# An industrial policy for Europe

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#### Abstract

A new departure for industrial policy in Europe in needed for five major reasons. The first one is rooted in macroeconomics; exiting the current depression requires a substantial increase in demand, that could come from a Europe-wide public investment plan.

The second one is associated with the changes in Europe's economic structure resulting from the crisis; major losses are taking place in industries, a downsizing is needed of the inflated financial sector and no new large economic activities that could offer new useful products and services and provide new employment are emerging. A EU-wide industrial policy could drive the rise of new environmentally sustainable, knowledge intensive, high skill and high wage economic activities. Specific activities that could be targeted include: a) the protection of the environment and renewable energy; b) the production and dissemination of knowledge, applications of ICTs and web-based activities; c) health, welfare and caring activities.

Third, a new EU-wide industrial policy is needed in order to reverse the massive privatisations of past decades; an economy based on private, market based activities, with decisions left to the short term interests of firms has failed to provide growth and employment. The new activities outlined above require a substantial action by the public sector – at the EU, national and local level - in setting priorities, investing, creating employment. Public action could provide direction and support to private activities – including the development of competences and entrepreneurship, access to capital, the organisation of new markets, etc. - and could directly produce public goods, such as knowledge, environmental quality, wellbeing, social integration and territorial cohesion.

The need for greater cohesion and reduced imbalances within the EU and individual countries is the fourth reason for a new EU-wide industrial policy. Current changes in Europe's industrial structure open up a growing divide between a relatively strong "centre" and a "periphery" where a large share of industrial capacity is being lost. This leads to deepening imbalances within the EU (and within individual countries) in terms of knowledge base, investment, trade, employment and incomes. A EU-wide industrial policy could have a specific aim of reducing such imbalances, concentrating action in the countries of the "periphery" and on the less favoured regions of the "centre".

Fifth, a new EU-wide industrial policy could become a major tool for addressing the urgent need for an ecological transformation of Europe. Turning Europe into a sustainable economy and society - reducing the use of non renewable resources and energy, protecting ecological systems and landscapes, lowering CO2 and other emissions, reducing waste and generalising recycling - goes well beyond the emergence of specific environmentally friendly new activities; it is a transformation that concerns the whole economy and society. A combination is needed of direct public action with provision of environmental services, and appropriate regulations for private activities, including environmental taxation, incentives, public procurement and organisation of new markets. A new EU-wide industrial policy could provide the framework for integrating the different policy tools needed for making Europe sustainable.

In addressing all these priorities industrial policy can be an important and flexible tool. In order to implement it effectively, there is a need for new institutional arrangements and funding sources, new mechanisms of accountable governance, efficient and effective operation, systematic links between the EU, national and local levels, as well as forms of democratic control with participatory practices.

## **Depression and polarisation in Europe**

The crisis of 2008 has brought Europe to a depression. The continent has been divided between a "centre" with financial and political power, and a "periphery" with no political influence, high public debt, high unemployment and no hope for recovery. This polarisation is evident in Eurostat data about industrial production. With 2010 data equal to 100, in June 2013 Germany's index was 110.2, Austria's 105.8, Denmark's 106 and France's 102.6. Conversely, Italy's index was 96.9, Spain's 95.9, Portugal's 95.3 and Greece's 93.7 (Eurostat 2013). Taking 2010 as the year of comparison, however, ignores the effects of the first years of the crisis. In Italy industrial production is now 25% lower than in 2008, a fall that is common to most countries of the "periphery" and is leading to a permanent loss of production capacity in most industries. As the "centre" has largely preserved its industrial base and increased its exports to the "periphery", we are likely to face mounting trade imbalances within Europe that in the weaker countries might be addressed either by continuing austerity policies - depressing incomes and imports -, or by renewed capital inflows further expanding private and public debt. In both cases, Europe's periphery is heading towards a spiral of losses of income, jobs, production and exports.

Such a reshaping of Europe's economy is primarily driven by large firms with international systems of production and is affected by national and EU policies. Operating in the pursuit of short term profits, market power and financial rents, firms' responses to the crisis have included the following: drastic downsizing and plant closing; reduction of R&D, innovation and investment; concentration of production in the areas of greater strength and in core businesses; consolidation and acquisitions, leading to more oligopolistic market structures; and a further wave of international relocation of production towards emerging and developing countries with cost advantages and a large potential for growth in domestic markets. These negative consequences have been concentrated in the countries of the "periphery" where the recession has hit hardest.

In a context where European macroeconomic policies resist pressures to stimulate new demand and redistribute income, a generalised return to growth is unlikely. Without a substantial increase of public demand an end of the current depression is unlikely. Moreover, the aftermath of the crisis is likely to be marked by a more polarised industrial structure, where weak countries, regions, industries and firms become weaker, and where also the "centre" may be left with lower demand, and a reduced ability to develop new technologies and economic activities. With a slowdown of overall growth in Europe and economic decline affecting several areas of its "periphery", change is likely to become more difficult. Europe as a whole would be stuck in its traditional economic trajectory – with sluggish markets, a heavy environmental burden, and growing inequality - while other advanced and emerging countries may move faster towards new knowledge, new products and processes, new sources of employment, supported by faster demand dynamics. The opportunity to develop in Europe a new trajectory of growth based on environmentally friendly activities and greater social justice would become more difficult to pursue.

## Five reasons for a new industrial policy

There is no need, however, to accept such an outcome as inevitable. Europe is now facing multiple challenges – ending the depression; upgrading its economic structure with new job creating activities; extending public action and public goods provision after decades of privatisations; reducing the polarisation between "centre" and "periphery" emerging from the crisis; moving towards a fundamental ecological transformation of the economy and society. An important, well known and effective tool could contribute to address all these challenges - a new Europe-wide industrial policy.

In Europe, industrial policy has driven the highly successful expansion of production from the 1950s to the 1970s. In new industrialised countries it combines public and private efforts to develop knowledge, acquire technologies, invest in new activities, and expand foreign markets. A growing debate is now emerging on these issues. Chang (1994) has provided a restatement of the need for industrial policy; as argued by Rodrik (2008), the question is not whether industrial policy makes sense, but the way in which it can be carried out. Its relevance for emerging countries is discussed by Cimoli, Dosi and Stiglitz (2009); the European context is examined by Coriat (2004); the broader role of public action in innovation and industrial change is investigated by Mazzucato (2013); even mainstream perspectives have paid attention to the mechanisms for controlling and targeting industrial policies (Aghion et al. 2011).

Industrial policy fell out of fashion in Europe in the last two decades, when governments largely left decisions on the evolution of the economy to markets - that is, to large multinational firms - with waves of liberalisations and privatisation of public enterprises. The argument of such neoliberal policies was that markets are able to operate efficiently both in the short term - allocating given resources - and in the long term - when the challenge is developing new activities, resources and markets. Policies lost their selectivity and were limited to automatic "horizontal" mechanisms, such as across-the-board tax incentives for R&D and acquisition of new machinery, or incentives to producers and consumers of goods. The result has been a general loss of policy influence on the direction of industrial change and development in Europe.

## Europe's missing industrial policy

Industrial policy has long had a marginal role in Europe's policies. European Union policies on the evolution of economic activities are now framed in the Europe 2020 strategy, approved in June 2010 by the European Council. It provides the new framework for economic policy in Europe, replacing the Lisbon Strategy that was supposed to inspire Europe's policies in the previous decade. In the Lisbon Strategy the EU set the goal "to become the most competitive and dynamic knowledge-based economy in the world capable of sustainable economic growth with more and better jobs and greater social cohesion". A comprehensive economic strategy was expected to be developed "preparing the transition to a knowledge-based economy and society by better policies for the information society and research and development (R&D), as well as by stepping up the process of structural reform for competitiveness and innovation and by completing the internal market; modernising the European social model, investing in people and combating social exclusion; sustaining the healthy economic outlook and favourable growth prospects by applying an appropriate macro-economic policy mix". As pointed out by Lundvall and Lorenz (2011), after the mid-term evaluation of 2004-05 – and with right-wing governments replacing centre-left majorities in most European countries - the EU strategy was scaled down and focused on neoliberal policies for employment and economic growth.

The Europe 2020 strategy follows this same trajectory identifying three priorities: 'smart growth': an economy based on knowledge and innovation; 'sustainable growth': a resource efficient, greener and more competitive economy; and 'inclusive growth' a high-employment economy with social and territorial cohesion. By 2020 the EU is expected to reach five "headlines targets" through a wide range of actions at the national and EU level, but the specific policy tools for achieving such goals appear limited. Eight "flagship" initiatives are associated to priority themes for re-launching Europe (European Commission, 2010a).

The specific targets identified by Europe 2020 follow the footsteps of the Lisbon Agenda. The target of devoting 3% of EU GDP to R&D expenditure is maintained. In 2008, R&D in EU-27 amounted to 2.1%, with a highly uneven distribution across countries and no sign of convergence. Since then, the recession has led to falling expenditures and greater disparities. Innovation capacity should be supported by the formation of human capital: the share of early school leavers should be under 10% in 2020 (it was 14,4% in 2009 in EU-27) and at least 40% of the younger generation

should have a tertiary degree (32,2% in 2009 in EU-27). Again, progress towards such goals has been highly uneven and the recession has rolled back advances in "periphery" countries.

The strategy includes a set of indicators from the 20/20/20 climate/energy targets established in 2009 by the European Council. The first one is the 20% reduction of emissions by 2020 on the levels of 1990 (enlarged to 30% "if the conditions are right"); in 2009, the EU level has declined by 17%, largely due to the economic crisis that has deeply reduced output as well as emissions. The second target is the reduction of 20% in the use of renewable sources (in 2008, it was 10.3%); the third one is a rise of 20% in energy efficiency, with a move towards clean and efficient production systems the potential to create millions of jobs.

The two "flagship" initiatives devoted by Europe 2020 to innovation and industrial policy include the "Innovation Union" (European Commission, 2010b) and "An integrated industrial policy for the globalization era" (European Commission, 2010c). The aim is to provide the best conditions for business to innovate and grow, as well as to support the transformation of the manufacturing system towards a low-carbon economy.

As in the Lisbon agenda, industrial policy is based on a "horizontal" approach, where the main policy tools are the provision of infrastructures, the reduction of transaction costs across the EU, a more appropriate regulatory framework favouring competition and access to finance. A significant role is ascribed to the ability of small and medium enterprises to promote growth and create employment. Key issues include the need to fight protectionism, increase the flows of goods, capital and people within and outside the EU, to exploit a more open single market for services, to benefit from globalization. This strategy confirms the rejection by EU policy – first emerged in the 1980s - of targeted industrial policies and state support for particular sectors, choosing a market based approach. Selective industrial policies continue to be considered ineffective by the EU, due to the difficulty of fine-tuning actions and evaluating results (Lerner, 2009).

Besides misplaced targets and a misleading approach, EU industrial policies have lacked an adequate governance mechanisms, and no significant EU-wide resources have been made available to members states. Moreover, in this as in other fields of EU economic policy, the lack of democratic processes and broad participation in decision making has emerged as a major weakness of the present model of European integration.

When the crisis started in 2008 and austerity policies were imposed on Euro-area countries, the emphasis on fiscal consolidation and macroeconomic coordination has sidelined any serious discussion on industrial policy. Europe 2020 is now in line the neoliberal view that economic growth can be supported by the operation of markets and that fiscal consolidation and debt reduction create appropriate conditions for long term growth. Europe 2020 only suggests more resources for "growth-enhancing items" such as education, R&D and innovation, at the expense of social expenditure, that is considered to be unsustainable (European Commission, 2010a, 2010c).

Such view has become extremely explicit in the policy directives imposed in 2011 on weaker countries of the "periphery" of Europe - Greece, Portugal, Spain and Italy — as conditions for granting them financial help in facing their debt crisis. Cuts in government expenditures, public sector jobs and wages, liberalisation of labour markets and reduced workers' protection have been key elements of the austerity plans imposed on these countries, with the result of deepening the recession and worsening unemployment.

## How can we change what is produced?

A different policy perspective is needed, addressing at the European level the joint needs to end the depression and rebuild sustainable economic activities in a less polarised continent. Decisions on the future of the industrial structure in Europe have to be brought back into the public domain. A new generation of Europe-wide industrial policy has to overcome the limitations and failures of past experiences - such as collusive practices between political and economic power, heavy bureaucracy, and lack of accountability and entrepreneurship. They have to be creative and selective, with

mechanisms of decision making based on the priorities for using public resources that are more democratic, inclusive of different social interests, and open to civil society and trade union voices. They have to introduce new institutions and economic agents, and new rules and business practices that may ensure an effective and efficient implementation of such policies.

The general principles of industrial policy are simple enough. It should favour the evolution of knowledge, technologies and economic activities towards directions that improve economic performances, social conditions and environmental sustainability. It should favour activities and industries characterised by learning processes — by individuals and in organisations -, rapid technological change, scale and scope economies, and a strong growth of demand and productivity. An obvious list would include activities centred on the environment and energy; knowledge and information and communication technologies (ICTs); health and welfare.

Environment and energy: The current industrial model has to be deeply transformed in the direction of environmental sustainability. The technological paradigm of the future could be based on "green" products, processes and social organisations, that use much less energy, resources and land, have a much lighter effect on climate and eco-systems, move to renewable energy sources, organise transport systems beyond the dominance of cars with integrated mobility systems, rely on the repair and maintenance of existing goods and infrastructures, and protect nature and the Earth. Such a perspective raises enormous opportunities for research, innovation and new economic and social activities; a new set of coherent policies should address these complex, long-term challenges.

Knowledge and ICTs: Current change is dominated by the diffusion throughout the economy of the paradigm based on ICTs. Its potential for wider applications, higher productivity and lower prices, and new goods and social benefits should be supported. However, ICTs and web-based activities are reshaping the boundaries between the economic and social spheres, as the success of open source software, copyleft, Wikipedia and peer-to-peer clearly show. Policies should encourage the practice of innovation as a social, cooperative and open process, easing the rules on the access and sharing of knowledge, rather than enforcing and restricting the intellectual property rules designed for a previous technological era.

Health and welfare. Europe is an aging continent with the best health system in the world, rooted in its nature of a public service outside the market. Advances in care systems, instrumentation, biotechnologies, genetics and drug research have to be supported and regulated considering their ethical and social consequences (as in the cases of GMOs, cloning, access to drugs in developing countries, etc.). Social innovation may spread in welfare services with a greater role of citizens, users and non-profit organisations, renewed public provision and new forms of self-organisation of communities.

All these fields are characterised by labour intensive production processes and by a requirement of medium and high skills, with the potential to provide "good" jobs.

# Institutions, governance and funding of Europe-wide industrial policy

Industrial policy has long relied on different mechanisms. On the supply side, public funds have supported selected R&D, innovation and investment efforts. Public investment banks and public enterprises – as well as non profit foundations – have supported business start-ups in key fields with credits and venture capital and managed the restructuring of major production activities. Public, community and cooperative enterprises have a role in fields - such as knowledge-based activities, environmental and local services - where public goods and public procurement are prevalent.

On the demand side, far-sighted public procurement, the organisation and regulation of markets with high growth potential, and support and incentives for early users of new technologies have helped "pull" innovation and investments (Mazzucato, 2013). Similar tools have sometimes shifted production and consumption towards more sustainable patterns. In fewer cases policies have "empowered the users", letting them define specific applications of existing technologies that may lead to new goods and services with large markets. Finally, policies have aimed at building closer relationships among all actors of national and European systems of innovation - firms, financial institutions, universities and policy makers - helping to coordinate decisions of public and private actors.

The funding for such policies have generally come from national public expenditures, the granting of public capital to state banks and enterprises, and from financial markets through bonds with various degrees of public guarantee. Austerity policies, EU constraints and pressure for fiscal consolidation on national public budgets mean that different types of funding have now to be developed, with a focus on Europe-level initiatives.

A proposal for a new Europe-wide industrial policy could be developed building on such previous experiences and on recent plans, such as the one proposed by the German trade union confederation DGB (2013). The following institutions, governance mechanisms and funding arrangements could be considered.

#### The institutional arrangements

The new industrial policy has to be firmly set within the European Union and – if required – within the institutions of the Euro-zone. This is needed in order to coordinate industrial policy with macroeconomic, monetary, fiscal, trade, competition and other EU-wide policies, providing full legitimation to public action at the European level for influencing what is being produced (and how). Major changes are required in current EU regulations, in particular the ones that prevent public action from "distorting" the operation of markets. The expansion of economic activities that markets are unable to develop should become an explicit objective of EU policy. The EU level is crucial also for funding such policy (see below). As this policy is likely to meet opposition by some EU countries, a "variable geometry" EU policy could be envisaged, excluding the countries that do not wish to participate.

A close integration has to be developed between the European dimension, providing policy coherence, overall priorities and funding, the national dimension – where public agencies have to operate and an implementation strategy has to be defined - and the local dimension – where specific public and private actors have to be involved in the complex tasks associated to the development of new economic activities.

Existing institutions could be renewed and integrated in such a new industrial policy, including – at the EU level – Structural Funds and the European Investment Bank (EIB). However, their mode of operation should be adapted to the different requirements of the role here proposed. While in the short term adapting existing institutions is the most effective way to proceed, in the longer term there is a need for a dedicated institution – either a European Public Investment Bank, or a European Industrial Agency - coherent with the mandate of reshaping economic activities in Europe.

It could be envisaged a system where EU governments and the European Parliament agree on the guidelines and funding of industrial policy, calling the EU Commission to implement appropriate policy tools and spending mechanisms. In each country a specific institution – either an existing or a new one, either a National Public Investment Bank, or a National Industrial Agency – could assume the role of coordinating the implementation of industrial policies at the national level, interacting with the existing national innovation system, policy actors, the financial sector, etc. More specific Agencies, Consortia or Enterprises, with a flexible status but a strong public

orientation, could be created (or adapted, if already in place) for action at the local and regional level and for initiatives in particular fields. The institutions at the national and local level would take responsibility for spending decisions, identifying the private firms to be supported, the projects to be developed, the new public activites that are required. And they would be subject to the strict monitoring described below.

## The funding of industrial policy

Funds for a Europe-wide industrial policy should come from Europe-wide resources. It is essential that troubled national public budgets are not burdened with the need to provide additional resources and that national public debt is not increased. Different arrangements could be envisaged.

As suggested by the DGB proposal "A Marshall Plan for Europe" (DGB, 2013) - funds could be raised on financial markets by a new European Public Agency; it could obtain the Europe-wide receipts of a once-for-all wealth tax and of the newly introduced Financial Transactions Tax; such income could help cover interest payments for the necessary projects that are not profitable in market terms. This arrangement would not burden domestic public finances and could visibly make the connection between policies for downsizing finance, taxing the rich, reducing inequality, and the industrial policy that could lead to new economic activities and jobs.

An alternative may come from a deeper European fiscal reform introducing a EU-wide tax on corporations, thus effectively eliminating fiscal competition between EU countries. Perhaps 15% of proceedings could go to fund industrial policy, public investment, knowledge generation and diffusion at the EU level; the rest could be transferred to the countries' Treasury.

For the group of Euro-zone countries, financing through EMU mechanisms could be considered. Eurobonds could be created to fund industrial policy; a new European Public Investment Bank could borrow funds directly from the ECB; the ECB could directly provide funds for industrial policy.

Moreover, funding arrangements could be different according the relevance of the "public" dimension:

- a) the priority of public funds should go to public investment in non-market activities such as public goods provision, infrastructures, knowledge, education and health;
- b) public funds and long term private investment should be combined in funding new "strategic" market activities, such as the provision of public capital for new activities in emerging sectors;
- c) public support could stimulate financial markets to invest in private firms and nonprofit organisations developing "good" market activities that could more easily repay the investment. In all cases, the rationale for financing industrial policy cannot be reduced to the financial logic of the "return on investment". The benefits in terms of environmental quality, social welfare, greater territorial cohesion, more diffused growth at the European level have to be considered, and the costs have to be shared accordingly.

# The governance system

The different options outlined above are associated to different governance arrangements of EU-wide industrial policy. As an example, we can assume that a EU Public Investment Bank or Agency – let us call it *European Public Investment* (EPI) – is created and similar organisations – *National Public Investment* (NPI) – act in each country. The European institution should be accountable to the European Parliament, who appoints its board where representatives from business, research organisations, trade unions, environmental civil society organisations should be included. No "revolving door" between industrial policy institutions and private firms and banks would be allowed. The European institution should engage in consultation with EU political, economic and social actors for developing its proposed industrial policy, that should be approved by the European Parliament. Funds would then become available, and could be assigned to

national institutions and specific targets and activities. Transparency in decisions would be required, monitoring and evaluation procedures would be arranged.

The same governance system could be introduced in the national institutions in charge of coordinating implementation at the country level. They could identify partner organisations - both private, nonprofit and public – operating at the local level and in specific policy fields, who could become key players in the implementation of specific investment programmes.

The fields that could be eligible for such industrial policy programmes can be identified within the broad areas outlined above. The countries and regions where such investments could be carried out have to be defined in advance, with the explicit aim to reduce the polarisation that is weakening the industrial base of Europe's "periphery". For instance, 75% of funds could go to "periphery" countries (Eastern and Southern Europe, plus Ireland); at least 50% of them should be devoted to the poorer regions of such countries; 25% could go to the poorer regions of the countries of the "centre".

These criteria for operation, transparency in decision making, accountability to the EU Parliament and citizens may contribute to overcome the collusion between industrial policy and economic and political power that has characterised past European and national experiences. Extensive public consultations and a democratic debate about what and how we produce could support these policy initiatives, building consensus and credibility for EU-wide industrial policy.

Opening up a debate on industrial policy in Europe is an urgent task. A wide range of ideas and proposals have to be shared and discussed. The political obstacles for such a new industrial policy are indeed huge, and major changes would be required in order to implement it. But the results of such efforts could be very important – ending the depression, creating new high wage jobs where they are most needed, greater EU cohesion and public action, progress towards an ecological transformation of Europe, greater democracy in economic decision making.

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