



**Panel 2**

## NATIONAL AND EUROPEAN CHAMPIONS – BURDEN OR BLESSING?

PAUL SEABRIGHT

University of Toulouse

### Introduction

The recent commercial and developmental success of Airbus Industrie has led many observers (particularly but not only in France) to suggest that the time has come to apply the Airbus model of industrial policy more widely across industries that could be important for the future economic success of the European Union. Could the lessons of Airbus be fruitfully applied in other sectors, creating champions that might be not only national but, in appropriate cases, pan-European? Does the Airbus case show that the pendulum of received opinion has swung too far in recent years, and that active industrial policy has more to be said for it than skeptics have acknowledged? Or might future European projects turn out to be more like Concorde than like Airbus? Or like Bull, Credit Lyonnais, or MG Rover? In other words, what makes the difference between successful industrial policy and prestige projects that appeal to politicians but are quite unable to pay their way?

In this short contribution I propose to do two things. First, I assess the Airbus experience and ask whether it does indeed constitute an example that could usefully be followed by European leaders seeking to apply industrial policy. I conclude that Airbus has been a rather special case whose applicability to other projects and sectors is fairly limited. Secondly, I ask more broadly what we have learned in the last couple of decades about how markets and political processes differ in their ability to select and promote innovative and productive investment projects. Surprisingly, perhaps, for the skeptics, I conclude that there is no evidence that politicians are any less good than private markets at “picking winners”. But markets appear to

be *much* better than politicians at terminating projects that turn out to be unsuccessful. And the real discovery of recent years, about which we now know much more thanks to the availability of high quality panel data on firms, is that terminating failed projects is a very important part of the process of productivity growth, though more so in some sectors than in others.

### The Airbus experience

I turn first to the Airbus experience. Has this been worth it? Reliable accounting and other economic data to answer this rigorously are unfortunately not available. Nevertheless, in a simulation study I published ten years ago with Damien Neven [14] we estimated that Airbus was likely to make a comfortable rate of return on the public investments that had been made to launch it. This study was not contested at the time, and events since then appear to have confirmed the assessment. However, we also estimated that these benefits would come mostly at the expense of forgone profits for Boeing; gains to consumers, though positive, would be fairly modest. The reason for this assessment was that gains from competition would be offset by lost economies of scale, and the weakening and/or exit of McDonnell-Douglas. Though there is some controversy about whether McDonnell-Douglas could have survived in the industry even without the advent of Airbus, it seems unlikely that the US Justice Department would have accepted its exit through takeover by Boeing had there been no Airbus to provide countervailing competition.

It is hard not to conclude, therefore, that even if this kind of “subsidy war” makes sense from the perspective of Europe, it is collectively self-defeating when applied at a world level. This conclusion can only be reinforced by the consideration that Airbus has many sub-contractors in the United States and Boeing has many in Europe, so that in terms of value-added there may be much less to choose between the projects from the perspective of the European economy than its political sponsors may realize. Competition policy to restrict subsidies to industry, whether under the EU’s state aid legislation or under the subsidy rules at

the WTO, is based on the idea that such subsidy wars may be collectively self-defeating, and the Airbus experience provides no reason to ignore this very sensible presumption.

Even ignoring such adverse international spillovers, we may well ask whether it is just luck that Airbus has not had the fate of Concorde. (It may even be premature to conclude that Airbus will avoid the fate of Concorde in the future – recent Franco-German wrangling over the nationality of the chief executive does not inspire confidence in the corporate governance of the company). It is true that Concorde had some bad luck (notably in facing regulatory obstacles in the United States). But the aircraft was also poorly designed for passenger comfort, and the project as a whole was much more engineer-driven than customer-driven. Airbus certainly seems to have learned from these particular mistakes, but its success is not just a matter of inspired innovation. The aerospace sector has some particular characteristics (see in particular the work of John Sutton [17]) that make it a suitable setting for publicly-sponsored innovative projects, and which by the same token suggest caution before launching such projects in other sectors where these characteristics do not occur.

What are these particular characteristics of aerospace? The three crucial technological characteristics are:

- High fixed costs of production
- Variable costs of production that fall significantly with scale
- The products are somewhat less differentiated than in other comparably high-technology sectors such as motor vehicles and precision instruments.

The consequence of these characteristics is that successful market entry into aerospace requires principally focus and commitment, rather than such virtues as flexibility, responsiveness to customer preferences throughout the development process, and openness to the unexpected. In this respect, as Sutton points out, it is quite different from precision instruments (the fact that these are both “hi-tech” sectors is neither here nor there). Indeed, the reason why Airbus has been able to meet customer requirements reasonably effectively is in large part that customer requirements can be summed up rather more simply than in many other industries. Designing new aircraft is largely a matter of throwing money at the challenge of carrying a given number of passengers

for a given distance at reasonable speed and safety and at minimum fuel cost. Paradoxically, this is one of those industries where an open cheque-book (what economists in their jargon call a “soft budget constraint”) may actually be a recipe for success. One sign of this is that successful aerospace firms tend to be large and rather stable over time. In this they are quite unlike firms in many other sectors, such as cars, biotechnology, consumer goods, most kinds of software, precision instruments, venture capital and computer hardware. It is worth recalling that the US motor vehicle industry had 300 independent manufacturers in the year 1900, 297 of which did not survive long into the twentieth century. Overall, few industries outside aerospace look as though they would be suited to the Airbus model.

### Picking winners: politicians versus markets

What do we know about the biases of politicians (and more broadly, of public officials) in selecting investment projects for public support? Some characteristics of such projects are reasonably obvious: they tend to be large, they tend to produce products that are highly visible in the press and media (affording many photo-opportunities for the politicians concerned), and they tend to be comparatively insulated from competition – both because this makes them less risky to finance and because it avoids awkward questions about their comparative performance with similar projects that do not receive public support. In addition, such projects tend to face a number of other less obvious biases, which recent studies have helped to document:

- One common bias is that politicians and public officials tend to favour projects in relatively high-technology sectors, whether or not these are suitable for the comparative advantage of the location in question. A recent study by Midelfart-Knarvik and Overman [12] showed that both national state aids and EU regional aid often failed to attract targeted industries to a significant degree because they did not take comparative advantage into account (like whether there was enough skilled labour in the workforce). They therefore often failed to benefit from agglomeration economies.
- A second bias is that politicians frequently ignore the impact of one project on others. A recent study by Algan et.al. [2] showed that such impacts can be large – public employment can reduce pri-

vate employment through general equilibrium effects. The last biennial report of the German Monopolkommission [13] also discusses these harmful inter-project effects at some length. And the study by Midelfart-Knarvik and Overman just referred to suggests one route by which this could occur – subsidized projects could bid up the price of a scarce resource like skilled labour, making it less available to other firms.

Does this mean that private firms do not have equivalent biases? Not at all! Recent years have seen no shortage of examples in which the executives of private firms have displayed all the vanity, short-sightedness and obsession with technology and visibility that can characterize public projects at their worst: names such as Vivendi Universal, Enron and WorldCom spring irresistibly to mind. In fact, it would be hard to show convincingly that executives of private firms are any better than public officials in their selections of projects to support (they may be, but there is no rigorous evidence that I know of, and anecdotal evidence can be used to show anything in this domain).

Nevertheless, there remain two important respects in which public and private sponsorship of industrial projects differ systematically from each other:

- The first is that private projects can come from anywhere – not necessarily the politically well-connected, nor even necessarily from firms that already exist. Recent evidence has shown that this openness to new sources of innovation has been crucial to growth in Western economies in recent decades. For instance, Hobijn and Jovanovic [11] have shown that the US stock market recovery of the 1980s and 1990s was driven almost entirely by new firms, and that incumbent firms of the early 1970s that did not take over or merge with new firms had still not recovered their market value relative to US GDP even by the end of the 1990s. If investment projects had had to depend significantly on public support for their funding, who can doubt that incumbents would have got their hands on a very substantial proportion of that support?
- The second is that politicians and private markets typically react very differently when projects fail – politicians, responding to well-understood electoral and lobbying pressures, are reluctant to close projects down unless their failure becomes spectacular. Of course, private financiers can sometimes be too hasty in withdrawing their support from projects that do not yield profits early

enough, and the fact that public projects are hard to close down is sometimes a strength (as, arguably, in an aerospace firm like Airbus seeking to establish a credible market entry). But recent research has shown that allowing projects to fail and disappear is a very important part of innovation and productivity growth in a modern industrial economy.

Indeed, work by a number of authors using panel data on individual firms (usually at the plant rather than the firm level) has established the major role that selection plays in productivity growth. For instance, an important study by Disney, Haskel and Heden [10] showed that:

- Half the growth of labour productivity in UK manufacturing 1980-92 was *not* due to internal growth of plants. It was due instead to selection (the replacement of low-productivity plants by high-productivity plants)
- 80 to 90 percent of *total* factor productivity growth was due to selection
- Much of the selection effect was due to multi-plant firms opening good plants and closing bad ones. This suggests that multi-plant firms operate an internal capital market that can be – and on average, is – somewhat more efficient than external capital markets.
- However, the ability of multi-plant firm to do this depended on their facing significant competitive pressure. Without this they tended to stagnate.

In some sense, therefore, we can say that the process of productivity growth is more Darwinian and less Lamarckian than previous research (lacking detailed panel data) had supposed.

A number of other studies can be cited concerning the conditions under which productivity growth is fostered in a modern economy:

- First, several studies have established the importance of some degree of competition (what has been termed “a minimum of rivalry”) as an incentive for productivity growth: [3], [4], [6], [7], [15], [16].
- Secondly, and distinctly, there needs to be a relatively stable competitive environment in which productive projects have a significantly higher probability of survival than unproductive ones. In a study I conducted with Wendy Carlin and Jonathan Haskel [8] on firm restructuring in tran-

sition economies, we found that for many inefficient firms in the former Soviet Union, the problem was not that they were resistant to change. It was that change didn't help them – the environment was too turbulent. Firms doing a lot of restructuring were no better off, on average, than firms doing very little. By contrast, in stable environments there is a relation between the degree of change and the growth of productivity. This encourages firms to gamble on innovation and change. But such stable environments cannot be provided by firms themselves – their provision is a central responsibility of government.

- Thirdly, there is an important role for the state in supplying high-quality public goods such as infrastructure, education and public support for innovation: [5], [9]. There is very clear evidence that foreign direct investment is attracted not just by low wages (otherwise sub-Saharan Africa would be the magnet for FDI), but more importantly by education and infrastructure, as the recent success of the Irish economy has made clear. There is no reason to think that domestic productivity growth depends any less on these conditions.

## Conclusions

My main conclusions are as follows. In modern economies growth comes mainly from innovation. Innovation is a gamble – it will often fail. But that is a normal part of the process of economic change. Indeed, an economic climate that fosters innovation is one that allows for failure. But this needs to take place in an overall climate of stability, so that success or failure is a good discriminator of the fundamental quality of investment projects.

Most actual or prospective national (or indeed European) champions do not fit this description. On the contrary, most of them are or would be “too big to fail” – perhaps “too prestigious to fail”. Private firms, on the contrary, are not usually too big to fail, sometimes to the surprise and discomfiture of their executives (banks are something of a special case, due to considerations of systemic risk). Indeed many private companies, though very large indeed, have had to restructure and adapt radically to their environment in order to avoid failure. IBM is a case in point – since the sale of its last assembly plant to a Chinese buyer in 2004, it no longer even manufactures computers – can we imagine an Airbus that no longer made aircraft?

It is hard to escape the conclusion that if the computer industry had been dominated in the 1970s by national champions (as opposed to containing a few national champions in a landscape dominated by private firms), we would all still be using mainframes.

## References

- [1] Aghion, Philippe, Bloom, N., Blundell, R., Griffith, R. and Howitt, P. (2004) ‘Competition and Innovation: An Inverted-U Relationship’, *IFS* June 2004.
- [2] Algan, Yann, Pierre Cahuc and André Zylberberg (2002): ‘Public Employment and Labour Market Performance’, *Economic Policy* No. 34, 7–65.
- [3] Baily, M. N. and Gersbach, H. (1995) ‘Efficiency in Manufacturing and the Need for Global Competition,’ *Brookings Papers on Economic Activity: Microeconomics*, pp. 307–347.
- [4] Blundell, Richard., Rachel Griffith and John Van Reenen (1999) ‘Market Share, Market Value and Innovation in a Panel of British Manufacturing Firms’, *Review of Economic Studies*, Vol. 66, pp. 529–554.
- [5] Braunerhjelm, Pontus, Riccardo Faini, Victor Norman, Frances Ruane and Paul Seabright (2000): *Integration and the Regions of Europe: How the Right Policies Can Prevent Polarization*, Monitoring European Integration 10, London, CEPR.
- [6] Bresnahan, Timothy and Reiss, P. (1991) ‘Entry and Competition in Concentrated Markets’, *Journal of Political Economy*, 99, No. 5, pp. 977–1009.
- [7] Carlin, Wendy, Mark Schaffer and Paul Seabright (2004): ‘A Minimum of Rivalry: Evidence from Transition Economies of the Importance of Competition for Innovation and Growth’, *Contributions to Economic Analysis and Policy*.
- [8] Carlin, Wendy, Jonathan Haskel and Paul Seabright (2001) ‘Understanding “the Essential Fact about Capitalism”’: Markets, Competition and Creative Destruction’, *National Institute Economic Review*, January.
- [9] Criscuolo, Chiara and Jonathan Haskel (2003): ‘Innovations and Productivity Growth in the UK: evidence from CIS2 and CIS3’, *CeRIBA discussion paper*, QMW College.
- [10] Disney, Richard, Jonathan Haskel and Ylva Heden (2003): ‘Restructuring and Productivity Growth in UK Manufacturing’, *Economic Journal*, 113, 666–694.
- [11] Hobijn, Bart & Boyan Jovanovic (2001): ‘The Information Technology Revolution and the Stock Market’, *American Economic Review*, 91(5), 1203–1220.
- [12] Midelfart-Knarvik, Karen-Helene and Henry Overman (2002): ‘Delocation and European Integration: Is Structural Spending Justified?’, *Economic Policy* No. 35, 321–359.
- [13] Monopolkommission (2003): ‘Competition Policy Under Shadow of ‘National Champions’’, English summary of *Fifteenth Biennial Report of the Monopolkommission 2002/3*.
- [14] Neven, Damien and Paul Seabright (1995): ‘European Industrial Policy: the Airbus Case’, *Economic Policy* No. 21, 313–358.
- [15] Ng, Charles and Paul Seabright (2001) ‘Competition, Privatisation and Productive Efficiency: Evidence from the Airline Industry’, *Economic Journal*, 111, pp.5 91–619.
- [16] Nickell, Stephen (1996) ‘Competition and Corporate Performance’, *Journal of Political Economy*, 104, August, pp. 724–46.
- [17] Sutton, John (1998): *Technology and Market Structure: Theory and History*, Cambridge, Ma., MIT Press.