

3 The Aeronautical Sector: Recent Tendencies

Aviation first appears as the First World War is coming to an end. As with other productive sectors, the strategic needs of nations will set the pace of development in the aeronautical sector. Born as an adventure of pioneering dreamers, aviation became a strategic industrial sector as a consequence of the First, and particularly, the Second World Wars when the sector is essential to the nations' armed force defense needs. This fact has been the principle singularity of the sector until only recently. That is, the aeronautical industrial sector was strongly conditioned by governments and had become a public good as a strategic defense sector.

Although this tendency is still latent, at present the institutional framework of the sector is undergoing changes. The original impetus as a public sector in its beginnings still persists, but decisive steps are being taken to slowly move aeronautics away from its historical path. This change began to come about in the 1980s but the dynamic transition toward a new governance structure has not yet been completed. This evolution will be one of the concerns of this study.

3.1 The Organizational Model in the Industry

Five characteristics may define the aeronautical sector since its beginnings in the first third of the 20th century. The first is that it arose within the framework of nations' strategic defense needs and therefore shares the characteristics of a public good. The second involves the legal format within which most of the leading firms in the sector have operated, whether closer to private ownership or public property. Related to this characteristic are the relations between firms and the largest monopsonistic client: the State. Third, the peculiarities of the sector's industrial organization distinguish it from other productive sectors. The convulsion taking place in industry in general since the 1980s has occurred with particular strength in the aeronautical sector. Fourth, the importance of science and technology in the sector is crucial and, finally, the territories and their

agents play an important role in the creation, consolidation or restructuring of the aeronautical industry.

3.1.1 Defense and the Aeronautical Sector as Public Goods

Economic literature in the field of Public Finance refers to non-rival goods as those whose demand cannot be excluded and designates them as "public goods". The most systematic example is national defense. It is clearly a non-rival good which means that one specific demand for the good does not reduce the quantity available to another demand, and, at the same time, if the good is available, other consumers cannot be excluded from its consumption.

For defense to be a public good, resources must be made available so that defense is more than mere rhetoric. Men and weapons must be available to the armed forces in order to defend the country from outside intervention. For this reason, the history of nations has not only been concerned with the contributions of men, but also in great measure with the history of the equipping of its armed forces. In fact, weapons factories have generally been created or supported by governments who consider them strategic industries of the country.

Also rivalry among nations has been common since the creation of nation-states, which explains the priority that governments assign to endowing its armed forces with the best defensive and offensive weapons to properly safeguard "national sovereignty". A country's weapons, then, are closely related to the concept of a public good as described in the literature.

Along with the technical grounds for determining if a good is more or less "public", political and financial aspects accompanying the good should be considered. The financial impact that defense requirements have had on public budgets has historically been understated. Defense industries have normally generated many jobs which has justified those who support the sector.

The rhetorical use of "public good" has often concealed investment decisions hardly justifiable to be in the best interest of the country. Public goods for defense were identical to national interest and, therefore, no other justification was needed.

After the 1950s, the sector has increasingly developed civil aviation while progressively freeing itself from the ties with military industry. This is not to say that government opinion has not been a determining factor in the evolution of the aeronautical product, from financial support, design and development to having the last word as to who the products will be sold to and, indirectly, how the aircraft will be sold. Government interven-