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**A New Paradigm of Industrial Policy of the Republic of Croatia in the Process of Accession to the European Union[[1]](#footnote-1)**

**Abstract**

“Now more than ever, Europe needs industry and industry needs Europe” (COM, 2010). Although today the service sector accounts for over 50% of GDP in most countries, the majority of these services are directly or indirectly connected to industry. The significance of manufacturing industry was additionally reaffirmed by the most recent global financial and economic crisis. Therefore, it is not surprising that over the last few years political leaders have been calling for a *new* industrial policy which is against deindustrialisation. Acceleration of the rate of technological advancement and preconditions for efficient participation in globalisation are difficult to realize and, in many countries, this renders their ability to compete more difficult. As the European integration becomes stronger, the effectiveness of national economic policies decreases. A new industrial innovation policy (so-called ‘*manufutur’*) must ensure a much faster development and commercialisation of goods and services, which will put EU enterprises in the leading market position.

In addition to many problems it had in the past, contemporary Croatian industry has been dealing with outdated technology and lack of interest in technical sciences among young people; concentration of capital, knowledge and activities in the No. 1 region in the country which is North-western Croatia; lack of national industry vision and strategy, as well as lack of financial means necessary for investments into the ‘new industry’. It becomes imperative to create and implement an adequate industrial policy which has to be the result of a comprehensive analysis of the relevant, past and future, industrial factors, but, in doing that, it is important to take into consideration the limitations of the EU, as well as limitations at the level of the Member States.

**Key words:** European industrial policy, new industry, reindustrialization, manufutur

1. **Transformation of European Industrial Policy**

Measured by the number of industry employees and the share of industry in GDP, the level of development of a country (GDP per capita) increases to a certain point. Once it reaches that point, the economy enters a phase in which the share of industry starts to decrease gradually and the share of services increases. The largest share of industry in GDP in today’s highly developed industrial countries was reached in the 1970s. It should be pointed out that regardless of the reduced share of industry in GDP and lower number of industry employees, the industry has not lost its importance, but rather there has been *reindustrialisation* or *industrial evolution* towards post-industrial society characterised by a combination of industrial production, knowledge, modern technology and services. Promotion of trade, innovativeness and organisation of the factors of production which constitute the basis for industrial progress, enable transformation of economic advantages into effective rights and legitimate political power. Industrial progress facilitates faster growth of national wealth and necessitates encouragement, support and promotion of *new* industry because it is the source of national power (Supple, in Cipolla, 1980, p. 285 in Bianchi and Labory, 2006). Baumol, Blackman and Wolff (1989, in Rowthorn and Ramaswamy, 2007) established that productivity growth rates differ. They have introduced the terms *technologically progressive and technologically stagnant* sectors*.* In general, they maintain that industry is primarily *technologically progressive*, the main reasons for that being that production can be standardised, information necessary for production of goods can be formalised and transferred into a series of instructions that repeat themselves. Service sector, due to its specific nature, cannot do that. This causes variations in productivity.

As industrial policy has to contribute to general economic growth, it could be named national industrial policy which contains national planning of economy and wellbeing at the level of the entire state (DiLorenzo, 1984). There is an opinion that economic policy in general is in fact industrial policy because, in reality, all economic decisions made by the government affect the state of industry. Industrial policy means strategy developed and initiated by the state. It includes a mechanism which enables one to coordinate, monitor and evaluate the decisions about allocation of resources in the economy, and using direct and indirect measures influence the static allocation of resources, both within and between economic sectors (Walser, 1999, p. 22). Nuti (1992, in Esposito and Mauriello, 1995) divides evolution of productions systems into three main phases: 1) decentralisation, 2) discontinuity and 3) competition. According to him, the industry has evolved from reinforcing the role of manpower, division of labour and dynamic role of industry in economy to unpredictable nature of industry under the influence of unpredictable demand and final phase whose imperative is competitiveness and ‘survival’ (Table 1).

*Table 1. Production system evolution phases and their characteristics*

|  |  |  |  |
| --- | --- | --- | --- |
| **Phase** | **I****1968-1975****‘Decentralisation’** | **II****1975-1985****‘Discontinuity’** | **III****1985-****‘Competition’** |
| **Dominant theme** | Reinforcing the role of manpower;Distribution conflicts;Greater interest in SMEs; | Turbulence;Unpredictable demand;Decentralisation of technical progress;Trends; | Convergence between large enterprises and SME networks; |
| **Previously ignored issues and facts**  | Increased demand for consumable goods;Fast growth rates of some manufacturing industry sectors;The nature of ‘disintegration of production cycles’ | Weak link between uncertainty, trend and structure;Weak link between technical progress and structure;Shift in production requirements from quantity to quality;Decrease in competitiveness of traditional industry; | Problems of SMEs in their adjustment to competitive demands;Relations between SMEs and large companies; |
| **Overview** | Increase in decentralisation of capacity;Beginning of increased investment in technical capacities; | Drastic decline in the number of employees in ‘peripheries’;Search for optimal added values; | Changes in sectors; zero growth in the traditional sector; |
| **Predominant relations between enterprises** | Division of labour force;Independence of SMEs (agreements and buyers);Legal obstacles to entry into the market; | Enterprise hierarchy; | ‘Grouping’ in some sectors; networks in advanced sectors; |

*Source: Nuti, 1992, in Esposito and Mauriello, 1995*

Changes brought on by globalisation require systematic adjustment. As it is not possible to 'return to the old’ industrial policy which was based on the protection of the state, there is a need for a completely new industrial policy that will protect even the liberal countries. Such confrontations between the *old* industrial policy and liberalism have brought to two important intellectual and operational fields: 1) role of innovativeness and research, and 2) role of territory and forming of cooperative clusters (Bianchi and Labory, 2006). European industry has undergone the most severe economic and financial crisis in decades and its consequences are still felt today. Total output in 2007 was at the level of that in 1998. All sectors were affected by the crisis, though to a different extent. The automotive industry, metal industry, electrical equipment and textile industry suffered the most from this economic crisis, whereas sectors such as pharmaceuticals and food industry have remained relatively stable (SEC, 2009, 1111). Weakening of the competitive position of the EU in comparison to the USA and Japan, as well as emerging of the third generation of so-called newly industrialised countries such as China and India, has forced key political actors in the European Union to promote expansive version of clearly defined integrated industrial policies. There is a great deal of confusion about what industrial policy is, only surpassed by the confusion about what European industrial policy might be (Table 2). The latter is even more complicated because the EU is a union of different countries and different industrial policies (and hence, instruments). Good industrial policy is the one that rectifies and improves the market, especially in terms of its efficiency and lowest prices.

Table 2. Regulatory framework of the European industrial policy

|  |  |  |
| --- | --- | --- |
| **Key areas** | **Elements** | **Principles** |
| **Establishment of internal market** | free movement of:products;services;capital;codified technology;labour force (etc.);free establishment of:enterprises, FDIs; | non-discrimination;proportionality;open borders;ownership(EU neutrality); |
| **Proper functioning of internal market** | overcoming market failures:through rules and codesharmonisation/approximation:old and new approach;global approach;community regulation:standardized rules;mutual recognition;competitive public procurement;standards;through market competition policy:complementarity of the EU and Member States;EU 🡪 anti-trust policy; network industries; state support for bans and controls;common EU policy for:transport (and infrastructure);trade (specific industrial policies);agriculture (cohesion/environment);Business environment (cost/benefit analysis and testing of competitiveness); | subsidiarity;‘better regulation’;‘cooperative federalism’;‘open and competitive’; |
| **Regional / structural and cohesion policy** | Measures for building up hard and soft infrastructure (location attractiveness);Measures for retraining;Subsidies for adjustment after industry downturn / rural stagnation;Cross-border regional integration;Environmental remediation | Long-term catch-up growth;Co-financing and additionality; |

*Source: Pelkmans, J. (2006) in Bianchi and Labory (2006), p. 61*

To steer the current state of industry towards new, innovative solutions, there must be an integrated ‘willingness’ of three key interest groups: business, public and university sector, i.e., efficient action using the Triple Helix Model (Cini, Drvenkar, 2010). A new industrial innovation policy is needed to ensure a much faster development and commercialisation of goods and services and make EU enterprises efficient, and as a consequence enabling them to secure a good position in the global market. Without such innovation, Europe’s industry will not be able to compete successfully in the global market, both in high-tech and traditional industries. There is an urgent need for better coordination of education, R&D, innovation efforts, more coherence in science, technology and cooperation with the rest of the world. A level playing field has to be established for R&D and a better access to finance and risk capital at all EU levels (COM, 2010). Therefore, it is not surprising that the European Commission sent a document (COM(2010) 614 dated 28 October 2010) entitled An Integrated Industrial Policy for the Globalisation Era also known as Europe 2020, to the European Parliament and other EU bodies, … in which, at the very beginning, it is pointed out that: “*Now more than ever, Europe needs industry and industry needs Europe.… The Single (European) Market, with 500 million consumers, 220 million workers and 20 million entrepreneurs, is a key instrument in achieving a competitive industrial Europe. One out of four jobs in the private sector in the European Union is in manufacturing industry, and at least another one out of four is in associated services that depend on industry. 80% of all private sector research and development efforts are undertaken in industry…. It is essential to increase productivity in manufacturing industry and associated services to underpin the recovery of growth and jobs, restore health and sustainability to the EU economy and help sustain our social model. Industry is therefore at centre stage of the new growth model for the EU economy as outlined in the Europe 2020 Strategy. …. The financial and economic crisis has refocused attention on the central importance of a strong, competitive and diversified industrial manufacturing…. Manufacturing itself accounts for 75 % of exports…”*

An ambitious strategy framework for a *new* industrial policy must put the competitiveness and sustainability of European industry at centre stage. First, it is about those policies that have an impact on the cost, price, and *innovative competitiveness* of industryand individual sectors, such as standardisation and innovations (overall and sectoral). Second, it is necessary to consider the competitiveness effects of all other policies such as transport, energy, environmental and consumer protection, but also the single-market policy and trade policy (Table 3). These policies play a crucial role and can have an important influence on the cost, price and innovative competitiveness of industry (COM, 2010). Key *enabling technologies* of the new European industry are biotechnology, nanotechnology, advanced materials and manufacturing systems that can provide the basis for a wide variety of new processes, goods and services, including the development of entirely new industries over the next decade. Improved use of ICT to enhance industrial competitiveness of the EU and innovation optimisation will be essential for future activities, as set out in the Europe 2020 flagship on the Digital Agenda (COM, 2010).

Table 3 Structure of domestic demand by manufacturing sectors in the EU-27, %

|  |  |  |  |
| --- | --- | --- | --- |
| **%** | **Intermediate demand** | **Final consumption demand****(private and public)** | **Investments into fixed capital** |
| Over 95% | Basic metals; | Tobacco products; |  |
| 75%-95% | Non-metallic mineral products;Pulp, paper and paper products;Rubber & plastic products;Wood & of products of wood,Fabricated metal products; | Clothing and leather,Footwear and leather products; |  |
| 55%-75% | Electrical machinery and equipment;Chemicals and chemical products;Coke, refined petroleum products and nuclear fuel; | Food & beverages;Furniture;Other manufacturing industries; | Office machinery & computers;Machinery & equipment; |
| 35%-55% | Textiles;Medical, precision and optical instruments;Radio, TV and communication equipment;Other transport equipment; | Motor vehicles, trailers and semi-trailers;Textiles; | Motor vehicles, trailers and semi-trailers;Other transport equipment;;Radio, TV and communication equipment;Medical, precision and optical instruments; |
| 15%-35% | Machinery & equipment;Food & beverages;Office machinery & computers;Furniture; Other manufacturing industries; | Coke, refined petroleum products and nuclear fuel;Chemicals and chemical products;Other transport equipment;Radio, TV and communication equipment;Medical, precision and optical instruments; | Furniture;Other manufacturing industries;Electrical machinery and apparatus;Fabricated metal products; |
| Less than 15% | Footwear and leather products;Motor vehicles, trailers and semi-trailers;Clothing and leather;Tobacco products; | Office machinery & computers;Machinery & equipment;electrical machinery and apparatus;Fabricated metal products,Wood & of products of wood;Rubber & plastic products;Non-metallic mineral products;Basic metals; | Footwear and leather products;Textiles;Chemicals and chemical products;Wood & of products of wood;Rubber & plastic products;Pulp, paper and paper products;Non-metallic mineral products;Basic metals; |

*Source: EU Industrial Structure 2007: Challenges and Opportunities, COM*

European industrial policy cannot be understood by focusing only on technology, information and communication technologies (ICT) and several other specific incentive policies. It is necessary to look at the wider picture taking into consideration the limitations of the EU as well as limitations at the level of the Member States. European industrial policy must seek to underpin the basic determinants of competitiveness. Over the last couple of years, political leaders have been calling for a *new* industrial policy which is against deindustrialisation – it is precisely for this purpose that many attempts were made to reduce the burden on the European industry, through new EU regulations. The old European industrial policy (from the 1950s, 1960s and 1970s) was predominantly based on favouritism and intervention measures. Today, EU institutions are highly active in stimulating positive entrepreneurial atmosphere, but not by exercising favouritism (Figure 1). From the process of rewarding the ‘winner’ a shift was made to technological infinity of sorts (see Pelkmans in Bianchi and Labory, 2006). *Manufuture* (EU) and *Monodzukuri* (Japan) are new industrial paradigms that rely on mass *customisation*, larger services of higher quality, networking, and cooperation, which implies and includes globalisation. In their essence, these two terms also consider the climate change and environmental responsibility, but also the effectsof *offshoring*, as pointed out by van der Zee and Brandes (2007). According to the *European Attractiveness Survey, 2010*, Europe’s priorities should be 1) support to small and medium enterprises (29%), 2) support to high-tech industries and innovation (27%) and 3) lower taxation (22%), followed by lower labour costs, promotion of environmental policies and provision of infrastructure. There is also a number of OECD recommendations (2010) highlighting the following activities: 1) establishment of standing and ad hoc services which will represent the interests of small and medium-sized enterprises in a regulatory process; 2) analysis of effects of some regulations on small and medium-sized enterprises and 3) establishment of one-stop shops for administrative procedures and licenses; 4) monitoring of administrative burden for small and medium-sized enterprises; 5) conception and development of e-government. There must be a wider concept of industrial policy which will be aligned with non-industrial policies that directly affect industry. Horizontal industrial policy as well as sectoral/specific industrial policies must include supranational EU interests, but at the same time, reinforce specific features of national industrial policies that make them unique. It must be general in nature while national policies must be tailor-made for each national industry, individual sectors and enterprises.

Figure 1. EU and national powers of industrial policy instruments

**Notes:**

EU🡪EU powers; EU/nat. 🡪shared powers; nat. 🡪 memner states' powers; nat./EU🡪shared powers, mainly national; nat.(+EU) 🡪 national and EU constraints; -EU 🡪little national leeway, strict EU constraints

**Policies (somehow) affecting industry**

**Policies not for industry**

but affecting industry as such:

* macroeconomic (EU/nat.)
* redistributional (nat.)
* wage policies (nat.)
* agricultural/fisheries policies (EU/nat.)
* services policies (EU/nat.)
* tax policies (nat.(+EU))
* energy policies (nac.(+EU))

**Non-industrial policy measures directly affecting industry**

* buy national campaigns (-EU)
* regional planning and development (nat./EU)
* tied development aid (nat.(+EU))
* export promotion (-EU)
* specific environmental policies (nat./EU)

**Policies for industry**

**Wide concept of industrial policy**

**framework aspects**

**horizontal industrial policy**

**sectoral/specific industrial policy**

* proper functioning IM
* removal distortions competition policy (EU/nat.)
* state aids
* network industries regional/ cohesion policies (EU/nat.)
* better regulation (EU/nat.)
* state ownership (nat.)
* reseach and development strategies (nat./EU)
* innovation stimulus (nat./EU)
* entrepreneurship and risk capital (nat./EU)
* human capital (nat.)
* restructuring funds (nat./EU)
* competitiveness tests for other policies (EU)
* public procurement (nat./EU)
* sectoral interventions
* (-EU)
* sector policies (-EU; EU/nat.)
* clustering and filieres policies (nat.)
* trade policy
* specific aspects of regional/ cohesion policies (EU/nat.)
* technology policies (EU/nat.)
* Defence procurement (nat.)

*Source: Pelkmans, J. (2006) in Bianchi and Labory (2006), p. 47*

1. **Need for Transformation of Croatian Industry**
	1. ***Croatian Economic Burden***

Economic problems[[2]](#footnote-2) Croatia is facing today are primarily the result of the lack of a clearly defined economic development policy, and only secondly the result of economic turbulence (economic and financial crisis). Croatian economy is burdened by: 1) negative growth rates; 2) growing foreign debt, public debt and budget deficit; 3) inability to attract direct foreign investments; 4) unfavourable entrepreneurialclimate; 5) inefficiency of bureaucracy; 6) non-competitiveness; 7) growing unemployment rate; 8) lack of industrial policy; 9) lack of quality regional development strategy and 10) demographic issue – population aging and inadequate educational structure. Croatia’s economic growth over the last two decades has been supported by growing domestic consumption based on international borrowing. The economy was marked by import and trade. When the global crisis erupted, it became clear that this development model could no longer be supported and that it is necessary to switch to a model based on manufacturing and exports. After years of neglecting manufacturing and exports, a question arises as to how long it will take to implement this model. Last but not least, the level of knowledge that has a significant impact on development in Croatia is quite low. Average number of years of education in the population group aged above 15 in Croatia is 6.28; EU average is 8.95, while in the most developed EU countries it is 10.50. According to the analysis conducted by Lovrinčević (2009), technological structure of Croatian industry has taken an unfavourable direction. The share of lower-tech output and consequently lower added value has increased. Such structural changes point to the loss of competitive advantage and ability to manufacture products with higher added value (see Figure 2). Indicators of global trends in industrial production and foreign trade can serve as a good guideline for the restructuring of Croatian industry. It is necessary to create an industrial policy that will recognize the existing deindustrialisation as an initial phase of reindustrialisation. Croatian industry, although affected by deindustrialisation, can be considered an extremely important part of Croatian economy. Industrialisation was and still is crucial for economic development. Not only is industrialization the normal route to development, but as a result of the globalization of industry, the pace of development can be explosive (UNIDO, 2009). Industrial production on which the present civilisation relies is without constraints and today developed countries are the ones that have a developed manufacturing industry. Although the service sector makes up over 50% of GDP in most countries, it is important to know that the majority of these services are directly or indirectly connected to industry (Jurčić, 2011).

*Figure 2. ‘Wrong road’ for the Croatian industry*

*Source: Authors according to UNCTAD, 2010*

Croatia is currently in the third phase of industrial development where it needs to increase its participation in the international division of labour, boost sectoral labour productivity, reinforce the importance of technology, increase the role of entrepreneurship and develop quality personnel to achieve greater coordination of development and create preconditions for the second phase characterised by overall development efficiency and post-industrial society. This is difficult to achieve given the current state of Croatian industry. In 2011, there were 14,633 active industrial enterprises in Croatia with over 294,000 employees or 20,8% of the total number of employed persons in Croatia. However, from 2002-2011, the industry lost 25,000 workplaces mainly due to economic problems and to a lesser extent because of modernisation of industry (Table 18).

Table 18. Key indicators of Croatian industry for 2002, 2005, 2007, 2009 and 2011

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Indicators** | **2002** | **2005** | **2007** | **2009** | **2011** |
| Total number of employees in industry (000)*% in the total number of employed persons in Croatia* | 31923 | 32222.7 | 33522 | 31921 | 29420.8 |
| Average monthly net earnings (*Kn*)*+/- deviation from Croatian average (Kn)* | 3,832+112 | 4,607-231 | 5,142+301 | 8,498+3,187 | 5,955+514 |
| Active legal entities*% of all active legal entities in Croatia* | - | 11,51412 | 13,61211 | 14,17810.7 | 14,63311 |
| Exports(in mil. USD 2002-2007; in mil. EUR 2009-2011)*% of the total Croatian exports* | 4,74896.8 | 8,62597.9 | 11,97696.9 | 7,16895 | 9,16496 |
| Imports(in mil. USD 2002-2007; in mil. EUR 2009-2011)*% of the total Croatian imports* | 10,39096.9 | 17,99096.9 | 20,89880.9 | 14,71697 | 15,73097 |

*Source: Authors using data from available documents issued by the Croatian Bureau of Statistics (selected years)*

* 1. ***Transformation of Croatian Industry***

In a Schumpeterian manner, Hausmann and Rodrick think of enterprises as individuals who are trying to experiment with new industrial activities, production solutions and innovations. Their conclusion is that for ‘the 21st century industrial policy’ it is necessary to invest into entrepreneurship and the process of finding successful ‘specialisations’. The basic premise was (DiLorenzo, 1984), and still is today, that the problem of slow economic growth can be solved through cooperation between government, labour, and business – ‘an arbitrarily chosen collection of special interests’. As Smith noted a long time ago: “It is not the benevolence of the butcher or baker that provides us with our meat and our bread, but concern for their self-interest.” It is this ‘collection of special interests’ that slows down the efficiency of economic changes thus affecting the very competitiveness of industry and thereby the whole country. The recent economic theory increasingly puts emphasis on the necessity of cooperation of these three sides. The Triple Helix Model is based on integration of commercialisation, empirical knowledge and public good. This is a new model of promoting cooperation between industry, universities and government agencies with an emphasis on commercialisation (Asheim & Coenen, 2004; Leydesdorff, 2005; Leydesdorff & Etzkowitz, 2001). This is the very model of cooperation which creates balance between knowledge, social benefit and profit-driven motivation (Asheim & Coenan, 2004; Leydesdorff, 2005). By creating research programmes and projects, engaging available human and material resources solutions are produced that will be able to collect new knowledge. The process of creating private-public partnership started in the last decade, and the Triple Helix enables the best solution for long-term cooperation which allows short-term intensive experience (Campbell, 2005; Etzkowitz, 2003). In addition to the Triple Helix Model, industrial enterprises need to be encouraged to form clusters so that they could become more productive and informed in their areas of activity and stronger in competing in international tenders.

Development and growth require more than just free trade – a costly lesson for many developing countries that have liberalised trade but have not been able to reap its potential benefits as yet (Mendoza, 2003). Through cooperation of government institutions, private sector and higher education system using the Triple Helix Model, it is possible to create a favourable entrepreneurial atmosphere and, finally, competitive advantage of Croatian industry. Although necessary, the transformation of traditional industry into *new* industry is impossible unless structural, even revolutionary changes are introduced into all spheres of public and private activity. Economy will grow if the existing institutions are efficient (North, 1973, in Yongjian, Ning, Xiaofang, 2005). Industrial development should therefore be seen as a process consisting of many different industrial activities and processes. Each process must be efficient; therefore, it is necessary for the state to influence the conditions in which they are functioning. This is possible by encouraging adjustment of human and technical capacities to the new industry. It is often stressed that the industry must modernise, but modernisation will not have an effect unless the public sector, in its entirety, modernises as well. Gone are the days when the public sector had a privileged position in society and economy. It is time that public sector realises that it cannot function without the private sector because, after all, it is largely financed by it. The public sector can prevent market failures by providing public goods; through tax policy and subsidies, as well as various forms of regulation for economic activities. It is often pointed out in economic literature that a so-called ‘third factor’ was critical for successful development of the most developed countries in the world today (especially in the last fifty or so years). ‘The third factor’ points to knowledge and includes other variables such as development of general education, saving by citizens, acceptance of new technology, direct foreign investments etc. According to Domazet (2010), ‘the third factor’ is made up of the following elements: 1) innovation system, 2) support to entrepreneurs for development and growth, 3) improving the quality of education and skills among people including higher level of education for institutions for the purpose of revitalisation of community, 4) investments into so-called *tradable sector*, 5) combination of efficiency of investments and real interest rate as an important element of development and 6) new relations between labour and capital. Vladimir Stipetić pointed to the importance of ‘the third factor’ as early as 1971. Some assessments indicate that investments contribute 40% percent, labour approximately 10%, and ‘third factor’ the remaining 50% to the total growth. Innovation system might be the most important part of ‘the third factor’; it is made up of new technologies, new processes, new ideas and other innovations that make production and economy more competitive (Domazet, 2010). For countries that have undergone significant political and economic transformation, such as transition countries, it is necessary to create a competitive economic policy that will take into account the achieved level of development and be aimed at long-term sustainable economic development. This is partly because of possible effects of ‘openness’ as well as national processes of deregulation, privatisation and liberalisation. As pointed out by Singh and Dhumale (1999), economic growth in such countries would have to be under the influence of the concept of ‘optimal degree of competition’, rather than of maximum competition to promote long term growth of productivity.

Lately, industrial policy is no longer focussed on promotion of individual enterprises but rather on forming alliances, industrial clusters and innovation networks (Halliday and Seabright, 2001, in Lorentzen and Mollgaard, 2006). Reindustrialisation requires more and more complex industrial products and incorporation of services; the market is opening up and becoming a global market erasing national boundaries in every respect. Spreading of knowledge and cooperation in R&D activities has become essential in creating a dynamic market system which will provide consumers with new products and improved and cost-effective processes. While competition policy welcomes new turns in industrial policy, it still struggles to find its place in assessing agreements, mergers and similar trends of *new economy*. Industrial differentiation is important for economic growth because it enables exports and use of competitive advantage in the global market. Reindustrialisation will have to include horizontal and vertical industrial policies to influence the cost, price and so-called *innovative competitiveness of industry* (COM614, 2010) as well as individual industrial sectors. Standardisation and innovative policy must be an integral part of competition policy. Reindustrialisation must include innovative competition policy that will ensure industry innovation, industry competitiveness in the international market and consequently sustainability of industry necessary for long-term sustainability of economic growth. There must be ‘smart interventions and institutions’ at all levels and in all areas of economic policy which will be used to influence the competitiveness of industry. Reindustrialisation must be based on competitiveness in a number of areas (costs, innovations, R&D, human resources, standardisation and location). This is the only way for the industry to reap the benefits of globalisation and become competitive in the global market.

1. **Instead of a Conclusion**

The following recommendations for transformation of traditional industry into *new* industry can be highlighted:

1. Reform of vocational education at secondary level and higher education programmes by considering market changes in the structure of professions and programmes;
2. Removal of administrative barriers by reducing the number of procedures required to start up a business (cadastral surveys and associated regulations);
3. Support to industrial enterprises applying business processes based on knowledge and research methods (through tax reliefs, financial support, etc.); creation of supporting technological infrastructure, promotion of industry demand for research projects, networking of industry, government and educational institutions in the form of efficient cooperation (triple helix); promotion of technologically-intensive direct foreign investments;
4. Application of knowledge and innovations in product development; investing in new product design solutions; investing in high-tech solutions and finally, optimal sale and distribution; establishment of an industrial design centre that will provide help with design implementation through direct involvement of industrial designers; establishment of the Croatian centre for certification and CE marking[[3]](#footnote-3);
5. Promotion of a balanced development of regions through fiscal decentralisation to enable tax competitiveness of counties and regions;
6. Creation and implementation of industrial policy, i.e. development of the Republic of Croatia long-term development strategy.

At the same time, it is necessary to recognize market failures and undertake timely corrective actions. Ignoring external factors, political inconsistency and failure to form networks will lead to profound and lasting consequences following the principle of multiplication. Industrial policy has the capacities to identify cause and effect relationships and external factors, but it must be the main national development strategy which will be used as a guideline for development of operational programmes. Cooke (2001) identifies the role of public sector through development of regional innovation systems such as creation of systematic link in order to enable transfer of knowledge and innovations within and beyond regional economy. A systematic monitoring of world statistics on industrial production[[4]](#footnote-4) needs to be undertaken and then we need to attract investors in line with set goals. Sometimes it is necessary to accept investments, whatever they may be, because of extremely unfavourable economic conditions; however, in the long run, these investments will be able to provide neither stable economic growth and employment, nor the principal goal of any country’s economic policy – increased standard of living. The role of public sector is to develop social capacities, networks and institutional support so that the whole system could function following the principle of excellence and independence. At that, the public sector must have the role of animator and partial financial partner. Therefore, the role of the government is to provide indirect support which is becoming increasingly important because this support will help create favourable business climate in which industrial enterprises can seek to achieve excellence.

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1. Cini, Vladimir; **Drvenkar, Nataša**, Wentzel, Dirk:**A New Paradigm of Industrial Policy of the Republic of Croatia in the Process of Accession to the European Union** // Zbornik radova XXXII međunarodnog simpozija: 32th Scientific Symposium Osijek-Pforzheim, From old industries to a new entrepreneurial development structure – reality and challenges for Pforzheim and Osijek; Faculty of Economics in Osijek, J.J. Strossmayer University, Hochschule Pforzheim, Pforzheim University; 2012.; Osijek, Croatia; str. 17 – 32; ISBN: 978-953-253-114-5; zbornik radova; znanstveni rad; engleski jezik. [↑](#footnote-ref-1)
2. In 2011, coverage of import by export was at 58.9%, while in the first half of 2012 it was at 56.1%. Balance of foreign trade in goods in 2011 amounted to -6,698,986 thousand euro. Gross foreign debt amounted to 45,733.4 million euro in 2011. GDP per capita was 10,111 euro in 2009, the real growth rate was at -6.9%, while in 2010 it was at -1.2% (in 2008, as little as 2.1%). Natural change in 2010 was -2.0 per 1,000 people, i.e. -8,735. In 2010, unemployment rate was at 11.8%, employment rate was at 41.1%, while activity rate was at 46.6%. Chain index of real gross earnings was 98.5 in 2010. At-risk-of-poverty rate was at 18% in 2009 (Croatian Bureau of Statistics, 2012). [↑](#footnote-ref-2)
3. Conformité Européenne – the CE marking certifies product compliance with safety requirements; it is mandatory for export to the European Union market. [↑](#footnote-ref-3)
4. For a country or a region, the growth of exports can be decomposed into three parts: 1) growth in global demand (the growth in global demand is given by the rate of increase in world output of the product); 2) geographic shift in production (the geographic shift in production is given by the difference between the rate of growth of output of the product in each country and the rate of growth of world output of the product); 3) change in export propensity (the change in export propensity is given by the difference between the growth rate of exports from each country and the growth rate of production) (UNIDO, 2009). [↑](#footnote-ref-4)