

The «Jacquemin-Rodrik» Synthesis and the Design of a new European Industrial Policy

Franco Mosconi





Polo Interregionale di Eccellenza Jean Monnet - Pavia
Jean Monnet Interregional Centre of Excellence - Pavia

***THE «JACQUEMIN-RODRIK» SYNTHESIS
AND THE DESIGN OF A NEW EUROPEAN
INDUSTRIAL POLICY***

Franco Mosconi

November 2012

This project has been funded with support from the
European Commission.

This publication reflects the views only of the authors, and the
Commission cannot be held responsible for any use which may be
made of the information contained therein.

Scientific Committee:

Oreste Calliano, Jean-Claude Gautron, José M^a Gil-Robles
Markus Krienke, Marco Mascia, Daniela Preda, Vincenzo Salvatore
Carlo Secchi, Giuseppe Usai, Dario Velo

Editorial Board:

Laura Bottinelli, Silvia Bruzzi, Enrica Pavione, Francesco Velo

© Polo Interregionale di Eccellenza Jean Monnet
Università degli Studi di Pavia
Via San Felice, 5 - 27100 PAVIA - ITALY

Internet Site: www.jeanmonnet-pv.it
Contact: info@jeanmonnet-pv.it

Franco Mosconi. The «Jacquemin-Rodrik» Synthesis and the Design of a new
European Industrial Policy

ISBN: 978-88-96890-10-3

Publisher:

Jean Monnet Centre of Pavia
Università degli Studi di Pavia
2012 - Pavia - IT

Printed in November 2012

at Studio Pixart srl - Quarto d'Altino VE - IT

Cover Image:

Bernardino Lanzani (1522), *Veduta di Pavia*. Edited detail.
Fresco Painting. Basilica S. Teodoro, Pavia

This publication may only be reproduced stored or transmitted in any form or by any
means, with the prior permission in writing of the publisher. Enquires concerning
reproduction outside these terms should be sent to the Jean Monnet Centre of Pavia

Index

Summary	p. 7
1. Prologue	p. 9
2. The contributions of Alexis Jacquemin (1980s) and Dani Rodrik (2000s)	p. 11
3. “The Economist” Debate on Industrial Policy	p. 15
4. The European Perspective (I)	p. 19
5. The European Perspective (II): the implications for Italy’s manufacturing	p. 29
6. Conclusions	p. 35
References	p. 39
Annex N. 1: “The Economist” Debate on Industrial Policy	p. 43
Annex N. 2: The EU’s Industrial Policy: an Overview	p. 45
Annex N. 3: Structural Indicators	p. 49

Summary

The aim of this paper^(*) is to analyze the possible role of a new industrial policy at a European level. In so doing, the paper sheds light on both the forward-looking contribution of the late Alexis Jacquemin [1987], and the seminal papers of Dani Rodrik [2004, 2007]: this analysis shows what we could label the «Jacquemin-Rodrik Synthesis»; i.e., a positive industrial policy aimed not only at coping with the traditional market failures, but one aimed at influencing the structural transformation of industries and nations. The EU's current situation is the subject of a specific paragraph given the potential role of a new industrial policy managed at the supranational level. From this framework emerges the strength of Italian manufacturing, and consequently the necessity to reform our fragmented (i.e., at the regional level of government) industrial policy. The renewal of our industrial policy should give Italy the chance to contribute to the debate in Brussels and Strasbourg where the EU is shaping a new approach for «a stronger European industry for growth and economic recovery».

JEL Classification: L10, L 50, L52.

Keywords: Industrial policy; Market failures; Structural transformation; Creative destruction; European Union.

Note on the Author

Franco Mosconi, Jean Monnet Chair, is Professor of Industrial Economics at the *University of Parma and at the European College of Parma*. e-mail: franco.mosconi@unipr.it ; homepage: www.cattedramonnet-mosconi.org

^(*)This paper builds on the articles originally published in the review “il Mulino”: *Una nuova politica industriale* (21 July 2010, on-line edition); *Una politica industriale europea* (N. 1/2011, January-February). The research has been carried out within the framework of the "Progetto di Ricerca di Rilevante Interesse Nazionale (PRIN) 2008 - Unita' di Ricerca dell'Universita' di Parma"

1. Prologue

Discussion immediately becomes difficult upon the mention of «industrial policy», and paradoxically this is true even after the disasters caused in the real economy – made-up of families, companies and workers – by what the late Edmondo Berselli [2010] in his *L'economia giusta* called «l'imbroglio liberista» [something like, the «free-market machine fraud»].

In fact, industrial policy always runs the risk of being treated like the «ugly duckling» of Andersen's fairy tale, while other public policies – such as monetary policy, fiscal policy and the like – seem to be destined to a future of «beautiful white swans». Currently, no one wants to deny the wisdom of central bankers or the virtues of a budget policy to keep public finances in order (even though one might add that infallibility lies elsewhere).

But going back to our fairy tale metaphors, the question is: do things stand exactly this way today? Do they stand this way after all that happened in the years following September 2008 and had such a terrible impact on Western economies? In a nutshell: is industrial policy wrong *per se* or it is time – as authoritative voices that we will discover along the way have underlined even recently – to develop a new industrial policy at European level?

This analysis exams the ideas and contributions of Alexis Jacquemin and Dani Rodrik. Unfortunately Professor Jacquemin is no longer with us, while Professor Rodrik is in full activity. They both taught, and Professor Rodrik still does, in prestigious universities: at Louvain-la-Neuve the former, at the J. F. Kennedy School (Harvard University) the latter. Beside teaching and doing academic research, they both collaborated with important institutions: the European Commission headed by Jacques Delors

in the case of the late Jacquemin; UNIDO and the World Bank in the case of Rodrik. These two academics can be considered among the leading economists of their generations. They dealt extensively with industrial policy and do not consider it wrong, useless or damaging.

The paper is organized as follows. In paragraph 2, as we mentioned, we will take a look at the theories of both Jacquemin and Rodrik. Although they were developed in different periods, in our opinion they share a common inspiration, which has led us to talk of a «Jacquemin-Rodrik Synthesis». Paragraph 3 analyzes in further detail Rodrik's theory as it has emerged from an important debate launched by "The Economist". We believe it is a sign of the times that in the readers' vote Rodrik's ideas prevailed over the thesis «industrial policy always fails» proposed by the London magazine. In paragraphs 4 and 5 the focus of our analysis shifts from the theory to policy options, emphasizing a European perspective: first, by examining what the European Union (EU) has proposed since 2002 in terms of new industrial policy; then, by examining the case of Italy, which is still the second European manufacturing power after Germany. Paragraph 6 draws the conclusions of this paper.

2. The contributions of Alexis Jacquemin (1980s) and Dani Rodrik (2000s)

In his seminal book, *The New Industrial Organization*, Alexis Jacquemin [1987] reserved the entire last chapter, the sixth, on industrial policy. The *leitmotiv* of the whole book is the contrast between «market forces» and «strategic behaviour», a contrast that could not fail to have an impact on industrial policy choices.

Jacquemin argues that «for those who have full confidence in market mechanism the only real requirement is the existence of a healthy macroeconomic environment»; in contrast «there is a whole tide of research questioning whether the market alone can efficiently accomplish selections leading to new industrial organizations».

According to Jacquemin, the latter view leads us to the classic two arguments that justify an industrial policy: *[i]* «the long list of so called market “failures”» [the author openly mentions the support for R&D in high-tech sectors]; *[ii]* «the strategies that deliberately influence the transformation and the industrial reorganization of sectors, and nations».

Hence his criticism of the domestic policies of Member States pursuing the creation of «National Champions» and, at the same time, his proposal on the «need to create a *concerted European industrial policy that will help overcome industry strategies along national lines*, to reduce the barriers among large national enterprises and to develop a large domestic European market for industrial applications» (emphasis mine).

It's important to note that this is a far-sighted vision as it has currently reappeared in the EU - a quarter century later.

After Jacquemin's work (in the Eighties) and a decade of silence on industrial policy (the Nineties) – a policy area that fell victim both of its own past mistakes and of the rise of a dominant ideology (the so-called *Washington Consensus*) – we quickly reach the 2000s.

Halfway through the new decade a couple of papers by Dani Rodrik shed light on what industrial policy really at the start of the 21st century. To avoid misunderstandings, the adjective «new» has been added to industrial policy, in order to distinguish it from the industrial policy of the past, which was focused on the «picking the winners» and, more generally, on excessive public intervention (above all by the nation-state) in the economy, mainly through the state ownership of industrial and/or services enterprises and through «State aids».

Rodrik's papers that are usually referred to in the economic literature are those of 2004 and 2007, respectively entitled *Industrial Policy for the Twenty-First Century* and *Normalizing Industrial Policy*. In both papers the author illustrates «his own» definition of industrial policy: «I will use the term to denote policies that stimulate specific economic activities and promote structural change» (not only, he argues, in the manufacturing industry but also in all kinds of «non-traditional activities» in agriculture or in the services). Like Jacquemin, Dani Rodrik starts from a conventional point of view for industrial policy, i.e. «market failures» («markets for credit, labor, products, and knowledge», he adds) and the need to deal with them. Yet, like Jacquemin, there more to Rodrik's thought: «The right model for industrial policy is not that of an autonomous government applying Pigovian taxes or subsidies but of strategic collaboration between the private sector and the government with the aim of uncovering

where the most significant obstacles to restructuring lie and what type of interventions are most likely to remove them [...] It is innovation that enables restructuring and productivity growth».

Rodrik continues to promote the principles inspiring a modern industrial policy in the debate promoted by “The Economist” in July 2010 with the title: «*This house believes that industrial policy always fails*». Josh Lerner (Harvard Business School) was called to support the thesis of the British weekly.

3. “The Economist” Debate on Industrial Policy

Have “The Economist” readers suddenly become all nostalgic about some form of planned economy? Are they somehow missing the notorious five-year plans? This is unlikely and one hopes that no one will judge the result of the debate on industrial policy promoted by the British weekly magazine through the lenses of the past. There is no nostalgia in the minds of the 72% of the readers who, on Saturday 17 July 2010, at the end of an engaging week of debate between two opposite theses, have defeated the motion of “The Economist”, which was the following: «*This house believes that industrial policy always fails*».

Examining what is happening around the world, starting with the United States, Dani Rodrik, in his counterargument, asks is it really true that industrial policy «always fails»?

It is almost impossible, in this short article, to summarize how rich the debate was. The debate was divided in three phases (“Opening remarks”, “Rebuttal statements”, “Closing statements”) which lasted a whole week (12-17 July) and was moderated by a journalist of “The Economist”, Tamzin Booth. The debate was also enriched by many online comments by the readers, as well as by two special guests¹. However, two fundamental notes must be made: one regarding the method and the other the substance of the debate.

The first regards the profile of the two opponents invited by the weekly to animate the debate: two champions, to use a sports’ term. Each of them with his own history, as has clearly emerged

¹The Debate is available at:

<http://www.economist.com/debate/overview/177>

in all stages of the debate, which at times has been a fierce fight and at times a fencing match. Josh Lerner teaches Investment Banking and is the author of a rightly celebrated book: *Boulevard of Broken Dreams* [Lerner 2009]. It is an accurate comparative analysis of «why – we are quoting the subtitle – public efforts to boost entrepreneurship and venture capital have failed – and what to do about it». Therefore it was logical that “The Economist” choose Lerner. On the other hand, Rodrik was a natural choice as he has reopened the debate on industrial policy in the international economic literature [Rodrik 2004, 2007]. His basic thesis is that normalization means considering this public policy like any other policy. Do governments deal with education, health and taxes, while addressing the interests of advocacy groups and lobbies? Obviously the answer is yes, but this cannot prevent them from intervening. Indeed, everybody – governments and scholars – discuss on how to offer these public services to all citizens in the best way possible. The same – the argument goes – needs to be done with industrial policy, without getting scared by problems, which exist, such as the «regulatory capture» and the fine-tuning of the right incentives for the implementation and assessment of aid schemes for enterprises.

A basic summary of the substance of the debate can be found in this statement made by Rodrik [“The Economist” 2010] in the first phase of the Debate on 12 July:

«The essence of economic development is structural transformation, the rise of new industries to replace traditional ones. But this is not an easy or automatic process. It requires a mix of market forces and government support. If the government is too heavy-handed, it kills private entrepreneurship. If it is too standoffish, markets keep doing what they know how to do best, confining the country to its specialisation in traditional, low-productivity products.» (§20).

In the face of such great challenges, which remind us of Joseph A. Schumpeter's «creative destruction», the question is not so much to ask «whether» there should be an industrial policy, but rather «how» to organize, manage and assess its outcomes. Three quarters of the voters (72% against 28%) agree with Rodrik, as the moderator of the debate declares in the “Winner announcement”.

However, Lerner does not agree - or at least not completely; in fact, in his final remarks there is a timid and partial opening to Rodrik's thesis: with industrial policy there are both unresolved conceptual problems and some downright «failures in its implementation», but something can be done. The counterevidence is Lerner's book – cited and recommended by Rodrik himself – where the author speaks about the historically important role played by the U. S. Department of Defense in the growth of the Silicon Valley [Lerner 2009].

Following this debate from a European perspective, there is an additional argument to that can be made².

² Form my own contribution to this Debate, see: «Comments from the floor, 9/58» (<http://www.economist.com/debate/overview/177>). See also: Annex n. 1.

4. The European Perspective (I)

It is thanks to the European Commission, at the time headed by Romano Prodi with the Finnish commissioner Erkki Liikanen in charge of the dossier, that industrial policy has returned to the top of the European agenda. This started with the seminal Communication of December 2002 (*Industrial Policy in an Enlarged Europe*) – a seminal one.

Many other Communications of the Commission have followed in the next years until the present day. In fact, the last one is of October 2012. Appendix N. 2 shows a timeline of these documents in order to facilitate a more rapid *excursus*. As you will see, along with the Communications which are explicitly devoted to industrial policy, we have indicated two other strategic documents of the European Commission («Europe 2020», «Monti Report») for the parts –which are far from irrelevant – that deal with this policy area.

In a previous article published in “The European Union Review” [Mosconi 2006], I have already outlined this new industrial policy, also to shed light on the «European Champions». These are very different from the «National Champions» that were typical of the old industrial policy. Dario Velo [2004] talked about the «large European federal enterprise». The main type of European Champions (which I called «Type II») comprises large enterprises that originated in the internal market from cross-border mergers and acquisitions (M&A) in the same sector (horizontal M&A).³

³ Two years later I returned on «European Champions» with the paper presented at the 10th EUNIP International Conference [Mosconi 2007].

More broadly, it should be observed that in Europe the rediscovery of the industrial policy – after more than a decade of silence on the subject – has been accompanied by a new impulse to the academic studies in this field. In a literature that has become significant again, we would like to mention, by way of example, the works of Bianchi and Labory [2006], Pelkmans [2006], Budzincki and Schmidt [2006], Brancati (2010), Chang [2010], Aghion, Boulanger, and Cohen [2011] up to the most recent of Owen [2012]. In Italy, “L’Industria-Rivista di economia e politica industriale” boasts a long tradition of studies in this field (among the most recent contributions, those of Pontarollo [2010, 2011] and Pozzi [2008]). In the Introduction to their *Handbook* Bianchi and Labory significantly write:

«The meaning of the term ‘industrial policy’ has changed a lot over time. Until the 1980s, the term meant the direct intervention of the state in the economy, the direct control by the government of large parts of the production apparatus and a set of public action aimed at limiting the extent of the market and at conditioning productive organization. Nowadays, the term ‘industrial policy’ indicates instead a variety of policies which are implemented by various institutional subjects in order to stimulate firm creation, to favour their agglomeration and promote innovation and competitive development in the context of an open economy» [Bianchi and Labory 2006, xv].

If the principles and objectives of the new industrial policy are clear and agreed upon, the question of how, in the European countries, it should be designed and implemented remains open. The EU as a supranational level of government should be considered in this policy area as our natural point of reference. There are two main reasons for this.

First, since December 2002 the European Commission has started an important study on *Industrial Policy in an Enlarged Europe*. The Communications have continued over the decade. The «integrated approach» that has been developed Communication after Communication does certainly develop the «horizontal» measures (to use the jargon of this policy area) that aim to make markets more and more efficient by removing non-tariff barriers and excessive regulations; but it also focuses on «vertical» applications – i.e., on applications to certain industries. In its «Reference documents» on industrial competitiveness, the European commission distinguishes between «cross-sectoral studies» and «sector specific studies». Many sectors are mentioned in the documents the Commission issued between 2002 and 2012, and among them the most important are the research-intensive ones: biotechnology and life sciences, information technology, aeronautics and space technology, as well as the green economy. Summing up, along the way the spectrum of industrial sectors has been broadened, and now it includes all the «advanced manufacturing technologies» as well as the «key enabling technologies», together with «bio-based products, sustainable industrial and construction policy and raw materials, clean vehicles, smart grids».

This is the right way to avoid making mistake: drawing a short list of supposed key sectors, meaning that other industries do not play an important role in the European manufacturing. This is not true, especially in Germany and Italy where there are no industries less deserving of attention. Examination of the entire mechanical and industries shows a continuous process of incremental technological innovations, together with radical organizational changes which have led to a major transformation of the industries themselves. The German motor industry or the

Emilian evolution of the mechanic industry into mechatronics are perfect examples. Another examples in Italy are the world-famous brands that have flourished in the fashion industry not only in Milan and Florence, but just everywhere in the small towns of the so-called «Third Italy» (Veneto, Emilia-Romagna, Marche, etc.), the traditional location of Marshallian industrial districts too soon given up for dead.

Nevertheless, the European Commission is right to place R&D-intensive industries – and the most competitive sectors – on a different plain because of the fundamental growth-enhancing effects they can have [Aghion, Boulanger, and Cohen 2011]. These are industries that often need radical innovations – downright changes of paradigm – considering also that the EU is lagging behind the United States in terms of technological advancements and in view of the new challenge coming from Asia and from the emerging countries in general (the famous BRICs but not only).

These industries require a new industrial policy, such as the «Jacquemin-Rodrik Synthesis». In other words, a policy that «overcomes industry strategies along national lines» thanks to combined efforts at the European level; and a policy that, thanks to a «strategic cooperation» between the public and private sphere of the economy, is concerned above all with the provision of public goods for the productive sector. Rodrik [2004] points out that:

«Public labs and public R&D, health and infrastructural facilities, sanitary and phitosanitary standards, infrastructure, vocational and technical training can all be viewed as public goods required for enhancing technological capabilities. From this perspective, industrial policy is just good economic policy of the type that traditional, orthodox approaches prescribe».

If the ideas are so clear, then where's the rub in today's Europe? In other words, why is it that after (nearly) a decade of Brussels elaborating on the new industrial policy, the practice is still far away from a fully integrated and supranational approach? The answer has many facets and is due to the fact that:

- the EU budget has remained essentially the same, with a substantial part (almost 40%) of it still destined to agriculture (CAP), in spite of some changes made over the last decades;
- this budget has not been thoroughly reformed, as the «Sapir Report» [Sapir *et al.*, 2004] commissioned by President Prodi sought by creating a «Fund for economic growth» amounting to 45% of the total resources;
- there is still a «missing link in the new EU cohesion package» [Marzinotto 2012] – i.e., the use of EU Structural and Cohesion funds (2014-2020) «to support long-term investment». With the new European Semester process – the Bruegel's argument goes – «consistency» should exist not only *across policy* areas but also *across national reform plans*: «A European industrial policy strategy – Benedicta Marzinotto concludes – is what would contribute to enhanced coordination across countries»;
- the research and technology policy, while there are important EU programs that deal with it, is mainly carried out by the single Member States, each of them with its own research «system» and its own «Act» for technological innovation (not to mention the further fragmentation of powers between central government and regions that occurs in Italy);
- it is also difficult to reach agreement on the Community patent;

- after the big crisis of 2008 the rediscovery of «Colbertism», timid in some countries and passionate in others, in more than one case has brought the risk of old-school industrial policies;
- the creation of big European infrastructural networks (the *Trans-european Networks* of President Delors' White Paper [European commission 1993]) remained a dead letter for many years (decades);
- the Eurobonds, conceived by Delors himself to finance the *TENs* mentioned in the previous item, in spite of several types that have been devised⁴ since then, have not yet become part of the *acquis communautaire* (only some minor steps forward have been made).

Combining the eight reasons mentioned reveals the opposite of the transfer to the supranational level of policies and instruments (starting with R&D) that today are a substantial part of the new industrial policy. Moreover, a policy conceived this way (i.e., aiming at enhancing the competitiveness of the European industry) is not in the least in contrast with one of the cornerstones of the Treaties (competition policy).

Here is the second reason explaining why Europe is our natural point of reference when we discuss growth-related issues. Speaking at the University of Parma, some years ago Giuliano Amato [2004] explained how there is «no contradiction» between competition policy (originally, articles 85 and 86 of the Treaty) and the policies referred to in article 130 of the Maastricht Treaty, which dealt precisely with industrial policies: «A concept –

⁴ It is worth mentioning, among the most innovative and forward-looking proposals, the one called «EuroUnionBond» by Alberto Quadrio Curzio and Romano Prodi [2011, 2012].

he said - that is now linked to that of competitiveness». More recently, Mario Monti [2010] has returned to this topic in his report for the President of the European Commission, José M. Barroso, entitled *A New Strategy for the Single Market* – which highlights that the single market in Europe remains the first and best industrial policy. Examining this broader context of an «active industrial policy», Monti asserts: «The word is no longer taboo». Reflecting on the worries voiced in some economic literature that industrial policy and competition rules might be opposing terms, he states: «The opposite is true: competition is necessary to create the varieties, comparative advantages and productivity gains on which growth and innovation flourish».

In conclusion, Europe remains an economy where industry (manufacturing plus construction) still plays a fundamental role: this is apparent from some structural indicators analyzed comparatively and published in Appendix N. 3. Of course we need to recall the profound changes occurred over the last decades: on one side, the diminishing role of industry (especially of manufacturing) in the creation of added value in Europe; on the other, the rise of the so called emerging countries in the world economy. It is in these two changes of scenario that lies the true reason for a new European industrial policy. Not accidentally, in its last Communication on the subject, the European Commission [2012] suggests that the fundamental purpose of the «partnership between the EU, its Member States and industry» be that of trying «to reverse the declining role of industry in Europe from its current level of around 16% of GDP to as much as 20% by 2020».

Manufacturing Matters: some years after the financial crash of September 2008, this is by far the greatest re-discovery of

Western countries, including the «Anglo-Saxon economies». Examining this aspect is beyond the scope of this paper, but with regard to the United States we could mention some positions and initiatives of President Obama and of his Administration⁵, as well as the ideas of some of the most influential professors of the Harvard Business School⁶. As far as the United Kingdom is concerned, we can go back to the debates of “The Economist”, in this case to the one that took place in the summer of 2011, exactly one year after the debate on industrial policy of which we have given a detailed account in paragraph 3. This time the thesis

⁵ As a matter of fact: (i) on June 24, 2011, speaking at the Carnegie Mellon University, President Obama said: «*Today, I'm calling for all of us to come together- private sector industry, universities, and the government- to spark a renaissance in [...] manufacturing and help our manufacturers develop the cutting-edge tools they need to compete with anyone in the world... With these key investments, we can ensure that [...] remains a nation that 'invents it here and manufactures it here' and creates high-quality, good paying jobs for [...] workers*», and he launched the Federal program called “Advanced Manufacturing Partnership (AMP)”:

http://manufacturing.gov/advanced_manufacturing.html; (ii) on June 29, 2011, President Obama visited an Alcoa plant in Iowa highlighting a «*manufacturing revival*», that is «*adding precious private-sector jobs*»; (iii) American manufacturing was the first of the main topics of 2012 President Obama's *State of the Union Address* on January 24: «*[...] We will not go back to an economy weakened by outsourcing, bad debt, and phony financial profits. Tonight, I want to speak about how we move forward and lay out a blueprint for an economy that's built to last – an economy built on American manufacturing, American energy, skills for American workers, and a renewal of American values. Now, this blueprint begins with American manufacturing [...]*».

⁶ Professor Gary Pisano (Harvard Business School) pointed out that: «*One of our key messages is to get students to appreciate that manufacturing involves a lot of knowledge work. There has almost been a whole generation of MBA students and managers who have been brought up on a false idea that manufacturing is kind of the brawn and not the brain, and that the country should focus on the brain.*» (“HBS Weekly Newsletter”, March 28, 2011).

of the London magazine was the following: «*This house believes that an economy cannot succeed without a big manufacturing base*». From the way the thesis is formulated, we think we can say that a change of attitude emerges compared to the previous year: here the topic of manufacturing is tackled positively, whereas the issue of industrial policy was dealt with negatively («always fails»). In his Opening statement in defense of his motion Ha-Joon Chang [“The Economist” 2011] writes:

«There is truth in the argument that above a certain level of development, countries become ‘post-industrial’, or ‘deindustrialised’. But this is only in terms of employment –the falling proportion of the workforce is engaged in manufacturing. Even the richest economies have not really become post-industrial in terms of their production and consumption. From expenditure data in current (rather than constant) prices, it may appear that people in rich countries are consuming even more services, but this is mainly because services are becoming even more expensive in relative terms, thanks to structurally faster productivity growth in manufacturing».

While in 2010 the readers defeated the thesis of “The Economist”, in 2011 they approved it – again with a large majority (76% against 24%)⁷ – thus giving consistency to the two results, which can be summarized as follows: manufacturing matters and in order to make it grow a smart industrial policy is needed.

⁷ Ha-Joon Chang (Cambridge University) was defending the motion on behalf of “The Economist”, while Jagdish Bhagwati (Columbia University) represented the opposition; for the whole Debate, with Patrick Lane as moderator (www.economist.com).

If a wind of change – the rediscovery, in the theory and in the practice, of industry and industrial policy – is up in the Anglo-Saxon world, an additional responsibility falls on the two European countries that have never abandoned the manufacturing tradition, not even in the years dominated by the *Washington consensus*. The reference, with all the due differences, is to Germany and Italy. And it is exactly on our country that we will focus in the next paragraph.

5. The European Perspective (II): the implications for Italy's manufacturing

Romano Prodi [2009] envisaged the image of a «cylinder that goes from Hamburg to Florence» to describe the core of the European manufacturing industry. It follows that Germany and Italy give a substantial contribution to the creation of the industrial added value of the EU, which as we said remains important also at international level (again, please see Appendix N. 3). In the political debate this situation is typically referred to, with what has become a sort of mantra for the policy makers of our country, as «Italy is the second manufacturer of Europe after Germany».

The structural characteristics of the German industry (first of all, firm size and industry specialization) are widely known. Here we can only mention some of the institutions and of the policies that substantially contribute to its performance. First: from the point of view of the «investment in knowledge» (research, innovation, human capital) – the true keystone for a really new industrial policy – we should mention the big scientific institutions: Max Planck, Fraunhofer, Leibniz, Helmholtz and the Fachhochschulen network (which are known as Universities of Applied Sciences in the international literature). Second: the Federal Ministry of Economics and Technology has among its dossiers that of industrial policy, which is characterized by a «horizontal orientation» but does not leave out some strategic industries or the research-intensive sectors. Third: the Federal Ministry of Education and Research [2010] has written an updated version of the «High Tech Strategy 2020 for Germany» entitled *Ideas. Innovation. Prosperity*, which is entirely focused on Germany's

ability to deal with some key global challenges (the "key technologies" are five: climate energy, health nutrition, mobility, security and communication).

Now, how many of these institutions and policies can be found in Italy?

At first, the distance between the two countries seems considerable in all the above mentioned aspects. The parallelism with Germany («we are the second manufacturer in Europe») should therefore be completed by reforming institutions and policies in support of industry in the direction of the German model – a real benchmark.

Given its manufacturing traditions, Italy has much to offer and do in all these matters. If there is a place in Europe (or in the world) where it is worth studying again and putting into practice industrial policy – the «normalized» one, to quote Dani Rodrik – that place looks very much like Italy.

The question becomes: given the supranational perspective we have tried to outline in the previous paragraphs of this paper, what can the conceptual framework and the European context offer to a country like Italy? A country that – as the Appendix N. 3 shows - is still the eighth industrial power of the world, and the second in the EU [Centro studi Confindustria 2012].

The implications of the analyses made in the previous pages can be summarized at least as follows:

- (i) First, abandoning the Italian manufacturing to its own destiny is something we cannot afford to do: the backbone of the country's economy is the widespread entrepreneurship;
- (ii) Second, the work of the various Authorities that have been established in the country since 1990 guarantees the

- correct application of competition policy; but even supposing that they all function in a rigorous and efficient way, they are not enough to support the great transformations that our productive structure needs to undergo in order to be able to compete around the world;
- (iii) Third, there are horizontal measures valid for all the productive sectors. However, there is also a growing consensus on the need for some vertical applications, which are specific to individual industries. Among these sectors, the most promising are the pharmaceutical and biotechnology industry; the health industry, the aerospace and defense industry; energy and environmental protection. Thus, returning to the original question: can the Italian industrial policy afford the luxury of watching with detachment (or, worse, distractedly) what is going on in these macro-sectors? The answer is obviously no;
- (iv) Fourth, the Italian manufacturing – that is, the part of our economy which for decades now has been really exposed to international competition (as opposed to many service activities that are still protected by entry barriers) – must respond to the challenges that come, for example, from both Germany and China. Therefore, successful firms have been undergoing a metamorphosis, for example in the strategic functions of companies: according to the Bank of Italy [Bugamelli *et al.* 2009] and ISAE [2008, 2009], the «upstream and downstream» functions, such as R&D and marketing, are growing more than the productive process in a narrow sense. Moreover, often the optimal size for businesses to operate is also changing. Another change – although at a slow pace – is Italy's industry specialization: that is, the specific industries and/or their segments (the

famous niches] that are growing more in world markets [and towards which it would be better to gradually move] or that, on the contrary, are most affected by the competition of the new emerging countries [and from which it would be wise to depend on less and less over time];

(v) Fifth, Schumpeter concept of «creative destruction», which is referred to by both Jacquemin and Rodrik in their works, certainly has in the market dynamics its *primum movens*. But is it so strange to say that it also needs an (enlightened) guide? In two editorials of the end of July 2010 for the daily “Il Messaggero”, Romano Prodi wrote about the then persisting lack of a Ministry for the Economic Development (formerly, Ministry of Industry) and about what the agenda would be for the new Minister. Among other things he wrote: «[...] Even if we don't call it by its name, industrial policy is the strong point also of the countries that are more based on market economy. It is so in Germany, where besides the ministry in charge of financial policy there is a symmetrical institution that directs the real economy. It is so in the United States, where impressive resources are allocated to innovative sectors, starting from the research and production of new sources of energy. Not to mention France, where national interests are protected with instruments that perhaps go even beyond the shared European rules. In Italy the post has been left vacant for months on end [...]» [our translation];

(vi) Sixth, many policy areas still exist where the strategic European-style cooperation between public and private sector - without which any new industrial policy project is doomed to fail - could be experimented. Think of: (a) a new impetus for the implementation of programs such

as «Industria 2015» [which was started by the Italian Government in 2006-2007]; [b] the increasing development of the so-called «business networks» [*reti d'impresa*] following the provisions of the Act of 2010 on *Contratti di rete* to strengthen small enterprises; [c] the re-launching of technical education and vocational training – which is vital in a country with a strong manufacturing base, such as the German Fachschulen clearly proves; [d] the institution, in the field of applied research, of Fraunhofer Institutes through what can be defined – borrowing the *modus operandi* of the EU – as «reinforced cooperation» [D. Velo e F. Velo 2007, 8-11]; in this instance, among regions characterized by a common manufacturing vocation with a strong export propensity, as is the case of the Italian North-east; [e] with regard to this, it should be remarked that the support to internationalization is another fundamental area in which reinforced cooperation should be experimented in order not to waste resources in too many directions;

- (vii) Seventh, a new industrial policy at national level should be able to play a role also at the European level, where an increasingly numbers of important decisions are taken. From this point of view, things still don't add up in Italy, and not only – let's make it clear – due to the Ministry of Economic Development: it's the whole chain of command that needs to be revised. In fact, the impression is that the mere combination of «regional» industrial policies (the 2001 reform of Title V of the Italian Constitution has given important powers to the Regions in this policy area) does not yield a full-fledged national industrial policy, nor a vision of the future manufacturing that can be supported at

European level⁸. On the other hand, the proximity of the Regions to SMEs and industrial districts puts them in a privileged position to deal with the Ministry of Economic Development and that of Education, University and Research. Striking the right balance between these needs can be one of the tasks of the new Italian federalism that is heaving into sight.

⁸ For an analysis of the «reinforced cooperation» in the «strategic fields of industry and research», see: D. Velo, F. Velo [2007, 38-47].

6. Conclusions

In sum the conclusion of “The Economist” Debate show the importance of Rodrik’s view. This should be seen as a sign of the times: the Nineties were the decade of silence on industrial policy where the 2000s were the decade of its partial rediscovery. According to the «Jacquemin-Rodrik Synthesis» the task of a new industrial policy is twofold: it is not only a matter of market failures (i.e., a public policy to cope with them), but also of structural transformation (i.e., a policy mix of market forces and government support in order to speed-up the process). The severe economic crisis that followed September 2008 and the collapse of the financial system has played a role in nurturing this new attitude.

The European perspective – as several Communications of the Commission on this topic clearly demonstrate - has become more important. All in all, the basic idea is – first and foremost - to envisage a new strategy to re-launch the Single Market, which has historically been – and can continue to be – the true driving force of European integration (the so-called «horizontal orientation»). Secondly, a new «vertical approach» has come into play.⁹ It follows that without forgetting the needs of the most traditional part of the EU manufacturing, new technology areas¹⁰ deserve special attention for a couple of reasons: because the world is on the eve of the third industrial revolution (and Europe is not starting from scratch), and because they are the areas for an

⁹ See also: Mosconi [2005].

¹⁰ «Green energy, clean transport, new production methods, novel materials and smart communication systems», according to the 2012 Commission’s Communication.

increasingly effective partnership between Institutions (the EU and its Member States), industry, universities and other research bodies. A country like Italy – the EU second biggest manufacturing power – should be able to deal with this new European perspective, finding ways to reshape its industrial policy: knowledge investment, firms' size growth and support to their internationalization appears to be the fundamental goals. In so doing, Italy will be in a better position to take part in the renewal of economic governance (among many other dossiers, the new Budget 2014-2020 is a good example of this) which are under way in Brussels and Strasbourg. All the Member States face a big challenge: filling the gap which already exists between the European and national levels in the field we would like to label as «The New Industrial Policy» – i.e., supranational R&D investment, Centers of excellence for human capital, TENs, etc. Two years ago, during a visit to Veneto, President Giorgio Napolitano [2010] said:

«I think the time has come for Italy to give itself a serious industrial policy again in the European context, based on the general rules of European integration and abiding by the great principles of free competition. We need it also to encourage employment, especially the employment of young people [...]» [our translation].

The evidence promoting industrial policy is strong – it is hard to believe that all the thinkers and policy-makers, examined above, have got it wrong and at the same time. In other words, the fate of industrial policy does not necessarily have to be that of the «ugly duckling», to recall the Andersen's fairy tale mentioned at the beginning. With the enduring crisis of real economy, the time has come to implement – with good sense and foresight – a new policy for the manufacturing industry, given the role this latter

plays in the overall economic development of a country. The «beautiful white swans» do not exist in economic policy, and it is better to leave them to the fairy tales our children love so much.

*
* *
*

References

AGHION P., BOULANGER J., COHEN E. [2011], *Rethinking industrial policy*, "Bruegel Policy Brief", 16th June 2011 (www.bruegel.org).

AMATO G. [2004], *Politica industriale e politica della concorrenza nell'Europa unita*, in Mosconi F. (ed.) [2004], pp. 99-112.

BERSELLI E. [2010], *L'economia giusta*, Torino, Einaudi.

BIANCHI P., LABORY S. [2006], (eds.), *International Handbook on Industrial Policy*, Cheltenham, Edward Elgar.

BRANCATI R. [2010], *Fatti in cerca di idee. Il sistema italiano delle imprese e le politiche tra desideri e realtà*, Roma, Donzelli.

BUDZINCKI O., SCHMIDT C. [2006], *European Industrial Policy: Economic Foundations, Concepts and Consequences*, 24 July (www.ssrn.com).

BUGAMELLI M., SCHIVARDI F., ZIZZA R. [2009], *The euro and firm restructuring*, Banca d'Italia, "Tema di discussione" n. 716, Rome, June (www.bancaditalia.it).

CENTRO STUDI CONFINDUSTRIA [2012], *Vuoti di domanda e nuovi divari fra le imprese. Manifattura cuore dell'innovazione: torna strategica la politica industriale*, "Scenari industriali" n. 3, Rome, June (www.confindustria.it).

CHANG H-J [2010], *Industrial Policy: Can We Go Beyond and Unproductive Confrontation?*, Turkish Economic Association, "Discussion paper" 2010/1 (www.tek.org.tr)

(THE) ECONOMIST [2010], *Industrial policy: This House believe that industrial policy always fails*, "Economist Debates", July (www.economist.com)

– [2011], *Manufacturing: This House believes that an economy cannot succeed without a big manufacturing base*, "Economist Debates", June-July (www.economist.com).

EUROPEAN COMMISSION [1993], *Growth, Competitiveness, Employment: the Challenges and Ways Forward into the 21st Century*, “White Paper”, Brussels, December (http://europa.eu/documentation/official-docs/white-papers/index_en.htm#block_15).

– [2002], *Industrial Policy in an Enlarged Europe*, Brussels, 11 December.

– [2012] *A Stronger European Industry for Growth and Economic Recovery – Industrial Policy Communication Update*, Brussels, 10 October.

FEDERAL MINISTRY OF EDUCATION AND RESEARCH [2010], *Ideas. Innovation. Prosperity. High-Tech Strategy 2020 for Germany*, Bonn-Berlin.

HARVARD BUSINESS SCHOOL [2011], *Why Manufacturing Matters*, in “HBS Weekly Newsletter”, Cambridge (MA), March 28 (<http://hbswk.hbs.edu/item/6664.html>).

ISAE [2008], *Rapporto Isae, Previsioni per l’economia italiana – Comportamenti di impresa*, Rome, March, pp. 163-225.

– [2009], *Rapporto Isae, Previsioni per l’economia italiana – Ciclo, imprese, lavoro*, Rome, February, pp. 175-189.

JACQUEMIN A. [1987], *The New Industrial Organization. Market Forces and Strategic Behavior*, Cambridge (ma), The MIT Press, pp. 167-212.

LERNER J. [2009], *Boulevard of Broken Dreams: Why Public Efforts to Boost Entrepreneurship and Venture Capital Have Failed—and What to Do About It*, Princeton (NJ), Princeton University Press.

MARZINOTTO B. [2012], *Industrial policy: the missing link in the new EU cohesion package*, Brussels, 26th April (www.bruegel.org).

MONTI M. [2010], *A New Strategy for the Single Market – At the Service of Europe’s Economy and Society*, “Report to the President of the European Commission – J. M. Barroso”, Brussels, 9 May

http://ec.europa.eu/bepa/pdf/monti_report_final_10_05_2010_en.pdf.

MOSCONI F. [2004] (ed.), *Le nuove politiche industriali nell'Europa allargata*, Parma, Monte Università Editore (2005, 2nd updated edition)

– [2005] *La politica industriale europea e la competitività italiana nei settori high-tech*, in P. Guerrieri (ed.), «Tornare a crescere. Idee per la competitività dell'Italia», «Arel Informazioni», Rome, N. 2.

– [2006], *The Age of «European Champions» – A New Chance for Eu Industrial Policy*, in «The European Union Review», vol. 11, No. 1, March, pp. 29-59.

– [2007] *EU Policy-Making, the Single Market and European Champions: Towards a Taxonomy*, «Proceedings of the 10th EUNIP (European Network on Industrial Policy) International Conference», CD Rom, Faculty of Economics, University of Florence, Italy, 12th-14th September 2007 (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1988116).

NAPOLITANO G. [2010], *Saluto del Presidente Napolitano in occasione della intitolazione di una piazza a Gianni Pellicani*, Mestre (VE), 2 Settembre (www.quirinale.it).

OWEN G. [2012], *Industrial policy in Europe since the Second World War: what has been learnt?*, February (<http://eprints.lse.ac.uk>).

PELKMANS J. [2006], *European Industrial Policy*, in Bianchi P., Labory S. (eds.), pp. 45-78.

PONTAROLLO E. [2010], *Crisi economica ed economisti industriali*, in "l'industria", N. 3 (luglio-settembre), pp. 391-396.

– [2011], *L'industria oltre i numeri: chiavi di lettura per il futuro dell'economia italiana*, in "l'industria", N. 3 (luglio-settembre), pp. 385-390.

Pozzi C. [2008], *L'Italia e i volti della globalizzazione: il ruolo della politica industriale*, in Pozzi C. (ed.), "l'industria"-Numero speciale 2008/1, pp. 7-14.

QUADRIO CURZIO A., PRODI R. [2011], *EuroUnionBond, here is what must be done*, "Il Sole 24 Ore", 23 August (www.ilsole24ore.com)
– [2012], *EuroUnionBond, why are we proposing them again?*, "Il Sole 24 Ore", 23 August (www.ilsole24ore.com).

PRODI R. [2009], *Industria pilastro del paese*, article by F. Locatelli, "Il Sole 24 Ore", 10 September, p.2
– [2010a], *Ministero dello Sviluppo Economico, un'amnesia nel paese dei ritardi*, "Il Messaggero", 24 July (www.romanoprodui.it).
– [2010b], *L'agenda del nuovo Ministro dello Sviluppo: Mercato e Stato, la sfida del rilancio si gioca in due*, "Il Messaggero", 29 July (www.romanoprodui.it).

RODRIK D. [2004], *Industrial Policy for the Twenty-First Century*, John F. Kennedy School of Government-Harvard University, September
(<http://www.hks.harvard.edu/fs/drodrik/Research%20papers/UNIDOSep.pdf>).
– [2007], *Normalizing Industrial Policy*, John F. Kennedy School of Government-Harvard University, September
(http://www.hks.harvard.edu/fs/drodrik/Research%20papers/Industrial%20Policy%20_Growth%20Commission_.pdf).

SAPIR A. ET AL. [2004], *An Agenda for a Growing Europe: The Sapir Report*, Oxford, Oxford University Press.

VELO D. [2004], *La grande impresa federale europea. Per una teoria cosmopolita dell'impresa*, Milano, Giuffrè editore.

VELO D., VELO F. [2007], *La cooperazione rafforzata e l'Unione Economica Europea: la politica europea dell'energia*, in Velo D. (ed.), «La cooperazione rafforzata e l'Unione Economica. La politica europea dell'energia», Milano, Giuffrè editore.

(THE) WHITE HOUSE [2012], *President Obama's State of the Union Address*, Washington, January 24 (www.whitehouse.gov).

ANNEX N. 1

«THE ECONOMIST» DEBATE ON INDUSTRIAL POLICY

The following is the comment I wrote on July 13, 2011 during the debate launched by the «Economist» and sent to www.economist.com/debate:

Dear Madame,

I do share professor Rodrik's view that the «only debatable question about industrial policy is not "whether" but "how"».

Looking at the debate from a European standpoint, "how" in turn also means: "who" (i.e., the supranational level of government and/or the nation-states)? As the past decade shows, here lies a relevant part of the problem. In fact, the European Commission chaired by Mr Prodi – and with Mr Liikanen in charge of the dossier - firstly re-launched in December 2002 industrial policy with a Communication ["Industrial in an enlarged Europe"], whereas the other four followed in 2003, 2004, and 2005 – the latter unveiled by the Barroso Commission. All in all, the aim was to envisage a more modern policy capable of mixing – to put it in the traditional jargon - a "horizontal" approach (more pro-market reforms) with some "vertical" applications (in high-growth industries). Notwithstanding this new thinking, too little has happened on the ground since then: and this fact could, at first glance, prove that professor Lerner is right.

On closer inspection, the essence of the matter remains what the late Alexis Jacquemin – senior economic adviser to President Delors in Brussels – pointed out in his seminal book "The New Industrial Organization" (1987, see chapter 6 on Industrial policy): «The need for a concerted European industrial policy that will help overcome industry strategies along national lines, reduce

barriers between national champions, and develop a large home European market for industrial applications».

In doing so, what we now use to label “European Champions” should be a possible outcome of a New Industrial Policy, as Europe’s Airbus case – which you yourself mentioned in your *Moderator’s opening remark* – shows; and as illustrated by the France-Italy’s STMicroelectronics case.

In these successful examples, what matters is to strike the right balance between – in Dani’s Rodrik terms – «market forces and government support». But in Europe there is no Department of Defence as in the US. It follows that we should go back to the governance problem I mentioned before: which level of government? The EU and/or the Member states?

We should try to solve this problem keeping in mind that the New Industrial Policy is a twofold concept: the completion of the Single market (see the recent “Monti Report”); the provision of public goods such as R&D and education (increasingly important for high-tech industries, and not only).

[Franco Mosconi]

ANNEX N. 2 THE EU'S INDUSTRIAL POLICY: AN OVERVIEW

*
* *
*

[Brussels, 10 October 2012]

Communication from the Commission to the European Parliament, the Council... COM(2012)582

A Stronger European Industry for Growth and Economic Recovery – Industrial Policy Communication Update

«This Communication proposes a partnership between the EU, its Member States and industry to dramatically step up investment into new technologies and give Europe a competitive lead in the new industrial revolution [...] The Commission proposes to jointly focus investment and innovation **on six priority lines**: advanced manufacturing technologies, key enabling technologies, bio-based products, sustainable industrial and construction policy and raw materials, clean vehicles, smart grids».

[Brussels, 14 October 2011]

Communication from the Commission to the European Parliament, the Council... COM(2011)642

Industrial Policy: Reinforcing competitiveness

«The main drivers of strong economic growth are competitive firms of all sizes».

[Brussels, 28 October May 2010]

Communication from the Commission to the European Parliament, the Council... COM(2010)614

An Integrated Industrial Policy for the Globalisation Era: Putting Competitiveness and Sustainability at Centre Stage

«It is a flagship initiative of the **Europe 2020** strategy».

«This policy paper sets out a strategy for supporting a strong, diversified and competitive industrial base in Europe that offers well-paid jobs while generating less CO₂ and using resources more efficiently».

«Examples include: a more favourable business environment; faster industrial innovation; increased efforts to fight protectionism; support to help industry transform to meet new challenges [...] ».

[Brussels, 9 May 2010]

Report to the President of the European Commission, by Mario Monti

A New Strategy for the Single Market

Ch. 3, § 3.7 – *The single market and industrial policy* (pp. 86-88)

«The word is no longer taboo. Europe's leaders are discussing the merits, and limits, of an active industrial policy. The return of interest for industrial policy goes parallel with a renewed attention to the importance of manufacturing for Europe's economy and a wide concern for the profound transformation of the European industrial base triggered by the crisis [...]».

[Brussels, 3 March 2010]

Communication from the Commission [COM(2010)2020]

Europe 2020. A strategy for smart, sustainable and inclusive growth

Ch. 2, Flagship Initiative: "An industrial policy for the globalisation era" (pp. 15-16)

«[...]The Commission ... will draw up a framework for a modern industrial policy, to support entrepreneurship, to guide and help industry to become fit to meet these challenges, to promote the competitiveness of Europe's primary, manufacturing and service industries and help them seize the opportunities of globalisation and of the green economy [...]».

[Brussels, 2002-2007]

Communication(s) from the Commission

- 2007 (July): *Mid-term review of Industrial policy*

- 2005 (October): *Implementing the Community Lisbon Programme: A Policy Framework to Strengthen EU Manufacturing – Towards a more integrated approach for Industrial policy*

THE «INTEGRATED» APPROACH

Cross-sectoral policy initiatives (Horizontal)	New sector-specific initiatives (Vertical)
(1) An Intellectual Property Rights and Counterfeiting Initiative (2006)	(1) The Pharmaceuticals Forum (2006)
(2) High Level Group on Competitiveness, Energy, and the Environment (2005)	(2) Mid-Term Review of Life Sciences and Biotechnology Strategy (2006-2007)
(3) External Aspects of Competitiveness and Market Access (2006)	(3) New High Level Group on the Chemicals Industry (2007) and the Defence Industry
(4) New Legislative Simplification Programme (2005)	(4) European Space Programme
(5) Improving Sectoral Skills (2006)	(5) Taskforce on ICT Competitiveness (2005/2006)
(6) Managing Structural Change in Manufacturing (2005)	(6) Mechanical Engineering Policy Dialogue (2005/2006)
(7) An Integrated European Approach to Industrial Research and Innovation (2005)	(7) A series of competitiveness studies, including for the ICT, food, and fashion and design industries

Source: European Commission, COM (2005) 474 final.

- 2004 (April): *Fostering structural change – An Industrial policy for an enlarged Europe*
- 2003 (November): *Some key issues in Europe's competitiveness: towards an integrated approach*
- **2002 (December): *Industrial policy in an enlarged Europe.***
«Enlargement will be a major source of opportunities for industry in new and existing Member States alike. It should

make a positive contribution to overall industrial competitiveness. The competitiveness of manufacturing industry is a cornerstone of EU's sustainable development strategy. Industrial policy is horizontal in nature and aims at securing framework conditions favourable to industrial competitiveness (...) However, it needs to take into account the specific needs and characteristics of individual sectors.»

[REMARK: “Bangemann Communication”, Brussels 1990]

Industrial Policy in an Open and Competitive Environment: Guidelines for a Community Approach

For further information:

http://ec.europa.eu/enterprise/policies/industrial-competitiveness/industrial-policy/index_en.htm

ANNEX N. 3 STRUCTURAL INDICATORS

1(A). THE (“OLD”) TRIAD: EU, US, AND JAP (*)

Value added by economic activity (% of the total)

	EU	US	Jap
Agriculture	1.7	1.2	1.2
Industry (Incl. construction)	25.8	20.0	28.1
Services	72.5	78.8	70.7

(*) Figures for China have been added, respectively: 10.1; 46.8; 43.1

External (% of GDP)

	EU	US	Jap
Exports of goods and services	15.6	12.6	15.8
Imports of goods and services	15.9	16.1	14.5
Current account balance	- 0.9	- 3.2	3.6

(*) China: Exp 26.0; Imp. 23.9; C.a.b.: 5.1

Source: ECB – *Statistics Pocket Book*, October 2012, p. 7 (www.ecb.org)

1(B). A FOCUS ON EUROPE

World's Industrial Production (Top Twenty share, %)

2011 General Ranking of EU Countries	2011	(2007)	(2000)
4. Germany	6.3	7.4	6.6
8. Italy	3.3	4.5	4.1
9. France	2.9	3.9	4.0
11. United Kingdom	2.0	3.0	3.5
12. Spain	1.7	2.5	2.0
17. Netherlands	1.1	1.2	1.1
20. Poland	0.9	0.9	0.6
EU-15	21.0	27.1	25.7
EU-New	2.4	2.6	1.4

Source: Adapted from CsC [2012], *Scenari Industriali*, chapt. 1, p. 12 (www.confindustria.it)

2. A (“NEW”) GLOBAL INDUSTRIAL MAP IS TAKING SHAPE

World Manufacturing Production: Quarter IV, 2011

	Share in world MVA[**] (2010)	In % compared to the same period of previous year
World	100.0	4.2
Industrialized countries	67.9	2.0
(North America)	(24.8)	(4.1)
(Europe)	(23.5)	(1.4)
(East Asia)	(18.1)	(-0.1)
Developing Countries	32.1	9.2
(China)	(15.4)	(13.1)
(Newly industrialized countries)	(12.8)	(3.0)
(Other dev. countries)	(3.5)	(2.6)

[**] MVA: manufacturing output distribution worldwide

Source: UNIDO, *World Manufacturing Production, Quarterly Report*, QIV, 2011, p. 10

http://www.unido.org/fileadmin/user_media/Services/Research_and_Statistics/statistics/publication/QuartProd/STA%20Report%20on%20Quarterly%20production_2011Q4.pdf

ISBN
978-88-96890-10-3

Jean Monnet Centre of Pavia

Università degli Studi di Pavia



Education and Culture DG

Lifelong Learning Programme