

# European Industrial Policy of the Early 21st Century: an Empty but Stronger Shell

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Despite the lack of institutions clearly in charge of industrial policy, European industrial policy is a large shell of framework regulations that condition country initiatives on industrial policy. This lack of institutions along with budget constraints intensifies the complicated process of cooperation between countries and does away with any sectoral industrial policy. Three trends will influence the next 15 years of European industrial policy: manufacturing concerns, the abandonment of big investment projects, and the mixing with trade policies. This last point may build around Europe a stronger shell.

## EU Has No Integrated Industrial Policy

Although the creation of the European Union began with industrial projects, they are no longer the engine that drives the EU. Indeed, the European Coal and Steel Community (ESCS) of Jean Monnet and Robert Schuman, a common management for coal and steel production, was the starting point of the EU story and even though the success of Airbus also presents an industrial view of EU achievements, there is no official integrated industrial policy in the EU nowadays. The EU members have no common industrial policy similar to their shared trade policy or agricultural policy, for instance. There is no institution clearly in charge of formulating industrial policy.

The EU position is such that industrial policy must be a policy for exceptional circumstances only. This is the result of the European institutional process, which has deepened economic integration and put the economic policies of European members under the surveillance of the competition policy regulatory authority. In the European Community, the common market goal and the need to forbid all rules that could create unfair advantages in favor of any member nation company to the disadvantage of another member nation firm has become the backbone of European economic policy. The goal of the common market has led to a strict banning of any vertical industrial policy. Because of the need for the creation of uniform conditions for doing business in Europe, the EU Commission has dedicated much more of its energy to supervising any kind of competition failure than to creating tools for industrial policy-making.

Since 2000, industrial policy has, however, become less and less a taboo, and the expression — which used to be banned from legal texts — is now flourishing in several important official documents. But industrial policy is always viewed as a framework policy and not as a concrete support for industry. The consensual view is expressed by the Lisbon Agenda (2000) of the EU: “The main role of industrial policy at the EU level is to proactively provide the right framework conditions for enterprise development and innovation in order to

make the EU an attractive place for industrial investment and job creation.”

## A Pile of Frameworks & Systems of Controls

The EU is good at launching broad agendas that constitute a framework for countries’ industrial policies. The most famous is the Lisbon Agenda. It was a 10-year set of strategies intended to make Europe “the most competitive and the most dynamic knowledge-based economy in the world” by 2010 by bringing combined public and private investment levels in R&D to 3% of GDP. In 2010, this agenda was followed by the 2020 Europe Growth Strategy whose key areas are “knowledge and innovation, a more sustainable economy, high employment and social inclusion”. The growth strategy includes seven “flagship initiatives” from a “digital economy” to a “European platform against poverty”. Another of the flagships is “an industrial policy for a globalization era”.

There are many other initiatives that build frameworks and orientations in specific sectors: in the automotive industry, the Competitive Automotive Regulatory System for the 21st century (CARS 21) was launched in 2005; in the shipbuilding industry, the LeaderSHIP 2015 was created in 2003; the European Commission launched an EU strategy for biofuels in 2006, while the European Community Regulation on Chemicals and their safe use (REACH) entered into force in 2007 and in 2012 the commission published a communication presenting the EU Space Industrial Policy.

All these initiatives, whether simply declarations of intent or binding regulatory frameworks, aim “to foster the competitiveness of the EU” in the sector of interest by providing good and efficient rules for the allocation of European resources in a competitive way, or by indicating the direction where investment should go. It is based on the idea that firms need more certainty regarding legal frameworks to invest and take the risks associated with technological investment. These sector frameworks are actually very useful in this respect. It is noteworthy that none of these initiatives proposes a direct support or investment impetus that will be financed by the European budget. EU

institutions are very reluctant to be a substitute for the market.

Hence, the EU remains the source of many of the rules that shape individual members' industrial policies. Moreover, domestic policy is largely restricted to respect for EU competition rules and specifically rules regarding public funding. An EU member has to declare to the European Commission a three-year grant above 150,000 euros attributed to an individual firm. And supervision has been increased in recent years. To assist the supervision, the commission launched in 2001 the EU public aid scoreboard to collect information on the overall state aid situation in the member states and on the commission's state aid control activities.

State aid consists of all aid granted to private enterprises under the normal EU state aid rules, including cash subsidies, soft loans, guarantees, equity subsidies, and tax subsidies. The EU15 countries have very different percentages of GDP allowed for state aid. The percentage ranges from 1.48% in Finland to 0.37% in Luxembourg (Table 1). Regarding distribution by sector, the manufacturing industry captured the greatest part of state aid in most countries. The average share was 66% in 2010 in the EU15 where aid for the agricultural sector is still the second most important share. There are two obvious reasons for that: first, manufacturing industries are those where lobbies are very active and second, the manufacturing industry is the location of R&D as well as of the main loss of jobs associated with foreign competition, which are the two main justifications for allocating public subsidies. But there are some exceptions: in Finland and in Ireland, agriculture grasps the greatest amount.

### Economic Rationale for Integration — but Political & Cultural Opposition

By nature, independent national decisions are non-cooperative. But in a single market with the fragmentation of production processes spread over all Europe and with a single currency (or tied currencies), independent policies with no externalities on neighbors are very rare. Any EU country's policy is bound to have economic consequences for other EU countries. Economic theory states that with externalities, efficient outcomes require coordination. It is only with coordination that positive as well as negative externalities can be internalized and economic efficiency achieved.

Positive externalities and scale effects are pervasive in European industries given the specialization in high-value added production. High-tech production exhibits increasing returns mostly due to R&D investment or other high fixed costs which make a domestic firm strongly dependent on European markets. High-tech sectors are also

TABLE 1

## State aid & European countries' characteristics

	Aid share	RD/GDP	High School share	ETCR
	1992-2010	2010	2011	2011
EU15	0.74	2.06	77.4	
EU27	0.8	2.01	79.5	
Austria	0.70	2.72	85.4	3.16
Belgium	0.50	2.03	81.6	3.19
Denmark	0.82	3.06	70	2.60
Finland	1.48	3.92	85.4	2.83
France	0.87	2.26	83.8	3.83
Germany	0.97	2.82	75.8	2.59
Greece	0.75	0.6	83.6	4.74
Ireland	0.90	2.82	86.9	3.86
Italy	0.67	1.26	76.9	3.85
Luxembourg	0.37	1.66	73.3	3.04
Netherlands	0.44	1.82	78.2	2.72
Portugal	1.05	1.64	64.4	3.78
Spain	0.68	1.39	61.7	3.07
Sweden	0.66	3.61	88.7	2.55

Notes: Aid share: Average share of state aid (non-crisis aid) over 1992-2010 in percentage of GDP.

RD/GDP: Investment in R&D in percentage of GDP.

High School share: Percentage of 20-24 year-old people having reached high school level.

ETCR: Indicator measuring regulation in energy, transport and communications summarizing regulatory provisions in seven sectors: telecoms, electricity, gas, post, rail, air passenger transport, and road freight.

Source: Aid share: European Commission State Aid scoreboard 1992-2010

RD/GDP: Eurostat

High School share: Eurostat

ETCR: OECD product market regulation indicators

such that the fragmentation of production is fostered (modularity of components) and it also increases the production dependencies of EU countries. A European country does 75% or more of its trade with another European country. A great part of this trade consists of intermediary products and components.

Any support or subsidy to a firm will benefit other firms in European countries. The chain of multiplicative effects is not clearly known but is certain. Citizens can question the financing of subsidies that may boost growth and employment in other countries. Coordination at the European level would allow for the exclusion of free riders and double spending, and may multiply the efficiency of any support. It will also publicize the information about what a country does and make citizens understand the concrete economic dependencies. Debate is also a good process for making preferences start to converge.

But there is a trade-off between centralization benefits and coordination costs. Coordination costs are mostly transaction costs and other costs linked to the making of a consensual decision from heterogeneous positions. The coordination costs are most often considered too big relative to integration/centralization benefits, also because centralization benefits are decreased by the reluctance of country members to abandon their decision-making powers to a supranational decision maker. This reluctance is itself a positive function of the heterogeneity in countries' preferences regarding the public good in question. If a country knows it has very specific

preferences regarding a public good provision or a public policy, it will be reluctant to let others decide on its policy given the gap between the average or median preferences in Europe and its own preferences.

And regarding industrial policy, countries have very different preferences based on their economic history, their political orientation, their current economic situation, their sectors' specialization, and their degree of deregulation (see ETCR in [Table 1](#)). Of course, despite these differences, a common agricultural policy, a common tariff, and a single currency have been implemented. Why not an industrial policy? Probably because the level of consensus regarding industrial policy is still too weak.

The “open method of coordination” associated with the implementation of the Lisbon Agenda did not work as well as intended. This method consisted of relying on the goodwill of members given that they all well understand their interest in implementing structural reforms and given the hypothesis that peer pressure will motivate them to implement these structural reforms. The failure of the Lisbon Agenda was shortly assessed by the Kok Report (2004). The lack of political will was the main cause identified.

Of course, the financial and economic crisis experienced by the EU since 2007 has greatly undermined the budget capacity and room for maneuver of each government. At the same time it has enhanced the demand for an industrial policy from economic players and emphasizes the threat to manufacturing industries whose situation has worsened during the crisis. The crisis of 2007 and the following years of debt crisis are fated to feed a specific moment in industrial policy-making. We are heading towards a “normalization” of industrial policy in European debate and maybe instruments.

### Manufacturing Decline & Rising Concerns

Manufacturing industries account for 20% of the EU's GDP and 75% of the EU's exports. Most countries in the EU are old industrialized countries and have experienced since the 1980s a decrease in their employment dedicated to manufacturing ([Table 2](#)). The decline in employment is either seen as a natural and logical evolution of old industrialized economies coming from structural changes, or perceived as a threat to the economy's ability to grow. The international economic context pushes forward one of the two different perceptions to the forefront of the leaders' minds. Each perception influences the design of industrial policy. What dominates today is a rising concern about the loss in manufacturing employment.

All old industrialized countries have experienced a loss in manufacturing jobs while total jobs increased. From 1990 to 2007 (before the crisis) the eurozone lost more than the United States: nearly 6 million jobs disappeared, which amounted to 4.7% of total employment in 1991.

The jobs lost were mostly located in low-technology industries. The decrease in employment was also doubled by a decrease in the manufacturing value-added relative to GDP for some countries, which intensifies concerns.

At the same time the share of imports coming from China has impressively increased since the end of the 1990s. And this occurred regardless of industry. Even Germany, the strongest actor in the EU, is being challenged by China. Not only did China overtake Germany to become the world's largest exporter in 2009 but in mechanical engineering it has also taken the lead, a sector that used to be dominated by Germany.

The decline of manufacturing in GDP is a rising concern because of the nature and function of the manufacturing industry. The industry is still the location of the main driving forces for economic growth. Around 90% of total exports are from the manufacturing industry and most of a country's R&D is also spent by the manufacturing industry (70%-90% depending on the country). This makes manufacturing industries much more important than suggested by their share of the economy's total value-added.

Moreover, numerous strategic interests, technology and skills are behind many high-tech industries. Everything concerning health, the environment, and well-being in general is linked to chemicals, biotechnology, energy and space industries and more. Technological leadership and the ability to dictate standards and rules are linked to the maintaining of a strong industry from conception to production.

The fear of losing technological leadership and concerns about low-wage economies' competition and their technological catching-up create an ideal breeding ground for industrial policy. This is what is revealed in the European Commission's communication in 2010, “An integrated industrial policy for the globalization era”, which states that “Industry must be placed centre stage if Europe is to remain a global economic leader.” And, as already mentioned, this is why industrial policy is one of the flagship initiatives of the Europe 2020 strategy.

TABLE 2

### Manufacturing share as percentage of total economy & of total employment

	Value-added share		Employment share	
	2000	2009	2000	2009
EU15	20	15	18	15
EU22	21	19	18	15
France	16	12 (10*)	15	12
Germany	23	19 (23*)	21	18
Italy	21	16	22	19
Japan	21	18	19	16
UK	17	12	14	10
US	15	12 (11*)	13	9

Notes: \* In 2011. Manufacturing is classes 10 to 33 in ISIC-rev4.

EU15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, UK, Sweden.

EU22: EU15 + Czech Republic, Estonia, Hungary, Norway, Poland, Slovak Republic, Slovenia

Sources: OECD, STAN database for structural analysis

## Galileo Likely the Last European Industrial Diplodocus

Given budget constraints, and as long as EU members will be not be willing to transfer more of their domestic budgets to the EU budget than the roughly 1% of their GDP, the EU economic achievement will no longer be realized through large-investment integrated sector projects. The European Global Positioning System, named Galileo, is certainly going to be a kind of “diplodocus project” and the last of its kind.

Space policy has a particular place within European policies. Space and aircraft, with Airbus and Ariane, are associated with the best European industrial achievements. Even if the EU is not the direct instigator of this success, it has always worked hand in hand with the European Space Agency (ESA). The main European countries have joined forces to become an international power in civil space activities. Because of the nature of these activities, there are deep links between the ESA and the EU. One most important recent project was to implement a Global Positioning System different from the American GPS. But its implementation was not easy.

Launched in 2005, Galileo was to provide a competitive system of positioning different from the US and Russian ones. The system was planned to be operational in 2008 with 30 satellites. It would offer a great deal of scientific uses but also ensure Europe independence in several strategic fields.

Its implementation is a good illustration of the difficulties of implementing a European industrial policy because of divergent country interests. European countries fought with each other over location of the activities. The private consortium was not able to create an entity to manage all activities or to name a director of this entity. They disagreed on the terms of the contract giving them 20-year exploitation rights. They refused to take any further risk. Thus the European Commission decided in 2010 to break the contract and to head toward complete public funding. The 27 European Union countries will completely finance the infrastructure at a cost of 3.4 billion euros. The total cost should amount to 10 billion euros. Three European companies were chosen to launch the start of production.

Any sectoral industrial policy needs a second level of cooperation beyond the country level, at the corporate level. Compelling public-private partnerships in such sectoral policies forces big firms, even if not numerous, to work together. This constraint, weighed on further by budget constraints, is a serious obstacle that any future sectoral industrial policy will have to bear.

## Trade Policy Is Growing Substitute for Industrial Policy

Another major trend of EU industrial policy is the tendency to use trade policy to protect and foster specific sectors. Most technological

industries need to reach a critical level of production to benefit from the increasing returns associated with the high fixed cost of entry and to see a return on their big R&D investment. Reaching a large level of production requires itself a competitive performance on international markets to grab a share of world demand.

At the same time, some industries are of utmost importance regarding energy costs and technological leadership and independence. This is the case with all industries linked to renewable energy. Climate change, increasing dependence on oil and other fossil fuels, and rising energy costs are making our societies and economies reliant on firms’ abilities to master future energy.

Strategic trade policy has been a justification for a lot of industry support since the 1980s and it is still very active in many emerging countries. But the EU used to prohibit such support since Airbus. The industry of renewable energy has stirred a revival in this kind of support. Since December 2010, six trade disputes regarding renewable energy have reached the WTO dispute settlement body. Complaints deal with national aid attributed to domestic firms conditional on their use of domestic inputs. The EU is sometimes a complainant, for instance against Canada relative to its Feed-in Tariff Program, or the subject of complaint, for instance by Argentina regarding Measures Concerning the Importation of Biodiesels or by China regarding certain measures affecting the Renewable Energy Generation Sector. And there are more trade investigations pending.

The EU is used to acting as a complainant against diverse trade policies or public support from trade partners deemed to be unfair and contrary to WTO rules. Recently the fierceness of Chinese competition in the industry of solar cells and modules stirred great opposition from European firms. Meanwhile in Europe, energy policy is a critical issue as stated by the Renewable Energy Road Map (2007): “The EU has compelling reasons for setting up an enabling framework to promote renewables. It is thus undisputed that renewable energies constitute a key element of a sustainable future.” The EU is thus very sensitive regarding any policy that could prevent the European industry from developing.

## Conclusion

The network of regulatory frameworks established by the EU as well as its diverse sectoral plans have so far been the main instruments of EU industrial policy. This is going to be more and more mixed with a more or less hidden (strategic) trade policy to preserve and foster some of the crucial manufacturing industries. The era of globalization has created demand for an industrial policy in many countries and the EU is trying to find its own way. **JS**

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