

VISION vs IMPROVISATION: ON THE INDUSTRIAL FUTURE OF ITALY

Salvatore Biasco

1. Finally we can talk about it

Industrial policy is the set of public actions aimed at increasing the competitiveness of a country or area and strengthening its productive system, through direct and indirect instruments. The neoliberal era questioned state intervention in the productive structure, considering it discretionary, arbitrary and in fact inefficient with respect to its alternatives. These alternatives were essentially reduced to a single one, in Italy as well in other Western countries: letting market selection and pressure operate, predisposing a competitive and flexible economic environment, populated by multiple private actors. In substance, industrial policy has long meant competition policy (including competition in the labour market) and privatization. It was complemented by the creation of sector Authorities responsible for monitoring the competitive process, by tax reliefs and by other measures aimed at encouraging and incentivizing economic activity. The European Union has reinforced this drive with her extreme aversion to discretionary policies and through the sentences of the Court of Justice, always oriented at keeping the State out of the economy and instead legitimating fiscal and regulative competition. The term itself 'industrial policy' has long been banned from the lexicon of political economy, alongside its disappearance from academic debate and textbooks. Only very recently has re-emerged in the EU debate (although practices referable to 'industrial policy' have always been implemented in some form by the most far-sighted States).

In Italy too the long oblivion seems over: the term is cleared, but it was necessary to wait until 2016 (with the Digital Plan) to see any action that could properly be ascribed to it. It should be remembered that industrial policy is not limited to single interventions concerning firms, sectors or public industry, but also consists in the ability to govern the context in which productive processes occur, by acting on the ground, coordinating public and private actors, monitoring the

implementation of policies, setting priorities, and calling relevant actors to their responsibilities.

In what follows, I would like to propose a normative and critical review of the “state of the affairs” in Italy. I will start by examining how the country fares in terms of some of the policies impacting the generality of production sectors in a horizontal way (in Italy, called “factors’ policies”). Next, I will proceed by examining some of those specifically directed at orienting the productive structure of the country. Finally, I will claim that although the policies envisaged in the paper must be implemented on a national scale and as a national responsibility, they must be geared as to produce a particular effect where development is lagging, namely in the South, where territorial differences with the most advanced areas of the country are sharp.

The need of governing policies affecting the context

2.1 Research and Development

Research policy certainly involves the management of the productive context. At its heart it is not the provision of incentives - often directed to the support of actions that firms would have undertaken in any case (as it is happening in Italy) – but the drawing-up of long term plans focused on major projects of technological development. These plans require a coherent governance of multidimensional processes and a unified management of public funds - which should rely on an Agency for Research to guarantee selection procedures according to well established international criteria. An industrial policy worthy of its name should provide an appropriate allocation of resources to the selected projects and call together the best industrial capacities in terms of engineering, technology and delivery, in synergy with universities and research centres. It should take care of the production and territorial chains that are connected to these projects to make these chains a driver of growth. Its missions could be centred on green chemistry, smart cities, digital development, cultural assets, mobility and energy efficiency. In Italy, however, these addresses are struggling to take off: a national Agency is not there yet, the programs of eight ministries and twenty Regions are often inconsistent and generic, and the disbursements are not infrequently random. When, in 2016, spending on research started to grow again - after years in which, unlike in other countries, it had been curtailed - this happened with great approximation and with the assignment of the Human Technopole project funds (for food research) to an Institute without competences in the field. Moreover, no open calls for tender, clear rules, or calls to the scientific community to develop alternative proposals have been envisaged. Some later revisions about selection of projects are not enough to overcome the nature of an improvised project.

Close to the question of the governance of major research projects, is also the question of applied research at the service of firms. The Italian model runs the risk of not pursuing either a mission-oriented or an applied research characterization, but remaining in between. It is also not guided by a public demand and is characterized by the dispersion and self-referentiality of different centres. As regards applied research, there are no national (or local) institutions capable of connecting firms with places where innovative research is conducted, as is the German Fraunhofer Gesellschaft. Neither do we have something resembling the Fachhochschulen (laboratories and schools of applied sciences operating outside the university system). To develop applied research, it would take six or seven research centres focused on technological paradigms and transfer of knowledge. A criterion to create them and to choose their location could, experimentally, be based on the financing share of property guaranteed by consortia of private partners in the proponent territorial district or virtual district (in addition, of course, to criteria based on the quality of projects themselves, not least the quality of the network of the subjects involved, including universities and research centres). This could happen through public bidding or auction.

2.2 Education

The education system is another pillar for a well-designed context, capable of taking into account the needs of the productive structure. Issues span from technical schools to universities. A good governance and design are particularly important in this field, though Italy is far from moving in this direction.

In Italy, technical education suffers from various shortcomings: there is no organic design, hours spent in laboratories and in specialized teaching have been reduced, and programmes have been made more rigid. The country also lacks a national teacher training system. On top of this, there is no co-ordination between the State-regulated professional education, which is too similar to high school, and that of regional competence, characterized by a strong differentiation in schools quality and a by small range of professional qualifications. Finally, there is no system of national evaluation. The paradox is that at the same time firms find it hard to find on the market about 150,000 technical profiles to be hired. Despite efforts made in recent years to introduce some corrections, the model of technical training requires a radical revision of its institutional setup and a substantial increase in spending commitments. Suffice it to say that the Italian expenditure per pupil is equivalent to half that of France or Germany. In addition, while in Germany apprenticeship training is not an internship or a stage but an organic part of the scholastic path, in Italy it is simply a particular work contract (i.e. a sort of temporary contract, where on-the-job training is by and large informal).

Post-diploma technical education is incardinated in ITS (Higher Technical Institutes), of which only 103 exist hosting less than 12,000 students, against the French equivalents training 1,200,000. The recent provision for school-work alternation has been introduced without adequate preparation and due attention to the formative content of the working experience.

Rather than turning Universities into a driver of the country's growth, they have been left on their own and without a wider vision of the demand for competences. In the last decade, the number of standard academic positions (i.e. teaching staff) has decreased from 62,000 (in 2008) to 50,000 today, that of students from 320 to 260 thousand and funds have been cut by 20 percent. Many mechanisms follow perverse logic: allocation of funds, selection and replacement of teaching staff, evaluation processes of Departments, degree options and prevalence of competition over collaboration. The organization of research suffers, as mentioned, from self-reliability and from an excessive articulation of professional profiles (coupled with frozen careers and low pay). Rebalancing plans among universities of different qualities based on agreements and checks are absent. In the recent years, Italy has focused on sporadic excellences in a worsening framework, rather than aiming to raise the general average quality, with the consequence of determining a high differentiation between institutions and between territories.

The establishment of the 'three plus two' education structure, (with Bachelor of Science and Master of Science programmes) has not reached its goal, considering that after obtaining the educational qualification (on average in five years, instead of three, and with low marks, below 90 out of 110 in a third of cases), 55 percent of Bachelor graduates continue their tertiary education undertaking a higher degree course. A revision is needed: the 'three plus two' system must be rethought in favour of professionalizing degrees that are not subordinated to specialist degrees. In fact, the short study paths most directly related to high-level technical professions are few and very weak (while in Germany, such courses account for almost 40 percent of graduates). The theme starts to be addressed now by the Italian Conference of Deans, but not yet by the political class. Without an applied technical education, it is difficult for the Italian productive sector to prosper. It must be added that also "high-level education apprenticeship" (introduced in 2003), a form of higher technical specialization to be carried out in universities and firms at the same time, has not taken off.

2. Direct policies

At the level of direct policies, there has never been a debate in Italy dealing with the issue of what kind of productive structure the country needs to achieve and how to govern the processes. Yet, it is necessary to address these questions so to guide the kind of interventions suitable to design a model for Italy from now to twenty years ahead. The questions to be addressed are different, all important and urgent. In particular, whether to focus on the dimensional growth of small firms, on technological brokerage, on logistics, on the development of the South, on energy efficiency, on cultural goods, on sectoral excellences, et cetera. To have a digitalization plan for the country we had to wait until 2016.

What is absolutely essential is that the resources allocated to firms, even those aimed at tax relief, are not dispersed in operations carried out without a vision of the future and are given out at random. For instance, funds allocated to infrastructures for the period 2015-2023 by the previous governments have no operational plans and have been made effectively programmable from 2019. The present government has planned a very modest increase in public investments and suspended some major works (e.g. the Torino-Lyon railroad and the natural gas pipeline in Puglia). Drilling works in the Adriatic Sea have been halted too.

3.1 Digitalization

The strategic importance of the Digital Agenda (enacted with the budget law for 2017) is out of the question, but its current concept has merits and shortcomings. The key point is that the creation of the network infrastructure is not enough. The development of digital platforms for supply chains and productive districts is also needed in order to integrate firms and connect them to public and private research centres, according to a rational design. This should be based on open standards, on the sharing of expertise and best practices, and on guidance services. The Competence Centres (*Centri di Competenza*), of a future establishment (envisaged with the 2017 budget and identifying eight Universities as centres of reference for firms), are still to be defined, if ever, in their vocation and operation. In any case, their funding is insufficient. Also with regard to the material infrastructure there is much room to suspect that the duplication of the broadband grid in the name of competition would imply a form of waste. It is probably more appropriate to opt for a single network created through a synergy between the public and private sectors. Furthermore, the digital literacy plan aimed at families and small and medium-sized enterprises is not clearly defined.

With regard to the diffusion of public wi-fi connectivity, there has been a disengagement of local administrators and governments, apart from the two territorial exceptions of Milan and Rome, as well as Sardinia, which however have a limited number of hot-spots. The reasons why the country's second digital grid, owned by Poste Italiane, has not been utilised for the diffusion of wi-fi throughout

the national territory are unclear. The privatization of the Poste Italiane (the company with 13,000 branches providing integrated services in insurance, banking, correspondence and transport activities) is incomprehensible if not in light of a neoliberal understanding of industrial policy. Rather than capitalizing on the very high synergies between this company and the public sector (logistics, digitization of the public administration, a variety of possibilities of connecting citizens with the administration) it has been decided to let it enter into a logic complying with privatistic canons (and, in fact the expansion of Poste has taken place in another direction, i.e. in the asset management business).

Lastly, it is not clear why digitalized information on six million firms and ten million administrators, owned by InfoCamere (consortium set up by the Chambers of Commerce) is not acquired by the State, risking, in this way, to duplicate what is already available.

Without dwelling on the subject, it must be added that industrial policy obviously also involves the spread of knowledge, requiring, among other things, that artificial intelligence algorithms are open and accessible to all.

3.2 Small and medium-sized enterprises (SMEs) and technology

On SMEs, there is no organic project to turn their widespread diffusion in Italy into a system: a project that - horizontally or by supply chains - aims at their aggregation and enables them to make a technological leap. Suffice it to say that no measures encouraging mergers is in place, apart from tax neutrality when they merge. Italy has been very late in recognizing firm networks legally, that is those projects between producers aimed at a common development of services and platforms. Such contracts are now 5,300, involving more than 32,000 firms, but are not a lever of industrial policy. These networks have not benefited from a significant financial support, nor, most importantly, have they been encouraged to evolve from contractual networks to organic networks (those including clauses constraining the business transfer or providing for other forms of integration, leading to mergers).

Only through an institutional guidance can the connection of SMEs with technology be fostered. This must move from the awareness that smaller firms are often unable to understand how to innovate in a manner that is suitable for them. Consequently, demands for innovation remain unexpressed even if firms generally feel a need for a technological advancement. Furthermore, there is often no ready-to-use technology that is applicable to their individual cases. More than incentives, a technological leap requires scouting by professional figures and institutions that are familiar with production-related issues and know how to dialogue with the world of applied research, in order to adapt available solutions

to each specific case. The Competence Centres, when they become operational, seem more direct towards large and medium-large enterprises, while for SMEs it remains necessary to create a specific interface between research and firms and to focus on technological brokerage figures or institutions able to carry out the scouting job. These should be accredited in a special register. Regions can devote their own institutions to this task, but the central State can play a role as coordinator and co-financier. Completing the framework would require a portal of innovations, which could be entrusted to the National Institute for Research (Consiglio Nazionale delle Ricerche, CNR), and a portal of available technical skills, classified according to standard criteria by universities.

The proposal for providing tax breaks to SMEs employing “digital angels”, that is experts on enabling technologies, can be useful in the absence of something else, but does not address the need to conceive a governance of the overall process aimed at their growth, which, as mentioned, is not triggered spontaneously.

3.3 Internationalization

The governance of the internationalization processes remains very incomplete, as the Chambers of Commerce and the Italian Trade Agency (Istituto per il Commercio Internazionale, ICE), do not communicate with each other, whereas in other countries, primarily Germany, their ability to work in synergy represents an important strength of SMEs. In this area, there still is no binding national strategy that allows Regions, which today have a broad mandate in terms of industrial policy, to find their role in a framework without diverting from it or producing overlapping actions.

3.4 Special attention to logistics

Although I do not wish to dwell on specific aspects of different sectors, it is appropriate to stop over at least on the subject of the logistics for international trade, albeit briefly. Logistics could represent a winning card in the future and allow Italy to become a hub for part of the freight traffic which today follows Northern-European shipping routes. An important opportunity is offered by the doubling of the Suez Canal and the Gotthard tunnel, but, to seize it, it is decisive to further connect Italy to the trans-European networks. An infrastructural commitment is needed to accommodate high-tonnage ships as for the allocation of rail investments according to the strategic importance of commercial ports. The aim of this is not only expanding the intermediated volumes of freight traffic, but also of moving it significantly from the road to the railway and the sea. Italy could be a natural hub for Switzerland, Alsace, Bavaria, Baden Wuettemberg. In contrast, it suffices to note that 70 percent of finished and semi-finished products and raw materials arriving in northern Italy from East transit through foreign

logistics hubs and operators, while only 13 percent of the European Union's sea freight traffic passes from Italy. The Plan for Logistics and Ports (launched in 2015) draws an effective and interesting picture, but reasons to be satisfied when we take stock of it are very few. The projects relating to the Giovi and the Brenner Passes proceed slowly, while prospects for the Italy-France axis remain uncertain.

Problems related to logistics and transport are also intertwined with the Southern question: the South still remains isolated from the most important railway lines. The project to extend the High Speed line up to Reggio Calabria is not foreseen and the construction of the Napoli-Bari-Taranto route has only a first financing and, in any case, is uncertain and far from developing rapidly.

Ports are not only important for freight traffic. Ports of landing for cruise traffic should be transformed themselves into points of tourist attraction and into an integral part of the social life of the urban fabric, with recreational, sport and commercial facilities. Regions should be encouraged to act in this direction, especially in the South. Accordingly, the national and regional rail network should be unique, integrated and capable of satisfying the relevant interconnections. Fragmentation of local rail operators does not help to achieve the purpose.

3. Connecting industrial policy to territorial rebalancing

The question of how an industrial policy intertwines with territorial rebalancing must be posed on account of its fundamental importance; it does not only touch logistic and infrastructural issues. Unfortunately, the crucial role that the South has in determining the future of Italy does not seem to raise the concern it deserves. An idea is missing on how to insert the South into national policies aimed at redesigning the administrative, regulatory, fiscal and incentive framework of the entire Italian economy; policies through which one can expect particular repercussions in this area and that can have a territorial graduation, even within the South itself.

It cannot be said that incentives and bonuses are lacking; many exist and of various types. Financial commitments, however, are mainly borne by the Regions, but their provision does not respond to a broader design that would instead require a direct commitment by the central government, a monitoring of the various actors and the ability to provide a guidance in managing the processes. "Pacts" signed with each Southern Region and with some Southern Cities risk leading to a fragmentation of projects with numerous duplications. These Pacts consist in a survey of the available resources and in a list of interventions to be implemented with related deadlines and foreseen disbursements. It is certainly noteworthy that they have indeed been launched, and that some of the commitments that they

envisage are valuable. At heart, however, they consist essentially in an attempt to accelerate the use of European structural funds and often promote dormant projects to be funded with resources already destined for the South. No additional and specific commitments are foreseen beyond ordinary public spending destined to the South for the 2014-2020 period.

Overall the impression is that the Pacts do not correct the underlying weakness of policies for the South and that they are, in fact, working poorly.

The role of the South would need to be rethought in its entirety and in its geo-economic location (in the Mediterranean Sea). Instead, the framework of productive policies has remained for too long mainly a responsibility of fragile Regional institutions, in a context not within their grasp. Regions have been left without a model of reference, without a reward for best practices, and without a national deposit of experiences to inspire the different territorial contexts. The result has been a poor hierarchy of interventions, an excess of aid to micro enterprises and local activities, an excessively pronounced focus on incentive tools, and over-sized partnerships characterized by a lack of precision in the tasks of the actors present at the decision-making tables. One cannot escape the impression that the Regions have focused on strengthening and supporting the fabric of local businesses rather than attracting capital. On the other hand, the great infrastructural axes of the South, such as energy, water and transport, exceed the planning capacities of Regions. Further, the field of ports, interports, sea motorways and digitalization of the territory as well as public administration provide new objectives that, in the same way, transcend the regional dimension. As already mentioned, the same can be said about the role of trade logistics.

There is no need to renounce to the degree of federalism achieved, nor to affirm that participatory and bottom-up development should cease, but it must be stated that it should take place in a framework that rewards selectivity and sets the baseline criteria against which the effectiveness and the externalities of the allocation of resources can be assessed. So far, this context is missing.

It remains an illusion to continue thinking that development can rise solely “bottom to top”. A public subject - or more public or mixed institutions – is fundamental in implementing a systemic coordination, in providing high quality, integrated projects and in organizing capitals and private and public actors. Such a subject should dialogue with the territories and carry out policies to attract investments related their unique features, as well as interacting with the technological districts, productive supply chains and cities. Above all, it is needed that it establishes priorities. We do not need a subject that manages resources, but rather one able to direct and coordinate in order to accompany change.

To conclude, I can summarize by recalling the most recurrent terms in this short review of some of the issues of industrial policy: 'governance', 'guidance', 'planning', 'future', 'concentration of resources'. In negative: 'improvisation', 'spontaneity', 'buffer measures', 'absence of coordination', 'dispersion'.

FOT FURTHER INSIGHTS

Bianchi, P. (2018). *4.0 La nuova rivoluzione industriale*. Bologna: Il Mulino.

Biasco, S. (ed) (2008). *Il laborioso mondo delle PMI e lo Stato*, Rome: Fondazione ItalianiEuropei.

Cattaneo, E. (2016). *Documento relativo al progetto Human Technopole*. https://www.phenomenologylab.eu/public/uploads/2016/05/Documento-su-progetto-HT_

Cefalo R. (2017). *Istruzione, formazione professionale, transizione scuola-lavoro. Il caso italiano in prospettiva*. <https://www.secondowelfare.it/primo-welfare/diventare-duali-struttura-e-riforma-della-formazione-professionale-in-italia.html>, February 17 2017

Consiglio Nazionale delle Ricerche (2018). *Relazione sulla ricerca e l'innovazione in Italia Analisi e dati di politica della scienza e della tecnologia*. Roma: CNR

Centro Europa Ricerche (2017). *Il sistema delle politiche di sostegno all'internazionalizzazione*. In Cer, *Rapporto Cer 2016*. Roma: Cer, 49-72

Confcommercio (2017). *Analisi e previsioni per il trasporto merci in Italia*. <https://www.confcommercio.it/documents/10180/3599445/Analisi+e+previsioni+per+il+trasporto+merci+in+Italia/7310f660-ce91-48a2-a0fc-1328985b92b3>

Fondazione Ricerca & Imprenditorialità (2017). *Materiali per una politica industriale 4.0 Inclusiva delle start-up e PMI innovative*. <https://www.fondazioneri.it/wp-content/uploads/2018/04/materiali-per-una-politica-40.pdf>,

Ioannidis, P. A. J, (2018), *Il modo in cui distribuiamo i fondi per la ricerca scientifica non favorisce i risultati migliori*, www.lescienze.it

Lucchese, Nascia and Pianta M. (2016). Industrial policy and technology in Italy. *Economia e Politica Industriale; Journal of Industrial and Business Economics*. 43(3): 231-232.

Ministero dell'Economia e della Finanza (2016). Strategie per le infrastrutture di trasporto e logistica. *Documento di Economia Finanza. Allegato*, Roma: Mef.

Onida F. and Viesti, G. (2016). *Una nuova politica industrial in Italia*. Firenze: Passigli Editore.

Simonazzi, A. (2015). Wanted an Industrial Policy for the Southern European countries. The Case of Italy. In Gerlach, F., Schietinger M. and Ziegler, A. (eds), *A strong Europe - but only with a strong manufacturing sector: Policy concepts and instruments in ten EU member states*. Marburg : Schüren, 146-172.

Svimez, (2016. 2017 and 208). *Annual Report*. Rome: Svimez

Trigilia, C. and Viesti, G. (2016). La crisi del Mezzogiorno e gli effetti perversi delle politiche. *Il Mulino*, 65(1), 52-61.

Viesti, G. (2018). *La laurea negata: Le politiche contro l'istruzione universitaria*. Bari: Laterza.

Viesti, G. (2016). *Università in declino. Un'indagine sugli atenei da Nord a Sud*. Roma: Donzelli Editore.

Visco, I, (2018). *Investimenti pubblici per lo sviluppo dell'economia*. Roma: Banca d'Italia.

Visco, I. (2014). *Investire in conoscenza. Crescita economica e competenze per il XXI secolo*. Bologna: Il Mulino.