



Cambiamento strutturale e politiche di sviluppo

13 e 14 settembre 2019

*Facoltà di Economia "G. Fuà", Università Politecnica delle Marche e IstaO, Villa Favorita, Ancona*

## Session 3: Politiche industriali di sviluppo

Intervento di  
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# Presentazione del programma del Forum “A New European Industrial Strategy” oriented to the citizens and the territory for a reform towards post-neoliberal economic policies

in partnership with the  
European Economic and Social Committee  
4th December 2019, Bruxelles

<p style="text-align: center;"><b>POLICY FORUM</b> on the document</p> <p style="text-align: center;"><b>“A NEW EUROPEAN INDUSTRIAL STRATEGY”</b></p>	<p style="text-align: center;"><b>ORIENTED</b> <b>TO THE CITIZENS</b> <b>AND THE TERRITORY</b> FOR A REFORM TOWARDS POST-NEOLIBERAL ECONOMIC POLICIES</p>	<p style="text-align: center;"><b>4th December 2019 - Bruxelles</b> organized by AISRe – Italian Regional Science Association, Giuseppe Di Vittorio Foundation, Rome Group “Growth, Investment and Territory” in partnership with <b>EESC - European Economic and Social Committee</b></p>
<p style="text-align: center;"><b>1. New monetary and public budget policies</b> (9.00 - 10.30)</p> <p>It is time that policymakers in the European Union change their orthodox neoliberal economic policy assumptions. An expansionary monetary policy with interest rates close to 0 is not effective on the increase of investments. A flat tax policy which subsidize private companies is not effective on investment and it only increases the profits and the bank deposits. The drastic slowdown of the economic growth in Europe requires the relaunching of the internal demand, a decrease of the current surplus, higher growth and inflation rates, a lower unemployment rate and lower spread of the interest rates, through a large European program of greater private and public (both material and immaterial, both European, national and local) investments financed by a new EU budget, by new rules on the national budgets (“Golden rule”), by the QE of ECB, by the EIB and also by large private funds.</p>	<p style="text-align: center;"><b>2. A new industrial and innovation strategy</b> (10.30 - 11.30)</p> <p>A new industrial strategy policy oriented to the internal demand rather than to export aims at promoting a reconversion towards new productions, driven by the new needs of citizens and embedded in the territory, in the six fields of: nutrition, housing, mobility, leisure and culture, health and education, environment and energy saving. It will relaunch infrastructures, fixed investments and immaterial investments in human resources, knowledge, creativity, technical design and new labour organization and R&amp;D. A new industrial strategy should be oriented to the citizens and the territory and be adopted: a) with the people as workers active in a territorial production system, b) for the people as consumers and for their needs in a given territory and c) with the citizens, who have a common identity and make collective decisions in a given territory.</p>	<p style="text-align: center;"><b>3. European coordination of new fiscal and financial instruments</b> (11.45 - 12.45)</p> <p>The macroeconomic policy instruments are inadequate, as indicated by the wide disparities in the interest rates and in the tax rates and also by the wide disparities in income/wealth distribution and in the labour conditions, which are distorting the investments allocation and the wages and labour conditions in the European Single Market. New policy measures should be adopted in the European Union (as proposed in the USA) for a coordination and a coherent reform of the actual tax system and also the creation of new no bank financial instruments aiming to promote risk capital investments, innovation, economic growth and employment, thus avoiding the actual unfair “beggar my neighbourhood” policies of some European States. Raising employment levels is a crucial policy in some countries, in particular to reduce youth unemployment rates.</p>
<p style="text-align: center;"><b>4. New territorial, urban and environmental policies</b> (12.45 -13.45)</p> <p>The territory is the priority policy framework for the new European industrial strategy as the life of people depends on a well preserved external natural and urban environment. New actors and civic movements have entered the policy arena proposing innovative visions of the community. The large metropolitan areas, the networks of medium and small cities and the rural and peripheral areas, throughout the European territory, indicate the crucial role for the future of the EU of joint actions for promoting projects preserving the natural environment, enhancing the value of “common goods” for the citizens in the various cities and local communities and investing in material and immaterial infrastructures. These new investments will promote modern productions and new qualified employment. In fact, the citizens and their living conditions represents the crucial European “common good” promoting the strengthening of the European Community.</p>	<p style="text-align: center;"><b>5. Institutional changes and multi-level governance</b> (15.00-16.15)</p> <p>European Integration and coordination require a medium-term collaboration based on the sense of community. Common values, as the three “republican principles” of freedom, equality and cooperation, together with reciprocal trust are key factors of the European common identity. External challenges and common future should induce to common actions. Thus, common norms and fixed financial parameters are not sufficient, but only complementary for European integration and coordination. Institutions and public policy should have a crucial role in orienting the economic and social change and private and public investments. The process of European integration should be based on multilevel governance and a flexible geometry model, where countries could agree new forms of cooperation or could “opting out”, as in the case of Euro area, with respect to new additional programs, aiming to strengthen growth, investment, employment and environmental quality.</p>	<p style="text-align: center;"><b>6. European added value of a new industrial strategy</b> (16.15 - 17.30)</p> <p>A new industrial policy, as monetary and fiscal policies, must necessarily be coordinated at European scale, and no country can act independently without determining positive or negative external effects (spillovers) for other countries. A European industrial strategy that promotes economic growth and a better quality of life in the different areas of the European Union certainly represents a “European added value” with respect to the limits of the current European and national economic, monetary and fiscal policies. In particular, a new industrial strategy, that raises GDP growth and improves the quality of life of European citizens, with investments and innovations, with “more and better jobs”, also contributes to improve the social conditions and creating a common identity, thus stimulating common trust and strengthening European institutions.</p>
<p style="text-align: center;"><b>Group “Growth, Investment and Territory”</b></p>  <p><a href="http://economia.uniroma2.it/dmd/crescita-investimenti-e-territorio/">http://economia.uniroma2.it/dmd/crescita-investimenti-e-territorio/</a> <a href="https://www.linkedin.com/groups/7451330/">https://www.linkedin.com/groups/7451330/</a> <a href="https://www.facebook.com/crescitainvestmentiterritorio">https://www.facebook.com/crescitainvestmentiterritorio</a> mail: <a href="mailto:cappellin@economia.uniroma2.it">cappellin@economia.uniroma2.it</a></p>	<p style="text-align: center;"><b>Documents</b></p> <p><a href="https://www.academia.edu/39199486/Cappellin_R_Ciciotti_E_and_Battaglini_E_edts_The_guidelines_of_a_New_European_Industrial_Strategy_oriented_to_the_citizens_and_the_territory_policy_proposals_for_the_European_economy_c_growth_Academia.edu_May_2019_e-book_preliminary_draft">https://www.academia.edu/39199486/Cappellin_R_Ciciotti_E_and_Battaglini_E_edts_The_guidelines_of_a_New_European_Industrial_Strategy_oriented_to_the_citizens_and_the_territory_policy_proposals_for_the_European_economy_c_growth_Academia.edu_May_2019_e-book_preliminary_draft</a> <a href="https://www.academia.edu/38031947/Discussion_Group_Growth_Investment_and_Territory_2018_The_response_to_the_needs_of_the_citizens_and_the_turaround_in_European_policies_a_common_cultural_and_political_platform_for_a_radical_change_in_European_economic_policies_December">https://www.academia.edu/38031947/Discussion_Group_Growth_Investment_and_Territory_2018_The_response_to_the_needs_of_the_citizens_and_the_turaround_in_European_policies_a_common_cultural_and_political_platform_for_a_radical_change_in_European_economic_policies_December</a></p>	<p style="text-align: center;"><b>Participants</b></p> <p style="text-align: center;">High level European economic experts from Universities, Think-Tanks, Foundations, Economic and Social Actors</p>

## **POLICY AIMS AND PROPOSALS**

**(preliminary draft)**

1. **The disparities between countries, regions, companies and people** in the European Union have increased due to the macroeconomic low growth, asymmetric shocks, the inadequate adopted economic policies and should be decreased through a New European Industrial Strategy, which promotes **a greater growth of all territories and of modern high quality productions and improves the quality of life of each citizen.**

# GDP ANNUAL GROWTH RATE:

## EURO AREA: 1,2% last



## EUROPEAN UNION: 1,4% last



## USA: 2,3% last

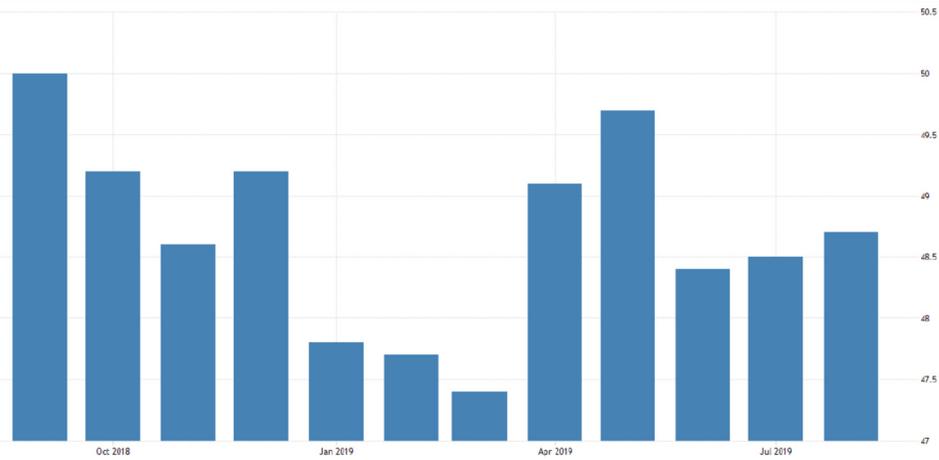


## CHINA: 6,2% last

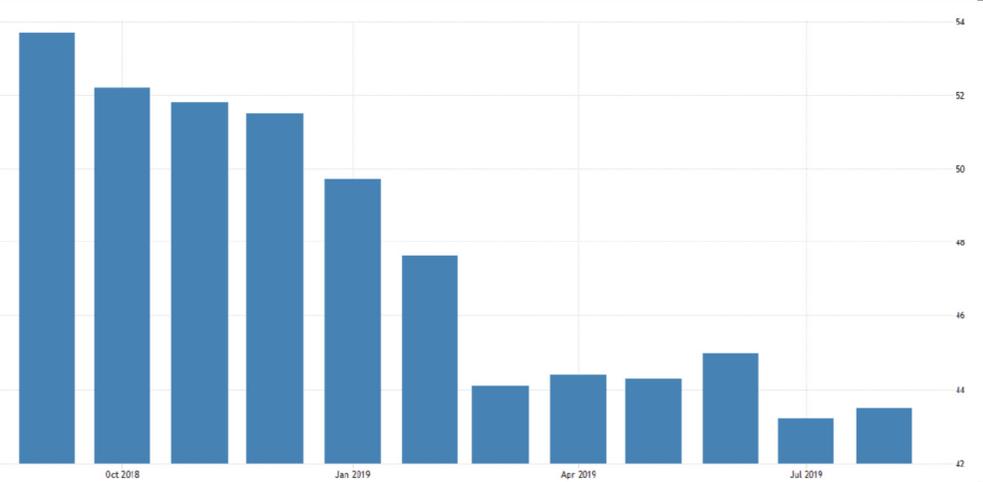


# MANUFACTURING PMI

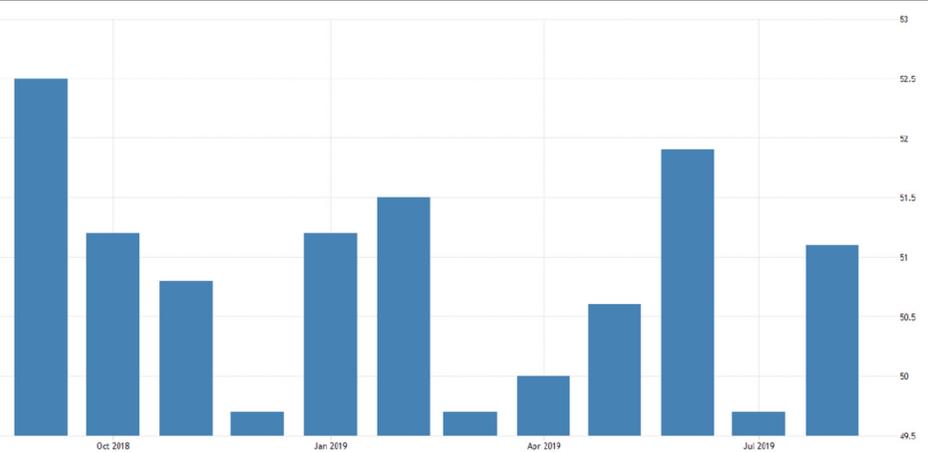
**ITALY: 48,70 last**



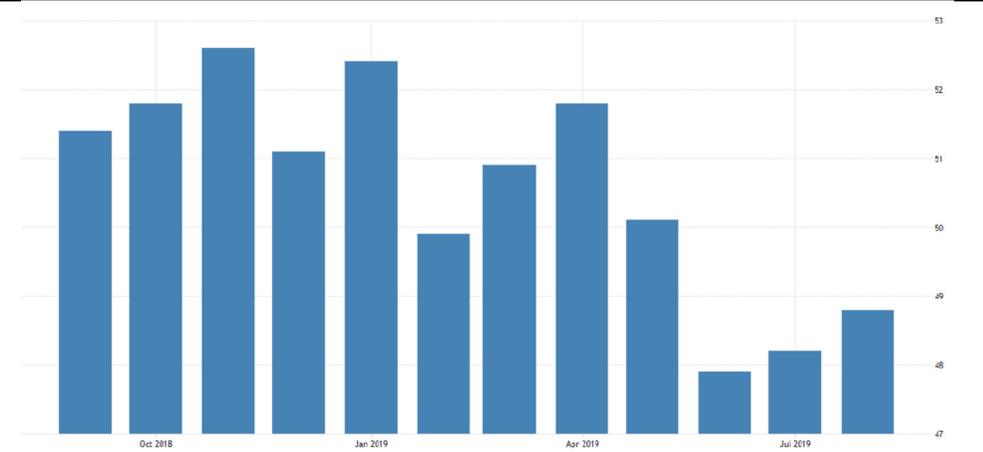
**GERMANY: 43,50 last**



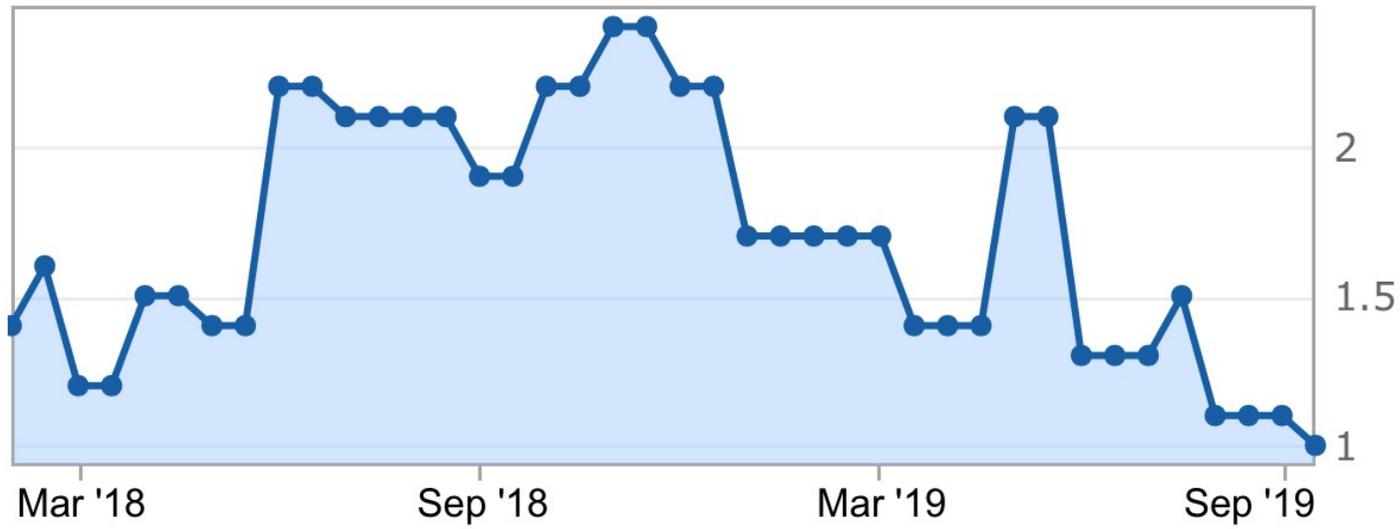
**FRANCE: 51,10 last**



**SPAIN: 48,80 last**



## GERMANY – CONSUMER PRICE INDEX



## EURO ZONE YEARLY INDUSTRIAL PRODUCTION

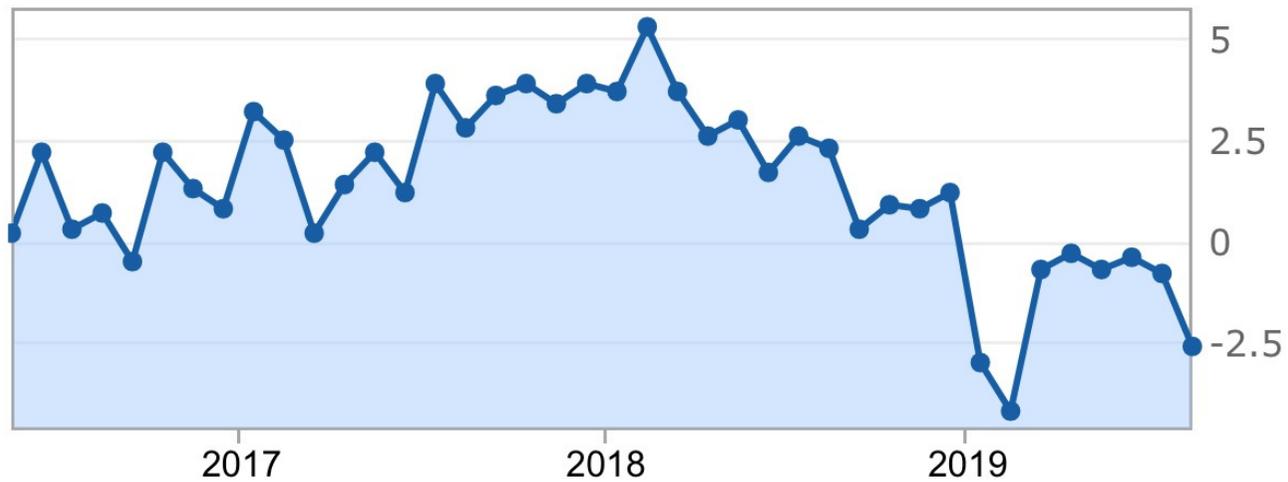


Table 1: The Spring 2019 forecasts of the European Commission				
	Real GDP 2019	Inflation	Unemployment Rate	Current-account balance
European Union	1,4	1,5	6,9	3,0 (367,9)
Euro Area	1.2	1.4	7,7	3,3 (448,9)
Germany	0,5	1,5	3,1	6,8 (267,1)
Italy	0,1	0,9	10,0	2,5 (50,8)
USA	2,4	2,0	3,8	-2,5 (-536,3)
China	6,2	2,0	..	0,3 (43,7)

Source: European Economic Forecast, Spring 2019, ISSN 2443-8014 (online)  
Table 1: Overview - the spring 2019 forecast and tables 52 and 61: Statistical Annex  
Forecasts for 2019, percentages and values in billions of US dollar,

2. The causes of the current crisis are in **the insufficient domestic demand** (consumption and investments, private and public) and in the excessive surplus of the Euro area current balance.

$X - M =$  accumulation of real and financial assets abroad

$$S + (T-G) - I = X - M$$

$$I = S + (T-G) - (X - M)$$

This identity indicates that **internal investment can increase** according to the size of internal private and public saving and **investment decreases**, when financial funds are transferred abroad.

3. The **ratio debt/GDP** should be decreased **by increasing the GDP**, which is stagnating in all Europe, and to this purpose public investment should be excluded from the deficit calculation (“**golden rule**”). Moreover, the **trillions of private debt** existing in Europe and of the **financial assets with negative return** indicate that there is ample scope for **financing innovative and profitable private real investments**, through various specialized financial institutions, such as among others the **European Bank of Investments** and the various national Development Banks.

4. A new "European Industrial Strategy" should promote **a large program of private and public investment** at the European scale aiming to increase the European internal demand (**by approximately 500 billion every year**, to decrease **the surplus of the EU current external balance** or the difference between internal production and internal demand).
  
5. The European Union must use not only monetary policy or public budget policy, but also **a third instrument of economic policy, which is a "New European Industrial Strategy"**, aimed to orient the investments of private companies, also through public investments, **towards new strategic productions**. Moreover, European governments together should **adopt appropriate fiscal policies** to contrast the widespread and profound **financialization of the economy**, that leads to a price increase of the financial assets while weakening the growth of the real investments.

6. A New European Industrial Strategy **should aim to more innovation**, not only technological and in scientific research, but also **organizational and institutional innovation**, in the companies, in the society and in the institutions, supporting integration and also digital networking between multiple platforms. A new industrial strategy should not only **expand the supply capacity** of companies by reducing costs and increasing productivity, **but it should also stimulate the consumer demand for new products and services**, that create new markets and can **drive the investment effort by the companies**, diversifying the production system.
  
7. A New European Industrial Strategy **should aim to a better environmental quality and a better quality life of the citizens** in the territory and especially in the urban areas, also as a tool for the creation of new productions and occupations. The quality of life of the European citizens represents the crucial **European “common good”**.

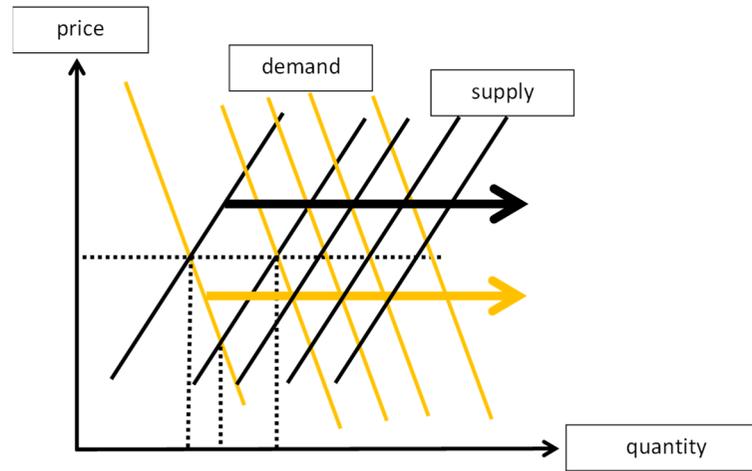


Figure 1: The growth of investment determines a shift of the sectoral demand and supply

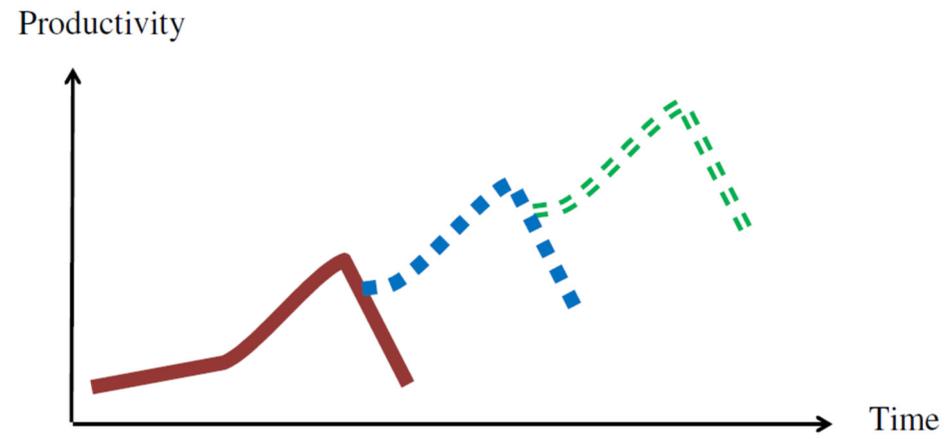


Figure 2: the evolution of productivity and the productions cycles

8. The European Union should **launch 6 or more strategic investment programs** in the following **new productions**, which determine the **citizen's living conditions**:
- a) food;
  - b) housing;
  - c) mobility and logistics;
  - d) culture, leisure and media;
  - e) health, social assistance and education;
  - f) environment, energy saving and spatial planning.

A new European Industrial Strategy should promote **a decisive process of transformation of traditional specializations** through a great investment effort by companies, finance, public administration and households. As in the post-war reconstruction and in the “economic miracle” of the 1960s, the European economy needs **a "big push" to get out of a "middle income trap" and to create the "bases" in terms of infrastructure, qualified services, and a workforce with high skills for a new phase of “industrialization”** and for transforming the European economy into a modern knowledge society.

9. **The territory, the urban areas and the cities networks** are the priority political and **geographical framework** for the New European Industrial Strategy, since the quality of the people's life depends **on a well-preserved natural environment and on liveable cities**, with a greater availability of affordable housing.

## THE FOUR PHASES OF TRANSFORMATION OF THE EUROPEAN PRODUCTION SYSTEM

In summary, the following four phases can be observed in the long term change of the European productive structure:

1. the large **Fordist company** (60s and 70s),
2. the **flexible specialization of SMEs** (70s-80s),
3. the outsourcing of industrial productions and the increasing integration **between manufacturing and service productions within the companies** (80s-90s),
4. the economy driven by the **creation of new HT products** and **the tight interaction between the producers with the consumers**, to respond to the new emerging demands of the consumers. That requires **interactive learning processes** and the **tight interaction** also through new communication technologies and **exchange of knowledge**, between the various companies and between these latter and the end and intermediate consumers (2000s).

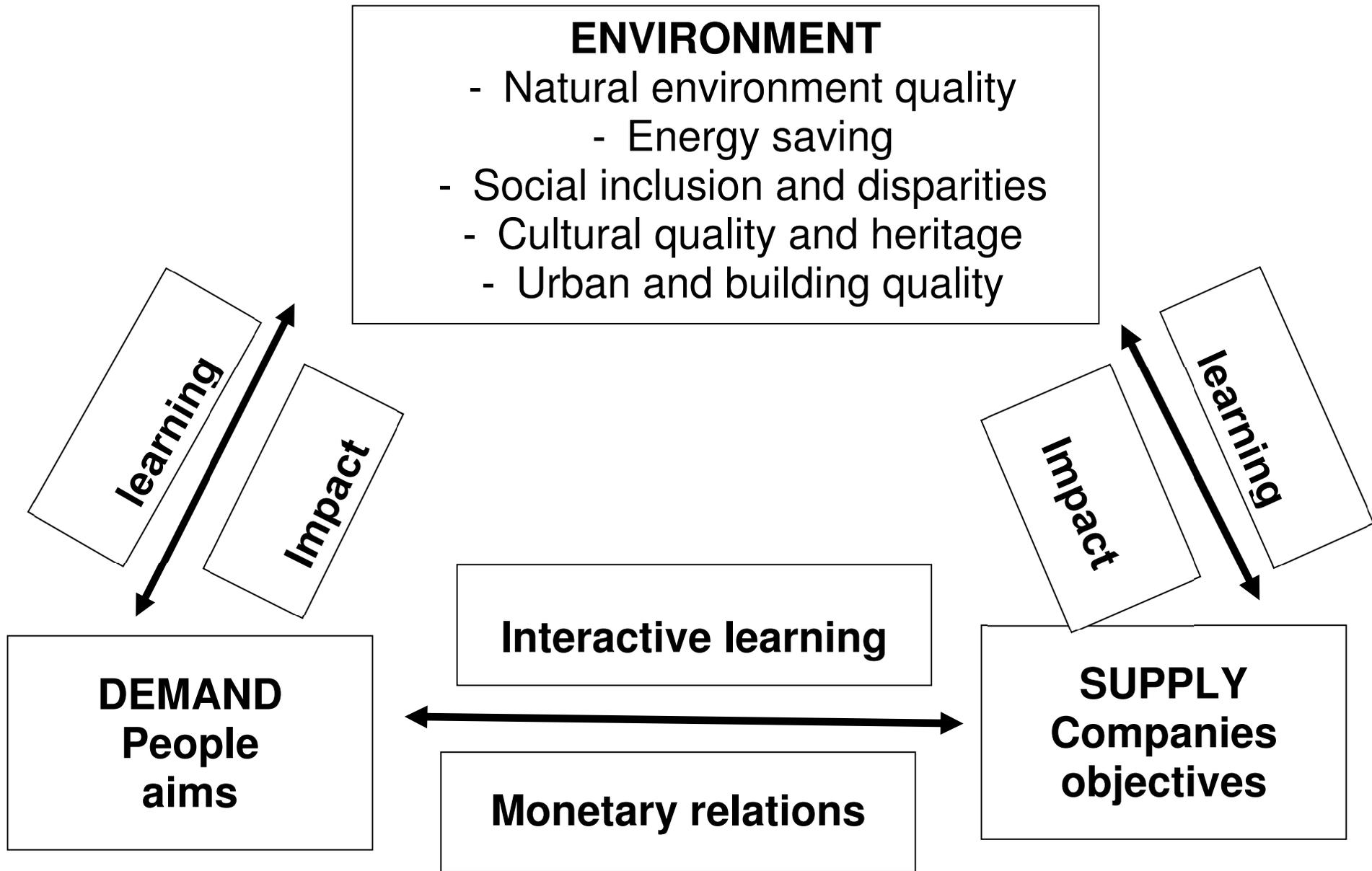


Figure 3 - The process of interactive learning and the change in the needs and demands by the consumers and the changes in the competence and objectives of the companies

## **THE LINEAR MODEL - deterministic**

- supply of production factors,
- entrepreneurial skills of the companies,
- creation of productions, accumulation of stocks and marketing policies,
- purchase and use by consumers,
- environmental impact without control of production and consumption

## **THE CIRCULAR MODEL - policy guided**

- Development of new citizens' needs and of users' knowledge,
- Knowledge development and creation of new productions
- Impact of new productions on workers' incomes, on the environment and on the quality of life of citizens
- Interaction between users and producers interactive learning and change in the needs and demands by the consumers and changes in the competence and objectives of the companies
- Possibility of new forms of production and new forms of consumption

## THE CHANGES IN THE MODELS OF INDUSTRIAL POLICY

**The industrial policy models have undergone continuous evolution** over the last 60 years. That is largely connected with the evolution of technologies and of specializations and therefore with the change in the **problems of the industrial system**.

- a) **public aid** policy and fiscal and financial incentives to companies,
- b) **competition policy**,
- c) **vertical policies** in the sectors and production chains,
- d) **horizontal policies** on external factors of competitiveness,
- e) policies of **national champions** and for **SMEs**,
- f) policies of national / **regional innovation systems**,
- g) policies of **industrial districts and business networks**,
- h) policies of the **centres of competence**,
- i) policies of "**smart specializations**" and **intangible investments**,
- j) incentive policies for **private and public demand**,
- k) **quadruple helix**: companies, universities, institutions, citizens.

## THE ROLE OF PEOPLE IN MODERN PRODUCTIONS

**People play three different roles in the economy** and this indicates that the new industrial policy does not have as its interlocutor the only companies and as an objective the only increase in production, but that it must become a **new "industrial policy oriented to citizens and the territory"**, which is made:

- a) **with people as workers** who have increasingly higher skills and want to realize their personality at work,
- b) • **for people as consumers** who need increasingly complex and want to realize their personality in their free time,
- c) **with citizens who have common values** and a common identity and participate in collective decision-making processes in a given territory, country and European institutions.

## **A NEW EUROPEAN INDUSTRIAL POLICY ORIENTED TOWARDS CITIZENS AND THE TERRITORY**

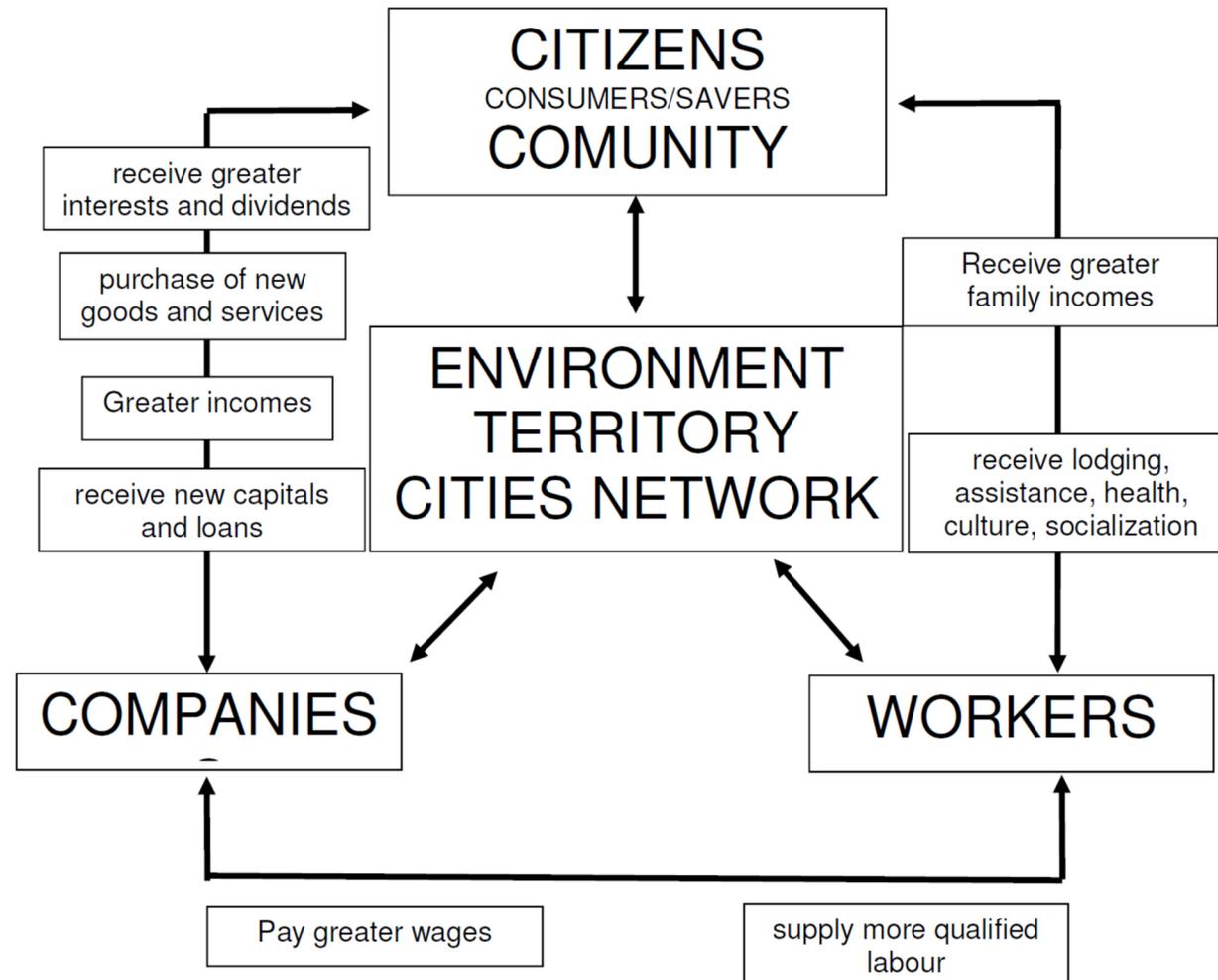
A new industrial policy oriented towards the citizens and the territory must take into account that **people play an even greater role in modern industrial production processes** than by machinery or fixed capital and also by financial capital.

**Moreover, each actor is linked through real and monetary flows with the other actors.**

In particular, **citizens as savers and consumers provide capital to companies and demand new goods and services produced by companies.**

Citizens as **members of the local and national community provide to the individual workers, within the family and the local community, monetary and real or social support.**

**Figure 4 – The actors of a European development strategy based on a “new industrial policy oriented toward the citizens and the territory”**



10. A new European Industrial Strategy that responds to the new needs by European citizens and that **raises GDP growth**, promotes **interregional cohesion**, decreases **income disparities** and improves the **quality of life** of European citizens, through investments and innovations, will contribute to creating a **European common identity**, stimulate **reciprocal trust** and **solidarity** and it **strengthen the European institutions** and will certainly represent a "European added value".

## **THE FUTURE DEVELOPMENT OF THIS CULTURAL PROGRAM**

These policy proposals may promote a **collective rethinking of the “European Industrial Strategy”** between many well-known European experts and may represent the **start of a wide bottom-up cultural and political process** leading to a **radical turnaround of European economic policies.**

In order to promote the adoption by European Governments of these proposals, the Group “Growth, Investment and Territory” has promoted on 4<sup>th</sup> December 2019, a **Forum of about 30 experts in Brussels** at the “**European Economic and Social Committee**” The meeting will aim to **elaborate an in-depth document on a “European Industrial Strategy”** addressed to the **European Council and to the European Commission.**

## References

[https://www.academia.edu/38031947/Discussion\\_Group\\_Growth\\_Investment\\_and\\_Territory\\_2018\\_The\\_response\\_to\\_the\\_needs\\_of\\_the\\_citizens\\_and\\_the\\_turnaround\\_in\\_European\\_policies\\_a\\_common\\_cultural\\_and\\_political\\_platform\\_for\\_a\\_radical\\_change\\_in\\_European\\_economic\\_policies\\_December](https://www.academia.edu/38031947/Discussion_Group_Growth_Investment_and_Territory_2018_The_response_to_the_needs_of_the_citizens_and_the_turnaround_in_European_policies_a_common_cultural_and_political_platform_for_a_radical_change_in_European_economic_policies_December)

[https://www.academia.edu/39199486/Cappellin\\_R.\\_Ciciotti\\_E.\\_and\\_Battaglini\\_E.\\_eds.\\_The\\_guidelines\\_of\\_a\\_New\\_European\\_Industrial\\_Strategy\\_oriented\\_to\\_the\\_citizens\\_and\\_the\\_territory\\_policy\\_proposals\\_for\\_the\\_European\\_economic\\_growth\\_Academia.edu\\_May\\_2019\\_e-book\\_preliminary\\_draft](https://www.academia.edu/39199486/Cappellin_R._Ciciotti_E._and_Battaglini_E._eds._The_guidelines_of_a_New_European_Industrial_Strategy_oriented_to_the_citizens_and_the_territory_policy_proposals_for_the_European_economic_growth_Academia.edu_May_2019_e-book_preliminary_draft)

<https://www.key4biz.it/al-nuovo-governo-servirebbe-una-nuova-strategia-industriale-trainata-dai-bisogni-dei-cittadini/269071/>

**SOME EMPIRICAL DATA  
FOR A NEW EUROPEAN  
INDUSTRIAL STRATEGY**

The analysis of employment and of productivity change indicated the strengths and the weaknesses of the various sectors and the role that each sector may have in a future “Industrial Strategy” of the European Union.

The **change in the value added at current prices** in each sector can be disaggregated into the **effect of productivity change** (taken the employment constant) and to **the effect of employment change** (taken productivity constant) and indicated by the identity:

$$Y1 - Y0 = \sum_i ((Y1i/N1i - Y0i/N0i) * N0i) + \sum_i ((N1i - N0i) * Y1i/N1i)$$

where Y indicates the product and N indicates employment and the suffix 0 and 1 indicate the initial and the final year and i indicate the specific sector considered.

That allows to disaggregate the GDP change measured in current prices into the effects due to productivity change and to employment change in each specific sector.

A sectoral breakdown of the aggregate **GDP change in the euro area** in the **period 2011-2018**, taking into account the effect both of productivity increase and of the employment change, indicates that the sectors which qualify for a crucial positive role are:

- **manufacturing** (mainly due to productivity increase),
- **wholesale and retail trade**, transport, accomodation and food service activities, but also
- **professional scientific and technical activities**,
- **public administration**.

Moreover, it seems important to underline the positive impact on the product growth by the productivity increase in the following sectors:

- **construction**,
- **agriculture** and also in
- financial and insurance, notwithstanding the decrease of employment.

In conclusion, **a sectoral breakdown of the aggregate GDP change**, taking into account **the effects both of productivity increase and of the employment change**, indicates the sectors which qualify for a crucial positive role in an European Industrial strategy.

There is the need to sustain the **productivity increases** in

- **manufacturing** (mainly through productivity increase), and
- **agriculture** (mainly through productivity increase),

There is the need to **relaunch employment** in:

- **construction** (where productivity increases are important)
- **professional scientific and technical activities** (where productivity changes are negative),
- **information and communication** (where productivity changes are negative) and
- **arts and entertainment** (where productivity changes are negative)

**On the contrary a negative performance is inevitable in financial and insurance (due to the large decrease of employment and slow increase in productivity).**

Table 1 – Structural change and GDP growth in the Euro area

(values in million euro at current prices)

	2011-2018			2007-2011		
	a	b	c	d	e	f
	Productivity effect	Employment effect	Total change	Productivity effect	Employment effect	Total change
1	90.548,97	65.421,03	155.970,00	108.054,23	-29.251,13	78.803,10
2	6.686,01	3.556,19	10.242,20	28.775,98	-328,48	28.447,50
3	38.531,32	-24.297,62	14.233,70	26.872,33	-10.727,13	16.145,20
4	27.745,57	58.162,63	85.908,20	5.372,12	5.404,18	10.776,30
5	320.221,91	17.213,69	337.435,60	91.972,65	-135.152,55	-43.179,90
T	1.043.197,40	514.665,50	1.557.862,90	522.610,82	-135.472,12	387.138,70
6	84.466,67	161.875,53	246.342,20	2.938,95	47.602,85	50.541,80
7	94.560,13	- 26.558,43	68.001,70	55.292,13	-94.198,33	-38.906,20
8	138.955,12	120.132,78	259.087,90	139.859,71	57.766,09	197.625,80
9	210.300,99	105.010,51	315.311,50	77.347,33	-14.730,93	62.616,40
10	25.641,07	15.665,83	41.306,90	15.973,27	7.763,13	23.736,40
11	34.077,96	-10.054,96	24.023,00	12.239,81	-11.707,51	532,30

Source: Eurostat national accounts data base.

1 Real estate activities

2 Industry except construction and manufacturing

3 Financial and insurance activities

4 Information and communication

5 Manufacturing

T Total GDP

6 Professional, scientific and technical activities; administrative and support service activities

7 Construction

8 Public administration, defence, education, human health and social work activities

9 Wholesale and retail trade, transport, accommodation and food service activities

10 Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies

11 Agriculture, forestry and fishing

Note: columns (a) and (d) indicate the impact of productivity taken employment constant:  $(Y1/N1 - Y0/N0) * N0$  ; columns (b) and (d) indicate the impact of employment taken productivity constant:  $(N1 - N0) * Y1/N1$  ; columns (c) and (f) indicate the total product change:  $(Y1 - Y0)$ .

Table 2 – Structural change and GDP growth in Italy

(values in million euro at current prices)

	2011-2018			2007-2011		
	a	B	c	d	e	f
	Productivity effect	Employment Effect	Total change	Productivity effect	Employment effect	Total change
1	5.742,09	17.389,11	23.131,20	15.572,27	5.414,63	20.986,90
2	- 1.173,18	2.553,68	1.380,50	2.187,90	- 383,20	1.804,70
3	1.293,02	- 3.791,12	- 2.498,10	726,52	- 2.670,82	- 1.944,30
4	- 7.019,23	2.430,53	- 4.588,70	- 203,97	- 848,83	- 1.052,80
T	74.659,66	30.641,54	105.301,20	51.333,30	- 26.763,80	24.569,50
5	43.784,26	- 12.600,46	31.183,80	1.571,11	- 26.009,51	- 24.438,40
6	2.578,81	7.182,39	9.761,20	17.914,83	- 2.994,13	14.920,70
7	- 6.253,99	17.529,89	11.275,90	514,37	5.580,83	6.095,20
8	22.428,50	16.603,60	39.032,10	5.790,36	- 1.694,26	4.096,10
9	6.639,58	- 14.763,08	- 8.123,50	- 247,71	- 4.091,29	- 4.339,00
10	3.094,79	- 905,09	2.189,70	1.857,21	- 1.409,31	447,90
11	- 1.268,84	3.825,94	2.557,10	4.391,15	3.601,35	7.992,50

Source: Eurostat national accounts data base.

1. Real estate activities

2. Industry (except manufacturing and construction)

3. Financial and insurance activities

4. Information and communication

T Total - all NACE activities

5 Manufacturing

6 Public administration, defence, education, human health and social work activities

7 Professional, scientific and technical activities; administrative and support service activities

8 Wholesale and retail trade, transport, accommodation and food service activities

9 Construction

10. Agriculture, forestry and fishing

11 Arts, entertainment and recreation; other service activities; activities of household and extra-territorial organizations and bodies

Note: columns (a) and (d) indicate the impact of productivity taken employment constant:  $(Y1/N1 - Y0/N0) * N0$  ; columns (b) and (d) indicate the impact of employment taken productivity constant:  $(N1 - N0) * Y1/N1$  ; columns (c) and (f) indicate the total product change:  $(Y1 - Y0)$ .