Diagnosing growth constraints in south-eastern Europe: The case of Serbia

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We use a growth diagnostic approach to analyse the main impediments to investment and growth in Serbia. We look at a wide set of quantitative and qualitative indicators to understand if businesses are constrained by access to finance or if they forgo investment opportunities because they cannot reap the full benefits of their investment. Our analysis indicates that, while businesses still face challenges with respect to access to finance – particularly non-banking finance such as venture capital for high risk entrepreneurial investments – the binding constraints to growth in Serbia currently lie predominantly in the category of micro risks resulting from government failures. We find that weak competition, a burdensome tax administration, restrictive labour regulations, a high labour tax burden and pervasive corruption represent the main impediments to investment in Serbia today.

Keywords: growth diagnostics; Serbia.

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1. Introduction

South-eastern Europe (SEE) faces a serious growth problem. The 2008-09 global economic crisis affected people more than the official GDP data would suggest, and no real recovery has taken place since then.\(^1\) In 2012, average growth in the region was close to zero and only a modest upturn occurred in 2013.\(^2\) The lack of growth has compounded long-standing problems in living standards and the labour market. Rising inequality has pushed up poverty in several countries and the unemployment rate is around 20 per cent on average, despite in many cases low labour participation rates, and even reaches 35 per cent in Kosovo.\(^3\) The failure to bounce back from the crisis has prompted international financial institutions (IFIs) such as the EBRD, EIB and World Bank, to step up their efforts to help the region recover.\(^4\)

Serbia, which lies at the heart of SEE, exemplifies many of the problems faced by the region as a whole, but it also faces a number of problems uniquely related to the legacy of the past. The country was effectively isolated for most of the 1990s, and the Kosovo conflict and NATO air strikes in 1999 caused huge damage to the economy. Following the removal of the regime of Slobodan Milošević in October 2000, Serbia embarked on a period of economic recovery, helped by the introduction of long overdue reforms, major inflows of foreign investment and substantial assistance from IFIs and others in the international community.

However, the growth model on which Serbia and other SEE countries relied between 2001 and 2008, being based mainly on rapid capital inflows, a credit-fuelled domestic demand boom and high current account deficit (above 20 per cent of GDP in 2008), was not accompanied by the necessary progress in structural and institutional reforms to make this model sustainable.\(^5\) It is now generally recognised that, as relatively small markets with limited domestic demand, these countries need to shift their focus to external markets and, in this respect, diversify and expand their export base.

The past few years have been difficult ones for the Serbian economy. Real GDP fell by 3.5 per cent in 2009 and, although there was a modest recovery in 2010 and 2011 (growth rates of 1 and 1.6 per cent respectively), the economy re-entered recession in 2012, with output dropping by 1.7 per cent. As of the first half of 2014, the outlook has improved in some respects: economic growth in 2013 was 2.5 per cent, fuelled by strong export growth and a good harvest, while inflation has dropped to low single digit levels. However, more than one in five people in the labour force are unemployed, and cumulative fiscal deficits over the years have led to a level of public debt above 60 per cent of GDP, well above the administrative limit of 45 per cent. Foreign direct investment has largely dried up and credit growth is negative in real terms. A bright spot at present is the export sector which is recovering well, largely on the back of exports of cars and car components, but this aside, it is hard to see any growth drivers in the economy.

What is holding back growth in Serbia? The answer is likely to be a mixture of cyclical and structural factors. The former are by definition short-term and transient; the latter, with which this paper is mainly concerned, affect the long-run outlook. The short-term prospects are

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\(^1\) Evidence that people felt hard hit by the crisis in SEE relative to other regions is provided in the second round of the EBRD/World Bank Life in Transition Survey (LiTS II) – see EBRD (2011).


\(^3\) See World Bank (2013).

\(^4\) In November 2012, the EBRD, the European Investment Bank and the World Bank announced a new Joint Action Plan, aimed at supporting economic recovery and growth in central and south-eastern Europe. The Action Plan includes joint commitments of over €30 billion for the period 2013-14.

weak. Serbia’s main export markets – the eurozone and the neighbouring CEFTA region – are all growing weakly at best, depressing demand for exports from Serbia. With investment at depressed levels and banks facing deleveraging pressures and a high level of non-performing loans (21.1 per cent of total loans as of the third quarter of 2013), Serbia has little chance in the short term of returning to the growth rates it enjoyed in the years preceding the global crisis. However, most observers would agree that the country has considerable long-term potential, especially given the low level of GDP per capita compared with the EU average, provided the right conditions are in place. What these “right conditions” might be is the subject of the rest of the paper.

The aim of this paper is to diagnose systematically the obstacles and constraints to economic growth in Serbia and to identify which constraints are binding and most important to address. The approach is in line with the “growth diagnostics” methodology developed in recent years by Hausmann, Rodrik and others – see, for example, Hausmann et al. (2008) – as explained in Section 2. Based on this analysis, we argue that the main constraints on growth in Serbia are largely microeconomic in nature. Factors such as tax administration, labour market regulations and corruption are serious impediments to investors. In contrast, we do not find much evidence of binding constraints on the financial side, or with regard to quality of infrastructure or export diversification.

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6 According to the latest estimates from Eurostat, GDP per capita in Serbia (adjusted for purchasing power standards) in 2012 was 35 per cent of the EU average.
2. Growth diagnostics: a brief overview

A basic premise underlying the growth diagnostic approach is that economic growth is driven primarily by private sector investment. That is, economies do well when they are dominated by private businesses and entrepreneurs, able to identify profitable opportunities, finance them and reap the benefits of their efforts. If an economy is growing below potential, therefore, there must be some factors that are constraining investment: the cost of finance is too high, or the returns to investment are deemed to be too low, or both. The main aim of the growth diagnostic approach is to pursue these two lines of enquiry and see which factors constitute binding constraints to investment and growth. One can apply a series of tests, explained in more detail in the following sections, to determine the presence or absence, and its relative importance, of a particular obstacle.

The pioneers of the growth diagnostic method – Hausmann, Rodrik and Velasco – have argued that a helpful way to think about the problem is in terms of a decision tree: see Chart 1, which is taken from Hausmann et al. (2008). On the right-hand side of the tree is the high cost of finance option. If one concludes that the cost of financing in a particular country is indeed high relative to international comparators, then this could be due to either a low level of savings or a weak system of financial intermediation. If it is the latter, that could be explained by factors such as lack of competition or high risks. The left-hand side explores different reasons for low returns to investment. It could be due to social factors such as lack of human or physical capital, or it could be explained by government and institutional failures (both micro and macro), or market failures. By moving systematically down the branches of the tree, one can evaluate along the way the relevance of each potential problem for investment.

Chart 1: Growth diagnostic tree

Source: Hausmann et al. (2008)

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7 The growth diagnostic approach is not meant to give an exhaustive account of all sources of growth in an economy. As such, it should be seen as a complement, rather than substitute, to other approaches to analysing growth, such as the growth accounting method. For an application of the latter in the SEE context, see Begović (2013).
Several caveats should be mentioned at this point (see Hausmann et al., 2008, for more details). First, the concept of a “binding” constraint is not always clear-cut; in other words, it is not a (0,1) variable. Rather than trying to search for the one dominant constraint, it would make sense to speak more in terms of different constraints being more or less binding. Second, the notion of a decision tree seems to rule out important relationships between constraints on different parts of the tree. These interactions have to be taken into account in order to arrive at a sensible diagnostic. Third, the choice of comparators is important. Ideally, they should be countries that not only share a range of common characteristics and a similar level of development but also are at the same stage in the business cycle. The fact that Serbia (and other neighbouring countries) has suffered a deep economic shock in recent years complicates the analysis. However, as argued above, many of the deeper structural problems that the country faces were present, albeit in a disguised form, throughout the pre-crisis years.

To date, there have been very few studies that apply the growth diagnostic method to transition countries. In south-eastern Europe, the two papers we are aware of are Moore and Vamvakidis (2008) on Croatia, and Sen and Kirkpatrick (2009), which focuses on Kosovo. Moore and Vamvakidis argue that the constraints in Croatia are mainly associated with a weak business environment and excessive role of the state. In contrast, Sen and Kirkpatrick (2009) identify access to finance as an important constraint to growth, as well as weak property rights and poor provision of public goods such as electricity and transport. More recently, a detailed joint study of Tunisia produced by the African Development Bank and the governments of Tunisia and the United States points to two broad categories of constraints: a lack of effective public institutions, and the high fiscal and regulatory cost of employing workers.8

8 See African Development Bank et al. (2013).
3. Potential causes of low investment and growth in Serbia

3.1 Binding finance

If finance were the binding constraint for growth in Serbia, then this must be due to an inadequate level of savings, to weak financial intermediation, or a combination of the two. As we will argue below, neither factor is dominant in the Serbian case. However, the availability of finance is something that is potentially sensitive to global and domestic market conditions, and it cannot be ruled out that lack of finance may become more binding than before if present economic difficulties continue.

Finance is a binding constraint on investment and growth if domestic demand is higher than domestic supply and external access to finance is limited. If finance is a binding constraint, we would expect to observe some or all of the following:

- a low level of savings
- a high lending interest rate (scarce finance is expensive)
- investment elastic to interest rate (high shadow price of constraint)
- low net cash flow from banks.

We will look at each of these in turn.

Chart 2 suggests that the level of gross domestic savings in Serbia is indeed low by international comparison. With regard to household savings, this phenomenon is common in post-communist countries and may reflect pent-up consumer demand. However, it is possible that the figures underestimate the true amount of saving, because many people save abroad in jurisdictions that they regard as somewhat safer than Serbia. Moreover, in recent years there has been a notable increase in household savings – from about €4.8 billion in 2008 to €8 billion in 2012 – that can be attributed to both higher savings interest rates as well as strengthening confidence in the banking sector.

Chart 2: Gross domestic savings, % of GDP

Source: World Bank WDI Database.
The main reason why looking at domestic savings only would be misleading is that Serbia’s access to external finance has been relatively plentiful since 2001. Foreign banks have poured into Serbia and remained engaged even during the downturn from 2009. Serbia’s credit ratings have remained largely unchanged during the crisis and the government has been able to tap international markets at relatively favourable rates: in November 2012, a five-year US dollar bond was five times oversubscribed and had an attractive yield of 5.45 per cent. Thus, despite the low appetite on the domestic market for saving, Serbia has sufficient access to international capital to provide plentiful financial intermediation.

If lack of savings is not the main problem, then there could be a concern with financial intermediation. One symptom of weak financial intermediation is a high spread between deposit and lending interest rates. However, the spread in Serbia is also relatively low by international standards, as shown in Chart 3. This is despite the relatively high reserve requirements in Serbia, which would normally push up spreads, and reflects competition and availability of finance from abroad. If we look at historical trends, Serbia has consistently one of the lowest real lending interest rates compared with regional peers. Moreover, the real interest rate has not changed dramatically over the past eight years despite significant shocks to the parent banks and deleveraging pressures (see Chart 4). If finance were constrained, we would have expected interest rates to react more to such supply side shocks even when accounting for corresponding demand-side responses. Deposit rates have held up fairly well, likely reflecting competition for a limited pool of domestic savings.

**Chart 3: Interest rate spread, 2010 (%)**

Source: World Bank WDI Database.

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9 The continued engagement of foreign banks in Serbia and other countries of the region throughout the crisis reflects the success of the European Bank Coordination Initiative, more commonly known as the “Vienna Initiative”. See [www.ebrd.com/downloads/research/factsheets/viennainitiative.pdf](http://www.ebrd.com/downloads/research/factsheets/viennainitiative.pdf) for more details.
If finance were a binding constraint, we would expect investment to be quite responsive to changes in the interest rate, but this has not been the case in Serbia over the past 10 years. As we can see in Chart 5 below, while the real lending rate has fluctuated quite considerably, the level of investment has remained generally between 18 and 25 per cent of GDP. Moreover, between 2003 and 2008, higher interest rates tended to correspond to higher levels of investment, which suggests that factors other than the levels of interest rates were driving the fluctuations in investment. Lastly, there is no evidence that there is a low net cash flow from banks. Private sector credit as a percentage of GDP in Serbia during the period 2008-12 was 48.2 per cent, higher than most other SEE countries.¹⁰

The results from the latest EBRD Banking Environment Performance Survey (BEPS) provide further support to the hypothesis that demand-side, rather than supply-side, constraints determine the level of credit in the Serbian economy. The BEPS asked banks to identify the main constraints to their ability to make loans to both SMEs and large enterprises. For SMEs most Serbian banks identified the lack of creditworthy clients as the main constraint and insufficient demand for credit as the second largest constraint. A large proportion of banks also identified the low interest margins on these loans as one of their top three lending constraints to SMEs, further evidence suggesting that competition within this sector is quite high. Only a few banks mentioned supply side issues (lack of capacity to evaluate credit risk, lack of information needed to evaluate credit risk, lack of liquidity or lack of equity capital) as one of their top three constraints for SME lending.

That said, it is important to note that access to finance remains an important obstacle for SMEs as confirmed by the results from the fourth round of the EBRD/World Bank Business Environment and Enterprise Performance Survey (BEEPS), which was carried out in 2008/2009. Because of the limited information about their creditworthiness and the small loan size relative to the administrative cost of the administration of such a loan, SMEs face high interest rates and large (and often prohibitive) collateral requirements when they apply for bank loans. Thus, the above-mentioned lack of creditworthy clients that banks identified as a major constraint to SME lending can be seen to reflect limitations in financial intermediation and thus supply-side issues that can be addressed through risk-sharing instruments such as credit guarantee schemes. In our view this is an important reform area but not as binding a constraint as some of the other issues discussed below.

For large enterprises, the BEPS results are broadly the same: creditworthiness of clients is considered the main issue as is insufficient demand, but the low interest margins were identified by more banks as an issue for lending to large enterprises than to SMEs. As in the case of SMEs, supply-side constraints were identified by very few banks. The biggest supply-side constraint for lending to large enterprises was the lack of equity capital, which was likely more of an issue for the smaller banks.

The BEPS also asked respondents to say if constraints had become more or less problematic over time. Low credit demand and low interest rates became more of a constraint in 2011 compared with 2007 according to most banks. Funding constraints became a bigger issue for banks for SME lending, but less of a concern for large clients between 2007 and 2011.

The emphasis on the low interest margins by many banks suggests that competition is quite strong in the banking sector, and this is not surprising given that the concentration in the sector is not as high compared with regional peers: the top five banks holding 50 per cent of assets and top 10 banks 72 per cent of assets. On the other hand, the banking sector appears to be still profitable with most income coming from interest. The return on assets (ROA) at 0.8 per cent is reasonable but return on equity (ROE) at 3.8 per cent is low and falling, reflecting high capital requirements. Profits appear to be among the highest in the region. And this is despite the high level of NPLs and quite substantial provisions, so overall profits may end up even higher once NPLs can be worked out. This suggests that perhaps the low interest rate margins are more a reflection of the demand-side constraints rather than the lack of monopoly power.

The BEPS is an occasional EBRD survey of banks across most of the transition region. First carried out in 2005, the survey was repeated in 2012 and included 30 Serbian banks which together account for most of the banking assets in the country. See www.ebrd.com/pages/research/economics/data/beps.shtml for more details.

The data are as of Q3 2013, from the National Bank of Serbia.
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Overall, therefore, finance is currently not the main binding constraint to investment and growth. That does not mean it will not become more of a problem in the future. There are at least three important issues that need to be addressed to help mitigate this risk. First, the low level of aggregate savings could become a more serious constraint if deleveraging pressures worsen and/or access to international sources of finance becomes scarcer. In this regard, the dialogue facilitated under the Vienna Initiative aims to prevent major and disorderly deleveraging. Second, it is unclear how the current high level of NPLs will be resolved and, perhaps more importantly, what the impact will be for future credit applications, especially from riskier segments of the market (for example, micro-enterprises and entrepreneurs). Third, the development of non-banking sources of finance, and capital markets more

13 The data are as of Q3 2013, from the National Bank of Serbia.
14 For more information on the Vienna Initiative, see: http://vienna-initiative.com/.
generally, is limited to date. There is little private equity or venture capital for high risk investment, which limits the scope for entrepreneurship and innovation. And as discussed above, access to finance for SMEs still remains challenging.

3.2 Lack of complementary factors

Good-quality human capital and infrastructure are two key components of a successful, growing economy. There is clearly a need for further improvements in both in Serbia. Despite the obvious problems in both areas, however, neither appears to be the main binding constraint for growth in Serbia.

Turning first to human capital, the overall level of education in Serbia appears to be reasonable when seen against regional comparators, although some serious problems persist. On the OECD’s latest Programme for International Students Assessment, which was conducted in 2012, Serbian secondary school students performed better than students from all other countries in the region except Croatia across all three tests (reading, maths and science – see Chart 7). The level of tertiary education is also high relative to the level of development. Nevertheless, the PISA tests also show that 33 per cent of 15 year olds are functionally illiterate, compared with an EU-15 average of 19 per cent (see World Bank, 2013).

Chart 7: PISA scores

Source: OECD.

Further evidence that human capital is not a binding constraint comes from the BEEPS. According to the fourth round of the BEEPS, an inadequately educated workforce appears to be less of a constraint for firms in Serbia than in other countries in the region as well as the world. In Serbia, only 17.3 per cent of all firms identified the education of their workforce as a constraint compared with a 28.7 per cent average in eastern Europe and Central Asia and 26.9 per cent world average. This may be in part explained by the fact that Serbian manufacturing firms offer more on-the-job training, according to BEEPS. The results show that a considerably higher percentage of workers in Serbian firms were offered formal training compared with workers in other countries: 65.9 per cent of workers had the option of training compared with 34.4 per cent in eastern Europe and 47.2 per cent in the world. It is, of course, important to note that these surveys are mostly focused on existing firms and thus do not reflect the views of potential new entrants, particularly foreign firms with higher-value added products. It is possible that some of these firms decide not to invest in Serbia because of insufficient human capital. In our view this could be a potential problem but not one big enough to constitute a binding constraint to growth in the context of the other issues discussed below.
Lastly, if human capital were a binding constraint, we would expect to see high returns to education and/or the inward migration of highly skilled workers. There is little evidence of either in the Serbian context. With regards to migration, Serbia is in fact a net exporter of skilled workers and, like many regional peers, the “brain drain” problem here is quite acute. With respect to returns on education, research is relatively limited. Staneva et al. (2010) use data from 2003 to show that returns to education in Serbia are fairly flat across the earnings spectrum for men, although they show more variation for women. Arandarenko et al. (2006) also use data from the early part of the previous decade to show that returns to education are positive in Serbia and comparable to those in Romania but below those in Bulgaria. They also show that the human capital of men is rewarded more than that of women.

With regard to infrastructure, the World Economic Forum’s annual competitiveness report provides a useful assessment of relative quality across countries. According to the WEF, Serbia lags behind most regional peers and OECD countries with respect to the quality of its infrastructure (see Chart 8). The quality of transport infrastructure is particularly poor, but Serbia’s electricity and telephony infrastructure is among the best in the region. This is consistent with results from BEEPS, where more firms in Serbia use the internet and email to run their businesses than the average regional or transition-wide peers.

**Chart 8: WEF scores on quality of overall infrastructure**

![Chart showing WEF scores on quality of overall infrastructure](chart)


Furthermore, exporting firms identified infrastructure issues as constraints far less often than non-exporting firms in BEEPS. The same pattern is visible when comparing the answers of exporting firms in Serbia with those in the wider transition region, or worldwide. For example, an exporter in Serbia could get a connection to the electricity grid within 32 days, considerably quicker than a non-exporting firm could, which on average has to wait for 151 days. The differences between exporters and non-exporters are not as drastic in other countries. Serbian exporters get electricity much quicker on average than exporters in the whole transition region (74 days) and the world (45 days). Electricity is much less of a constraint for exporters than non-exporters (14.2 per cent versus 22.1 per cent). Also, transport is not a major constraint for either exporters (8.7 per cent) or non-exporters (10.8...
per cent) – substantially lower than the average of 18.5 per cent for the transition region and 22.6 per cent for the whole world.

Lastly, the whole area of infrastructure and energy is one where significant regional initiatives under way are leading to visible improvements. The energy community for south-eastern Europe is extending the European Union’s internal energy market to the SEE region and is helping to attract investment in power generation and networks.\textsuperscript{15} The South East Europe Transport Observatory (SEETO) is promoting cooperation on the development of regional networks and the implementation of investment programmes.\textsuperscript{16} There is some way to go before energy and transport infrastructure will reach the standards of western Europe, but the substantial progress achieved in the past two decades has reduced barriers and has helped to promote trade and investment within and across borders.

3.3 Ex ante government failure and low appropriability

Examples of ex ante government failures can be divided broadly into several categories. One is concerned with political and social risks and the related fear that profits will be expropriated or otherwise “lost”. A second category is associated with ex ante risks of unpredictable or discriminatory tax policy. A third concerns the labour market and the possibility of unfair (from the business point of view) labour burdens and/or disruptive strikes by the workforce. We will argue below that none of these really constitutes a binding constraint to growth in Serbia.

Political risks

Political risk and uncertainty remain features of the Serbian political scene. In the fourth round of the BEEPS, political instability was identified by 21 per cent of surveyed firms as a major constraint on doing business. However, what is meant by political instability is not clear from the formulation of this question, so interpreting these responses is difficult. Most likely the answers reflected concerns over the political uncertainty that had gripped the country in that period. After Kosovo’s declaration of independence in February 2008, the government coalition broke down and new parliamentary elections had to be called. This could have created some concerns in the business community over political instability. Since that point, however, Serbia has been a relatively stable country in the political sphere. The coalition government formed in mid-2008 lasted more or less a full term, and elections in mid-2012 led to the formation of a new coalition. Early parliamentary elections in March 2014 gave a decisive mandate to the main party from this coalition. The government in power since 2012 has shown a constructive attitude towards the difficult and sensitive issue of relations with Kosovo. As a result of Serbia’s willingness to compromise, the European Union formally opened accession negotiations in January 2014. Some signs of social discontent have emerged as a result of the prolonged economic difficulties, but no serious unrest has occurred in recent years. The resignation of the central bank governor (and other senior central bank staff) in mid-2012, following threats of amendments to the law to enable his forced removal, was a worrying indication of regulatory uncertainty and a threat to central bank independence, but the proposed changes to the law were subsequently reversed under international pressure.

Tax policy

During the transition years, Serbia’s tax policy has been relatively stable. Changes to key tax rates have been few and far between. The corporate tax rate was fixed at 10 per cent for many

\textsuperscript{15} See www.energy-community.org/portal/page/portal/ENC_HOME for more details of this initiative.

\textsuperscript{16} See www.seetoint.org/ for more details of this initiative.
years but was raised to 15 per cent at the end of 2012, still a low rate by international standards. However, employer taxes related to social and pension provisions are a major burden and account for an estimated 60 per cent of salary costs on average. There is also a non-negligible risk of future tax hikes because of loose fiscal policy in recent times. The outgoing government in early 2012 went on something of a spending spree and the present government has, as of April 2014, not yet taken adequate steps to bring the general government deficit down to acceptable levels. It is more likely that adjustment will eventually be mainly on the spending side as there is scope for further reductions in the amount of subsidies to public enterprises and in the overall size of the public administration. Whether the new government will have the political will and ability to make these cuts remains to be seen.

**Labour market risks**

The ex ante risks of labour market problems are moderate in Serbia. Trade unions are significant in some sectors but their influence has declined over the years and their potential for causing major upheaval and disruption to production is limited. Trade union density (defined as trade union membership as a percentage of all employees in dependent employment) is 35 per cent, most of which is in the public sector (over 60 per cent in the public sector and below 20 per cent in the private sector). Collective bargaining coverage (per cent of employees covered by collective agreements) is 55 per cent. However, according to the latest WEF Competitiveness Report, labour-employer relations in Serbia are considered much more confrontational than in Serbia's regional peers as well as most of the countries covered in the report. On this indicator, Serbia ranked 144th out of 148 countries.

### 3.4 Ex post government failure and low appropriability

This class of potential constraints encompasses broadly the “cost of doing business”, a concept that has garnered increasing attention over the past decade, notably from the World Bank with its annual Doing Business report, which now covers 189 countries. Such costs can come from an ex post realisation of some of the concepts described in the previous section: political or social conflict, high taxes and restrictive labour market regulations. Other obstacles faced by businesses in many countries are lack of effective competition policies, including low entry costs, and corruption. We will draw on a variety of evidence to argue that some constraints to starting a business, notably tax administration, monopoly power and corruption, are important in the Serbian context and are potentially binding constraints.

**Tax administration**

Comparing tax rates across countries, Serbia seems to be average on a global scale but its total tax rate is higher than that of its regional peers with similar income levels (Bosnia and Herzegovina, Montenegro, FYR Macedonia and Bulgaria). The labour tax and contributions in Serbia are marginally lower than those in the whole region and the OECD (20.2 per cent for Serbia, 22.1 per cent for the transition region and 23.8 per cent for the OECD), but the overall tax rate (see Chart 9 below) is lower than the transition region and OECD averages (34 per cent for Serbia versus 40.5 per cent for the transition region and 42.7 per cent for the OECD).

However, the challenges are considerably larger when it comes to the administrative burden of paying taxes. According to the Doing Business 2014 report, businesses need to make 66 payments per year (compared with 28 for the transition region and 12 for the OECD), and thus spend more hours on tax-related issues than peers in the transition or OECD regions. As 17 There is a dedicated web site for Doing Business: [www.doingbusiness.org](http://www.doingbusiness.org).
a result, Serbia’s ranking on the paying taxes indicator is quite low (161st out of 189 countries). Also, according to the World Bank, progress on this indicator has been very limited over the past six years (as measured by distance from best performer) and Serbia even regressed on this score in the past year.

**Chart 9: Tax rate (as % of current profits) vs. GDP per capita**

![Chart 9](image)

Source: World Bank WDI Database.

**Inflation tax**

Serbia has had a history of relatively high and volatile inflation, which has consequences for the real exchange rate because of the significant but unpredictable impact on the exchange rate. In 2009, the central bank adopted an inflation targeting regime with the goal of stabilising the volatile fluctuations in the price level. Nevertheless, inflation continued to overshoot the upper limit of the central bank’s target band for several years. The lowest annual average inflation rate over the past five years was 6.2 per cent in 2010, but just a year later this figure shot up to 11 per cent. A further inflationary bout occurred in 2012 but a dramatic reduction occurred in the second half of 2013, with inflation ending the year at just 2.2 per cent. A modest upturn is likely during 2014.

**Monopoly power and barriers to entry**

Monopoly power and barriers to entry are likely to be important and possibly binding constraints to investment and growth in Serbia. While some of the constraints on starting/formally registering a business have been reduced in recent years, considerable challenges remain in practice.

Since 2009, the government has implemented significant reforms to make starting a business much easier than before. In 2010 the government set up a one-stop shop for registering a new enterprise which was meant to reduce the logistical and administrative barriers to starting a business. Also in 2012, the costs of starting a business were reduced further because the government eliminated the paid-in minimum capital requirement (Serbia’s ranking on the Doing Business indicator of starting a business improved by 49 places that year, from 91st to 42nd, just on account of this change). However, in practice, the administrative burden still remains high and implementation of a set of measures known as the “regulatory guillotine” is
behind schedule. In addition, dealing with construction permits still remains a major obstacle, with Serbia ranked among the bottom 10 countries globally (182nd out of 189) in the Doing Business report. Contract enforcement and resolving insolvency are also major challenges (Serbia ranking 116th and 103rd respectively out of 189 countries globally on both of these measures).

With regard to enforcement of competition, the EBRD’s transition indicator for competition policy scores Serbia at 2+ on a scale of 1 (little or no progress) to 4+ (the standards of an advanced market economy). This places Serbia above Montenegro and on a par with Albania and Bosnia and Herzegovina but below others in SEE. A law on the control of state aid and protection of competition, adopted in July 2009 to comply with EU competition policy, gave extended powers to an independent Commission for the Protection of Competition. However, its decisions are subject to judicial control, which leaves room for political interference as the judiciary is still not a fully independent institution and the institutional capacity of the commission is quite weak.

Further evidence on the weakness of competition comes from the World Economic Forum’s analysis. According to the latest competitiveness report, Serbia ranks at 123rd place out of 144 countries, last among the SEE countries, on their indicator for overall competition. It ranks almost last globally (142nd) on the indicators of extent of market dominance (“How would you characterise corporate activity in your country?” 1= dominated by few business groups; 7=spread among many firms. Serbia scored 2.62) as well as on the indicator of the effectiveness of anti-monopoly policy (1= policy does not promote competition; 7= policy effectively promotes competition; Serbia scored 2.84).

As a countervailing force, Serbia has become more open to foreign competition as a result of various trade agreements. Trade is fairly liberalised and many foreign firms consider some of the FTAs (likely mainly with the European Union) to be a big advantage. The country is not yet a WTO member but it has an observer status and accession negotiations are in the final stages. Serbia has reduced tariff and non-tariff barriers quite considerably, but the agricultural sector remains quite protected, including by high import duties. Preferential trade regimes exist with Russia, Belarus, Turkey, Kazakhstan, the European Free Trade Agreement members (EFTA) and Central Europe Free Trade Agreement (CEFTA, 2006) signatories. Under the Stabilisation and Association Agreement with the European Union, which entered into force in 2013, Serbia has committed to gradually phase out tariffs on all industrial goods over a period of six years and duties on about 75 per cent of agricultural imports from the European Union. Trade with the European Union comprises more than 50 per cent of total trade.

**Corruption**

Corruption remains widespread through Serbia and is a significant and probably binding obstacle to investment and growth. According to Transparency International’s Corruption Perceptions Index (CPI), Serbia ranks among the three lowest in the region and considerably below the OECD average (see Chart 10).
The Transparency International Global Corruption Barometer survey 2012/2013 provides further evidence of the seriousness of the corruption problem. In Serbia, 73 per cent of all respondents indicated that corruption in the private sector is a very serious problem, which is higher than all regional peers and all transition economies with the exception of Russia and the Kyrgyz Republic. Over 60 per cent of respondents indicated that it is either important or very important to have contacts in the public sector to get things done. Corruption is perceived to be highest within the judiciary, the health sector, political parties, and among public officials. Around 80 per cent of all respondents indicated that they thought these institutions are corrupt or very corrupt. Corruption is also perceived to be quite high within the parliament, in the media as well as in the education system. This indicates that corruption is perceived to be quite widespread and it affects most of the key public sector institutions. Furthermore, over half of the people surveyed indicated that they thought that the government was ineffective in dealing with the issue of corruption, compared with 23 per cent that thought it was effective.

*Labour market regulations*

Serbia has moderately flexible labour market regulations. According to the latest WEF Competitiveness report, firms are quite flexible in determining wages. On the question of how firms determine wages (where 1 = centralised bargaining process and 7 = individual firm decision) Serbia scored 5.44 and ranked 35th out of 148 countries, higher than all but one country in the SEE region. According to WEF, Serbian firms also have one of the lowest redundancy costs in the region as well as globally; in 2011, the average redundancy compensation paid by Serbian firms was 7.7 weeks of salary, lower than all but one SEE country and in 21st place globally. However, at the same time, Serbian firms have to pay these costs not only for each year that the employee has worked for the firm but for their total years of work experience. Thus, in this regard, redundancy costs may be a considerable issue for firms and may lead in fact to some inefficient outcomes such as layoffs that do not reflect

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individual productivity, discrimination against more experienced candidates and strong incentives for firms to hire people on part-time contracts. Serbian firms also feel quite constrained by regulations when it comes to hiring and firing workers. On this indicator Serbia ranks at 103 out of 148 countries – second lowest in the SEE region after Croatia.

3.5 Coordination and market failures

Coordination problems and market failures are often endemic in poor or middle-income countries. A new line of research in recent years has examined the interactions among different products and industries, and the ease with which producers of a particular product can move to another one close by, thereby taking advantage of new markets and export opportunities. The coordination problem arises because the expenditure associated with research and product development may fall disproportionately on the innovating firms, and not on those free-riding on the outcomes.

Export sophistication

One way of getting a sense of the importance of market failures is to look at the export sector and the degree of export sophistication in Serbia. Hausmann and others have developed a methodology to measure this concept. (For an application to transition countries, see EBRD, 2008, Chapter 4). In essence, export sophistication is an outcome-based measure: a country tends to score more highly on this measure if it exports goods that tend to be produced and exported by high-income countries. Hausmann et al. (2007) have shown that countries with a relatively sophisticated export structure relative to their income tend to grow faster than others.

Chart 11 below shows the link between export sophistication and (log of) GDP per capita for a range of countries, using 2008 data. The chart shows that Serbia is actually quite high relative to regional peers and above average for its level of income compared with the rest of the world. Even though the data are several years old, Serbia ranked higher than most countries of similar income level. And since then Serbia has advanced quite considerably on diversifying its export base with perhaps the biggest contribution made by the entry of Fiat, which has revived the auto manufacturing industry. This has also attracted investments in manufacturing of auto parts.

A related concept is that of “product space”, which looks at the connectedness of different products – essentially the extent to which they use similar inputs. Similar to the export sophistication measure, the product space is also based on outcomes. The distance between products is related to the probability that a country exports both products. A “dense” part of the product space, therefore, indicates a set of products that are closely related and where it may be easier to move from producing one to another. Conversely, a sparsely populated section is one where the connections to other products are relatively few.

The product space for Serbia is shown in Chart 12. The data are from 2010, and therefore do not fully incorporate the recent developments in the automotive industry, which takes a very central part of the product space as it is a sector with considerable linkages. The product space indicates that many of Serbia’s exports are still concentrated in sectors with weak linkages to others such as agricultural products, metals and textiles. However, unlike most regional peers, Serbia’s export base also includes higher value added sectors that are in the denser part of the product space, such as processed agricultural products, chemicals and allied industries, machinery and electrical products as well as most recently automobiles and auto parts. Thus, Serbia ought to be able to diversify its export base more easily than regional

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19 See, for example, Hausmann et al. (2007).
peers by attracting foreign as well as domestic investors into higher value added products that are closely related to its existing exports.

Chart 11: Export sophistication, 2008

Source: MIT Observatory of Economic Complexity.
Chart 12: Serbia product space 2010

Source: MIT Observatory of Economic Complexity.
4. Concluding remarks

We used the growth diagnostic approach to find out where the main impediments to investment and growth in Serbia lie. We looked at a wide set of quantitative and qualitative indicators to understand if businesses are constrained by access to finance or if they forgo investment opportunities because they cannot reap the full benefits of their investment. Our preliminary analysis indicates that, while businesses still face challenges with respect to access to finance – particularly non-banking finance such as venture capital for high-risk entrepreneurial investments – the binding constraints to growth in Serbia currently lie predominantly in the category of micro risks resulting from government failures. We find that weak competition, a burdensome tax administration, restrictive labour regulations, a high labour tax burden and pervasive corruption represent the main impediments to investment in Serbia today.

Further work is needed to identify the impact of these constraints on investment and growth. As Hausmann et al. (2008) have suggested, if a constraint is binding agents in the economy should be actively seeking to overcome or bypass the constraint. The pervasiveness of informal activities throughout the economy can be attributed to the desire to avoid the kinds of tax administration and labour market constraints alluded to earlier.\(^\text{20}\) In addition, the high level of euroisation in the economy is an indication that uncertainty over macroeconomic policy is also a major constraint that businesses and individuals seek to overcome by conducting transactions in a foreign currency, mainly the euro.

If a constraint is binding, agents in the economy that are less intensive in the constraint should be thriving while those that are more intensive in the constraint should be either rare or in difficulty. As results from Transparency International’s Global Corruption Barometer indicate, there is a widespread perception that firms and individuals with connections in the public sector have easier and faster access to public services than counterparts that do not have these connections. This factor, in addition to the widely reported need to pay bribes to either speed things up or to express gratitude for the provision of a public service, is likely to further exacerbate the divisions between the more privileged firms/individuals and those less so. This in turn is reflected in the low competition, due to the ability of large and financially strong firms to keep competitors out. Addressing these challenges will be critical to the new government’s efforts to restore robust growth in the Serbian economy.

\(^{20}\) Krstić et al. (2013) have conducted exhaustive and multi-layered research on the informal economy in Serbia. They conclude that the informal economy may account for between 21 and 30.1 per cent of GDP, depending on the method used to estimate its size. One method allows a comparison across countries and the authors show that, for a selection of 11 other central and south-eastern European countries, only Bulgaria has a larger informal sector (as a per cent of GDP) than Serbia.
References


