

Civil Aircraft

Sources: European Commission, Tyson, Irwin-Pavcnik

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 than 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.