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Shut out? South East Europe and the EU's New Industrial Policy

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Abstract

This paper explores the potential role of industrial policy to stimulate post-crisis recovery in South East Europe (SEE). Policy reactions in the region have focused on fiscal consolidation and austerity, while the design of active industrial policies to improve competitiveness has been less in evidence. The paper reviews the experience of industrial policies in the EU and shows how these policies have evolved from vertical to horizontal approaches, and how the latter versions of policy have been transferred to the accession states in SEE. The paper reviews the evolution of industrial policies in eight countries of the region and the impact of these policies on industrial production. It argues that the horizontal industrial policies that have been imposed on SEE countries through conditionality embodied in the EU accession process have left their economies vulnerable to adverse spillovers from the eurozone crisis. It concludes with an assessment of the relevance of industrial policies to economic recovery, and questions whether SEE has been 'shut out' of the 'fresh' vertical industrial policy that has been adopted by the EU in recent years.

Keywords: industrial policy, innovation, competitiveness, European Union, South East Europe.

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1. Introduction

Following the global economic crisis, the limitations of unregulated free-market capitalism have become apparent. The rise of the financial sector as a dominant force in many developed economies over the last two decades has been accompanied by widespread de-industrialisation and has left these economies vulnerable to destructive financial bubbles (Bellamy-Foster and Magdoff, 2009). Following the crisis, there has been a loss of confidence in the prescriptions of neo-liberal economic thought that prescribed a strong reliance on the market and the withdrawal of the state from active intervention in the economy to promote industrial development. As yet, however, no alternative growth model has been proposed which has won widespread acceptance.

The most recent permutation of the global crisis within the eurozone and its periphery has seen the transference of private sector indebtedness to the state, leading to soaring budget deficits that have required widespread and unpopular cuts in public expenditures (Pisany-Ferry, 2013). Policy reactions in EU member states have focused on supporting the financial sector though banking union combined with a macro-economic policy package involving tight fiscal discipline implemented through the imposition of tough austerity packages and strengthened economic governance, while the design of active industrial policies to improve competitiveness have been less in evidence.

Faced with the need to raise labour productivity and international competitiveness so that renewed economic growth could underpin a sustained reduction of government deficits, countries in the European periphery are bereft of suitable policy instruments apart from 'internal devaluation'. It is in this context that finding a suitable form of industrial policy is once again on the agenda promoted by the European Commission, which has called for a 'fresh approach' to industrial policy as a means to promote recovery from the economic crisis in the EU (EC, 2010).

The economies of South East Europe (SEE) have been severely affected by the global economic crisis (Bartlett and Prica, 2011) and face similar challenges of as the rest of Europe in finding an appropriate policy response[1]. So far, the economic policies that have been adopted in SEE have been broadly conservative, being initially stimulative in allowing budget deficits to increase from relatively low levels, but subsequently restrictive with deep cuts in public expenditure to constrain the emerging deficits (Cviic and Sanfey, 2010). The IMF has intervened with conditional loans in the worst affected counties such as Bosnia & Herzegovina, Serbia and Romania and more recently in the Former Yugoslav Republic of Macedonia (henceforth "Macedonia"). Monetary policy was initially loosened in countries that experienced rapid reversals of credit growth, such as Croatia, but later tightened where the pegged exchange rates were threatened as in the case of Macedonia. These difficult economic conditions have continued as a result of spillover from the continuing crisis in the Eurozone leading to double-dip recessions in some countries. In response, aggressive fiscal austerity policies have been applied in the 'super-periphery' countries of SEE similar to those imposed on other peripheral countries of the EU (Bartlett and Prica, 2013). However, there has

[1] For overviews of the nature and effects of the economic crisis in the region see Anastakis et al. (2011) and Bartlett and Monastiriotis (2011).

been no sign of an accompanying renewal of industrial policy as a remedy for economic recession in any of these countries (Cerović et al., 2014).

This paper explores the role of industrial policy as a potential means to stimulate economic revival in South East Europe. In the next section, the paper reviews how industrial policies in the EU and the USA followed similar policy evolutions from a 'vertical' approach in the immediate post-war period under the Keynesian consensus, to a 'horizontal' approach in the period following the Reagan-Thatcher neoliberal ascendancy. Within the class of horizontal industrial policies, it distinguishes thos designed to promote business networks and industrial clusters from those designed to promote the knowledge economy and innovation systems. Section 3 turns to the analysis of industrial policy and performance in SEE and argues that the region has been driven by the process of Europeanisation to make an equivalent shift from vertical to horizontal industrial polices. Sections 4 through 6 detail the evolution of industrial policies in each of eight SEE countries, taking in turn three groups of countries distinguished by their accession status: new member states, candidate states and potential candidates[2]. Section 7 reviews the recent return of EU industrial policy towards a vertical approach through the 'fresh' industrial policy adopted at the start of the 2010s in response to the eurozone crisis. Section 8 concludes with an assessment of the horizontal industrial policies that have been adopted in SEE in recent years, and argues that these policies have been incapable of supporting economic recovery in which industrial capacity has been diminished by the long years of transitional recession and undermined by the horizontal industrial policy that they have been obliged to implement as a condition of the EU accession

[2] Among EU member states, the countries considered are Bulgaria, Romania and Slovenia; among candidate states are Croatia (a candidate until 2013) and Macedonia; and potential candidate states are Bosnia & Herzegovina, Montenegro (a candidate since 2010) and Serbia (a candidate since 2013).

process. The section concludes that the SEE countries are likely to be effectively "shut out" of the EU's fresh approach to industrial policy due to this lack of capacity for high technology industrial production.

2. Industrial Policies in the EU and USA- from Vertical to Horizontal

After the end of the Second World War, most governments in Western Europe adopted active industrial polices to stimulate post-war economic recovery. Industrial policy was used to direct state support to favoured industries, guided by various sorts of planning. The most active proponent of this approach was the French government, which adopted a formal planning approach to support selected industrial sectors and build 'national champions' (Cohen, 2007). Governments also channelled development funds into less developed regions, focusing on infrastructure projects and subsidies to large-scale industries to support the development of regions in decline.

In the late 1980s, with the creation of the EU Single Market, this 'vertical' industrial policy lost favour as the Reagan-Thatcher economic policies emphasised the withdrawal of the state from economic management, the privatisation of state owned enterprises, a greater reliance on market forces and the creation of a business friendly 'investment climate' in which the spontaneous forces of the market would decide which industries or sectors would prosper, and which would fall by the wayside. The new 'horizontal' approach to industrial policy saw a role for the state in supervising an enabling environment for business growth, by setting out the rules of the

game, ensuring the rule of law, and generally creating a market free of preferential subsidies in which all could compete on an equal basis. The old idea of 'picking winners' from the era of vertical industrial policy was derided as infeasible and ineffective and was replaced by a wave of economic liberalisation. The new emphasis was on competition policy, which it was thought would eliminate or at least significantly reduce state aid to industry, and on promoting horizontal measures to establish a level playing field for companies across the Single Market.

In the 1990s the focus of such a horizontal industrial policy shifted further away from sectoral industrial policies towards decentralised territorial policies embodied in the EU regional policy and the activities of the European Regional Development Fund (Begg and Mayes, 2000). This emphasised the fostering of 'regional competitiveness', and led to the creation of programmes of regional development that embodied new formulations of horizontal industrial policy such as (i) support for small and medium sized enterprises at a local level through the creation of decentralised business networks and industrial clusters and (ii) an emphasis on 'regional innovation systems', the 'knowledge economy' and 'knowledge transfer' from public research and higher education institutions to the business sector (Cooke, 2001).

Business networks and industrial clusters

Business networking and industrial clusters were at the heart of this new horizontal industrial policy approach within which small and medium sized enterprises (SMEs) became an increasing focus of attention. Italian industrial districts became a paradigm for a new form of economic development based

upon a dense networking and clustering of small firms in specific geographic locations. Drawing on the research evidence from the 'Third Italy' as well as other regions in which industrial districts had been observed, such as Baden-Württemberg in Germany, Cooke and Morgan (1993) identified a new "network paradigm" in which the spatial dimension of inter-firm networking was of key importance. Stabher et al. (1995) showed how programmes to support business networking had been widely developed as a tool for regional industrial policy. Inter-firm networks were also identified as an important element for decentralised industrial policy in transition economies where rapidly changing economic conditions led to the emergence of new and more flexible industrial economies to replace the old obsolete hierarchical industrial structures (Franičević and Bartlett, 2001).

Viewed from a policy perspective, the recognition of the importance of inter-firm networks and their geographical concentration led to the emergence of the notion of industrial clusters as a policy device. If such clusters had been so effective in the Third Italy and elsewhere, could governments seeking to promote economic growth and development create them artificially? The influential work of Michael Porter stimulated an increased policy interest in the beneficial effects of industrial clusters, and governments rushed to introduce new industrial cluster programmes with subsidies to support them. However, few of these initiatives proved to be successful. As Feldman et al. (2005) argued, effective clusters are typically created by entrepreneurs as a part of their strategic business strategy in response to market incentives. They evolve, rather than being the product of conscious design. Nevertheless, policy makers in many transition countries have supported the idea of clusters, starting with the cluster policy introduced in Slovenia in 2001, and

spreading throughout South East Europe through a process of policy transfer from international donor organisations and EU assistance programmes.

The knowledge economy and regional innovation systems

The accession of the East European economies to the EU in 2004 led to an increased pace of delocalisation in the old member states as industries began to transfer from the UK, France and Germany to the new member states in the East. This prompted calls for a more coordinated approach to industrial policy. In 2005 the European Commission re-launched the Lisbon Agenda as the "Growth and Jobs Strategy". The new strategy re-emphasised the horizontal approach to industrial policy based on improving competitiveness through increased support for innovation. It aimed to increase expenditure on R&D to 3% of EU GDP, promote the uptake of Information and Communication Technologies (ICT) and develop innovation poles linking regional centres, universities and businesses.

The new emphasis by the Commission on innovation and the knowledge economy chimed with the voluminous academic research into regional innovation systems. This had argued that differences in innovative capacities between countries and regions are linked to the 'thickness' of institutions that promote learning and the transfer of technology (Morgan, 1997). Porter (2000) argued that industrial clusters would benefit from knowledge transfer from local universities. Policy makers began to support programmes to facilitate links between high technology companies and institutions of higher education. Universities were encouraged to set up programmes to enable academics and students to establish high-tech spin-off companies to

commercialise the results of their scientific inventions. Yet the use of spin-offs as a mechanism of knowledge transfer is not without its drawbacks and difficulties. Evidence from several studies showed that only a minority of spin-offs could be expected to have growth potential (Druilhe and Garnsey, 2004), while in the absence of adequate support spin-offs may remain stuck at a too small scale of operation (Degroof and Roberts, 2004). Moreover, spin-offs may find it hard to raise either outside equity capital or loan funds to finance their activities (Lerner, 2004) and they typically lack the managerial expertise needed to exploit the commercial potential of their technologies (Wright et al., 2004).

Spin-off companies are often located in science or technology parks based either within or close to a university or research institute. Some early empirical evidence suggested that the level of interaction between firms in such science and technology parks and their local universities is generally low (Massey et al., 1992). Cooperation between firms in a park may also be less than one might expect (Quintas et al., 1992; Johanisson, 1998), which may be due to the heterogeneity of the firms in a Park (Lowengren-Williams, 2000). Nevertheless, interactions between park-based companies may be greater than among other firms (Felsenstein, 1994). Lindelöf and Löfsten carried out an empirical study of 265 new technology firms in ten science parks in Sweden, and compared these with a matched sample of off-park firms. They found stronger links to universities, higher levels of technological innovation, and higher rates of growth in firms located in parks compared to off-park firms.

Such decentralised industrial policies were not confined to Europe, but were also adopted in the USA. Shrank (2009) shows how industrial policy in the

USA has become highly decentralised, reflecting the emergence of a new, networked economy. US industrial policy is now delivered through institutions such as the National Institute of Standards and Technology, and the Small Business Administration (SBA). The SBA provides Small Business Innovation Research (SBIR) grants allocated on a decentralised and competitive basis. The Advanced Research Projects Agency brokers the relationship between scientists, engineers, and entrepreneurs to foster the growth of new firms and industries. According to Shrank, over the last three decades the USA has been transformed from the virtual archetype of a 'liberal market economy' into an increasingly enthusiastic practitioner of horizontal industrial policy, based on the principles of experimentation, diversity and local knowledge. Under the SBIR programme, public institutions must allocate 2.5% of their R&D funds to small businesses through competitive awards. During the 2000s, the SBA allocated grants to 1,500 firms, fostering cooperation between research institutions and the small business sector on a decentralised basis. The view that the USA implements effective industrial policies is echoed by Ketels (2007) who demonstrates the effectiveness of decentralised industrial policies in the areas of science and technology, local economic development and trade supporting policies, despite the lack of an overall strategy.

It should not be thought, however, that the 'horizontal' approach to industrial policy in the EU was adopted on the basis of unanimous approval by all the Member States (Trouille, 2007). France and Germany in particular were dissatisfied with the horizontal approach to industrial policy and have continued to implement their own versions of industrial policy, with France in particular continuing to pursue 'vertical' policies of supporting 'national

champions'.[3] However, they were unable to influence the emerging new EU policy approach that had been captured by the dominance of neo-liberal arguments that had been pushed hard by the UK in particular (Smith 2005). It was this more liberal market interpretation of industrial policy that was transferred to East European accession countries as part of the conditionality of the accession process. In the more advanced transition economies in Central Europe and the Baltic states this approach chimed well with their market-oriented policies adopted during the post-communist transition, but in South East Europe the liberal policy approach was less favoured and state intervention in the economy persisted for longer.

3. The Europeanisation of industrial policy in South East Europe

This section argues that industrial policies in South East Europe followed a similar pattern of evolution, from vertical to horizontal, that has been observed in the developed market economies, although with some delay. The countries of South East Europe became highly industrialised under the communist system, to an extent greater than was justified by their level of economic development. However, with the onset of transition to a market economy in the 1990s the industrial base of these countries collapsed. This was a common phenomenon of the transitional recession and restructuring that affected all transition countries, but was far more emphasised in South East Europe following the break-up of former Yugoslavia and the wars and

[3] Trouille (2007: 518) cites the French Beffa Report "For a Renewed Industrial Policy" as advocating industrial policies focused on large-scale programmes in high-tech industries, and notes that the report has been criticised for relying on 'old French recipes' inspired by de Gaulle's vision of grand projects from the 1960s.

conflicts that affected the whole region either directly or indirectly. In addition, international assistance, and the transfer of policy ideas that came with it, emphasised the importance of withdrawing the state from an interventionist role in supporting the economy. Conditionality related to the EU accession process emphasised the creation of competitive economies through a sharp reduction of state aid to industries. As a consequence of this conditionality, a process of Europeanisation of industrial policy has gradually taken place, even in countries that are not currently candidate states.

Some countries tried to resist these trends, and the pace of privatisation and marketisation has indeed been slower in South East Europe (SEE) than in the countries of Central and Eastern Europe (CEE) and the Baltic. Privatisation was adopted gradually and hesitatingly, and state aid to industries in the form of subsidies with the aim of preserving employment was widespread (Hare and Hughes 1992). Countries as diverse as Bulgaria, Romania, Serbia and Slovenia followed a gradualist approach to privatisation. In the view of the former Slovenian Minister of Economy, Tea Petrin, privatisation on its own was unlikely to promote economic growth in the absence of an industrial policy to guide the replacement of the old industrial structures in small transition economies (Petrin, 1996). Slovenia's gradualist approach led to eventually to the creation of a "corporatist" variety of capitalism (Luksić, 2003). In Croatia too, after an initial burst of enthusiasm in the early 1990s, the completion of privatisation was delayed. The restructuring and privatisation of the shipbuilding industry became a critical issue in relation to the completion of EU accession negotiations. The shipbuilding industry had been kept alive only by a continuous injection of subsidies in response to the political pressure from local interest groups and in consideration of the serious impact on employment that would result from letting this industry

collapse. The industry was eventually privatised only in the final months preceding Croatia's accession to the EU in July 2013. Serbia also resisted the effective implementation of transition policies until the democratic turn in 2000. Elsewhere in the region the neoliberal perspective was taken on board more readily. Countries such as Albania and Macedonia had completed the privatisation process by the late 1990s and adopted a liberal market variety of capitalism (Bartlett, 2007), as did Montenegro in the 2000s.

Despite these differences, the influence of the EU accession process has eventually become a decisive factor, as industrial policy has formed one of the negotiating 'chapters' of the acquis which must be taken on by aspiring EU members as a requirement of the accession process. Thus, in the early 2000s, the new EU member states (Slovenia, Bulgaria and Romania) adopted the horizontal industrial policy measures mandated by the EU, while the candidate states soon followed suit (Croatia, Macedonia). In contrast, Serbia[4] and Bosnia Herzegovina have retained a more interventionist approach, with large subsidies to specific industries, accompanied by protection of monopolistic interests through tariff and non-tariff protection policies. Even in those countries, measures implementing EU-style policies through the creation of tax-privileged industrial zones and regional development agencies to support the development of SMEs have been funded through the EU's assistance programme (IPA – Instrument for Pre-accession Assistance).

Thus, from about mid-2000 onwards, almost all SEE countries were vigorously pursuing market-friendly economic policies. Privatisation was completed in Bulgaria, Romania and Slovenia in the run up to or shortly

[4] Serbia became a candidate for EU membership in March 2012, and opened negotiations for membership in January 2014

following accession in 2004, and in Croatia in 2013. Economic growth was led by an expansion of the services sector together with the liberalisation of capital markets and the ensuing rapid growth of foreign credits.

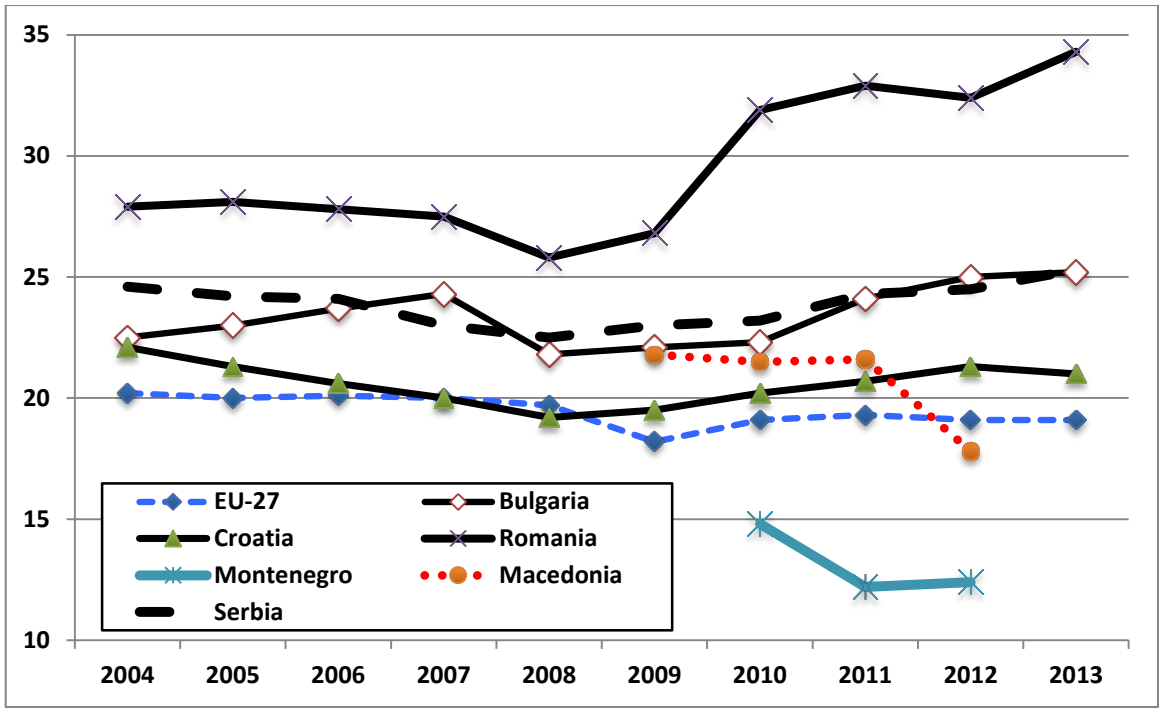
Trends in industrial performance

By the end of the 1990s, the region had witnessed a sharp reduction in the share of output produced and workers employed by the industrial sector (Bartlett, 2009). As shown in Figure 1, the share of industry in gross value added (GVA) continued to fall in most countries of South East Europe (Croatia, Romania, Serbia) during the period of economic growth that took place in the early 2000s, with the exception was Bulgaria where the share of industry in GVA increased by two percentage points following EU accession from 2004 to 2007. This general fall in the share of industrial production followed the EU trend and reflected the rapid growth in services sectors during this period.

Following the onset of the period of economic crisis from 2008, the share of industry tended to rise in all these countries as output fell or stagnated; the crisis has apparently affected the agriculture and services sectors more seriously than the industrial sector. Almost all the countries represented in Figure 1 (the only SEE countries for which data is available) maintained a share of industry in GVA above the average for the EU-27. The exceptions have been Macedonia and Montenegro. In the former case, the share of industry in GVA fell during the recession, reaching levels below the EU average in 2012 although most likely recovering in 2013. In Montenegro, the manufacturing sector had been hollowed out in the 1990s and early 2000s

with the early adoption of a neoliberal economic policy that exposed the wood manufacturing industry in the North East of the country to exceptional external competition, leading to its rapid demise (Bartlett and Šišević, 2013). Its share of industrial production in GVA is therefore far below that of other countries of the region and has fallen further in recent years.

Figure 1: Industry share in GVA (%)



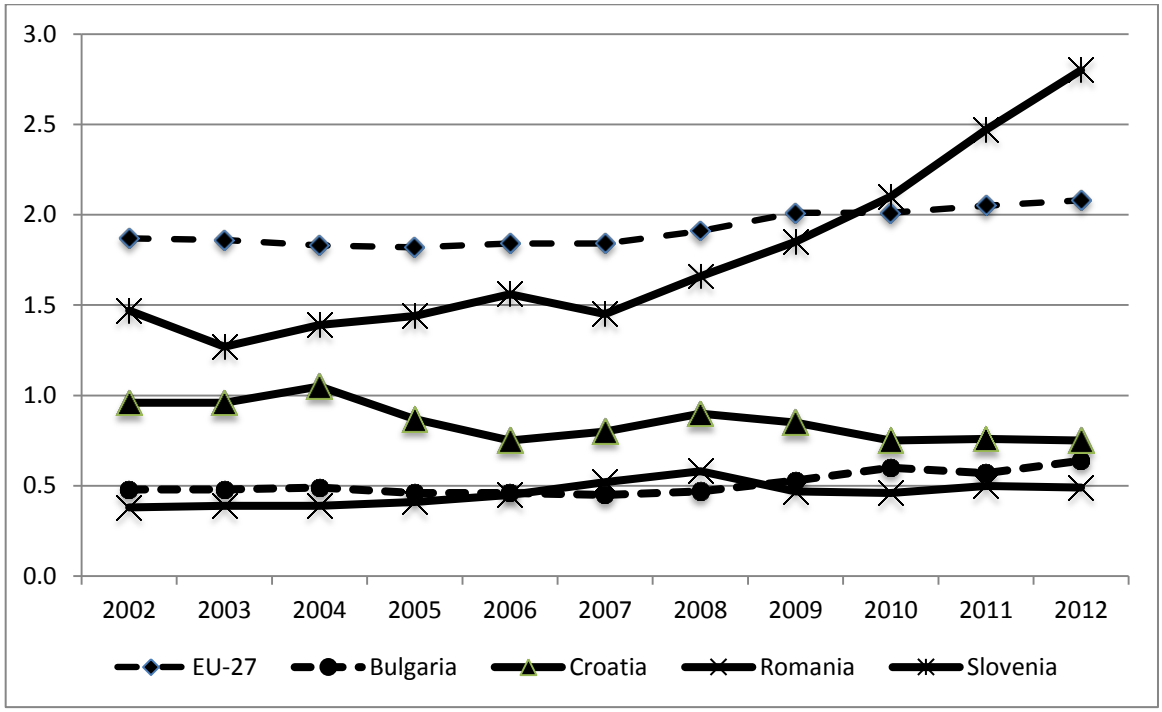
Source: Eurostat online data on share of industry (except construction) in gross value added, variable name [nama_nace10_c]

Over the last decade, the share of manufacturing sector share in GVA has followed a similar path to that of industrial production. In Croatia and Serbia the share of manufacturing followed the long-term secular decline of manufacturing in the EU-27 rather closely[5]. Only Romania maintained a significantly higher share of manufacturing in GVA at 23.5% over the period from 2004-2013.

[5] The share of manufacturing in gross vale added in the EU-27 fell monotonically from 17.4% to 15.2% between 2002 and 2012. In Croatia the share of manufacturing in gross value added fell from16.8% to 18.3% and in Serbia from 19.0% to 17.1% over the same period.

As shown above, a main element of the horizontal approach to industrial policy has been its focus on increasing the innovative capacity of the economy, and on support for high-growth innovative small and medium sized enterprises (SMEs) which it has been argued have played an important role in underpinning economic growth in transition countries (Radosevic, 2002).

Figure 2: Gross domestic expenditure on R&D (% GDP)



Source: Eurostat online data, Total intramural R&D expenditure (GERD) by sectors of performance variable code name [rd_e_gerdtot].

An influential argument developed by Radosevic (2004) and others is that while growth in the early stages of transition depended on a reallocation of resources from large low-productivity state firms to higher productivity firms in the emerging private sector, improvements in economic growth in later phases of transition depend on the pace of innovation and the development of a knowledge-based economy. Yet, state expenditure on R&D in the transition economies of SEE has been systematically below the average in the EU (see

Figure 2). Significant differences in gross expenditure on research and development as a proportion of GDP (GERD) can be observed between countries. Only Slovenia has caught up with the EU average GERD ratio of around 2% since accession in 2004, and subsequently surpassed the EU average. Slovenia has adopted a supportive and long-term set of policy instruments to support innovation, with greater focus than in most other countries of SEE (Bartlett and Bukvič, 2006, OECD, 2013). In Croatia, where a less conscious policy focus on innovation has characterised policymaking (Bartlett and Čučković, 2006) the GERD ratio has fallen over time towards the far lower levels typical in Bulgaria and Romania, where it has hovered around just 0.5% over the last decade.

4. Industrial Policy in the EU Member States in SEE

Slovenia

As in other transition countries in SEE in the first wave of the EU's Eastern enlargement, Slovenia adopted a gradualist approach to privatisation. Even at the point of accession to the EU in 2004, the main state owned banks had not been privatised. In fact, privatisation in Slovenia resulted perversely in greater state control, since most firms allegedly privatised were bought out by state funds and by state-sponsored privatisation investment funds (Pahor et al., 2004). In the run-up to EU accession, the Slovenian policy changed to a greater emphasis on horizontal industrial policies and the removal of subsidies and state aids for industry in keeping with the EU acquis (Šuštar, 2004). On the eve of accession, the EU's Comprehensive Monitoring Report on Slovenia recommended the termination of the Slovenian Development

Corporation, the body that owned state companies, as its main recommendation on the Chapter on Industrial Policy (EC, 2003).

Slovenia has also been an exception to the general early avoidance of horizontal industrial policy (Bartlett, 2000). Early in the transition process, Slovenia established a number of measures designed to support local economic development by supporting SMEs with interest rate subsidies and other supportive measures.[6] The Slovenes were influenced by the example of the successful Italian experience with industrial districts that demonstrated the potential for economic development based on local networks of small firms, which had been an important element of regional industrial policy in the Veneto and Emilia Romagna. The aim of this policy was to preserve the old established industrial base while establishing a core of high- growth SMEs that would generate high quality jobs (in terms of value added per worker). The focus of the policy was on the search for potentially fast growth firms that could be supported by the state through the main SME agency: the Small Business Development Centre.

In keeping with the horizontal approach to industrial policy, Slovenia adopted a programme for developing industrial clusters involving companies and research institutes, beginning with a pilot programme in 2000-2003 (Palčič et al., 2010). One of the aims was to promote knowledge transfer from research institutes to the companies in the clusters. The programme provided co-financing for the costs of the initial phase of creation of clusters, for the preparation of a joint development strategy, and for the costs incurred during the first two years of their operations. Industrial policy focused on support for

[6] Even before independence in 1991, within the former Yugoslavia, Slovenia had taken a leading role in a country-wide initiative to establish support centres for small firms.

small firm clusters and networks, through a decentralised system of support for innovation using technology parks and university-sponsored spin-offs (Bartlett and Bukvič, 2006).

Bulgaria

Bulgaria had a legacy of investment in high tech industries from the communist era when it specialised in computer industries. Although the large firms mainly collapsed in the 1990s, a significant number of high tech SMEs emerged with some support from the state (Bartlett and Rangelova, 1996). By the time of its accession to the EU in 2007, state support had been withdrawn from most sectors of the economy as Bulgaria complied with the EU accession criteria. According to the final regular annual report in 2005 Bulgaria's industrial strategy broadly complied with the principles of European horizontal industrial policy. The privatisation and restructuring process had moved forward and Bulgaria had improved the business environment, consolidated the banking sector and attracted foreign investment. However, in order to complete its preparations for accession, Bulgaria was requested to continue to develop a horizontal industrial policy designed to promote innovation and strengthen economic competitiveness, complete its privatisation strategy and the restructure the steel industry. The share of sectoral state aid in industry fell from 0.11% of GDP in 2004 to 0.03% in 2006 just before accession.[7] EU industrial policy, to which Bulgaria was asked to conform, was limited to enhancing the competitiveness of enterprises in general, promoting an environment conducive to entrepreneurship and the creation of SMEs, and to exploiting the industrial potential of innovation, research and technological development. By 2011, Bulgarian industrial policy

[7] Eurostat data on state aid by type of aid

was fully in line with the EU industrial policy approach. This was neatly summarised in the National Reform Programme document for 2010-1013 adopted in April 2011:

> "The government policy will [support] research and development of innovations by businesses, acceleration of knowledge transfer towards them through development of high-technology parks and technological incubators, centres for transfer of technologies, etc. Assistance is also envisaged for innovation networks, for establishing or expanding the operations of networks of 'business angels' in Bulgaria. Considerable efforts will be made for the promotion of clusters and regional business incubators development with a view to increasing the efficiency of enterprises' production and market performance. With a view to increasing their competitiveness, the enterprises will be supported in the process of technological modernisation and introduction of internationally-recognised standards."[8]

Romania

In Romania, in the run up to EU accession industrial policy became gradually oriented towards horizontal industrial policies. State aids to the manufacturing sector fell from 52% of national state aid expenditure in 2002 to just 15% of total expenditures in 2006. Moreover total state aid expenditure fell from 2.6% of GDP in 2004 to just 0.7% in 2006 (GOR 2008: 87). At the same time the amount of state aid devoted to horizontal objectives increased to

[8] "Republic of Bulgaria: National Reform Programme 2010-1013, in Implementation of the Europe 2020 Strategy", Sofia: Ministry of Finance

80.5% of national state aid expenditure by 2006, up significantly from the 63.8% achieved in 2004. The share of state aids with a sectoral target correspondingly diminished, in line with EU policy on reducing state aids to industry.

Table 1: National state aids for manufacturing industries in Romania

	2002	2003	2004	2005	2006
National State Aid (€m) (a)	859.3	918.4	1,607.0	639.3	691.8
Manufacturing (%) (a)	51.9	33.9	46.9	15.0	15.0
Sectoral state aid % GDP (b)	0.95	1.08	1.67	0.48	0.57

Source: (a) GOR (2008), Annex 4 (b) Eurostat

As one of the priority measures for implementing horizontal polices, the government launched a National Strategy for Research, Development and Innovation (RDI) for the period 2007-2013, which called for a strong promotion of scientific research, technological development and innovation. The aim was to increase public funds for research from 0.5% of GDP in 2007 to 1% of GDP by 2010. Other measures involved improved regulation to support investments, facilitate enterprise entry and exit, improve the participation of SMEs in public procurement, develop business infrastructure, and increase enterprise competitiveness. Of particular importance was a set of measures designed to increase enterprise competitiveness that involved large-scale investments in modernisation and regional development, of which €1.7m was provided for financing investments in SMEs, €401.7m for financing large investment projects, and €50m for regional development.

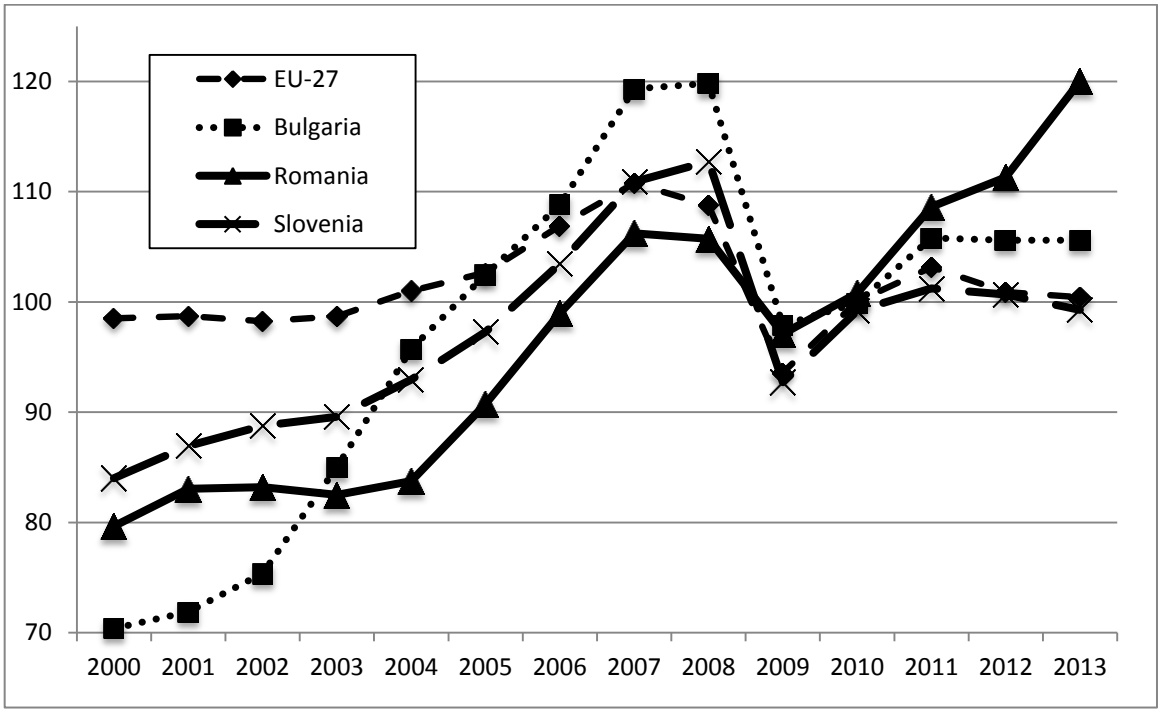
Industrial performance in the NMS

Indices of industrial production for the three SEE countries that became EU member states in 2004 are shown in Figure 3. They cover the period 2000-2013. In all three countries, industrial production expanded continuously up to the onset of the economic crisis in 2008. Romanian industrial production took off following accession in 2004, whereas in Bulgaria and Slovenia, industrial production had been increasing for several years before. Following the onset of the crisis, industrial production levelled off in 2008 in all three countries, and then declined precipitously in 2009. Industrial production has recovered above pre-crisis levels only in Romania. Interestingly, Slovenia has one of the sharpest declines in industrial production in 2009 and the slowest recovery of the three countries, despite its investment and efforts in innovation expenditure.

How can these divergent patterns be explained? The rapid increase in industrial production prior to the 2004 accession in Bulgaria and Slovenia, supported by a high level of state aid to industry, seems to vindicate the gradualist approach to transition to the market economy that these countries followed. The Romanian case points in the opposite direction, with industrial growth only taking off after accession and after the abandonment of the state aid approach. After the accession the Romanian industrial sector recovered more strongly than the other countries, despite the feeble impact of the national strategy for research and development on expenditure on innovation activities. A clue may be found in the nature of the recovery of Romanian industrial production, which was driven mainly by an increase in low-technology manufacturing. Data from Eurostat reveal that the index of low-technology industrial production reached 116.9 in 2013 (an increase of almost

17%compared to the base year 2010=100), while the index of high technology industrial production reached only 104.6 (an increase of just 4.6%).[9] The strongest growing industrial subsector was repair and installation of industrial machinery, which expanded by more than 50% between 2010 and 2013[10]. The Renault-owned Dacia car factory in Romania has partially led the industrial recovery with production of low-tech cheap cars.[11]

Figure 3: Industrial production indices: New Member States in SEE (Bulgaria, Romania, Slovenia) compared to EU-27



Source: Eurostat online data, industrial production index (2010=100), variable code name [sts_inpr_a] Data refer to NACE Revision 2.0, Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply (data do not include construction)

In contrast, in Bulgaria the index of high-technology industrial production reached 128.6 in 2013 (an increase of almost 29% compared to 2010), but the

[9] Eurostat online data on industrial production, variable code name [sts_inpr_a].
[10] The 2013 index value for this sector was 153.65 (compared to the 2010=100 base)
[11] See for example the report by Bloomberg news: http://www.bloomberg.com/news/2014-09-11/europe-s-cheapest-cars-reviving-romania-as-dacia-thrives.html. The Romanian industrial production index for vehicle production shows an increase of 33% between 2010 and 2013.

low share of such high-technology production inhibited this sector from driving a general industrial recovery.

5. Industrial Policy in EU Candidate States

Croatia[12]

Before EU accession in 2013 Croatia had pursued an active vertical industrial policy through the state development bank HBOR. When the growth of domestic credit fell sharply in 2009, lending to the corporate sector increased by 2.0%, while lending to households fell, taking the brunt of the decline in credit. Almost half of the increase in corporate loans was related to the government's programme to stimulate corporate financing through the HBOR. Moreover, the Privatisation Fund continued to hold a stake in 768 companies, with a majority holding in 79 of them. According to the European Commission's Report, in 2010 'overall, very limited progress has been made towards reducing the large role of the state in the economy'.[13] Yet, alongside the traditional vertical industrial policy, Croatia also began to develop a horizontal approach. The Croatian Agency for Small Business (HAMAG) was established in 2003 as a state agency aiming to develop the SME infrastructure, including regional development agencies, incubators, industrial parks and technology parks. In one active interventionist programme, HAMAG subsidised vouchers for consultancy services for SMEs in the amount of 50% with a budget of HRK 1 million per year. The main goal of HAMAG has been to work locally and regionally. Contracts were signed

[12] Croatia acceded to the EU in July 20913, but during the period of the analysis presented here was a Candidate State

[13] EC (2010) *Croatia 2010 Progress Report*, SEC(2010) 1326, Brussels: Commission of the European Communities, p. 23

with local partner institutions such as RDAs, who managed the voucher scheme. The SMEs who approached the partner institutions for consultancy service were offered a choice of certified consultants. In addition, subsidised credit lines for local SMEs were provided by the State in a programme delivered through local banks. The credits, with a ten-year payback period, carried an interest rate subsidy of 2% from the State and a further 2% from the County, disbursed by local commissions, whose membership consisted of representatives from the Ministry of Economy, the County, the local bank, and the Chamber of Commerce. Other initiatives were developed at local level, such as in the town of Split, which had its own programme for SME development focusing on the crafts sector. Similar local programmes were developed in other towns and counties.

The Europeanisation of Croatian industrial policy was much in evidence as the pre-accession process gathered pace (Čučković and Bartlett, 2007). Croatia gradually adopted the EU acquis on competition, establishing the Croatian Competition Agency (CCA) in 2009. The CCA issued 18 decisions on anti-trust and merger cases in its first year of operation, as well as resolving 23 cases of state aid in line with the acquis. The CCA was also in charge of the sensitive issue of restructuring and privatising the Croatian shipyards, the tendering procedure for which was completed in May 2010. The privatisation of shipbuilding was a key element in the completion of the accession negotiations. The stipulations on enterprise and industrial policy (Chapter 20) related mainly to support for SMEs and alignment with the Small Business Act for Europe. In relation to industrial policy, the EC 2010 Progress Report noted that measures had been taken to address the impact of the economic crisis through the Economic Recovery Programme introduced in April 2010, which included measures to improve the business environment and create a

competitive economy. The Report also approvingly referred to Croatia's active participation in the EU Competitiveness and Innovation Programme and the Europe Enterprise Network.

Several horizontal measures were introduced in line with the EU industrial policy approach. A "Strategy for the Development of Science in the Republic of Croatia in the 21st Century" was adopted, and the government developed programmes to enhance cooperation between research institutes and universities and the business sector. A business innovation network (BICRO) was established which was designed to link innovative enterprises, research institutions, and universities in an attempt to stimulate knowledge transfer and promote innovative activity. A set of institutions similar to those in Slovenia was developed to facilitate knowledge transfer and the start up and growth of high technology industries including incubators, technology parks and technology centres, and a programme to stimulate the formation of technology clusters was implemented. By 2010, as many as 138 entrepreneurial zones had been established.

Macedonia

The recent approach Industrial policy in Macedonia has been developed almost exactly in line with the EU horizontal approach, clearly influenced by the EU pre-accession process. The industrial policy of Macedonia (MoE 2009) aims to attract FDI, promote research and development and innovation, develop eco-friendly technologies and products, promote SME development and entrepreneurship, and develop clusters and networks. The adopted measures are designed to support applied research, development and innovation in industry, stimulate knowledge transfer between universities

and industry, stimulate the commercialisation of new products and services in the field of product design, support industry in employing researchers, stimulate transfer of technology, create technological industrial zones, protect intellectual property rights, and develop an integrated innovation policy (MoE 2009: 32-33). The policy document states quite bluntly that "the policy is horizontal in its nature and does not focus on supporting selected industries" (MoE 2009: 6). The vision of the policy is to encourage the production of higher value-added products and services based on knowledge, innovation and collaboration. However, it also identifies organic wine and foods, eco-steel, eco-friendly construction, ITC, specialised electronic parts, renewable energy production, creative industries, medical equipment and service, authentic tourism and other industries as part of the vision for development by 2020. Quite how these aspirations are to be met without specific sectoral measures to promote them was left suitably vague.

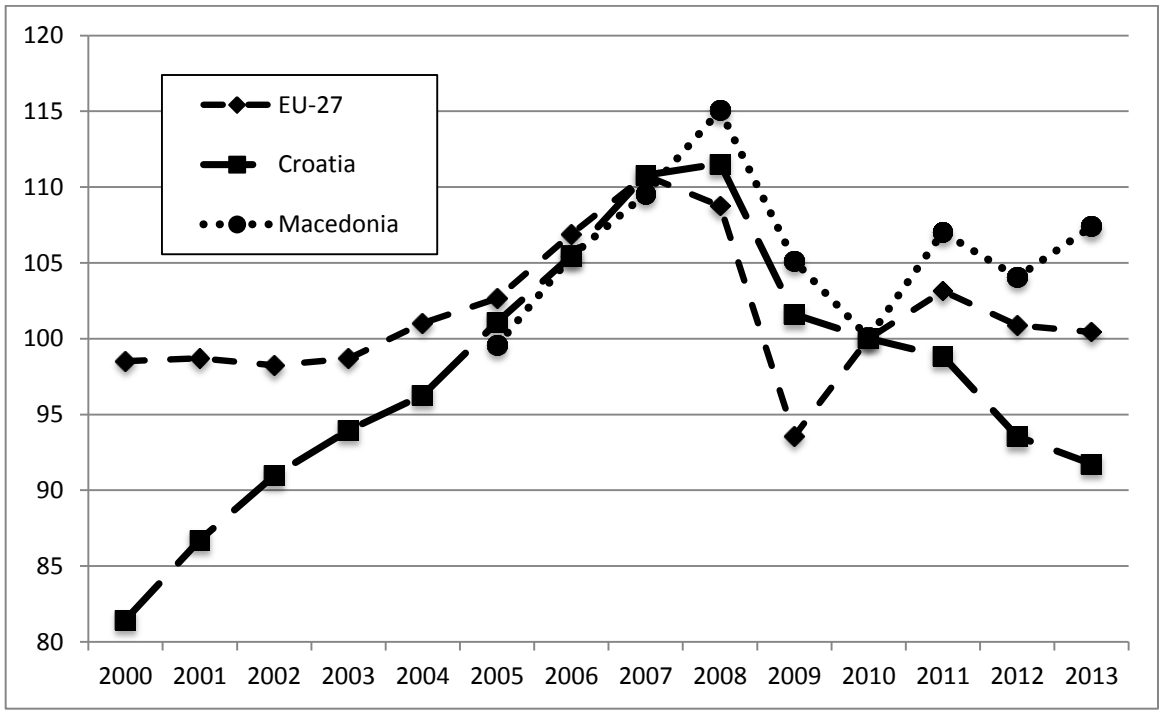
As EU-compatible laws have gradually been introduced, the business environment for SMEs has improved. In 2014 the country was ranked 25th of 189 countries in the World Bank `ease of doing business' index, making the country the highest ranked in the region. The time required to register a business has been reduced to three days at relatively low costs, with no minimum capital requirement, making the country the seventh ranked for starting a business. Between 2013 and 2014 the country improved its ranking for "getting electricity" from 109th position to 76th and "getting credit" from 24th position to 3rd position.

Industrial performance in the Candidate States

Industrial production in Croatia and Macedonia grew steadily from 2000 to 2008. In common with other countries in the region, the industrial sector experienced a sharp downturn in 2009. After the onset of the economic crisis industrial production in Croatia has fallen steadily and in 2013 reached the level attained a decade earlier. In Macedonia industrial production began to recover in 2010, although it has still not reached its pre-crisis peak. Nevertheless, Macedonia is the only country in the region in which unemployment has begun to fall since the onset of the crisis, albeit from extremely high levels.

The differences in post-crisis performance of the industrial sectors in the two countries are striking. As discussed above, Croatia maintained an active industrial policy approach in the period before her EU accession, maintaining a significant state holding in many industries. She supported SMEs through subsidised interest rates at county level through HAMAG, and continued to provide subsidies to preserve the shipbuilding and other strategic industries. Overall the Croatian approach brought about a strong improvement in manufacturing performance before the onset of the crisis, although other factors such as the Free Trade Agreements and CEFTA regional free trade area as well as many other factors undoubtedly played a role in contributing to the differences in performance between the two countries. After the recession hit, Croatian industrial performance faltered. As state aids were gradually withdrawn in the years immediately preceding accession in 2013, the industrial sector lost state support and continued to decline.

Figure 4: Industrial production indices: Candidate countries Croatia and Macedonia compared to EU-27 (2010=100)



Source: Eurostat online data, industrial production index (2010=100), variable code name [sts_inpr_a] Data refer to NACE Revision 2.0, Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply (data do not include construction)

In contrast, a different approach to industrial policy had been adopted in Macedonia based upon neoliberal policy principles, with the full completion of the privatisation of the industrial sector taking place in the late 1990s. Macedonia became a candidate country in 2005 and quickly adopted EU horizontal industrial policy measures, based upon support for SMEs and a raft of horizontal measures. Up to 2008 the policy yielded some dividends with a rapid growth of industrial production from a very low base occurring from 2005 to 2008 (see Figure 4). As in other countries in the region, the economic crisis brought about a decline in industrial production from 2008-2010 but thereafter a recovery took place that has lifted industrial production partly back to its pre-crisis peak. Instrumental in this performance has been the creation of a number of tax-free industrial ones that have supported an inflow of foreign direct investment into the country on the basis of large

targeted subsidies. Johnson Controls was the first company to invest in the Technological-Industrial Development Zone in Skopje, with a US$40 million plant to assemble electronic dashboard components. Other investors have followed, moving into the industrial zones and creating a significant number of new jobs.

6. Industrial Policy in Potential (and New) EU Candidate States

Serbia

The industrial policy adopted in Serbia from 2000-2010 overturned the policy of the previous regime, which had given large subsidies to enterprises in order to maintain employment. The new approach involved the privatization and restructuring of the economy, attraction of FDI, creation of a competitive business environment, and the strengthening of the entrepreneurial sector. However, state aid continued to be offered to the industry sector despite the broad orientation towards pro-market transition policies, and it has even increased in recent years.

Table 2: State aid to industry in Serbia (excluding transport, agriculture and fisheries) (% GDP)

	2003	2004	2005	2006	2007	2008	2009	EU-27
Share of GDP	2.4%	2.1%	1.0%	1.4%	1.7%	1.5%	2.0%	0.42%

Source: Report on State Aid Granted in the Republic of Serbia in 2009, Belgrade: Ministry of Finance

State aid to industry as a share of GDP was reduced by more than half between 2003 and 2005, but subsequently crept back up as the pace of transition reforms slackened. State aid to industry was 2% of GDP in 2009, more than four times as high as the average for the EU-27 (which was 0.42%). However, within the total, the share of horizontal measures has been increasing while the share of sectoral state aid has been reduced (from 19.5% of the total in 2007 to 17.3% in 2009). A new Law on State Aid Control was adopted in July 2009, in line with EU principles, following the signing of the Stabilisation and Association Agreement in July 2008, which carries stipulations regulating the granting of state aid.

The industrial policy for 2011-2020 is strongly oriented to EU style horizontal measures (Jakopin, 2011). It focuses on sustainable industrial growth and development, institution building, improved investment climate; strengthening of competitiveness, faster development of entrepreneurship, increased and restructured export, reforms of the educational system in line with needs of the economy, active and dynamic cooperation between science and industry, stimulation of innovation, development of regional industrial centres and regional business infrastructure. All of this is in line with the EU horizontal approach to industrial policy. Nevertheless, the EC 2010 Report on Serbia stated that "Serbia has made little progress in developing and implementing a modern industrial policy. The industrial strategy remains to be adopted."

At local level, several municipalities have established business zones that compete against one another for outside investors by offering a range of incentives and subsidies to attract both domestic and foreign businesses (Avlijaš and Bartlett, 2011). To take one example, at a newly established

enterprise zone in the municipality of Svilajnac south of Belgrade, companies are provided with business spaces that are rent-free for 99 years, and free of tax for 3 years. Outside investors receive an employment subsidy from the National Employment Service and are required to employ at least half their workforce from the local population. The enterprise zone is mainly funded by the Ministry of Economy on a competitive basis through the National Investment Plan. It is expected that the zone will employ 1,000 people, of which 500 will be unskilled workers from the local area. Avlijaš and Bartlett (2011) observed three agricultural businesses in the zone, two of which were in foreign ownership producing processed cucumber, gherkins, and herbs, and one in domestic ownership, producing meat products. A German company produced plastic companents for the motor industry, while an Austrian company produced train tracks. Other municipalities have created similar enterprise zones.

Bosnia & Herzegovina

Under the socialist system in former Yugoslavia, Bosnia & Herzegovina had established a significant industrial base around heavy industries (steel and aluminium) and defence industries. Twelve large enterprises produced 35% of GDP, four of which generated more than two-fifths of total exports (Bartlett et al., 2012). As opposed to other republics of former Yugoslavia, Bosnia & Herzegovina did not have a strong public R&D structure; the main carriers of R&D were industrial institutes. Unfortunately, most of these assets (in higher education, research and industry) collapsed during the 1992-1995 war in Bosnia. Many researchers from the industrial laboratories and universities migrated to foreign countries.

Bosnia & Herzegovina now has little in the way of industrial policy and co-operation between universities and companies in terms of innovation and technology transfer is at a very low level. Some regionally based technology centres have been set up with donor-support. For example, an innovation centre was established in Zenica in 2008 at the University, while the city of Zenica a Business and Innovation Technology Park operates in cooperation with the University of Tuzla and Tuzla Municipality (ERAWATCH, 2014). Other similar centres have been established in Mostar (INTERA Technology Park) and the Technology Park in Zenica. In 2010 an innovation centre was established in Banja Luka, and property for a technology park was purchased in 2013. The idea of developing a technology park in Sarajevo appear to have been forgotten, even though Sarajevo has the largest number of faculties, institutes and donor organizations.

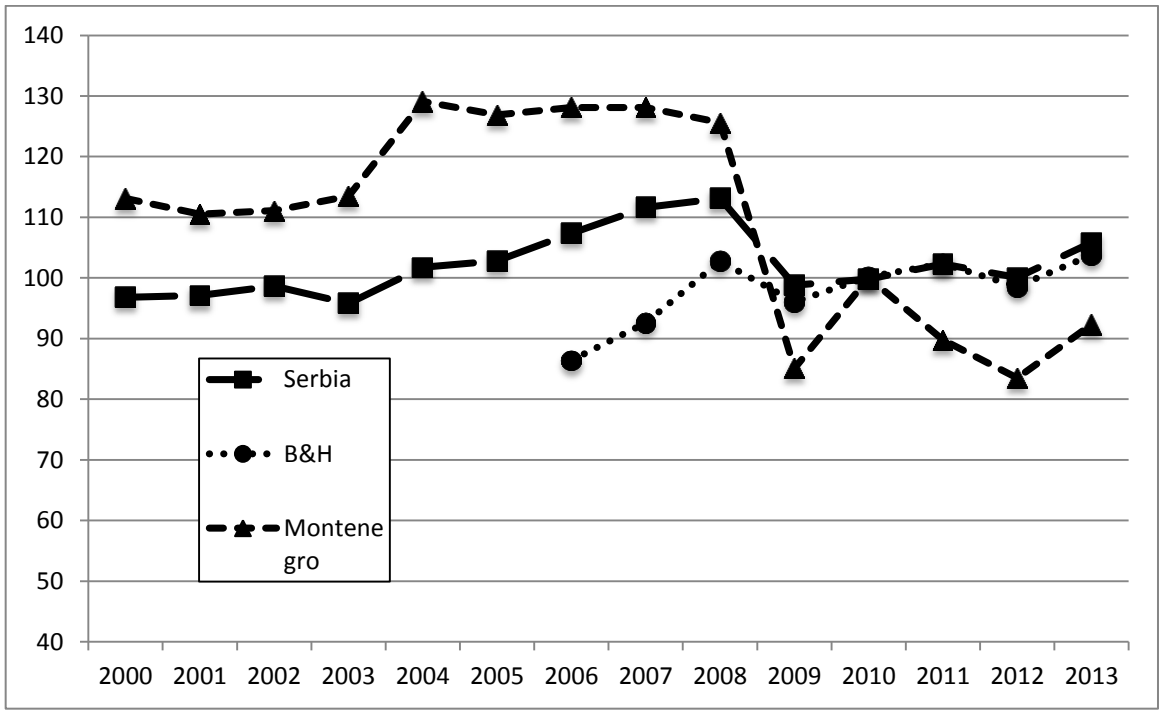
Montenegro

Montenegro has been a prime example of the pursuit of the neoliberal agenda, adopting a free trade policy in 2000 that opened the country to unrestricted imports and led to a rapid process of de-industrialisation. The consequence of the privatisation policy and the reduction of the role of the state has led to a dramatic reduction in the share of industry in GDP, and an increase in the share of employment in the services sector, including business services, finance and tourism, but predominantly retail and wholesale trade. It is hard to see that this strategy can lead to long run sustainable growth, and is likely to lead to a situation in which the economic growth of the country is highly dependent on the growth of the core economies of the EU.

Industrial performance in the Potential (and new) Candidates

Industrial production in the potential and new candidate countries has been far more sluggish than in the EU Member States and Candidate States. Industrial production in Serbia increased from 2003 to 2008 following the first wave of privatisation in the early 2000s (see Figure 5). However, the industrial production fell back to previous levels of the early 2000s following the economic crisis and has not recovered significantly since then.

Figure 5: Industrial production indices: Potential (and new) Candidates, Bosnia & Herzegovina, Montenegro, and Serbia (2010=100)



Source: Eurostat online data, industrial production index (2010=100), variable code name [sts_inpr_a] Data refer to NACE Revision 2.0, Mining and quarrying; manufacturing; electricity, gas, steam and air conditioning supply (data do not include construction)

A similar picture can be seen in Bosnia & Herzegovina, with the economic crisis bringing about a stagnation of industrial production. The collapse of industry in Montenegro, associated with the neoliberal policy adopted by the

government in the 1990s and the unilateral dismantling of tariff protection of domestic industry, inhibited the recovery of industry following the crisis in 2009. Industrial production fell from an index value of 125.6 in 2008 to a value of 85.1 in 2009. The collapse of the wood and forestry industries in the North East of the country has not been addressed by an appropriate policy of industrial regeneration.

7. The New European Industrial Policy: What role for South East Europe?

Over the last decade, anxieties about the relative underperformance of European businesses in future technologies led to calls for a more interventionist industrial policy (Trouille, 2007). The recent global economic crisis, especially, has led to a rethink, with the German position being strengthened by its success in leading the EU out of the recession caused by the dominance of financial capital associated with the Anglo-Saxon model of deregulation, neglect of industry, and excessive liberalisation of the financial markets. In 2010 therefore, the Commission launched a 'fresh approach' to industrial policy for the EU (EC 2010). A strong motivating factor has been the eastward shift in economic power to the new emerging economies in East Asia and the rise of the BRIC economies led by China. This has led to the realisation that in order to enhance the global competitive position of the EU, there is a need for a EU-level industrial policy, which would create globally competitive European industries and European champions to compete against the rising powerhouses of China, India and the other emerging economies. While horizontal policies might continue to be needed to ensure

the cohesion of the Single Market within the EU, the challenge of competition from without the EU has refocused minds on the need for sectoral policies that would enable the EU to meet the challenge of the rapidly changing global economic architecture, and find its own niche in the global economy as a significant player.

Consequently, in addition to improving existing horizontal measures, in its 'fresh' industrial policy the Commission now called for a sector-specific dimension, identifying specific sectors for development at a European level such as space technology, clean and energy efficient motor vehicles, transport equipment, healthcare, environmental goods, energy supply industries, security industries, chemicals, engineering, transport-equipment, agro-food and business services.[14] Measures to support these industries are to focus on promoting innovation, understood to include business and organisational innovations. The new industrial policy draws on the provisions of the Lisbon Treaty in particular Article 173 TFEU on industrial policy. As part of the Europe 2020 strategy the Commission will now regularly report on the EU's and Member States industrial policies, organised through the Competitiveness Council and the European Parliament.

The new emphasis on sectoral industrial policy should be seen in the context of increased global competition, and the inexorable shift of economic power to the BRICS and East Asian countries since the recovery from the global economic crisis began in 2010. Europe needs to compete on a global market in a world in which competitor nations are engaged in active policies to support

[14] The Commission website summarising EU legislation states that "The Community industrial policy combines a horizontal approach, aimed at ensuring cohesion and synergy among the various strategic sectors, with a sectoral approach, allowing the specific characteristics of the various sectors to be taken into account",
http://europa.eu/legislation_summaries/enterprise/industry/n26109_en.htm

their own industrial champions, despite WTO strictures against unfair competition. Thus the EU dimension of the new industrial policy is emphasised. The horizontal approach is still relevant as regards national industrial policies so as to prevent unfair competition within the EU, and to ensure a level playing field on the EU Single Market. Indeed it is enshrined in the Treaty of Lisbon. But in relation to global competitors, the EU now proposes to support Industrial policy cooperation among EU countries in the designated target industries.

The new European industrial champions are to be based around advanced technologies and employ highly qualified workers. The question for the countries of South East Europe is to what extent they will be able to participate in this new world of super-advanced industrial development. How far will they be able to contribute to cooperative ventures to develop space technology, clean motor vehicles, nanotechnologies, and bio-engineering innovations? Given the well known deficiencies in the technological level and skills base in these countries and the reduction in support to leading industry sectors in relation to EU accession and integration, it seems highly likely that the countries of SEE will be shut out of this new game altogether, while at the same time being prevented by the EU horizontal approach and by EU competition rules from applying a sectoral industrial policy of their own to drive the exit strategy out of economic recession and stagnation.

8. Conclusion

Despite the slow initial pace of transition in South East Europe and the widespread use of state aids to industry to support vertical industrial policies in the 1990s, with the onset of a faster pace of EU integration in the 2000s the pro-competition horizontal industrial policies of the EU have been adopted in almost all countries of the region. In various forms, industrial policies in South East Europe have followed the pattern of industrial policies in the EU which have evolved from a reliance on subsidising national champions in the early post-war years, towards an emphasis on horizontal measures to support the Single Market and the catching up of less developed regions. Industrial policy in South East Europe has been subject to a similar process of Europeanisation as has been observed in other policy areas. In the region's new member states, state aid to industry was rapidly reduced in the run up to accession, and a similar process took place in the candidate and potential candidate states. A horizontal approach to industrial policy has replaced the previous reliance on more direct vertical forms of industrial policy that was designed to support key industries and preserve employment in large firms. These new industrial policies have been designed to support SMEs, develop technology parks, local industrial clusters, and promote the transfer of knowledge from the universities and research institutes to the business sector. The new horizontal approach has not however provided a strong basis for post-crisis recovery.

Considering the data on the index of industrial production, in the case of the new member states, both Bulgaria and Slovenia expanded industrial production in the pre-accession years and beyond up to the economic crisis period, but have experienced a slow down since then. In the case of the

candidate states, both Croatia and Macedonia experienced strong growth of industrial production before the crisis but collapse or stagnation thereafter. In the case of the potential members, both Bosnia & Herzegovina and Serbia had experienced some industrial recovery of industrial production prior to the crisis but has not been able to match this since and industrial production has stagnated. In Montenegro, neoliberal policies adopted in the early 2000s had undermined the industrial sector and the crisis has only continued that process. In no countries apart from Romania has the adoption of the new horizontal industrial policies, at different points of time in different countries, been able to support a post-crisis recovery of industrial production. The Romanian case appears to be exceptional, driven as it has been by low value-added production in the motor vehicle production sector, dependent on outside investment rather than indigenous recovery of the high growth high technology SMEs promoted by the horizontal policies.

However, as argued above, the industrial policy of the EU is not a fixed arrangement. It has been the outcome of intense differences of opinion over the appropriate policy to adopt. The main industrial countries, especially France and Germany, have persisted in efforts to lobby for policies that would be more supportive of specific industrial sectors such as chemicals. Until the onset of the global economic crisis these lobbying efforts were largely unsuccessful and the pro-competitive orientation of Member States such as the UK predominated in ensuring a deepening of the horizontal and decentralised approach to industrial policy that became embedded in EU competition laws and in laws prohibiting direct state aids to industry that would distort competition.

All this has changed with the onset of the global economic crisis since 2008 and its subsequent evolution into a crisis of the eurozone. German influence has become stronger, and the shift of global economic power to the emerging economies has made the EU much more concerned about its international competitive position. This sharpening of focus has brought vertical industrial policies, applied at the European level, back onto the agenda. As shown in Section 7 above, while the requirements for competition and horizontal policies remain in place, a new space has opened up for the use of various measures to support industrial champions at the EU level, in industries as varied as space technology, clean and energy-efficient motor vehicles, transport equipment, healthcare, environmental goods, energy supply industries, security industries, chemicals, engineering, transport-equipment, agro-food and business services. One of the common characteristics of these industries in the form envisaged in the 'fresh' approach to industrial policy championed by the European Commission is the focus on advanced technologies and the application of highly skilled labour.

The challenge facing the countries of South East Europe wishing to follow this "high path" to industrial renaissance will be to engage with this new agenda, and make a significant contribution to the new industrial sectors at the European level. Unfortunately, the SEE countries are no longer able to contribute to the high technology industries that this approach targets because their industrial capacity has been diminished by the long years of transitional recession, and undermined by the horizontal industrial policy that they have been obliged to implement as a condition of the EU accession process. Reversing this will involve extensive industrial upgrading and adoption of new technologies in targeted industries within the group of sectors identified by the European Commission as the future industrial

champions of the EU. In the absence of such engagement, the economies of the region will be held back from involvement in the leading sectors of European industry, and will be effectively "shut out" of the EU's fresh approach to industrial policy.

The alternative for the SEE countries seems to be to manoeuvre as best as possible within the constraints of EU competition policy to ensure that the adopted horizontal measures and decentralised industrial policies at local and regional level are well supported by the central government, and to make best use of EU assistance and funding opportunities. This "low path" industrial policy requires effective fiscal decentralisation to provide local authorities with sufficient funds to meet the challenges of local economic development, ensuring effective ministerial coordination and effective partnership between local administrations and business organisations at the local level, an orientation that is still to be developed in most countries in the region.

Future research investigating the causes of differences in industrial sector performance in the SEE countries should be based on detailed case studies to assess the effects of different types of industrial policies on industrial performance. The research should identify the extent to which the countries of the region have followed the "high path" of technological upgrading or continue with the "low path" of cost-based competition on the basis of low value-added industrial development. A combination of methods should be used for such a research design, including a shift-share analysis of changes in the industrial structure to identify the nature of structural change, and identify sectors and industries that are experiencing the most significant growth in each country. This should be backed up by a set of in-depth local case studies in each country to identify the extent to which local companies

have managed to link in to the European value chains in the sectors such as clean and energy-efficient motor vehicles, transport equipment, healthcare, environmental goods, energy supply industries, security industries, chemicals, engineering, transport-equipment, agro-food and business services which are the focus of the EU industrial policy approach. One important policy that could help companies in the region to link in to these value chains is the now rather widespread development of tax-privileged industrial zones, for example in the Former Yugoslav Republic of Macedonia and in Serbia. Case studies should be carried out in a number of these zones to investigate the extent to which they may provide support for a technology upgrading strategy linking local and EU high technology companies in a new wave of industrial development in the region. Factors contributing to the success or failure of these new initiatives should be identified and best practice examples identified to provide a guide to the policy makers involved in designing effective industrial policies to support future economic growth in the Europe's less developed South East region.

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