Studia Regionalne i Lokalne
Nr 2(60)/2015
ISSN 1509-4995
DOI: 10.7366/1509499526003

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Development of international financial centres in Central and Eastern Europe during transition period and crisis. The case of Budapest

Abstract: This paper examines the development of international financial centres (IFC) in Central and Eastern Europe (CEE). The study argues that the development of the financial services in CEE is characterized by external dependency, which is manifested in the form of hierarchical command and control functions over CEE financial subsidiaries within the West European IFC network. The paper quantitatively compares the factors of IFC functions of Budapest in comparison to those of Warsaw and Prague. It argues that despite the lack of market evidence showing signs of a regional-centre focus during the transition period, there are some signs of IFC formation. The paper assesses the uneven impact of the global economic crisis upon CEE financial centres and confirms that their development trajectories became more differentiated as a result of the crisis. The steady decline of Budapest during the second half of the 2000s was accompanied by the rise of Warsaw. Our analysis concluded that Budapest, despite its earlier endeavours, most likely lost the competition to become an international financial centre.

Keywords: international financial centres, Central and Eastern Europe, post-socialist transformation, FDI, IFC functions, crisis.

Rozwój międzynarodowych centrów finansowych w Europie Środkowej i Wschodniej w okresie transformacji i kryzysu. Przykład Budapesztu

Streszczenie: Autor analizuje rozwój międzynarodowych centrów finansowych w Europie Środkowo-Wschodniej (EŚW). Badania pokazały, że rozwój usług finansowych w krajach EŚW charakteryzuje zależność zewnętrzna, gdyż tamtejsze filie firm o tym profilu są kontrolowane przez centrale zlokalizowane w krajach Europy Zachodniej. Autor porównuje w ujęciu ilościowym stopień rozwoju funkcji finansowych w Budapeszcie, Warszawie i Pradze. Dowodzi, że pomimo braku wyraźnych przejawów tworzenia międzynarodowych centrów finansowych w okresie transformacji można obecnie dostrzec sygnały świadczące o powstawaniu takich centrów. Czytelnicy znajdą w artykule ocenę wpływu światowego kryzysu gospodarczego na centra finansowe w krajach EŚW i potwierdzenie wzrostu zróżnicowania trajektorii ich rozwoju. W szczególności obserwowany był stały spadek znaczenia Budapesztu pod tym względem, szczególnie pod koniec pierwszej dekady XXI w., któremu towarzyszył jednoczesny wzrost roli Warszawy. Zoltán Gál zaznacza na koniec, że Budapeszt, pomimo wcześniejszych osiągnięć, najprawdopodobniej przegrał konkurencję jako międzynarodowe centrum finansowe.

Słowa kluczowe: międzynarodowe centra finansowe, kraje Europy Środkowo-Wschodniej, transformacja postsocjalistyczna, bezpośrednie inwestycje zagraniczne, kryzys gospodarczy.

Introduction

Global financial capital has played an important role in all transition economies. Foreign direct investment in the banking sector is closely connected to the transition process in Central and Eastern Europe (CEE) and has received considerable attention from both a theoretical and an empirical perspective. However, much less attention has been devoted to the major determinants of international financial centre (IFC) formation within the 'de-nationalised dual banking system' of CEE (Gál, 2014).

During the last three decades the financial services industry has experienced major transformations in which the largest market players, instiutions, and global hubs, namely IFCs, have gained importance. Although market activity is spreading to new corners of the world, a powerful process of centralization is reinforcing the traditional dominance of financial capitals, led by London and New York, and to a lesser extent by second and third tier international financial centres (Faulconbridge et al., 2007; Engelen and Grote, 2009; Gál, 2010a). Despite the growing body of literature (Grote, 2008; Engelen, 2007; Wójcik, 2007; Boschma and Ledder, 2010; Zademach and Musil, 2012) on the development of global financial centres, very little attention has been paid to the evolution of financial centres in peripheral or emerging regions (Poon, 2003, Karreman and van der Knaap, 2009; Zhao et al., 2013)

Despite the geographic dispersal of financial services, the increased importance of central coordination and control functions is the main characteristics of IFCs. A financial centre is defined as a large city with an agglomeration of the headquarters of the largest financial firms providing all banking and financial services, nationally or internationally (Porteous, 1999; Cassis, 2010). The term is used for strategic urban locations where the financial sector plays a dominant role in the local and/or global economy, as measured by the share of financial services in national income, GDP, or in total employment, and by the presence of foreign banks. Apparently, financial sector agglomeration reflects and reinforces 'real economy' concentrations, as firms tend to agglomerate similarly to other advanced producer service providers in order to achieve the location advantages of urbanization economies (Porteous, 1999). Financial centres can be classified, in terms of their geographic influence, as national, regional (international functions with macro-regional scope), and global centres (Zhao et al., 2004). A global centre is defined as a city with a strong presence of a wide variety of financial players (investors, brokers, securities firms, investment banks, etc.) with extensive international activities, while the domestic centre is dominated by firms with a domestic scope of operations.

These international financial centres, which are also referred to as global cities, have developed a dense network of linkages, and provide a full-spectrum of advanced producer services. Most of the major international financial centres are also world cities (Sassen, 2004; Taylor, 2004). These global centres have massive concentration of resources that allow them to maximize the benefits of information and connectivity, with other centres generating asymmetric power relations executed through their affiliates, which are the key mediators of their command and control functions. Key social and information-generating processes occurring in IFCs, such as face-to-face contact, are facilitated by a high degree of social proximity. IFCs are also a gateway for financial services for other lower tier centres. The emergence of IFCs depends on several factors, among which the most important are: (1) the size of the domestic economy, (2) the information hinterland, and (3) path dependence (Cassis, 2011). Scale economies, together with the diversity of the financial sector, are a key factor explaining the formation of a financial centre. The concept of an information hinterland defines a geographical area for which the financial centre provides an ideal access point for the exploitation of valuable information flows. The path dependence approach refers to a historical incidence that would have long-run cumulative consequences in the evolution of financial centres (David, 1988). The development trajectories of the Central and Eastern European financial centres, as well as the impact of the economic crisis, are likely to differ from those of higher-rank international financial centres.

Central and Eastern European finnacial centres are neglected from this point of view, and Karreman's (2009) or Wójcik's (2007) studies on contemporary financial geographies of Eastern Europe do not provide a detailed overview of the development of financial centers, and do not consider the development of IFCs' functions in the region. Despite its re-integration processes into the global financial markets, little attention has been directed towards the development of financial centres in Central and Eastern Europe. This paper examines the financial centre function of Budapest in comparison to those of Warsaw and Prague, two other significant financial centres in the contemporary CEE region, and how they are integrated into the network of established European financial centres. As the development of the financial sector in European emerging markets is largely dependent on foreign investments, explicit attention is directed to determine which CEE centres exhibit sufficient power to attract multinational financial service firms and develop certain international functions. The paper examines whether the concentration of command and control functions over CEE within the Western European IFC network make it possible to develop paralell IFC function in CEE capital cities.

The paper explores the international financial centre function of Budapest relative to Warsaw and Prague, assessing the preconditions (including the main indicators of banking & capital markets) for the creation of a regional centre. It presents the requirements for the formation of an IFC and discusses arguments about the ongoing competition among the CEE metropolises. The paper also raises the question of whether the CEECs need to develop their own regional financial centres, or whether they could instead rely on existing 'western' IFCs. This study also examines the impact of the recent global economic crisis on the future of Central and Eastern European financial centres. This raises the question of cross-border financial exposures and the related risks of financial contagion, as well as of asymmetric shifts in capital flows between West European and CEE financial centres during the crisis.

From the methodological point of view, both qualitative and quantitative data have been collected. Primary data is collected from national statistical offices, central banks, and private financial firms' reports (Raiffeisen CEE Banking Reports), as well as from the websites of international financial organizations (e.g. Bank of International Settlements, World Federation of Exchanges). We also used consultancy firms' reports. With regard to the development of the financial centre functions of Budapest, expert interviews were conducted with the stakeholders of the Hungarian banking sector and policy makers in 2007.

The paper is organised as follows: the first section summarises the impact of transformation on IFC formation. The second section examines the development of the international financial centre function of Budapest, as compared to Warsaw and Prague, assessing the preconditions for the creation of a regional centre transition using quantitative indicators. The third section asseses the impact of the global crisis on Central and Eastern European financial centres. Finally, in the concluding section, key findings are summarised.

Impact of transition on the formation of International Financial Centres

Since the early 1990s CEE countries went through fundamental political, economic, and institutional transitions on the way from a centrally planned economic model to an open market economy. Structural adjustments were accompanied by the rapid internationalization and re-integration of CEE countries into the global economy, and later – by European integration and accession into the European Union.

Most of the literature studying the transition process has described the transformation and the (re)-integration of the region into the global capitalist system as a linear convergence with the advanced market economies, following the path of liberalization and privatization. However, there is considerable diversity among Central and Eastern European countries, due to their different legacies, varieties of implemented transformation models, and economic policies (Sokol, 2001).[1] The crisis further strengthened these different developmental trends, resulting in diverging economies and regions within Central and Eastern Europe.

Concerning IFC formations there were three parallel processes, namely the *post-socialist transition, financialization,* and *world-city formation*, which not only accompanied but also influenced the conditions of the development of financial centers explored in this study.

*The **post-socialist transition*** was characterised by external pressure from the intertwined virtues of neoliberalism, foreign capital, and international institutions (e.g. IMF). The international situation in the context of which the change of

[1] Sokol (2001) puts the CEE transition into the context of the centre-periphery model and divides the regions by different subregions: 'Super-periphery A' (ECE and Baltic states) have a more solid economic structure, legacy of modernization, and more experience with market and political democracy. In 'Super-periphery B' (former Soviet Union) countries, liberal-capitalist economic and political structures were relatively underdeveloped.

regime was to take place in CEE was crucially shaped by two major currents of the twentieth century, namely, *globalisation* and *(neoliberal) economic paradigm change*. These developments not only contributed to the fall of the Soviet bloc, they also created rather strict economic conditions for post-communist countries about to reintegrate into the global market economy. In the course of this transition, CEE countries had to adjust to the *modus operandi* of a world economy fraught by shocks and uncertainties (debt crisis, money market and currency crises), driven by competition, which could sometimes be extremely disadvantageous. The forerunners of economic transition, like Hungary, were exceptionally vulnerable and had to act as an experimental ground for the dominant interests of foreign capital (Gazsó and Laki, 2004). According to Gowan's (1995) view, the transition, and especially the 'shock therapy' approach, was designed to allow Western capital to conquer the Eastern European markets, to capture cheap production lines and create dependent West-East economic relations. As a result, the chief characteristics of this blend of 'outer directed capitalism' or the 'dependent market economy' model (DME) included a relatively fast recovery from the transformation crisis but also a dominant role of foreign capital in the process of stabilisation (Szelényi et al., 2000).

Although there is no single indicator of international integration, the transition process is heavily influenced by dependence on foreign financial inflows, and generally by the high level of ***financialization*** (Myant and Drahokupil, 2012). Foreign Direct Investment (FDI) inflow into CEE economies has been a vital factor in the first stage of privatisation, and FDI became the predominant type of incoming capital investment in the first stage of the economic transition. The banking and insurance sectors were the primary targets of strategic foreign investors, resulting in significant inflows of FDI into these sectors, connected mainly to the privatisation of state-owned banks. The other forms of foreign capital inflows were also important in many countries of the CEE region. Indebted states (Hungary, Balticum) inherited or generated larger debts, and due to their 'fiscal alcoholism,' they remained dependent on foreign investors in public debt financing. Other forms of private flows, such as equity investment, increased as the local blue chip companies started to attract more foreign capital through revitalised local stock exchanges. The most important form of financialization was driven by an increase in domestic consumption credit.

The ***network of world cities*** was another determining factor for the formation of IFCs in the 1990s. The rapid integration of economies through the structural effects of globalisation on production, financial transactions, and wealth creation have also stimulated the *formation of world cities* (Lo and Yeung, 1998). This is also accompanied by an unprecedented concentration of new tertiary and quaternary activities, such as various forms of financial and advanced producer services (Bourdeau-Lepage and Huriot, 2003, 2005). It is therefore not accidental that the Globalization and World City Network's approach ranked world cities on the basis of the concentration of advanced producer services (Taylor, 2004). The process of globalization, defined as increasing the cross-border integration of economic activities, is enhancing interlinkages and interdependencies among major cities located around the globe. The process of the formation of world cities impinges upon the transformation of the structural and functional role of these cities, focusing on the role of command and control activities (Sassen, 2004).

In this regard, pressures of globalization, particularly in the form of city competion for attracting investments and improving their position within international urban networks, have posed significant challenges for the transforming capital cities of CEE countries. The capital cities of the most dynamically reforming states of Poland, Hungary, and the Czech Republic were the most exposed to globalization and EU integration, and have been playing a leading role in their transforming economies.

The transformation and modernization of capital cities were characterised by two simultanous processes. *First, metropolitan transformation* has led to important structural changes in Central and Eastern Europe, characterised by economic restructuring, and by the shift from industrial to service economy. S*econd*, the *international integration* of the capitals of the Visegrád Group[2] into the global world-city networks has played a key role in the formation of IFCs. These cities started to internationalise their financial and business functions beginning in the early 1990s, while simultaneously searching for investors and a particular ‘niche’ in which to specialise in trans-national (European) and cross-border (regional) urban networks. Simultaneously, capital cities became gateway cities by attracting a significant number of western corporations, who placed their regional headquarters responsible for business operations in the entire CEE region there. The position of Budapest, Prague, and Warsaw was enhanced from the rank of cities of national significance to cities of European importance (Enyedi, 1998; Csomós, 2011).

Economic transition has been most beneficial for capital cities. It means that the overwhelming part of GDP is produced in the capital city-regions (in Hungary – 48%, in Slovakia – 60%). In the period 1995–2009, capital city-regions in CEE countries grew more rapidly than other regions and cities of the European Union (Gál and Lux, 2014). In fact, after two decades of city transformations, there is considerable rivalry and competition among CEE cities for access to resources, investments, and networks, which could diminish the overall competitive strength and cohesiveness of an enlarged European Union. If we take a closer look at the financial functions of competing capital cities and examine them in the context of financial market transitions, we can clearly see the emergence of winners and loosers.

[2] Czech Republic, Hungary, Poland, Slovakia.

Development of functions of national and international financial centres in Central and Eastern Europe – the rise and fall of Budapest

Revival of financial centre functions during the transition period

Transitions of the financial markets and changes in the urban fabric of national financial centres in CEE are seen as both path-dependent and path-shaping process, where history and the legacies of earlier modernization processes (catching-ups) in the region matter, but new trajectories are also possible (Sokol, 2001).

In the early 1990s, after 40 years of discontinuity during the communist period, Hungary's financial sector reintegrated into a global financial system that was shaped by powerful processes of globalization. A common characteristic of the spatial organization of the Hungarian banking system before and after the political transitions in the 1990s was an extremely high concentration of headquarters function in the capital city. This peculiarity could be explained by the mode of revival of the modern Hungarian banking system. A specificity of banking systems in transition economies is that financial markets did not emerge organically. With the separation of central banking and commercial banking functions in 1987, a two-tier system was established from above and was supervised by a central authority. At the same time financial resources were mainly concentrated in the capital cities as a legacy of the centrally managed state economy. Its main command and control functions were already strongly centralised in capital cities, like Budapest. In this sense, the new system practically reproduced the earlier Budapest-centred, over-centralised state-socialist mono-bank structure, even if more financial institutions were founded. Early privatisation dominated by foreign banks and EU regulations further reinforced these functions of financial centre.

As the centre of the national economy, Budapest is also the country's financial centre. International relations in the financial sector are administered via the capital city. All institutions and functions associated with these roles are located there. Budapest has the only stock exchange in the country. It concentrates the head offices of banks, insurance companies, specialised credit institutions, building societies, mortgage banks, and lease companies. The significance of the capital's special strategic geographical location in the national financial system also derives from the fact that important, so-called 'critical information' (i.e. making bank strategies, central data provision, access to the giro-system) flows exclusively via the centre. Institutions for maintaining contact with other IFCs are also to be found there. The number of financial sector employees in Budapest is equal to 40 thousand, which is 56% of the total country's workforce in this sector (2013).

Financial centres located at the top of the urban hierarchy concentrate the greatest amounts of capital. This results in significant regional disparities (Porteous, 1995; Leyshon, Thrift, 1997). In the case of Hungary, this means that 94% of banking capital stock is concentrated in Budapest. Since banks available for privatisation were exclusively located in Budapest, as were greenfield banking investments, in effect 100% of foreign capital invested in the sector was concentrated in the city. The common feature of CEE transition economies is the scarcity of locally founded banks.

Role of the foreign capital in the formation of financial centres and asymmetric power relations

Dependent market economies[3] of Central and Eastern Europe are heavy importers of capital, therefore the ratio of inward and outward FDI stock is much higher than in the EU-15, due to the low level of capital exports from these countries (Nölke and Vliegenthart, 2009). Foreign financial inflows and especially FDI have resulted in dramatic changes of ownership structures. In 1994, in the wake of the early transition crises, an overwhelming majority of the banks in post-communist countries were still state-owned. There was a double shift of ownership from the public to private sector and at the same time from domestic to foreign owners through privatisation. In contrast, in 2007 private foreign ownership already accounted for about 80% of banks' assets in the CEE region.[4] Hungarian financial markets, similarly to other CEE counterparts, remained rather bank-cented, and security markets played only a limited role. The only exeption in the region is the revival of the Warsaw securities market since the mid-2000s (Mykhnenko, 2007; Wójcik, 2007).

At the beginning of the 1990s, the Hungarian banking system – similarly to its Eastern and Central European counterparts – faced the problem of reintegration into international markets, while also witnessing the swift spread of foreign capital, which was to play a leading role in accelerating modernisation and privatisation. Unlike in the Czech Republic, where voucher-based mass privatization was followed by a relatively belated recapitalization and foreignization of the banking sector, or in Poland, where not only a belated banking reform but also a gradual and well-regulated privatization made much more room for the state and privately owned domestic banks, the rapid 'de-nationalisation' and foreignization of the Hungarian banking system was unique in the region in the begining of the transition period.[5] It created a peculiar ownership structure, differing from the majority of developed countries as well, in which *the share of foreign-owned banks* reached around 75% by 2000 (Gál, 2005). Foreign financial inflows have resulted in dramatic changes of ownership structures throughout the region. In 1994, in the wake of the early transition crises, an overwhelming majority of financial intermediaries in the post-communist countries were still publicly

[3] See: Nölke and Vliegenthart, 2009; Raviv, 2008.

[4] These figures are especially striking when we compare them with the average level for the EU-25, where the share of foreign-owned banking assets in total is less than one quarter. In the Euro area this figure is equal to 15.5%. Even the average for non-OECD countries is 50% (Gál, 2014).

[5] This rapid privatization of the banking sector can be explained by bankruptcies and the regulation of the supervision of the banking sector as well as *bank and credit consolidation* with significant state participation (its cost was equal 14% of the GDP by 1999).

owned. By contrast, in 2007, more than a decade later, private foreign ownership already accounted for about 80% of financial intermediaries' assets in the CEE region.

Traditional 'modernization theory' highlights the key role of foreign banks in institutional development, stability, and the increase of financial depth of the banking sectors, and emphasizes that FDI increased the host country's integration into the global economy (Wachtel, 1997; Várhegyi, 2002; Csaba, 2011). If we try to place the CEE region in the comparative typologies of capitalism following Nölke and Vliegenthart's (2009) argument, the primary source of investment in the CEE is foreign direct investment, not the stock market as in Liberal Market Economies (LME), or domestic credit as in Coordinated Market Economies (CME). Although FDI does play a role in the other capitalist models, the degree of external dependency is much more extreme in the CEE (Raviv, 2008). Foreign banks (understandably) followed commercial market-seeking principles, and even the governments of host countries were not active in gearing or 'diverting' them through various regulations towards addressing the development needs of their economies. 'Rather, they were always aimed at redressing the declining profitability of financial institutions operating in the already financialised economies of Western Europe. As a result, foreign financiers emerged as a powerful rentier class in Central Europe able to extract rent incomes far in excess of their profits in the west' (Raviv, 2008, p. 311).

DMEs are is characterised by an unequal power relation between the home countries and the CEECs through parent-subsidiary networks of TNCs. 'Dual banking system' model, characterized by the dominance of foreign-owned commercial banks, became common in these economies (Alessandrini and Zazzaro, 1999; Gál, 2005). Dual–economies literature argues that FDI generates typical core-periphery disparities between old and new Member States. That model, consisting of large foreign banks and small local/indigenous banks, displays strong dependence on foreign banks and their resources (external liabilities vs. local savings). Financial TNCs in the primary international financial centres have a massive concentration of resources that allow them to maximise the benefits of information and connectivity with other centres. Inter-linkages that are established between their subsidiaries and their parent bank generate asymmetric power relations executed through their affiliates (Karreman, 2009; Wójcik, 2007; Gál, 2010a). These power relations mediate strong command andcontrol functions over CEE countries within the international financial centre network from which these investments are controlled. Asymmetric power relations also play a significant role in the international financial centre function of Budapest, Warsaw, and Prague, and provide certain unfavourable preconditions.

As Central and Eastern European countries are largely dependent on foreign investors in finance, explicit attention is directed at determining which CEE financial centres attract multinational financial firms, and Karreman (2009) examined from which international financial centres these investments are controlled. The banking sector in the CEE region is predominantly commanded from the financial hubs of the neighbouring 'old' EU Member States.[6]

Factors of the formation of Budapest's IFC in comparison with its CEE conterparts

This section quantitatively examines the development of international financial centre function of Budapest, as compared to Warsaw and Prague, assessing the preconditions for the creation of an IFC. It also tries to find market evidence showing some signs of IFC formation, with a particular regional focus in the three cities.

As we noted before, the capital cities of Central and Eastern Europe became major gateways for FDI investments, and headquarters of TNCs' subsidiaries expansion towards new markets. Early GaWC[7] research (Beaverstock et al., 1999) reflects the increasing economic significance of these capital cities in CEE, and as a consequence they became an agglomeration of advance business services. On the basis of the agglomeration of banking, accountancy, legal, and advertizing services firms, capital cities of CEE have shown their visibility in the third level group of gamma world-cities, in line with other secondary European services centres (Hamburg, Munich, Berlin, Cologne) (Csomós, 2011). Prague, Warsaw, and Budapest were major centres in at least one category of high-order services. According to Taylor (2004), who examined the global network connectivity of banking firms, Warsaw ranked 9th in Europe, followed by Prague (17th) and Budapest (19th).[8]

Csomós (2011) compared these capital cities on the basis of their economic strength measured by GDP (PPS). In 2008, Warsaw, with 68Bn USD, ranked 85th (followed by Hamburg), Budapest with 53 Bn USD was 100th and Prague was the 106th. Functions of coordination and control can be measured by the number of corporate headquarters of domestic companies located in these capitals.[9] Multinational companies and banks prefer to hierarchically control local subsidiaries from the headquarters of their parent banks located in the IFCs outside the CEE region (Myant, Drahokoupil, 2010). From the emerging international financial centre funtions point of view, headquarters of locally

[6] Vienna, Stockholm, and Athens, among others, became gateways to the East and hosted the headquarters of large investors in the CEE, Baltics, and Southeastern Europe, respectively. The largest concentration of parent-subsidiary connections forms bridgehead centres (Moscow, Warsaw, Budapest) in the CEE.

[7] Globalization and World City Network

[8] Warsaw was the 25th most connetcted IFC worldwide according to the banking network connectivity in 2003.

[9] According to the Forbes Global 2000 database, in 2010 the world's 135th largest HQ city in CEE is Budapest, with 26 Bn USD aggregate turnover of the companies located there. Budapest is followed by Warsaw, which is only ranked 227th, and Prague with 238th place (with 11 and 10Bn USD turnover respectively). It has to be noted that while both Hungary and the Czech Republic are represented by single capital cities with a very high geographical concentration of HQ function, Poland is represented by three additional cities (Plock, Gdansk, and Lublin).

based multinational companies matter more as they concentrate their own control functions in Central and Eastern European IFCs (Gál, 2014).[10]

The next section summarises the factors of IFC functions through analysis of the selected indicators in the three capital cities (Budapest, Prague, Warsaw). Various data, such as employment figures, presence of foreign banks, depth of financial sector, and the size of stock markets, illustrate the main factors of the development of international financial centre functions.

Employment in financial services

Employment in the financial sector has the highest share (10.6%) in Warsaw, demonstrating the growing importance of financial centre functions (Table 1). The relative weight of its finacial sector corresponds with the share of the leading global IFCs. Contrary to Warsaw, Budapest shows the lowest relative weight of this sector, which also demonstrates higher volatility and very slow growth during the entire transition period.

Table 1. Share of Financial sector in total employment of the capital cities (%)

% of total employment	Budapest			Warsaw			Prague		
	1995	2002	2013	1995	2001	2013	1995	2001	2013
Financial Intermediation (K)	3.5	3.8	4.3	6.0	7.8	10.6	3.2	4.9	6.3

The relative importance of the financial sector in the three cities is evaluated by calculating location quotients (LQ).[11] According to the domestic LQ, Warsaw's financial sector dominance within the Polish economy is clearly marked by its almost five-folds (4.4) share in comparison to the share of that sector in nationwide employment (Table 2). In the case of Budapest the same ratio (2.0) rather indicates a stagnation, while Prague managed to increase the importance of its financial sector within the domestic economy. The intercity LQ compares the weight of finance of each city with the average structure of all three capital cities. While Budapest's position negatively deviates from the average, Warsaw's share significantly exceeds it, demonstrating the successful adaptation of the Polish capital to the requirements of the global economy, and the common tendency towards metropolization marked by the increasing weight of its financial sector.

[10] Budapest is a peculiar IFC in this sense, as it is the only centre that developed its own control functions due to the fact that the only Eastern European regionally based multinational bank (outside Russia and to some extent Slovenia), the OTP Bank, has its headquarters in Budapest.

[11] For the financial sector, the domestic LQ is the ratio of the share of that sector in the city employment to the share of that sector in the nationwide employment. It relates the city structure to the country structure, so identical city structures generate different domestic LQ values depending on the country structures. The intercity LQ is the ratio of the share of that sector in the city employment to the average share of that sector in the five capital cities. This LQ is independent of the country structures. It permits direct comparisons between the employment structures of the three cities.

Table 2. Domestic (Dom LQ) and Inter-city (IC LQ) Location quotients of capital cities on the basis of employment in the financial intermediation sector (2001)

NACE 1 rev. 1	Average employmen in 3 cities %	Budapest		Prague		Warszawa	
		IC LQ	Dom LQ	IC LQ	Dom LQ	IC LQ	Dom LQ
K (2001)	5.5	0.8	1.9	1.0	2.4	1.2	2.6
K (2013)	7.0	0,6	2.0	0.9	3.3	1.5	4.4

1 *Intercity LQ (IC LQ)*
2 *Domestic LQ (Dom LQ)*

Source: Bourdeau-Lepage, 2003, author's calulation based on data of Central statistical offices.

Size of banking sector within the economy

Banking assets of eight new Central and Eastern European Member States (who joined in 2004) was only a small fraction of the EU as a whole, 1.2% of the total EU-25 assets in 2005, and so only a small segment of the European banking market.[12] The Hungarian banking system was the smallest of the three countries, only slightly more than one-third of the Polish banking system (50 billion Euros).

Table 3. Overview of banking sector developments, 2005–2013

%	Czech Republic		Hungary		Poland	
	2005	2013	2005	2013	2005	2013
Bank assets (Bn EUR)	100	(159)* 190	78	(124)* 105	164	(274)* 339
Bank assets/financial assets, %	81.1	68.8	86.2	76.6	84.8	70.0
Share of foreign banks (% of total asstes)	94.5	83	84.5	67*	69.9	62
Banking assets/GDP	101.0	135	90.1	108.0	62.4	86.2
Loans to private sector/GDP	17.6	22.5	26.0	23.2	16.5	17.0
Loans to househods/GDP	12.7	28.4	17.2	23.7	31.0	37.0
Total deposit/GDP	62.7	86.7	39.3	43.1	32.9	47.5
Loans in foreign currency (% of total loans)	13	18	38.6	51	26.2	30.0
Loan-to-deposit, %	63.7	75.0	113	110	78.8	108.0
ROA (return on asstes)	1.4	1.4	2.2	0.5	1.6	1.1

* Data for 2009.

Source: central banks, CEE banking reports, Raiffessen Bank.

12 This was equal to the size of the Portuguese banking system or the assets of the Royal Bank of Scotland (in 2003), and almost three times smaller than the size of Deutsche Bank. The average bank size in this market was about 1.3 billion Euros.

Financial markets in the region remained rather bank-centred as a consequence of slowly developing capital markets (Mykhnenko, 2007). The share of banks in the financial sector assets is still around 70%. The depth of banking, measured by assets per GDP, was the highest in the Czech Republic (101 and 135% respectively) and the lowest in Poland (62.4 and 86%). Hungary with its figures ranked in the middle (Table 3). As for the banking sector, when measured by operational efficiency and profit indicators the Hungarian banking system proved to be the most at the beginning and the least efficient at the end of our research period.

Operational efficiency of the banking sector has improved significantly in the region after a relatively short transition crisis. However, prior to the recent 2008 crisis, banking sectors in CEE had become a major target of credit-fuelled growth. Foreign banks played a significant role in the transmission of contagion to transition economies.

Presence of foreign banks

The spatial concentration of foreign banks is an important indicator of the global integration of the financial center of the region. However, the clear indicator of a thriving international financial center is the increasing presence of private investment banks. As the economies recovered from the transition crisis and the

Table 4. Offices of 15 largest private investment banks in three CEE capital cities, 2005

	Warsaw	Prague	Budapest
J.P. Morgan	X	X	–
Merill Lynch	X	–	–
Morgan Stanley	–	–	–
Goldman Sachs	–	–	–
Deutsche Bank	X	X	X
Citibank	X	X	X
Bank of New York	–	–	–
Barclays	–	–	–
State Street	–	X	–
UBS	X	X	–
Nomura	–	–	X
Credit Suisse FB	X	–	–
Shroeders	–	–	–
Lehman Brothers	–	–	–
HSBC	X	X	X
Brown Brothers Harriman	–	–	–
Total	7 (2)	6 (1)	4 (1)

(1) Bank office is exclusively located in only one out of the three cities.

Source: Gál, 2010a.

EU expansion was completed, foreign investment banks such as Goldman Sachs, J. P. Morgan Chase, and Credit Suisse set up their offices in each of three analysed capitals. The presence of the 15 largest investment banks was examined in 2005 (Gál, 2010a). Despite the relatively low level of overall presence at that time, Warsaw proved to be the most attractive location, where seven investment banks had their representation, while only four such offices were opened in Budapest (Table 4). A relatively large and crisis-resilient Polish economy attracted more investment banks than all their counterparts put together. In 2011 Goldman Sachs opened its Warsaw investment banking office, considering Warsaw as an important financial hub with huge development potential for the whole region (Hashimoto, 2015).

Cross-border flows in the financial sector

Cross border financial flows and their direction (inflows-outflows, capital import-export) are one of the major indicators of the international integration of IFCs.[13] During the first phase of transition, FDI was the most important source of cross-border capital flows in CEECs, although, with varied timing, mainly because of the different privatisation timetables in different countries in the pre-crisis era (Figure 1). Data shows that Hungary lost its attractiveness even before the financial crisis. In terms of the stock of FDI in the sector, Poland stood out in 2007, with more than 20 billion Euros foreign investment demonstrating its greater potential to attaract new strategic investments in the Polish financial sector. Changes in FDI flows during the crisis period were substantial. While there was a smaller fall of FDI in the Czech Republic and a larger one in Poland in 2009, FDI stock in financial services was mainly characterised by growth, while in Hungary this indicator slightly decreased during the crisis (Gál and Sass, 2013).

There are significant cross-border transactions channelled through the networks of the West European parent banks and their local subsidiaries. About 50-70% of corporate lending and 60% of interbank lending in 2009 was the subject of cross-border transactions, which not only has an implication for increasing international integrartion of CEE financial markets by strengthening connectivity to the European IFCs, but also, these links generated imbalances in the banking system during the time of the crisis, as the CEE remained largely reliant on cross-border lending. Hungary experienced higher cross-border lending, which is expected on the basis of economic fundamentals, and the fact that it had developed significant vulnerabilities in the pre-crisis period. This resulted in the largest drop in cross-border lending (unlike Poland, which almost managed to maintain its international position, and the Czech Republic, where demand for cross-border lending remained low). Cross-border bank flows demonstrate that

[13] Although the data available on country level, due to the dominant role of financial centres these flows are conrolled and intermediated by financial institutions/subsidiaries located in the host IFCs.

Poland has leading position of attracting banking flows, while Hungary shows larger fluctuation in this sense (Table 5).

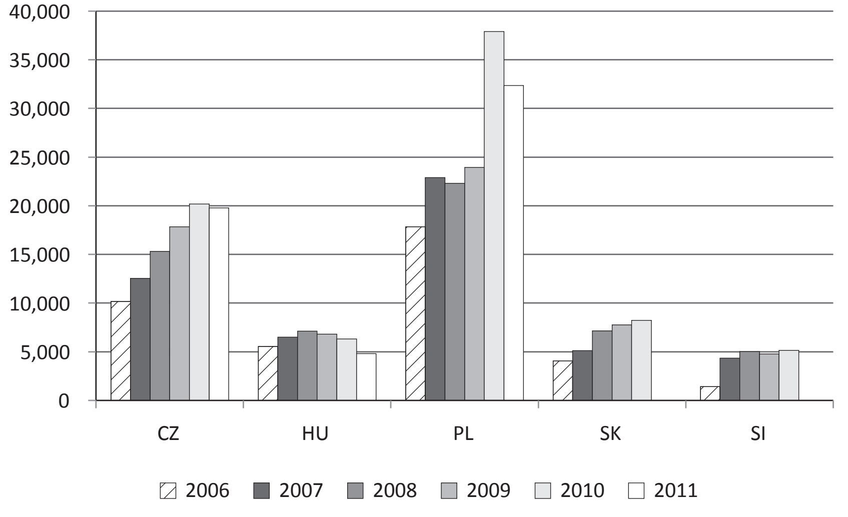

Figure 1. FDI stock in financial services, 2006–2011 (million Euros)

Source: National banks.

Another parallel process, namely the rapid surge in outward foreign direct investment (OFDI) generated by the cross-border activities of locally-based multinational banks, made Hungarian companies prominent foreign investors in the wider Eastern European region. Financial capital export to Eastern and Central Europe is dominated by bank acquisitions of OTP, the largest bank of Hungary, and OTP become the only 'indigenous' multinational bank in the region (by 2008, 40% of assets, 66% of branches, and the 38% of total loans of OTP bank were generated abroad)[14] (Gál, 2014).

Table 5. External positions (cross-border claims) of BIS[15] reporting banks vis-a-vis CEE countries, 1996–2013

	1996 Bn USD	2004 Bn USD	2008 Bn USD	2013 Bn USD
Hungary	1.4	39.8	95.0	43.2
Poland	7.2	40.9	138.0	120.6
Czech Republlic	7.2	17.3	54.0	51.2

Source: BIS Annual Reports.

[14] OTP Group currently operates in Bulgaria, Croatia, Romania, Serbia, Slovakia, Ukraine (CJSC OTP Bank), Russia, and Montenegro via its subsidiaries. Until 2004, 28% of Hungary's FDI export was generated in the banking sector.

[15] Bank of International Settlements (BIS), Basel

Size of the capital markets

Studies focused on global cities draw attention to the fact that the dominant feature of these leading cities is the considerable concentration of financial capital, not only in banking but also in stock markets. Data on total market capitalisation and the number of companies listed on stock exchanges, therefore, serves as an ideal index for measuring financial centre development. It has to be noted that stock exchanges in the CEE countries have taken a fairly short period of time to reach their recent potential. There are no large companies in the region with longer stock market experience and none of the institutional investors has long history of presence in the region. All CEE stock exchanges were launched as late as the early 1990s, after the change of the political and economic regime. Budapest Stock Exchange was founded in 1990. As the fast economic uplift in the countries of the Visegrad Group was substantially driven by FDI, the contribution of domestic companies to the GDP of the national economy remained rather small. As it is primarily domestic companies that are listed at the regional stock exchanges, it is not surprising that the value for domestic market capitalization is low (Csomós, 2011) (Table 6). The market capitalization of the new EU Member States accounted for only 2% of market capitalization of the EU in 2004. The aggregated size of the Warsaw (WSE), Prague (PSE) and Budapest (BSE) Stock Exchanges was equal to only 13% of capitalization of the Deutsche Börse at a time. Due to the relatively strong banking sector and the non-organic development of capital markets in the region, firms were allowed to seek affordable bank loans rather than to endeavour to attract investments through less mature stock exchanges. In addition, the propensity of households to raise funds in the capital market is still low.

Despite its slow start, the Warsaw stock exchange rapidly increased its capitalization from the early 2000s and attracted more companies for listing than did neighbouring stock exchanges (Budapest, Prague, Vienna). The effect of financial crisis was visible in both 2008 and 2011, although Warsaw seemed to recover faster than the other financial centres. The development of the stock market in Budapest, once a forerunner in the region, has been rather weak, with the current level of market capitalisation being comparable to the pre-EU accession period level, despite a steady increase of GDP (Figure 2). The number of companies listed in Warsaw in 2013 doubled since 2009 and reached 895, out of which 26 are foreign. This level is significantly higher than that of Vienna – 102 companies, 20 foreign; Prague (23 with 10 foreign) in Prague, and Budapest (50, none foreign) (Federation of European Securities Exchanges, 2015) (Table 6). By the mid-2000s, the Warsaw Stock Exchange, due to its larger capitalisation, posed serious competition to the Budapest Stock Exchange. The Warsaw Stock Exchange became the leading stock exchange of the region, and that is why the Wiener Börse intends to compete with it by acquiring control over the smaller stock exchanges in the CEE region. The rearrangement of the ownership structure of these stock exchanges suggests that Vienna and Warsaw are strengthening their leadership roles in the CEE region, while the roles of Budapest and Prague are

Table 6. Key indicators for the stock exchanges of Central and Eastern Europe in 1999–2013

	Market capitalization				Number of listed companies							
	1999	2005	2009	2013	1999		2005		2009		2013	
	Million USD				Domestic	Foreign	Domestic	Foreign	Domestic	Foreign	Domestic	Foreign
Budapest SE	13,811	32,575	30,037	19,797	64	2	44	0	42	4	50	0
Prague SE	10,582	34,886	75,022	31,260	74	0	23	4	18	8	13*	10*
Warsaw SE	29,577	94,028	150,962	117,541	221	0	234	7	470	16	869	26
Wiener Börse	33,023	126,251	114,076	204,677	97	14	92	19	97	18	82	20

Source: World Federation of Exchanges, Annual reports and statistics.

* 2014.

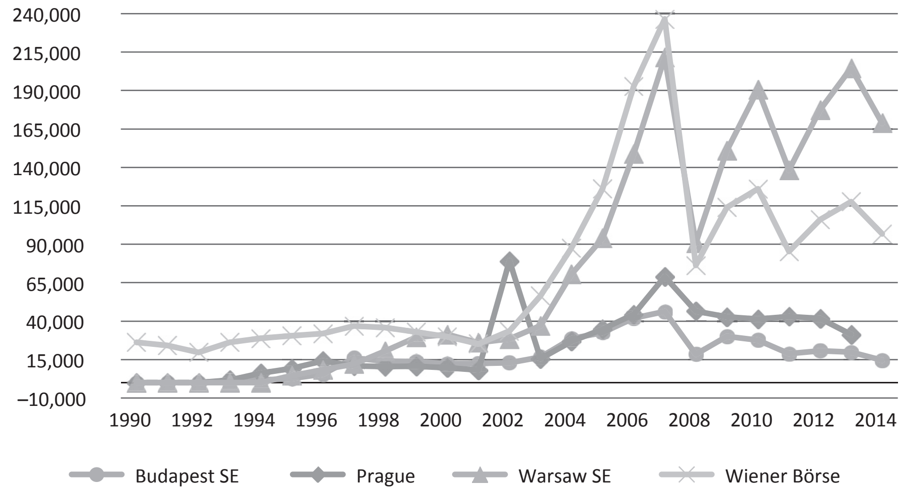

Figure 2. Total market capitalisation in Million USD

Source: Edited by the author, World Federation of Exchanges, Annual Reports and Statistics.

diminishing (Csomós, 2011). As far as foreign listing is concerned, Budapest no longer seems to be a strong international capital market centre.[16]

Assesment of the function of Budapest international financial centre

The stake of the ongoing race among metropolises in Eastern and Central Europe at the beginning of the 2000s was in part whether Budapest, with the relatively most developed financial markets at that time, could become a regional business and financial centre of Central and Eastern Europe (Enyedi, 1992). Nevertheless, contradicting former optimistic expectations, Budapest has not yet become such a regional financial and business (gateway) centre, the envisaged 'Singapore of Central Europe.'[17] Rather, as a result of the crisis and the recent unorthodox economic policy, Budapest seems to have exited from the regional competition of international financial centres located in the region (Szabadföldi, 2001; Gál, 2010a). At the same time, the Hungarian capital did have the potential to acquire competitive advantages in certain areas of the financial sector in the early 2000s. Such advantages could stem from its central location, early economic reforms and its bridging role within the region. Budapest's only peculiar role as an international financial centre is strengthened by the fact that due to its housing the OTP Bank's headquarters, it is the only financial centre in the region which

[16] In 2011, Poland's stock market ranked fourth in the amount of capital raised. At the WSE, 38 new companies were listed in 2011, and 25 of these were foreign ones.

[17] In the period of dynamic growth in Hungary the first Orban government had made attempts to develop Budapest as CEE regional business and financial centre. See: http://www.bibca.net/en/home.

developed its own command and control functions over subsidiaries located abroad (Gál, 2010b). OTP's expansion abroad since the beginning of the 2000s increased the connectivity of Budapest as a regional finacial centre. However, the regional banking networks alone do not make a city an international financial centre – especially when capital markets are concerned.

In other respects, however, Budapest is not unique in comparison to other regional capitals (Parague, Warsaw), which are rapidly catching up – they had compatible, and even larger domestic markets. Another reason for this is the overlapping foreign ownership. Foreign banks established subsidiary banks with paralell networks controlled by managements of foreign parents rather than by selecting a single regional financial centre. Therefore there is little evidence of regionalisation in the banking markets of Central Europe.

However, already during the 2000s there were serious impediments to Budapest's becoming an international financial centre. Its previous competitive advantage in the financial sector and capital-attracting potential gradually decreased due to the deteriorating macro-economic position of the contry prior to the crisis. The competitive advantage of Budapest was also weakened by the organizational transformations of the BSE in 2004. This allowed the Wiener Börse, following a policy of expansion in the framework of takeovers, to acquire majority shares in the Hungarian and Czech stock exchanges. Budapest's position concerning its independent decision-making functions was adversely affected by the acquisition of the Vienna Stock Exchange.[18]

In Budapest, despite a suitable supply of highly qualified professionals, qualifications of the available workforce still fall short of international quality standards. In an interview, the CEO of a US-owned bank emphasised that in certain areas of finance (accounting, cost-management, marketing and sales), there are especially serious shortcomings in labour supply. Consequently, financial services providers tend to employ foreign managers.

In a 2007 interview with a banking analyst, the issue of functions of regional IFC was discussed. The inteviewee argued that there was a genuine niche for creating a regional sub-centre in Budapest and for providing certain special back office services for the global financial firms. Although the capital city would remain primarily a national financial centre while extending its lower level international embededness in shared services and business process outsourcing. The question is whether these shared services locations attracting new types of FDI might help in repositioning weakening business and financial centre funcions.[19]

[18] Since the Wiener Börse has acquired control over the Budapest stock exchange, a series of debates arose between the Austrian management and the handful of domestic blue chip companies (OTP, MOL, Richter) in strategical issues, which hinders the development of a long-term strategic vision for the BSE.

[19] EU accession, competitive infrastructure, low wages, and a strong education system were favourable preconditions that supported the growth of the first group of capital cities, such as Prague, Budapest, and Warsaw, in the first wave of the offshoring boom of the late 1990s (however, it is notable that advantages in rival capitals are similar and mostly based on low wage cost) (Gál and Sass, 2009; Gál, 2014).

Contrary to IFC locations, shared servies centres (SSC) are less embedded in their national and regional hinterlands, and these supply and efficiency-driven[20] vertical investments across national boundaries are seeking low-cost global locations within *transnational production systems*. The demand-led market seeking investments (such as financial FDI) were the most common throughout the begining of the transition period in CEE (Hardy et al., 2011). Due to their low level of terriorial embeddeness, SSCs' impact on their host location is rather limited. Consequently, SSC locations can not result in a natural evolution to an IFC, as it lacks the geographical concentration of indigenous and international financial firms and the exercise of command and control functions from their headquarters (Bellon, 1998; Pelly, 2001).

Although earlier consultancy reports revealed strong international business presence (regional headquarters, advanced service providers, IT, accounting and HR) to be a necessary factor for developing international business and financial centre functions in Budapest, surveys also demonstrated the lack of leadership both within Budapest as well as in the CEE region (Szabadföldi, 2002; Gál, 2010a). The plan to compete against Warsaw and Prague as the regional business centre was introduced in 2001. This plan seemed to have correctly identified Budapest's comparative advantages vis-a-vis 'western' cities (e.g. Vienna), but it was short on explaining the vision for distinctive features of Budapest vis-a-vis Prague and Warsaw as financial centres. Nevertheless, it should be noted that the rise and fall of Budapest as a prominent regional financial centre could be explained to a large extent by the actions and successes achieved by other financial centres.

Impact of 2008 global economic crisis on CEE financial centres

The transition of the financial sector in the CEE region has received considerable attention during the transition from both a theoretical and an empirical perspective (Bonin et al., 1998; Wachtel, 1997; Claessens et al., 2001; Gál, 2004; Várhegyi, 2002; Banai et al., 2010; Csaba, 2011), but much less attention has been devoted to the post-transition period and the impact of the crisis, which has become the most serious challenge of transition models, and has indirectly affected the IFC conditions of the capital cities.

Concerning the transmission of the crisis in CEE, there are two distinct approaches in the transition literature. According to Myant and Drahokoupil (2012), the financial crisis was an external shock to the CEE region and affected countries in different ways, where finacial inflows and export flows were the transmission channels of the contagion. The other arguments emphasize that the crisis cannot simply be understood as an internal adjustment to an external shock (Bohle, 2011); rather, the global financial and economic crisis exposed the weaknesses of the post-socialist neo-liberal economic development model

[20] The demand-led horizontal investments are located in the capital city, where there is the highest demand for their services. For supply and efficiency driven vertical investments, the main attracting factor in capital cities is the large supply of suitable and relatively cheap skilled workers (Hardy et al., 2011).

in CEE (EBRD Transition Report, 2009). Smith and Swain (2010) focus on the dependent models and uneven forms of transition to capitalism and the internationalizatiotion of the financial sector in CEE. They argue that this model of transition has contributed to systemic vulnerabilities excerbated by the crisis in the CEE region.

In a few CEE countries, catching up in the first half of the 2000s was generally accompanied by macroeconomic stability (Czech Republic, Slovakia, and partially Poland), but certain countries (Hungary, Estonia, Latvia) of the region became increasingly vulnerable to external shocks due to unsustainable trajectories of credit-fuelled housing and consumption booms, high current-account deficits, and quickly rising external debt (a large proportion of it denominated in foreign currencies). Foreign currency indebtedness channelled through interlinkages occurring between West European parent banks and their local subsidiaries had an implication for the internal and external imbalance within the EU banking system (Gorzelak and Goh, 2010). The impact of the crisis has been highly uneven within the European Union and has not only increased the gap between the core countries and the peripheries, but also resulted in growing diversity within CEE.[21] Poland has avoided recession by not having expanded huge debt and by benefiting from its large internal markets (Smith and Swain, 2010). The excessive burden of debt repayment resulted in severe decline both in investments and consumption. This was the case in some of the countries that experienced negative or zero growth in 2008 and 2009 (Latvia, Hungary, Romania).

In Hungary, foreign currency indebtedness had direct spillover effecs on the national economy since 2009, when local debt crisis affected all indebted sectors (Gál, 2014). The impact of the financial crisis increased Hungary's dependence on external financing and also weakened the position of Budapest as an international financial centre. In Hungary and the Baltic states, funding availability and capital outflows led to a more severe decline in bank lending than the Eurozone average (measured by loans to the nonfinancial corporate sector).[22] The crisis has also altered the future growth prospects of these CEE countries; monetary and fiscal policies are on a tightening course for several years and there is little room for powerful countercyclical policy responses. External capital inflows suddenly and significantly stopped despite the relatively quick recovery in the region. For example, in Hungary, despite its recovery, the scale of investment and the financial intermediation sector remained much below its pre-crisis level.

The financial and economic crisis has had an impact on the international financial centre position of the capital cities studied. Various data on banking and capital markets (lending activity, market capitalisation) illustrates the fluctuation in the concentration of IFC functions. After the ambitious start of Budapest thanks to the seemingly successful gradual transition model, it is now losing the

[21] Hungary's external funding exposure was the highest (while the Czech Republic had the lowest), reaching one third of total liabilities in 2009.

[22] The current FDI literature (Claessens and van Horen, 2012) focusing on the impact of foreign bank presence on credit creation and financial stability during the crisis confronts the once-dominant approach of 'supporting effect' of foreign banks (Haas and Lelyveld, 2009).

race with other CEE capitals to become the international financial centre in the CEE region.

The rapid decline of Prague as a financial centre in the late 1990s and Budapest in the second half of 2000s was accompanied by not only a less spectacular recovery, but also by the rise of Warsaw, especially after the 2008 financial crisis. Despite the fact that the recent financial crisis had a visible effect on Warsaw in 2008 and 2011, it recovered faster than other financial centres in the region. In this regard there are two effects in play – the country effect and the financial center effect. Poland was not only able to avoid the recession, but well-timed regulations managed to prevent the burst of the housing bubble. Foreign capital inflow was not significantly affected. Warsaw experienced a tremendous scale of public and private investments, and the large domestic market generated huge demand. Poland does not rely heavily on export (it accounted for only 40% of GDP, half of the percentage of the Czech Republic and Slovakia). The EU funds also contributed to the mitigation of the effects of the crisis (Berend, 2013).

Besides its crisis resilience, there are important factors that make Warsaw suitable for the functions of IFC with a strong regional focus. For instance, the high-standard of financial regulations in the Polish financial market in general, and the wise and active strategy that made the Warsaw Stock Exchange the largest player in the CEE region. This strategy is acompanied by active marketing, and by an active engagement in multilateral trading platform, which helped link the WSE with London (Wójcik, 2007; Hashimoto, 2015). Warsaw was the only city of the three that managed to attract many foreign investors and influencial market players, even during the time of the crisis. With its global presence, the WSE sucessfully maintained its independence from Vienna, unlike its larger regional counterparts (Budapest, Prague).

The financial and economic crisis have had a moderate impact on Prague's banking sector as the banking market was prudent, and the share of foreign currency loans, which proved to be the Central and Eastern European subprime, was insignificant. The Czech Republic experienced 'reverse flows' because of the decrease in cross-border lending in spite of its strong economic fundamentals. However, the indirect effect of the crisis became clearly visible in declining demand, largest pressure on profit, efficiency and risk management. The strong presence of German and Austrian retail banks in the Czech Republic and the incorporation of the Prague Stock Exchange into the Wiener Börze was accompanied by an integration trend in the capital markets as well. However, the PSE did not recovered from the financial crisis, as the total market capitalisation in Prague was only a half of its 2007 value.

Similarly to Prague, the development of financial markets in Budapest has been rather weak, reflecting the deteriorating macroeconomic situation, which started long before the crisis and was chracterised by the lack of strategic-minded long-term economic policies in Hungary. Starting in the late 1980s, Hungary was a pioneer country for transition success, but its badly designed and managed fiscal and monetary policies have served poorly in preparing it for the global economic crisis in 2008. Despite sustained rapid development continuing up to

2006, imbalances and negative trends have gained ground since the beginning of 2000s. Paradoxically, its financial integration, once the engine of transition and growth, became the source of relatively large accumulated private and public debt, and contributed to the crisis. Hungary's public debt, although below the EU average level, had increased rapidly, from 54% in 2000 to 80% of the GDP in 2010. The foreign currency indebtedness of the private sector resulted in the largest risk for macroeconomic imbalances.

Although the Hungarian 'gradual' transition model is characterized by some degree of stability, at the same time, foreign investment and takeovers seem to have strengthened the fundamentals in Budapest. However, the lack of consistent and long-term economic policies and the fiscal alcoholism of serving governments and weaknesses of regulations made the Hungarian financial markets unstable during the crisis, and further weakened Budapest's international financial centre position. The recent right-wing government's campaign against foreign-owned banks in Budapest presented big challenges to Budapest's ambition to become an international financial centre. On the one hand, foreign capital inflow has stabilised the Hungarian economy and even developed it to the highest level in the region by 2004. On the other hand, the the Hungarian banking system's over-reliance on foreign capital made the risks of high reverse capital flow evident during the recent financial crisis, demonstrating the dependency of Budapest on the West European IFCs (Mihaljek, 2010).

The capital inflows to the financial sector have recovered somewhat since the outbreak of the crisis in 2008, and stock has increased substantially in the Czech Republic and Poland, while decreasing in Hungary. The seemingly successful stabilization programme in Hungary could not take advantage of conter-cyclical measures until recently, due to the huge burden of public and private indebtedness (the transfer of foreign currency debt to local currency that was decided upon in late 2014 could cost 8% of the GDP). The right-wing government launched a major re-nationalization program after 2010, primarily in the energy and banking sectors. It aims to increase the domestic/state share of the banking sector, which reached more than 50% by 2015 at the expense of purchased foreign owned subsidiaries. The Hungarian government heavily taxed foreign-owned banks in past years, and therefore the Hungarian financial market is considered less attractive for foreign financial players. The nationalist approach strongly discourages the internationalisation of Budapest as a financial centre and as it looks now, it has left the competition to become the international financial centre of CEE region.

Conclusions

The aim of the present study was to examine the development of international financial centre function of Budapest as compared to Warsaw and Prague during the transition period, assessing the preconditions for the creation of regional centres. Various data used, such as employment figures, presence of foreign banks, and size of the banking sector and capital markets, illustrate the signs of financial centre formation. However, despite the significant growth in financial sector employment, banking assets, stock market capitalization, and cross-border capital flows since the early 1990s, the size of the financial sector and the number of global players concentrating in these capital cities are still much smaller than their western conterparts.

The paper finds that despite the increasing integration of these capital cities to the network of the West European IFCs, the external dependency of these capitals, which appears in the form of hierarchical command and control functions by global IFCs, reinforces the high level of financial dependence of CEE. This prevents the development of fully-fledged financial centre functions. A key finding of our study is that despite these preconditions, carefully tailored economic policies combined with city branding strategy make it possible to develop certain IFC functions in each of the three capital cities, providing significant benefits through international economic integration and networks, as illustrated by Warsaw's example, or by the post-crisis development of Budapest as a counter-example.

The paper argues that the global crisis not only exposed the weaknesses of the post-socialist development model in certain CEE countries, but it has also had a significant impact on the future development of IFCs. Our analysis confirms that diversification is observable not only at the country level, but on the level of capital cities as well, as their development path also became more differentiated as a result of the crisis. Various data on banking and capital markets illustrates the fluctuation in the concentration of IFC functions. Despite there being little market evidence showing signs of a regional-centre focus there around the millennium, recently there are more signs of IFC formation, especially considering the current development of Warsaw. Budapest, once a forerunner in economic transition, lost its previous competitive advantage in the financial sector and declined due to the deteriorating macro-economic conditions and mismanaged economic policies long before the crisis. Budapest has not become a regional financial centre despite its favorable preconditions, which largely stemmed from the regional network of OTP Bank. The paper argues that regional banking networks alone do not make a city an international financial centre – especially when capital markets are concerned. However, in the case of Warsaw, its prudent and investor-friendly economic policy, high-standard of financial regulations, and active strategy in the capital markets, made the city the most important IFC in CEE. With its global presence, the Warsaw Stock Exchange not only maintained its independence from Vienna, but also became the largest exchange in the region.

The rise and fall of Budapest as a prominent regional financial centre can be explained not only by the badly managed fiscal and monetary policies prior to the global economic crisis, but also to a large extent by the competition and successes of the other financial centres. We argue that besides the lack of consistent economic policies and weaknesses of regulations that made the Hungarian financial markets vulnerable during the crisis, the recent nationalist approaches of the government (re-nationalization, levy on banking) have further weakened Budapest's international position. Our analysis concluded that Budapest, despite its earlier endeavours, has most likely lost the competition to become an international financial centre.

Zoltán Gál's research for this publication has been supported under OTKA, the Hungarian Scientific Research Fund, grant no. NK 104985, "New driving forces of spatial restructuring and regional development paths in Eastern Europe at the beginning of the 21st century".

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