

COMPETITION AND INNOVATION

A CHALLENGE FOR THE EUROPEAN UNION

Jean-Luc Gaffard and Lionel Nesta

OFCE-Sciences Po

Real divergences in economic performances that emerge between countries belonging to the Eurozone make it necessary to define an economic policy oriented towards a re-industrialization of some regions in Europe. In a world characterized by irreversibility of investment and imperfection of market information, supply-side reforms should consist in establishing a framework aimed at supporting both competition and cooperation between the various players of innovation, and thus allowing firm strategies to be successful. This requires reconsidering both national and European policies that are growth-enhancing, that is, industrial policy, competition policy, labour policy, regional policy, and banking policy. However, any change in the industrial landscape in Europe will only be possible if a new macroeconomic policy prevents the inappropriate destruction of productive capacities.

1. A dangerous problem

There is now a new and very dangerous problem in Europe: the increasing real divergence between European countries, particularly between France and Germany both in terms of industry development and in terms of trade balance, which feeds the obsession of competitiveness.

As a matter of fact, unit labour costs have increased in France relatively to what happened in Germany. This is a signal of an increasing competitiveness gap, during the last decade. But it would be a mistake to only focus on costs and prices while the main difference between the two countries lies in the nature of industrial organisation.

Germany is characterised by a dense and stable group of medium-sized firms (16,000 firms with between 500 and 5,000 employees). Production segments are outsourced to low-cost countries with highly qualified employees, so that real wage costs (taking into account the labour costs of countries in Eastern Europe) are about 20% lower than those of other countries in the euro area.

In France, large firms that are specialised in a specific area – aeronautics, energy, environment, luxury goods, etc. – perform exceptionally well on global markets. However, when these firms relocate some part of their business, it is to less-developed countries most often characterised by low wages and low skills. On the other hand, there are too few medium-sized firms (4,000 firms between 500 and 5,000 employees), and successful SMEs are rapidly sold and acquired by large firms, when they should instead be allowed to grow without losing their identity. The consequence is that firms belonging to large segments of industry are more sensitive to price competition.

During the 1990s, in manufacturing sector, the total firm turnover (entry plus exit rates) was about 3% in Germany, while it was around 11% in France. Moreover, firm exit outpaced firm entry in France, while Germany experienced a more balanced pattern. Entry and exit rates are positively correlated in Germany, while they are negatively correlated in France. This can be interpreted as meaning that the creative destruction process is predominant in Germany, while sector profit shock is predominant in France. However, another interpretation is possible: that in Germany market structures are relatively stabilised and investment behaviours are relatively well co-ordinated, while more turbulences persist in France, revealing a weaker degree of co-ordination within industries which affect firms' performance.

Given this gap, and according to the actual consensus, supply or structural reforms would be the only way to re-establish growth and full employment, and to favour real convergence among the European countries. These reforms would consist in promoting competition to diminish economic rents on both the goods and the labour markets. In France for example, dismantle the monopoly power of taxis aimed at overcoming the shortage of supply should allow increasing competition and reducing prices.

Opening on Sunday local stores and more generally introducing less rigidity in labour times would favour employment and growth. Indeed, although the reduction of abnormal economic rents is well grounded in several instances, dismantling entry barriers is not the sole means neither a simple means to promote industrial development.

2. Real coordination issues

Competition plays a central role in the co-ordination process, as it determines the way in which the relevant market information is being made available step-by-step, so that the required adjustments in productive capacity can actually take place.

But, rather than conceiving competition as a state of affairs, it is more appropriate to conceive it as a process, whereby new products are being introduced onto the markets, and incumbents are being challenged by potential and actual new players. Competition helps to make innovation process viable and to obtain the productivity gains deriving from it. In this light, it is not only aimed at equalising supply and demand in a given market and technological environment, but also has to adapt both structure and technology to the fresh opportunities created by expanding markets.

This is where argument about the real nature of the information process comes to rescue. Innovation requires both competitive and complementary investments. On the one hand, investment by a single firm will be profitable provided, first, that the volume of investment by rival does not exceed a critical threshold, and, secondly, that the volume of complementary investments reaches a minimum level. On the other hand, investments decisions are taken by entrepreneurs on the basis of expectations whose reliability depends on their being grounded on adequate market information that is not immediately available. As a consequence, entrepreneurs will have access to the market information they require only if there exists a variety of restraints to which their freedom of action is subject. These restraints feature as imperfections or frictions, which are in the nature of the competitive system.

In this context, policies to ameliorate industry performance should be aimed at improving market information to firms, creating a more stable environment, and should then help indus-

tries to converge towards a stable and efficient market structure. Obviously, governments do not have more accurate information than firms do about markets and technologies. But they have the devices that help firms to access information about market conditions, and thus in their efforts to innovate and grow.

3. Industrial policy

From this perspective, industrial policy, rather than being targeted at promoting specific sectors or technology, must be an array of horizontal interventions that concern the relations between firms, between firms and their employees, between firms and financial intermediaries, or between firms and public research institutions. This final option is preferable to any other since such intervention does not shield any particular firm or sector, but rather increases the quality of incentives, which are strongly dependent on conditions of co-ordination. Subsidies must not be devoted at supporting national champions or high tech sectors *per se*, but at encouraging cooperation between firms, including, of course, the firms that compete with each other.

Hence industrial policies should be horizontal. But instead of replicating or re-establishing the conditions of full (perfect) competition as required by those calling for supply-side reforms, they should be aimed at validating some restraints or monopolist practices that allow firms acquiring market information.

In other words, competition policy must consider the distortions that the growth process necessarily carries in and the necessity of having temporary market imperfections. Instead of targeting a mythic state of perfect competition, it must be aimed at enforcing the viability of the innovation process.

Connexions among firms can then be viewed as a necessary aspect of the production and the dissemination of knowledge in a market economy. In this perspective it is surely incorrect to call them imperfections: Schumpeter coined them as the natural features of an economic process driven by creative destruction.

Therefore policy-makers face a dilemma. On the one hand, contrived arrangements help firms to invest and innovate, thereby contributing to economic growth. On the other hand, it is some-

times in the nature of these arrangements to shelter inefficiency or extract undue profits. But it is another story to argue that all imperfections are against the public interest *per se*. It is then necessary to provide policy makers with guidelines by specifying the circumstances in which these practices may or may not be justified.

4. Labour market policy

The prevailing view in the literature and in most political circles is that the possibility of hiring and firing freely, and of offering wages at a freely-chosen level, is an incentive to invest and hence favours innovation and growth.

Yet the fundamental aspect of a thorough process of innovation is the creation of skills. It results from job tenure and, thereby, favours on-the-job training. Employment protection affects not only employment but also human capital accumulation, and hence productivity and welfare. Then, labour market policies, far from being oriented to the dismantlement of the welfare state, should promote labour market organisation and forms of bargaining between employers and employees that help with adjustment to technological and market changes. In France, it would be more appropriate to reinforce bargaining procedures between employers and employees, and to revise the working of internal labour markets rather than suppress them.

Therefore, the effect of employment security regulation and of the partial reforms recently carried out, which extend to the use of temporary contracts for newly-hired workers leaving employment protection unchanged for permanent workers, and hence make the labour market more flexible, have only favoured a segmentation of this market and the appearance of a new category of workers, namely the 'short-term' workers. This segmentation might even be an obstacle to workers' mobility and growth by preventing voluntary quits from 'solid' jobs.

5. Banking policy

Banking policy must be considered in relation to the problem of providing firms facing innovation processes with the required amount of liquidity, and the right distribution of this liquidity at

the right moment. In this light, financial institutions are important, not so much because they are associated with incentives schemes that are more or less appropriate in the sense of determining a higher or lower saving rate, a better or a worse resource allocation, but as for the capacity to smooth the fluctuations of outcome. Therefore the debate about the role and the functions of banks appears as essential.

When liquidity is needed to cover sunk costs associated with research and development investments, what is at stake is the ability of financial intermediaries to support firms along this path. As a matter of fact, relationship-banks offer continuation – lending at more favourable terms than transaction banks to innovative firms. This is why the regulation of the banking system is necessary. The separation between credit banks (or relationship-banks) and investment banks as proposed by European commission aims at ensuring that credit bank activities are not unduly influenced by a short-term oriented strategy associated with risky investment bank activities.

6. Regional policy

It goes without saying that industrial policies have a territorial dimension insofar as there are local learning processes. But, there is no evidence that local or regional governments are better informed than the national government, have a higher degree of competence, or are less easily captured by lobbyists. Competition between regional governments may prove inefficient if its main consequence is to promote the performance of a small number of regions at the detriment of all others. Such inequalities would be detrimental to real convergence and affect negatively global efficiency.

The conjecture can be made that the smaller the regions, the more wasteful competition between them will be. This might be so because small regions are more inclined to compete with each other by proposing generic advantages such as tax reductions or set-up subsidies, which reduce the sunk costs that firms have to bear and make setting-up more instable. Larger regions, on the other hand, would be more inclined to promote cooperation between firms within and outside its territory, and to pay subsidies aimed at sustaining large public programmes such as environ-

mental programmes. The issues to deal with are to build on critical mass, to allow diversification or differentiation among regions, and most of all, to facilitate adjustments to changes affecting technologies and preferences.

Clusters as well as technological competencies are the result of innovation rather than a precondition of it. Again, policy-makers face a dilemma, which concerns both the appropriate level of decision-making and the relevant geographical area of public intervention.

7. The European challenge

The main objective of any policy in Europe should be to re-establish the conditions of a convergence in real terms, which means re-establishing a balanced trade between the large European countries, and, thus, re-industrialising some parts of the euro-zone. This requires reconsidering both national and European policies that are growth-enhancing, that is, competition policy, labour policy, regional policy, but also industrial policy *stricto sensu*.

First of all, it would be worthwhile to abandon the idea that supply-side reforms making the factor markets – among which the labour market – more flexible in all countries would reinforce the competitiveness of each without damaging global demand and growth at the European level. Efforts by governments to reduce the cost of labour can only be bounded, for the target cannot be to reach a cost of labour similar to that of, say, Eastern European countries. More flexibility in the factor market may be worthwhile only when backed by strong public support. For example, it has been shown that liberalization in the energy markets has led to an upsurge in innovation in renewable energy only when strong policies supporting green innovation are being implemented. In the same vein, the search for increased flexibility in the labour market encouraging professional mobility should be accompanied by strong support to lifelong learning, among other things. More than securing employment, public policies should secure employability.

Therefore, in contrast with the common belief that competition demands no or low state intervention, industrial policy and competition policy might appear as complements in favouring innovation. Supply-side reforms should consist in establishing a

policy framework aimed at supporting *both* competition *and* cooperation between the various players of innovation processes. This is largely the case in Germany, but not in France and not at the European level. Therefore, other countries in Europe should take advantage of the German experience and revisit their national policies. At the same time, a new European initiative should take the form of large public programmes defined at appropriate geographic levels, that is, levels that permit avoiding the destructive competition between regions or countries, typically technological programmes in transversal fields such as energy production and distribution, transportation, health-related industries such as the pharmaceutical industry.

The main reason for developing such programmes is that they qualify as general purpose technologies, rather than being sector specific both in terms of activities, firms and countries, and they aim at improving market information for firms, creating a more stable environment, making it credible and relevant for these firms to invest.

It remains that changes in the industrial landscape in Europe will only be possible if a new macroeconomic policy is under way. Generalised austerity is now destroying large segments of the European industry. Although fiscal consolidation is a necessary part of a rebalancing strategy, it should be progressive, going hand to hand with structural reforms that correspond to a coherent variety of capitalism.