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INDUSTRIAL GROWTH – AN OBJECTIVE NECESSITY FOR THE ECONOMIC DEVELOPMENT OF BULGARIA

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Abstract

A number of empirical studies have acknowledged the special properties of manufacturing as an engine of growth such as: dynamic economies of scale in manufacturing; strong backward and forward linkages between manufacturing and other sectors of the domestic economy; strong properties of learning-by-doing; innovation and technological progress; and the importance of manufacturing for the balance of payments. Nowadays many developed countries (the USA, the UK, France, etc.) are pursuing reindustrialization as they are aware of the costs of deindustrialization: external deficits and indebtedness; lowering of the skill level of jobs; decline in potential growth.
The paper looks at the process of deindustrialization which Bulgaria underwent during the economic transformation and the current state of the country's industrial competitiveness. It is argued that reindustrialization is an objective necessity for the needed sustainable catching up development and has to be fostered by a proper industrial strategy.

Key words: *manufacturing,industrial competitiveness, industrial strategy, reindustrialization, Bulgaria*

JEL: O14, O25, L60

1. Introduction

During 2004-2008 in a catching-up context Bulgaria's GDP growth averaged 6 ½ %. However this remarkable growth rate was achieved not as a result of some notable technological upgrading and improvement in the competitiveness of the real sector but by taking advantage of the economic cycle, which was amplified by the global investment boom, financial market deepening and positive confidence effects arising from the country's EU accession. The global financial and economic crisis showed that the pre-crisis economic growth modelbuilding up excessive internal and external imbalances in the economy is not viable and cannot continue to function anymore. Unlike countries which had kept macroeconomic imbalances largely under control Bulgaria was hit by the global crisis very hard. The strong impact of the crisis on the

Bulgarian economy is widely attributed to the unprecedented current account deficit before the crisis; rapid expansion in credit; asset bubbles in non-tradable sectors; fast real exchange rate appreciation; lack of flexibility due to the fixed exchange rate; strong reliance on external inflows of capital. Since the adjustment has come through low levels of activity, according to the European Commission (2012) there are risks of structural problems going forward and a serious risk of locking the economy on a low growth path.

Weak growth almost always goes hand in hand with a weak status of the real economy. During the transition to a market economy over the last 20 years Bulgaria has suffered a painful process of restructuring, causing deindustrialization as many plants having been closed down without being replaced by new ones. The global crisis however has demonstrated that manufacturing-oriented economies which held on to their industrial sector and experienced export-based growth fare much better than service-dominated ones which rely too much on the non-exchangeable products in the creation of the GDP. Poland is an impressive example in this regard. It is the only EU country to have increased its percentage of industrial value added over the last ten years. That has been good for Poland – it is also the only EU country to come through the crisis without going into recession, and it continues to grow more strongly than almost every other country on the continent(Steinmeier, F., 2012, p.3).

The aim of the paper is to look at the deindustrialization process which Bulgaria underwent during the economic transformation period and to argue that the development of a modernized, competitive, bringing high value added manufacturing is an objective necessity for achieving sustainable catching up growth. Yet theneeded reindustrialization process is not going to progress on its own but has to be fostered by a comprehensive industrial strategy.

2. Why is manufacturing important?

Manufacturing[1] is considered to be of vital importance for the dynamics and competitiveness of every economy. Its specific characteristics make the sector important as an "engine of growth". The vast theoretical and empirical arguments in favour of manufacturing's special role in economic development can be summarised as follows:

- A statement coming from the work of Kaldor (1980)highlights the capacity of manufacturing to generate 'dynamic increasing returns', that is rising productivity through the expansion of production, that are less available in agriculture or services.

[1]Manufacturing here is defined narrowly as a part from industry which in addition includes construction, energy and mining. It is namely manufacturing (NACE rev. 2 Section C) that is considered to possess special characteristics important for economic development.

- The manufacturing sector offers special opportunities for both embodied and disembodied technological progress (Cornwall, 1977). Technological progress is strongest in this sector which is an important provider of new technology and new knowledge to the service sector. In fact a country's position in technology is determined largely in the manufacturing sector. In the European Union 80% of the business R&D expenditure is done by the manufacturing sector (European Commission, 2010, p.3).

- Linkage effects (which refer to the direct backward and forward linkages between different sectors) and spillover effects (which refer to the disembodied knowledge flows between sectors) are presumed to be stronger within manufacturing than within other sectors. Linkage and spillover effects between manufacturing and other sectors such as services or agriculture are also very powerful (Szirmai, 2009).

- Services depend strongly on the manufacturing sector and often it is hard to be separated. If production is relocated abroad, R&D and other high value added services often follow. When there is offshoring of production, innovation capacities are weakened as it is the process of actually making things that leads to ideas for how to make them better. One cannot keep the innovation at home unless manufacturing is kept too as the next wave of product innovation comes from the experience one gets by manufacturing (Jobs Council, 2011, p.33).

- Manufacturing is unique in that it is a source of good jobs for both highly educated and non-college-educated workers. In this sense it is considered thatmanufacturing bolsters the middle class. According to the European Commission (2010, p.1) 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 as a supplier or as a client.

- Manufactured products have a much larger share in international trade than that of services.[2] The trade balance and - to a lesser degree - the balance of current accounts is dominated by manufactured goods. The ability of an economy to achieve balanced trade and to pay for energy and the import of other basic resources depends on manufacturing exports (Aiginger and Sieber, 2005). Hence increasing export competitiveness of the manufacturing sector plays a crucial role in restoring trade imbalances, with associated benefits for economic stability and national prosperity.

[2]According to UNCTAD in 2011 goods have a share of 81.05% of total world trade, while services account for only 18.95%.

- According to Szirmai (2009) when one examines the successful cases of economic catch up, they were invariably countries which were also successful in industrialisation. There are no important examples of success in economic development in developing countries since 1950, which have not been driven by industrialisation. Neither tourism, nor primary exports, nor services have played a similar role, with the possible exception of India since 2000 (Szirmai, 2009, p.35). Evidence from cross-country data suggests that rapidly growing countries are those with large manufacturing sectors. Examining instances of growth acceleration (of 2 % or more) that were sustained for at least eight years, Johnson, Ostry, and Subramanian (2006) found that nearly all these cases took place in the midst of a rapid increase in the share of manufactures in total exports. Jones and Olken (2005) found that upbreaks in growth were associated with increased manufacturing employment (as a share of economy-wide employment), while down-breaks witnessed declines in manufacturing employment (Rodrik, 2006, p.7).

Given that the existing evidence supports the role of manufacturing as an engine of growth, deindustrialization would be of concern from a growth perspective and reindustrialization could be seen as a policy target foremerging economies.[3]

However, in recent decades there has been a significant decline in the share of manufacturing in GDP – and even more so of the share of manufacturing in employment – especiallyin advanced economies (Tregenna, 2011). The contribution of the service sector has become more and more important and the share of services in GDP of OECD countries nowadays is well above 70 per cent.The basic force behind the decline of manufacturing in rich countries is that services have a higher income elasticity (consumption increases more than proportionately relative to income) and technical progress is faster in manufacturing than in services (leading to lower price increases for industrial products and thus a smaller share in GDP) (Aiginger, 2007, p.302).

Following Rowthorn and Wells (1987) we can distinguish between positive and negative deindustrialization. Positive deindustrialization is regarded as the normal result of sustained economic growth in a fully employed and already highly developed economy. In contrast, negative deindustrialization is a product of economic failure and occurs when industry is in severe difficulties, shedding labour which is not reabsorbed in the service sector. Furthermore,in the case of emerging economies, we can speak of "premature liberalization". Deindustrialization can be considered 'premature' in the sense that of commencing at lower levels of income per capita than was generally the case for deindustrialization in advanced economies(Tregenna, 2011, p.19).

[3]Industrialization, deindustrialization and reindustrialization refer to changes in the share of the manufacturing sector in GDP and/or employment.

In the economic literature it is well established that the share of manufacturing in per capita GDP follows a humped-shaped pattern, rising during industrialisation and then decreasing once countries attain high income levels. According to Buera and Kaboski (2008), the share of manufacturing in GDP will rise as a country develops, and will reach a turning point. In a sample of 21high-income countries they find that this turning point occurs at an average per capita income of around US$7,100, after which the relative share declines and the share of the services sector continues to rise (Naude, 2010, p.1). Thus, if a country experiences a decline in the share of manufacturing at significantly lower level of GDP per capita than US$7,100, it might be inferred that this is an instance of premature deindustrialization. Premature deindustrialization is likely to have particularly severe negative effects on long-term growth, as less of the benefits of industrialization would already have been captured. Reindustrialization may be particularly necessary as well as viable in countries where 'premature' deindustrialized has been triggered or exacerbated by policy-related factors such as trade or financial liberalization (Tregenna, 2011, p.19).

After the global financial and economic crisis, besides emerging economies many developed countries (the USA, the UK, France, etc.) are pursuing reindustrialization as they are aware of the costs of deindustrialization: external deficits and indebtedness; lowering of the skill level of jobs; decline in potential growth. To Obama's administration the decline of manufacturing in the U.S. is a central factor in slow economic growth, high unemployment, and rising income inequality. Accordingly, manufacturing is given an important position in Obama's economic policy. In the 2013 budget, there is a chapter defending the auto bailout and proposing additional measures targeting the manufacturing sector, which include tax, trade and other initiatives.Placing manufacturing a special place in American economy and targeting it for special treatment is the essence of Obamanomics (Bartlett, 2012).

Recognizing the role of the real economy in underpinning sustainable economic growth and creating high-value jobs, the European Commission has proposed a new plan to strengthen the industrial base of the EU and to reverse the declining industry trend observed for a long period of time from its current level of 15.6% of EU GDP to as much as 20% by 2020 (European Commission, 2012).

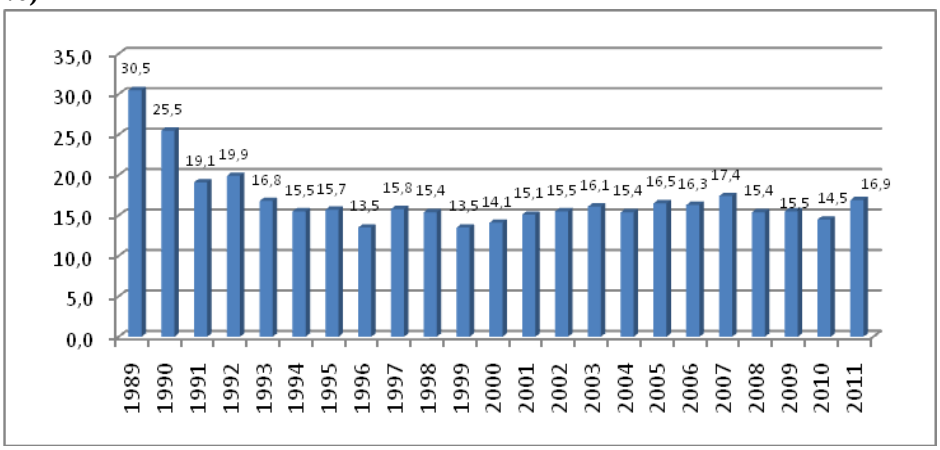
3. Deindustrialization in Bulgaria during the transition process and current state of industrial competitiveness

During the socialist period under centrally planned economic system Bulgaria managed to industrialize its economy shifting from mainly agrarian type. In the 1980s, Bulgaria was the second most industrialized country in the Council of Mutual Economic Assistance (CMEA) after the former Czechoslovakia, with 60 per cent of its GDP generated by industry, and a pattern of specialization geared to satisfying CMEA markets (Ognivtsev, 2005, p.159). The strong priority on the industrial sector led to the

development of industrial subsectors including machine building, chemical and oil processing, food processing, ferrous metallurgy and electronics.Within the CMEA Bulgaria also was specialized in high technologies and more precisely in five fields – the generation mainframes, high-speed matrix processors and parallel systems, software development, system hardware, digital and analogue PC design areas. Regarding this specialization in high-tech and ICT products, Bulgaria even was called "Silicon Valley of Eastern Europe" (Lepage and Kolarova, 2005, p.15).

In the process of transformation from a planned to a market economy, however, Bulgaria suffered from a massive deindustrialization. The share of manufacturing in the country's value added has experienced a significant drop from over 30% in 1989 to 14% in 2000. After it has registered a slight increase during the second decade of transition, in 2011 manufacturing accounted for 17% of Bulgaria's GDP, which is among the lowest shares in CEE (the corresponding share in Slovakia is 26%, in the Czech Republic – 24%, in Romania – 25%, in Hungary – 23%, in Poland – 18%).[4]

Figure 1 Share of manufacturing in value added in Bulgaria (1989 – 2011, %)



Source: UNSD

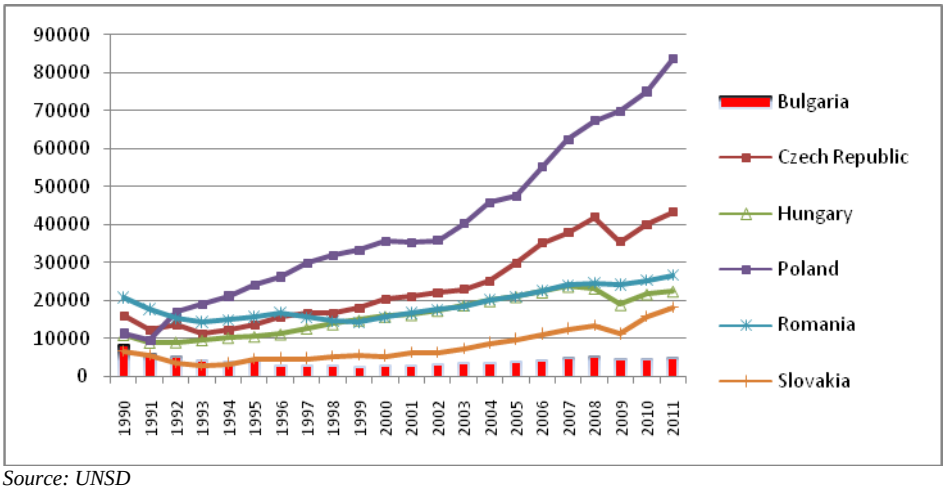
Transition in Bulgaria started and initially proceeded under more difficult circumstances than in most other CEE countries, reflecting a legacy of stricter central planning, the highest dependence on CMEA markets (80% of foreign trade in 1989) and a larger external debt burden. Moreover, political factors also played significant negative role. During the period 1990–1997, there was no political consensus in the country as to the economic policy priorities needed at the macro and micro levels. This resulted in a stop-and-go transformation towards a market economy with significantly delayed structural reforms. Many state owned firms, which might have been successfully privatized earlier, after losing CMEA markets started to accumulate

[4]According to UNSD data

payment arrears and were stripped of assets, lost any attraction to potential foreign or domestic investors and were closed down. Unlike other CEE countries which in the first years of transition also suffered deep "transformational recession" but then resumed growth, Bulgaria together with Romania and Moldova, were the only transition economies that experienced a second transformational recession with two consecutive years of falling aggregate output.

Figure 2 shows the trends in manufacturing value added in real terms in Bulgaria and other CEE countries during the years since the beginning of the transition process. It is clear that among the selected comparator countries Bulgaria's manufacturing industry performed the worst. Its output has been falling continuously in the first decade of transformation (with the exception of the years 1995 and 1998) and in 2000 it was only 35% of its 1990 level. While aftercarrying out of the pro-market reforms and achieving macroeconomic stability there has been a constant increase (interrupted in 2009 by the global financial and economic crisis) in the manufacturing output during the last decade, it has never reached its pre-transition levels in real terms. In 2011 Bulgaria's value added by manufacturing stands at less than 60% of its 1990 level. In a sharp contrast to Bulgaria, the Visegrad-4 countries in the process of transition have managed to substantially increase their manufacturing output. In this regard Poland can be distinguished as it has increased its manufacturing value added by more than 7 times since 1990, the Czech Republic and Slovakia - by 2.7 times and Hungary by 2 times. Even Bulgaria's companion in the EU integration process Romania succeeded in 2005 to surpass its pre-transition level of manufacturing output which in 2011 was already by 28% higher.

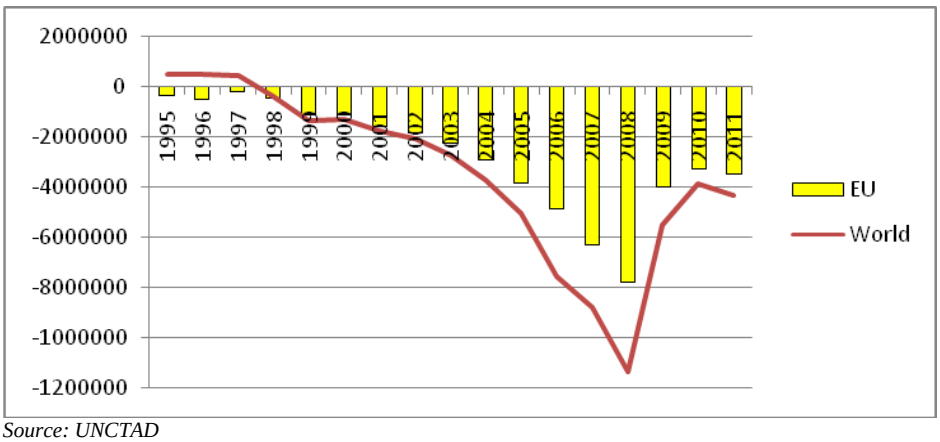
Figure 2 Manufacturing value added at constant 2005 prices in millionUS $ in Bulgaria and selected countries from CEE (1990 – 2011)



Source: UNSD

The reform process has brought about a visible deindustrialization in Bulgaria which has occurred owing to two major factors: the relatively lower level of competitiveness of Bulgarian industries, and existing trade restrictions in major markets, especially those related to technical barriers and market entry conditions (Ognivtsev, 2005, p.148).The "asymmetric" liberalization of the trade regime with the EU under the European Association Agreement (EAA) appeared to be insufficient for substantially expanding Bulgarian exports to the EU. Quite low international competitiveness of the national production, the technological, marketing and managerial backwardness of the majority of Bulgarian companies objectively limited the ability of national businesses to benefit from liberalized access to the EU market. Such objective limitations did not exist for the business of the EU partner countries, which has managed to exploit the opportunities for exports to Bulgaria a lot better, despite the slower liberalization schedule of the Bulgarian market. This gives grounds to a number of authors to consider that the principle of asymmetric liberalization projected in the EAA actually is transformed into the effect of "reverse asymmetry". Thus the EAA has not contributed to the creation of a considerable export base of the Bulgarian economy. Throughout the years Bulgaria has been registering a growing negative trade balance in trade with manufactures with the EU and correspondingly with the world.

Figure 3 Trade balance of Bulgaria with the world and the EU in trade with manufactured goods (SITC 5 to 8 less 667 and 68) for 1995 – 2011, thousand US $



Source: UNCTAD

During the economic boom that Bulgaria experienced in the context of the EU accession, the negative trade balance with manufactures in its trade relations with the EU reached record values of $ 6,3 billion in 2007 and $ 7,8 billion in 2008, which accounted for 15% of the country's GDP. Due to the global economic crisis and depressed internal demand the negative trade balance has diminished in 2009 and 2010, but started to increase again in 2011. The chronic negative trade balance and inability

of the country to pay for its import needs by its exports for a long period of time signifies serious structural weaknesses in the economy.

Besides deindustrialization, the trade liberalization and belated privatization carried out in Bulgaria have led to important structural transformation in the manufacturing sector. Changes in resource allocation are revealed in the evolution of the trade structure of Bulgarian manufacturing. According to Kandogan (2006) given the relative factor endowments of some of the CEECs compared to the EU, EAAs force them to specialize in labour intensive lower quality industries. This has been the case of Bulgaria.

As evident from table 1, after several years of functioning of the EAA a significant movement in comparative advantages towards labour and resource-intensive manufacturing products has occurred – in 2000 their share in Bulgaria's manufacturing export become over 45% increasing sharply from less than 30% in 1995. Although in the years of full EU membership the importance of those products underwent a significant decline, in 2011 they still have the highest share in Bulgaria's export of manufactures– 31.1%, while the corresponding share in the EU is about 2.5 times lower (12.6%). Labour-intensive and resource-based manufactures are all products that embody unskilled, low-paid labour and have little Bulgarian added value. At the same time, Bulgaria loses its positions in the most perspective group of products with a high level of skill and technology intensity whose share of almost one third in 1995 shrank to 22.6 % during the last year, while the average number for the EU countries is as high as 36.4%.

Table 1 Manufactured goods exports according to their factor and skills intensity in Bulgaria's and EU's trade with the world, %

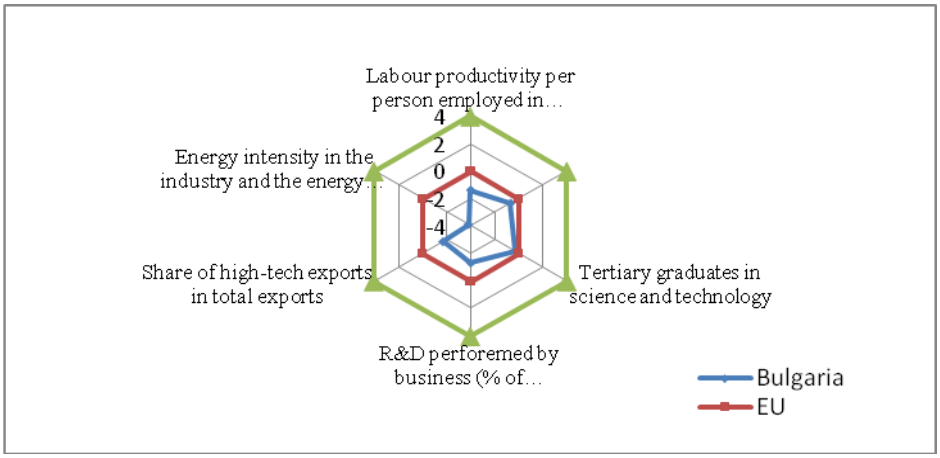
	Bulgaria				EU			
Products / Years	***1995***	***2000***	***2010***	***2011***	***1995***	***2000***	***2010***	***2011***
Labour-intensive and resource-based manufactures	29,3	45,2	33,2	31,1	18	15,4	13,3	12,6
Manufactures with low skill and technology intensity	18,9	17,9	12,7	14,3	10,3	8,6	9,8	10,1
Manufactures with medium skill and technology intensity	17,9	15,5	30,4	31	37,7	37,5	37,4	38
Manufactures with high skill and technology intensity	32,8	20,3	22,6	22,6	30,8	35,5	36,5	36,4
Unclassified	1,1	1	1,1	1	3,1	3	2,9	2,9

Source: UNCTAD

A positive change in Bulgaria's exports is the decreasing of the share of manufactures with low skill and technology intensity to the benefit of those with medium intensity. Overall, Bulgaria still differs substantially in structural and technological aspect from

its European partners, and some claim it has fallen in the "low-tech sectors trap" (Zhelev, 2012, p. 268).

Figure 4 Indicators on competitiveness of Bulgarian industry vis-à-vis the EU (distance from the EU-27 average, measured in standard deviations)



Source: European Commission (2012a)

Figure 4 provides a good illustration of the current state of the industrial competitiveness in Bulgaria. According to all presented indicators Bulgaria performs well below the EU average. Lagging behind the European partners is exceptionally strongly pronounced in terms of share of high-tech exports in total exports (-1.7 standard deviations from the EU average), labour productivity per person employed in manufacturing (- 1.4 standard deviations from the EU average) and R&D performed by business (- 1.3 standard deviations from the EU average). A major concern is also the very high energy-intensity of the industry – several times higher than the EU average (-3.8 standard deviations).

The very low industrial competitiveness of Bulgaria vis-à-vis the EU is no surprise. It is reflected in the lowest living standards in Bulgaria among all EU member states. Per capita income (at purchasing power parity) in Bulgaria in 2011 is estimated by Eurostat at only 46 per cent of the EU average per capita income.

Despite the acute socio-economic problems associated with the deindustrialization, during the last 20 years the Bulgarian governments have not pursued any industrial policy to counteract this phenomenon. After carrying out the pro-market reforms, the efforts were concentrated on fulfilment of the EU accession requirements and securing financial and macroeconomic stability. The result of the absence of clear vision and such a desertion of the state to promote industrial upgrading is dramatic – the country, which otherwise is among the most stable in terms of government finances, has lost a large part of its industrial potential, positioning itself permanently in the economic periphery of the EU. Bulgaria has not yet converged and is still far away in economic,

social and technological terms in comparison not only with the old but even with the new EU member states.

Probably the most important factor behind the divergence of Bulgaria from the other new EU member states is the significant difference in the roles which FDI played in their economies in supporting the build-up of industrial capacities and in its focus on tradable vs. non-tradable sectors.In the more successful CEE countries FDI brought about a process of reindustrialization and consequently excellent export performance because of the upgrading of their tradable sectors and strengthening the export potential. However these countries were not passive recipients of FDI. They have actively participated in FDI attraction by providing various fiscal and financial incentives, while guiding them in certain sectors of the economy.

On the other hand, the non-selective approach to promoting FDI applied in Bulgaria has led to their unfavourable sectoral distribution in the Bulgarian economy as the bulk of the FDI flows were directed to non-productive sectors instead of developing the production and export capacity of the manufacturing sector. While in the more advanced CEE countries manufacturing has a share of close to or even above 40%, in Bulgaria it has managed to attract only 16.8 % of the total FDI stock of 36.8 bln EUR by 2011. On the other pole, over 60% of the FDI stock in Bulgaria in 2011 is in sectors that are strongly dependent on credit availability (30% - in real estate and construction; 18% in financial intermediation and 13% in retail)[5]. These investments have mostly speculative character and do not contribute to technological modernization, export competitiveness and sustainable economic growth. Accordingly they were most severely affected by the global financial and economic crisis and withdrew very fast from the country after the credit crunch, revealing the unsustainability of growth model based on current account deficits and inflow of credits.

4. Conclusion

In developed countries the deindustrialization process which started during the 1960s and 1970s is an inherent consequence of the technological advancement and high economic development. In Bulgaria deindustrialization commenced in 1990 with the start of the transformation from a planned to a market economy. It has been a result of the much delayed and inefficient privatization process, strong deleveraging and lack of adequate policies to attract investment necessary for technological modernization of the Bulgarian economy. Besides the decrease of manufacturing share in the GDP and the sizeable shedding of labour which was not reabsorbed by the tertiary sector, deindustrialization in Bulgaria also involved a dramatic slump in the manufacturing production, which has never been recovered to its pre-transition level. Adopting the term from Rowthorn and Wells (1987) we can classify the deindustrialization process

[5]Source of data - Bulgarian National Bank

which Bulgaria underwent during the economic transformation as a "negative" deindustrialization.It resulted in a significant loss of human capital skills that were available in the early 1990s but either disappeared due to the intensive migration or were simply depleted because of a lack of employment opportunities.

A key negative consequence of the deindustrialization in Bulgaria is the deterioration in the trade specialization of the country. Most significant is the dramatic reduction in exports of machinery and equipment, from more than half of Bulgaria's exports in 1990 to less than 1/5 in 2011. In the pre-transition period, Bulgaria was a major exporter of capital goods for the CMEA, but is now a net importer of these products. A meaningful sign of the structural weaknesses of the economy is the persistent negative manufacturing trade balance. Even after 6 years of full EU membership the Bulgarian economy continues to be dominated by labour-intensive industries with low and medium-low technological sophistication, substantially differing from its EU partner countries.

Bulgaria's deindustrialization process can be also defined as "premature" – it has started much earlier than the level of economic development of the country suggests[6]and was triggered and exacerbated by policy reforms and trade liberalization. According to Tregenna (2011) in such a case reindustrialization is particularly necessary as well as viable but requires decisive and effective industrial policies.

Adoption of an active industrial policy is essential for Bulgaria which has not managed so far by relying only on the free market forcesto reverse the early deep process of deindustrialization and where investment patterns favoured the expansion of non-tradable as compared to tradable industries.By placing industry a central position in its "Europe 2020" strategy the EU also gives a strong signal to its member states to step up their national industrial policies. In order to be effective Bulgaria's industrial policy likewise has to be part of a comprehensive long-term industrial strategy, which is not prone to short-term, cyclical or political considerations and has to be widely shared by society.

Such an industrial strategy must support a new type of economic growth model, sustainable in the long run, that is pro-investment and export-oriented and objectively requires a strong and competitive manufacturing sector. The aim of the industrial strategy would be to fosterthe productive and export capacity of the economy and achieve a gradual shift in the industrial structure from resource-based and low-tech activities to medium- and high-tech industries, implying a relatively greater increase in areas that bring higher added value.In order to be successful the industrial strategy has

[6]Bulgaria reached income per capita of US $ 7 100 (the turning point at which manufacturing share in GDP started to decline in high-income countries as suggested by Buera and Kaboski (2008)) only in 2011.

to be pursued by adoption of a systemic approach, integrating and coordinating a whole host of policies such as administration and allocation of resources provided by the EU funds, FDI policy, science, technology and innovation policy and human capital policy.

REFERENCES

Aiginger, K. (2007) *Industrial Policy: A Dying Breed or A Re-emerging Phoenix*, Journal of Industry Competition and Trade (2007) 7:297–323

Aiginger, K., Sieber, S. (2005), Towards a renewed industrial policy in Europe, WIFO

Bartlett, B. (2012),*Can Obama's Manufacturing Initiative Really Work?*, The Fiscal Times, 17 February 2012

Buera, J. and J. Kaboski (2008), Scale and the Origins of Structural Change, Federal Reserve Bank of Chicago Working Paper WP2008-06

Cornwall, J, (1977), Modern Capitalism. It's Growth and Transformation, St. Martin's Press, New York

European Commission (2012), A Stronger European Industry for Growth and Economic Recovery, COM(2012) 582, Brussels

European Commission (2012 a) Member States competitiveness performance and policies 2012, Brussels

European Commission (2010), An Integrated Industrial Policy for the Globalisation Era Putting Competitiveness and Sustainability at Centre Stage, COM(2010) 614, Brussels

Jobs Council (2011) Road Map to Renewal, President's Council on Jobs and Competitiveness, Washington

Johnson, S., Ostry, J., A., Subramanian (2006), Africa's Growth Prospects: Benchmarking the Constraints, IMF Working Paper, Washington

Jones, F., and B. Olken (2005), The Anatomy of Start-Stop Growth, NBER Working Paper No. 11528 , Cambridge, MA

Kaldor, N. (1980), Essays on Economic Stability and Growth, 2nd edition, Duckworth, London

Kandogan, Y. (2006),*The Reorientation of transition Countries' Exports: Changes in Quantity, Quality and Variety*, Intereconomics, July/August 2006

Lepage, L. and D. Kolarova (2005) Knowledge Society and Transition Economies -The Bulgarian Challenge, Dijon

Naude, W., (2010) New Challenges for Industrial Policy, UNI-WIDER Working Paper No 107/2010

Ognivtsev, V. (2005) Bulgaria: Experience in Systemic Transition and Reforms", in UNCTAD project "Coping with Trade Reforms: A Developing-Country Perspective on the WTO Industrial Tariff Negotiations", available at: http://192.91.247.38/tab/events/namastudy/fullreport-version14nov-p158-179.pdf

Rodrik, D. (2006), Industrial Development: Stylized Facts and Policies, Harvard University

Rowthorn, R., and J. Wells (1987), De-industrialization and Foreign Trade, Cambridge University Press

Steinmeier, F. (2012), A growth programme for industrial renewal in Europe, Friedrich-Ebert-Stiftung, Berlin

Szirmai, A. (2009) Industrialisation as an engine of growth in developing countries, UNU-MERIT, Working Paper Series 010-2009

Tregenna, F. (2011), Manufacturing Productivity, Deindustrialization, and Reindustrialization, UNU-WIDER Working Paper No. 2011/57

Zhelev, P. (2012), Industrial policy under conditions of EU membership – the case of Bulgaria, Economic Theory and Commercial Performance: Global Challenges, proceedings of the International Conference "Evolution of International Trading System: Prospects and Challenges", St. Petersburg, October 11-12, 2012 available at: http://worldec.ru/eng/178/180.html