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Industrial Policy and Competition

Economic historians generally agree that about nine thousand years ago, the world underwent a first mutation with the beginning of the first agricultural revolution characterized by the domestication of certain animals, which thus allowed mankind to transition from hunter-gatherers into farmers. From the second half of the 18th Century onwards, three industrial revolutions followed one another. The first, generally dated between 1760 and 1840, marked the era of mechanized production with, in particular, the invention of the weaving machine, the steam engine and the construction of the railways. The Second Industrial Revolution, between the end of the 19th Century and the Second World War, allowed mass production thanks to the control of electricity as well as coal and the creation of assembly lines. Finally, from the 1960s onwards, a third industrial revolution took place with electronics and information technology.

It is these developments that make it possible to live better in today's world than at any other time in history. Today, people are doing better, are richer and live longer, as Angus Deaton (2013) points out. In a striking summary, he notes that "today in sub-Saharan Africa, children are more likely to survive to age 5 than were English children born in 1918" (Deaton 2013, p. 8). The historian David Landes (1988, p. 5) had already marked this progress by indicating the following trait: "The Englishman of 1750 was closer in material things to Caesar's legionnaires than to his own great-grandchildren". As an illustration, the correlation between the changing world population and scientific discoveries can be seen in Robert Fogel's (1999) graph, which is taken up by the World Bank (2008), as shown in Figure 1.1.

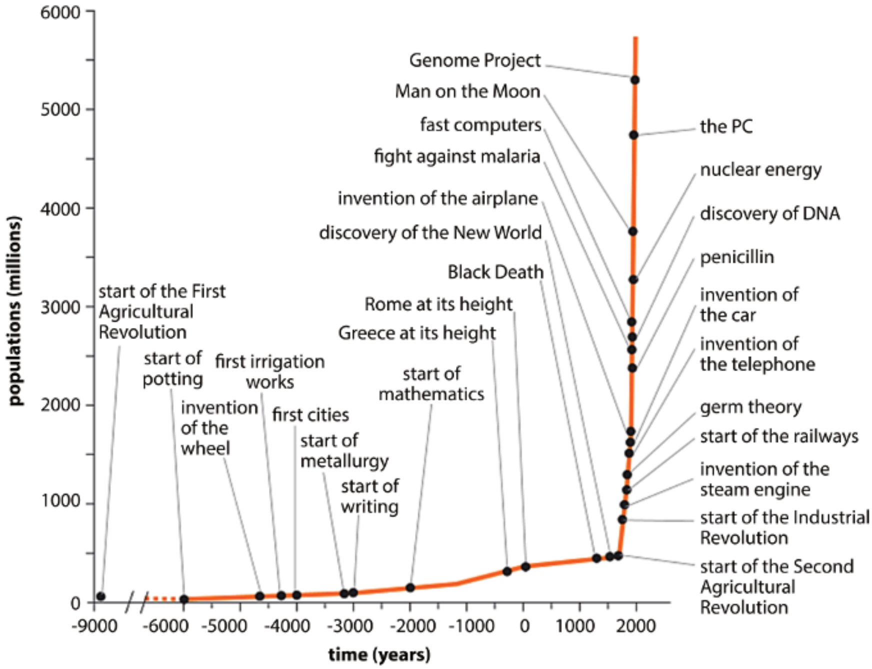

Figure 1.1. *World population growth and some major events in the history of technology between -9000 BCE and today (source: World Bank 2008, p. 108)*

Yet, despite this prodigious change, the world today faces two major, interrelated facts that began in the 1970s in industrialized countries: the increase in inequality within each country (Bourguignon 2012; Deaton 2016) and the deceleration of economic growth. This second situation had not yet arisen 10 years ago thanks to developments in emerging countries such as BRIC (Brazil-Russia-India-China), which were driving global growth, even though it was generally agreed that they were only catching up with more industrialized countries. However, since the Great Recession, the world economy has grown at a rate of about 3 to 3.5% per year, which is below the post-Second World War average.

In all industrialized countries, the problem of economic growth refers to the question of industry. Once the "engine" of growth, these countries are now experiencing deindustrialization; that is, simultaneously a decline in industry's share of value-added creation, a decline in the active population in industry and a decline in the market share of exports. France offers a topical example in this regard, with the share of industry decreasing from 24.6% in 1970 to 14.1% in 2016, as shown in the graph in Figure 1.2.

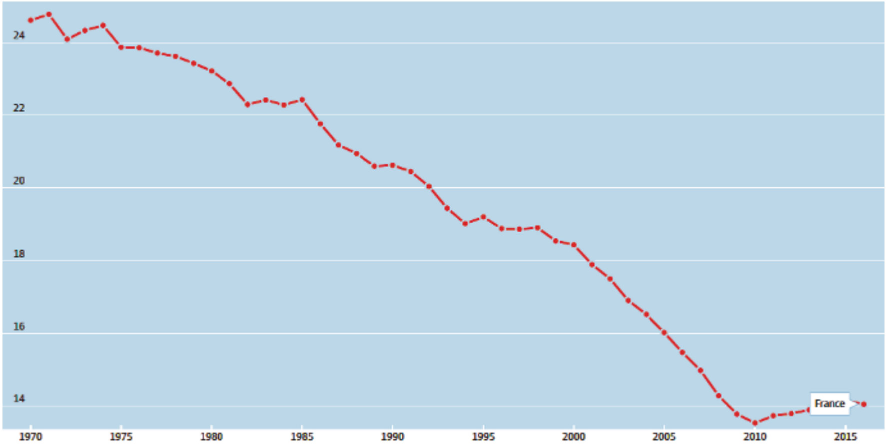

Figure 1.2. *Evolution of the share of industry (including energy) in value added for France between 1970 and 2016 (OECD data)*

This deindustrialization is also reflected in employment figures, which have declined from 15% to 10% of the working population over the past 20 years, as well as in the trade balance, which has gone from a surplus to a chronic deficit. In other words, in 30 years, French industry has lost about two million jobs and, since the early 1970s, it has lost almost half of its industrial population (between 1975 and 2012, according to INSEE, the population employed by industry – excluding construction – fell from 6,175 000 to 3,180,000, a drop of 48.5%). French deindustrialization is also perceptible, as Jean-Luc Gaffard (2017) points out, in the figures for the number of robots (1.22 per 100 jobs in the manufacturing sector compared to almost twice as many in Germany in 2015) and decommissioning rates, which reveals that the productive apparatus is not being modernized. France would thus have become the least industrialized country in Western Europe, as Pierre-André Buigues (2016) notes.

This phenomenon of rapid deindustrialization, the consequences of which are economic, social, political and cultural, explains why, even though industrial production has continued to increase in volume and added value, the evolution of industry seems to be associated in the minds of the French with plant closures, relocation, job losses, brownfields and the decline of their country.

By consensus, economists agree that this evolution has its origin in the conjunction of three main explanatory factors:

– rapid progress in industrial sector productivity;

– the outsourcing by industrial companies of certain activities to companies in the service sector (the so-called “servitization” phenomenon);

– the loss of industrial activity to other territories due to international competition.

According to Lila Demmou (2010), the first two factors contributed 30% and 25% respectively to the destruction of industrial jobs over the period 1980–2007, with foreign competition accounting for nearly 45%.

While everyone now agrees on the general observation that France is deindustrialized, as evidenced in particular by the reports of Jean-Louis Beffa or Louis Gallois (Beffa 2004; Gallois 2012), the same cannot be said for the assessment of this development. Two blocks face each other, as Cohen and Buigues (2014) point out.

On the one hand, some consider this to be a development similar to that of agriculture. At the beginning of the 19th Century, two thirds of production came from agriculture, whereas it accounted for only 2.16% of value added in 2016. However, no one today believes that it is necessary to launch an agricultural reconquest and return to the place it previously occupied in the French economy. A France composed of fewer but better-equipped farmers corresponds, as Agnès Bénassy-Quéré (2012) points out, to a higher per capita income for farmers and cheaper food. Farmers of the past went to the factory and contributed to the development of a mass manufacturing industry leading to technological innovation and lower prices. From this perspective, deindustrialization would be the product of a “law of economic evolution by which, the richer a country gets, the fewer industrial products and the more services it consumes, the more it abandons routine tasks to keep the sophisticated tasks of creation, design, development, but also marketing and commercialization”, according to the presentation of this argument by Cohen and Buigues (Cohen and Buigues 2014, p. 38).

In support of this position, we can find in particular the analysis of Jagdish Bhagwati (2007), who advocates an agnosticism in terms of specialization; the analysis by Patrick Artus and Marie-Paule Virard (2008) for whom the weight of industry will inevitably decrease in developed countries as a result of capital migration to emerging countries that have lower production costs, increased domestic demand and significant productivity thanks to technological catch-up; or Augustin Landier and David Thesmar's (2013) analysis, according to which the higher a country's standard of living is, the less weight industry has.

On the other hand, other authors consider that deindustrialization is a serious and worrying phenomenon because it could not only undermine the potential for innovation, but also lead to a permanent external deficit caused by the difference left over from a deficit in the balance of goods for which the exports of services cannot compensate. This analysis, to which Cohen and Buigues (2014) subscribe, is based on the fact that industry is at the heart of the innovation and R&D process. They cite in particular the analysis developed by Suzanne Berger (2013), according to which deindustrialization can lead, beyond a certain threshold, to the dismantling of a productive ecosystem. Indeed, when it is no longer possible to travel back and forth between scientific laboratories and factories, incremental innovation is prevented. However, if such a spiral starts, France will be marginalized in terms of technological innovation, which will also have an impact on increasing productivity in other sectors, since industry remains the main source of productivity for both agriculture and services.

In view of these elements, Cohen and Buigues (2014, p. 66) clearly oppose the *fabless fab* strategy (i.e. an industry without a factory) and stress that "there is no autonomous development of high value-added services against a background of complete deindustrialization". In the same vein, Bénassy-Quéré (2012) points out that deindustrialization raises three problems:

– services are on average traded less between countries than industrial or agricultural goods;

– productivity growth in services is slower than in industry;

– services may not have the same capacity to drive growth as industry or agriculture.

In the face of this disagreement over the seriousness and consequences of deindustrialization for the French economy, questions relating to the need, objectives and modalities of an industrial policy are also clearly the subject of heated debate. However, in many respects, it can be considered that Jean Tirole's (2016) treatment of these issues provides a synthesis of the current dominant view among economists.

Three points deserve to be highlighted at this level. First, Tirole chooses to address the issue of industrial policy in a chapter entitled "Competition and Industrial Policy", thus revealing both a link between the latter and a hierarchy. Second, after stressing the virtues of competition and competition policy, he asks whether competition is always a good thing, and writes clearly: "The answer to this question is unequivocally 'no'" (*ibid.*, p. 477). Third, he points out that "anyone who asks about 'industrial policy' must first think about the nature of 'market failure'; otherwise, one wonders why the State intervenes. But simply analyzing a market failure is not enough" (*ibid.*, p. 481). Then he adds:

> There is also evidence that competitively neutral industrial policies appear to be more favorable to growth than other industrial policies (*ibid.*, p. 481).

Then comes the author's final position on industrial policy, which is set out on the basis of an observation and then provides "guidelines". The observation, taken from Dani Rodrik, is as follows: "Whether or not we like industrial policy, governments will continue to make it and the subject will not disappear overnight" (*ibid.*, p. 488). In practical terms, Tirole then states that the aim is to "make these initiatives as successful as possible, even if we know that our knowledge in this area will continue to evolve in the future" (*ibid.*, p. 488), and proposes to adopt seven guidelines on this subject:

1) identify the reason for the market failure and respond;

2) use independent and qualified expertise to select projects and recipients of public funds (protected *ex ante* evaluation of policy intervention);

3) be attentive to supply and not only to demand;

4) adopt a neutral industrial policy in terms of competition;

5) evaluate *ex post* and disseminate the results of the evaluations;

6) strongly involve the private sector in risk-taking;

7) understand the evolution of our economies.

Tirole's position on industrial policy may surprise the reader as it contrasts in some respects with the aspirations of industrialists (such as Didier Lombard (2017)), the conclusions of the various official reports on industry over the past 10 years, the positions of political leaders, and the feelings of the French population. However, it seems to us to correspond perfectly to the dominant analysis among economists and reflect developments in industrial policy and competition from the 1970s to the early 21st Century.

Therefore, starting from this conception and all the previous elements, the purpose of this chapter is to demonstrate that if competition policy was initially conceived, until the mid-1970s, as one of the cogs of industrial policy, it gradually came to completely condition the State's sphere of action by introducing its logic and purpose. As a result, industrial policy today has two characteristic features: on the one hand, it is conceived in a hollow form based on competition policy and, on the other hand, it is fragmented in the sense that it no longer comes under the control of an upstream state source, clearly identified because it is centralized, as evidenced by the fact that there is no longer any ministry of industry in France at present.

In order to establish this result, we will first explain how industrial policy has been gradually challenged and has gradually atrophied. Second, we will show that this development has simultaneously been accompanied by an increase in the power of competition policy in France and Europe, to the point of becoming the background for all forms of public intervention, which must now be neutral in terms of competition.

1.1. The State and industrial policy

In order to understand the reasons for this gradual substitution of competition policy for industrial policy, it is worth starting by recalling how a policy for industrial development was implemented after the Second World War. In a second step, we will then be able to specify how the evolution of economic analysis on the one hand, and certain failures on the other, have led to questions about the legitimacy and effectiveness of the State's direct action in industrial matters. This last point of view is developed in particular by Cohen and Buigues (2014, p. 427), who show that each of the elements of the model that enabled *Les Trentes Glorieuses* (1946–1975) turned around in the long term, making it necessary to invent a new form of industrial intervention because of the transition from a catching-up economy to a knowledge and innovation economy.

1.1.1. *The State organizing the economy*

Traditionally, it has been agreed to consider that France has offered, for at least three centuries, a unique interventionist approach to industrial policy. This is with regard to both the place and role of the State and its instruments of action, starting with the action and influence of men belonging to the major bodies of the State, and in particular the Mining Corps (Stoffaës 2011).

The origin of this French singularity is associated with France's history and more specifically with two of its outstanding figures. The first is that of Sully, Superintendent of Finance of Henri IV, who sought, with the advice of Barthélemy de Laffemas, to develop national production through a whole series of actions ranging from the improvement of infrastructures (backfilled, paved and passable roads) to the abolition of small financial and judicial offices, including the abolition of tolls and the development of plantations and industry (for example, the Gobelins Manufactory). The second historical figure is that of Colbert, Controller General of Finance of Louis XIV, who wished to place the kingdom's economy at the service of the king, in particular by introducing customs duties, creating national manufactures and promoting developments in technology (with the creation of the Academy of Sciences in particular) and infrastructure (roads and canals). The latter's reputation is at the origin of the noun "colbertism" and "sums up the specificity of the French approach to economic policy" (Stoffaës 2011, p. 51).

It is therefore in the context of this French historical specificity that questions relating to the need for an industrial policy (section 1.1.1.1), as well as those concerning its definition and implementation methods (section 1.1.1.2), must be considered.

1.1.1.1. *The need for an industrial policy*

Since Richard Musgrave (1959), economists have considered that, beyond the sovereign functions, States intervene through economic policies in order to fulfill three functions: allocation, distribution and stabilization. In this context, industrial policy may appear to be a necessity, first because industry plays a crucial role in a country's economy (there is a correlation between the growth rate of industry and that of the economy; industrial productivity is higher than that of other sectors and it influences the rest of the economy); second, because "spontaneous evolution, resulting solely from autonomous decisions by the various actors in industrial life, does not seem fully satisfactory" (Maillet 1984, p. 5), in particular in the event of a crisis.

According to Pierre Maillet, to convince oneself of the need for public intervention in the productive fabric, it is necessary to start by asking oneself what is expected of a country's productive apparatus and, in particular, of its industrial component. According to him, we expect:

> First of all, to produce at the lowest cost the goods and services that are demanded by the nation; this is the *raison d'être* of a productive system. But also to provide jobs that are as remunerative and as stable as possible [...]. Some other objectives that the productive system can help to achieve should also be mentioned: price stability (or at least a low rate of inflation), justice in income distribution, balance of payments and a certain degree of independence from other countries (*ibid*., p. 20).

However, although the market is a "powerful factor in efficiency" for Maillet, it is not in a position to satisfy all these expectations and must therefore be "supplemented by various public interventions designed to improve its functioning" (*ibid*., p. 28). In other words, the need for state intervention is based on market failures, that is, on the fact that a number of elements move real markets away from markets as defined under perfect competition theory; and therefore the efficiency and optimality of markets that are supposed to be guaranteed by the two welfare theorems do not materialize. Among these market failures, Pierre Maillet identifies five main ones.

First, the competitive mechanism "can only function fully if the market is transparent and not compartmentalized and provides information over time" (*ibid*., p. 30). However, companies do not spontaneously post their prices or scales, do not necessarily respect them on their own, and tend to split the market through agreements or product differentiation. In addition, he considers that the market only offers a short-term view and therefore mismanages the problem of the articulation and coherence of long-term perspectives – a crucial issue for industry and R&D.

Second, companies neglect the externalities they generate both when they are positive (such as the complementary effects that can exist between activities or products) and when they are negative (such as the deterioration of the regional or social fabric caused by plant closures). As a result, their decisions are generally biased in relation to the general interest.

Third, the decision-making behavior of companies may not lead to an efficient functioning of the economy. On the one hand, this is because they adopt excessively short-sighted and cautious behavior; on the other hand, it is because competition can be self-destructive, as evidenced by "a certain 'exploitation' of the workforce (poor working conditions, unhealthy or dangerous, underpayment of certain qualifications, etc.)" (*ibid*., pp. 33–34).

Fourth, companies are unable to accelerate or slow down certain rates to "facilitate the readjustment and reclassification" of their employees (*ibid*., p. 35).

Finally, "the functioning of a decentralized market economy can lead to imbalances resulting in underemployment, an unbalanced balance of payments and higher prices" (*ibid*.), as well as to under-investment in relation to the socially optimal level.

In the end, this author's analysis, which is representative of the arguments supporting the need for an industrial policy, concludes with the following idea:

> For economically highly developed nations, where an increasing number of individuals take their destiny into their own hands, in accordance with a democratically established and state-controlled rule of the game, the appropriate form is a mixed economy, based on autonomous enterprises and a market economy, supplemented by public interventions, of limited scope and on carefully chosen points: it is the role of industrial policy to make these interventions intelligently (*ibid*., p. 37).

1.1.1.2. *The definition and implementation of an industrial policy*

From the above, Maillet (1984, p. 25) concludes that the role of public authorities consists, within the framework of an industrial policy, of intervening in business' behavior by modifying both:

– the prospects for developing business opportunities and

– self-financing resources and conditions of access to credit,

but also by controlling or influencing price trends through:

– the evolution of wages;

– promoting technological change.

Understood in this sense, it is easy to understand why Yves Morvan (1991, p. 415) points out that industrial policy is "omnipresent in modern economies, insofar as all government actions have a direct or indirect impact on industrial structures and agents' behavior". He therefore proposes to define industrial policy as "a set of guidelines coordinated by public authorities aimed at influencing the conditions for determining agents' attitudes (and/or influencing the attitudes themselves), in order to achieve objectives considered important" (*ibid*., p. 425).

This extensive and central conception of industrial policies is found in Table 1.1, inspired by Bertrand Bellon and Jacques De Bandt (1991, p. 832).

Politically, this representation corresponds to the French conception from 1945 to 1984, as can be seen by taking a broad look at the history of industrial policy during this period.

With the post-war reconstruction, an era of catching-up began, led by Charles de Gaulle, thanks in particular to the *Commissariat général du Plan* (General Commisseriat of the Plan) set up in 1946 at the initiative of Jean Monnet. This economic plan, unlike that of the USSR, was intended to be indicative and incentive: it was "the concerted economy". The Plan was a forum for reflection aimed at bringing all social partners and public authorities together towards common objectives; it meant "reducing uncertainty", according to Pierre Massé's formula. The role of the State was nevertheless very strong since the productive apparatus had been quite destroyed, such that basic activities had to be restored and the public sector was extremely important in industry; this was particularly due to the 1946 nationalizations, direct aid to companies and the *Commission centrale des Marchés* created in 1959. The government thus acted in two ways: through direct actions on the productive fabric through public enterprises and administered finance, and through indirect actions to guide the business environment through the Plan.

Macro-economic policies			Science and technological policies	
Currency Balance of payments Employment Growth	Public procurement Defense	**Industrial policies** Restructuring operations Privatization Sectoral plans	Technological policies R&D	Research Education Training
		Regulation/ Deregulation Aid to SMEs Investment aid		
Equipment Spatial planning	Regional industrial development actions	Aid for business creation Standards **Competition policy**	Export subsidies Aid to FDI (foreign direct investment) Tariff and non-tariff protection	WTO International agreements
Regional policies			Trade policies	

Table 1.1. *Articulation of the different levels of political intervention*

With the decree of August 9, 1953, France set up a *Commission technique des ententes* (Technical Commission on Agreements) and thus began a policy of competition before the German Competition Act and the 1957 Treaty of Rome. However, far from initiating a policy of competition in the modern sense of the term, the French initiative was motivated by the desire to have an additional lever for industrial policy.

Indeed, in order to build vertical industrial sectors around national champions, the political power created a body totally under its control, the aim of which was to fight against horizontal agreements that weigh on the price of equipment as well as public budgets, and are a source of inflation. This horizontal coordination was institutionalized during the Occupation through the organizing committees.

Thus, with this body, the political powers did not intend to fight against coordination *per se*, but against coordination that was exercised against the State's will to modernize France's industrial structures.

Theoretically, this articulation of industrial policy and competition policy as an instrument of the former finds justification in Maurice Allais' theory of competitive planning and Jacques Rueff's theory of the constitutional market.

Box 1.1. *Competition policy as a lever for industrial policy (source: Didry and Marty 2016)*

During Georges Pompidou's presidency, the spectrum associated with industrial policy was still very broad since it:

> mobilized public procurement, sectoral development grants (through the FDES-Fonds de développement économique et social) and spatial planning, public or semi-public financing channels (specialized banks such as the French Bank for Foreign Trade or the Crédit national) and nationalized companies (particularly in the energy sector, with EDF, the Compagnie française des pétroles, Elf-ERAP-Société nationale des pétroles d'Aquitaine or CdF-Charbonnages de France), in order to build a rationality in the allocation of budgetary or public resources and in the modernization that will ensure the country's competitiveness (Bonin 2010, p. 398).

However, faced with the initial difficulties encountered by this model (steel or shipbuilding crisis), Georges Pompidou entrusted Jacques Chaban-Delmas with the task of modernizing French industry by introducing more competition, that is, finding a new balance between the State and markets: this would be "contractualization". This evolution can be illustrated by Simon Nora's 1967 report, which proposed a reform of public companies such as RATP, GDF, EDF or SNCF. The latter were to be granted much greater management autonomy under program contracts. It should also be noted that from May 1970 an Inter-ministerial Committee on Industrial Policy was set up, the purpose of which, together with the Plan, was to offer expertise to the State in order to define France's industrial strategy.

In addition to supporting SMEs and exports, one of the main objectives of Georges Pompidou's industrial policy was to create national champions (of any legal status) capable of competing internationally (for example, Creusot-Loire). It was also at this time that European cooperation was to enjoy significant success with the creation of Airbus in 1970 and the advent of a European space policy. This period also corresponded to the apogee of the Plan.

Yet, as Cohen and Buigues (2014, p. 313) point out, behind this appearance of a uniform industrial policy:

> three situations must be radically distinguished: the conditions for State intervention and the status of national champions differ according to whether the State is faced with powerful industrial actors (whose structures it intends to define and predetermine), with lame ducks (politically destabilizing), or with the absence of any industrial actor in a sector decisive for national independence – this is then the field in which major projects are chosen. In all three cases, the mechanisms are formally comparable: sectoral plans, subsidies or bonifications for modernization, investment, export, concentration, etc.; in practice, the effects of these tools are radically different.

Subsequently, Valéry Giscard d'Estaing did not really deviate from the idea that France should gradually become a real market economy, but that the State should first radically transform the French productive system, in particular through its industrial policy, so that it can be competitive when it competes with other nations. In other words, France first had to face more competition internally before it could compete with the others. This justifies the eviction of foreign firms in favor of national groups, as evidenced, for example, by the fact that the Ministry of PTT (Post and Telecommunications) promoted Thomson's entry into public telephony and forced the American firm ITT (International Telephone and Telegraph) and the Swedish company Ericsson to sell their French subsidiaries (Bouvier

2008, p. 81). This conception is reinforced by the importance of the oil and monetary shocks which underline the fragility of the French productive fabric and its dependence on the outside world. It was also from this period that the State conceived itself too as a “stretcher-bearer”, to use Élie Cohen’s expression, by ensuring the social management of industrial restructuring and reconversion.

The election of François Mitterrand, the first socialist to hold the office of President in the Fifth Republic, initially strengthened industrial policy and the desire to create and consolidate national champions. However, the Socialists believed that previous governments had not sufficiently developed a strategic vision and had only relied on large groups. It was therefore necessary to intensify industrial policy and extend it to all sectors and companies. This takeover of the entire productive fabric was carried out in particular by a wave of nationalizations (in particular in the banking sector, but also by major industrial groups such as Thomson, Saint-Gobain, Rhône-Poulenc, Usinor, Sacilor, Suez and the CGE), the establishment of “mobilizing programs” to better link industry and research, a stronger focus on industry, increased credits, interventions in favor of SMEs, and the development of regional industrial policies within the framework of State–Region contracts.

This perspective was to be challenged from 1983, the year that marks the beginning of what is usually referred to as “the turning point of rigor”, due to external constraints – linked to the economically liberal turn taken by the elections of Margaret Thatcher and Ronald Reagan – and François Mitterrand’s desire to remain in the European Monetary System. From 1984, France, within the common market and under the impetus of the European Commission, really converted to a market economy, as illustrated, in particular, by the transformation of the telecommunications markets (Bouvier 2008) and the end of administered financing. The socialist power was also struggling against the first shock of deindustrialization with, for example, the creation of the *Comité interministériel de restructuration industrielle*, CIRI (Inter-ministerial Committee for Industrial Restructuring). The years 1983–1984 thus marked a “break in industrial policy: it was increasingly reduced to an environmental policy”, as Norbert Holcblat and Michel Husson (1990, p. 84) noted, quoting Élie Cohen, who concluded that “the State no longer claimed to direct the economy or even protect industry from the market”.

From this rough perspective, it emerges that the post-war years up to the early 1980s appeared to be a period of "tight reins" piloting of the economy by the State. However, at the end of this period, we see the first signs of questioning, which were to lead to the fragmentation of industrial policy and its suffocation by the gradual rise of competition policy.

1.1.2. *Challenging the economic role of the State*

The above elements indicate that industrial policy, like all State interventions, is understood within the economic analysis through the notion of market failure. It is because the market does not necessarily lead to the desired objectives that the State intervenes to correct its failures.

However, the evolution of economic analysis and the global environment, as well as some resounding failures of industrial policy, will lead to the conclusion that market failures do not necessarily imply state intervention: it is indeed possible that the cure is worse than the disease. Therefore, changing the normative perspective, it will now be considered that the State must intervene when two *cumulative* conditions are met: the existence of a market failure, and the demonstration that the State will improve the situation. This new conception will involve deconstructing the economic role of the State (section 1.1.2.1) and challenging industrial policy (section 1.1.2.2).

1.1.2.1. *The end of the enchanted conception of the State*

France has traditionally made the State the essential actor in the functioning and transformation of society. However, from the 1970s onwards, economic discipline was to be marked by a challenge to the model of the omniscient, omnipotent and benevolent State.

First of all, the State, like all other economic actors, has limited knowledge. This means that it has only an imperfect knowledge of the structure of the economy. Indeed, even if the State has resources that are often more important than private economic agents – which is no longer necessarily guaranteed in the age of the Internet and GAFAM (Google, Apple, Facebook, Amazon, Microsoft) – the fact remains that it knows the structure of the economy only imperfectly. This lack of knowledge is mainly due to two factors. First, as Friedrich Hayek in particular pointed out, the structure of the economy is not a permanent and unchanging factor. The millions of choices made all the time create a dynamic and complex interaction. In addition, studies on chaotic dynamics, evolutionism, computational phenomena or game theory have shown that the results may be highly sensitive to initial conditions. Second, one of the major differences between the social sciences and the natural sciences is that human beings understand that they are being analyzed and that it may be in their interests to lie or withhold information. In other words, assuming that the State is omniscient is an extremely strong hypothesis, since it is implicitly based on a perfect knowledge of not only the structure of the economy but also the interactions that drive it.

Moreover, even if an omniscient state is assumed, there is no guarantee that it will also be omnipotent. Indeed, it is now generally accepted that economic policy analysis can be approached using the tools of game theory. The state is then defined by its strategies and payments, and faces other players who also have their strategies and payments. In other words, we are far from the idea that the State would act on society in a purely directive way, as in a command and control system.

With the consideration of strategic interactions between agents, the question of the impact of expectations on economic policies arises. Indeed, as Robert E. Lucas pointed out, any change in economic policy leads to a change in agents' expectations. Therefore, if the implementation of an economic policy measure does not take these changes into account, the results obtained may differ from the desired results.

Finally, it is the state's benevolence hypothesis that has undoubtedly been the subject of the strongest criticism, initially from both the Virginia school (James Buchanan) and the Chicago school (Georges Stigler). In essence, it is a question of pointing out the fact that the State as an entity does not exist, because it would only itself consist of women and men who are *homo oeconomicus*, that is, beings who seek to maximize their welfare functions and are sensitive to incentives. Therefore, far from considering that politicians are driven by the collective interest, it is a question, first of all, of seeing in them beings who make career choices and seek re-election. It is no longer the general interest that serves as a compass, but the search for a majority electorate, which contradicts the idea that the State has a long-term perspective while the market has only a short-term view. Moreover, since politicians are sensitive to incentives, pressure groups (*lobbies*) will do everything possible to exploit and capture the State apparatus in order to serve their interests. The idea is that thanks to public power and the fact that it can impose certain rules through legal mechanisms, it can be interesting for a pressure group to "buy" politicians to get what they want. This may involve the introduction of subsidies, barriers against their rivals or restrictive measures against consumers. In other words, pressure groups would act to direct public funding towards their interests in return for career support for politicians. This risk seems all the more serious as voters have difficulty in observing public decisions and their effects.

In the end, as Avinash Dixit (1996) points out, the state appears to be neither benevolent, nor omniscient, nor omnipotent. Since the early 1980s, we have therefore entered a period that could be described as the end of the "enchanted" conception of the State, which is essentially reflected in the idea that the existence of market failures does not necessarily imply State intervention. This has led to the fragmentation of centralized public power, both horizontally with the multiplication of independent administrative authorities, and vertically with the WTO, the IMF or the regions (Bénassy-Quéré *et al*. 2017).

1.1.2.2. *Challenging industrial policy*

Following the oil shocks of 1974 and 1978, Thatcher's rise to power in 1979 in the United Kingdom and Reagan's the following year in the United States, these different ideas about the place and role of the State, which had remained mainly in the academic sphere, would have a direct influence on political leaders. Thus, in his 1981 inaugural speech, Reagan stated: "The State is not the solution to our problem; it is the problem".

We will thus witness a real metamorphosis in the conception of the State, which now presents itself as "a more or less coordinated assembly of public policies" (Muller 2004, p. 34). This transformation, described as a "neoliberal shift", will highlight the failures of industrial policy and in particular call into question the policy of "national champions".

More generally, it can be observed that criticism of the French conception of industrial policy is not only the work of economists. It is found, for example, in the work of a sociologist like Michel Crozier (1963) who mobilizes the theory of organizations to denounce more generally a phenomenon of bureaucratization of French society.

The *Plan Calcul* (Calculation Plan) was a major program launched by Charles de Gaulle to provide France with a national IT industry and thus ensure its autonomy from both other countries and foreign manufacturers. This objective seemed all the more strategic as IT had a central place in the field of civil and military nuclear power as well as in the electronics industry – in particular semiconductors – as the *Compagnie des machines Bull*, the only major French company in the sector (14,000 employees in France in 1960) had come under the control of General Electric in 1964, and as IT was becoming an instrument of State reform, according to Pierre-Yves Baudot (2011).

This Plan resulted in very high public subsidies (several billion euros), the incentive to buy French as part of public procurement, the creation of two research centers (IRIA – now INRIA – and LETI) and an industrial complex formed by the CII (created by merger in 1966), SPERAC and SESCOSEM.

The Calculation Plan ended in 1975 with Valéry Giscard d'Estaing's decision, which only acknowledged the commercial and industrial failure of the CII, the central nucleus of the Calculation Plan, and therefore that of the attempt to create a French IT industry.

Today, the industrial policy conducted in the IT sector, organized around the Calculation Plan, appears consensually as an archetype of failure of French industrial policy if it is evaluated on the basis of the results obtained in terms of the subsidies and actions that have been carried out. In a way, only INRIA remains from the Calculation Plan.

Box 1.2. *The* Plan Calcul *(1966–1975) (sources: Mounier-Kuhn 1994; FXO-23 archives 1966, on François-Xavier Ortoli's*[1] Plan Calcul*)*

1.2. Competition policy as the area of public action

Even before the fall of the Berlin Wall on November 9, 1989 and the collapse of the Soviet Union on December 26, 1991, European countries, including France, chose to be market economies and, as such, began to reform their understanding of the economic role of the State. The period from the 1980s to the end of the 2000s thus marks the definitive abandonment of direct State intervention in the productive system and the advent of competition as the main source of economic regulation. Article 4

1 Available on the website of the Historical Archives of the European Union, hosted by the European University of Florence.

of the consolidated version of the Treaty establishing the European Community in 1997 stipulates in particular that States shall act in accordance with the "principle of an open market economy with free competition". As Pierre Muller (2004, p. 35) points out:

> it is because a new global reference framework has emerged – the market reference framework based on the idea that market mechanisms are more effective than public mechanisms in regulating modern societies – that a new vision of the State has in turn emerged and that the French model is no longer a model.

This transition is mainly achieved by a disengagement of the State, offset by the rise, from the 1980s, of a new institutional form which emerged in 1978: the independent administrative authority. The term "competition policy" will gradually become meaningless and misleading. Indeed, from 1986 onwards, France gradually neutralized any strictly political dimension, since political action would be considered at best unfit and at worst corrupt. Competition policy would thus gradually become a competitive market regulation: the authorities in charge of this regulation are no longer subject to the State and have no obligation to coordinate with other policies pursued by the public authorities.

Once placed under the authority of the State, competitive regulation became autonomous in the 1980s and took over control of market architecture (section 1.2.1), as well as control of market functioning (section 1.2.2). Competition policy has thus become both the composer and the conductor of microeconomic policies since the latter, starting with industrial policy (European competence since 1992) and innovation policy, can only be conceived and developed in areas left free by the competitive regulation of markets since they must ensure that their anti-competitive effects are kept to a minimum.

In this development, the impact of European integration is particularly strong for two reasons. On the one hand, it is because European law had previously been given absolute primacy over national law for all European acts with binding effect and because, in addition, some of them (thanks to their direct effect) can be directly invoked by all before the national courts. On the other hand, it is because the period 1980–2000 corresponds to a period of densification of European substantive law, which applies to individuals and companies, both at the level of primary law (that of the Treaties) and secondary legislation (that of the European institutions).

1.2.1. *Control of the market architecture*

Once an auxiliary, competition policy has since the 1980s become the force that controls the existence and limits of markets as well as the space left for other policies. This metamorphosis was achieved in particular through three elements. The first was the affirmation and deepening of a competitive order provided by the freedoms of movement and the new meanings given to the central concepts of competition law (section 1.2.1.1). The second was the deregulation of network industries (section 1.2.1.2). The third was the control of market structures, and more specifically concentrations (section 1.2.1.3).

1.2.1.1. *The competitive order*

The European construction, at the beginning of the 1980s, was already well established. Indeed, it was based under primary law both on the Treaty of Paris of April 18, 1951, establishing the ECSC (European Coal and Steel Community), and the Treaties of Rome of March 25, 1957, establishing the EEC (European Economic Community), and Euratom or EAEC (European Atomic Energy Community).

The main feature of the European project was already there: a functionalist method based on the economy and the will to build institutions that would transcend nation states in order to build a large European market. This method led in particular to the establishment of a customs union on January 1, 1968, unanimous decision-making from the Luxembourg compromise of January 29, 1966, the creation of the European Council at the Paris Summit on April 9 and 10, 1974, and the election of the European Parliament by direct universal suffrage from June 1979.

However, it was between the 1980s and the early 2000s that European integration deepened both in terms of economic and institutional integration and in terms of powers, with four treaties: the Single European Act (1986), the Maastricht Treaty (1992), the Amsterdam Treaty (1997) and the Nice Treaty (2001). Among the major changes resulting from this foursome are: the completion of the internal market without frontiers, qualified majority decision-making by the Council of the European Union, the extension and enlargement of common policies, the creation of the CFI (Court of First Instance of the European Communities), the creation of the European Union, the single currency and the creation of the ECB (European Central Bank).

This renewal of European integration was mainly based on the conclusions of the Fontainebleau European Council of June 25 and 26, 1984, those of the report of the *ad hoc* committee on institutional matters (chaired by James Dooge) and those of the first report of the *ad hoc* committee on a people's Europe (chaired by Pietro Adonnino) of March 29 and 30, 1985, but above all in the European Commission's White Paper of June 14, 1985, adopted at the initiative of its President Jacques Delors. The conclusion of this document is very clear:

> Europe stands at a crossroads. We either go ahead – with resolution and determination – or we drop back into mediocrity. We can now either resolve to complete the integration of economies of Europe, or through a lack of political will to face the immense problems involved, we can simply allow Europe to develop into no more than a free trade area (European Commission, 1985, p. 8, section 2019).

Competition policy therefore presents itself as the central and structuring policy for reaching the European market. In the Treaty establishing the European Community, since 1992 the provisions on competition have been located between, on the one hand, the principles and foundations and, on the other hand, the various policies (economic and monetary, employment, commercial, social, cultural, etc.). Developments in the 1980s and 2000s led to the clarification of freedom of movement and a rethinking of the main concepts of competition law, in order to legally define the constituent elements of the European market.

The main architects of this change have been the European Commission, through its initiative function and general supervisory power, and the European Court of Justice (ECJ), in particular through the preliminary ruling mechanism.

Placed at the heart of the completion of the internal market, the freedoms of movement of goods, services, persons and capital correspond both to the main principles of European law and to fundamental freedoms. Since the beginning of European integration, they have been the precondition for effective competition and are based on the principles of market access and non-discrimination on grounds of nationality. The ECJ points this out in particular in its Schul judgment of May 5, 1982 (Case C-15/81, section 33):

> The concept of a common market as defined by the Court in a consistent line of decisions involves the elimination of all obstacles to intra-community trade in order to merge the national markets into a single market bringing about conditions as close as possible to those of a genuine internal market.

The only exceptions to these freedoms are those relating to the system of justifications for obstructing freedom of movement on the grounds of imperative requirements (Articles 36, 51 and 52 of the *Treaty on the Functioning of the European Union*): public morality, public policy, public security, protection of health and life of humans or animals, plant protection, protection of industrial and commercial property, and protection of national treasures with artistic, historical or archaeological value.

These economic freedoms have in particular raised issues relating to technical standards and regulations, professional diplomas and qualifications, freedom of establishment, freedom to provide services and cross-border cooperation of companies.

As regards the movement of goods and services on the European market, since there has been a customs union since July 1, 1968, the general principle is that all forms of trade barriers should be prohibited, whether by taxes that have an equivalent effect to customs duties or by measures that have an equivalent effect to quantitative restrictions. The classic *de minimis* legal principle, according to which the law should not concern itself with small things, is inapplicable in this area. Traditionally, European law had chosen the path of harmonization by using the principle of mutual recognition of national standards and by using standardization in certain areas.

From the 1985 White Paper, the European Commission adopted a “new approach”: the Commission defines the essential safety requirements (as well as those relating to other collective interests) for placing a product on the market, the standardization bodies propose ways to achieve these objectives, and all States must recognize a presumption of conformity with the essential requirements when products and services comply with these standards. This approach has also introduced a procedure for alerting and informing about technical regulations envisaged by Member States. The completion of the internal market is thus based on harmonization (limited to essential requirements) and reference to voluntary standards adopted by European standardization bodies. This development is reinforced by the Single European Act of 1986, which replaces unanimity by a majority in European Council decisions on European regulatory and technical harmonization, with a view to eradicating all forms of trade barriers. It is also within this framework that the Community Customs Code was adopted with Regulation No. 2913/92/EEC of October 12, 1992, which was the first codification of standards relating to trade between European countries and third-party countries.

The ECJ, the ultimate guarantor of compliance with European law, confirms this strengthening of the free movement of goods and services within the European territory with numerous case laws. At least three can be mentioned. In its Campus Oil judgment of July 10, 1984 (Case C-72/83), the ECJ held that a State cannot protect an economic sector to avoid the effects of the European treaties, while recognizing that it may take a discriminatory and protectionist measure if it is justified and proportionate on grounds of public security. With the Keck and Mithouard judgment in principle of November 24, 1993 (Cases C-267/91 and C-268/91), the Court introduced a distinction between *measures relating to the conditions to which products must conform* (e.g. shape, size, weight), which are likely to constitute measures that have equivalent effect, and *measures relating to the conditions of sale* (e.g. place, advertising, authorized operators) which are likely to constitute measures that have equivalent effect only if it is demonstrated that they affect imported products more than domestic products. Finally, enshrining the European Commission's new approach, the ECJ in its CIA Security judgment of April 30, 1996 (Case C-194/94) states that a national technical provision which has not been notified is not enforceable against individuals if it has the effect of hindering the exploitation of a product or the provision of services.

With regard to the movement of persons, whether natural or legal, it is necessary to allow borders to be crossed in the broadest sense. On the one hand, it is a question of ensuring that each person can freely establish themselves or be employed throughout Europe without facing unjustified obstacles. On the other hand, it must be ensured that each economic operator can freely offer its services to customers located in other Member States, while remaining based in a single State. In other words, it is a question of eliminating all barriers to entry and exit within the internal space, for workers and companies alike, in order to mechanically increase the number of competitors.

In addition to these contributions relating to the creation of an area of free movement, the European Commission and the ECJ have, during the years 1980–2000, deeply rooted the competitive order by defining the central concepts of competition law and those relating to public service. Indeed, it is through a jurisprudential construction, since the Treaties do not provide any definition, that the central concepts of business, economic activity and serving the general interest have been defined.

The European competitive approach to the notion of "enterprise" is a functional and not an organic approach. In other words, the notion of enterprise goes far beyond commercial companies. Thus, an inventor who makes use of a patent license, a religious community, an economic grouping, a trade union, a professional association or any entity governed by public law may be qualified as a business within the meaning of European competition law if it does not act within the framework of its prerogatives as a public authority (for example, a business entrusted with a certification mission which does not exercise any standardization mission and does not have any decision-making power related to the exercise of public authority). Gradually, the ECJ came to a definition which it first set out in its landmark judgment of Höfner and Helser of April 23, 1991 (Case C-41/90, section 21): "every entity engaged in an economic activity, regardless of the legal status of the entity and way in which it is financed" must be regarded as a business.

Consequently, all entities that do not carry out an economic activity are excluded from the application of the competition rules. The ECJ recognized, for example, in its judgment of Poucet and Pistre of February 17, 1993 (Case C-159/91 and C-160/91, section 20) that bodies responsible for the management of social security schemes perform a function of an exclusively social nature. Similarly, in its Eurocontrol judgment of January 19, 1994 (Case C-364/92, section 30), it recognized that an international organization which carries out a mission in the general interest on behalf of the Contracting States, for example airspace control and policing, should not be considered as a business.

However, while these two examples may seem obvious, there are cases where this is not the case. Indeed, Article 90 of the EEC Treaty (Article 106 TFEU) sets out situations where the conclusion on the application (or not) of the competition rules is more difficult to reach. These are cases relating to, respectively, public undertakings and undertakings to which special or exclusive rights are granted (Article 90(1)), as well as undertakings entrusted with the operation of services of general economic interest or that have the character of a tax monopoly (Article 90(2)). Without going into the details of this thorny issue, which has been the subject of many debates, comments, decisions and rulings, two essential points should be mentioned.

First, it should be pointed out that the European Commission has provided a framework for the transparency of financial relations between States and public companies, through a series of acts begun with Directive 80/723/EC of June 25, 1980. This framework specifies in particular that the definition of what a public company is must be assessed according to an extensive approach. This means covering cases where there is a direct or indirect influence – even potential, but dominant – of the State (in the broadest sense), whether it owns all of it, has a financial participation or determines the rules governing the company in question. Second, it should be pointed out that it is in this context that questions concerning the definition and limits of SGIs (Services of General Interest) and SGEIs (Services of General Economic Interest) are raised, which make it possible to deal with the notion of public services as it is understood in France.

Finally, to conclude on the competitive order, this time strictly at the French level, it should be noted that competition policy was still essentially a matter for the State in the early 1980s. The major change was to take place with the Ordinance of December 1, 1986 on free prices and competition. The two main points concerning this ordinance are, on the one hand, the clear affirmation of the general principle of freedom of prices from which freedom of competition derives, and, on the other hand, the creation of the *Conseil de la concurrence* (Competition Council). Unlike its predecessor, the *Commission de la concurrence*, the latter has decision-making powers in matters of agreements and abuses of dominant positions, under the supervision of the judicial authority (*Cour d'appel de Paris* and *Cour de cassation*). In addition, by respecting the principle of primacy, the *Conseil de la concurrence* may cumulatively apply European provisions on anti-competitive practices (Articles 85 and 86 of the EEC Treaty) with those of national law and thus impose a double sanction.

1.2.1.2. *Deregulation of network industries*

In terms of economic analysis, the 1980s were marked in particular by the questioning of the traditional idea that network industries (electricity, telecommunications, post, railways, air transport, etc.) could not be competitive because they were entirely natural monopolies. It is the theory of contestable markets that makes it possible to dismiss this idea by emphasizing the notion of potential competition, drawing on not only analyses of network externalities, but also the idea previously developed in the 19th Century by Edwin Chadwick, then by Léon Walras in the field of railways, according to which the absence of competition *on* the market does not imply the absence of competition *for* the market. On the basis of these elements, various problems are then identified, including the social inefficiency linked to the dimensions of monopolies, the price and quality of services provided to consumers and businesses, and the issues relating to the financing of the public enterprises to which these monopolies are usually entrusted.

The spread and importance of these ideas, as well as the growing importance of network industries in our societies, the political rise of neoliberalism, technological change and the desire to complete the internal market, led to the deregulation of network industries in the European area in the 1990s. This is, of course, another major change in the tools traditionally used by States to implement an industrial policy, particularly for France. In order to trace most of these changes, it is necessary to return successively to the role of the European Commission in this area, the liberalization of these industries, the transformations of the incumbents to which they have led and the advent of sectoral regulation, emphasizing the major role played by the *Conseil de la concurrence* in the French context.

With a view to the completion of the internal market, the European Commission undertook, from the early 1990s, to open up network industries within the European territory to competition. However, the possibility of taking such an initiative, which was contested by several States, was recognized by the ECJ on two grounds. First, with the judgment of France versus Commission of the ECJ of March 19, 1991 (Case C-202/88), the European Commission was granted the ability to enact general legislative acts; in other words it was granted regulatory power. Second, the judgment of the Netherlands versus Commission of the ECJ of February 12, 1992 (Cases of the C-48/90 and C-66/90, section 28) states that the European

Commission has a general power of supervision and may therefore "indicate what measures the State to which the decision is addressed must adopt in order to comply with its obligations under Community law". These included the Directives on telecommunications terminals (1991), electricity (1996), mail (1997) and gas (1998), as well as the 2001 White Paper on transport.

The liberalization of network industries is fundamentally based on the idea that they were organized at that time around an overly broad and therefore erroneous understanding of the notion of natural monopoly. It is therefore necessary to separate within them those activities that are genuinely part of a natural monopoly from those that can be carried out in a competitive manner. As François Lévêque (2004) points out, this opening to competition was carried out in two distinct ways. The first, notably followed by the United States and English-speaking countries, consisted of dismantling the monopolies into several independent entities in order to create several companies. The topical example is the dismantling of the American Telephone and Telegraph (AT&T*)* operator in 1982, following a competition lawsuit that gave rise to more than a hundred companies. It should be noted that this does not necessarily imply privatization in the case of a public company, as the example of the Swedish railways shows. The other possible path, followed by the European Union, is to make competition possible by removing the barriers that prevented the entry of new entrants and their potential exit. In this context, the incumbent operator is not necessarily dismantled vertically – it retains its borders, but is subject to new requirements.

Two main transformations will therefore be imposed on each public incumbent operator whose market is liberalized.

The first is to open access to its infrastructure to new operators, whether national or European, private or public. The reasoning is as follows. On the one hand, only the infrastructure, that is the network, corresponds to a natural monopoly because it is not economically possible or socially desirable to reproduce it. On the other hand, since, from a historical point of view, it is the taxes, duties or charges that have paid for this network, it is normal that it should be fairly accessible to all operators. It should also be noted that in this context, the European Commission, then the national competition authorities, have found a particular field of application in network matters for a new form of abuse of dominant position resulting from acculturation, from an American jurisprudential construction that began on

April 22, 1912 with the Terminal Railroad decision of the Federal Supreme Court: the theory of essential facilities or essential infrastructure theory. This theory essentially argues that when a dominant operator controls an infrastructure that is *essential* to the expression of effective competition, in the sense that there is no current or potential substitute, the dominant operator must, as far as possible, provide access to it on reasonable terms.

The second transformation is deduced from the first because it then becomes essential to separate, at least in accounting terms, the activities that are part of the network from those that are part of the use of the network within the public incumbent operator. The objective here is both to prevent the incumbent operator from using its monopoly activity (on the network) to finance or promote its competitive activity (the use of the network), and at the same time to allow new operators, but also the incumbent operator, to pay the real cost of their use of the network; this is the question of access charges or network interconnection charges, in order to finance its maintenance and renewal. The aim is to obtain transparency of costs so that they can be distributed fairly.

In order to ensure the effectiveness of this system, the deregulation of network industries has simultaneously led to the separation of the State from the incumbent operator and the introduction of sectoral regulation.

The separation between the State and the incumbent operator is based on the idea that the former should not set objectives or management for the latter that are different from those they should have. In other words, it is a question of preventing the State from relying on or putting pressure on the incumbent operator to help it conduct a microeconomic policy such as industrial policy, or a macroeconomic policy such as growth policy. Therefore, depending on how much confidence one has in the State, two paths have been followed. The first is that of the United Kingdom, which privatized its network industries, thus severing any link between the State and the incumbent operator. The second, the one notably followed by France, was to consider that the State is capable of not using its public network companies politically and of behaving towards them solely as a shareholder concerned about its dividends.

On the other hand, it seemed unthinkable that the State should be directly responsible for the day-to-day implementation and enforcement of regulations relating to the liberalization of these markets, as well as for ensuring fair relationships between the new operators and the incumbent operator. The State was thus not considered to be able to be impartial when its interests are at stake. Several independent administrative authorities were then created in France – some of which have since become independent public authorities – responsible for what is known as "sectoral regulation". The principle was that each liberalized market should have its own sectoral regulatory authority; this has led, after several changes, to the existence today of ARAFER (*Autorité de régulation des activités ferroviaires et routières*), ARCEP (*Autorité de régulation des communications électroniques et des postes*), ARJEL (*Autorité de régulation des jeux en ligne*), CRE (*Commission de régulation de l'énergie*) and CSA (*Conseil supérieur de l'audiovisuel*).

In the face of this new environment, three main questions have arisen with regard to these institutions. They concern respectively their independence, their missions and the means of implementing them, as well as their links with the national competition authority.

In order to guarantee impartiality, the State was excluded in favor of independent administrative authorities. However, it remained to be ensured that the latter were truly independent of both the State and private economic powers, that is, they were not subject to any conflict of interest. Two main guarantees were then put in place. The first concerns the status of these authorities, which are organically and functionally independent in the sense that they do not come under the organizational chart or the hierarchical authority of the executive, legislative or any other power. No power has the right to give them instructions or even to influence them. The second guarantee concerns the composition and protection of the members of these authorities. Thus, even if they are generally appointed by the executive branch, the members of these authorities are in principle irrevocably appointed for a term of office whose duration is fixed and known in advance. In addition, there is a whole series of professional and political incompatibilities.

Defining the tasks and means at the disposal of a sectoral regulatory authority consists of adopting a teleological approach. It is a question of starting from the objectives set by the law that creates it in order to know what the situation essentially is. By way of illustration, when it was created by Act No. 2000-108 of February 10, 2000, the CRE was the *Commission de regulation de l'électricité* (electricity regulation commission); it was only with Act No. 2003-8 of January 3, 2003 that it became the *Commission de regulation de l'énergie* (energy regulation commission) as a result of the European liberalization of the natural gas market, achieved with Directive 98/30/EC of June 22, 1998. More generally, it has been highlighted, in particular by Marie-Anne Frison-Roche (2001), that the emergence of these sectoral regulatory authorities is closely linked to that of a new branch of law: regulatory law. The purpose of the latter is to seek a balance between free competition and another imperative principle – such as the monopoly of transport infrastructure, multiannual programming, equality of information, plurality of information, etc. – in order to achieve a balance. A sectoral regulatory authority therefore has the task of building and safeguarding, for a given sector, a balance between opening up to competition and another imperative principle. To this end, it has very broad, unusual and derogatory means at its disposal in relation to traditional public law since, to ensure this balance, it will be responsible for issuing and adapting the regulations governing the sector – a normative power recognized by the Constitutional Council – as well as settling disputes between operators, where necessary by using a power of sanction. The exercise of its powers and their accumulation – contrary to the French tradition of separation of powers – are, in all cases, ultimately controlled by the judicial or administrative courts, essentially with regard to the principles of impartiality, transparency and proportionality.

The relationship between competition law and regulatory law raises the question of the relationship between the competition authority and sectoral regulatory authorities. The issue is then that of interregulation, both among sectoral regulatory authorities and between them and the competition authority. Without exhausting the treatment of these relationships, it is simply necessary to bear in mind, as Anne Perrot (2002) points out, that the competition authority – the *Conseil de la concurrence* in France until 2009 – has horizontal competence (that is, it concerns all sectors), whereas a sectoral regulatory authority has only vertical competence (that, is it only relates to its own sector). In addition, the action of a sectoral regulatory authority is essentially *ex ante*, unlike that of a competition authority, which is mainly *ex post*. It was then that the relevant courts came to specify in their judgments how this interregulation should be carried out in practice.

In the French context, Frédéric Marty (2004) highlighted, through statistical analysis, the importance of the *Conseil de la concurrence* in the liberalization of network industries during the 1990s. Indeed, whether for industries that had not yet been liberalized (railways, post offices, etc.), those in the process of liberalization (electricity) or those already liberalized (telecommunications), the *Conseil de la concurrence* has played a structuring role with its opinions, protective measures and decisions. This role is partly recognized by this institution since, in its 2000 annual report, it emphasizes that "opinions and decisions given in the context of emergency procedures have often concerned sectors that were formerly monopolistic and that have been the subject of a relatively recent opening to competition".

The general pattern that emerges from this statistical analysis highlights three phases. In the first, the *Conseil de la concurrence* is asked by the government to provide its opinion on optimal regulation, the objective being to transpose the European directive concerning the specific sector. In the second phase, the *Conseil de la concurrence* is approached by a sectoral regulatory authority to issue an opinion on the implementation of the regulation. Finally, in a third phase, when the "rules of the game are clear", the *Conseil de la concurrence* is understood contentiously, generally by new players on the market, who want to assert their rights against the practices of the incumbent operator.

Finally, it appears that the *Conseil de la concurrence*, like the national competition authorities of the other Member States, as well as the European authorities, have played a fundamental role in the deregulation of network industries, given the very general nature of European directives and the technological and market developments in these industries.

1.2.1.3. *Merger control*

Among the classic industrial policy tools available to States is the establishment of large national companies (private or public): the "national champions". The underlying idea is that to be a major economic operator on the European and international markets, a state must first of all be large enough. In addition, having a national champion supports the production system by creating a chain of suppliers and subcontractors, thus promoting employment and government revenues. Consequently, the State will seek to promote or, at a minimum, allow a concentration of actors within the production apparatus, so that they benefit from economies of scale and scope, opportunities and new technologies.

However, since the 1980s, this idea has clearly faced two obstacles. The first obstacle is the economic analysis, which offers two arguments against this logic. First, market concentration reduces the number of players present and thus risks leading to anti-competitive behavior leading to a deadweight loss; second, the State is not necessarily, as we have already mentioned, a benevolent and omniscient actor capable of "choosing the winners" of tomorrow. The second obstacle is related to the construction of the European market and its performance in an environment of competition and international firms. Indeed, if each European State supports the creation of its national champion, this not only fragments the internal market, but also risks preventing or delaying the natural and desirable creation, by the market, of a real European champion, which is harmful to European consumers and European companies.

In this field, it is possible to identify two periods at European level in the treatment of concentrations: before and after September 21, 1990. Before that date, there were two obstacles to the processing of mergers in the internal market. First, national laws on merger control, where they existed, were limited and not homogeneous, as they were limited to the borders of Member States' respective territories. This could lead to difficulties for both companies and States. Secondly, apart from related areas in the ECSC Treaty (coal and steel), the European Commission had very limited powers since the EEC Treaty did not say anything about merger control. The main reason for this silence was that the Member States were extremely resistant to the idea of giving Europe such control, as well as to the fact that it seemed necessary to restructure the European economy around larger medium-sized companies.

This situation therefore led to difficulties at an early stage, which led the European Commission to make proposals, as early as 1965, to establish a merger control regulation in the Council of European Communities (Vandamme and Simons 1990): proposals that the latter systematically refused. This refusal led the European Commission to circumvent this obstacle by using the provisions related to anti-competitive practices to deal with mergers. It was followed in this direction by the ECJ, which handed down two major judgments on this subject. The first was the Continental Can judgment of February 21, 1973 (Case 6/72), by which, while satisfying the company that brought the action for annulment against the European Commission's decision, it confirmed in terms of principles that Article 86 of the EEC Treaty could be applied in the case of concentrations where the undertaking initiating the operation is in a dominant position. The second was the Philip Morris judgment of November 17, 1987 (Case 142 and 156/84), in which it stated that an acquisition of a shareholding in the capital of a competing undertaking does not in itself restrict competition, but that this could be the case if its object or effect is to influence the commercial conduct of the businesses concerned, thereby indicating that Article 85 of the EEC Treaty could apply when acquiring a minority shareholding in the capital of a competing undertaking.

However, this circumvention did not solve the problem, as many concentrations could not be covered by Articles 85 and 86 of the EEC Treaty because, in particular, they caused the entities to disappear, which posed an insurmountable difficulty in demonstrating coordination; or there was no dominant position, which excluded any form of abuse thereof. Moreover, the European Commission could only intervene after the abusive operation, which made preventive control impossible, and could not grant any exemption in such a case. Similarly, the European Commission could not, in the context of applying the antitrust article, carry out prior checking. The situation was all the more delicate as from the 1973 crisis onwards, mergers developed in Europe (see the various Annual Reports on Competition Policy submitted by the European Commission during that period) with major consequences for employment and market structure.

A new period began on September 21, 1990, with the entry into force of Regulation No 4064/89 of December 21, 1989 on the control of concentrations. This is the main change in competition rules since 1957, and the European Commission, in its 1989 Annual Report on Competition Policy, considered it to be "intended to be a cornerstone of competition policy and to make a substantial contribution to the successful completion of the internal market". To limit ourselves to the essential aspects of this Regulation, it is possible to distinguish its foundations, its scope, its functioning and the means at the disposal of the European Commission to carry it out.

Two legal bases are at the origin of this regulation. These are Article 87 of the EEC Treaty on measures implementing Articles 85 and 86, which must be approved by a qualified majority of the members of the Council of the European Communities, and Article 235 of the EEC Treaty, which gives the Council the ability, in the event of unanimity, to give the Community additional powers necessary to achieve its objectives. Thus, far from being imposed by the European institutions, the adoption of a European merger control could only be achieved with the agreement of all the Member States, and in particular France. As a result of this adoption, the Regulation (Article

22) terminated the application of Articles 85 and 86 of the EEC Treaty to concentrations with a Community dimension.

The scope of the 1989 Regulation is particularly broad both in terms of the types of transactions it covers and in its application. This Regulation covers any takeover, that is, any possibility of exercising decisive influence over the activity of an undertaking (merger, acquisition, or joint venture where it is of a concentrative nature) exceeding certain turnover thresholds (Articles 1 and 3). Thus, any concentration is now either national (if the thresholds are not crossed) or European (if the thresholds are crossed); the European Commission is the only competent authority for the latter, even though in each case, there are derogatory referral possibilities (Articles 9 and 22). However, Member States have the ability to protect their legitimate national interests – in particular those relating to public security, media plurality or prudential rules (Article 21(3)). Finally, in addition to its application to companies (within the meaning of competition law) located in the European territory, transactions carried out outside the European territory by at least one European company, between a European company and a non-European company, or between foreign companies, may also fall within the scope of this Regulation, which therefore has an extraterritorial scope provided that the European internal market is affected.

The stated objective of the Regulation (Article 2) is to avoid effective competition being significantly impeded in the European internal market or in a substantial part of it as a result of a change in the structure of businesses. The assessment of the operation is based on the notion of the creation or strengthening of economic power in the sense of a single dominant position (ECJ United Brands judgment of 1978) or a collective dominant position (Article 2(1)). Thus, the prevention of the formation of a dominant position is now being incorporated into European competition law. In its assessment, the Commission will take into account developments in technical and economic progress, if it is to the advantage of consumers and does not constitute an obstacle to competition (Article 2(1)).

In terms of its functioning, European supervision takes place in two stages. During the first, the party or parties acquiring control must give notice of the transaction within one week of conclusion of the agreement and in principle wait at least three weeks after the notification (Article 7) before carrying it: this is therefore an *a priori* control (Article 4). The second stage begins as soon as all the elements necessary for the examination of the transaction have been received. The European Commission publishes the notification and begins its examination. The latter is strictly limited in terms of time, since it must take a maximum of four weeks[2], at the end of which the Commission may conclude either that the operation does not fall within the scope of the Regulation, or that it is compatible with it, or that it raises serious doubts as to its compatibility and merits a detailed examination. The latter, for a maximum period of four months, from the decision following the first phase, then leads to the conclusion either that the transaction is compatible with the settlement, with any amendments made in the form of an undertaking, or that the transaction is incompatible with the settlement, which makes it impossible to carry out the transaction legally. Over the period 1980–2000, the European Commission opposed eight mergers (including the famous ATR/De Havilland case in 1991), but some companies preferred to abandon their projects and others accepted the conditions required by the European Commission.

It should be noted that the Regulation establishes an “Advisory Committee on Concentrations between Businesses” (Article 19), in which Member States may submit their comments, and which must be consulted and issue an opinion.

To achieve this control, the European Commission has investigative powers, similar to those it has in relation to anti-competitive practices, ranging from simple requests for information to coercion (Articles 11 to 13). It also has powers of sanction since it can impose *fines* (when deliberately or through negligence there are: omission of notification, violation of the suspension period, inaccurate or incomplete information, information beyond the time limit), *penalty payments* (in order to compel the provision of information, submit to a verification ordered by decision, execute a charge, apply the measures ordered by the Commission’s decision), *separation* (if the operation has already been carried out, the Commission orders devolution), or *revocation of a previous decision* (incorrect information, compatibility obtained fraudulently, non-compliance with the obligations attached to the decision)[3].

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2 This period may be extended to six weeks at the request of a Member State justifying the dangers that the concentration represents for its market.

3 In order to clarify the main procedural details of Regulation No 4064/89 before its entry into force, Regulation 2367/90 of January 25, 1990 was adopted at the same time. In particular, it

This system continued until the in-depth overhaul of the merger control system following the adoption on January 29, 2004 of Regulation (EC) No. 139/2004, which took into account five amendments:

– an extension of the Commission's exclusive competence by increasing the number of transactions to be notified;

– a change in the way thresholds are calculated for financial and credit institutions, as well as for insurance companies;

– the explicit possibility for companies to make commitments from the first phase of the review;

– the strengthening of the distinction between concentrative joint ventures and cooperative joint ventures;

– the impossibility of implementing a concentration before obtaining a decision declaring it compatible.

At the French level, following on from the 1945 Ordinance, merger control began with Act No. 77-306 of July 19, 1977 on the control of economic concentration and the repression of unlawful agreements and abuses of dominant positions; it was the first legislative text to deal with this subject explicitly. These provisions will be taken up again when modern competition law emerges in France, since they appear in Title V of the 1986 Ordinance (Articles 38 to 44).

Three main features characterized French merger control during the period 1980–2000. First of all, it was an exclusively governmental competency: only the Minister in charge of the economy and the Minister responsible for the economic sector concerned could make decisions in this area. This decision was binding and can only be appealed to the Council of State, in particular with regard to respect for the principle of freedom of trade and industry. Second, it was an optional control both for the Minister in charge of the economy (Article 38) and for the companies concerned (Article 40). Finally, control can be *a priori* (at the request of companies) or *a posteriori* (at the request of the Minister in charge of the economy). Thus, in matters of concentration, the *Conseil de la concurrence* has no power and only intervenes, where necessary, at the request of the Minister in charge of

clarified how the most relevant product and geographic market should be delimited, how the markets affected by the proposed transaction should be determined, and how Form CO and supporting documents allowing companies to give notice of a transaction should be introduced.

the economy to provide an opinion (the control procedure at the initiative of the *Conseil de la concurrence* provided for in Article 43 of the Order has never been used).

All in all, it appears that if France can still pursue a microeconomic policy, such as industrial policy, during this period, by allowing the productive apparatus to restructure itself or by promoting such restructuring, it is only on the condition that this policy does not affect effective competition on the internal market within the meaning of European law. During this period, this type of policy is therefore not simply abolished but considerably reduced in its scope of application. Its almost complete abolition was achieved with the Law on the Modernization of the Economy of August 4, 2008, which transfers all merger control to the Competition Authority and only grants the Minister for the Economy a residual power of evocation for reasons other than those relating to competition. From then on, mergers have been governed essentially by competition law.

1.2.2. *Monitoring the functioning of markets*

Defining the playground and its rules is not enough to ensure that the referee and players will respect them. This explains why competition policy, this time acting as a market police, ensures that the State and all economic operators, both public and private, do not distort competition defined by the competitive order. However, while all are affected by the prohibition of anti-competitive practices (agreement and abuse of dominant position), States must also comply with certain rules relating to the subsidies they may decide to grant (section 1.2.2.1) and to public procurement law (section 1.2.2.2).

1.2.2.1. *The framework for State subsidies*

It should be recalled that economic theory explains that, in perfectly competitive markets, any government subsidy is inefficient from a social welfare perspective. However, if the Pareto optimum cannot be achieved due, for example, to market failures (imperfect information, barriers to entry, market power, imperfect mobility of production factors, agglomeration effects, etc.), it becomes necessary to seek a second-best optimum (best solution after the Pareto optimum).

However, in general, when one of the conditions for achieving the Pareto optimum is not met, it is not optimal for the other conditions to correspond to those that would have been achieved with the Pareto optimum. In other words, in a second-best optimum situation, subsidies can correct inefficiencies related to the imperfect nature of markets, as it is generally inefficient to want to remove all existing distortions. This is one of the foundations of the general principle that a State is never prohibited from providing subsidies to economic operators. Nevertheless, over the period 1980–2000, this general principle was the subject of a framework both at the level of international rules and at the level of European rules.

At the international level, it is essentially the measures concerning subsidies under the GATT (General Agreement on Tariffs and Trade) and then the WTO (World Trade Organization) that are binding on European countries. In this area, three main measures should be highlighted.

First, the agreement of April 12, 1979 on the interpretation and application of Articles VI, XVI and XXIII of the GATT. This agreement, in practice sometimes referred to as the "Subsidies and Countervailing Powers Code", does not provide a definition of the notion of subsidy but introduces control mechanisms. Indeed, in this context, it is incumbent on each signatory State to demonstrate, before imposing a countervailing duty, that its domestic industry is suffering or threatened with serious injury and that this injury is caused by subsidized imports or *dumped* prices by another State. The damage must be demonstrated on the basis of a series of objective criteria. Export subsidies are thus regulated. With regard to purely domestic subsidies, the agreement stipulates that signatories must seek to prevent them from prejudicing the interests of other signatories, or from cancelling or compromising benefits resulting from the General Agreement for another signatory. A notification system is established, as well as a dispute settlement procedure. It is also provided, in the context of a dispute, that States may make commitments, that is, bilateral agreements, to voluntarily restrict exports. It was in this context, for example, that an agreement between the EEC and the United States on steel was signed on October 21, 1982, under which European producers voluntarily restricted their exports to the United States.

Second, the agreement of April 15, 1994 establishing the WTO. This agreement first ended the bilateral voluntary export restriction agreements and introduced a limit on the duration of the safeguard clauses (four years in principle and a maximum of eight years). In addition, the agreement specifies that when a country restricts imports to safeguard its domestic producers, it must in principle give something in exchange to the person (or persons) to whom it is thus causing injury. However, exports from developing countries enjoy some protection against safeguard measures. The agreement also provides that the exporting country (or countries) may request compensation through consultation. If the parties cannot agree, the exporting country may take an equivalent retaliatory measure (e.g. an increase in customs duties). The WTO Committee on Safeguards monitors the functioning of the Agreement and the fulfillment of commitments made by Members.

Finally, the WTO Agreement on Subsidies and Countervailing Measures of 15 April 1994, which entered into force on January 1, 1996. This agreement covers both the granting of subsidies and the use of compensatory measures to neutralize the damage caused. It begins by defining the term subsidy based on three elements:

– it is a financial contribution (in any form: donations, loans, equity participation, guarantees, provision of goods or services, tax measures, etc.);

– it comes directly or indirectly from the public authorities;

– it confers a benefit on its recipient(s).

The agreement then distinguishes between *prohibited subsidies* (those relating to exports or the presence of domestic elements) and *subsidies that may be challenged before the WTO or be subject to countervailing measures* (these are subsidies that are specifically targeted at one or more companies, industries or regions of the national territory). It is also provided that a State party to this agreement may not impose a countervailing measure unless it can prove that there are simultaneously 1) subsidized imports, 2) injury to a domestic industry and 3) a causal link between the subsidized imports and the injury. Finally, Article 25 of the agreement requires signatory States to give notice of all specific subsidies (at all levels of government and for all product sectors, including agriculture) to the *Comité des subventions et des mesures compensatoires* (Committee on Subsidies and Countervailing Measures). They must submit new complete notifications every three years and, in the meantime, update notifications. These notifications are subject to in-depth examination and discussion in the Committee.

As far as European provisions are concerned, subsidies are organized within a system consisting essentially of two components: economic and social cohesion and State aid control. Since the Single European Act of 1986, economic and social cohesion has been a European competency. It was in this context that Regulation No. 2052/88 of June 24, 1988 was adopted. It sets five priority objectives for this grant system:

1) promoting the development and structural adjustment of regions whose development is lagging behind;

2) aid for the conversion of regions seriously affected by industrial decline;

3) fighting against long-term unemployment;

4) the professional integration of young people;

5) speeding up the adjustment of agricultural structures and promoting the development of rural areas.

European regions that meet at least one of these five objectives are eligible for support under this policy. The Maastricht Treaty in 1992 changed this policy in three ways: by establishing the Cohesion Fund, by creating the Committee of the Regions (a new European institution to represent local authorities) and by introducing the principle of subsidiarity into this policy. Finally, it is worth mentioning the creation of a sixth objective (aid for sparsely populated regions) in 1995 and, with the Treaty of Amsterdam in 1997, the establishment of closer coordination of national employment policies with the inclusion of a principle of a European strategy in this field.

However, it should be pointed out that since Europe as a political entity began to be formed in 1957, there has been a framework for national State aid within the provisions on competition. Part of the legal doctrine considers that this State aid scheme should in fact be seen as one of the elements of European industrial policy. In other words, before having an explicit industrial policy from the 1990s onwards, the European institutions would have implicitly pursued an industrial policy through the competitive framework of national industrial policies.

Before discussing the main provisions concerning European State aid control, which is one of the specific features of European competition policy, it is necessary to specify the principles and then the procedures.

The general principle is the control of subsidies to avoid distortions of competition within the European market. Thus, it is not an absolute prohibition of any form of subsidy, but a strict framework designed to preserve the equality of economic operators on the markets, a necessary condition for the realization and functioning of the European project. There is a risk of partitioning the European market if operators consider that an increase in their market share in a Member State will result in the latter's aid to its national companies being used in retaliation. On the other hand, European integration is not based on competition from States, which would be a waste of public funds. The State aid regime is therefore centered on an incompatibility in principle. It follows from these elements that aid will in principle be declared incompatible with European law if three conditions are cumulatively met.

First of all, it must be State aid. While this first condition may seem trivial, it has nevertheless been the subject of the most debate and litigation. Thus, the acceptance has gradually emerged that aid corresponds to a selective advantage granted to an undertaking – private or public – or a sector, without remuneration or with a remuneration that does not correspond to the amount at which the advantage is assessed. This aid must come, directly or indirectly, from State resources. For example, aid may be a grant, an interest-free loan, a soft loan, a financial guarantee, a tax exemption, or a contribution of goods or services on preferential terms. The European institutions have thus developed an extensive conception of the concept of aid, which must be assessed on the basis of its effects and not on its legal form or purpose. This is the origin of the jurisprudential construction of the criterion of "the private investor acting in a free market context" or "the investor guided by market criteria" (the Netherlands versus Commission judgment of March 13, 1985, Cases 296 and 318/82, section 17), which makes it possible to distinguish two situations in the event that a State has shares in the share capital of an undertaking. Either the State behaves like a private investor, and there is no aid, or the State does not behave like a private investor, and in this case there is aid. The ECJ subsequently clarified that this investor should not, however, be considered as a short-term investor interested in immediate profitability (Belgium versus Commission judgment of July 10, 1986, Case C-234/84, section 15, and Alfa Romeo judgment of March 21, 1991, Case C-305/89, sections 20 and 22). On the other hand, not all general, uniform and automatic economic support measures likely to concern all sectors of activity and which do not favor any specific operator are qualified as State aid. Similarly, if a selective advantage corresponds to the counterpart of a public service, it is not aid.

Second, the State aid must distort or threaten to distort competition. This condition can be understood in the same way as the provisions on anti-competitive practices, but it is not limited to this meaning.

Finally, this State aid which threatens to distort or distorts competition must affect trade between Member States. This condition is taken in a broad sense. Indeed, in its judgment of July 13, 1988 of France versus Commission (Case C-102/87, section 19), the ECJ held that export aid may distort competition because it may lead to domestic production being maintained or increased; this reduces the opportunities for companies from other Member States to engage in export. In addition, export aid to third countries may also affect European trade, given the interdependence of markets, as the ECJ stated in its judgment of Belgium versus Commission of March 21, 1990 (Case C-142/87, section 35).

Ultimately, Article 92(1) of the EEC Treaty (Article 107(1) TFEU) concerns the effect on trade between Member States by means of aid from State resources which distorts or threatens to distort competition by favoring certain operators or certain products. However, the same article, in the following two paragraphs, stipulates the existence of two regimes of derogations from the general principle laid down in the first paragraph.

Article 92(2) of the EEC Treaty (Article 107(2) TFEU) distinguishes a block exemption scheme for:

– aid of a social nature granted individually to consumers (e.g. tax exemption for the purchase of an electric car, regardless of the brand);

– aid to repair damage caused by natural disasters or other exceptional occurrences;

– aid to certain German regions as a result of the division, which became obsolete from October 1990.

Article 92(3) of the EEC Treaty (Article 107(3) TFEU) implicitly establishes that the European Commission has discretionary power to accept other aid – power explicitly recognized by the ECJ since its Phillip Morris judgment of September 17, 1980 (Case C-730/79, section 24). However, on the one hand, the European Commission must give reasons for its decisions in this matter in order to preserve the rights of the defense and to allow formal review by the ECJ (i.e. verify that the Commission has not exceeded its discretion and has not committed a manifest error). On the other hand, the paragraph of the Treaty indicates the categories in which this discretionary power is exercised:

– in the economic development of regions where the standard of living is abnormally low (the Commission specified in a 1988 communication on regional aid that this corresponds to a per capita GDP below 75% of the Community average) or where there is serious underemployment (in terms of structural unemployment);

– in order to promote the execution of an important project of European interest (such as national aid for R&D) or to remedy a serious disturbance in the economy of a Member State;

– for the development of certain activities or regions if this does not affect trading conditions to an extent contrary to the common interest;

– since the Maastricht Treaty, to promote culture and heritage conservation;

– within the framework of new categories created by the Council on a proposal from the European Commission.

Turning now to the procedural aspects, a distinction must be made between existing aid and projects relating to new aid. In the first case, whether it is aid granted before the EEC Treaty or aid that has been previously accepted, the European Commission exercises permanent *ex post* control on the basis of the annual reports provided by the States concerned. This control may lead the Commission to modify or withdraw aid. In the second case, it is an *a priori* control. Any aid project or modification of existing aid is subject to a prior authorization procedure before it can be implemented. The Commission has two months to examine the proposed aid from the moment it has all the information it needs to carry out its examination. At the end of this period, either explicitly or implicitly, the Commission may raise no objection to this aid. Alternatively, it may initiate the contradictory procedure provided for in Article 93(3) of the EEC Treaty (Article 108(3) TFEU), which provides for the collection of observations by a formal notice from the State and the observations of interested third parties, before a decision is generally made within 18 months. This final decision may be positive, negative, conditional or partly positive and partly negative. In the absence of notification, the Commission opens an *ex officio* procedure, or following a possible complaint. It may then take interim measures to prevent or suspend the granting of the aid and order the recovery of the sums paid to the company by the State.

Any aid that is incompatible with European rules may thus be recovered by decision of the European Commission. This recovery procedure is governed by national law and is accompanied by the payment of interest calculated on the basis of the commercial rate from the date on which the aid was granted. This recovery is not considered as a sanction, but as a corrective measure in the face of found illegality. The obligations to notify and suspend the payment of State aid have a direct effect and, as such, must be respected by national courts *ex officio* or at the request of an interested third party. However, they cannot decide on the compatibility of the aid, as this falls within the exclusive competence of the European Commission. National courts must therefore block the aid by interim measures, pending the Commission's decision, or ensure that the Commission's decision is implemented. In addition, as a result of the direct effect, the State incurs liability action.

During the years 1980–2000, the Commission systematically refused any aid relating to an industrial management policy, as well as aid concerning the operation of a company, or *a fortiori* several if it is determined selectively. It only accepted aid to mitigate the social consequences of company closures. According to the Commission, the industrial strategy must be defined within the market. Aid to a sector in crisis can only be granted in support of restructuring measures to restore competitiveness and only if this is beneficial for the Community and is not at the expense of competitors. According to the European Commission, sectoral policies only delay the necessary structural changes and create delayed job losses (as stated in its 1990 communication on *La politique industrielle dans un environnement ouvert et concurrentiel*). In short, States should not replace companies.

1.2.2.2. *Provisions relating to public procurement*

Among the means of implementing an industrial policy, it is extremely common to use public procurement. In many respects, the latter plays the role of a go-between to help national industries that are in crisis (steel, textiles, construction, etc.) or considered strategic (IT, aeronautics, space, etc.), to support specific national companies, with regard to social considerations such as the employment of nationals, or to promote territorial development. The strength of this tool can be particularly important since public procurement (public procurement and concessions within the meaning of current European law) concerns all public purchasers and often represents a significant proportion of economic activity, estimated by the WTO as being in the order of 10 to 15% of the GDP, depending on the country.

In France, since the 1980s–2000, public procurement has been subject to a strong legal framework that limits its ability to implement an industrial policy via this channel. To clarify this point, the rules of the GATT and the WTO will be discussed in turn, followed by those relating to European law.

The GATT 1947 agreement expressly excludes public procurement from its scope. However, after having started by harmonizing customs duties and combating quantitative trade restrictions, it became clear that a real opening of markets at the global level implied in particular that States should not reserve their purchases solely to their national economic operators. This is why the signatory countries launched, with the Tokyo Round (1973–1979), a first round of negotiations on non-tariff barriers, at the end of which a series of agreements were adopted, the first of which concerned public procurement.

This agreement, sometimes referred to by practitioners as the "Tokyo Round Public Procurement Code", was signed in 1979 and entered into force on January 1, 1980. It is a multilateral reciprocity agreement applying only to countries that have accepted and signed it, aimed at opening up the field of public procurement to increased and mutual international competition through concerted, fair, transparent and non-discriminatory rules and procedures. The objective was therefore to guarantee all signatories that their products and companies will not, when public contracts are awarded to any of them, be treated less favorably than its own operators and products. Thus, signatory countries must refrain from any award subject to the supplier providing compensatory purchasing opportunities, or other similar conditions (e.g. licensing of a technology), and ensure that the words "or equivalent" appear in the technical specifications of the public contract. The agreement applies to all procedures (open, selective, one-off or over-the-counter) provided that the public procurement is carried out by a central or federal government and concerns the purchase, leasing, rental or hire-purchase of products with a value exceeding 150,000 DTSs (Special Drawing Rights: monetary instrument introduced by the IMF in 1969, the value of which is determined by a basket of currencies).

In addition, this agreement provided for the obligation for each signatory country to publish all matters relating to its public procurement covered by the agreement (texts, laws, etc.) and to compile statistics concerning them. It also provided for special and differential treatment for developing countries, in particular for the least developed among them. Finally, it established a Public Procurement Committee (composed of representatives of the signatory States) to make recommendations or rule to end the dispute.

The Uruguay Round (1986–1994) gave rise to the WTO and a new multilateral agreement on government procurement. This time it concerns supply, service and works contracts, whether they are awarded by central (e.g. a ministry), sub-central (e.g. a region or department) or local (e.g. a municipality) entities, according to WTO terminology, with higher thresholds for the latter two types of entities. In addition, this agreement becomes evolutionary since it introduces the results of bilateral agreements signed later thanks to a system of loose-leaf sheets inserted in the initial agreement. Article XX of the agreement refers to the exceptions that signatories may apply to their own procurement when imposing and implementing:

> measures that are necessary to protect public morals, human, animal or plant life, or health; measures for the protection of patents, trademarks and copyrights, and the prevention of deceptive practices; or measures relating to the products of prison labour.

Finally, the agreement specifies the existence of two mechanisms for redress in the event of disputes: an internal redress mechanism at the national level, and a WTO dispute settlement mechanism at the international level (see on this point the WTO website and, in particular, the Memorandum of Understanding on Rules and Procedures Governing the Settlement of WTO Disputes).

The agreement currently in force since 2014 takes into account standards for the use of electronic tools, increases the fight against fraudulent practices, strengthens environmental protection and promotes the conservation of natural resources; it involves 47 WTO members. Beyond these international rules linked to the WTO which modify European law, the latter also has an extremely strong normative impact on the rules governing public procurement in France, both through treaty law and secondary legislation.

European primary law, that is, the law resulting from the Treaties, has an important influence on public procurement by prohibiting measures that have an equivalent effect to quantitative restrictions and freedoms of movement, in particular with the concepts of freedom of establishment and freedom to provide services. It is on these bases that the principles of non-discrimination and publicity in public procurement have been identified.

First of all, primary law remains as ordinary law and applies in the absence of secondary acts, as stated by the ECJ in its Dundalk judgment of September 22, 1988 (Case 45/87) and in its Pont sur Storebælt judgment of July 22, 1993 (Case C-243/89). It is also on the basis of this reasoning that the ECJ refused to consider it legal to reserve a percentage of public contracts for companies located in certain regions with its judgment of DuPont de Nemours Italiana of March 20, 1990 (Case C-21/88, section 13):

> It must be emphasized in the first place that, although not all the productions of the Member State in question benefit by comparison with products from abroad, the fact remains that all the products benefitting by the preferential system are domestic products; secondly, the fact that the restrictive effect exercised by a State measure on imports does not benefit all domestic products but only some cannot exempt the measure in question from the prohibition set out in Article 30.

These elements, combined with others along the same lines, led Christine Bréchon-Moulènes (1992) to use the expression "encirclement policy" in public procurement law. This is also confirmed by the Gemeente Arnhem judgment of November 10, 1998 (Case C-360/96), paragraph 41 of which states the following:

> Coordinating at Community level the procedures for the award of public service contracts is to eliminate barriers to the freedom to provide services and therefore to protect the interests of economic operators established in a Member State who wish to offer goods or services to contracting authorities in another Member State.

Secondary legislation in the field of public procurement is essentially based on these foundations and has been developed, on the one hand, with the establishment of fundamental principles and, on the other hand, with a succession of directives. There are three fundamental principles of public procurement.

First, it concerns the *equal treatment of bidders*, the term equality being understood both as the comparable treatment of situations that are not different and the unequal treatment of situations that are different. This principle concerns the call for competition and implies that bidders must have the same opportunities, both at the time of preparing their bids and at the time of their evaluation.

Second, the principle of *non-discrimination on the basis of nationality or any other criterion leading to the same result* is affirmed. Thus, for all matters relating to public procurement, it is not permitted to specify a national preference clause concerning not only the operator but also supplies, equipment or services. In particular, this prevents a public purchaser from using a technical specification to foreclose European economic operators located in another Member State.

Third, a principle of *transparency of procedures* is recognized. This implies both the publicity of the contract, which allows any company to express its interest insofar as there has been adequate publicity, and the impartiality of the award procedure, which is guaranteed by its transparency and objectivity.

Secondary legislation on public procurement was also developed through a series of four legislative packages between 1970 and 2014. In the period 1980–2000, no less than nine directives were adopted. Their objective was to establish a set of harmonized rules to prepare and then extend the Single European Act, with the aim of establishing an internal market. This included extending the scope to service and network contracts, strengthening advertising and competition rules, clarifying the nature of award procedures and introducing a basis for appeals. It is also worth noting, in line with the Dundalk judgment of September 22, 1988 (case 45/87), a reference to technical standards, which would lead to the adoption in 2002 of a common vocabulary for public procurement (*Common Procurement Vocabulary*, CPV).

Finally, this period is also crucial in that it marks with the Teckal judgment of November 18, 1999 (Case C-107/98) the advent of an exceptional approach to integrated services, also known as *in house*. This route, which corresponds to the case of an overlap between the contracting authority and the economic operator, thus exempts the former from its obligations in terms of public procurement, because everything happens as if the service were provided on a direct labor basis. Indeed, it is not a real contract since there is no meeting between two distinct wills. The relationship remains in the public sphere and the operator does not operate in a competitive market. In other words, the *in house* exception corresponds both to a lack of autonomy of the operator and to the application of the principle of freedom left to any contracting authority to satisfy its needs through its own services.

Two additional conditions are required to activate this exception channel. First of all, it is an *organic criterion*. The contracting authority must exercise "similar control" over the economic operator to that which it has over its own services. Thus, the successful tenderer must be in a relationship of dependence with the adjudicator regarding his or her strategic choices and important management decisions. This dependence is assessed in particular by analyzing the criteria relating to the ownership of capital, the essentially non-commercial nature, the existence of a legal personality and the appointment of members of management bodies. Then there is a *material criterion*. This means that most of the operator's activity is carried out with the contracting authority that holds it – or the entities that have held it since the Coditel Brabant judgment of December 13, 2008 (Case C-324/07) – in order to avoid the likelihood that the operator will enter into competition with other companies. This exception will then be extended to forms of cooperation that do not involve the existence of a dedicated operator, such as cooperation between local authorities. Today, issues relating to vertical or horizontal *in house* cases are governed by the 2014 directives.

As a result of this legal framework for public procurement, it has gradually ceased to be one of the major tools of French industrial policy, as was the case between the end of the Second World War and the 1970s.

1.3. Conclusion

Changes in economic facts and their theoretical analyses have led to the reversal of the hierarchical order that once existed between industrial policy and competition policy. The latter is now both the central policy of the European Union and the theoretical framework from which economists think about the necessity (or not), and the modalities of public authorities' interventions in the productive sphere. As we have pointed out, industrial policy appears to have crumbled away, hollowed out by competition policies.

This presentation seems to us to reflect the situation in France until the beginning of the 21st Century. However, much of this development has been contested because it would prevent an understanding that the difficulties facing France would come from its gradual transition, since the end of the *Trente Glorieuses*, from a catching-up economy (far from the technological frontier) to an innovation and knowledge economy (designed to move the technological frontier). In other words, the suffocation of any industrial policy by competition policy would only allow us to take advantage of the best opportunities of a given situation, that is to say on the technological frontier, but not to move it. France's industrial difficulties thus seem to come from the fact that it has not been able to find ways to take full advantage of the Third Industrial Revolution (electronics and information technology) and that it must now participate in the Fourth Industrial Revolution if it does not want to decline, which is that of artificial intelligence, robotics, the Internet of Things, autonomous vehicles, 3D printing, nanotechnologies, biotechnologies, energy storage or quantum computing, to use the fields identified by Klaus Schwab (2017).

To this change in the conception of what makes French grow today, marked by theories of endogenous growth, we must also add the contributions of the new approach to the international economy, as well as the theory of *clusters* (or industrial clusters).

If this conception is at least partially justified, it makes it possible to understand why innovation and R&D policies have occupied a growing place in France for nearly 10 years, the reasons for some of the changes in competition policies (which we have not previously developed to exaggerate and emphasize the main trend), and the renewed economic arguments in favor of an industrial policy.