

Rebalancing Serbia's Economy:

Improving Competitiveness, Strengthening the Private Sector, and Creating Jobs

June 2014.

Report No: ACS8575

Republic of Serbia

Serbia Competitiveness Policy Note

Rebalancing Serbia's Economy:

Improving Competitiveness, Strengthening the Private Sector, and Creating Jobs

June 2014

Trade and Competitiveness EUROPE AND CENTRAL ASIA



Document of the World Bank

Standard Disclaimer:

This volume is a product of the staff of the International Bank for Reconstruction and Development/ The World Bank. The findings, interpretations, and conclusions expressed in this paper do not necessarily reflect the views of the Executive Directors of The World Bank or the governments they represent. The World Bank does not guarantee the accuracy of the data included in this work. The boundaries, colors, denominations, and other information shown on any map in this work do not imply any judgment on the part of The World Bank concerning the legal status of any territory or the endorsement or acceptance of such boundaries.

Copyright Statement:

The material in this publication is copyrighted. Copying and/or transmitting portions or all of this work without permission may be a violation of applicable law. The International Bank for Reconstruction and Development/ The World Bank encourages dissemination of its work and will normally grant permission to reproduce portions of the work promptly.

For permission to photocopy or reprint any part of this work, please send a request with complete information to the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA, telephone 978-750-8400, fax 978-750-4470, http://www.copyright.com/.

All other queries on rights and licenses, including subsidiary rights, should be addressed to the Office of the Publisher, The World Bank, 1818 H Street NW, Washington, DC 20433, USA, fax 202-522-2422, e-mail <u>pubrights@worldbank.org.</u>

Rebalancing Serbia's Economy: Improving Competitiveness, Strengthening the Private Sector, and Creating Jobs

Contents

Executive Summary
Summary of Priority Recommendations
1. Overview of Serbia's Economy and Main Challenges
2. Productivity and Competitiveness of Serbian Enterprises: A Sector- level Analysis
3. Serbia's Export Performance
4. Reforms to Support Private Sector Growth
4.1 Making it easier to operate businesses, by reducing excessive administrative burdens and making regulatory environment predictable
4.2 Making it easier to invest and expand business, by improving planning and construction permits procedures
4.3 Making it viable to create formal sector jobs, by reducing labor market costs and rigidities
4.4 Improving the Competitiveness of Agriculture and Food Processing
Annex 1: Detailed Table of Recommendations
Annex 2: Data sources and methodology used in assessing productivity growth and labor allocation

Boxes:	
Box 1: Automotive Industries in Serbia and Slovakia	16
Box 2: An Overview of the IT Sector in Serbia	
Box 3: Successful reform to reduce administrative burden: Serbia's Business Registry	Agency 30

Figures:

Figure 1: Out of a workforce of 4.6 million, just over 1 million have a formal private sector job Figure 2: Employment rate: Serbia comes among last in Europe Figure 3: The tax wedge on low-wage earners in Serbia is among the highest in the region	5
Figure 4: Consumption has been growing rapidly until 2008, but stagnated since then	
Figure 5: Non-tradable sectors have been expanding rapidly, while tradable sectors grew only	
marginally	8
marginally Figure 6: The very sharp drop in output during the 1990s was not followed by similar drop in	
employment, leading to large productivity gap	
Figure 7: After an initial burst, reforms in Serbia have mostly stagnated	9
Figure 8: which means that Serbia is now well behind regional peers	9
Figure 9: FDI is equally out of balance: most of inflows target non-tradable sectors	10
Figure 10: Serbia's exports are very low compared to regional peers	10
Figure 11: Wages in the public sector are consistently higher than in the private sector	11
Figure 12: (Real) Apparent labor productivity growth decomposition: 2007-2012 (CAGR)	13
Figure 13: (Real) Apparent labor productivity growth (CAGR)* for manufacturing, 2007-2012	214
Figure 14: (Real) Apparent labor productivity level for manufacturing in 2012	14
Figure 15: (Real) Apparent labor productivity growth (CAGR)*, food production, 2007-2012.	14
Figure 16: (Real) Apparent labor productivity level, food production, 2012	14
Figure 17: Unit labor cost and apparent labor productivity by Nace 1 digit sector in 2012,	
(2007=100)	15
Figure 18: Unit labor cost and apparent labor productivity by manufacturing sector in 2012,	
(2007=100)	15
Figure 19: Trade: The EU is becoming even more important	17
Figure 20: Serbia's is running external deficits with all parts of the world, except CEFTA	17
Figure 21: Serbia's exports have a lower survival rate than peers	19
Figure 22: Share of parts and components in manufactured exports, 2002-2012	
Figure 23: Per capita services exports and per capita income, 2008-2010	22
Figure 24: Sector composition of services exports for Serbia and its peers (2007-2010 average	e)
Figure 25: Serbia's pattern of comparative advantage in services exports	

Acknowledgments

This report was prepared by a World Bank team led by Duško Vasiljević, Private Sector Development Specialist (GTCDR) and Wolfgang Fengler, Lead Economist (GTCDR). The core team also included Mariana Iootty De Paiva Dias, Economist (GTCDR), Darko Djukic, Consultant (GTCDR), Olivera Jordanović, Land Administration Specialist (GURDR), Michael Joseph Ferrantino, Lead Economist (GTCDR), Johannes Koettl, Senior Economist (GSPDR), Violane Konar-Leacy, Operations Officer (GTCDR), Igor Matijević, Operations Officer (GTCDR), Zoran Skopjak, Operations Officer (GTCDR).

The report was prepared under the supervision of Paloma Anos Casero (GTCDR), Lalit Raina (GFMDR), Tony Verheijen (ECCYU) and Ellen Goldstein (ECCU4). The team benefited greatly from their support and guidance.

Executive Summary

Serbia's economy is out of balance and performing below its potential. Since the post-Yugoslavian transition, Serbia's economy has been running on one engine, the non-tradable sector and expansion of domestic demand. This was financed with ample capital inflows, which were sharply reduced since 2008 as the global economic crisis escalated. While this consumption-led growth produced some improvements in living standards, it was not sustainable and created hardly any formal jobs. This explains why Serbia's job market is also out of balance. Less than half of the working-age population has a job at all, and among those that are formally employed, almost half are employed in the public sector.

Serbia needs to start the other growth engine – **exports.** In a small middle-income economy exports should drive economic activity, a strategy which successful emerging markets have embraced. Serbia can significantly increase its exports, especially to the large next-door market of the EU. However, Serbia's exports are very low by regional standards, clearly indicating lack of competitiveness. Serbia has a comparative advantage in agriculture and food products, machinery, electronics, the automotive sector, and ICT. It also maintains a manufacturing base in textiles, apparel, and leather. Competitors from new member states of the EU have higher labor costs than Serbia, but have gained a competitive edge through strong international integration and much higher labor productivity. To build on its comparative advantage, Serbia will need to accelerate structural reforms of its economy.

Lack of competitiveness and weak exports are a consequence of low productivity and insufficient investment, in particular in the manufacturing sector. Manufacturing is the most important exporting sector; yet for over a decade it has been underperforming greatly. Since 2000, the sector grew by less than 1 percent annually, which resulted in its relative decline. Manufacturing today is below 20 percent of GDP, much lower than in more successful new member states of the EU, where productivity in manufacturing is also more than double compared to Serbia. Low productivity is directly linked with low investment: FDI to Serbia is lower than in regional peers, and further more about three quarters of FDI went to non-tradable sectors of the economy.

All investors, and especially large-scale ones, need stability and predictability. Most export industries, particularly manufacturing, is lumpy and entail large-scale investments which will only pay-off in the medium-term. This is why these investors will only come if they can expect a certain degree of stability with respect to the economic fundamentals and a relatively smooth process of starting and expanding a business, especially if they need to construct buildings and factories. These are the areas where Serbia is particularly weak. Excessive regulatory burdens add to the costs of production and exports, unclear land use policies inhibit investment, and the current tax system does not make it worthwhile to hire low-medium skilled workers.

Complicated procedures and an opaque regulatory environment enable vested interests to engage in rent seeking, while reducing incentives for rule-abiding long-term investment. To start transforming its economy, Serbia will also have to reduce the power of vested interests. These thrive when regulations are too burdensome, unclear or unpredictable, creating conditions for unfair access and corruption to trump sensible business logic. The best way to reduce the influence of vested interests is to simplify regulatory environment, reduce room for discretion and ensure fully consistent implementation of regulations.

The new Government, which was elected on the basis of a strong pro-reform mandate, laid out a vision to make Serbia a modern and economically competitive country. To start the

export engine, the new government expressed its commitment to a substantial reform program. This note identifies three priority areas and a set of specific measures which complement other important reforms, especially those related to improving the country's macroeconomic and fiscal position. The proposed reforms would make it easier to invest, operate a business, and create jobs. The measures could be implemented within a relatively short period of time, since many of them build on the existing initiatives and address well identified problems (see table below for the list of priority measures and expected impacts).

Priority area 1 – Making it easier to operate businesses, by reducing excessive administrative burdens and making regulatory environment predictable. Serbia's business environment ranks 93rd out of 189 economies in the 2014 Doing Business report. This ranking is below most countries in the region $(22^{nd} \text{ out of } 26 \text{ ECA countries})$, and lower than what is expected based on GDP per capita. An unfavorable business environment has a negative impact on the day-to-day transactions of companies, and reduces incentives for long-term investments. This undermines export potential. In order to become an attractive destination for export-oriented investments, several measures need to be implemented. These include: accelerate and complete the Comprehensive Regulatory Reform, and other similar initiatives; reduce red tape by introducing E-Government; promptly ensure full functionality of the Central Registry of Compulsory Social Insurance; introduce clarity and predictability in para-fiscal charges and fees; strengthen the Better Regulation Unit; initiate reforms in the inspections system.

Priority area 2 – **Making it easier to invest and expand business, by improving planning and construction permits procedures.** Problems with land management remain a major issue affecting both business entry and resource allocation. In particular, Serbia ranks extremely poorly on Dealing with Construction Permits (182nd out of 189 countries in the 2014 Doing Business). Deep structural issues in the management of land and security of property rights must be addressed. Reforms to facilitate accelerated structural transformation should include: streamline the construction permitting process by introducing benchmarks and accountability; complete the missing municipal plans and prepare rule books and planning manuals; implement flexible safeguard measures; introduce one-stop shops on construction permits in municipalities; streamline procedures related to the conversion from use rights to property rights.

Priority area 3 – Making it viable to create formal sector jobs, by reducing labor market costs and rigidities. Serbia faces two main challenges related to jobs. First, it must create jobs for the mid- and older generation of workers, mostly low productivity and flexible. In Serbia, the employment rate peaks at low age, at around 35, and decreases quickly. Also, companies in Serbia employ much fewer low skilled workers than in peer countries. This indicates that employing older, low skilled workers is economically unviable. Reforms should ensure that the mid and older generation and less skilled workers can benefit from the spillover effects of a competitive private sector. Second, youth unemployment is among the highest in Europe and policies must ensure that the youth entering the job market have skills to pursue career paths that will lead them to higher productivity jobs, and become the entrepreneurs of the future. To overcome these challenges, key labor market reforms must include the following: reform severance pay regulation to better enable the hiring of older workers so that severance payments are based on tenure with the firm, and not the entire work history; facilitate the creation of mini and midi-jobs by abolishing the minimum social security contribution and by allowing for more flexible work arrangements in the labor code; facilitate own-account work and microentrepreneurship; and facilitate school-to-work transition for the younger group.

Summary of Priority Recommendations

Action	Estimated timeframe*	Expected impact
Making it easier to operate a businesses, by reducing exce		tive burdens and making regulatory
environment predictable		arve burdens and making regulatory
Accelerate and complete the Comprehensive Regulatory	short term	Unnecessary administrative burden
Reform and other similar initiatives aiming to streamline	short term	reduced; more transparent business
administrative and regulatory requirements		environment.
Introduce clarity and predictability in para-fiscal charges	immediate to	Reduced uncertainty for entrepreneurs and
and fees	short term	investors, more clarity when making
	short term	investment decisions.
Promptly ensure full functionality of Central Registry of	immediate	Significantly simplified administrative
Compulsory Social Insurance	minoulute	procedures, both for employers and
		employees; reduced cost of complying
		with regulations.
Implement aspects of E-Government and enable data	short to	Simplified and more transparent
exchange and coordination between various agencies.	medium term	administrative procedures, both for
exchange and coordination between various ageneies.	incurum term	businesses and citizens in general
Initiate reforms of the inspections system	short to	Reduced uncertainty for entrepreneurs and
initiate reforms of the inspections system	medium term	investors.
Making it easier to invest and expand business, by improv		
Streamline the construction permitting process,	short term	Easier to start or expand business. Faster
introduce benchmarks and accountability to reduce the	short term	and more predictable process will support
degree of discretion		more private sector investment. Improved
degree of discretion		resource allocation across the economy.
Prepare the missing municipal plans and improve quality	medium term	Improvements in planning documentation
of plans; strengthen public and private sector planning		will facilitate speedier and more
capacities		transparent issuance of construction
capacities		permits and make it easier to start and
		expand business.
Introduce flexible sefection measures	short term	Construction and investment more
Introduce flexible safeguard measures	short term	streamlined and easier.
Introduce One Stop Shope for construction permits in	short to	Significantly simplified administrative
Introduce One-Stop-Shops for construction permits in the municipalities	medium term	procedures for investors.
1		
Prepare regulations, rule books and planning manuals	medium term	More transparent and predictable
	1	environment for investors.
Streamline procedures related to conversion	short to	Increased legal security; easier access to
	medium term	finance.
Making it viable to create formal sector jobs, by reducing		
Reform severance pay regulation	immediate to	Easier to employ mid-aged and older
	short term	workers, due to reduction of possible cost
		of firing.
Allow more flexible work arrangements	short term	Easier to employ low skilled or part time
		workers.
Abolish minimum social security contribution	short to	Employing low skilled / low wage
	medium term	workers made more economically viable.
Improve work incentives of existing benefits	medium term	Better incentives for unemployed/inactive
		to seek employment more actively.
Facilitate own-account work and micro-entrepreneurship	medium term	Improved employability of mid-aged and
for the older generation		older workers.
Facilitate school-to-work transition for the young	medium term	Improved employment prospects for new
		entrants to labor market.
* immediate – could be completed within 6 months: short term – cou		1 1

* immediate - could be completed within 6 months; short term - could be completed in 1 year; medium term - could be completed in 2 years

1. Overview of Serbia's Economy and Main Challenges

Serbia's economy is out of balance

Serbia's economy remains fundamentally out of balance, with important reforms significantly lagging. The objective of this policy note is to review Serbia's key constraints impeding economic competitiveness, and to help Serbia rebalance an economy which has a lot of potential. The new Serbian government will have an opportunity to make Serbia a fully functioning market economy with a vibrant private sector. In order to do so, it must address overdue reforms which many Eastern European, and other emerging countries have embarked on over a decade ago.

The economy needs to shift from consumption to exports. Foreign markets are critical as they provide deep demand for competitive products and services. This expansion of private sector-led exports needs to happen in parallel with a gradual downsizing of the public sector. Therefore, both economic growth and job creation needs to happen in the private sector. Creating favorable business conditions to nurture a competitive private sector should be the priority of the economic policy. Currently, the private sector in Serbia is relatively weak and not competitive. Only 60 percent of GDP comes from the private sector which is below other countries of the region where the private sectors drives at least 75 percent of the economy (see EBRD Transition Report indicators). Also, only 23% of the working age population has jobs in formal private sector.

Creating conditions for job creation in the private sector needs to be a priority for economic policy. Since the global crisis escalated, a significant number of jobs in Serbia were lost, and unemployment remains high at over 20 percent. Just before the crisis, in 2007/08 the total number of employed people in Serbia was around 2.7 million. Since then, the number of employed has dropped sharply, both in the formal and informal part of the economy. As of October 2013, the total number of employed people in Serbia was around 2.3 million. Although precise data is not available, the vast majority of job losses have been in the private sector.

Job market is very unfavorable, with large segment of population inactive and significant chunk of active population employed in the public sector (Figure 1). Serbia has very low employment and activity rates, with large segment of population economically inactive. In 2013 employment rate of the working age population was just 47 percent, compared with the average employment rate of 62 percent for new member states of the EU (Figure 2). The structure of employment is unfavorable, with almost half of the people with formal employment working in the public sector. About one-third of formal jobs in the private sector are at sole proprietorships, which are typically low productivity and low wages jobs. The current structure of the labor market and significant fiscal constraints that the public sector is facing, it is clear that vast majority of new jobs will need to come from the private sector.



Figure 1: Out of a workforce of 4.6 million, just over 1 million have a formal private sector job

Source: World Bank staff calculations based on Statistical Office of Serbia and Ministry of Finance data



Figure 2: Employment rate: Serbia comes among last in Europe

Source: Eurostat, Statistical Office of Serbia

Many inactive and unemployed have low levels of education and skills, yet low-wage jobs are highly taxed and firms employ relatively little low-skilled labor in production. Comparing Serbian firms to other Eastern European countries reveals that they use significantly less unskilled labor: the share of unskilled workers in production is 14.2% while the ECA average is 23.8%.¹ One likely explanation is that Serbia has a relatively high tax wedge on low-wage earners (Figure 3). The main reason for the high tax wedge is the minimum social security contribution, which is set at about 40 percent of the average wage. This means that anyone earning less than 40 percent of average wage, including part-time workers, have to pay social security in the same amount as a full time worker at 40 percent of average wage, This makes any formal part-time work unviable, but also makes full time work below 40 percent of average wage relatively expensive and could deter firm from employing more unskilled labor. Yet, it is exactly these low-paying (part-time) jobs that would be suitable for the large pool of unemployed and inactive population.





Note: Tax wedge measures the percent of total labor costs that are taxed through income tax and employer and employee social security contributions. The chart shows tax wedge on low wage earners (33 percent of average wage) in OECD and select ECA countries (2008 unless otherwise indicated)

Source: World Bank staff calculations based on OECD Tax and Benefit models

Growing on "one engine"

Serbia began its transition to a market economy late, and under difficult circumstances. In the 1990s, a lost decade for Serbia, the economy was devastated by regional conflicts, international sanctions, and trade shocks following the breakup of the former Yugoslavia. By 2000, the recorded GDP fell to below one-half of its 1989 level², while other Central and Eastern European countries had made significant progress on the transition path. In 2001, the new government launched an ambitious reform program for a rapid transition to a more market-oriented economy, normalization of relations with foreign creditors, and integration with regional, European Union (EU) and world markets.

¹ See Enterprise Surveys (http://www.enterprisesurveys.org), The World Bank.

 $^{^{2}}$ 1980s was also a difficult decade economically, with almost no growth in the aftermath of oil crisis and increased pressure of debt service.

During the first period of transition (2001-2008), the economy grew at a solid pace of 5 percent annually, but this growth was not accompanied by necessary competitiveness enhancing adjustments. Growth was based largely on domestic demand and in particular consumption. The expansion of non-tradable sectors contributed more than 80 percent of growth. This model was financed by ample capital inflows, mostly in the form of increased private debt, which further fueled the demand. Large capital inflows also contributed to appreciation pressures. Fiscal policy added to the imbalances, as the budget was in deficits almost consistently from 2000-2008. The consequence of this growth model can best be seen in the growing current account deficit, which reached over 20 percent of GDP in 2008. The outbreak of the global economic crisis and sudden drop in available financing made it apparent that this type of growth was unsustainable. With financing likely to be constrained, consumption has leveled off, and limited growth can be expected from the domestic market (Figure 4).



Figure 4: Consumption has been growing rapidly until 2008, but stagnated since then

Composition of the GDP changed significantly: even though the economy was growing, tradable sectors such as manufacturing were lagging behind (Figure 5). Real industrial output from 2000-2008 grew by just 2 percent per year, at well below the overall economy average of 5 percent. The share of manufacturing in value-added fell from around one quarter, to less than one fifth, much lower than in successful new member states of the EU. For more than one decade, there were significant job losses in manufacturing. About half of the manufacturing jobs have been lost since 2000.

Sharp job losses in manufacturing reflect a delayed adjustment to output losses during the 1990s (Figure 6). During the 1990s, industrial output contracted by about 60 percent in real terms, and driven by sanctions, the breakup of Yugoslavia, the loss of markets, and the collapse of supply chains. However, the number of employed was reduced much less than the output (mainly as a consequence of the adoption of a decree which prohibited the dismissal of workers in the period of sanctions³). As a result, at the beginning of 2000s, employment and output were

Source: Statistical Office of Serbia

³ Decrease in employment was mostly due to retirements. During the 1990s early retirement was fairly common and it contributed significantly to large increase in number of pensioners during the decade, with very unfavorable consequences for the fiscal sustainability in the 2000s.

completely out of balance, and productivity was very low. Further exacerbating the problem was the fact that during the 1990s, there was very little, if any, investment in upgrading technology. The opening up of former Eastern bloc countries, and rapid growth of China and other East Asian countries meant that Serbian companies were faced with very different and much more competitive international environment.

A full rebound in industrial employment is highly unlikely. In order for manufacturing to regain competitiveness, productivity needs to increase significantly. Although some gains in employment can be expected, full recovery is not compatible with strong increases in productivity. However, increase in productivity and output in manufacturing has a strong spill-over and multiplying effect. Manufacturing, in particular in large companies, integrates various other supply chains and generates demand for various inputs from the rest of the economy. Improving productivity and increasing output in manufacturing should be a high priority.



Figure 5: Non-tradable sectors have been expanding rapidly, while tradable sectors grew only marginally

Source: Statistical Office of Serbia and World Bank staff calculations

Figure 6: The very sharp drop in output during the 1990s was not followed by similar drop in employment, leading to large productivity gap



Source: World Bank staff estimates based on Statistical Office data

Imbalances were further aggravated by slow progress in structural reforms

While Serbia made clear progress early in its transition, "reform fatigue" set in earlier than in other transition economies. Transition effectively started in 2000, much later than most of the other Central and Eastern European economies. Given the heritage of the Yugoslav era, Serbia's starting position was on average, slightly better than in the new member states of the EU when they started their transition (Figure 7). Early in the transition, the progress of reforms in Serbia was comparable to that of the EU10. Momentum seems to have been lost relatively early, and the pace of reforms in Serbia has since been slow. At the end of the first decade of transition, Serbia was behind the EU10 average at a similar point in their transitions, as measured by the EBRD's Transition Indicators (Figure 8).





Figure 8: ... which means that Serbia is now well behind regional peers



Note: Both charts show EBRD transition indicators. EU10 is the average score for new EU member states, except the Czech Republic.

Slow progress in structural reforms and limited FDI inflows

Poor performance of manufacturing and other tradable sectors is in large part a consequence of weak FDI inflows to these sectors (Figure 9). Overall FDI inflows to Serbia are relatively modest, as the stock of FDI per capita is less than one-third of that in more successful than Central European countries⁴. Additionally, about three-quarters of cumulative FDI inflows from 2000-2012 went to non-tradable sectors, and one-quarter to tradable sectors. This unfavorable composition of FDI inflows is likely a reflection of a volatile and uncertain business environment. When the business environment is uncertain, investments tend to flow to sectors which can generate relatively fast returns. This typically includes telecoms, trade, and in case of Serbia financial sector (which at the beginning of the decade was completely undeveloped and offered exceptionally high rates of return). The opposite of these is

⁴ See "Boosting Job Growth in the Western Balkans", IMF Working Paper, WP/14/16

manufacturing, which can also generate substantial returns, but over a much longer time period, and hence requires a stable and predictable business environment. Low inflows into the tradable sectors are also a consequence of a strong appreciation trend, which made these sectors less competitive.



Figure 9: FDI is equally out of balance: most of inflows target non-tradable sectors

Exports are improving, but still lag behind regional peers

Exports remain low compared to regional peers due to unresolved structural problems and modest investments in tradable sectors. For a small open economy geographically located near a large market, exports are the most promising way for sustainable growth. This is even more relevant since Serbia's already small market will likely stagnate during the recovery from the economic crisis. While there has been improvement over the last several years, exports are well below regional peers, and significantly below some of the global leaders (Figure 10).



Figure 10: Serbia's exports are very low compared to regional peers

Source: NBS, Eurostat and World Bank staff calculations

Source: NBS and World Bank staff calculations

Large and expensive public sector is hampering private sector growth

The public sector remains large, has a significant role in the economy and is adversely impacting the incentives. Currently, there are about 900,000 people employed in the public sector. This accounts for over 19% of the working age population, and as much as one-third of the active population. Large public sector also creates wrong incentives, as jobs in the public sector are more attractive than jobs offered in the private sector. Public sector job security is much higher, and benefits are relatively generous. The average public sector wage is consistently higher than the private sector wage by about 20 percent. In some SOE's, the average wage was twice as high as the private sector average (Figure 11). Significant discrepancies in job security and wage level between the public and private sector distorts labor market incentives. A recent survey conducted by a local think-tank found that out of 1,002 representative respondents asked about their work preferences, 65 percent said their ideal job is in public sector, 5 percent said they would prefer to be employed in the private sector, and 30 percent said they would like to run their own business



Figure 11: Wages in the public sector are consistently higher than in the private sector

Note: chart shows average monthly wage in Serbia (public/private sector), in RSD Source: Statistical Office and Ministry of Finance, Serbia

2. Productivity and Competitiveness of Serbian Enterprises: A Sectorlevel Analysis

This section offers analysis on the labor reallocation process and productivity growth from 2007-2012.⁵ Drawing on Structural Business Statistics (SBS) dataset⁶, the main objective is to answer four questions. 1. What are the recent trends for sector productivity and employment shifts? 2. Was the labor reallocation process conducive to productivity growth? 3. What are the leading sectors in labor productivity growth, and how does the Serbian economy fare against its peers? 4. Have wages outgrown apparent labor productivity growth?

Employment in manufacturing continues to decrease, while it is increasing in services sector in the 2007–2012 period. Evidence drawing form SBS data (which excludes agriculture activities) shows that about 79,000 jobs have been lost in manufacturing (a decrease of about 18 percent) in the 2007-12 period. The number jobs in services sectors has increased by about 17,000 (an increase of about 3 percent), particularly in wholesale and retail; professional and technical activities; and administrative services.

This reallocation of labor has not been conducive to productivity growth of the overall economy. SBS data shows that the overall economy has showed an incipient productivity growth in this period: 0.74% annually (Figure 12). Results show that the main determinant of this slightly positive performance was mainly the result of how productivity fares in each individual sector. The contribution arising from structural change (reallocation of labor across sectors) was showed to be negative which suggests the labor reallocation from manufacturing to services was not productivity enhancing (Figure 12).

During the same period, the manufacturing industry experienced relatively high productivity growth, while productivity in services has decreased. In both of these industries, the reallocation of labor across (sub) sectors was not productivity enhancing, which means that labor has been, on average, moving towards less productive activities, both within manufacturing and within services During the observed period, productivity in manufacturing was increasing at an average rate of 4.76 percent annually (Figure 12). The within-sector productivity was the largest contributor for this positive performance of manufacturing, while the structural change, again, has played a negative role. This suggests that the labor reallocation process - even within the manufacturing industry - was not productivity enhancing. Some of the surplus labor shifted into low productivity sectors in 2012; this includes the manufacturing of apparel; wood and of products of wood and cork, except furniture; articles of straw and plaiting materials; printing and reproduction of recorded media; and fabricated metal products, except machinery and equipment. There are some exceptions however. Some of the surplus labor generated within the manufacturing industry shifted to high productivity sectors in 2012, as such the manufacturing of food products; manufacture of basic pharmaceutical products and pharmaceutical preparations; and manufacture of rubber and plastic products. For services, productivity has decreased 1.65% annually, and again, labor has moved, on average, to

⁵ For details on methodology, see Annex 2.

⁶ See Annex 2 on limitations of SBS data.

low productivity sectors, which explains again the negative contribution of the "structural change" component to productivity growth in the services industry.



Electricity, gas, steam and air conditioning supply; E- water supply; sewerage, waste management and remediation activities; F- Construction; G-Wholesale and retail trade; repair of motor vehicles and motorcycles; H - Transportation and storage; I - accommodation and food service activities; J- information and communication; L-Real estate activities; M - professional, scientific and technical activities; N- administrative and support service activities.

Despite improvements in manufacturing productivity, Serbia is still significantly lagging behind regional competitors. Growth of productivity in manufacturing in Serbia has been at about the average of regional competitors. With a 4.76 percent annual growth rate, productivity has been improving faster than in countries like Czech Republic, Hungary, Poland or Romania, but significantly slower than in Bulgaria or Slovakia (Figure 13). However, the achieved productivity level is significantly below comparator countries. Despite recent improvements, productivity level of Serbian manufacturing is at about 40 percent of that in countries like Hungary, Czech Republic, Poland or Slovakia, though it is comparable to Bulgaria and Romania (Figure 14).









Source: World Bank staff elaborations based on Serbian SBS data.

Note: (Real) labor productivity measured as value added (at factor cost) per person employed. Real values are Euro (2005) adjusted. CAGR for international peers – based on Eurostat data – is for the 2008-2011 period; for productivity levels international peer info is for 2011.

One major sector where Serbia is closer to regional competitors is food production. Food production is the largest subsector of manufacturing, and accounts for almost one-fifth of employment and value-added in manufacturing. Growth of productivity in food production in Serbia has been among the highest in the region (Figure 15). This has helped to reduce the gap with regional peers, which however still remains significant. Productivity level in food production in Serbia is about 65 percent of top regional peers, much better than for the overall manufacturing (Figure 16). It should be noted that food production is the sector which has largely been privatized, and this likely explains the comparatively better performance.









Source: World Bank staff elaborations based on Serbian SBS data.

Note: (Real) labor productivity measured as value added (at factor cost) per person employed. Real values are Euro (2005) adjusted. CAGR for international peers – based on Eurostat data – is for the 2008-2011 period; for productivity levels international peer info is for 2011.

Cost competitiveness in manufacturing (as measured by unit labor costs) has been improving recently. From 2007–2012, the rise in manufacturing labor costs was lower than productivity growth, on average (Figure 17). As a result, unit labor costs have been improving, and in 2012 they were about 20 percent lower (in real terms) than in 2007⁷. Few broad sectors, besides manufacturing, were also able to improve competitiveness from 2007–2012 (Figure 17). Other nuances are revealed when the cross-sector differences are explored. Figure 18 compares the growth rates since 2007, of (real) apparent labor productivity, and (real) unit labor cost for manufacturing sectors in Serbia.

Figure 17: Unit labor cost and apparent labor productivity by Nace 1 digit sector in 2012, (2007=100)

Figure 18: Unit labor cost and apparent labor productivity by manufacturing sector in 2012, (2007=100)



Source: World Bank staff elaborations based on Serbian SBS data.

Note: (Real) labor productivity measured as value added (at factor cost) per employee at NACE 1 digit level while unit labor cost is proxied by real cost of salaries to (real) value added. Real values are Euro (2005) adjusted.

⁷ Labor productivity is defined as the ratio of (real) value added at factor cost to number of employees, while unit labor cost is proxied by real cost of salaries to (real) value added at factor cost. Real values are adjusted to 2005 Euro prices.

Box 1: Automotive Industries in Serbia and Slovakia

Since recent major investment by Fiat in Serbia has become fully operational, automotives have become an increasingly important industry. Fiat is already Serbia's largest exporter, and various suppliers are developing around the Fiat plant. As this investment is new, details are not yet captured in Structural Business Statistics used in the rest of this section. To provide an early assessment on the impact of this investment and its potential, this box 1 summarizes some key results of Fiat in 2013. It also provides a comparison with Slovakia, a country that is similar in size to Serbia, and is a European leader in cars produced, relative to population.

	Slovakia	Serbia
Car producers	3 (VW, PSA, KIA)	1 (Fiat)
Total cars produced	927,000 (in 2012)	~200,000 (in 2013)
Total employees in car plants	~17,000	~3,500
Total employees in automotive industry	~74,000	
Total exports	EUR 16.3 billion	EUR 1.5 billion
Investments, automotive sector (2011 and 2012)	EUR 1.4 billion	
R&D expenditures (2008 to 2012)	EUR 120 million	
Cars produced / employee in plants	~54	~60
Monthly gross wage in sector (EUR)	800 to 1500 (depending on skill level)	~650

Notes: Data for Slovakia are for 2012 and for Serbia for 2013. Sources for data on Serbia are Fiat company reports, Statistical Office and Ministry of Finance. Source for Slovakia data is a report on automotive industry by Slovakia Investment and Trade Development Agency.

Car production in Slovakia has rebounded and accelerated after the first wave of the global economic crisis. Three major producers in Slovakia produced a record level of over 900,000 cars in 2012. As the table shows, labor productivity (measured by cars produced/employee in plants) in Serbia and Slovakia is very similar, while labor costs in Serbia are lower than in Slovakia. This indicates that the Serbian automotive industry is competitive and has significant potential for growth. There are factors other than productivity and cost competitiveness that determine the performance of an industry. Slovakia has an advantage in physical proximity to major export markets, infrastructure, more accumulated experience and technical knowledge). Car exports from Slovakia are ten times higher than Serbia's, giving an indication of potential. The table shows major importance for the broader economy of the supplier networks and spillovers. In Slovakia, total employment in the sector is more than 4 times higher than in the plants themselves. This indicates and demonstrates that developments in the Serbian automotive industry could grow considerably if the proper policies are implemented to improve the investment climate.

3. Serbia's Export Performance

Exports have been improving though from a low base, with the EU main export market

Serbia's merchandise exports have been growing over previous decade, though they are still low by regional standards. After a crisis related drop in 2009, exports have been steadily improving, and in 2013 have reached a record level of EUR 11 billion, or about 34 percent of GDP. However, despite this solid growth they still remain relatively low compared to regional peers (as discussed in Section 1 and shown on Figure 10).

Exports to the EU represent about 60 percent of total exports and are growing fast. Serbia's trade has shifted towards the EU, and away from its regional partners in the Balkans. Exports to the EU have doubled over the previous four years. In 2013, EUR6.9 billion worth of goods were exported to the EU (Figure 19). Serbia also imports mostly from the EU, though the imports have been growing much slower over the previous several years. A consequence of large and fast growing exports, the trade deficit with the EU is steadily declining. An important region for foreign trade is CEFTA, as Serbia maintains a consistent trade surplus with the region (Figure 20). Exports to Russia and other CIS countries have also been growing very fast, though from a much smaller base.

The advancement of Serbia's integration into the EU provides both opportunities and challenges with respect to its external trade position. Subsequent to the adoption of the European Partnership with Serbia in 2008, and the entry into force of the Stabilisation and Association Agreement in September 2013, Serbia and the EU held their first round of formal accession negotiations in January 2014. Eventual full membership in the EU will further advance the integration of Serbia into the wider European economy, commence the eligibility of Serbia for EU structural funds, and alter the trade relations between Serbia and those of its regional neighbors, which are not yet members of the EU.





Figure 20: Serbia's is running external deficits with all parts of the world, except CEFTA



Serbia has several sectors with good potential for further growth

Serbia has a revealed comparative advantage in several important sectors and other sectors are improving rapidly (Table 1). A "revealed comparative advantage" (RCA) means that Serbia's share of world exports in that category exceeds Serbia's share of total world export. Serbia has a revealed comparative advantage that is particularly evident in agriculture and food products; this is followed by textiles, apparel, leather, and until recently iron and steel. The most rapidly growing categories of exports from 2007-2012 were primary agriculture and machinery/electronics/transportation equipment. Exports of machinery, electronics, and transport equipment are growing rapidly, and now represent the largest broad category of Serbia's merchandise exports. The rising RCA of this category suggests that Serbia now has a comparative advantage in sub-categories of machinery, electronics, and transport equipment. Demand for Serbian iron, steel, and metal products, a traditional strong area, has been declining.

	exports			exports			CAGR 2007-
type	2007	share 2007	rca 2007	2012	share 2012	rca 2012	2012
Agriculture, meat and dairy, seafood	716	8.1%	2.09	1,387	12.3%	2.62	14.1%
Food, beverages, tobacco, wood, paper	1,350	15.4%	2.54	1,813	16.1%	2.59	6.1%
Extractive industries	442	5.0%	0.30	580	5.2%	0.25	5.6%
Chemicals, plastics, rubber	1,439	16.4%	1.23	1,550	13.8%	0.99	1.5%
Textiles, apparel, leather, footwear	782	8.9%	1.56	947	8.4%	1.54	3.9%
Iron, steel, and other metals	2,420	27.5%	2.72	1,887	16.8%	1.87	-4.9%
Machinery, electronics, transportation equipment	1,267	14.4%	0.38	2,577	22.9%	0.67	15.3%
Other industries	370	4.2%	0.71	514	4.6%	0.72	6.8%

Table 1: Revealed comparative advantage of Serbia's exports

Source: UN COMTRADE. Note export values are in USD million

Export relations are not stable, indicating possible issues with capacity, consistency, marketing or financing

Serbia has had success introducing new export products in established markets, but some old products in established markets have disappeared. Similar to most countries, Serbia's export growth takes place primarily on the intensive margin (selling more old products to old markets). The extensive margin (selling products to markets in new ways) shows both positive and negative dynamics. The share of export growth consisting of product diversification in established markets is higher than any of its nine comparator countries, at 84.8 percent (Table 2).⁸ This indicates that Serbia has been able to broaden the geographical scope of some of its already existing exports. However, the rate of product extinction in existing markets is higher than any of its competitor countries, except Bulgaria, at 43.8 percent. This indicates that in many established markets, Serbia's exports in some categories have been entirely crowded out by competitors. The ability to maintain a presence in foreign markets varies widely across sectors. Further analytical work could identify the characteristics of products and markets for which Serbia is able to extend the geographical scope of its exports, as compared to those where it is retreating.

⁸ Comparator countries used in this analysis are Bulgaria, Greece, Hungary, Latvia, Lithuania, Poland, Portugal, Romania, and Ukraine.

Table 2: Volatile export dynamics: extensive and intensive margins of Serbia's exports, 2007-2012

	Serbia	Poland	Hungary	Ukraine	Romania	Lithuania	Latvia	Greece	Portugal	Bulgaria
Increase of existing products in established markets	187.2%	174.2%	336.5%	160.6%	143.0%	127.3%	123.6%	16 2.2 %	216.5%	170.1%
Decrease in existing products in established markets	-129.8%	-86.6%	-281.7%	-76.4%	-69.4%	-40.3%	-54.9%	-63.9%	-161.7%	-73.2%
Extinction of exports of products in established markets	-43.8%	-12.2%	-30.3%	-31.8%	-22.8%	-11.6%	-16.3%	-20.2%	-36.0%	-52.4%
Introduction of new products in new markets	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Introduction of new products in established markets	1.6%	4.1%	25.4%	1.4%	4.6%	1.1%	8.1%	2.1%	1.7%	7.3%
Introduction of existing products in new markets	0.1%	0.2%	0.0%	0.1%	0.1%	0.0%	0.1%	0.7%	0.1%	0.3%
Product diversification in established markets	84.8%	21.4%	49.9%	46.2%	44.7%	23.4%	39.1%	22.3%	65.5%	47.9%
Pink denotes the extensive margin - performance of existing products in established markets										

Green denotes the intensive margin - expansion into new products or new markets.

Product diversification denotes the introduction of existing products into established markets that have not bought those products before.

Source: UN COMTRADE and World Bank staff calculations. Note: totals sum to 100 percent of total export growth

Serbia's export relationships have a lower survival rate than those of comparator countries. Only 41.2 percent of Serbia's export relationships survive into the following year, and only 22.6 percent for three years⁹. By comparison, Poland has a 55.7 percent survival rate of export relationships for one year, and 35.7 percent for three years (Figure 21). Continued analytical work could help to identify sector variations in survival, and in the extensive and intensive margins, which in turn may help to identify factors inhibiting competitiveness of Serbia's exports. A low rate of export survival could indicate weaknesses in the marketing capacity of Serbian exporters or in their financing, volatility or uncertainty in the domestic economic or institutional environment facing Serbia's exporters, or similar factors.



Figure 21: Serbia's exports have a lower survival rate than peers

Source: UN COMTRADE and World Bank staff calculations Note: Chart is showing survival rate of export relationships over time

⁹ An export relationship is defined as the export of a particular narrowly defined (HS-6) product to a particular country (e.g. bowling balls to Bulgaria).

In the pre-crisis period, much of Serbia's export growth was due to overall global growth. In the post crisis period, most of the growth is due to increased competiveness

Export market share growth between 2006-Q1 and 2013-Q1 increased at an average annual rate of 1.6 percent. As shown in Table 3, in the pre-crisis period (2006Q1-2008Q2) there was a slightly negative growth rate of market share of -0.1 percent. Market factors in the pre-crisis period were favorable for Serbia, largely offsetting the negative influence of sector composition of exports and negative push factors. Conversely, in the post-crisis period (2010Q3-2013Q1), market factors were unfavorable. This is because the EU (Serbia's main export market), has been recovering significantly slower than other regions of the world. However, "push" factors (broadly speaking, reflect competitiveness) have been favorable and completely offset the negative market trends. It is likely that improved unit labor costs (as demonstrated in Section 3), linked with significant real depreciation in the aftermath of the crisis, was the major driver of improved competitiveness.

	Export market share growth	Export composition factors, of which:		Export push factors (export market share growth without export composition factors)
		Market factors	Sector factors	
2006q1-2013q1	1.6%	-1.4%	-1.9%	4.9%
2006q1-2008q2	-0.1%	4.5%	-4.1%	-0.6%
2010q3-2013q1	5.7%	-2.9%	-0.3%	9.0%

Table 3: Export market share growth decomposition across different periods¹⁰

Source: Export Competitiveness Database.

Although sophistication of exports is improving, it still remains low compared to regional peers

The quality of many of Serbia's exports (as measured by unit values), is relatively low compared to its peers, though there are some important exceptions. Differences in quality among different varieties of similar products can be proxied by unit values of export. For many of Serbia's products, quality thus measured is lagging compared to its peers, particularly so for exports in the category of iron, steel, and other metals. Serbia's measured quality level is also low for some key agricultural exports, such as frozen fruits, nuts and raw sugar. By contrast, exports of mechanical and electrical goods are of high quality.

¹⁰ A country's export market share growth is driven by export "push" factors, as opposed to "pull" factors, i.e. market and sectoral export composition (a country's export composition can be influenced by both demand and supply side factors). This helps countries identify which factors are driving their export market share growth in comparison to their competitors. Two countries may have similarly competitive bundles of export firms, but export market share growth of one country will be higher in the short- to medium-term because this has a more favorable composition in terms of export markets and sectors. "Push" factors, on the other hand, describe a country's own supply-side capacity to expand export market shares, assuming equal market and sectoral export composition across all countries. "Push" factors are further decomposed into volume (quantity) and price factors (unit values). For background information regarding the underlying methodologies and data, see Gaulier, Santoni, Taglioni, and Zignago (2013): http://worldbank/trade.

exports, away from metals toward machinery and electronics, is partly explained by the ability of Serbia to maintain or improve quality in some sectors relative to others.

Exports of manufactured intermediate goods are becoming increasingly important; this is an indication that Serbian firms are increasingly participating in global value chains. The share of manufactured exports consisting of intermediate goods increased from 14.9 percent in 2002, to 22.5 percent in 2012 (Figure 22). This increase suggests that Serbian firms are increasingly participating in global value chains for the production of complex products. This trend is consistent with the growing exports of machinery, electronics and transportation equipment, since there are many intermediate goods in this category (Table 1, above) but includes other products as well. Participation in exports of manufactured intermediates grew faster than any of its comparators except Romania and Bulgaria. In 2012, the share of intermediates for Serbia was in the middle of the range for its comparators, significantly higher than Greece, Latvia, Lithuania or Ukraine, but not as high as Hungary, Poland, or Romania.



Figure 22: Share of parts and components in manufactured exports, 2002-2012

Source: UN COMTRADE and World Bank staff calculations

Exports of services are increasingly important

Exports of services are at a normal level for its stage of development, and are growing at a healthy rate. The degree to which a country engages in exporting services is strongly associated with its level of development. Serbia's current level of services exports are at the level expected for its per capita income (Figure 23). Serbia's service exports/GDP ratio in fact equals or exceeds that of some of its comparator countries with a significantly higher per capita income (Portugal, and Poland). The growth of service exports from 2007-2012, at 4.7 percent annually, is in the middle of the range for comparator countries (Table 4).



Figure 23: Per capita services exports and per capita income, 2008-2010

Serbia has a strong comparative advantage in communication services and an additional comparative advantage in transport services. Communications services comprise 51 percent of services exports. This is a very high level compared to its comparator countries in the region, and equaled only by Hungary (Figure 24). This is significant because communication services, along with other modern business services, are important in the process of promoting innovation and productivity in manufacturing, agriculture, and other sectors. By contrast, the service sector of a country specialized in travel services (e.g. Croatia, Bulgaria) is likely to have fewer linkages to the rest of the economy. Measuring revealed comparative advantage (RCA) in the same manner as was done for goods above, Serbia has a strong RCA in communication services and a secondary one in transport services (Figure 25).

Service exports/GDP				Nominal g	rowth in services exp	orts (CAGR)
	2007-2009	2010-2012	change		2007-2012	Per capita
Bulgaria	15.2%	14.0%	-1.2%	Bulgaria	1.5%	6,866
Croatia	21.0%	20.1%	-0.9%	Croatia	-0.9%	13,881
Greece	13.6%	13.6%	0.0%	Greece	-4.0%	24,521
Hungary	13.1%	16.3%	3.2%	Hungary	5.8%	13,022
Latvia	14.4%	16.2%	1.8%	Latvia	3.6%	12,856
Lithuania	11.9%	14.2%	2.3%	Lithuania	9.6%	13,126
Poland	6.7%	7.3%	0.6%	Poland	5.6%	12,797
Portugal	9.8%	10.8%	1.0%	Portugal	1.9%	21,354
Ukraine	11.4%	13.0%	1.6%	Ukraine	7.8%	3,472
Serbia	8.4%	10.0%	1.6%	Serbia	4.7%	5,409

Table 4: Serbia's service exports in comparison with other countries

Source: World Development Indicators.

Source: World Development Indicators and UN COMTRADE.

Figure 24: Sector composition of services exports for Serbia and its peers (2007-2010 average)



Figure 25: Serbia's pattern of comparative advantage in services exports



Source: Services Trade Competitiveness Indicators and PRMTR calculations.

Box 2: An Overview of the IT Sector in Serbia

Trends

The IT industry officially employed 15 thousand workers. Majority of them, about 40 percent, are employed at micro-companies, small companies employ 28 percent, medium-sized companies employ 23 percent, and large companies employ 10 percent of IT workers.¹¹ It is estimated that in total there are about 50 thousand ICT specialist working in Serbia (even though the IT industry officially employs 15 thousand people). In their study on the Belgrade Service Sector, CEVES estimated that the productivity of ICT companies was higher than any other business sector in Serbia, and more than three times higher than the Serbian average¹².

Total IT market value peaked in 2008, at EUR545 million. Market value decreased to EUR410 million in 2012. According to the study "ICT in Serbia 2013" by DAAD, the market can be segmented into:

- IT services (EUR113.5 million total revenue)
- Software (EUR55.6 million)

- Hardware (EUR241.5 million)

It is very difficult to attain reliable figures on income, particularly for the outsourcing sector. According to research done by SIEPA, Serbian IT developers are the best paid workers in Serbia, but still competitive with respect to EU competitors. The average gross monthly salaries for developers are:

- Junior Programmer (0-2 years of experience) – EUR1,000

- Programmer (2-5 years of experience) – EUR1,500

- Senior Programmer (over 5 years of experience) – EUR2,000

Outsourcing sector

The outsourcing sector is a strong exporter and predominant IT sector. In 2011, out of 1,704 active IT companies achieving revenue over EUR10,000, 104 were outsourcing companies. They employ 3,038 IT experts, which is 20.4 percent of total IT workforce in Serbia. Average number of employees in outsourcing sector is 29 per company, with average revenue EUR37,000 per employee annually. Top 10 companies in this sector employ 1,194 workers, have average of 119 employees, revenue of EUR51,000 per employee and EUR43,000 added value per employee¹³. According to NBS, total revenue of Serbian IT outsourcing sector in 2011 was EUR112.8 million, while total export of computer and information services was around EUR166 million.

Advantages compared to the EU and region

According to SIEPA research on IT in Serbia (Serbia ICT, SIEPA 2012), the main advantage of the Serbian IT sector is a very favorable quality/cost ratio. Serbian IT market has a critical mass of professionals to make Serbia a relevant player on the market (especially outsourcing). The market is still shaping up, which allows for good business opportunities to find skilled and not very expensive employees. Due to the size of the market, Serbia acts as the center of gravity for the region. A significant role is played by a large diaspora, which maintains links and keeps Serbia as the main outsourcing partner. Often, Serbian engineers working abroad are sent to Serbia to set up a daughter company in order to act as an outsourcing partner.

Main challenges

One of the main challenges identified by companies is the limited number of graduates coming out of the current educational system. This may cause a shortage of new employees. In 2012, ICT education was

¹¹ Source: "ICT in Serbia 2013", DAAD

¹² Source: "Understanding Belgrade Services Sector", CEVES, 2007

¹³ Source: "ICT in Serbia 2013", DAAD

taught at 35 higher education institutions: 16 state-owned and 6 private faculties, and 13 state-owned technical colleges, with a total enrolment capacity of 8,619 students. The total number of students enrolled in ICT education (for B.Sc, M.Sc, or Ph.D) in 2012 was 5,523, with 50 percent enrolled at state-owned universities, 41 percent at state-owned technical colleges, and 9 percent at private universities. The practice indicates that around 52 percent will attain a B.Sc, around 40 percent will attain a M.Sc, and about 8 percent will attain a Ph.D.

Companies that are focused less on outsourcing, and more towards developing own products face a lack of a supportive environment, and professional support in the form of venture capital, incubators, accelerators, and other features which boost innovative companies. There are significant issues with enforcement of IP rights, lack of corporate and entrepreneurial skills, lack of experience with international partners, and almost no inflow of foreign programmers.

Background study: Asseco SEE

Asseco SEE is one of largest ICT companies in Serbia, and it is primarily developing its own products. It is a member of Asseco Group, which is one of ten largest IT companies in Europe. Asseco Group employs over 1300 people in 13 countries, and is the leading IT firm for production and implementation of own designed software services in South Eastern Europe for the financial sector, banking, telecommunications, public sector and administration. Asseco SEE was created in year 2009 by the merger of three reputable companies: Antegra, Pexim and PeximCardinfo. Founded in 1994, Antegra's main area of focus was core software for banks. Originally, Antegra produced software for domestic banks in Serbia, but quickly crossed the borders and became a regional leader in bank software. Pexim produced bank software, but focused on eBanking and client-oriented applications. Primary business for PeximCardinfo was POS terminal and credit card transactions. Asseco SEE currently has 450 employees. Asseco identified large possible opportunity in partnership with the government on establishing e-government solutions. According to Asseco, the largest obstacle for further development of the IT industry in Serbia is a lack of educated programmers. Qualitatively, Serbia is at the level of EU technology leaders, and some of worldwide best solutions are developed in Serbia.

Background study: HTEC

HTEC was established in 2011 as an outsourcing company. HTEC is oriented toward the EU market where it seeks to maximize advantages and similarities with the EU, including foreign language proficiency, market proximity, the same time zone, access to IT talent with a similar culture and business procedures. HTEC started as a small company with 8 developers, working for only one client, and in two years, grew to 60 employees and revenue over EUR1 million. They also created seven spin-offs in different areas of business. HTEC cited several main obstacles hindering even faster growth of the IT sector, including market fragmentation (companies are small and often not able to support larger project proposals), and lack of specialization ("everyone does everything"). The lack of educated programmers will be a major obstacle, since a shortage is already evident. Since most high quality programmers are taught at state-owned universities, government support could include significantly increasing the quotas for IT freshmen.

4. Reforms to Support Private Sector Growth

As demonstrated in previous sections of this note, Serbia needs to change its growth model towards exports. Growth model prior to the crisis has been based on expansion of domestic demand, which generated improvements in living standards, but proved unsustainable. Reforms to create a good investment climate were lagging. Investment, and in particular to tradable sectors and manufacturing, were low throughout the previous decade and a half (Figure 9). As a result, productivity in Serbia's manufacturing is well below that in comparator countries (Figure 14). Improving productivity will be critical if Serbia is to restart the other growth engine – exports. Although Serbia's exports have been improving recently, they are still far below regional peers (Figure 10). As shown in Section 3, there are several sectors where Serbia has revealed comparative advantage (in particular agriculture and food products and more recently competitiveness is improving in sectors like machinery, electronics and transportation equipment). Importantly, Serbia is improving its integration with global supply chains (Figure 22). However, it was also shown in Section 3 that Serbia's exports are typically of lower quality and value added than in regional peers. It was also shown that export relations are volatile, indicating possible issues with capacity and consistency of export production.

The business environment will need to improve significantly in order to boost private sector investment and improve competitiveness. To improve productivity and increase the quality and consistency of Serbia's exports, it will be critical to create conditions for much higher private sector investment in tradable sectors. Most export industries, particularly manufacturing, is lumpy and entail large-scale investments which will only pay-off in the medium-term. This is why these investors will only come if they can expect a certain degree of stability with respect to the economic fundamentals and a relatively smooth process of starting and expanding a business. These are the areas were Serbia is lagging: it ranks 93rd out of 189 economies in the 2014 Doing Business report, below most countries of the region (it is 22nd out of 26 ECA countries), and lower than what one might expect from its GDP per capita level. Similarly, in the latest Global Competitiveness Report by the World Economic Forum, Serbia ranks 101st out of 148 countries. The unfavorable business environment has a negative impact on the day-to-day transactions of companies, and on incentives for long-term investments. This undermines export potential.

Serbia is also facing a severe jobs crisis. Since 2008 about 15 percent of jobs were lost and there are no signs of turn around. Employment rate is very low (Figure 2), with less than half of the working-age population (15 to 64) having jobs at all, even less having formal jobs, and those having formal jobs largely being employed in the public sector (Figure 1). Employment rates peak at very young age (in the age group of 35 to 39) and small number of low skilled people have jobs. Short term priority in addressing the jobs crisis is making it economically viable for this large pool of low and mid skilled unemployed to find formal jobs.

Government reforms have resolved some business environment bottlenecks (see Box 3), but more remain and need to be addressed effectively. Over the last several years, Serbia's government has implemented a series of reforms to streamline procedures for starting and closing businesses, improve access to credit, strengthened competition laws, and improved contract enforcement. However, Serbia's relatively low rank with recent business ranking indexes suggests there is significant scope for further improvements.

This section presents a set of concrete measures to improve investment climate, most of which can be implemented in short to medium term. As discussed before, only significantly higher private sector investment to tradable sectors can improve Serbia's competitiveness. To make it easier for private sector to decide to invest and operate a business, it is critical to improve predictability, consistency and transparency of the regulatory environment. Set of reforms aiming to achieve this is outlined in subsection 4.1. Decisions on entering or expanding a business are heavily influenced on how easy (or difficult) it is to obtain permits needed to build production facilities: subsection 4.2 presents a set of measures aiming to streamline construction permitting and planning procedures. Reforms to make it viable to create jobs in formal sector and help address Serbia's job crisis are presented in subsection 4.3. As an example of specific package of reforms, subsection 4.4 is presenting measures focusing on improving export competitiveness in agriculture and food processing, one of the key sectors identified for Serbia's competitiveness. It should be noted that the measures that are proposed throughout this Section were selected on the basis that they can generally be implemented fairly quickly and many of them build on existing initiatives. Finally, it is very important to mention that the measures discussed here are mainly focusing on investment climate and if they are to be successful in improving Serbia's competitiveness they need to be a part of a broader package of reforms (including measures to ensure mid-term fiscal consolidation, broader job market reforms including those related to skills, innovation and technology transfer policies, etc.).

4.1 Making it easier to operate businesses, by reducing excessive administrative burdens and making regulatory environment predictable

Despite recent progress, companies in Serbia, in particular SMEs, are still facing significant regulatory burden. Businesses are faced with several hundred licenses and permits that govern business entry and operations. Significant regulatory burdens hinder growth and hamper competitiveness. One possible proxy for this is the Paying Taxes DB indicator, where Serbia is ranked 161st globally (out of 189 countries), and 23rd out of 26 ECA countries. Similarly, the Global Competitiveness Report ranks Serbia 142nd out of 148 countries on the Burden of Government Regulation indicator. Resolving insolvency is another area pinpointed by the Doing Business report as significantly problematic. Companies and investors do not feel that potential litigation or financial distress would be adequately treated by the legal and institutional framework, as is reflected by the ranking for Resolving insolvency and Contract Enforcement, which is respectively 103 and 116 globally (out of 189 countries). Various reforms have been implemented successfully, but clearly there is need to further significantly reduce the administrative and regulatory burden. At the same time, the regulations and laws that are in place, as well as court decisions, must be effectively implemented. It should be noted that most of the recommendations in this section are in line with the Government of Serbia's Draft Strategy for Enhancing Entrepreneurship and Competitiveness for 2014–2020.

Recommendations

- Accelerate and complete the Comprehensive Regulatory Reform and other similar initiatives aiming to streamline administrative and regulatory requirements. So far, 212 out of 304 recommendations from Comprehensive Regulatory Reform have been implemented, accounting for about two thirds of the estimated savings. Other similar initiatives should be completed. For example, the latest edition of NALED Grey Book identifies 100 problems/recommendations, out of which 7 have been resolved, 14 are partially resolved, and the remaining 79 are either unresolved or are new initiatives. Approach similar to Paperwork Reduction Act should be considered.
- Improve the functioning of the debt resolution mechanisms in the country and contract enforcement. Although Serbia has reformed the insolvency law relatively short time ago, new amendments to the law are needed and being discussed. In addition to the legislative framework, it is essential to work on the proper implementation of the insolvency system, to enable and encourage the number of restructurings. The number of non-performing loans (NPL) is high at 19.9% (source: National Bank of Serbia). Out of these, Serbian businesses account for 57.7% of NPLs, according to the NBS data for 2013. Adequate implementation can be achieved by enforcement of deadlines, training insolvency administrators and the existing non-specialized courts, monitoring the statistical data for courts and insolvency administrators, enforcement of penalties and disciplinary sanctions against fraudulent debtors/directors/shareholders and insolvency administrators. Better framework and guidelines for restructuring and out of court workouts should also be considered to create proper incentives for reorganizing financially distressed but viable companies and, in the end, keeping jobs. Businesses and banks should be encouraged through public awareness campaign and through Central Bank's prodding to consider debt restructuring at early stages. Additionally, other laws, such as company and tax laws need to be reviewed to remove any obstacles to timely and effective debt restructuring.
- Implement aspects of E-Government and enable data exchange and coordination between various agencies.
 - a. **Fully implement electronic filing of tax submissions for all companies** (should have been introduced January 2014, but has been postponed).
 - b. Consider developing a "meta database" where various data bases maintained by various agencies would be coordinated. For example, there are two data bases which contain official addresses of companies in Serbia (one in the Cadaster and one in Post), yet they are not coordinated between themselves and there is no automatic link with other users of this data (e.g. the Business Registries Agency). Data bases of the Customs Administration and Tax Administration are not linked. Data on individuals, which is highly relevant for administrative procedures related to registering and paying workers is dispersed between several uncoordinated data bases (including one in Health Fund and separate one in Pension Fund).
 - c. **Promptly ensure full functionality of Central Registry of Compulsory Social Insurance.** The Central Registry was set up in May 2010, however it is still not fully functional because the necessary data bases are still not complete. Full functionality of the Central Registry will significantly simplify various administrative procedures related to the Health Fund and Pension Fund.

- Strengthen the Better Regulation Unit. This unit has been set up with World Bank support and is operational. However, it is under-staffed and its role in developing new legislation and regulation has been marginalized. In addition to strengthening its capacity, a better mechanism for consultation with the private sector when proposing draft legislation that affects businesses, needs to be developed. For example, out of 29 laws that effect the business environment and were adopted in first half of 2013, more than two-thirds were adopted using the urgent procedure, without proper public consultations. The government should consider incorporating a full inventory of all national procedures that affect businesses into the national E-Register, and create a mechanism to accurately update it.
- Share best practices across municipalities, and move good sub-national practices to the national level. To the extent possible, government could continue supporting simplification of sub-national regulation, and try to link it with the national Better Regulation Unit to help ensure better coordination.
- Introduce clarity and predictability in para-fiscal charges and fees. Businesses tipically pay several dozen various fees each month to various agencies and different levels of government. The cost is an issue, but even more it is the non-transparent process according to which the fees are introduced, and the risk of fines if some of the plethora of fees are not paid. Some initial steps have been taken. After the 2012 elections, the government abolished some of the para-fiscal charges and introduced legislation which aimed to systemize the remaining ones. However, since then some new charges have been introduced, and the legal framework for systemizing para-fiscal charges is not complete.
- Initiate reforms of the inspections system. Inspections in Serbia are not coordinated and fragmented into 36 inspectorates operating under 15 different ministries. There is further fragmentation, as local governments and regulatory agencies also play a role. In the absence of a comprehensive and modern umbrella law to govern this area, business inspections are mired in uncertainty. For example, inspections are regulated through approximately 1,000 individual (sector) laws and bylaws, some dating back to the 1990s and 1980s. Inspections need to be better integrated and coordinated, and work much more transparently. A lot of initial work in this area has been done by the USAID BEP project and the IFC. Based on the existing diagnostic and preparatory work, the steps in inspection reform should include: (i) Introduce risk-based inspections; (ii) Clearly delineate responsibilities of various inspections and develop checklists of what each inspection covers; (iii) Develop software to coordinate various inspections; (iv) Consider creating a small centralized General Inspectorate (GI) at the Cabinet-level to govern the work of inspections and perform strong internal control of inspections.
- Improvements to National Quality Infrastructure (NQI). Improvements in NQI are critical for trade and exports in various sectors (automobile and food). This could include different measures related to standards, metrology, accreditation, and market surveillance. The government can explore the options to strengthen the Directorate of Measures and Precious Metals, and allow it more flexibility to respond to the needs of the private sector. It may be worth reviewing the suitability of alternate metrology models. In order to improve the accreditation system, the authorities could: (i) pursue regional and international

agreements for the mutual recognition of the established national accreditation bodies and (ii) promote awareness of the services of a national accreditation body in the regulatory domain and in the market place. A market surveillance structure could be established in full compliance with EC legislation, with more effective coordination among the market surveillance authorities.

Box 3: Successful reform to reduce administrative burden: Serbia's Business Registry Agency

A comprehensive reform of the Serbia business registration system began in 2003, aimed at: simplifying and accelerating the setting up and closing down of businesses; cutting administrative obstacles for doing business; setting the conditions for improving legal security; creating a more favorable business environment for investments; and establishing conditions for creating new jobs and reducing the informal economy. Former business registration system in Serbia had numerous drawbacks: (i) two business registration procedures; (ii) five parallel and unreliable databases on registered business entities; (iii) decentralized business registration system; (iv) lack of transparency; (v) very long business registration costs (US\$ 202 for companies) and very high minimum registered capital (US\$ 5,000 for companies).

The business registration reform was successfully implemented by the establishment of the Serbian Business Registers Agency (SBRA), which became operational on 1 January 2005, as the sole institution in the Republic of Serbia in charge of keeping the business and other registers prescribed by the law, as unique, centralized, public and electronic databases. Establishment of SBRA based on best practices, and continuous improvements at this agency, brought numerous benefits to Serbian business: (i) uniformed procedure of registration, recording and publication of data and documents that are subject to registration, regardless of where registration takes place (either at the SBRA's head office in Belgrade, or at any of its 13 regional offices throughout Serbia); (ii) significantly shortened business registration time (for companies: down to 5 days in 2005, 3 days in 2009 and just 1 day as of December 2013; for sole proprietors: down to just 1 day as of December 2013); (iii) significantly reduced costs of starting a business (for companies registration costs are down to EUR42 and as of February 2012 minimum registered capital is only EUR1); (iv) unique electronic database, containing up-to-date and reliable information on registered business entities; (v) SBRA's official web site provides a free of charge access to all registered data to any legal entity and natural person.

The SBRA is a self-sustainable institution financed out of the fees charged to its customers, which are set at the minimum level (cost-cover principle). It is the only state institution of the Republic of Serbia that has been applying a five-day "silence is consent" principle since its establishment.

The number of registers run by the SBRA has significantly increased, from 3 (2005) to 17 (2014), while at the same time, the number of staff employed and engaged by the SBRA has remained almost unchanged since its establishment. 397 SBRA employees (2014) are replacing approx. 1,500 employees, who used to perform this work in the commercial courts, local self-government bodies, organizational units of the Ministry of Interior, and other ministries.

The business registration reform implemented by SBRA and a continuous improvement of the SBRA business registration procedures have considerably contributed to a better "starting a business" ranking of the Republic of Serbia in DB: "Top reformer" country (DB2006); +33 positions (DB2010); + 42 positions (DB2013). Serbia could further improve its "ease of doing business" and "starting a business" rankings if registration of business entities with the local tax authorities is simplified and accelerated.

4.2 Making it easier to invest and expand business, by improving planning and construction permits procedures

Problems with land management remain a major issue for improving the investment climate. In particular, Serbia ranks extremely poorly on the Dealing with Construction Permits indicator of the 2014 Doing Business (ranked 182nd out of 189 countries). Deep structural issues in the management of land and property rights must be addressed.

The World Bank has prepared a separate policy note dealing with various aspects of land management and property rights. The policy note draws on extensive technical work in this area and detailed technical notes. The recommendations from the policy note cover three broad areas: (i) Reducing the fiscal deficit by broadening the property tax base rather than increasing the level of taxes, and improving state land management, (ii) Increasing fiscal stability by adopting internationally-recognized valuation standards which would help lower the risk commercial banks currently transfer to the state-owned National Mortgage Insurance Corporation (NKOSK), and (iii) Strengthening the business climate by streamlining the process related to planning, permits, restitution, conversion, and registration. In this section we reproduce some of the recommendations from the policy note, focusing on areas that have direct implications on improving competitiveness.

Recommendations

- Improve planning process. Serbia is struggling with several issues, including lack and/or poor quality of spatial plans, and lack of general urban plans (GUP), general regulation plans (GRP), and detailed regulation plans (DRP). In addition to the lack of such important planning tools, there is also frequent change in legislation, which confuses investors and adds to their cost of research to find out about planning processes, before undertaking a business venture or investment. The GOS is currently working on introducing a new law on planning and construction. While the new law introduces certain aspects of contemporary planning, it is does not address several key issues such as a complex institutional framework, weak institutional capacity, scarce financial resources, incomplete regulatory framework on planning, lack of coordination between service utilities and municipalities, and a weak private planning sector.
 - a. **Prepare the missing municipal plans** as a framework for issuing the construction permits.
 - b. **Improve the quality of plans**, by increasing the capacities of public and private sector.
 - c. Strengthen public and private sector planning capacities.
 - d. **Reduce the number of mandatory plans in smaller municipalities** (such as those with less than 30,000 inhabitants) where General Regulatory Plan would be sufficient.
 - e. **Prepare regulations, rule books and planning manuals** to be used by both private and public sector to apply the law, and then prepare and implement the plans. The rule books and manuals should include with all planning regulations and conditions with practical examples, and make clear reference to the obligation for the utilities to participate to the planning.

- f. Create urban information systems and urban data bases. The preparation and implementation of urban plans depends on the full functioning of planning, implementation, monitoring, supervision, participation, and control systems. Such systems must rely upon accurate, standard, reliable, advanced and a continuously updated urban database regarding the economic, social, and financial features of the municipalities.
- Streamline the construction permit process. The current construction permit process suffers from several issues. This includes the lack and/or poor quality of planning documents at the local level, an incomplete regulatory framework, inadequate training of local municipal staff, lengthy and expensive procedures, and lack of coordination between authorities. Serbia's Foreign Investor Council reports that, "the overall process of issuing permits remains non-transparent, long and heavily burdened with red tape, primarily as a consequence of difficult and time-consuming process of collecting all of the required documents."¹⁴ According to the USAID Business Enabling Project (BEP), Serbia's GDP could increase by as much as 2 percent or EUR570 million if its construction industry matched that of OECD countries; 57 percent of respondents to BEP's most recent Annual Business Survey said that a more efficient construction permitting system would enable them to expand their businesses.¹⁵ To improve the situation, the reforms should focus on:
 - a. Introduce benchmarks and accountability to reduce the degree of discretion.
 - b. **Introduce flexible safeguard measures** (such as Minimum Applicable Urban Planning Standards) to be used in the presence of old plans and new spatial plans, or in absence of plans, in order to facilitate the issue of construction permits.
 - c. Introduce One-Stop-Shops for construction permits in the municipalities.
 - d. **Introduce coordination mechanisms** between the service utilities and the municipalities, and establish fixed criteria for screening project applications.
 - e. **Resolve property issues** related to ownership rights, land restitution and conversion of use rights to property rights.
 - f. **Strengthen institutional capacities in the municipalities** by providing training for municipal staff in the implementation of the permit provisions.
- Streamline procedures related to conversion. The conversion of use rights to property rights, as outlined in the Law on Planning and Construction of 2009, is a welcome step towards greater security for property rights. However, there were a variety of problems with the conversion process involving a fee, particularly in relation to calculating the fee and administration of the process. While some of these problems have been resolved, others remain, and only a very small number of people have taken the opportunity to convert. Streamlining the conversion related procedures would lead to a much higher number of applications, and result in clearer property rights.
 - a. Introduce a streamlined process with a reduced fee.
 - b. **Provide training in valuation and using private evaluators** to ensure that the values on which fees are based are fair
 - c. Simplify the valuation procedures for the conversion of non-residential land

¹⁴ Foreign Investor Council, White Book 2012, Page 25.

¹⁵ USAID launches guide to reform Serbia's construction permitting process, June 27, 2013,

http://www.usaid.gov/news-information/press-releases/usaid-launches-guide-reform-serbias-construction-permitting-process

- d. **Consider alternative ways to encourage conversion**, such as a mass conversion program that would not require an application, or even conversion of use rights simply by a statement in the law
- e. Prepare clear regulations and guidelines.
- f. **Clarify the status of land under apartment buildings** to ensure that the benefits of secure property rights apply also to apartment owners

4.3 Making it viable to create formal sector jobs, by reducing labor market costs and rigidities¹⁶

The labor market is not functioning well, and it is not supportive of efficiency enhancing reallocation. Unemployment is very high, and the structure of employment is unfavorable, with a large share of employment linked to the public sector. Labor market rigidities are identified as a major issue in other relevant reports, including the Foreign Investor Council's White Book. Fully appreciating the high relevance of these issues, the World Bank is preparing a separate policy note on labor market. This section reproduces key messages and recommendations from that policy note.

The jobs challenge in Serbia is to find more jobs for the transition generation—born 1975 or earlier—before they are too old to work, while at the same time ensuring that the young have the right skills for the jobs of the future. Serbia faces two main jobs challenges: (i) creating—mostly—low productivity and flexible jobs for the transition generation; (ii) help ensure the young chose entirely different career paths than their parents. The key to addressing both of these challenges is to link the young and the older working population to Serbia's young and fast growing firms that create most jobs. The task of the government is to ensure that the older generation can benefit from the spillover effects of these fast growing firms, and benefit from jobs that are created in the surrounding environment. The younger generation must have access to the appropriate education and skills training to nurture growth, and become the entrepreneurs of the future.

Recommendations

• Facilitate the creation of mini and midi-jobs for the transition generation. In Serbia, the employment rate peaks at a dramatically low age, at around 35, and decreases quickly for older age groups. This generation received its education, training and first job before or during the onset of the transition. Today, they are largely de-skilled: many of them have held "life-long" jobs at SOEs and were never able to find new, stable employment after becoming redundant. Too many of them have given up of ever finding new proper employment again, as evidenced by the very high share of inactive and long-term unemployed among those aged 45 and older. Given their outdated skills profile, policy has to recognize that the prospects of finding promising remaining career paths for these people are slim. Rather, policy should aim to provide low-productivity jobs that this group can perform viably in the formal sector. These so called mini and midi-jobs are typically concentrated around fast growing companies. They are less well-paying, mostly casual and are usually in retail, in construction,

¹⁶ For more details, see policy note on Labor Market Policies.

and in the service sector. For these jobs to be performed formally, a flexible work contract and a tax and benefit system that encourages—and not prohibits—part time work, are necessary. These reforms should include:

- a. **Urgently reform severance pay regulation.** In order to better enable the hiring of older workers, the severance pay regulation has to be reformed, so that severance payments are based on tenure with the firm, and not the entire work history.
- b. Allow more flexible work arrangements: The planned reform of the labor code should allow for more flexible work arrangements that reflect a more casual arrangement and uncertain weekly work hours for many jobs in the service sector.
- c. **Abolish minimum social security contribution:** Serbia is the only country in the region that still has a social security floor that is not adjusted by actual hours worked. Anyone who has a formal job has to pay at least RSD 3,400 a month in social security contributions¹⁷, no matter how much he or she earns. This makes any low-paying part-time work unviable in the formal sector.
- d. **Improve work incentives of existing benefits:** Serbia's current unemployment, social assistance, and family benefits are of a typical first-generation design that does not encourage work. A better, second-generation design is a phased withdrawal of benefits, so that beneficiaries can actually increase their income from work because benefits are only gradually withdrawn.
- Facilitate own-account work and micro-entrepreneurship for the older generation. Just like mini and midi-jobs can help the older generation to connect to the indirect creation of dependent jobs around fast growing companies, own-account work and micro-entrepreneurship can help create independent employment opportunities. As with mini-jobs, these opportunities are limited, and will not provide substantial income generation; but there will be opportunities in the ecosystem of large job generators to set up their own micro businesses. In order for this to happen, some basic entrepreneurship skills and access to seed funds to help start a business are needed.
 - a. **Technical training for self-employment:** Setting up an own-account business requires technical skills for business. This includes general entrepreneurial skills, plus the ability to handle tasks such as the ability to set up a business development plan, perform cost calculations and revenue estimates, some legal knowledge about paying taxes, and hiring and managing employees. These skills can be taught, but the right system needs to be in place to provide this type of adult learning.
 - b. **Financial support for self-employment:** Access to financial resources is essential for a successful business start-up. The NES has a program to support start-ups, which includes both training and financial support. One particular program, which is especially designed for redundant workers, is the *severance-to-job* program. This program helps redundant workers to use their severance payment to successfully launch their own business. These programs should be strengthened, as program evaluations have shown favorable outcomes.
- Facilitate school-to-work transition for the young. The younger working generation should have access to education and vocational training which will help them to attain a stronger skill set. This will maximize their possibility to choose careers that will link them

¹⁷ The floor of RSD 3,400 refers to the employee-paid part of the social security contribution in the year 2012.

with highly skilled jobs. A transition can be more effective by linking employers to the education system, providing opportunities to work while studying, and in some cases, employers provide further education to their employees. This can be achieved through entrepreneurship programs in universities, traineeship and internships, and employer sponsored training.

• Foster labor market institutions. All of the above-mentioned reforms require strong labor market institutions for a successful implementation. This includes enhancing the capacities of the NES to better serve the unemployed, linking them with job opportunities, especially in areas with strong job growth, and providing programs to either increase the likelihood of matching job seekers with firms, or, as a measure of last resort, to mitigate the negative impacts of unemployment. Key to these reforms is to decrease the caseload of NES case workers, a decentralization of NES, and a redesign of active labor market programs (ALMPs). There is also an urgent need to improve the use of existing data, and gathering of new data to better monitor, evaluate, and research labor market conditions and programs.

4.4 Improving the Competitiveness of Agriculture and Food Processing

Agriculture and food processing is a sector where Serbia has a clear comparative advantage. It is a very important sector in terms of significant employment. Primary agriculture accounts for around 10 percent of GPD, and employment in agriculture is close to half a million people. Serbia needs to considerably increase its performance to fully realize the potential that it has in this sector. For example, in 2009, the per-hectare export value for Serbia was EUR385, while for new member states of the EU, it was on average EUR800. The IFC has recently conducted a detailed diagnostic of top reform priorities to strengthen the agriculture and food processing sector. This section is based on their main findings and recommendations relating to investment climate and business environment improvements in the agriculture and food processing sectors.

Recommendations

- Improve investment and incentive policy. Generous investment incentives place a heavy burden on government funds, and are ineffective in attracting greenfield FDI and generating jobs. There has been no cost benefit analysis or impact assessment of existing incentives carried out by the implementing agencies or the central government. This creates an environment where the government does not know enough about the effectiveness of the incentive instruments, and whether they are allocating scarce government funds appropriately. Poorly designed subsidy/incentive programs fail to adequately compensate lenders for their risk. Such a system distorts the market, and creates unhealthy competition among beneficiaries.
 - a. **Establish a fiscal and financial data collection mechanism.** This would become the basis for detailed cost-benefit-analysis of incentives, and provide reliable access to information for the public and officials. This activity would expand and build upon the efforts currently undertaken by the government to comply with EU state aid regulations.
 - b. **Develop procedures to assess the efficiency of subsidy and incentive schemes.** A number of key incentives relevant for the agribusiness sector should be identified, and a detailed cost-benefit/impact analysis performed. This analysis would provide the

basis for developing detailed recommendations for increasing the effectiveness of incentives offered in terms of generation of investment, improvement of profitability, productivity, and job creation.

- Improve agri-business regulations. Regulations and quality infrastructure for fruits and vegetable value chain are not fully transposed and aligned with EU. This prevents competitiveness and exports of the sector. The dairy sector faces several structural issues which impair sector growth and exports. The quality of raw milk is a key issue for the dairy sector because standards are far from the requirements prescribed by EU regulations (46/92, 852 and 853/04 EC). This makes it impossible for the producers to export into the EU. As a net grain exporter, Serbia has potential for productivity and export logistics improvement. Grain production is about 9 million tons a year. Most of the grain is feed grain for clients along the Danube River, including Austrian and Southern German livestock producers. The IFC could provide detailed technical assistance in reforming most relevant parts of the regulatory framework.
 - a. **Introduce Integrated Pest Management (IPM) into the regulatory framework** and harmonize it with the European Directive on Sustainable Use of Pesticides.
 - b. **Revise Law on Cooperatives**, to enable greater flexibility of cooperatives and create better conditions for farmers.
 - c. **Regulatory harmonization** of fruit packaging and calibration regulation with EU.
 - d. **Develop regulation** on increased level of official controls of imports of feed and food of non-animal origin representing known or emerging risk to public health to enable harmonization of the national legislation with the EU to reduce input market costs and final product cost.
 - e. **Develop dairy sector guidelines** listing necessary rules, requirements and check lists for compliance with EU hygiene and quality requirements.
 - f. **Operationalization of single river border crossing point** between Croatia, Hungary and Serbia, to significantly reduce transport costs for grain exporters.
- Streamline lengthy export/import licenses/permits and procedures. Lengthy procedures related to sampling and testing during imports, such as high prices of laboratory testing (fruits/vegetables around RSD 20,000) and long wait periods for results (7 to 10 days) cause significant costs to businesses. There is also a need to promote simplified procedures/trusted traders/in-house clearance.
 - a. Fully map and analyze export and import permits, licenses, certification, approvals, and tests as they relate to food products, to streamline them. The export and import procedures could be further streamlined through electronic exchange of trade related documentation with the Ministry of Agriculture.
 - b. **Promote simplified procedures/trusted traders/in-house clearance**, and enable greater use of this clearance in the private sector. Also, improve information exchange/pre-arrival information sharing and post clearance audit, as these would reduce burden to business.
- Ensure certification recognition among countries in the region. Serbia signed several international agreements in veterinary and phytosanitary area governing mutual recognition and acceptance of certificates of conformity with domestic food requirements, as well as testing results issued in other CEFTA countries during 2012. In practice, however,

procedures for recognition and acceptance of certificates/testing results are not fully and consistently applied.

- a. **Streamline the procedures for mutual recognition** of certificates and testing reports for most traded commodities in the dairy, fruits and vegetables sub-sectors.
- b. Streamline documentation requirements for preferential CEFTA origin. It requires traders/exporters to demonstrate that the goods they are selling are of CEFTA origin. In the case of jams, for example, the company must provide customs with individual contracts with farmers from which the fruits were purchased. An affidavit should suffice in such cases, allowing for significantly reduced burdens of compiling and presenting paperwork.
- c. **Further transposition of EU technical standards** as they relate to inputs, fruits and vegetables, dairy and related certification into Serbian system.
- Ensure consistent border treatment at various border posts, and introduce Risk-Based Controls. There is no standardized risk assessment conducted by Serbia SPS agencies. This results in a high frequency of physical examinations/lab tests. Regional trade is hampered by these high levels of examinations and long wait times for test results. Delays increase final product costs, affecting competitiveness of producers and traders. The IFC could provide support in developing methodology based on the systematic application of profiling and other risk criteria, including an annual sampling plan and operating procedures for the border inspectors. Risk-Based Clearance Controls will reduce the level of checks at the border, and reduce backlog created by excessive testing.
- Facilitate the establishment of joint border crossing points between Serbia and neighboring countries. This activity will significantly reduce the time needed for goods to cross regional borders by eliminating one set of clearance procedures, and enabling closer and more harmonized inter-agency cooperation between countries, and greater use of electronic systems for data exchange and risk based controls.

Annex 1: Detailed Table of Recommendations

Making it easier to operate	Making it easier to operate a businesses, by reducing excessive administrative burdens and making regulatory environment predictable								
Action	Estimated timeframe*	Type of change	Expected impact	Political and other challenges	Additional notes				
Accelerate and complete the Comprehensive Regulatory Reform and other similar initiatives aiming to streamline administrative and regulatory requirements.	short term	mostly administrative	Unnecessary administrative burden reduced; more transparent business environment	moderate, mostly resistance from bureaucracy	Despite notional support, implementing these reforms has proved challenging due to lack of ownership and understanding of the adverse impact of overly complex regulatory environment.				
Introduce clarity and predictability in para-fiscal charges and fees	immediate to short term	mostly legislative/regulatory	Reduced uncertainty for entrepreneurs and investors, more clarity when making investment decisions	moderate, it will affect the finances of local governments	Businesses are struggling with unpredictable manner in which fees and charges are being introduced; yet they have been an important tool for local governments to supplement their revenues since the crisis				
Promptly ensure full functionality of Central Registry of Compulsory Social Insurance	immediate	administrative	Significantly simplified admin. procedures, both for employers and employees; reduced cost of complying with regulations	moderate, mostly resistance from bureaucracy	Bureaucratic power of individual institutions might get diminished; also, technical capacity to fully implement and maintain a relatively complex data base could be an issue				
Implement aspects of E- Government and enable data exchange and coordination between various agencies.	short to medium term	mostly administrative	Simplified and more transparent admin. procedures, both for businesses and citizens in general	moderate to high, due to lack of financial resources, and bureaucratic opposition	Some financial support and technical capacity building for developing IT systems would likely be needed.				
Initiate reforms of the inspections system	short to medium term	administrative and legislative/regulatory	Reduced uncertainty for entrepreneurs and investors	moderate to high, due to bureaucratic opposition and lack of financial resources	Current system allows for discretion, a possible source of corruption; resistance from some inspectorates could be expected. Financial support for developing IT systems would likely be needed.				
Strengthen the Better Regulation Unit	short to medium term	administrative and legislative/regulatory	Better assessment of impact of regulation; business friendly legislative process	low, though some resistance from bureaucracy	Better Regulation Unit has been marginalized and its capacity reduced.				
Improvements to National Quality Infrastructure (NQI)	medium term	administrative and legislative/regulatory	Easier to trade across borders	low, though some resistance from bureaucracy	Individual elements of the current NQI system might resist change due to reduction in bureaucratic power.				

* immediate – could be completed within 6 months; short term – could be completed within one year; medium term – could be completed within 2 years

Action	Estimated	Type of change	Expected impact	Political and other	Additional notes
	timeframe*			challenges	
Streamline the construction permitting process, introduce benchmarks and accountability to reduce the degree of discretion	short term	legislative/regulatory and administrative	Easier to start or expand business. Faster and more predictable process will support more private sector investment. Improved resource allocation across the economy.	very high, due to significant bureaucratic opposition	Opaque and complicated process of planning and issuing construction permits is in some cases a significant source of potential corruption, so major bureaucratic resistance is likely.
Prepare the missing municipal plans and improve quality of plans; strengthen public and private sector planning capacities	medium term	administrative and legislative/regulatory	Improvements in planning documentation will facilitate speedier and more transparent issuance of construction permits and make it easier to start and expand business.	high, due to lack of financial resources, lack of capacity, conservative planning practice, limited mechanisms for central government to influence local governments	Planning process suffers from conservative approach (and, in smaller municipalities, lack of capacity). Lack of up-to-date planning documentation is contributing to opaqueness of construction permit issuing process, creating room for corruption.
Introduce flexible safeguard measures	short term	mostly legislative/regulatory	Construction and investment more streamlined and easier.	moderate to high, due to bureaucratic opposition	This would reduce bureaucratic power of some institutions, hence resistance could be expected.
Introduce One-Stop-Shops for construction permits in the municipalities	short to medium term	mostly administrative	Significantly simplified administrative procedures for investors.	very high, due to lack of technical and human capacity, financial constraints and bureaucratic opposition	Would also require developing efficient coordination mechanisms between different institutions, agencies and public utilities.
Prepare regulations, rule books and planning manuals	medium term	administrative and legislative/regulatory	More transparent and predictable environment for investors.	moderate to high, due to lack of technical capacity, and some bureaucratic opposition	
Streamline procedures related to conversion	short to medium term	mostly legislative/regulatory	Significantly higher conversion rates, increasing legal security, and also improving	moderate, due to bureaucratic opposition and capacity constraints	
Reduce the number of mandatory plans in smaller municipalities	short to medium term	mostly legislative/regulatory	medium	low to moderate	

* immediate – could be completed within 6 months; short term – could be completed within one year; medium term – could be completed within 2 years

Action	Estimated timeframe*	Type of change	Expected impact	Political and other challenges	Additional notes
Reform severance pay regulation	immediate to short term	legislative/regulatory	Easier to employ mid- aged and older workers, due to reduction of possible cost of firing	high, due to unions opposition	Initially unions have been completely opposed to this reform, but have since somewhat softened their position.
Allow more flexible work arrangements	short term	legislative/regulatory	Easier to employ low skilled or part time workers	moderate to high, due to unions opposition	Unions are likely to oppose these types of measures.
Abolish minimum social security contribution	short to medium term	legislative/regulatory	Employing low skilled / low wage workers mad more economically viable	very high, due to negative fiscal implications	The measure would likely have negative short term fiscal implications, questionable how feasible it is in current fiscal environment.
Improve work incentives of existing benefits	medium term	legislative/regulatory	Better incentives for unemployed/inactive to seek employment more actively	low to moderate	
Facilitate own-account work and micro-entrepreneurship for the older generation	medium term	administrative and legislative/regulatory	Improved employability of mid-aged and older workers	low	
Facilitate school-to-work transition for the young	medium term	administrative and legislative/regulatory	Improved employment prospects for new entrants to labor market	low	
Foster labor market institutions	medium term	administrative and legislative/regulatory	Improved performance of NES in worker/job matching	moderate, mostly resistance from bureaucracy	Among other things, this would imply re-allocation of staff in NES more towards working with unemployed, which is viewed as less desirable work than administrative duties

* immediate – could be completed within 6 months; short term – could be completed within one year; medium term – could be completed within 2 years

Annex 2: Data sources and methodology used in assessing productivity growth and labor allocation

This annex provides additional details on the data sources and methodology used in Section 2 to assess developments related to productivity growth and labor allocation.

The empirical analysis draws essentially on NACE 2 digit level tabulations from the Structural Business Statistics (SBS) for the 2007-2012 period, produced by the Statistical Office of Serbia in line with Eurostat methodology. It is important to note limitations of the SBS data. In Serbia, detailed SBS data cover only formal sector enterprises that report to Business Registries Agency. In total, enterprises that are covered by SBS employ about 1 million people, or about 55 percent of total formal sector employment. The difference is due to employment in public sector (administration, health, education, defense, etc.) and formal employment at sole proprietors. Gross value added of companies covered by SBS in 2012 is EUR 12.7 billion, or approximately 51 percent of overall value added of Serbian economy. The SBS data does not cover agricultural sector. It also does not cover informal employment. International comparisons are made using SBS data compiled by Eurostat.

Three main variables were extracted from SBS data set: value added at factor cost, number of employees, and gross salaries and wages. Nominal values (originally expressed in million RSD) were adjusted by Serbian GDP deflator (extracted from WDI database) and then converted to constant 2005 Euro values. Two main performance variables were computed: apparent (real) labor productivity – defined as the ratio of (real) value added at factor cost by number of employees – and unit labor cost – is proxied by real cost of salaries to (real) value added.

In order to examine whether labor reallocation has been productivity enhancing, simple productivity growth decomposition is performed. Following the approach of McMillan and Rodrik (2011), labor productivity growth in an economy is assumed to be achieved in one of two ways: first, *within economic sectors* through capital accumulation, technological change, or reduction of misallocation across plants; second, through a *structural change* in which labor can move from low-productivity sectors to high-productivity sectors. The following growth decomposition was applied:

$$\Delta Y_t = \sum_{i=n} \theta_{i,t-k} \Delta y_{i,t} + \sum_{i=n} y_{i,t} \Delta \theta_i, t$$

where Y_t and $y_{i,t}$ refer to economy-wide and sectoral labor productivity levels, respectively, while $\theta_{i,t}$ is the share of employment in sector i. The Δ operator denotes the change in productivity or employment shares between t-k and t. The first term in the decomposition is called the "within" component of productivity growth, and is defined as the weighted sum of productivity growth within individual sectors (with weights being the employment share of each sector at t). The second term reflects "structural change" and captures the productivity effect of labor reallocations across different sectors. It is the inner product of productivity levels (at the end of the time period) with the change in employment shares across sectors. A positive (negative) "structural change" component suggests that structural change in the economy has been productivity-enhancing (reducing).