

Serbia's Economic Structure: Challenges and Opportunities for Accelerating Growth

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1. Introduction and Summary

How can it be that Serbia, a European country (even if at the bottom of the list) in terms of location, education, and infrastructure, yet with wages at the level of today lower ones in Asia, is not growing faster? Following nearly 30 years of destruction and a halting transition and recovery, Serbia's GDP per capita today almost surely stands substantially below the level of 1989, and certainly below that of all EU New Member State (NMS) economies. Yet, as of now, it is not converging with them. There is an incongruence between these facts and what a visitor to Serbia sees as the external manifestations of its development and the sophistication of its people.

Undoubtedly the institutional obstacles that are so often blamed play a key role. However, it is hard to believe that they alone can explain the difference. Are institutions truly so much better in India and Indonesia?

In this note we present an additional factor, one that we expect will play an even more important role now that economic growth has accelerated in Europe and Serbia's fiscal adjustment has been completed. It is in the economy's atypical structure: a **sophisticated economy and skills and resources exist, but they are limited in size, and have a spotty distribution**—akin to a leopard's skin-- both across industries and geographically. This structure is the result of a slow and uneven transformation of the traditional economy--built during socialist times¹--throughout the country's protracted transition, which produced an

uneven deterioration and loss of the skills and resources held in it. The new economy today is small, in the sense that it employs a very small share of the population. Moreover, while it does have a modern quite competitive core its industrial structure appears to be too dispersed: diversified, but with many products produced in small amounts, little inter-enterprise integration (short value-chains) and no evidence of industrial clustering around competitive strengths. Moreover, the small modern corporate core is surrounded by an unusually large ring of household employment (farms, self-employment and sole proprietorships) as well as informal employment. Typically, this segment is far less productive, low-intensity and vulnerable, although it also contains some highly productive creative economy jobs.

We believe this structure is likely to present a challenge to the sustainable acceleration of the new economy's growth. In large measure, economic development happens through the transfer of resources, in Serbia's case mostly people, from less to more productive sectors/activities. This should be expected to continue happening from the traditional and household sectors to the new economy, and from the less to the more productive sectors of the new economy. However, we see a risk here. Industrial dispersion may be a stage in Serbia's economic recovery, but it is likely that the fact that high-skilled labour has become "thinly spread"-- of relatively limited availability outside the small core economy and with low-levels of mobility—will present an obstacle to the specialization

¹ See footnote 4 for a precise definition of traditional and new economy.

and clustering that such a process would need to produce.

In the next chapter, we present the structure of Serbia's employment and Gross Value Added (GVA, or GDP at factor prices) first by institutional sector and further, we give a closer look to the corporate sector by ownership and size. In addition to employing barely a little more people than the household sector, the ownership/size structure of the corporate sector is unfavourable. Nearly a quarter of employment in it is in the remaining traditional sector, that accounts for most of the employment in large companies. As to the new economy, the "best kind" of company--large, well established and connected to global markets--are typically foreign owned and hold a relatively small share of Serbia's corporate sector. Twice as much employment is in domestically owned companies, generally SMEs, that as such face well-known limitations in access to capital, to know-how and markets. We argue that this structure is the consequence of the deep displacement and protracted transformation of Serbia's traditional economy. To this day Serbia's cumulative receipts of FDI inflows per capita are half those of the NMS average.

Subsequently, we focus on the performance and structure of exports, and point to some key factors of their competitiveness, by industry and company ownership/size. Exports are the most important segment of the new economy for future growth, and also with by far the most reliable data. We identify natural and traditional factors as key to the competitiveness of the the agri-food sector, which is limited, nevertheless by extreme fragmentation of production and low levels of modern commercialization.

On the other hand, a strong performance by high-knowledge content services and mid-technology level manufacturing (around metal processing, machine construction and rubber/plastics) industries is based on a strong engineering education and technical skills built during socialist times. In the latter, the predominantly SME domestic sector has found an advantage in high-engineering or technical skill content of custom-made production.

Next we discuss and illustrate the phenomena of industrial dispersion, thinly-spread skills and how they may present an obstacle to a strengthening of exports expansion. Subsequently we argue that SMEs in Serbia's deserve particular attention because they can use and develop the dispersed and dissipating resources, and simply because a country needs a strong core of domestic capital to base its growth on. With proceed to give a limited analysis of the past dynamics of exports by company size, strongly suggesting that the potential contribution of SMEs to the overall growth of exports, and under what conditions, deserves to be analysed more deeply.

Finally, in our concluding discussion we emphasize these issues need to be studied further, and give two broad and indicative policy recommendations: the focus of policy needs to be on the further development of marketable labour skills and its mobility; and SME development should be given strong support, focused on areas of competitive strength but not only on innovation, and the consolidation of their output and activities either through integrative processes, or market intermediation development.

2. The Structure and its Origin

Serbia's GDP per capita (4.905 euros) is among the lowest in Europe, and it stands nearly 30% below that of Bulgaria, the least developed EU member state². Above all, this is because Serbia has one of the lowest total employment levels in Europe, 42,7% of those older than 15 (in 2015, the year in which we observe its structure), as well as because a very large share of it is of the low intensity, vulnerable kind. If Serbia had had the same employment level as Bulgaria in 2015 (56% of those older than 15) and a similar employment structure-- keeping Serbia's current productivity for each employment segment unchanged--her GDP/capita would have been higher than Bulgaria's.³

In this chapter we throw more light on Serbia's production structure breaking down employment and total Gross Value Added (GDP at factor prices) first by institutional sector-- public services (including administration and social services), financial services, corporate sector, households -- and legal status (formal/informal). Further, we break down the corporate sector by ownership--state

ownership (the remnants of the traditional economy)⁴, privatized, and *de novo* private, the latter two also broken down into domestic v. foreign owned. Moreover, in analyzing these segments, we also pay attention to company size.

In a transitioning economy, the above characteristics matter more to productivity than the industrial structure which is typically the focus of development analysis. They are correlated both with a company's behavioral function and with their access to resources, affecting their productivity and growth prospects. Of course, industrial structure also matters, but we deal with it later, in the analysis of exports, in which we are able to identify industrial breakdown reliably and in detail. Further, we give an indication of how this structure came about.

² Throughout this note we endeavor to rely on Serbia's National Accounts Statistics as little as possible, as we have little doubt they suffer from deep weaknesses. For a discussion, see "Annex 1 -- Quality and statistical data sources" of "Integrated Report on Performance and Value Chain Analysis of Selected Sectors within Manufacturing Industry", CEVES, 2017. This is why we often use relatively vague references, where we believe our assessment of the orders of magnitude is reliable enough.

³ This is a somewhat heroic counterfactual, based on knowledge of Bulgaria's total employment level, its share of vulnerable employment and that it was a recipient of twice as much FDI per capita than Serbia, but not knowledge of its detailed structure. It gives counterfactual GDP/capita that is almost

50% larger for Serbia, so it is quite safe to say that it would be larger than Bulgaria's.

⁴ We denote by traditional economy the untransformed state-owned or socialist owned sector. We observe as traditional enterprises all those that were originally built in the state- or socially-owned sector. If/when privatized we consider them part of the new economy. By "new economy" we denote the private corporate sector. Strictly speaking, the household sector should also be divided, with the traditional agriculture considered as part of the traditional sector and the new economy should also include the financial sector. There are unnecessary complications. Besides, part of the economic activities in the household sector are precarious coping strategies that should not really be included in either concept.

2.1. Employment and GVA by Institutional Sector

Weighing down on Serbia's economy's low productivity is above all that its corporate sector is small and within it a sizeable corporate state sector continues to be obviously inefficiently run. The household sector in Serbia carries particular meaning because it encompasses not only the low productivity traditional agricultural farmers, but also a large population of transition losers surviving on vulnerable low productivity employment or self-employment, as well as some promising creative industry hidden gems.

Serbia's corporate sector employs only 40% of the total number of employees, while as much as 37% are employed in the household sector, or other forms of vulnerable employment (See Table 1). 28,3% of all those employed are employed in the household sector that consists of self-employment and employment in sole-proprietorships (SPP) ⁵ that earn less than the VAT census of 66 thousand euros per year. While these also includes some highly-paid jobs, e.g. in the IT and creative industries, in general they are heavily outweighed by vulnerable and precarious employment. More than two-thirds of it consists of family farm unpaid employment (18% of total employment). Overall, the household sector's contribution to GVA is barely more than a half of its contribution to employment – 13,6%

Moreover, within the small corporate sector, the share still held under state ownership or state/insider control ownership (9% of total employment) is high and certainly weighs on the economy's productivity as it is highly inefficiently run. Nearly all utilities are state owned (postal service, electricity production and distribution, railroads, water, sewerage and waste disposal) and suffer from gross overemployment. Private-public joint ventures are still a cautious and rare experiment, and only at local utility level. There is also a sizeable share of traditional industrial companies awaiting privatization (SOEs), mainly in mining (copper mine and smelter, "Bor") and the chemical sector (*Galenika, Petrohemija, Azotara Pančevo*). Most of the state-owned corporate sector tends to be in highly capital-intensive industries. Moreover, this sector contains 62% of all the employment in large companies. The fact that their share of total value added (12,5 %) is only 30% higher than the share in total employment supports the hypothesis that over-employment in them is very high. Importantly, very significant assets remain captured, unused or barely operating under bankruptcy procedures. However, they are not too visible in our exercise, particularly not in our later analysis of exports.

⁵ Includes both sole proprietors – if not formally employed in other sector -- and those employed at sole proprietors.

Table 1. Economic Structure of Serbia's Economy in 2015

	Value added	Employment
Total	100,0	100,0
Temporary and occasional employment ¹		4,2
Traditional - state owned²	12,5	9,0
Traditional – privatized	9,8	5,0
<i>Domestic</i>	3,0	2,3
<i>Foreign</i>	6,8	2,9
De novo	29,7	25,8
<i>Foreign</i>	9,9	5,9
<i>Domestic</i>	19,0	18,6
<i>Other</i>	0,7	1,3
Vulnerable + SPP	20,4	36,7
<i>Household sector</i>	13,6	28,3
<i>SPP & SE³</i>	6,9	10,3
<i>Farms⁴</i>	6,7	18,0
<i>Other informal⁵</i>	6,7	8,4
Other⁶	27,7	19,3
Memo Item:		
Informal⁷	13,4	26,4

1 - Refers to employees in "temporary and occasional employment"; and the rest of the difference between APR and Registered employment, which cannot be explained.

2 – Traditional -- state-owned sector includes SOEs and Utilities.

3 – SPP (sole proprietorship) & SE (self-employed): Refers to employees by sole proprietors that are not required to submit financial statements. These include only employees that work within the firm, while the sole proprietor (owner) himself can, but may not be employed within the firm. This category also includes self-employed -- persons individually running business (around 70k).

4 - Refers to the contributing family workers as well as the household as an employer (household owner).

5 – Refers to informal employment (except informal employment in agriculture sector, which is covered by farms.

6 - Refers to Finance & Real Estate (including imputed rents), and Public administration

7 - Refers to Informal employment, which is represented as difference between Labor Force Survey employment and registered employment. Concept of informal employment is equivalent to World bank's concept of vulnerable employment

Source: Author's calculations on National Accounts Statistics, Labor Force Survey, and Registered Employment data; except for Traditional and De novo sector, where calculations are made using SBRA data. Official SORS assessment are used for SPP value added and employment figures

Finally, contrary to widely held views, Serbia's public service sector is not oversized, (shown together with finance and real-estate) and any negative contribution to the economy's productivity

is more likely to come from its structure— directed at controlling and administering red tape -- rather than its size as such. Observed relative to the total population that it services, the public service was small

even before the fiscal consolidation started in 2014 (7 employees per 100 inhabitants, compared an average of 8 for NMS). This was still large relatively to the total employment in the country, but by the end of 2017, after almost five years of a partial employment freeze, it has come down to a “normal” 16% of the total employed. This, however, has become *extremely* small relative to total population that it services (below 6,4 employees per 100 inhabitants -- only large countries such as Germany and Italy have fewer employees -- 5,6 and 5,7 per 100 inhabitants, respectively)⁶.

2.2. The New Economy by Ownership and Size

The new economy consists of the presumably transformed, privatized companies, as well as *de novo* private companies that were fully newly established as private companies, or were one way or another spun off from traditional ones.

It strikes us that a relatively small share of employment is today in privatized companies, only 5%. A large share of privatized companies showing meaningful signs of operation can be considered transformed, operating as efficient profit-maximizing entities, and particularly so if they are exporters. However, this is still not entirely the case with non-exporters, and was even less the case in the past, as many have throughout the past decades been in a kind of half-way house -- either as asset stripping vehicles or controlled by insider interests.

Privatized companies tend to be larger and with capital intensive technologies. This may be why they have the highest GVA to employment ratio of all the segments, comprising nearly twice as large a share of GVA (9%) than of employment. (It should be kept in mind that, because of their size, large both domestic- and foreign-owned privatized companies are also likely to be the beneficiaries of at least some special political support).

We do not observe the performance of companies by ownership on the domestic market, but in exports we see no difference today between brownfield and greenfield FDI. However, those privatized companies that today remain in domestic ownership show a strikingly flat past export performance and comprise a shrinking share of total exports. It should be born in mind that there is a self-selection bias: well-established international companies entered sooner and more decisively where comparative advantages were clearer (on condition that the political-economic situation did not represent a barrier). Also, many foreign-owned companies today were initially privatized to domestic capital. The sale to foreign capital was the exit strategy for the best domestic companies. The state and insiders, on the other hand, have been “stuck” with the more difficult cases.

***De novo* companies account for about a quarter of total employment, and somewhat more of the value added.** It is their performance that is of greatest interest for our understanding of the future because ultimately they increase not only in size, but also through new entry. Judging

⁶ „A Modern State - A Rational State: How many, how and what for?“, Ministry of Public Administration and Local Self-Government, 2015.

by the contribution to GVA and employment, the average productivity of *de novo* companies is, not surprisingly, much higher for foreign than for domestic held ones. We discuss their performance and the factors that affect them further below in the analysis of exports. However, because performance is related to size⁷ it is important to note that almost two-thirds of employment in *de novo* FDIs is in large⁸ companies, while 85% of employment in domestic *de novo* companies is in SMEs. And although an important sub-set of domestic SMEs belong to the innovative or even high-tech category (especially among exporters discussed below) domestic ownership in general reinforces the well-known constraints faced by SMEs--limited access to capital, weak, if any, linkages to globally positioned companies, and in the great majority of companies--limited access to technology, know-how, and sophisticated management techniques.

To simplify further references and discussion, unless explicitly noted otherwise, we will make the simplifying assumption that “foreign owned companies” refers to companies with the general characteristics of being large and owned by larger, well established international companies (even though some do not), as well as that “SMEs” are generally domestically owned, although about 15,6% of employment in SMEs is

actually in foreign, mostly mid-sized, companies.

Although the total employment structure by size of enterprise in Serbia is similar to European averages, (when size is measured by number of employees) average company size in each category, especially when measured by turnover, tends to be smaller in Serbia. In particular, it is interesting that Serbia today has very few very large companies—only 10 with more than 5.000 employees, with 7 of them hailing from the traditional sector, and 6 that remain in state-owned hands to this day.

2.3. A Slow Transformation

The relatively small corporate, economy, and particularly the small share of its privatized part, are the fallout of Serbia’s very slow economic transformation, which came on the back of what emerged from the physical and institutional destruction of the 1990s as a deeply bankrupt economy. Many people in 2000 still held jobs, but many of them paid little or nothing. These people had developed survival strategies—from small contraband and informal flea markets, to contract work often using company assets without compensation.

When in 2003 FDI finally began flowing-in, other NMS⁹ had already accumulated on average 2.681 euro of net FDI per capita. At that point Serbia’s GDP/cap stood at about

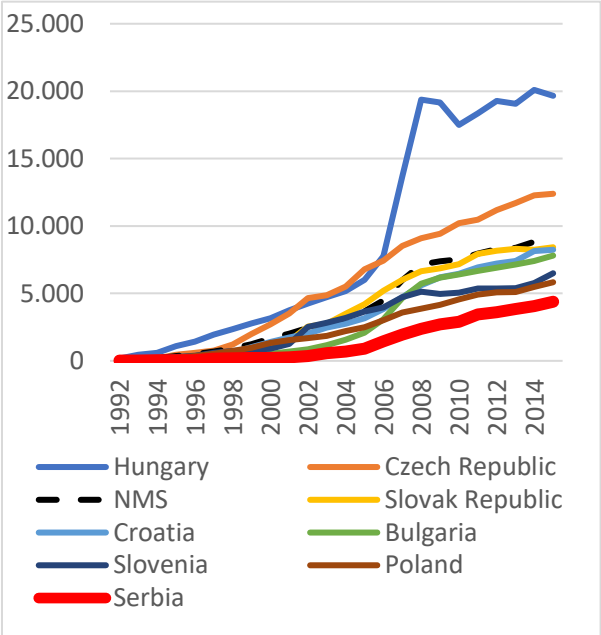
⁷ Of course, not all FDI is by well-established international companies—but a sizeable number are, and particularly in greenfield investment—and since their performance in those cases tends to be stronger, it is their behavior that tends to dominate in the data.

⁸ We classify companies by size based on employment: micro (0-9 employees), small (10-49 employees), medium (50-249 employees) and large (250 employees or more).

⁹ Average is the average of country averages. New Member States observed in this section cover countries: Bulgaria, Croatia, Czech Republic, Hungary, Poland, Slovak Republic, and Slovenia. The very small Baltic states likely to have benefited from particularly large per capita inflows have been excluded. Croatia has been depicted in the graph as an illustration, but excluded from the average as its historical trajectory is similar to Serbia’s.

half of its pre-1990s levels, and although capital was desperately needed FDI inflows took time to pick up (Figure 1). Today, the net accumulated FDI per capita over the years in Serbia amounts to 4.383 euros, 48% of the NMS average and lower than any single NMS. At no point in time, or within no industry or sub-sector, did Serbia become a „fashionable“ investor destination to attract interest from a multiplicity of similar companies. Successful privatizations in the tradables sector, especially of larger systems, were relatively few and sporadic.

Figure 1. Cumulative FDI Net Inflow Per Capita: Serbia and New EU Member States (EUR)



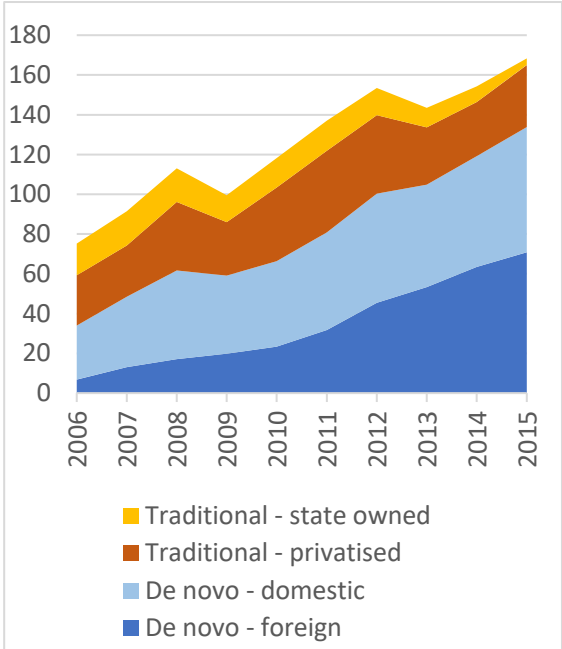
Source: World Bank database

During this slow transformation much of the traditional economy was kept alive based on subsidies, but with no actual investment in its turnaround. Meanwhile, the resources captured in it — both equipment and skilled labor — kept *dissipating*. If they did not find employment in the new economy, their quality simply eroded through obsolescence, and lack of actual work.

Ultimately, they de-activated or fed the army of precarious and vulnerable engagement in the low-paying segment at the bottom of Table 1.

The overall performance of the economy has been dominated by its traditional sector, as long as the share of the new economy remained small. We do not show the evolution in the structure of total GVA because National Accounts statistics are too unreliable for nuancing such trends. However, we illustrate the process with the performance of revenues of companies registered as producers of mechanical and electrical equipment, by type of ownership.

Figure 2. Machinery and Electrical Equipment Revenues by Ownership Structure (mil RSD)



Source: Serbian Business Registers Agency

As evident, those traditional enterprises that were never privatized, gradually have all but disappeared, while even those privatized (we do not know at what point in time) after two expansions (before the crisis and before the elections of 2012) suffered a strong decline. It is safe to say

that the traditional economy overall, even including privatized companies, is today smaller than even in 2009, and much smaller than before that.

The situation today is changing, however, as already for some time, the new economy has come to dominate over the traditional one.

3. The New Economy: Leading Export-Led Growth (Finally)

Serbia, we believe, is finally poised for an acceleration of export-led growth. It is important that its growth is export-led because, as emphasized by the World Bank's "Road to Prosperity"¹⁰, this is the only way it can be sustainable. The main reason for this confident prediction is simply that the new economy, which has always shown a much stronger performance, is now large enough to take the overall economy forward—it would accelerate even if there was no acceleration of growth of either of the two segments. Also, the global crisis forced a structural adjustment on Serbia's economy, (deepened by a fiscal adjustment

only at the tail end of the period of observation). Note, however, that we do not expect the acceleration to be radical. This would require the addressing of both the risks we present in subsequent sections of this note, and deeper institutional reforms.¹¹

3.1. A Relatively Strong Export Performance, 2009-2016

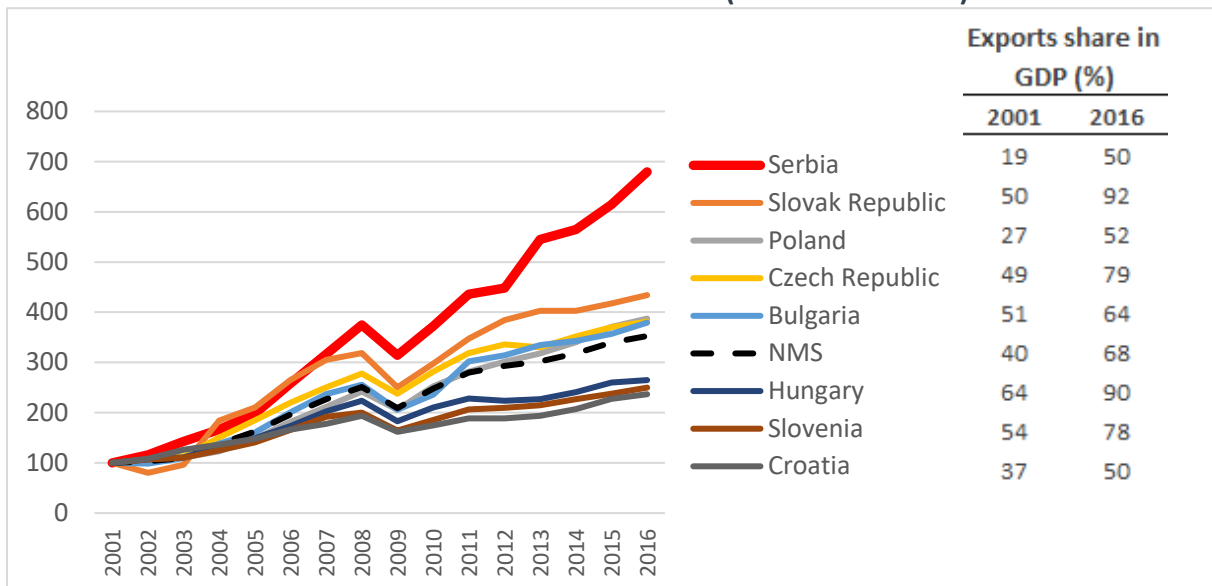
Ever since their sharp drop in 2009, Serbia's exports of goods and services grew strongly compared to its competitors (12% p.a. viz an average of 8% for the NMS, see Figure 3) and especially considering the sluggish international environment. In good measure, this is the manifestation of a process that had started with the opening of Serbia's economy in 2001: the growth of a new economy, whose exports grew relatively fast but from negligible levels. Gradually, they built-up to relevant size. The GDP share of Serbia's exports of goods and services more than doubled since 2009 (reaching 50% in 2016), but it had actually been converging with that of the NMS since the economy opened-up in the early 2000s (Figure 3).¹²

¹⁰ „The Road to Prosperity: Productivity and Exports Country Economic Memorandum, Volume I: Overview“, World Bank, p. 5.

¹¹ It should be noted that almost none of the recommendations contained in the "Road to Prosperity" have been implemented.

¹² It may well be that the difference between Serbia and the NMS would be smaller if the value added in exports were compared—certainly for domestic companies, as they have been integrating with the global economy only gradually, and so many of them are in the agri-food sector.

**Figure 3. Export of Goods and Services:
Serbia and New EU Member States (Index 2001 = 100)**

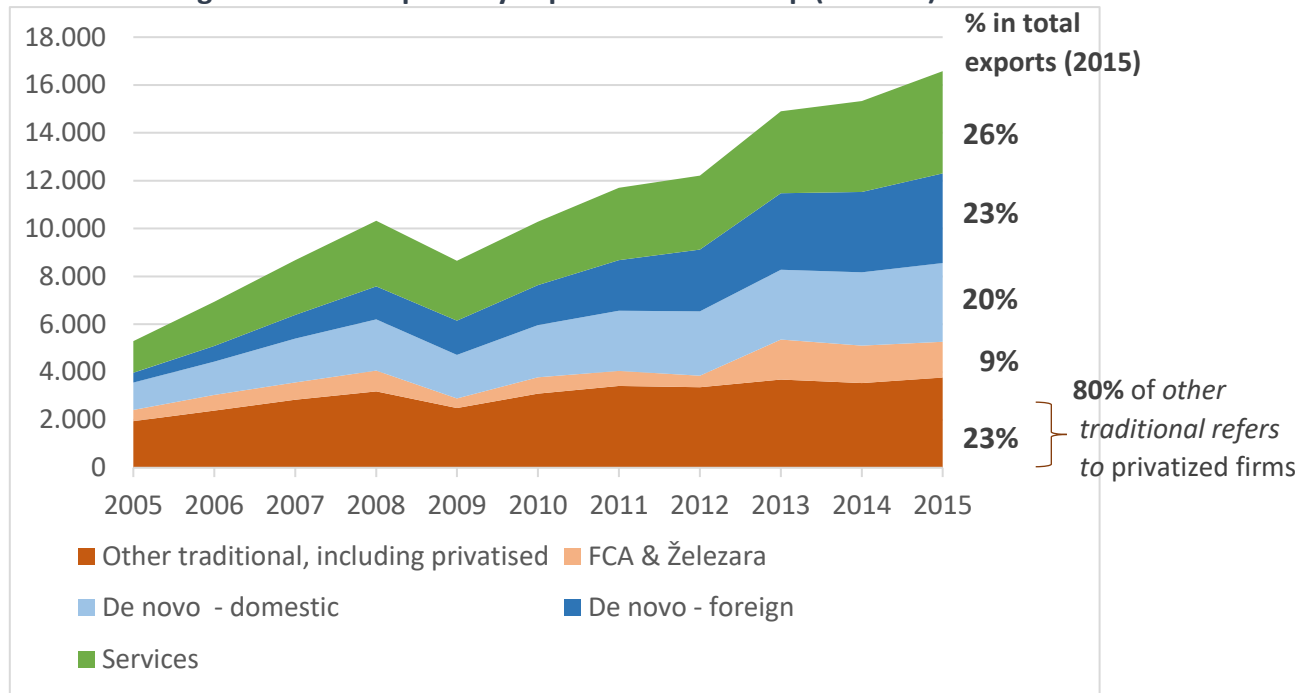


Source: World bank database

Only exports of the new economy grew throughout the period of observation, reaching 93% of the total export in 2015, and more than doubled compared to in 2006 (when it represented about 80% of the total). The relatively steady progress of total exports, and their composition by ownership of exporting company, is illustrated in Figure 4. Initially (not shown in the figure) the growth of the new

economy's exports was dominated by privatized companies. For a long time they did not seem to be comprised of much more than steel (the Zelezara was privatized in 2002) and grain (exported mostly by companies privatized even earlier), and raspberries (exported by the new private sector).

Figure 4. Total Exports by Exporters' Ownership (mil EUR)



Source: CCIS data

The shares of the various ownership segments in the exports of 2015 were relatively evenly distributed, but those by *de novo* foreign companies were growing substantially faster than the others (23% growth p.a.) and are likely to comprise a substantially larger share today. Note that of the privatized companies, Zelezara and Fiat Corporation are shown separately because of their bulk and oscillating dynamics, while the others are included together with the un-transformed traditional sector.¹³ Exports of services play an increasingly important role in Serbia's exports, and certainly belong to the new economy¹⁴, but cannot be traced back to an exporting company, and hence are not broken down by ownership. Exports of services were likely to be mostly by

domestic companies until 2011, when large outsourcing companies (NCR and Sitel Group) began to operate in Serbia.

A strong economic adjustment since 2009 is also evident in the data. Just the value added by exporter companies to exports more than compensated a decline in value added in domestic sales so that it comprised 114% of the total increase in the economy's GVA since 2009. Note that according to statistics the total economy's GVA in this period increased only 8%, measured in nominal euros, not catching up with the 2008 level. Meanwhile, the component sold on the domestic market remained lower in 2015 than even 2009. At the same time, the share of the value added by exporting companies to exports,

¹³ We know what set of companies hail from the traditional sector, and whether they are privatized or not today, but not when in the past have they been privatized. This is why we show all traditional companies together, whether they have been privatized or not.

¹⁴ Traditionally, Serbia was a significant exporter of construction services, which have recently been picking up. These would be largely by privatized companies, such as Energoprojekt, but it cannot be excluded that at some points in time some untransformed companies was able to export services at least within the former Yugoslav region.

increased from 12% to 20% of total GVA.¹⁵ The demise/transformation of the traditional economy in this period is evident in that it started the period with 611 exporters and ended it with 415, most of them privatized (325). Many new exports were the result of a shift of sales from the domestic to foreign markets. However, as evident in Figure 4, the global crisis hit the exports of domestic *de novo* companies particularly strongly (they declined 12% in 2009). Also traditional companies were strongly hit, and many stopped exporting or even exited altogether, at that time. Remarkably, however, the exports of the *de novo* foreign-owned companies did not even suffer a decline.

While unremarkable by the standards of economic development history, Serbia's recent export growth rates have been high and competitive within its economic environment. We assess their competitiveness based on standard market share analysis, which departs from the composition of a country's export markets—both the selection of goods and destinations—and asks how much market share has been gained in each of them.¹⁶ By this criterion, the so-called competitiveness effect explains about 76% of Serbia's exports increase (a doubling) in 2009-2015. Most of this market gain was accomplished in Europe—primarily in the large West European economies, but also in the new member state markets. However, Serbia's exports to third

destinations (Russia, the Middle East and the Far East) have been also growing very fast, albeit from extremely low levels. Only exports to the CEFTA region have stagnated.

In the following sections we explore the sources of this competitiveness—what are the characteristics of the industries taking the lead, and what the opportunities and limitations offered depending on company ownership/size.

3.2. The Industries

A Broad Diversification

While little of the traditional industry remains in operation to this day, much of the new economy is clearly being built on its foundations. Serbia's economy was highly diversified (as were those of the other Yugoslav republics), and while many products still exported by the traditional industry in 2008 have disappeared, others have (re)emerged. Overall, it is notable that Serbia's strong export performance has been very broadly spread across industries, and her already diversified export portfolio, after suffering a setback in 2009, has continued to diversify. Looking at the total of 34 industries (NACE 2-digit classification) producing tradable goods, the competitiveness effect comprised over 70% of the growth of exports of 15 industries, and between 40-70% of the growth of exports of 13 industries. A loss in market share occurred only in 6 cases. Disaggregating further, out of a total of 109

country where they are exported. It then aggregates the difference between the actual increase in exports of each particular good to each specific country and the increase that would have been necessary to keep that product's market share (i.e. if exports had grown at the same rate as the market).

¹⁵ Note that we refer here only to the value added added by exporter companies, as the estimation of total value added in exports is a more complex exercise.

¹⁶ The constant market share analysis looks at the exports of each individual product (4-digit aggregation level, about 800 products) to each

tradable industries (NACE 3-digit classification), the competitiveness effect comprised over 70% of the growth of exports of 44 industries, and between 40-70% of the growth of exports of 26 industries. Finally, looking at the 1.024 products at the 4-digit product level, 412 had a competitiveness effect higher than 70% and 117 had a competitiveness effect between 40-70% of the growth of exports.

The performance of Serbia's exports by group of industries is shown in Table 2.

Agri-food Complex

Serbia's **clearest comparative advantage lies in the agri-food sector**, deep rooted in tradition and extremely favorable natural conditions, whose development is nevertheless held back by an extreme fragmentation and constraints on access to land, as well as over- and wrong regulation. Agri-food exports comprise 16,3% of the value of total exports—not the highest share in total value, but probably the highest if only the value-added content was measured.

Table 2. Export Performance and Gross Value Added at Factor Prices by Industry Groups (%)

	Export ¹		Value Added	
	Share	CAGR ⁹	Share	CAGR ⁹
	2016	2009-2016	2016	2009-2016
Total exports	100,0	11,4	100,0	0,7
Agri-food Complex ²	16,3	11,2	10,6	0,5
High-Tech and Knowledge-Based Invisibles ³	11,4	10,2	23,4	0,7
Mid-technology Know-how Based Industries ⁴	19,5	14,6	3,9	2,8
Low Tech (Mostly Consumer-Goods) Industries ⁵	10,0	9,0	2,7	2,3
Automobiles and Basic Metals ⁶	18,3	17,0	1,5	8,1
Other - mostly SOE ⁷	7,8	8,9	8,4	2,7
High-tech Industries ⁸	2,4	5,7	0,6	-2,1
Construction	1,0	1,6	4,4	-0,9
Less knowledge intensive market services	11,5	8,9	26,7	0,6
Non-classified	1,8	6,1		

1 – There is a difference between merchandise export registered by NBS and merchandise export registered by SORS, due to different treatment of re-export. Merchandise export registered by NBS is lower by 4.6% (618 mil EUR).

2 – Agriculture, food, beverage and tobacco

3 – Professional services and especially high-tech knowledge, largely IT, services and products etc.

4 – Electrical, mechanical, metals, and rubber and plastics industries

5 – Textile and leather, wood, paper and furniture industries

6 – Motor vehicles and other transport equipment, and basic metals

7 -- Mining, Water, Electricity, Chemistry

8 -- Basic pharmaceutical products & Computer, electronic and optical products

9 --The compound annual growth rate (CAGR) is the mean annual growth rate over a specified period of time longer than one year.

Although Serbia is among the top 10 European net exporters of agricultural and food products, much of its potential continues untapped.¹⁷ The range of exported goods is broad: topping the list by competitiveness are fruits and vegetables that comprise nearly a third of the total. However, average yields per ha of cultivated land are 37% lower than the EU average, (assuming the same product portfolio) and the assortment of products is relatively low-value, and/or with low value-added, i.e. short value chains. Simply frozen raspberries (252 mill Euro) and unprocessed maize, wheat, sunflower seed and soya (581 million euro) make a whole 29% of the total agri-food exports. At the other extreme of the spectrum by value-added--meat and meat products--Serbia is essentially just self-sufficient, with marginally small net imports increasing gradually since the liberalization of this market. Fast growing exports of animal feed are an interesting indicator of constraints and distortions on the meat market, as this product is usually consumed domestically.

A fundamental problem is the very high fragmentation of both primary production and processing, with much of this fragmented chain operating in the traditional, subsistence, rather than commercialized realm. Serbia's average land holding (6 ha, and only 4 ha south of the Sava river), is typically additionally subdivided into an average of 4 non-contiguous plots of land. Significant

portions of the total agricultural land are not under cultivation, or are under central government or public utility control and not efficiently used. Approximately 30-50% of food production (depending on type of food) is consumed in kind or commercialized through green or informal markets. 48% of the exports of processed agri-food goods is by SMEs.

To increase its value and value-chain length, Serbia's agri-food sector needs to transform from a supply-driven to a demand-driven industry, i.e. to become capable of proactive positioning in international markets. This, in turn first requires the existence of effective channels of product collection from producers, and its distribution to markets. Little is known about the trade intermediation network that connects the current fragmented structure, and its ability to grow into that function. Some lukewarm efforts to develop modern wholesale markets/distribution centers by the government so far have not given result.

High-Tech and Knowledge-Based Invisibles

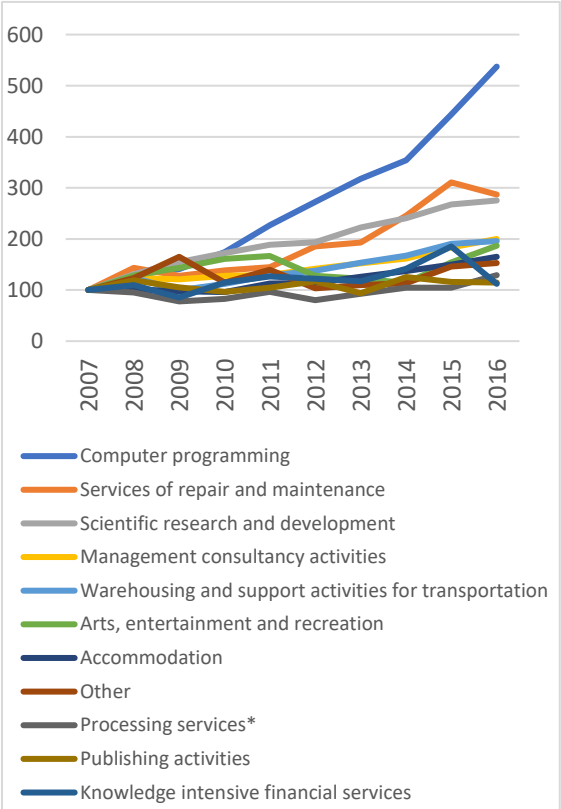
Next, and likely competing in importance with the agri-food sector in value added, come exports of high knowledge-content invisibles—whose value has been growing by 10% annually since 2009. Even though this growth was not high enough to increase its share in total exports (it remained at the level of 27% of total exports), net exports growth has been particularly high from 2013 (annual growth

¹⁷ According to SORS the GVA share of the agri-food sector in the economy's GVA is 13%. However, CEVES' analysis shows serious shortcomings in NA statistics and there is little doubt recent agri-food production growth in particular, has been underestimated. An agricultural census was conducted in 2012, but there is still much lack of

transparency regarding public land ownership. We suspect the key problem is reliance on unreliable and outdated municipality reporting. A dedicated analysis of these structural and performance trends could substantially increase clarity and increase the scope for policy improvement.

rate of 32% from 2013 to 2017). According to the scant available information—exports of invisibles were initially overwhelmingly comprised of transport and other services associated with the foreign trade in goods, as well as tourist proceeds. The performance of both their exports and imports closely mirrored that of the trade in goods, while net exports barely increased in value. However, professional services and especially high-tech knowledge, largely computer programming have been growing fast and (by 2011) begun noticeably to affect the total (Figure 5), and especially net service exports.

Figure 5. Exports of Services by Sector (Index 2007 = 100)



Source: Balance of Service, National Bank of Serbia

Mid-technology Know-how Based Industries

A further **clear cluster of competitive advantage is in the mid-technology range of the electrical, mechanical, metals, and rubber and plastics industries**, with an export growth of 17% per annum (competitiveness effect contributing to export growth with 76%) and market share gained both by large FDI and domestic SME companies. The key linking factor among these industries are the high skills and resourcefulness in mechanical design and construction as well as metal processing and to a lesser extent electrical engineering. The most convincing comparative advantage is exhibited in the fast-growing rubber and plastics (R&P) industry,¹⁸ with exports of large well established foreign companies (Micheline, Cooper Tire) and of home-grown domestic SMEs are growing at around 17% per annum. The key factor of success lies in excellent abilities when it comes to producing the varied, often unique and sophisticated, (metal) tools and equipment needed in the production of rubber and plastic products.

In these industries engineering and technical skills can be world-class.

Companies producing products such as home appliances (Gorenje), wind generators (Siemens), engine parts (Albon/Agena), and pneumatics (Tigar Tyres) have been able to transfer to Serbia product design and development (the first three), and injection molds construction (the later). Some now also do strategic sourcing from Serbia. Foreign managers have commented that Serbian workers are

¹⁸ Even within the overall broad diversification and relative similarity of the Yugoslav republics' structures, Serbia was preeminent among them in the production of food and rubber products, and it

shared a top position with Slovenia as regards machines (but not electrical equipment and appliances), and with BiH as regards metal processing.

able to go beyond the direct process they have been tasked with, to contribute creatively. The Micheline factory in Pirot is capable of introducing a new production line in a much shorter time than it takes its other global locations.¹⁹

Low Tech (Mostly Consumer-Goods) Industries

The **evidence is more mixed in the case of some low-technology industries.** The only sectors showing unambiguous competitiveness are the wood product industries (including wood furniture), enjoying high export growth rates albeit from low levels (particularly when the imploded traditional sector producers are excluded). These exports are largely by domestic SMEs. Some other consumer good industry exports have also been growing fast, but they tend to be heavily reliant on government subsidies--textiles, and knitted apparel, particularly stockings.²⁰ While other companies that hire large numbers of new employees are also beneficiaries of subsidies, in these industries the bulk the technology requires little capital investment and relies significantly on low-skilled labor, which, in turn, greatly increases the risk that the subsidies (being per employee) are masking an essentially uncompetitive position.

Automobiles and Basic Metals

Finally, the assessment of the **competitiveness of the automobile and steel industries**, each of whose bulk has

dominated the performance of manufactured good exports at different times, requires further analysis. Automobiles (mostly Fiat Chrysler Automobiles Serbia (FCA Serbia) and its suppliers) contribute as much as the agri-food sector to the value of Serbia's exports, and basic metals (mostly Zelezara Smedervo's steel) is the next largest with about half as much. However, their value added is still comparatively small, they have been recipients of massive government subsidies, and while the value added in the exports of the automobile industry has certainly been increasing, there is no clear sign of sustained growth in exports of either.

3.3. (Large) FDI v. (Domestic) SMEs²¹

Not surprisingly, almost three quarters of Serbia's FDI merchandise exports is by large companies (comprising 42% of the total). However, no exporter company is close to being an international giant. Even at the (3-digit) product level, only the exports of automobiles surpass the value of 1 billion euro, and for only 13 products does the value of exports surpass 100 million (all of them below 400 million, and most of them produced by several companies).

Nevertheless, domestically owned SMEs have also been able to find their place on international markets, with a share of 25% in the total merchandise exports

¹⁹ We did not interview Micheline leadership, but this information has been confirmed by two different sources connected to the company.

²⁰ The relatively low-tech production of many of the metal cables whose exports have been growing fast, and comprise a significant share of the

machines and electrical equipment industries, should also properly be considered here.

²¹ The figures in this section refer to all exporter companies, including those registered for commerce i.e. may not have been the producers. However, the structure does not differ materially if they are excluded.

(overwhelmingly by *de novo* companies) and well over a half of that is by small or micro²². About a third of domestic SME exports are agri-food products, the rest come from all industries, but with a more noticeable share of rubber and plastics, fabricated metal products, machinery, furniture and wood products.

Scale and access to markets (demand management) are key factors in determining the comparative advantages of FDI v. SMEs, and the way the two factors play out differs between know-how-driven (typically producer goods) industries and the low-tech demand-management-oriented (typically consumer-goods) industries.

Clearly, FDIs have a greater advantage the greater the scale of production. Large scale production typically requires more capital, more know-how and better access to global markets – all of which are more accessible to FDIs than to domestically owned companies, especially SMEs. Typically, large scale goes with automation and higher capital intensity and costs—all of which require large fixed capital outlays. However, even when the technology is not particularly capital intensive and sophisticated, larger production scales will require more capital (and time) to conquer the large markets that go with large scale. SMEs that do not have all the above advantages need by default to focus on products that can be competitive at smaller scale.

Nevertheless, Serbia's **SMEs may have a particular advantage in small scale**

production in know-how-based (or creative) industries when they require significantly greater per unit reliance on sophisticated skills and labor. This because in Serbia sophisticated skills are relatively cheaper than unskilled labor.²³ Scale tends to significantly affect the structure, not only the level, of costs in know-how-based industries. Large scale involves product standardization and automation of production. The expensive product and engineering process design costs are front loaded and are subsequently born by a larger number of output units. Less costly unqualified labor and machines become substituted for the more expensive skilled technical/artisanal labor required in individual piece production. Once production has been automated, the overall cheaper standardized product unit bears lower design and skilled-labor costs, and (relatively) higher costs of capital and less-qualified labor.

Important industrial segments in the know-how-driven producer good industries produce high-value products, customized, i.e. adapted to the specifications of known customers. Customization is often needed in the production of tools or machines for specific industrial/manufacturing purposes. These are typical cases in which Serbian SMEs may have an advantage. It is not unusual to find very small outfits (sometimes with less than 10 employees, most of them engineers), that are able to come up with niche design solutions to produce relatively demanding machines based entirely on sourced inputs, often imported from

²² Only 8% of total exports are by domestically owned large companies, and the bulk of them is by privatized companies in the agri-food sector.

²³ Labor cost in Serbia is lower than in other European countries, and the discrepancies increase

with the qualification level. For instance, average managers' salaries in the EU 28 are 5,03 times higher than in Serbia; with 3,92 for technical professionals, 2,93 for machine operators and 2,67 times for low and unqualified laborers.

abroad. Some of them compete with global leaders. For example, using highly demanding mechanical engineering solutions, *STAX Technologies* from Čačak produces completely customized machines and systems for packaging paper products and exports them to 55 countries.

It is this essential concept that also extends to, and combines with, the provision of high know-how content services—from IT program development to the design of equipment or system layouts. In our pursuit of understanding SME exports of manufactured goods, we encountered a number of companies also exporting the design of say cooling, transport or electrical installation systems adapted to the specific layout and needs of the foreign factory. A particularly telling example is *Svetlost Teatar*, evolved from a combination of technical skills and the ability to handle sophisticated system implementation, to produce and install complex theatre installations across the world.

In this area Serbia has an advantage over Far Eastern destinations in that customized production requires proximity and close collaboration with the customer—a strong factor why not more of it has already moved out of manufacturing powerhouse countries. However, it does not have an advantage compared to NMS. Customized production also requires flexibility, and this seems to be a strong Serbian advantage.

Serbia stands to benefit the most from foreign investment in the intermediate case when some customization and adaptation is needed before a medium- or large-size series is produced. That sort of production will require some of the characteristics of both described extremes.

The investor will engage and develop a technically trained workforce, but also transfer process management and large market access know-how.

Access to markets, or even more – the ability to develop markets and manage demand-- matters more in the low-tech usually consumer goods industries. Scale of course also matters, but product differentiation (quality, design, branding) typically allows for substantial cost reduction and competing on price without the need to shave-off every cent of cost based on scale and efficient process management. Clearly, Serbian both privatized and *de novo* companies in the consumer goods area are much more oriented to the domestic market, where they benefit from brand recognition and the scale is easily smaller. Of course, a particular and very important case of the latter is in Serbia's production of food. However, interesting processes are happening, in the already mentioned wood and furniture industries, as well as possibly the fashion industry, a subset of the apparel industry, which hold large shares of the domestic market and, after a shakeup during the economic crisis, appear to have found ways to compete abroad as well.

3.4. Industrial Dispersion and „Thinly Spread“ Skills—A Key Risk

While in principle industrial diversification is a desirable characteristic, it strikes us that Serbia's export/production structure appears not only highly diversified, but also little integrated, creating a quality that we call *dispersion*: many products are produced, but each by few or single relatively isolated producers, with little

horizontal industrial clustering and cooperation, and little vertical value chain integration²⁴. In an of itself this could be just a stage in Serbia's economic recovery process. However, this is coupled with what we call "thinly spread" skills -- the fact that quality skills, having been dissipating over nearly 3 decades, are now increasingly in short supply and quite immobile. Together these two phenomena may represent a serious obstacle to the acceleration of growth.

Dispersion

The dispersion is the result of the gradual transformation/recovery process in which a host of political economic and circumstantial factors played a more important role than innate economic potential in determining which resources were rescued from dissipation. The first brownfield investments went to the handful of still well-performing industries, largely focused on the domestic market (breweries, cement factories). Subsidies to foreign investors played an important part in attracting investors, although successful privatizations have also happened by international companies that Serbian companies had cooperated with (including using technology licenses) before the 1990s (Michelin, Fiat) and with whom a link had not been completely severed by the early 2000s. For an investment to happen in Serbia, numerous regulatory obstacles, as well as often complicated layers of ownership resolution need to happen. Hence, the most important factor was often whether these obstacles were large in a particular case, and whether a foreign investment (brownfield or greenfield) had

a dedicated champion helping them to overcome them. Greenfields tended to happen because of previous knowledge of the market (Gorenje) or literally by chance, as is the case with Siemens who happened to obtain a small local plant in Subotica when it bought its much smaller German owner.

On the other hand, for a domestic *de novo* company to develop, three elements needed to combine: production (technological) knowhow, a market opportunity, and entrepreneurship. We have observed that today's most successful *de novo* companies (generally exporters) surprisingly often hail from small shops established as suppliers of the traditional sector already in the 80s and especially during the trade embargo of the 1990s. Some developed as spin-offs of the traditional sector, where an individual or group of employees established a new company (usually with some access to the original company's assets). A third frequent channel has been when a distributor of an imported good that begun to produce and supply parts for the original producer, or to produce and sell locally, in competition with the original producer. Production for exports typically developed after a company established itself domestically, and very often it started with exports into the region, and only then to more distant Western or Eastern destinations. Exports often start due to contacts established in fairs, but also a frequent link is through contacts with, or even intervention and active involvement of, individuals in the diaspora. However, we also observe relatively small domestic or foreign owned

²⁴ That value-chains appear to be quite short in Serbia's economy—whether the segment produced is of low or high value added-- is the view of more

than one key informant. However, the issue could and should be the subject of more systematic study.

companies set up for exports from the outset, in which case there is often a link to individuals in the diaspora.

Both foreign and domestic new economy exporters tend to be distributed across rather different products within industries because described determining factors are not linked to integrative processes, or to some kind of systematic movement of the production possibility frontier of the economy. Serbia's exports are growing as a sum of a large number of products whose exports are starting from naught and therefore growing fast. At the product level the number of 4-digit SITC products with more than 50.000 worth of exports increased from 794 to 839 (out of a total of 1.024 products) over 2009-2015, and the number of products with over 10 million euros worth of exports each nearly doubled (from 125 to 203). What is more, although the average company exports size increased, this increase was also broadly spread so that in most of the 2-digit NACE industries the concentration of exports actually gently declined over the observed period. The share of exports of the three largest exporters declined and of the 25 largest exporters declined or remained unchanged in all 2-digit sectors except automobiles and machinery and electrical equipment.

Also, we see little clustering or specialization focused on specific products. The only significant exports of a product by more than one or two companies that has come to our attention are pneumatics (more than 360 mil EUR, exported by Michelin, Cooper and Mitas),

electrical cables for the electrical or automobile industry (more than 450 mil EUR, exported dominantly by Yura, Leoni, Draxlmaier, Tisza, PKC Wiring and Contitech) and stockings (more than 180 mil EUR, exported dominantly by Valy, Modital, Falke, Real Knitting, 8. Mart, and EMMEPI). As discussed earlier, pneumatics exports are undoubtedly based on Serbia's competitive strengths, but this is less likely for the electrical cables and stockings industries.

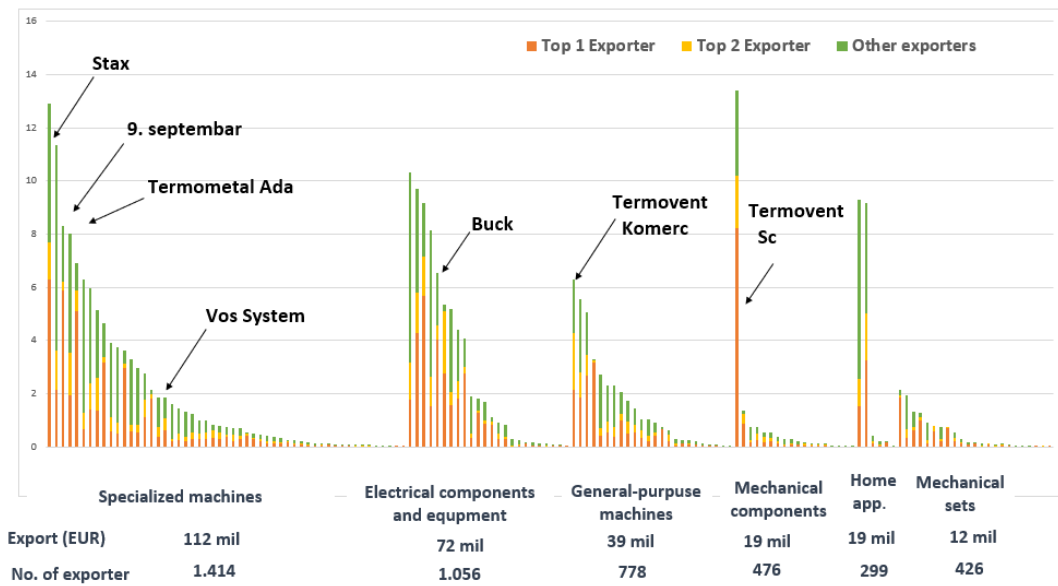
The lack of clustering or specialization goes deep, even at very disaggregated levels, in many industries. We here present two particularly telling examples.²⁵

The **exports of machines and electrical equipment by de novo domestic companies** although small in total value, are growing fast and are strikingly broadly distributed across products at the 4-digit level of product aggregation. Figure 6 shows the 149 product groups that comprise machinery and electrical equipment exported by *de novo* domestic companies, with the largest exporter of each product group marked in blue, second largest in red and the rest in green. First, note how every product is exported at least to some extent. Second, in many cases two companies account for the bulk of the product's exports—and they too tend to produce different products. There is a hint of some product grouping -- the major share of exports is made up of specialized machines (36%), electrical components and equipment (25%) and general-purpose machines (17%), but overall this is very faint.

²⁵ CEVES has had the opportunity to probe quite deeply into the structure of four industries and somewhat more superficially, into another eight. The described dispersion was present in all,

particularly the ones with more significant growth of exports, excepting automobiles, and possibly apparel.

Figure 6. Diversification of De Novo Firms Exports of Machinery and Equipment (Trade Firms Excluded), (EUR, 2015)



Source: CCIS database

There is also some suggestion of a clustering emerging in the production of customized machinery for the food industry and specialized machines for wrapping and filling (i.e. packaging), but this is not yet clear.






Another example can be seen in the **exports of wood furniture which include some foreign companies but are largely driven by domestic *de novo* companies.** Wood furniture exports are nearly evenly distributed between all three furniture kinds: solid wood (24%), upholstered (20%) and panel (37%) furniture. There is only very little exported in parts (8%)! Although furniture exports by non-state owned

companies are growing very fast, and although the furniture industry globally tends to be organized with different suppliers producing different parts, we have to this date not identified such a process of progressive specialization or division of labor, either in the foreign or domestic market²⁶. It is peculiar for Serbia's furniture producers that they tend even to retail their own products themselves.

The distribution of furniture exports across markets is also very even, with the SEE region comprising 50%, old EU member states 42%, and Russia and Kazakhstan 7%. With the exception of the regional market, all others show very strong rates of growth.

²⁶ Studied in detail, but anecdotal knowledge of apparel suggests similar.

Figure 7. Diversification of Exports of Furniture Producers (2015)

	Panel furniture 61 mil EUR (37%)	Upholstered furniture 34 mil EUR (20%)	Solid wood furniture 41 mil EUR (24%)	Furniture of metal and other materials 18 mil EUR (11%)	Furniture components 13 mil EUR (8%)
Main exporters	 Forma Ideale (36%), Mobilturi – FDI (17%), Matis (10%), Ergomade (7%) S.C.S. Plus (6%)	 Diva Divani - SDI (37%), Lotus Divani (11%), Top Sofa (8%), Extraform (7%) Atlas (5%)	 Enterijer Janković (28%), GIR (17%), Kolarević (12%), Standard Furniture (9%), Rimako (8%)		
Main markets	Romania, B&H, Croatia, the former Yugoslav Republic of Macedonia, Montenegro, Greece, but also Germany (S.C.S. Plus i Jela Jagodina)	Italy (FDI), Russia (Lotus Divani), Switzerland, Croatia, B&H	United Kingdom, Belgium, France, Russia, Germany, Switzerland		
Channel	Own brand	Private label and Own brand	Private label		
Price segment	LOW	LOW-MEDIUM	MEDIUM		

* without mattresses and seats for automotive industry

Source: CCIS database

“Thinly Spread” Skills

The fallout from the dispersion in combination with the gradual dissipation of skills and other traditional sector resources is that the country is covered with “islands” of productive capacity surrounded by dilapidated or no capacity at all. One would expect a competitive development process to start attracting people and resources to those areas (surrounding the islands) with the greatest competitive advantages, that different economic agents and institutions—producers, merchants, researchers—would start clustering into ecosystems of reinforcing feedback loops. However, such a process is not evident so far. One key reason, we believe, is that unless it is directed to the 2-3 largest cities, the population’s internal mobility in Serbia is extremely low²⁷. Hence, skills become what we call *thinly spread*. The resources are anchored and the productive islands

can either develop in concentric circles, or not at all.

The low internal mobility of Serbia’s citizens is well documented and often attributed to cultural factors. We believe a more practical factor is that people are tied to the location of their home and family by complex household livelihood strategies, i.e. income structures. The recent economic history means that people have higher income expectations (and more assets) than are normally associated with the incomes they are able to secure on the market. Hence, wages are complemented with other sources of income shared by household members and largely tied to a location-- homeownership, transfers from the government (primarily pensions) or remittances from emigrant family members, as well as assets such as land. If individuals leave the household, they tend to leave the country altogether.

²⁷ Marjanovic, D. (2015). “Labour Migration and its Effects on the Demography and Labour Market of Serbia Conducted within the "Mainstreaming Migration into National Development Strategies"

Project”. International Organization for Migration, Swiss Agency for Development and Cooperation and UNDP.

The “thinly spread” skills phenomenon affects FDIs and SMEs alike. It explains the paradox that foreign and domestic managers in skill-intensive industries cite productive skills as both the greatest competitive advantage and the key limitation to their success. They extoll the skills and resourcefulness and flexibility of the engineering and technical staff as their main competitive advantage and continue in the same breath to point to the lack of skilled labor as a key limitation.²⁸

Clearly, in such an environment large operations requiring abundant skilled labor cannot be set-up at once, but can be built gradually. While this is one serious obstacle to the entrance of large companies offering quality jobs at once, we observe that the majority of employers tend to be systematically engaged in training new labor, and gradually expand operations. The thinly available local capacity for sophisticated functions is relied on to build more local capacity, probably much faster than would be possible in other countries at comparable wage levels.

²⁸ It is interesting that in such an environment wages do not rise faster. Partly, this is because unemployment and underemployment persist in the areas between the productive islands, exerting, if nothing, a psychological pressure on all. Second, for an employer to increase wages, he/she has to have a willing offeror at the higher price. These are not available. In essence, this is a bilateral bargaining situation, within each island. Wages are beginning to move upwards with the greater demand, and especially in professions for which mobility is of little relevance, such as IT programming.

4. A Special Role for Serbia’s SMEs -- How Far Can They Take Growth?

Over the past decades, SMEs have played a critical role in engaging skills and preserving them from dissipation, some of them even developing them. SMEs have been able to perform this function at a very capillary level, picking up resources where they were too limited to attract larger investors. Today SMEs employ a total of 606 thousand people²⁹ (60% of the corporate sector). While we do not know how many of them engage significantly skilled and competitive labor, we do know that at about half are employed in companies that export goods, whether their own or as intermediaries, or are registered as manufacturing companies and selling only on the domestic market.³⁰

The question is, however, how far can MSMEs take this “rescue mission”? Can they become an important driver of Serbia’s sustained development? There are two aspects to this question.

- One is the rate at which new MSMEs enter exports, i.e. start selling to foreign markets³¹. This depends on the rate of creation of

²⁹ Not including SPPs and Self-employed, which are considered to be a household sector.

³⁰ An analysis could be conducted to obtain a rough assessment of the total number and industrial distribution of gazelles and strongly growing companies in manufacturing, as well as the employment they have been generating. Even of greater interest but substantially more complex it would be to conduct such an analysis on SPPs and the services/invisibles sector.

³¹ Of course, these questions refer not only to SMEs proper, but also to the self-employed (formal and informal) whose exports also contribute to Serbia’s output and employment.

new companies as such, and the rate at which existing domestic oriented companies may yet “graduate” to becoming exporters.

- The other is the extent to which they can grow individually, whether by increasing their productivity or employment, to make a contribution to overall exports (GDP) growth. How often, however, do SMEs oriented towards custom-made or niche production grow to become large? In which case can they graduate to large-scale production and in which not? How likely is it that these occurrences will multiply? What circumstances and support can help this happen? How often and in which circumstances are they likely to be bought out by a large company?

Answering these question is beyond the scope of this paper. We here proceed to present a few stylized facts on domestic MSME entry and growth that seem encouraging but remain inconclusive until further study.

4.1. Entry and Average Exports Size by Company Size—the Record so Far

Since the global financial crisis strongly shook up and created a new environment for Serbia’s exports (see Figure 4) we focus on the period from 2009 but show enterprise entry and exit in a longer period. but.³² We observe the size of the company at the time we observe its exports,

regardless of the company’s growth path. This is different from an exact assessment of the extent to which small enterprises have been able to become exporters (“enter exports”), and the extent to which exporters have been able to grow and graduate to larger brackets of size—an analysis beyond the scope of this paper.

Viewed in this way, **the increase in exports of *de novo* SME companies accounts for 34% of the total increase in exports since 2009** (Table 3). The exports of domestic *de novo* SMEs have grown more slowly than the average, but it should be taken into account that this category appears to have been hardest hit by the global financial crisis, with more protracted effects.

Table 3 Export Growth and Contribution to Growth, by ownership type and size

Export 2009/2015		
	CAGR	Contribution to export growth
Total	12.3	100.0
SOEs	0.2	0.2
Privatized	13.3	37.5
De Novo	14.4	62.3
<i>Large</i>	23.3	28.0
<i>SMEs</i>	11.1	34.3

Source: SBRA and CCIS data

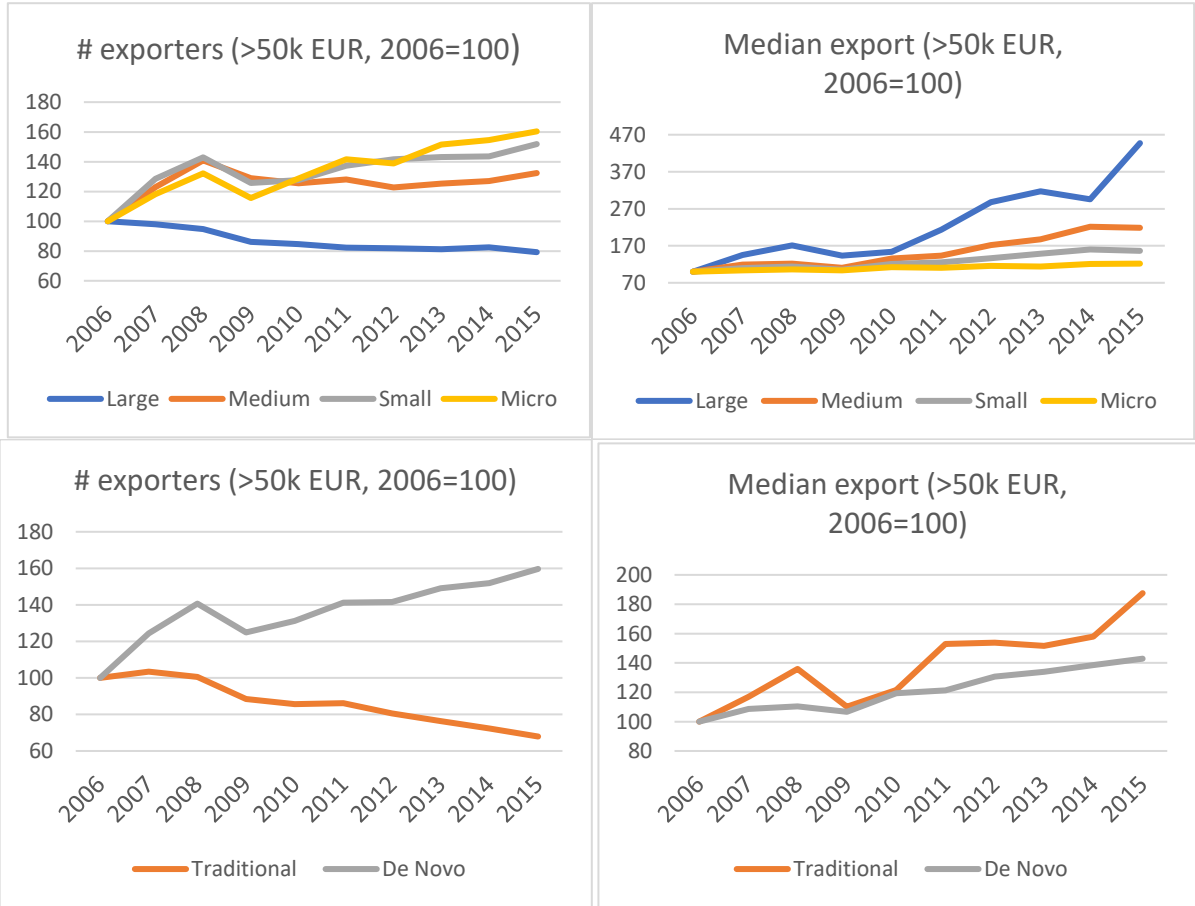
Export growth has come much more from the growth of average company exports, although the number of exporters also grew. Median exports over the last decade quadrupled for large companies, doubled for medium-sized ones, and increased by approximately 50% and 20% for small and micro companies, respectively (right-hand panel of Figure 8).

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At the same time, the number of exporters of more than 50 thousand EUR worth of merchandise has been increasing at a rate inversely proportional to company size (top left-hand panel, Figure 8). The number of micro exporters increased by 60%, and small ones by 51%, and while their rate of growth appears sustained, it is slower than in the period up to the crisis. The number of medium-sized exporters suffered longer after the crisis and was still below the 2008 peak in 2015, but recovering.

Privatized enterprises made the largest contribution to median export size, including as they do Micheline, FCA and Zelezara Smederevo. At the same time, the decline in the number of large exporters is entirely to the demise of the traditional economy, while the number of *de novo* large exporters increased by 55.

Figure 8. Evolution of Number of Exporters (left panels) and Median Exports (right panels) – by companies’ size and origin



Source: CCIS database

Overall, exporters that entered (“entry” considered exports sustained in a period of three years, contiguous, or a one-year gap anywhere) in the period since 2009

contributed 19% of total merchandise exports in 2015, with 8.7 p.p. of those comprised by foreign-owned and 9.1 p.p.

by domestically-owned companies³³. The number of large foreign *de novo* exporters increased from 45 in 2009, to 81 in 2015, although 18 exited in this period, By comparison, as much as 45 of large sized domestic *de novo* exited (out of 73 exporters in 2009) but a whole 62 entered—probably a reflection of “graduating” SMEs-- bringing the total to 90 in 2015.

5. Concluding Remarks with Indicative Recommendations

In the previous pages we have argued that as Serbia’s economy came out of the 1990s deeply bankrupt, and proceeded to transform very gradually, growth is now accelerating because the new economy has finally become large enough. However, this has also created an economic structure that poses specific challenges to the sustained and necessary further acceleration of Serbia’s economic growth. More study is needed (some of it listed below) before decisive policy recommendations can be given. However, the findings certainly suggest that the simple belated replication of the NMS transition experience, a model that policy analysts generally look to emulate, is very unlikely.

There are several aspects to Serbia’s peculiar economic structure.³⁴ First, a relatively small part of productive capacities built in Socst times was preserved and developed into what we call the new economy—a private corporate

sector capable of supporting competitive exports—critical to Serbia’s sustained growth. Presently, this export industry is showing strong competitiveness (defined as ability to gain market share) across a very broad array of industries. Serbia’s comparative advantages are rooted in its old tradition and highly favourable natural conditions for agriculture, and mid-technology manufacturing know-how. An emerging strong advantage seems to be present in high know-how content services, especially IT programming, but more needs to be known about this segment of services.

However, it is also a specific characteristic is that this new economy today has what we call a dispersed structure—very diversified, but with low levels of integration and absence of clustering around competitive strengths. While diversification is generally very desirable, for an economy to grow it is important that it also concentrates and builds on areas of emerging strength. It is desirable for clusters of connected companies to develop with spillovers of knowledge and circulation of a skilled workforce. These champion clusters would normally be drawing away employees from less productive sectors, the underemployed, and the unemployed or inactive.

The pool of those outside the productive core in Serbia is in fact large but skills in Serbia have become “thinly spread”. An unusually large segment of the employed population works in the vulnerable and low productivity household sector. A pool is also available in the overemployment of

³³ Since this includes registered merchant companies, some of this could in fact represent the shifting of commercial channels from direct to intermediated marketing.

³⁴ What we describe of Serbia’s economy is likely to be similar in most other former Yugoslav countries.

the still oversized state-owned corporate sector. However, the pool of those directly employable skilled individuals is limited and highly immobile. (Both of these characteristics are also the consequence of the slow transformation). The potential for developing the skills of the remaining labour force, and increasing their mobility needs to be better understood.

Hence, at present, the growth of companies in the competitive economic core appears to be more based on increasing productivity (this requires further study), while employment expands only gradually, at the rate at which companies are able to attract and train new workers.

In this context, the role that can be played by domestic SMEs become even more important than usually, as they can pick up and develop the remaining small pools of capacity. Moreover, it is important for long-term sustainable development to have a sizeable share of an economy owned by domestic capital, yet domestic capital is nearly all in SMEs. In this context, a big and important unknown is also the role that can be played by the high-knowledge content/creative segment of the household sector.

As mentioned, more research is needed to confirm some of the suggestions offered in this paper and implications fully drawn. Especially, although we believe the NMS experience cannot be repeated, important lessons can be drawn and more targeted comparisons and benchmarking with NMS economies needs to be conducted.

Some indicative recommendations, however, is to focus policies and direct programs of support on the tradable goods sectors—both exports and import

substitution, as we see clear evidence that domestic market production has been the first step for many to later sell abroad. Moreover, we have little doubt that policy should be oriented in two directions:

- The preservation, development and increased mobility of marketable skills. Not only productive, but also, and in some cases even more so (such as the critically important agrifood business) those related to the downstream (demand analysis, marketing and distribution) segments of the value chain. And not only industrial to which heavily biased this paper, understand much better the services ind and the HH sector as today's IT platforms.
- Supporting the development of the SME sector targeting a range of aspects. Above all, and in our opinion more promising than the often-touted access to finance, what is needed is support to market access and demand management. In some cases, like the agri-food sector, this requires industrial consolidation either through horizontal and vertical integration, or more likely (considering Serbia's political economy) through the development of more integrated and modern commercial intermediation of the downstream segments of the value chain. Regarding the export of services and custom-made manufactured goods, the methods may be directed more at creating initiatives that will support the capacity of the individual companies to find markets.

An additional recommendation is to take into account that not all SMEs can be equally helped. Broadly defined horizontal SME policy interventions in our opinion are

unlikely to provide meaningful results. More research is needed not only to further define those sectors more likely to contribute to Serbia's competitiveness, but also to better identify the population of SMEs willing and able to expand. This could start with an analysis of the kinds of SMEs that have shown persistent growth, the circumstances that have encouraged it and the scope for their multiplication. What is the role and source of productivity growth and what of employment expansion? Who are the 25 or so domestic *de novo* companies that appear as "new large exporters" in 2009-2015? Can their kinds of cases be multiplied? What is the potential of the household sector to contribute to growth through further growth of service exports? Do these have to become corporatized at some point in order to continue growing or can they simply fit in and grow within new emerging global economy as is? Research is also needed to understand the potential and limitations of efforts to enhance the

integration of existing SMEs with existing large globally integrated exporters.

A particular question is what adjustments are needed to the current policy of support to large investors. We have little doubt that an effort should be made to tie this support to investment in the development of labour force skills rather than simply jobs. This may already be happening implicitly by virtue of the fact that an arbitrary premium is paid where the investor is perceived to bring sophisticated technology or a large capital investment. However, the key question is the effect of per-employee support in low-tech labour intensive industries. It is conceivable that this hems labour to an essentially temporary, de-skilled existence, while alternative options, which may have had greater long-term developmental effects are being crowded out. This is likely to depend on specific circumstances, and more needs to be known about that.

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