instruments being also the most debated and internationally regulated ones. Still, a special place is conferred to a specific category of international trade policy instruments: the stimulating and promoting instruments. If tariffs and quotas are mainly related to imports, the promoting and stimulating instruments are related to exports. Among these types of instruments, the subsidies hold a particular position, reason for which we chose to analyze in this paper the regime of subsidies, their consequences and implications. After presenting the theoretical aspects regarding this subject, from the numerous examples of controversies that the use of subsidies have generated worldwide, we chose to examine the one called “The Boeing-Airbus war”, in order to see which of the two parties is right and which one is wrong, what arguments they both have and if, eventually, this “trade war” will ever have a winner.

2.Literature Review and Empirical Analysis

2.1. Definition, types and effects of subsidies

At international level, there are two agreed definitions for subsidies: one of the United Nation’s Statistics Division and one of the World Trade Organisation. The first one, the UN Statistics Division’s, is used to create national accounts, while the second one, the WTO’s, is used to regulate the use of subsidies that affect trade. According to WTO, whose definition is more comprehensive, “a subsidy is a financial contribution by a government or any public body within the territory of a Member which confers a benefit” (WTO, 2014). To this definition we will return, later in the paper.

There are also a few synonyms for subsidies that should be considered. In trade policy, the most frequently used and most accurate term seems to be “support”. We can find this term either in OECD regulation or in WTO’s agreements. In OECD regulation, the term “support” is related to market prices. According to the OECD definition, “A subsidy is a measure that keeps prices for consumers below market levels, or keeps prices for producers above market levels, or that reduces costs for both producers and consumers by giving direct or indirect support” (OECD, 2007). In WTO’s Agreement on Agriculture we can find syntaxes like “domestic support” or “aggregate measure of support”.

A very important aspect when talking about subsidies is the notion of “specificity”, especially in external trade policies. The notion of specificity provides a useful conceptual framework for considering whether a subsidy is likely to distort trade or competition (Steenblik, 2007, p.10). According to WTO’s regulations there are four types of “specificities”: *Enterprise-specificity* – when a government targets a particular company or companies for subsidization; *Industry-specificity* – when a government targets a particular sector or sectors for subsidization; *Regional specificity* – when a government targets producers in specified parts of its territory for subsidization; *Prohibited subsidies* – when a government targets export goods or goods using domestic inputs for subsidization. (WTO, 2013)

In practice, we can identify many types of subsidies, as for example: grants and other direct payments, tax concessions, in-kind subsidies, cross subsidies, credit subsidies and government guarantees, hybrid subsidies, derivative subsidies, subsidies through government procurement, market price support etc. Grants and other direct payments (usually in cash) are the most basic form of subsidies. In trade policy, a grant refers to a time-limited payment in connection with a specific investment. Other direct payments may be linked to the volume of production, sales, or prices. The latter's 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 on the market. To help exporters, sometime the government uses the so called in-kind subsidies, provided in other form than money. 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. (Steenblick, 2007, p. 21)

The terms of external trade can be distorted by credit subsidies and government guarantees. Usually, those are called “hidden” subsidies, and appear in one of the following situations: whenever a government takes on the role of a banker or insurer to a company or industry that is involved in foreign trade; whenever governments guarantee loans taken out by companies or individuals through commercial banks; or when governments serve as insurers of last resort for private investments.

A particular type of subsidy is the one materialized through government procurement. As we mentioned above, the WTO consider that government procurement constitutes a subsidy when “a benefit is thereby conferred”, usually when this procurement take place under circumstances that do not accurately reflect normal market conditions. The first rules regarding government procurement were established in the 1980s by WTO, and in 1994 many OECD member states signed the Agreement on Government Procurement (AGP) to regulate this issue.

Unlike grants and tax concession, the market price support (MPS) is a type of money transfer to producers using policy mechanisms that are artificially raising the price on the market. These policies may be domestic price interventions (for example, a minimum-price policy), usually supported by foreign trade barriers such as a tariff or quantitative restriction on imports. The economists consider market price support as one of the most market-distorting forms of support through government policies. Being less transparent, this form of indirect support – that ultimately reflects on consumers, is still used, on a large scale, especially in agriculture.

A reason why the subsidies constitute a strongly debated topic is represented by the profound and long-lasting effects they might have on the economy. Among the issues related to subsidies we can mention: the distribution of income in society, static effects on efficiency, dynamic effects, the opportunity cost of subsidies, environmental

effects and approaches related to the political economy of subsidies and the interest of politicians regarding the promotion of this form of financial support.

In broad terms, the introduction of subsidies or other government measures within an imperfect competitive market may conduct to situations when they improve welfare, as an efficient subsidy would correct a market failure, serving redistributive goals and bringing social and private costs and benefits into alignment (World Trade Report, 2006, p. 55). Subsidies usually influence markets by reducing prices and thus increasing the quantities sold. However, they are generally characterized by a Pareto inefficiency as they tend to imply higher costs compared to the dimension of gains they bring.

The part of literature that criticizes the subsidies and points out their negative consequences is significant. Investigating this literature on the subject, we find various opinions and controversies on many aspects regarding subsidies and their implications. However, there tends to be a general support of their static effects, referring to the economic distortions these types of financial interventions might create, mainly the ones applied to promote specific sectors or industries. The blame is based on the fact that such subsidies tend to divert resources from more productive to less productive uses, consequently reducing the economic efficiency. (Steenbick, 2007, p. 13) The dynamic effect is sometimes appealed as “the transitional gains trap” (Tullock, 1975, p. 673), as the subsidies gains tend to be transitional and mainly felt by those who can immediately take advantage of them, while their successors wind up paying higher prices.

With regard to the opportunity cost of subsidies, we have to emphasize that this is not a much explored one. This opportunity cost refers to the fact that sometimes the amount of money used to subsidize an activity or an industry could be employed somewhere else in the economy with probably higher benefits for the society. The limited approach is probably due to the fact that these types of analyses would be built more on subjective considerations than on precise proofs, as it would be difficult to estimate the impact on the society of a hypothetical financial support in an activity or in another.

2.2. International discipline in subsidies

The subsidies' main effect, from trade perspective, is that they artificially strengthen the competitiveness of the industry within they are used and they distort the terms of trade. Because of that, for a long period of time, countries have been trying to control subsidy-driven competition affecting commerce within their borders. Two examples here refer to European Union and United States of America. In E.U., even since 1951, in the Treaty of Rome, the 6 member states expressly abolished and prohibited, with some isolated exceptions, the “subsidies or state assistance, or special charges”. And even though later on these exceptions became a habit, their initiative is worth mentioning. With regard to the U.S.A., throughout the history, there were many situations when The Supreme Court invoked the Commerce Clause of the U.S.

Constitution (Article I, Section 8) to strike down subsidies that favour local businesses over competitors from other states.

Some countries choose to keep out subsidized goods from other countries, by restricting imports or levying additional duties on top of the tariffs normally charged on all imports of the product. Today, for such situations, since 1995, there is in practice the WTO Agreement on Subsidies and Countervailing Measures (ASCM) that provides guidelines for the so-called “countervailing duties” (CVDs). These are set unilaterally and they are the only border measures allowed in response to subsidized imports. CVD's are supposed to be set at a level equal to the estimated unit (i.e., per weight or volume) subsidy. The Agreement on Subsidies and Countervailing Measures addresses two separate but closely related topics: multilateral disciplines regulating the provision of subsidies, and the use of countervailing measures to offset injury caused by subsidized imports (WTO, 2013). The WTO ASCM establishes:

- how and when CVDs could be applied;
- what kinds of potentially trade-distorting subsidies would be allowed;
- what remedies were available for countries that felt they had been adversely affected by another country's subsidies.

According to ASCM (Article 2), all the specific subsidies fall in one of the following categories: prohibited subsidies and actionable subsidies. Prohibited subsidies (Article 3) are the “export subsidies” and “local content subsidies”. “Export subsidies” are the ones that affect export performance and “local content subsidies” are subsidies contingent upon the use of a domestically produced over imported goods.

Actionable subsidies are all other “specific subsidies”. “Actionable” means that if adverse effects can be demonstrated, the affected country can take one of several actions. Any WTO member can complain either for displacement of goods sold in its own market as a result of a non-prohibited subsidy, or for displacement of its exports in the subsidizing Member, or in a third country, by a prohibited or actionable subsidy. In first case, that Member may apply a countervailing duty. In the second case, that Member may seek remedies through the WTO. This leads us to Dispute settlement at the WTO. For any member of WTO is compulsory to implement the subsidy provisions of the WTO Agreements. Still, they have the “liberty” to choose the way to implement them. For any disputes concerning the type of subsidies – prohibited or actionable – they have to address WTO. There are a few steps to follow in dispute settlement process. First, it is necessary a domestic process to determine adverse effects. By adverse effects it is meant, according to WTO, three kinds of effects.

Second step is addressing WTO, and implies a panel and an Appellate Body phase. At WTO, the Dispute settlement process starts with a request for consultations between the disputing parties. The disputing parties, have 60 days or 30 days, if is involved an alleged prohibited subsidy, to reach an agreement, a mutually agreed solution. If they failed, either of them may refer the matter to the WTO's Dispute Settlement Body (DSB). As we mention before a panel may be required. The panel will organize hearings and will submit a final report. The report can be accepted by all, or

appealed by one of the parties. In case of appeal, the Appellate Body has to determine if the subsidy has resulted in adverse effects to the interests of another. If so, the Member found “guilty” of granting or maintaining the subsidy must “take appropriate steps to remove the adverse effects”, or simply withdraw the subsidy. The member has 6 months to conform. In the absence of agreement on compensation, the DSB shall grant authorization to the complaining Member to take countermeasures. (Steenblick, 2007, p. 37). These are to be “commensurate with the degree and nature of the adverse effects determined to exist, unless the DSB decides by consensus to reject the request”. (WTO, 2014)

Table 1: Adverse effects of subsidies

| Types of adverse effects | Possible actions |
|---|--|
| Injury to a domestic industry caused by subsidized imports in the territory of the complaining Member | Countervailing action |
| Serious prejudice - it usually arises as a result of adverse effects (e.g., export displacement) in the market of the subsidizing Member or in a third country market. | Complaint related to harm to a Member's export interests |
| Nullification or impairment of benefits – it arises most typically where the improved market access presumed to flow from a bound tariff reduction is undercut by subsidization. | Complaint |

Source: Authors' format based on WTO 2013 information.

We have to state that the WTO is not the only multilateral institution that have attempted to influence how national governments use subsidies, but for the purpose of the present paper is the only one mentioned.

2.3. Case Study: Boeing vs. Airbus

For over two decades, the World civil aircraft market has been dominated by a duopoly. On one side is the American company Boeing, which until recently was the only producer on the U.S. market, on the other side it is the company Airbus, resulted from the merger of some large European aircraft manufacturers. The competition between these two aircraft giants began in 1990, each company striving to satisfy more efficient the global demand. This competition is still going on, and sometimes is referred to as one of the biggest “trade wars” in history.

The stake of this “war” is government support, and consequently prices and market share. Nobody knows exactly who started this, but the accusations are running both sides. Officially, the US was the first one that filled on 6 October 2004 a complaint to WTO, actually a call for consultations.

Exactly at the same date, on 6 October 2004, the European Community addressed WTO related to measures affecting trade in large civil aircraft taken by US. There are other 2 more complaints: one filled by European Communities on 27 June 2005 against US and one filled by US on 31 January 2006 against European

Communities on same subject. The first complaint of US was about some measures affecting trade in large civil aircraft (LCA) and the respondents were the Governments of Germany, France, the United Kingdom and Spain (the “member States”), and European Communities (“EC”). The mentioned measures considered by US as subsidies include:

- ✓ the provision of financing for design and development for Airbus companies (“launch aid”);
- ✓ 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 provision of loans on preferential terms;
- ✓ the assumption and forgiveness of debt resulting from launch and other large civil aircraft production and development financing;
- ✓ the provision of equity infusions and grants;
- ✓ the provision of research and development loans and grants in support of large civil aircraft development, directly for the benefit of Airbus;
- ✓ any other measures involving a financial contribution to the Airbus companies. (WTO, 2012)

The request for consultation also states that those subsidies are inconsistent with the obligations under the ASCM and GATT 1994, and even more, the effects of subsidies are contrary to the provisions of Articles 5 and 6 of the ASCM. Those subsidies are for the whole range of Airbus products, but US considered that those for A340 and A380th appear to be illegal export subsidies in contravention to certain provisions of Article 3 of the ASCM.

As we mentioned in a previous section, after filling the complaint and addressing WTO, the next step implies a panel and an Appellate Body phase. On 31 May 2005, the United States requested the establishment of a panel, and the DSB deferred the establishment of a panel. Although the requested time for the panel’s work is 6 months, due to the substantive and procedural complexities, and the volume of materials involved in this dispute, the Chairman of the Panel delayed, several times, the completion of DSB work. Finally, after a titanic work of collecting information, meaning the exchange of hundreds of questions and answers between the parties, under special procedures for handling confidential and highly sensitive business information, the panel report was circulated to Members on 30 June 2010. The Appellate Body also upheld the Panel's finding that certain subsidies provided by the European Union and certain Member state governments to Airbus are incompatible with Article 5(c) of the ASCM because they have caused serious prejudice to the interests of US. (WTO, 2012)

The measures that caused prejudices are:

- financing arrangements (known as “Launch Aid” or “Member state financing”) provided by France, Germany, Spain, and the UK for the development of the A300, A310, A320, A330/A340, A330-200, A340-500/600, and A380 LCA projects;

- certain equity infusions provided by the French and German governments to companies that formed part of the Airbus consortium;
- certain infrastructure measures provided to Airbus.
- Other measures were considered not causing prejudices:
- the 1998 transfer of a 45.76% interest in Dassault Aviation to Aérospatiale;
- the special purpose facilities at the Mühlenberger Loch industrial site in Hamburg, Aéroconstellation industrial site and associated facilities (taxiways, parking, etc.) in Toulouse;
- the various research and technology development (R&TD) measures that had been challenged by the United States.

Anyway, all those subsidies intend was to displace exports of Boeing single-aisle and twin-aisle LCA from the European Union, Chinese, and Korean markets and Boeing single-aisle LCA from the Australian market. As a result or effect of these subsidies Boeing lost sale of LCA, anytime when were involved the A320 (Air Asia, Air Berlin, Czech Airlines, and EasyJet), A340 (Iberia, South African Airways, and Thai Airways International), and A380 (Emirates, Qantas, and Singapore Airlines) aircraft. The Appellate Body found that true. The Appellate Body did not find true the Panel's views on when subsidies can be considered as being de facto contingent upon anticipated export performance. Consequently, the financing provided by Germany, Spain and the UK to develop the A380 was not found contingent upon anticipated exportation and thus a prohibited export subsidy. There were also a few others US claims that Appellate Body rejected.

As mentioned before, a separate dispute brought by the European Union against the United States for subsidies allegedly provided to Boeing is currently before the Appellate Body. The European Union's complaint is more complex, containing besides prohibited and actionable subsidies provided to US producers of large civil aircraft (LCA) and in particular the Boeing company, also legislation, regulations, statutory instruments and amendments thereto providing such subsidies, grants, and any other assistance to the US producers. (WTO, 2012)

To be more specific, the EU complaint is about:

- specified state and local subsidies for the production of the Boeing 7E7;
- specified NASA research and development subsidies;
- specified Department of Defense research and development subsidies;
- specified National Institute of Standards and Technology subsidies;
- FSC/ETI subsidies;
- research and experimentation tax credits;
- NASA procurement contracts, etc.

Due to the fact that the use of these measures causes serious prejudice or a threat of serious prejudice to the interests of the EU and material injury or threat of material injury to the EU LCA industry in a manner that violates US obligations under provisions of ASCM, on 31 May 2005, the European Communities requested the establishment of a panel. The DSB deferred the establishment of a panel on 13 June 2005, but on 27 June 2005, the European Union requested additional consultations.

The panel report in this dispute was circulated to WTO Members on 31 March 2011. Both the European Union and the United States have appealed aspects of that panel report.

According to the WTO, European Communities claimed that subsidies provided to US producers of LCA, namely The Boeing Company, are prohibited and/or actionable under the ASCM. In addition, are mentioned:

- a number of state and local measures granted to US LCA producers by the states of Washington, Kansas, and Illinois, and municipalities therein;
- payments and other support provided to Boeing by “NASA”, US Department of Defense (“USDOD”), US Department of Commerce, and US Department of Labor;
- export subsidies allegedly granted to Boeing pursuant to provisions of the US Internal Revenue Code relating to Foreign Sales Corporation (“FSC”) / extraterritorial income (“ETI”) and successor legislation.

All these subsidies, which amounted to \$19.1 billion over the period 1989-2006, as the European claims, caused serious prejudice to European interests within the meaning of Articles 5(c) and 6.3 of the ASCM. The Panel however determined the value of the subsidies to be at least \$5.3 billion.

In order to determine more accurately the adverse effects, the Panel had conducted a separate analysis of adverse effects caused by the NASA/USDOD aeronautics R&D subsidies in the 200-300 seat LCA market (through their “technology effects”), and an analysis of the adverse effects caused by all the subsidies in the 100-200 seat and 300-400 seat LCA market (through their “price effects”).

The results of these analyses were that:

- the aeronautics R&D subsidies caused serious prejudice to the interests of the EU within the meaning of Articles 5(c) and 6.3(b) and (c) of the ASCM with respect to the 200-300 seat LCA market;
- there were significant lost sales and significant price suppression in the 200-300 seat LCA market;
- there was not found a threat of displacement and impedance with respect to the 200-300 seat LCA market as it relates to Kenya, Iceland, and Ethiopia (but not to Australia) within the meaning of ASCM.

The Panel also conducted an analysis of price effects and concluded that the FSC/ETI subsidies and the B&O tax rate reductions caused serious prejudice to the interests of the EU, with respect to the 100-200 seat and 300-400 seat LCA markets. But, the Appellate Body found that only with respect to the 100-200 seat LCA market. In completing the analysis, the Appellate Body found that the effects of the City of Wichita IRBs complemented and supplemented the price effects of the FSC/ETI subsidies and the State of Washington B&O tax rate reduction, thereby causing serious prejudice, in the form of significant lost sales, in the 100-200 seat LCA market.

Both reports were adopted on 23 March 2012, and on 13 April 2012, the US informed the DSB that it intended to implement the DSB recommendations and rulings. On 23 September 2012, the US notified the DSB of the withdrawal of subsidies (some

\$2 billion in prohibited subsidies, leaving about \$3 billion still to be addressed) and removal of adverse effects in this dispute and stated that it had fully complied with the DSB recommendations and rulings.

According to the ruling from 12 March 2012, the WTO's appellate body said Boeing received between \$3 billion and \$4 billion in U.S. subsidies, far less than the EU had alleged – \$19.1 billion. By contrast, the WTO said in December that Airbus received \$18 billion in subsidies from European governments, though not all were found to be illegal under international rules. (Rooney, 2012)

On the both sides, the declared prejudices were high. Europeans claimed Airbus has lost \$45 billion in sales due to illegal Boeing subsidies, and Boeing would not have been able to launch its 787 "Dreamliner" without government support. American said U.S. subsidies to Boeing have cost Airbus 118 lost aircraft sales, while EU subsidies for Airbus have cost Boeing 342 lost aircraft sales.

But, on 11 October 2012, the EU requested the establishment of a compliance panel, which was established on 30 October 2012. In the early 2013, there was announced a timetable, but not a very strict one, and taking into account the scale and complexity of the dispute, the panel expects that it will be in a position to circulate its report within the first half of 2014. So we will wait to see what happens in this dispute again.

This was a brief "movie" of what happened and is still happening in WTO's DSB. What really happened on market is another story.

The aircraft market is considered to be worth more than \$3 trillion over the next decade, so the stake of this long-running trade dispute is huge. Right now, the two companies compete for a roughly equal share of the \$100 billion civil jet market. The situation is not an easy one, as over the past two years the leader changed, first Airbus then Boeing, as they racked up orders for fuel saving models (A350 versus 787 Dreamliner).

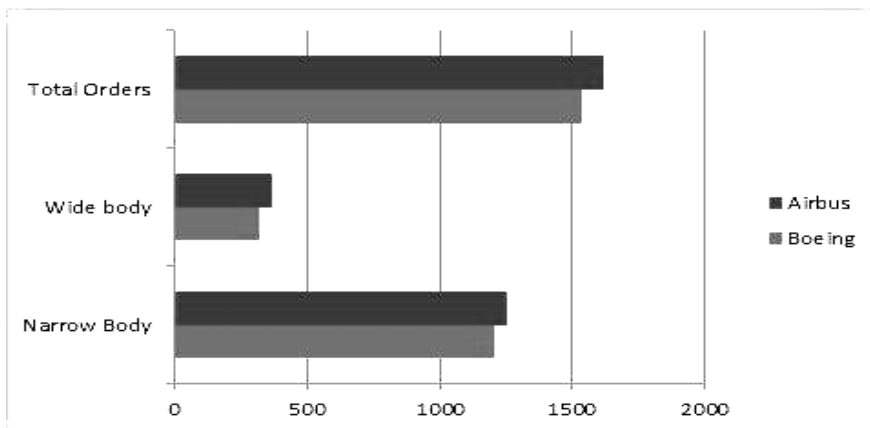
On actual market conditions, with travel air more accessible, with a buoyant demand market, both aircraft manufacturers seem and could be profitable. The real situation indicates that only Boeing is profitable now. It looks like Airbus is still "paying" the price for development of A380 that is still loss-making. Additionally, Airbus also had chosen to sale some of its planes below cost or with very small profits for the sake of market share. So, in 2000, Airbus delivered 311 planes to airlines, and in 2011, the number of delivered planes raised to 534. On the other side, Boeing delivered 487 planes in 2000 and 477 in 2011. (Karan, 2012). In 2012, according to Airbus officials, the European producer had 833 orders (from 914 announced), and delivered 588 aircraft, up 10 percent from previous year and above their estimation target. This meant for Airbus a market share of 41 percent. Boeing surpassed Airbus, having 1203 orders (from 1339 announced), delivering 601 planes, in 2012.

The year 2013 was a great year for both Airbus and Boeing, especially after the Paris and Dubai big air shows. For 2013, the Airbus target was set to 700 gross orders and about 600 deliveries. Although there are some problems for A380 (wing cracks), Airbus was hoping to sell 25 of them in 2013 and above 30 in 2014. But the

latest information gave by Airbus, shows us that there are 1.619 gross orders. The best sold “item” was A320, of which Airbus announced 377 orders – current generation and A320 neo – with 876 orders. A320 seems to be the main cash supplier for larger models.

In 2013, official data from Boeing were showing that the aircraft manufacturer has 435 orders (from 505 announced), of which 374 (85%) are for 737 family. But the end of year 2013, after Dubai Airshow, where the 777x-series were launched, was good news for Boeing. There were about 1.531 gross orders, meaning about 700 (actually 699) orders for 737 Max, but also orders for 787-10 and 787 models. According to these numbers, it looks like Airbus is the leader in smaller narrow body jets, and Boeing is the leader in bigger wide body jets.

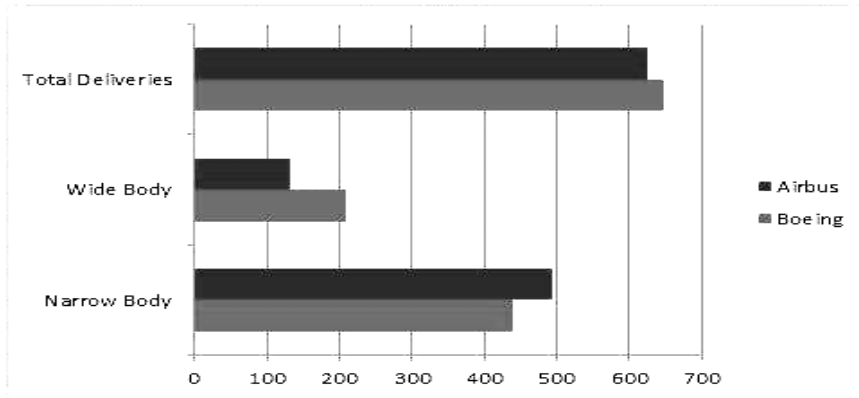
Figure 1: Total and specific orders in 2013



Source: www.airlinereporter.com

The orders are very important, but what really count are the deliveries. The total number of deliveries for Airbus in 2013 is 648 units. In narrow body sector, Airbus maintained an approximate output of 42 units from A320 family per month, meaning 493 units delivered per year. Related to wide body jets, Airbus managed to deliver just 133 units. On the other side, until May 2013, Boeing delivered 245 planes, of which 179 of 737-family (Boeing official data, 2013). Until the end of the year, Boeing announced 648 deliveries, of which 440 units of narrow body jets, meaning approximately 37 units per month, and 208 units of wide body jets (98 deliveries of 777-model, 65 of 787 model, 21 deliveries of 767 and 24 of 747 model). The deliveries of wide body jets – more expensive, mean bigger revenues (52 billion dollars for Boeing vs. 38 billion dollars for Airbus) and the profit for Boeing was higher than of its rival's: 3.9 billions dollars vs. 1.59 billions dollars.

Figure 2: Total and specific deliveries in 2013



Source: www.airlinereporter.com

3. Conclusions

The Boeing-Airbus “trade war” demonstrates the typical problems determined by a duopoly market structure, where the achievements of each company are highly dependent on the decisions of its competitor. The “war” between Boeing and Airbus has definitely not achieved its final state, as the troubled global economic environment is making competition on the market even more intense than before. We have to emphasize the fact that we do not necessarily see this “war” as being fought between two aircraft industry representatives affected by unfair competition practices. We consider it more to be another episode in the competition between U.S.A. and E.U. in their struggle to conquer the leading position on the global hierarchy. Similar “battles”, also involving the subsidy disputes, have been already fought between the two economies in the past, on agricultural markets for example. Both Boeing and Airbus represent significant contributors to the economic activity in the US and European Union. The two major economic powers will permanently search for methods and instruments – transparent or, sometimes, at the limit of legality – to support the pioneers of their representative sectors. Consequently, the episode Boeing-Airbus will settle at one point, but we may expect similar disputes to arise in other key sectors.

With regard to subsidy use, we must admit the fact that we support government intervention on the markets as long as this type of intervention is justified by vital economic and social interests. However, this should not constitute a permanent solution for any economy and a go-to answer to any situation. The rising tide of globalization has boosted growth prospects for the airline industry all over the world, and in particular in emerging markets such as China and India. Although 2014 promises to be a good year, as any other company, both Airbus and Boeing are doing their best in order to increase their market share. Their chance for significant economic results is to remain on a duopoly system of competition, otherwise China, Russia and Brazil may take a slice of this market. In conclusion, they should not see each other as

rivals, they should concentrate on extending each of them their competitive advantage (wide body sector and narrow body sector, respectively), and find a way to cooperate in order to avoid competition from other emerging economic powers. The current growth prospects for the aircraft industry offer a very positive context for profitability and business sustainability in which the governmental support does not necessary appear as justified anymore.

4. References

- Bodea G., Mihuț I.S. (2013) About feed-back: change in the context of financial crisis management, *Managerial Challenges of the Contemporary Society*, Vol. 5, p. 31-38.
- European Commission (2102) *Background Fact Sheet - WTO Disputes EU/US Large Civil Aircraft*. Available at http://trade.ec.europa.eu/doclib/docs/2010/september/tradoc_146486.pdf
- Karan, S.J. (2012) *Boeing Vs. Airbus: Orders And Profits*. Available at <http://seekingalpha.com/article/592001-boeing-vs-airbus-orders-and-profits?source=feed>, [accessed 17.03.2013]
- Leftly, M., Kumar, N. (2013) *Boeing vs Airbus: US shoots down Europe in dogfight*. Available at <http://www.independent.co.uk/news/business/news/boeing-vs-airbus-us-shoots-down-europe-in-dogfight-8449034.html>, [accessed 1.03.2013]
- Organization for Economic Cooperation and Development (OECD) (2007), *Subsidy Reform and Sustainable Development*. Available at <http://www.oecd.org/greengrowth/subsidyreformand-sustainabledevelopmentpoliticeconomyaspects.htm>, [accessed 15.03.2013]
- Rooney, B. (2012) *U.S. and EU claim victory in Boeing subsidy case*. Available at <http://money.cnn.com/2012/03/12/markets/boeing-airbus-wto/index.htm>, [accessed 1.03.2013]
- Steenblik, R. (2007). *A Subsidy Primer*. Available at <http://www.iisd.org/gsi/subsidy-primer>, [accessed 1.03.2013]
- The Boeing Company (2013). Available at <http://active.boeing.com/commercial/orders/index.cfm> [accessed 12.05.2013]
- Tullock, G. (1975) The transitional gains trap, *Bell Journal of Economics*, 6(2), p. 671-678.
- WTO (2013) Disputes involving aircraft. Available at http://www.wto.org/english/tratop_e/dispu_e/dispu_subjects_index_e.htm?id=G33#selected_subject [accessed 15.03.2013]
- WTO - European Communities – Measures Affecting Trade in Large Civil Aircraft (DS 316: the US challenge of EU support for Airbus). Available at http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds316_e.htm [accessed 15.03.2013]
- WTO - European Communities and Certain Member States — Measures Affecting Trade in Large Civil Aircraft (Second Complaint), (DS 347: the US challenge of EU support for Airbus). Available at http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds347_e.htm [accessed 15.03.2013]
- WTO – United States — Measures Affecting Trade in Large Civil Aircraft, (DS 317: the EU challenge of US support to Boeing). Available at http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds317_e.htm [accessed 15.03.2013]

WTO – United States — Measures Affecting Trade in Large Civil Aircraft (Second complaint), (DS 353: the EU challenge of US support to Boeing). Available at http://www.wto.org/english/tratop_e/dispu_e/cases_e/ds353_e.htm [accessed 15.03.2013]

World Trade Organization (2006). *World Trade Report: Exploring the links between subsidies, trade and the WTO*. Available at http://www.wto.org/english/res_e/booksp_e/anrep_e/world_trade_report06_e.pdf [accessed 21.05.2013]

*** www.airlinereporter.com (2014) *Boeing vs. Airbus...Who won?* [accessed 11.03.2014]