Civil Aircraft
Sources: European Commission, Tyson, Irwin-Pavcnik, NYTimes

The civil aircraft industry is mainly concentrated in the EU and in the United States.

The Large Civil Aircraft (LCA -- planes with more than 100 seats) sector in particular, is dominated by US and EU manufacturers.

US and EU aircraft manufacturers compete in their domestic and third countries' markets and the EU/US rivalry takes a predominant position in the larger multilateral trade context.

At bilateral level, the EU and the US concluded in 1992 a Bilateral Agreement on Trade in Large Civil Aircraft (1), whose
- Main objective:
  - to regulate and limit the level of Government support to both aircraft industries. Public support is in fact one of the most contentious issues in the aircraft industry

The LCA sector is today dominated by two manufacturers Airbus (EU) and Boeing (US). The third major manufacturer, Mac Donnell Douglas (US), was acquired by Boeing in 1997.

Airbus market share has steadily increased since the early 70s, reaching about 1/3 of the world market in the early 90s and approaching 50% of all new orders for large civil aircraft by the end of the 1990s. However, the enlarged Boeing remains the market leader with more than 80% of all large aircraft in service today.
1992 EC/US Agreement on Trade in Large Civil Aircraft

Until the late 70s the US enjoyed almost a de facto monopoly in the LCA sector.

The Airbus consortium (created in 1969) started competing effectively in the 80s. At that stage the US became concerned about the European competition and the alleged subsidies paid by the European governments for the developments of the early models of the Airbus family. This became a major issue of contention.

The European side was equally concerned by subsidies accruing to US LCA manufacturers through NASA and Defense Programs.

The EU and the US started bilateral negotiations for the limitation of government subsidies to the LCA sector in the late 1980s. Negotiations were concluded in 1992 with the signature of the EC-US Agreement on Trade in LCA which focuses on the limitation of both direct and indirect government support.

Limits to Direct Support

The agreement puts a ceiling on the amount of direct government support (33% of the total development costs) for new aircraft programs. It establishes that such support (granted in the form of repayable royalty-based loans) will be repaid at an interest rate no less than the government cost of borrowing and within no more than 17 years. Basically, this discipline applies to the form of government support in use in Europe.

Limits to Indirect Support

The agreement establishes that indirect support (i.e. benefits provided for aeronautical applications of NASA or military programs) should be limited to a 3% of the nation's LCA industry turnover (gross revenue) and 4% of the value of the firm’s annual sales.
This discipline is primarily targeted to the support system in use in the US. In contrast to the European system of repayable royalty-based loans, since the repeal of the US rules on recoupment (reimbursement), there is no requirement for indirect support to be reimbursed.

The large civil aircraft sector is generally subject to the WTO rules on subsidies, although more specific multilateral rules exist regarding forms of government support.

Laura D’Andrea Tyson

1992 Agreement achieved its objective: to limit profit shifting subsidies keeping some subsidies needed due to the economic characteristics of the industry

Irwin-Pavcnik: two questions

Did the 1992 Agreement have a significant impact on pricing?
What is the impact of the introduction of the A380 on prices and market shares of other wide body aircraft (specially the Boeing 747)?

Answers:

The agreement seems to have increased Airbus and Boeing prices of both narrow and wide body aircraft by 3%. Also consistent with increases of about 5% in MC’s. Introduction of A380 has a significant negative effect on prices and market shares of other wide body aircraft. Effect on other Airbus wide body (A330 and A340) is even larger that effect on Boeing 747.

Theory

Boeing and Airbus: multiproduct firms

Existing models sales and prices are sensitive to introduction of new models.

Bertrand or Cournot competition give very similar results.
WTO Complains/Rulings: 2009-10

**Background:** NYTimes Sept 2009, Sept 2010

**US claim:** The trade case started in 2005, when the United States complained to the World Trade Organization that European countries had given Airbus more than $20 billion in questionable aid, including $15 billion in low-interest loans to develop its jetliners.

The most serious charge in the American case, legal specialists say, involves “launch aid,” the low-cost loans extended by European governments to help finance the development of planes.

**EU Claim:** In a counterclaim, the European Union contends that Boeing has received at least $24 billion since the 1980s in research and development support through generous contracts with the United States military and space programs, as well as significant tax breaks from Washington State, the site of Boeing’s largest assembly lines.

**Ruling 1** (prelim Sep 2009, final June 2010): Boeing’s supporters cheered last June when a W.T.O. panel finally ruled that Airbus had used the loans, known as launch aid, to steal sales from Boeing. The panel concluded that it “would not have been possible for Airbus to have launched all these models, as originally designed and at the times that it did,” without the subsidies.

The World Trade Organization has found that Airbus received illegal subsidies for the $13 billion A380 superjumbo jet and several other airplanes, hurting Boeing in the battle for sales, American and European officials said Friday.

The W.T.O. found that a substantial amount of the low-cost loan money, known as launch aid, that European governments provided to develop the A380 jet was illegal and should be repaid by Airbus.

(Other series of Airbus planes — the A300, A310, A320, A330 and A340 — did also benefit from similar improper subsidies)

**Ruling 2** (prelim Sep 2010): the trade organization issued a preliminary ruling that found that Boeing had received at least $5 billion in federal research contracts and other subsidies that violated trade rules.

**Comments:**

While the findings may be a watershed in a case that, by many measures, is the largest and most expensive to be heard by the global trade body, analysts say the dispute’s relevance has faded as new airplanes are increasingly being designed and built in several countries.

And even if the W.T.O. forcefully declares Europe’s support for Airbus illegal, the process of resolving both claims would take many more years before any actions could be taken.

Some analysts also say it would be hypocritical to provoke a trade war over subsidies for airplanes after hundreds of billions of taxpayer dollars and euros were given to failing banks and automakers on both sides of the Atlantic in the last year.

With Airbus and Boeing globalizing production even more — and other countries like China and Japan expanding their domestic industries — several analysts say the Americans and Europeans would be better off seeking a negotiated settlement.

But the newest developments will most likely add to the acrimony, making it harder for the two sides to end the practices, especially as new threats emerge from state-sponsored competitors in China and Russia.

As long as aircraft manufacturing remains a source of national pride and high-paying jobs, “politicians on both sides will give till it hurts,” he said.

Analysts said that Boeing was trying to slow Airbus’s drive to develop a plane to compete with its best-selling new 787 Dreamliner, the first commercial jetliner made substantially from lightweight carbon composites.

But in the meantime, Airbus has been moving forward with plans to raise several billion dollars in loans from European
countries to develop its own plane with fuel-efficient composites, the A350 XWB.

If anything, the stakes seem higher now than in 2005. Problems with suppliers have delayed Boeing’s first Dreamliner by nearly three years, reducing its sales advantage over the A350 XWB. Dreamliner deliveries should start in 2011. Airbus hopes to introduce its plane in 2013. It has also been slowed by cost overruns on new, larger passenger and military models.

Efforts to resolve the trade dispute could also be complicated by other subsidized competitors.

As Brazil and Canada took over the regional jet markets roughly a decade ago, the W.T.O. ruled that each had improperly subsidized their exports. Now, Bombardier of Canada is building a midsize jetliner. Longer-term threats to Airbus and Boeing are also coming from China and Russia.

“If you think this trade dispute is tough, what do you do with an emerging aerospace power that gets all its working capital from the government?” Mr. Aboulafia asked