

FISCAL DECENTRALIZATION IN EASTERN EUROPE: TRENDS AND SELECTED ISSUES

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Abstract

The article attempts to provide an overview of the fiscal decentralization process in emerging market economies in Eastern Europe in the last 20 years. Using the methodology developed by Vo (2009), the article assesses the degree of fiscal decentralization in the region. Conceptually, the measurement of fiscal decentralization focuses on fiscal autonomy and on the fiscal importance of subnational governments. The empirical analysis reveals that the highest level of fiscal decentralization (centralization) is found in Russia (Armenia) among non-EU members and in Estonia (Slovak Republic) among EU members of the Eastern European countries. In addition, the empirical results show that, in general, the degree of fiscal decentralization is higher in developed OECD countries than in most Eastern European countries (EECs). However, in contrast to our expectations, there has been an alarming downward trend of the fiscal decentralization index (FDI) in most countries of the region over the last two decades. Moreover, the article also examines the effects of fiscal decentralization on growth and public sector size in EECs. The analysis provides some evidence that increases in public sector decentralization are associated with higher income levels. Finally, our results suggest that fiscal decentralization in EECs generally leads to an increase in the size of government, albeit there are some significant differences between EU and non-EU member states.

Keywords: fiscal decentralization, fiscal autonomy, fiscal importance, Eastern European countries, economic growth, public sector size.

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1. Introduction

Over the last two decades, fiscal decentralization has become a central concern in countries around the world, especially in the emerging market economies of Eastern Europe. These economies present a particular interest with regard to this topic because when communism collapsed in 1989 these countries embarked on a transition from highly centralized, planned systems to more decentralized, market-dominated economies. Indeed, the past shift towards democratic forms of governance has been closely associated with the demand for decentralized government. At the same time, increased fiscal decentralization¹ is, in itself, seen as an important way of boosting democratic participation in the decision-making process, thereby enhancing the accountability and transparency of government actions. In yet other countries, the trend towards greater autonomy for subnational levels of government is driven by the need for national coherence in the face of ethnic or regional centrifugal forces or conflicts.

In many Eastern European countries (EECs)², political and economic failure of autocratic, highly centralized socialist regimes may have provided an impetus for subsequent decentralization initiatives. Most of these economies have faced many challenges while trying to implement their fiscal decentralization reforms. Persistent macroeconomic instability, the legacy of more than 40 years of central planning, and the presence of weak legal systems have represented important obstacles to the design of effective decentralized systems. The result has been the implementation of fiscal decentralization processes that have been often criticized for their lack of transparency and of a clear division of powers between the different levels of government (Rodríguez-Pose and Krøijer, 2009).

Using the methodology developed by Vo (2009), this article assesses the degree of fiscal decentralization in Eastern Europe over the last two decades. Discussions on fiscal decentralization have recently centered on four main areas: the assignment of expenditure responsibility, revenue assignment (taxing powers), intergovernmental fiscal transfers and subnational borrowing.

1 Decentralization is typically viewed as having three overlapping components (World Bank, 2000; UNDP, 2008): political, fiscal and administrative. Political decentralization involves the transfer of political authority from central to locally elected state bodies. Fiscal decentralization refers to providing local government with the capacity and authority to define and collect taxes and revenues (Klun, 2004), manage public resources and make expenditures for the provision of public services (Raboca *et al.*, 2010). Finally, administrative decentralization seeks to redistribute authority (Cadez and Czerny, 2010), responsibility and financial resources for providing public services among different levels of governance (three major forms of administrative decentralization exist: deconcentration, delegation, and devolution).

2 The EECs represent Central Europe, South-East Europe, the Baltic states, Transcaucasia and some other former Soviet states. In our study the EECs include Armenia, Belarus, Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Macedonia, FYR, Moldova, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia, and Ukraine.

Conceptually, fiscal decentralization can be divided into two broad categories: (i) the fiscal autonomy of subnational governments, and (ii) the fiscal importance of subnational governments. In this regard, the fiscal autonomy of subnational governments deals mainly with the assignment of taxing powers, including supplementary tools such as intergovernmental fiscal transfers, subnational borrowing and the assignment of responsibility for the public provision of goods and services, whereas fiscal importance is directly connected with the level of fiscal activities of subnational governments relative to that of the fiscal activities of all levels of government.

The article is organized as follows. In the next section, we present a brief literature review of the arguments commonly advanced in favor of fiscal decentralization and some possible approaches to measure it. Section 3 shows trends and developments of fiscal decentralization in selected EECs in the last two decades. Section 4 presents a brief discussion and the impact of fiscal decentralization on economic growth and public sector size in the Eastern Europe region. The last section concludes.

2. The rationale for fiscal decentralization and its measurement

The theoretical literature about fiscal decentralization originally centered around the works of Tiebout (1956), Musgrave (1959), and Oates (1972), where it is claimed that decentralization helps promote allocative efficiency, efficiency of the delivery of public services and greater transparency. It is often argued that fiscal decentralization increases economic efficiency because local governments are better positioned than the national government to deliver public services as a result of their proximity and informational advantage (Klugman, 1994). This proximity is particularly important in emerging market economies where, in the absence of market opportunities, vulnerable populations rely heavily on state action for their survival. Moreover, decentralized expenditures may lead to greater 'consumer efficiency' (Thießen, 2003). As demands differ in each territory, resources can be saved by diversifying governments' outputs in accordance with local demands (Martínez-Vázquez and McNab, 2003). Population mobility and competition among local governments for the delivery of public services ensure the matching of preferences between local communities and local governments (Tiebout, 1956). Finally, fiscal decentralization is likely to instigate horizontal and vertical competition (Tiebout, 1956) at subnational levels, forcing governments to concentrate on the efficient production of public goods and services, and limiting the capacity of bureaucrats to act as revenue maximizers (Thießen, 2003). Last but not least, fiscal decentralization is also seen as a way of boosting democratic participation in the decision-making process (Dabla-Norris, 2006), allowing for greater transparency and accountability (Ebel and Yilmaz, 2002).

In order to measure fiscal decentralization, either revenue or expenditure from subnational governments have been used in empirical studies. For example, in his pioneering study, Oates (1972) uses the national government share in total public revenue as the degree of fiscal centralization. More recently, Woller and Phillips (1998) measure fiscal decentralization in one of four ways: (i) the ratio of local government

revenues to total government revenues; (ii) the ratio of local government revenues minus grants-in-aid to total government revenues; (iii) the ratio of local government expenditures to total government expenditures; and (iv) the ratio of local government expenditures to total government expenditures minus defense and social security expenditures³. Since most studies are based on the IMF (GFS) dataset which exhibits some deficiencies⁴, Thornton (2007) uses a measure that supposedly captures the 'true' amount of subnational autonomy. This measure, originally provided by the OECD (1999) (and updated by Blöchliger and King, 2007), is obtained by differentiating subnational tax revenue according to the level of autonomy subnational governments have over the associated rates and bases, and then calculating the ratios with regard to total government tax receipts⁵. Similarly, Thießen (2000, 2003) exposes four decentralization variables. Two of these are the most frequently used measures in the current literature (see, for instance, Rodríguez-Pose and Krøijer, 2009; Baskaran, 2010): subnational shares of revenue and expenditure. An average of the revenue and expenditure share could be the third decentralization variable. This measure can simultaneously account for both revenue and expenditure decentralization and identify the relative strengths of the two impacts. The fourth measure of decentralization accounts for the autonomy of subnational governments from the federal level. This indicator is the percentage of subnational revenues independently collected rather than financed through inter-governmental transfers.

It is widely accepted that previous works mainly measured fiscal decentralization on a superficial basis (Vo, 2009). In empirical studies, there has been an insufficient emphasis on the important distinction between subnational 'revenue' and own-sourced revenue over which a subnational jurisdiction has policy autonomy. Indeed, most of the above-mentioned measures are inadequate because the fiscal autonomy of subnational governments has not been properly taken into consideration. As a result, Vo (2009) developed a fundamental fiscal decentralization index (*FDI*) that allows an international comparison of various nations' degree of fiscal decentralization. The *FDI* consists of two main elements, *i.e.* the fiscal autonomy and the fiscal importance of subnational

3 Similar measures have been employed by Zhang and Zou (2001), Lin and Liu (2000), Thießen (2003) and Buser (2011).

4 A well-recognized drawback of the IMF dataset is that it provides an inaccurate picture of the 'true' level of decentralization. As Rodden (2004) notes, it takes the expenditures undertaken and revenue obtained by subnational governments at face value. Consequently, the data might indicate a high level of revenue/expenditure decentralization even though the autonomy of subnational governments over fiscal matters might actually be negligible (Baskaran and Feld, 2009).

5 Even though the data used by Thornton (2007) provide a better approximation of the true extent of decentralization than the IMF measures and hence lend credibility to his results, they exhibit an important drawback as they are only available as a cross-section dataset (Baskaran and Feld, 2009).

governments. *The fiscal autonomy of subnational governments (FA)* is represented by the ratio of subnational governments' own-sourced revenue to subnational governments' expenditure:

$$FA = \frac{\sum_{i=1}^n OSR_i}{\sum_{i=1}^n E_i}, \quad (1)$$

where OSR_i represents the own-source revenue (total subnational revenue less grants received from the central government) of subnational government i , E_i represents the expenditure made by subnational government i , and n is the number of subnational governments. Further, *the fiscal importance of subnational governments (FI)* can be defined as follows:

$$FI = \frac{\sum_{i=1}^n E_i}{TE}, \quad (2)$$

where TE represents total public sector expenditures by all levels of government within the country. This includes expenditures by the national government and all subnational governments, excluding fiscal transfers from one government to another (such as national government fiscal transfers to subnational governments).

In both equations (1) and (2) presented above, the denominator is based on public expenditure – (1) subnational governments' public expenditure in the case of equation and (2) total public expenditure in equation. As such, public expenditure may be viewed as the reference point against which both FA and FI are assessed. Fiscal autonomy is represented by subnational governments' own-sourced revenue to subnational governments' expenditures, while fiscal importance is seen as subnational governments' expenditure to total public expenditure. The fiscal decentralization index (FDI) is based on the 'fiscal autonomy and fiscal importance' approach and is the geometric average of the measures of the two elements (Vo, 2009)⁶:

$$FDI = \sqrt{FA * FI} = \sqrt{\frac{\sum_{i=1}^n OSR_i}{\sum_{i=1}^n E_i} * \frac{\sum_{i=1}^n E_i}{TE}} \quad (3)$$

In principle, the FDI would be greater than 100 when, and only when, total expenditure by the national government would be negative – a completely implausible situation. As components FA and FI have positive values, we may conclude that the FDI will also be positive and the lower the value of the index, the less fiscally decentralized is the country. Indeed, the situation of a country where $50 < FDI < 100$ can be described as 'relative fiscal decentralization', and 'relative fiscal centralization'

6 In order to account for institutional constraints on fiscal events, an *adjustment factor (AF)* for fiscal autonomy would be required (see Vo, 2009). However, due to the lack of data on conditional and unconditional fiscal transfers for the considered countries as well as due to the fact that conditional transfers in EECs are much smaller compared to OECD countries (see Adugna and Ford, 2010) we will neglect it in the analysis. Therefore, we should have in mind that the 'true' level of decentralization in the region is probably lower.

where $0 < FDI < 50$. Perfect fiscal centralization ($FDI=0$) whereby subnational expenditure is fully funded by fiscal transfers from the national government (when OSR is zero), and perfect fiscal decentralization ($FDI=100$) whereby total public expenditure is fully funded by subnational governments (when $OSR=TE$) are two extreme cases that are only theoretically possible.

In the next section, the *FDI* concept is applied and calculated for selected EECs (Armenia, Belarus, Bulgaria, Croatia, Czech R., Estonia, Hungary, Latvia, Lithuania, Macedonia, Moldova, Poland, Romania, Russia, Serbia, Slovak Republic, Slovenia and Ukraine) and compared with some developed OECD countries. Due to a lack of data, some countries from the region are not included (such as Albania, Bosnia and Herzegovina, Azerbaijan etc.). The data set comes from the IMF's Government Finance Statistics (GFS).

3. Trends and developments of fiscal decentralization in selected EECs

Fiscal decentralization tends to be a relatively recent phenomenon in emerging market economies such as EECs. In these countries, the two main reasons for the emergence of decentralization are either failure in economic planning by central governments and/or the changing international economic and political conditions (Smoke, 2001). In these circumstances, decentralization has been promoted as a means to achieve economic gains rather than the more traditional objective of decentralization to deliver a better setting for ethnic, religious, cultural or historical differences within nation-states (Rodríguez-Pose and Gill, 2005). However, in order to ensure sound and efficient fiscal decentralization, three main principles should be followed, *i.e.* clarity of roles and transparency, an explicit and well-defined measure of autonomy and developed institutional capacity (Dabla-Norris, 2006). As EECs have considered these principles differently, the process of fiscal decentralization in emerging market economies in Europe has resulted in a large variety of devolved systems, with varying degrees of fiscal, administrative and political powers being awarded to subnational governments.

The combination of efforts aimed at consolidating macroeconomic stabilization during the early years of the transition, together with the fundamental structural changes in the economy, are reflected in the fiscal decentralization processes in many EECs. In general, these processes have been rapid, haphazard and largely nontransparent, with the emerging system of intergovernmental relations holding important implications for budgetary developments (Dabla-Norris, 2006).

Therefore, some more developed EECs have also promoted institutional settings and processes that allow effective fiscal decentralization. The uneven nature of the degree of decentralization among EECs also reflects their demographic, ethnic, historical and political differences. For instance, countries with larger populations or geographic areas (such as Russia, Poland and Ukraine) require a greater decentralization of public service provision to subnational governments compared to smaller countries like Macedonia, Moldova and the Baltics (Alesina and Spolaore, 1997; Arzaghi and Vernon, 2005; Panizza, 1999; Dabla-Norris, 2006). Similarly, ethnically diverse countries such as Russia

also have a fairly high need for fiscal decentralization compared to other, smaller and ethnically more homogeneous transition economies (such as Slovenia). At the same time, political factors such as accession to the EU can be seen as providing an impetus for reform in countries like the Czech Republic, Poland and Hungary. In countries such as Croatia and Macedonia ethnic conflict may have played a significant role in shaping the nature of fiscal decentralization. Differences in institutional, economic and political developments can also be expected to influence the extent of decentralization across these countries (Dabla-Norris, 2006).

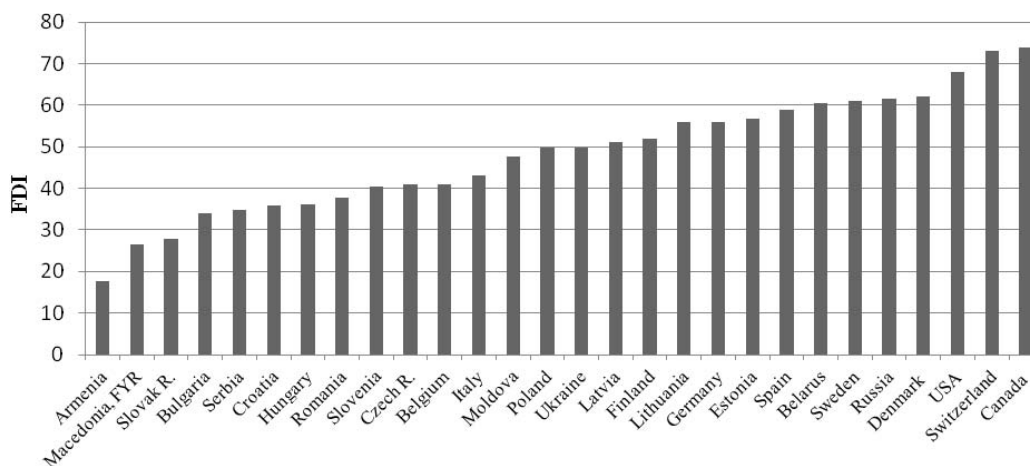


Figure 1: Average FDI in selected EECs and OECD countries

Note: The data set for EECs is based on available data averages for the 1993-2010 period. The data for developed OECD countries are derived from Vo (2009).

Sources: IMF (GFS), 2012; Author's own calculations

In general, EU members of the EECs have developed progressively towards increased local decision-making authority over expenditures, in combination with a fiscal system that is generally transparent and stable. But again, the extent of fiscal decentralization varies among the economies. Estonia, Lithuania and Latvia have the highest FDI (averaging 56.6, 55.9 and 51.2, respectively, in the period 1993-2010) while the lowest levels are exhibited in Slovak Republic and Bulgaria (averaging 27.9 and 33.9, respectively, in the period under consideration) (see Figure 1 and Table 1)⁷. While there is a consensus that EU members of EECs have made considerable progress in carrying out decentralization and establishing institutional settings that are supportive of decentralization, the persisting weaknesses of the existing systems are preventing

7 It is obvious that high-income OECD countries generally exhibit higher levels of fiscal decentralization than EECs (see Fig. 1). Further, the average FDI of EECs is around 42 and is well below the average level attained by developed OECD countries (around 50; this difference is statistically significant as it is confirmed with an independent t-test ($p=0.02$)). Indeed, the degree of fiscal decentralization is expected to be higher in developed countries (i.e. OECD) than in emerging market economies (i.e. EECs).

full exploitation of the benefits of decentralization. In some countries, grants offered by central government which constitute a large part of municipal revenues continue to be subject to negotiations every year. Although the fiscal autonomy of many new EU member state local governments is quite broad, the main tax revenue for local budgets comes from personal income tax for which the central government sets both the rate and the base (UNDP, 2008).

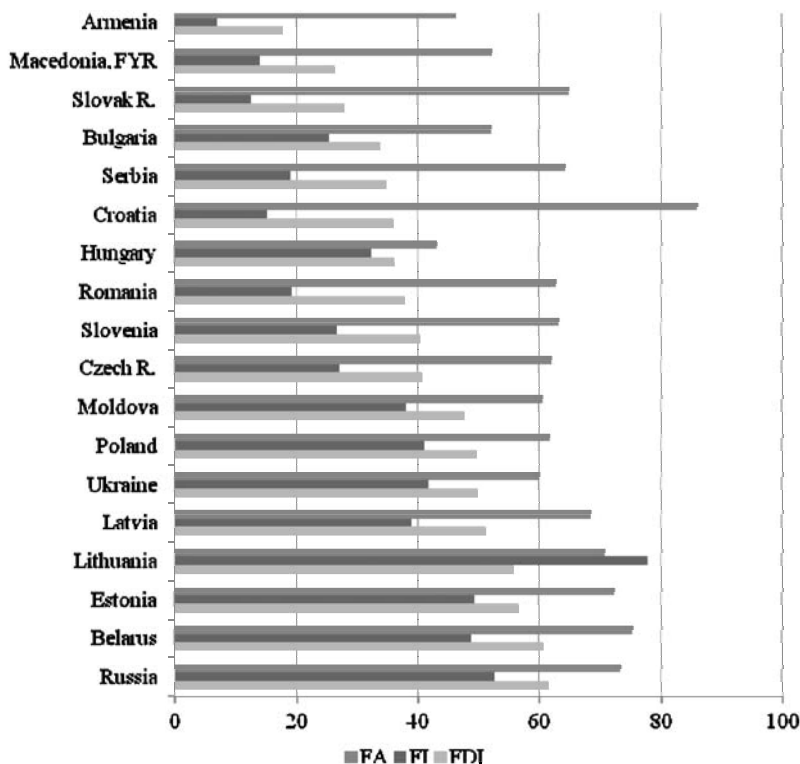


Figure 2: Average FA, FI and FDI in selected EECs (1993-2010)

Sources: IMF (GFS), 2012; Author's own calculations

On the other hand, among non-EU members of the EECs the local environment for decentralization is typically unfavorable. Consequently, the fiscal decentralization process has made relatively little progress⁸. The highest degree of fiscal decentralization is found in Russia (whose *FDI* averages out at 61.5), particularly due to its size and diversity. Surprisingly, Belarus (60.6) is also among the forerunners in fiscal decentralization (see Figure 1 and Table 1). However, the executive power structure there is organized in a top-down manner and reports directly to the president, which undermines the accountability of the executive branch to locally elected people's representatives. In contrast, Armenia (17.7) and Macedonia (26.5), both small unitary

8 However, the independent t-test reveals that the difference between both sub-regions is not statistically significant ($p=0.842$).

states, are the most fiscally centralized countries in the subregion⁹. In the group of non-EU members, in particular in Transcaucasia and other former Soviet states, it has been noticed that the system mainly reflects the old Soviet modes of doing business (the system of oblasts and rayons) and no significant real steps for reform are being taken. Subnational governments remain de-concentrated central units of central government and major reforms in the functioning of the state are needed in order to strengthen accountability at the national and local level and to develop civil society (UNDP, 2008).

Table 1: Fiscal decentralization index (FDI) in selected EECs in the 1993–2010 period

	Fiscal Autonomy (FA)	Fiscal Importance (FI)	Fiscal Decentralization Index (FDI)	FDI 1993–2000*	FDI 2001–2010*
Armenia	46.4	6.9	17.7	n.a.	17.7
Belarus	75.4	48.9	60.6	n.a.	60.6
Bulgaria	52.1	25.4	33.9	38.7	30.1
Croatia	86.0	15.2	36.0	40.5	32.8
Czech R.	62.0	27.1	40.8	40.9	40.8
Estonia	72.4	49.4	56.6	58.7	46.5
Hungary	33.4	39.1	37.6	37.6	35.3
Latvia	68.5	38.8	51.2	57.2	48.2
Lithuania	70.8	77.9	55.9	55.9	n.a.
Macedonia	52.3	14.1	26.5	n.a.	26.5
Moldova	60.6	38.0	47.6	49.1	46.7
Poland	61.8	41.1	49.7	49.7	n.a.
Romania	62.8	19.3	37.8	35.8	54.3
Russia	73.3	52.6	61.5	87.9	62.9
Serbia	64.2	18.9	34.8	n.a.	34.8
Slovak R.	64.9	12.6	27.9	28.6	26.3
Slovenia	63.2	26.7	40.4	40.0	40.7
Ukraine	59.9	41.8	49.8	57.0	48.4
<i>Min</i>	<i>43.1</i>	<i>6.9</i>	<i>17.7</i>	<i>28.6</i>	<i>17.7</i>
<i>Max</i>	<i>86.0</i>	<i>77.9</i>	<i>61.5</i>	<i>87.9</i>	<i>62.9</i>
<i>Average</i>	<i>63.3</i>	<i>32.6</i>	<i>42.5</i>	<i>48.4</i>	<i>40.8</i>

Sources: IMF (GFS), 2012; Author's own calculations

Notes: *Only limited data is available for the both sub-periods under consideration.

FA, FI and FDI calculations are based on equations (1), (2) and (3), respectively, where: OSR = Local Govt. Revenue – Grants for Local Govt.; E = Local Govt. Total Outlays; TE = Budg. Cen. Govt. Total Outlays + Local Govt. Total Outlays – Grants for Local Govt.; n.a. – not available.

The indicators of fiscal autonomy (FA) and fiscal importance (FI) of subnational governments of the Eastern European region shows that Hungary and Armenia have the lowest average level of FA and FI in the 1993-2010 period, respectively (see Table 1 and Figure 2). In many EECs, the financing of subnational governments is mainly

9 When comparing the results with the results of Vo (2009), Armenia has the same (average) level of fiscal decentralization as Indonesia (in 1999) and Russia as Brazil (in 1998) or Sweden (in 2005).

achieved through tax sharing and transfers from other levels of government. Only a few advanced reformers have devolved some revenue autonomy to subnational governments, although they still rely on the central government for the main part of their revenues (Dabla-Norris 2006). For example, in the Czech Republic, the Slovak Republic, Hungary, and Poland, the share of 'own' revenue (over which they have policy control and collect themselves) ranges from 33 to 40 percent¹⁰. However, the low *FA* in Hungary, for instance, implies that subnational governments have low taxing power to cover costs occurred in the provision of public goods and services. On the other hand, as a consequence of the need to redesign the public sector revenue system during the transition from a centrally-planned to a market economy, central governments have also tried to reduce money transfers while increasing local revenue sources, such as taxes, in an effort to create more self-sufficient subnational governments. In this respect, Croatia seems to have the highest fiscal autonomy as, in contrast to many other EECs, local governments in Croatia have been provided with 'real' fiscal resources and have the potential to realize real responsibilities. However, the degree of tax efficiency depends largely on the real autonomy of subnational governments in determining their own tax base¹¹.

As also seen in Table 1 and Figure 2, *FI* ranges from as high as 77.9 in Lithuania and 52.6 in Russia to 6.9 in Armenia. Indeed, despite the systematic approach the Armenian government is taking to local government (finance) reform, a substantive criticism of Armenia's decentralization reform is that the degree of decentralization Armenia is pursuing is quite limited, with a relatively narrow scope of responsibilities and revenue sources assigned to the local level (UNDP, 2005). However, the level of fiscal decentralization does not always match expectations, with Lithuania – a small and homogeneous country – having, at least on paper, the highest level of fiscal (expenditure) decentralization. In contrast, the ethnic diversity of the Slovak Republic and Macedonia are not reflected in high fiscal decentralization¹².

Finally, Figure 3 shows the evolution of the *FDI* for selected EECs across time. Apparently, many countries exhibit a considerable amount of within variation for

10 Nevertheless, some of the advanced reformers in EECs (including Hungary and Poland) have the lowest tax sharing rates, whereas in Russia and Ukraine revenues from taxes shared on a derivation basis continue to account for well over 60% of regional revenue receipts (Dabla-Norris, 2006).

11 Generally, a low level of revenue autonomy, particularly among the non-EU members of the Eastern European region, reflects a weak subnational administrative capacity, political constraints, and central limits on subnational tax rates (Rodríguez-Pose and Krøijer, 2009).

12 Indeed, expenditure autonomy at the subnational level has been limited in many EECs. In a number of countries, such as Moldova, Romania and Russia, the distribution of spending responsibilities remains unclear (Dabla-Norris, 2006). In Bulgaria, 90% of actual local expenditure in 1999 was not under the control of local authorities (McCullough *et al.*, 2000). This is in contrast to the situation in Hungary, Poland, Estonia, Latvia and the Czech Republic where the law grants subnational governments greater flexibility in service delivery (Dabla-Norris, 2006).

our decentralization measure (*FDI*). Since the beginning of the 2000s, Croatia, Latvia, Moldova and Ukraine exhibit an increasing trend of fiscal centralization. By contrast, Slovenia and the Czech Republic show relatively small time variations with some increasing trends of fiscal decentralization in the same period. Nevertheless, the fiscal decentralization index has declined in most EECs even when comparing the averages of two sub-periods (the only exceptions are Romania and Slovenia) (see Table 1). Accordingly, a concerning trend of fiscal centralization in the region is visible¹³.

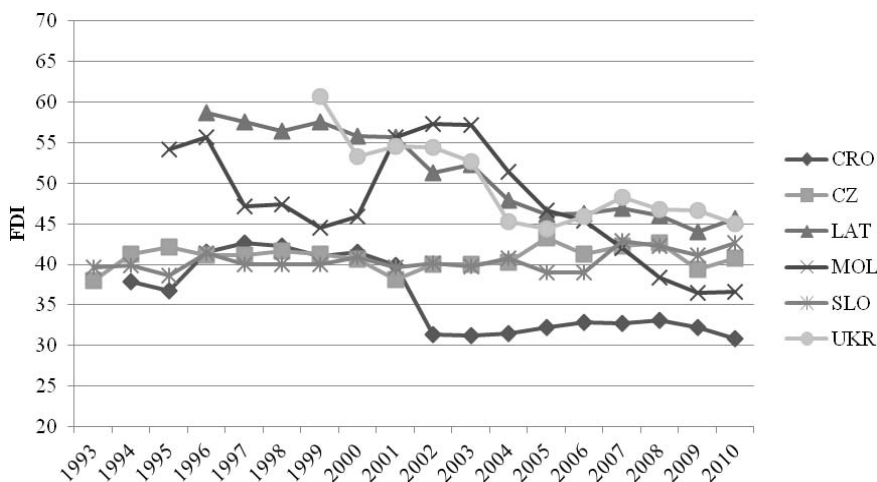


Figure 3: FDI developments in selected EECs in the 1993-2010 period

Sources: IMF (GFS), 2012; Author's own calculations

4. The impact of fiscal decentralization on economic growth and the size of the public sector in EECs

4.1. Fiscal decentralization and economic growth

No formal theory directly links decentralization and growth. Arguments in favor of fiscal decentralization, originally centered around the works of Tiebout (1956), Musgrave (1959), and Oates (1972), claim it promotes higher efficiency, a better public service, greater transparency and, eventually, economic growth. The best known mechanism through which fiscal decentralization may lead to greater overall economic efficiency is the so-called 'fiscal decentralization' theorem: the fact that, due to informational advantages and a better insight into the preferences of citizens, subnational governments are more capable than national governments to tailor the provision of public goods and services to the needs of local citizens (Tiebout, 1956; Klugman, 1994). While most 'theories' on fiscal decentralization indeed argue for a positive association between both variables,

13 Nevertheless, the paired samples t-test shows that significance value (p) is approaching significance, but it is not significant ($p=0.122$). Therefore, we cannot confirm that there is a statistically significant difference between FDI levels when comparing both sub-periods in the whole Eastern European region.

the empirical evidence is ambiguous. Although fiscal decentralization is often associated with the already mentioned greater transparency and better capacity of governments to adapt policies to subnational needs, it can be difficult to connect these factors to increased economic performance. Especially in countries lacking the appropriate institutions, such as non-EU members of the Eastern European region, legal systems, human capital and economic growth rates are unlikely to rise as a direct result of fiscal decentralization. Indeed, the opposite is more likely to happen, with decentralization having an inverse effect on economic growth (Rodríguez-Pose and Krøijer, 2009)¹⁴.

Most empirical studies highlight a positive correlation between both variables, in particular for developed economies, the majority of which are ‘mature’ democracies. For instance, Piriou-Sall (1998), Yilmaz (1999), Thießén (2000, 2003), Eller (2004), Ebel and Yilmaz (2002), Iimi (2005), Enikolopov and Zhuravskaya (2007), Baskaran and Feld (2009) and Buser (2011) show a positive relationship. Conversely, some studies find negative correlations, especially in the case of developing and emerging market economies (see Davoodi and Zou, 1998). Studies which focus mainly on European emerging market economies find a positive relationship (Ebel and Yilmaz, 2002), a negative relationship (Rodden, 2004; Rodríguez-Pose and Krøijer, 2009) and also no significant relationship (Feld and Dede, 2004; Bodman and Ford, 2006).

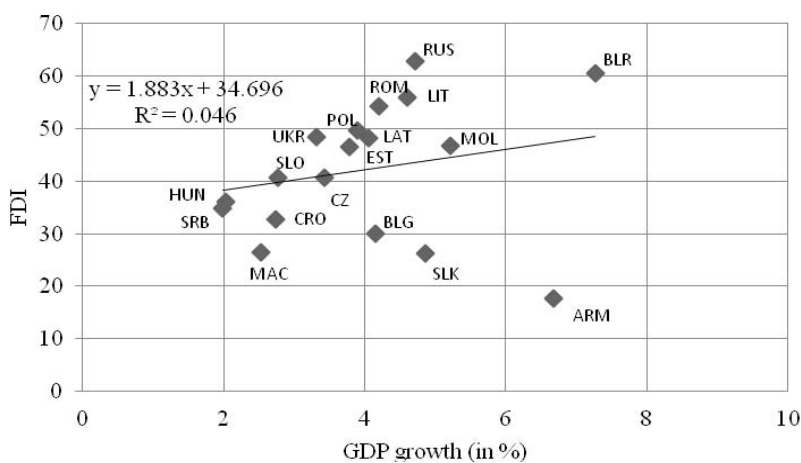


Figure 4: Correlation between FDI and GDP growth in selected EECs

Note: The data are based on available data averages for the 2001-2010 period.

Sources: IMF (GFS), 2012; Author's own calculations

In Figure 4, we plot the average level of *FDI* against average economic growth for the sample (2001-2010) in each considered EEC. The figure indicates there is

14 This scepticism is fuelled by problems often associated with fiscal decentralization, such as increasing fiscal deficits, corruption, inadequate governmental decisions, the stronger influence of interest groups, and greater interregional inequalities, which may result in lower economic performance (Prud'homme, 1995).

substantial between-variation in both the level of economic growth and the *FDI* among selected EECs. The bivariate plot indicates a positive, but weak relationship between the variables. Indeed, the correlation coefficient (r) for the whole Eastern European region is 0.21, while a weaker relationship is noticed for EECs which are EU members ($r=0.13$) and represents only around half of the correlation coefficient of non-EU members ($r=0.28$). These facts suggest that fiscal decentralization indeed plays some role in accelerating economic performance, albeit a relatively small one. Similarly, Rodríguez-Pose and Krøijer (2009) conclude that, while expenditure at and transfers to the subnational level have had a negative impact on economic performance in Central and Eastern Europe, locally imposed taxation has achieved some mildly positive economic benefits over time. In addition, many studies indicate that the success of decentralization processes is a consequence of not only the design of the decentralization model but, perhaps more importantly, of country characteristics and especially of the existence of strong effective institutions at all government tiers (Dabla-Norris, 2006). Indeed, Buser (2011) empirically confirms that the growth-enhancing effects of decentralization are much greater when supported by a sound institutional environment. This could be one explanation of why fiscal decentralization seems to have less success in emerging market economies of the Eastern Europe region. Nevertheless, as the presented sample figures (Figure 4) do not control for other important (external) determinants and can therefore only provide some preliminary evidence, further empirical work should provide more robust tests of the relationship between the variables.

4.2. Fiscal decentralization and the size of the public sector

Whether fiscal decentralization leads to a reduction or an increase in the size of the public sector is a well-researched question within the field of fiscal federalism. Most of the empirical work on decentralization and government size attempts to test Brennan and Buchanan's Leviathan hypothesis (see Feld, Kirchgassner, and Schaltegger (2003), for an exhaustive literature review). The previous empirical results are rather inconclusive. On one hand, Oates (1972), Edhaie (1994), Rodden (2003) and Ashworth, Galli and Padovano (2012) find that decentralization generally has a negative impact on the growth of governments. On the other hand, Stein (1999), Heil (1991), Stein (1998), Jin and Zou (2002) and Cassette and Paty (2010) conclude that fiscal decentralization leads to an expansion of the public sector. Nevertheless, many of these studies conclude that fiscal autonomy leads to 'smaller states' while grants have a positive impact on public sector size.

Few empirical surveys have measured the impact of fiscal decentralization on the size of the public sector in EECs. For instance, Ebel and Yilmaz (2002) find that subnational tax autonomy has a negative and significant impact on public sector size in ten transition countries for the 1997-1999 period.

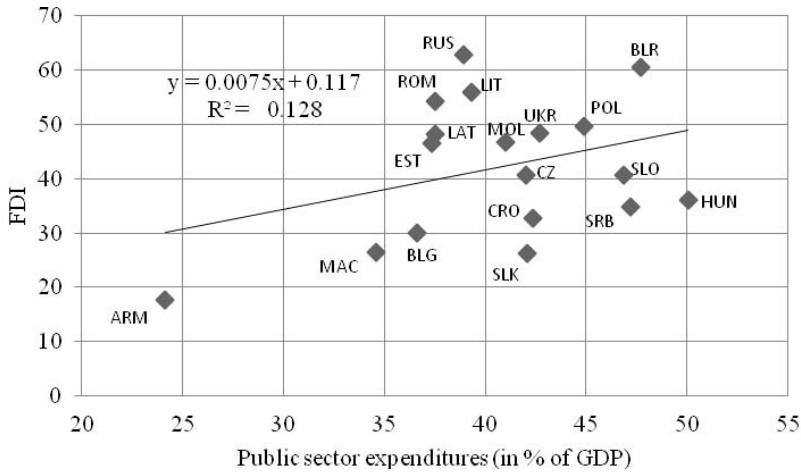


Figure 5: Correlation between the FDI and public sector expenditures (in % of GDP) in selected EECs

Note: The data are based on available data averages for the 2001-2010 period.

Sources: IMF (GFS), 2012; Author's own calculations

In our analysis, as shown in Figure 5, those EECs with a more fiscal decentralized arrangement generally experienced a larger growth of public sector (with correlation coefficients (r) of 0.36) for the 1993–2010 period. However, there is a significant difference between EU and non-EU member states in the Eastern European region. While EU members exhibit a weak negative correlation (with $r=-0.26$) between fiscal decentralization and the size of government, non-EU members show a relatively stronger positive correlation (with $r=0.63$). Obviously, as suggested by Jin and Zou (2002), fiscal decentralization in non-EU members, which is primarily funded from sources controlled by the center, increases the size of subnational governments. Consequently, expansion of the public sector at the subnational level due to transfers from the center also forces the national government to grow. Moreover, the analysis also reveals that fiscal autonomy in both sub-regions is more closely linked to public sector size than fiscal importance¹⁵. Accordingly, the fiscal autonomy of subnational governments plays a relatively important role in determination of public sector size in the region, albeit not in the same directions for both sub-regions. While fiscal autonomy reduces the public sector in the EU members, it causes public sector growth in the non-EU members of the Eastern European region (probably due to corruption, inadequate governmental decisions, rent-seeking, and other phenomena that accompany decentralization processes). However, these relationships need to be confirmed by further empirical research.

¹⁵ Indeed, the correlation between *FA* and the public sector size in EU members of the region is -0.54 (in non-EU members $r=0.67$), while the correlation between *FI* and public sector size amounts to -0.16 in the EU members (in non-EU members $r=0.53$).

5. Conclusions

Most Eastern European countries started the transition process by restructuring their political, economic and state systems as a reaction to the political and economic failure of the former authoritarian centralized systems. Since there is no optimal degree of fiscal decentralization, the level of decentralization has primarily been shaped by political, historical and ethnic realities, and its effectiveness has been influenced by the institutional design and capacities of the various levels of government. The need for decentralization and devolution of power from central to subnational authorities has become one of the priorities in changing the state in most of these countries to make it more democratic and efficient in delivering public services and promoting economic and social development. While fiscal decentralization has been a dominant feature of the reform process in the Central European, South-East European and Baltic states, this is not the case in many countries of Transcaucasia and some other former Soviet states. Authoritarian legacies of the past, the capture of power by certain elites or lack of political consensus on state reform has either prevented decentralization from appearing on the reform agenda or, when it reached the agenda, little has been done to ensure genuine progress towards implementation. However, in order to have sound and efficient fiscal decentralization, three main principles should be followed in EECs, *i.e.* the clarity of roles and transparency, an explicit and well-defined measure of autonomy, and developed institutional capacity.

In this respect, the article applies a recent methodology for measuring fiscal decentralization (Vo, 2009) and examines the degree of fiscal decentralization in EECs over the last two decades. Conceptually, the measurement of fiscal decentralization was focused on the fiscal autonomy and fiscal importance of subnational governments. The empirical results show that the highest level of fiscal decentralization (centralization) among the non-EU members (in the Eastern European region) is found in Russia (Armenia) and among the EU members in Estonia (Slovak Republic) in the 1993-2010 period. Furthermore, the empirical results show that, in general, the degree of fiscal decentralization is statistically higher in developed OECD countries than in most emerging market economies (*i.e.* EECs). However, in contrast to our expectations, there has been a concerning downward trend of the fiscal decentralization index (FDI) in the majority of the region over the last two decades. Nevertheless, fiscal decentralization is only one dimension of decentralization, which may not lead to devolution and the empowerment of local citizens and institutions if not accompanied by administrative and, above all, political decentralization. Consequently, fiscal decentralization (including other dimensions of decentralization) remains an important task that must be achieved in order to ensure progress in the region in the near future.

Moreover, the article also examines the effects of fiscal decentralization on growth and public sector size in EECs. The analysis shows some evidence that increases in public sector decentralization are associated with higher income levels. However, the growth-enhancing effects of fiscal decentralization are expected to be much greater when supported by a sound institutional environment. Therefore, the EECs, in particular

non-EU member states of the region, should improve their administrative and technical capability in order to establish sound and effective fiscal decentralization. Furthermore, our results provide some evidence that fiscal decentralization in EECs generally might lead to an increase in the size of government, albeit there are significant differences between EU and non-EU member states. Nevertheless, further empirical work is needed to provide more robust tests of the relationship between the variables.

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