

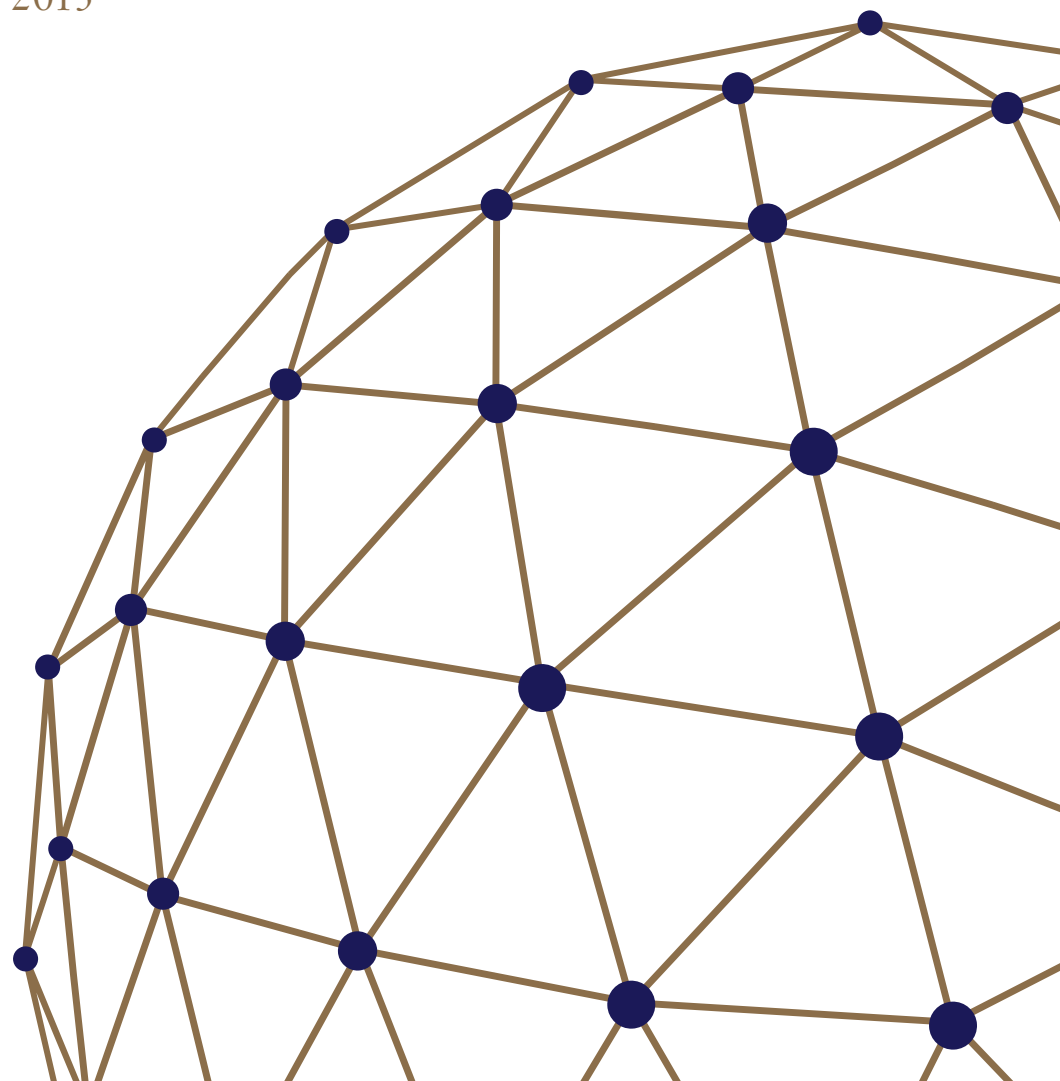


Péter Fáykiss, Gabriella Grosz,
Gábor Szigel

Transforming subsidiaries into branches – Should we be worrying about it?

MNB Occasional Papers 106

2013





Péter Fáykiss, Gabriella Grosz,
Gábor Szigel

Transforming subsidiaries into branches – Should we be worrying about it?

MNB Occasional Papers 106

2013



The views expressed here are those of the authors and do not necessarily reflect the official view of the central bank of Hungary (Magyar Nemzeti Bank).

Occasional Papers 106

Transforming subsidiaries into branches – Should we be worrying about it?*

(Külföldi bankok fiókosodása – kell-e félnünk tőle?)

Written by Péter Fáykiss, Gabriella Grosz, Gábor Szigel

Budapest, September 2013

The manuscript was completed in February 2013.

Published by the Magyar Nemzeti Bank

Publisher in charge: Eszter Hergár

Szabadság tér 8–9., H-1850 Budapest

www.mnb.hu

ISSN 1585-5678 (online)

* The authors are grateful to Ádám Reiff and Gábor Kátay for their useful comments on the empirical part of the study. Any remaining errors are the sole responsibility of the authors.

Contents

Abstract	5
Introduction	6
1 Experiences with the operation of branches in Hungary and abroad	7
2 Banks' considerations: branch or subsidiary?	12
3 Regulatory dilemmas	17
3.1 Micro-prudential supervision	17
3.2 Crisis management and bank resolution	19
3.3 Consumer protection and compliance with other legislation	20
3.4 Macro-prudential oversight considerations	20
3.5 Supervisory preference between branches and subsidiaries – a practical approach	23
4 Conclusions	25
5 References	26

Abstract

In recent years, foreign banks' presence in the form of branches instead of subsidiaries started to gain ground in most of the Central and Eastern European (CEE) countries, including Hungary. Due to the high share of foreign ownership in their banking systems, local authorities in CEE may perceive this trend towards the transformation of subsidiaries into branches as a loss of control over their financial systems. For the time being, we assess the financial stability risks related to this process to be rather moderate. First, no negative anomalies have been identified in respect of the existing branches in the Hungarian market, even though their market share is still small at this point. Furthermore, experience and our model results indicate that large universal banks, which constitute almost three quarters of the Hungarian market, are unlikely to switch to a branch model. Even though host country supervisors do not lose all responsibility for the regulation and supervision of branches, the use of certain regulatory instruments becomes more cumbersome or even impossible in certain cases. Thus, the spread of the branch model may increase the risk of contagion from parent banks in the host countries. Consequently, we think that the status quo appears to be the preferable option for the stability of the Hungarian banking system.

JEL: G21, G28, C21.

Keywords: branch, regulation, organisational form, microprudential supervision, macroprudential supervision.

Összefoglaló

Az elmúlt néhány évben Kelet-Közép-Európa legtöbb országa, így Magyarország bankpiacán is elkezdtek teret nyerni az önálló jogi személyiséggel nem rendelkező banki fióktelepek. Mivel e régió bankpiacának nagyobb része külföldi tulajdonban van, ezért a külföldi bankok leányvállalatainak fiókteleppé alakulását a helyi felügyelet a pénzügyi rendszerük feletti kontroll elvesztéseként élhetik meg. Az ebből eredő pénzügyi stabilitási kockázatokat egyelőre mérsékeltnek ítéljük: egyrészt a meglévő – piaci súlyukat tekintve egyelőre kicsi – fiókok működésével kapcsolatban egyelőre nem azonosíthatók negatív anomáliák, másrészt az eddigi tapasztalatok és modelleredményeink alapján nem is valószínű, hogy a magyar piac közel háromnegyedét kitevő univerzális nagybankok fióktelepi formára álljanak át. A fióktelepek szabályozásában és felügyeletében a hazai hatóságok nem veszítenek el ugyan minden felelősséget, de bizonyos hatósági eszközök használata bonyolultabbá – és néhány esetben lehetetlenné – válik, így a fiókok térnyerésével az anyabankoktól érkező fertőzés veszélye nőhet a fogadó országok számára. Ezért a magyar bankrendszer stabilitása szempontjából egyelőre kedvezőbbnek tűnik a status quo fennmaradása.

Introduction

In recent years, operation in the form of a branch has become more simple than ever for banks in the new Member States that joined the EU since 2004, including Hungary. This is partly due to EU accession itself and partly to national transposition¹ of EU directives² facilitating the provision of cross-border financial services. In the future, elements promoting branching are expected to become more common in the regulatory environment based on the new liquidity and capital regulation package of the EU,³ and furthermore, the evolving banking union of the euro area may also have a similar effect.

A branch of a foreign bank is an organisational unit of that banking group that has no legal personality, but has independence in its financial management. It is subject to the prudential supervision of the home authority of the parent bank rather than the host country's authority. Even though branches have their own separate balance sheets and income statements, claims on them are legally inseparable from claims on their parent institution. For the host country, branch may increase the risk of contagion from *the country of the parent bank*, whereas it may mitigate the negative effects of tensions on the *financial market of the host country*. These drawbacks/benefits of branches are present in every Member State, but the issue is particularly relevant in Central and Eastern European (CEE) countries, where a larger part of the banking system is in foreign ownership – though at this point typically in the form of subsidiaries with legal personality. In this paper, we examine whether the supervisory authorities of the region need to be concerned that the subsidiaries operating in their countries might be converted into branches and whether this may jeopardise financial stability in the host countries.

To this end, we first review the experiences with the operation of branches in Hungary and the rather limited international experience (Chapter 1). We then examine the considerations based on which banking groups (Chapter 2) and host country authorities (Chapter 3) may prefer one organisation form over the other. Finally, we draw some conclusions. In this paper, we look at the problems of the operation of branches **exclusively** based on the regulation of **banking groups operating within the European Economic Area (EEA)**. Any different regulation applied in other countries is outside our scope.

¹ For more details in respect of Hungary, see Act CXL of 2007 on cross-border mergers of limited liability companies.

² Directive 2005/56/EC on cross-border mergers of limited liability companies and Directive 2006/48/EC relating to the taking up and pursuit of the business of credit institutions.

³ CRR/CRD IV package, Single Rule Book regulation.

1 Experiences with the operation of branches in Hungary and abroad

In Hungary, the number of branches and their share within the banking system have increased more or less continuously in recent years. Particularly before 2009, this was attributable to the conversion of subsidiaries into branches (Calyon in 2007, ING in 2008, Citibank and AXA Bank in 2009, Deutsche Bank in 2011), whereas the process has been driven by the organic growth of branches since 2009. However, the weight of branches is still low: the 10 branches represented less than 10% of the banking system's total assets as of the end of 2012.

The average balance sheet composition of branches (Table 1) shows that these institutions often act as niche players in the Hungarian financial system. For instance, they play an important role on the Hungarian swap and government bond markets and in providing FX liquidity to Hungarian banks: this is indicated by their large on-balance-sheet open FX position relative to their size and the high share of interbank assets in excess of the ratio typical for subsidiaries.⁴ In addition, branches keep a relatively smaller part of their assets in loans to the domestic economy than foreign owned subsidiaries do, and they finance more of their operations directly from foreign funds rather than from domestic deposits. However, the descriptive statistics of branches need to be treated with caution, due to the concentrated structure of the market:

Table 1
Balance sheet structures of branches, foreign subsidiaries and domestic banks in Hungary,
as of 30 September 2012

Assets				Liabilities			
	Branches	Subsidiaries	Domestic banks	Branches	Subsidiaries	Domestic banks	
Government	13%	16%	11%	0%	2%	3%	Government
Corporate loans	15%	32%	9%	29%	42%	29%	Domestic deposits
Household loans	20%	25%	24%	45%	27%	10%	Foreign liabilities
Central banking and interbank assets	34%	22%	35%	0%	3%	19%	Self-issued securities
Foreign and other assets	18%	5%	22%	25%	26%	39%	Other
Total assets (per cent and billion HUF)	100% 2,457	100% 16,147	100% 9,899	100% 2,457	100% 16,147	100% 9,899	Total liabilities (per cent and billion HUF)
On-balance sheet open FX position / total assets:				-18%	6%	17%	
Number of institutions:				10	22	13	
The market share (by total assets) of the three largest institution in the relevant categories:				77%	46%	86%	
The Herfindahl index (by total assets) of the institutions in the relevant categories:				45%	12%	23%	
Source: MNB.							

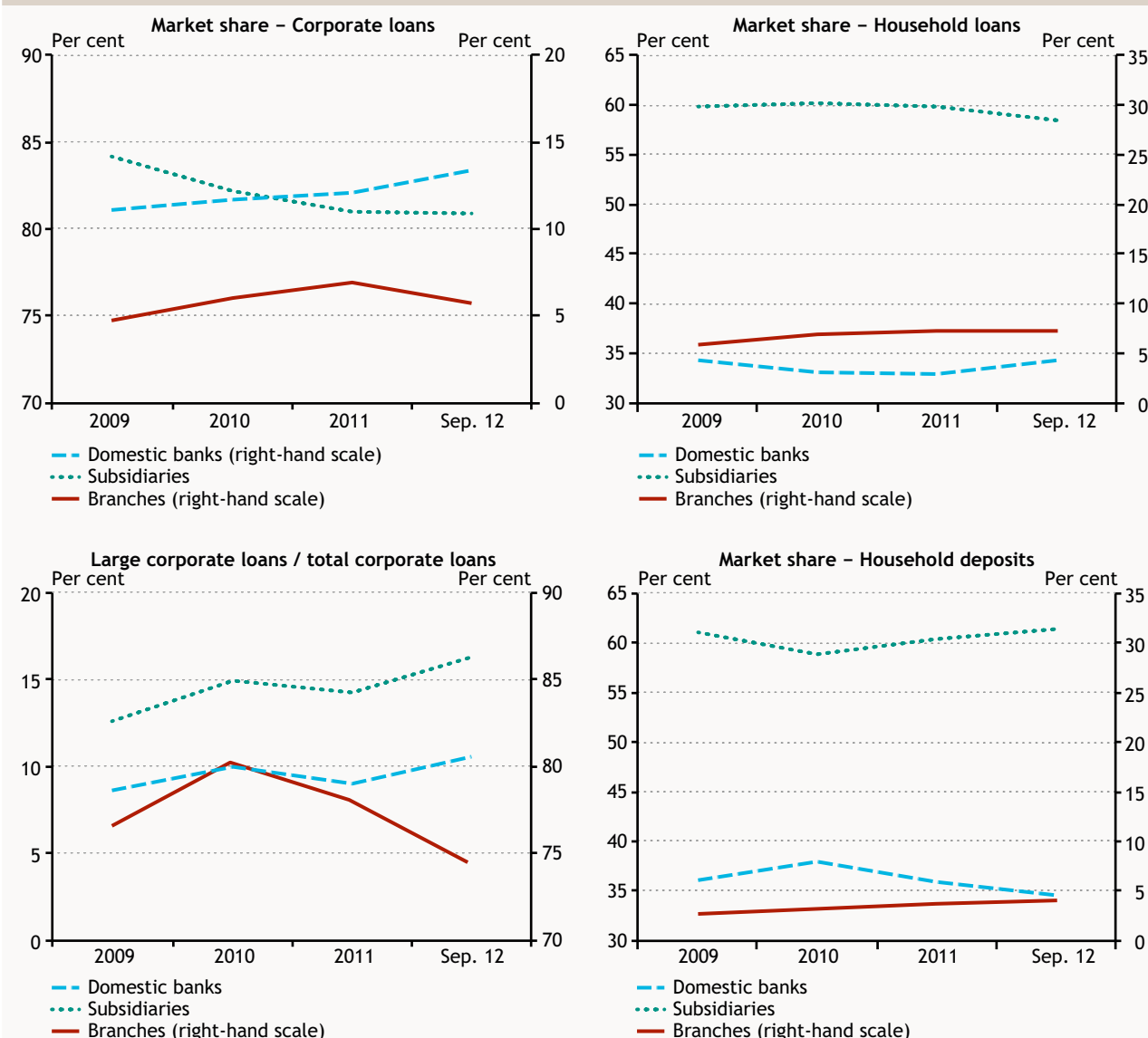
⁴ In Hungary a number of large banks obtain foreign exchange funds for foreign currency lending by swapping their forint deposits for foreign currency, which allows these banks to have much more foreign currency assets than foreign currency liabilities (= on-balance-sheet open foreign exchange position). The counterparties of such swaps are often branches located in Hungary, which swap the foreign currency obtained from their parent banks with large Hungarian banks and invest the forints thus obtained mostly in low-risk assets (e.g. government securities, central bank bonds).

only 3 of the 10 branches hold 77% of the total assets of all branches, and therefore developments in the branch segment are often attributable to specific stories at individual banks (the same can be said about domestic credit institutions with headquarters in Hungary, while the group of subsidiary banks is less concentrated).

In the period after the onset of the crisis, from 2009 on, when the conversion of subsidiaries into branches was no longer common, the market share of branches increased slightly both in corporate and retail lending and to some extent also in household deposits (Chart 1). This growth, however, is often driven by stories at individual banks: for instance, the increased market share in deposit collection is attributable mostly to a single branch. Moreover, the change in market shares may result from the strategy of branches concerning niche markets. For instance, branches were traditionally less active in retail mortgage lending, which has declined significantly since 2009, while unsecured retail lending, where certain branches are more prominent, suffered a smaller decline. In corporate lending, branches primarily targeted the segment of large corporations and multinationals; their growing market share may be attributable to the fact that this market segment was less affected by credit supply constraints or by the shrinking demand for new lending, driven by the drop in

Chart 1

Market share of non-resident banks operating as subsidiaries and as branches, and of banks with their headquarters in Hungary, in the various segments

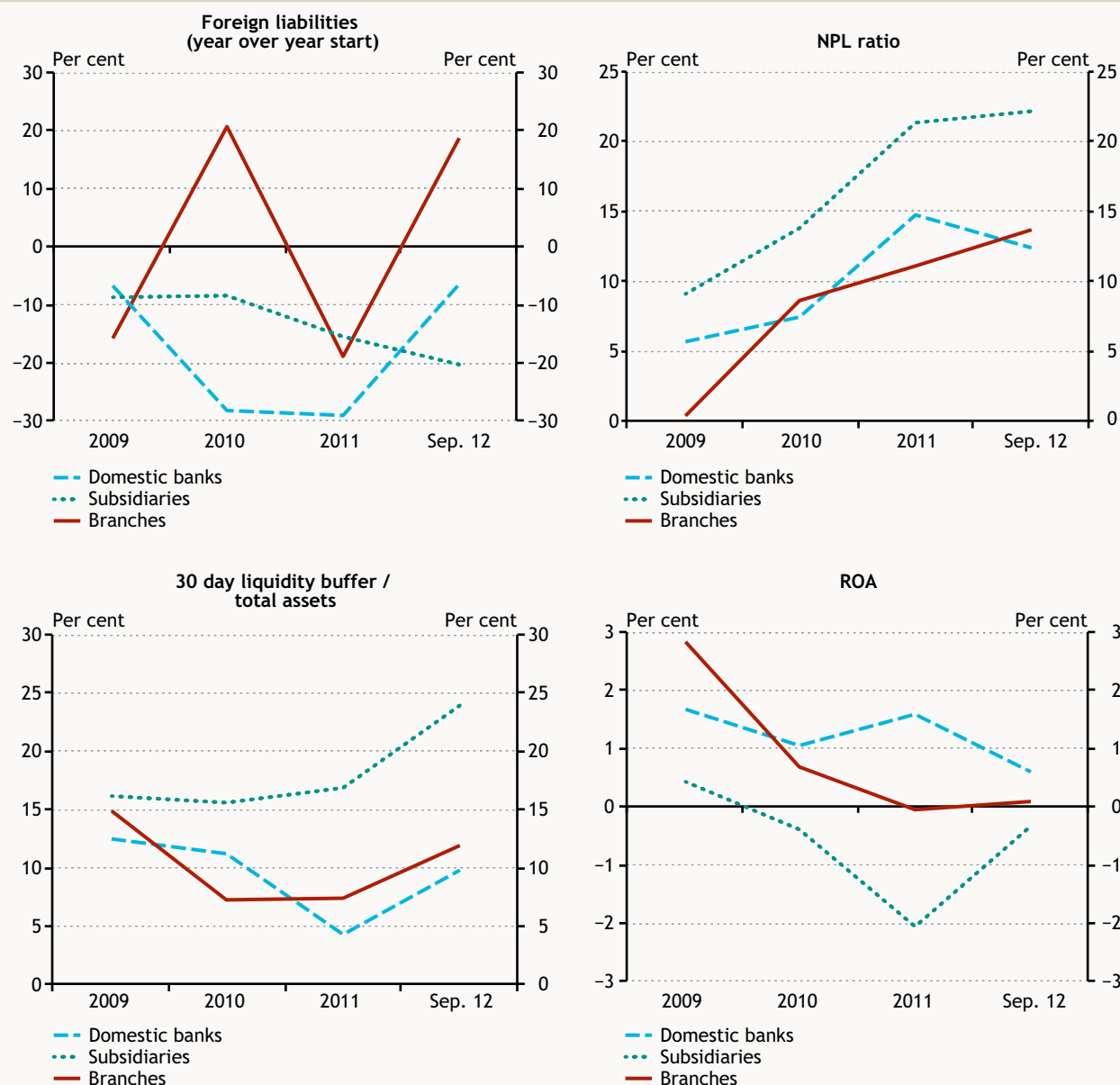


Note: Market shares are not adjusted for conversions of organisational form, but the effects of such were negligible in the segments examined since 2009.

Source: MNB.

Chart 2

Market share of non-resident banks operating as subsidiaries and as branches, and of banks with their headquarters in Hungary, in the various segments



Note: The 2012 figures are as of 30 September 2012. The change in external funds indicates the growth over December in the previous year, thus it does not include HUF/EUR exchange rate fluctuations. The return on assets (ROA) indicator was calculated using pre-tax profit. Calculation of the 30-day liquidity surplus: (liquid assets - outflows in the next 30 days + inflows in the next 30 days) / balance sheet total. Note: The 2012 figures are as of 30 September 2012. The change in external funds indicates the growth over December in the previous year, thus it does not include HUF/EUR exchange rate fluctuations. The return on assets (ROA) indicator was calculated using pre-tax profit. Calculation of the 30-day liquidity surplus: (liquid assets - outflows in the next 30 days + inflows in the next 30 days) / balance sheet total.

domestic demand. On the whole, however, the total market share of branches in these segments was still at a low level of less than 5-10 per cent in 2012.

Moreover, some other specific aspects can also be observed in the operation of branches (Chart 2). Even though the growth rate of branches' foreign funding has been volatile, on the whole they have hardly seen any withdrawal of foreign funds from Hungary since end-2008, while subsidiaries, like domestic banks, have suffered a significant and continuous outflow of external funds. Branches were more profitable than subsidiaries, although this indicator fell back to a near-zero level after 2009. In addition to some individual banks' stories, this was attributable to the declining net interest margins, rather

than to soaring loan losses or growing tax burdens, which were important underlying factors for subsidiaries and domestic banks. Nevertheless, branches also suffered from some portfolio deterioration, but this was considerably less severe than at subsidiaries. The more modest portfolio deterioration is partly attributable to their specific business model, for instance the higher share of large corporations in their clientele. In addition, for most of the time since the outbreak of the crisis the 30-day liquidity surplus of branches has also been significantly lower than the corresponding figure at subsidiaries: this may indicate that because of the synergies with the parent's liquidity management, branches need to maintain a lower level of liquidity buffers. (Though the increased difference in 2011 may be due to the new Hungarian liquidity rules⁵ that entered into force at the time, which apply to subsidiaries but not to branches).

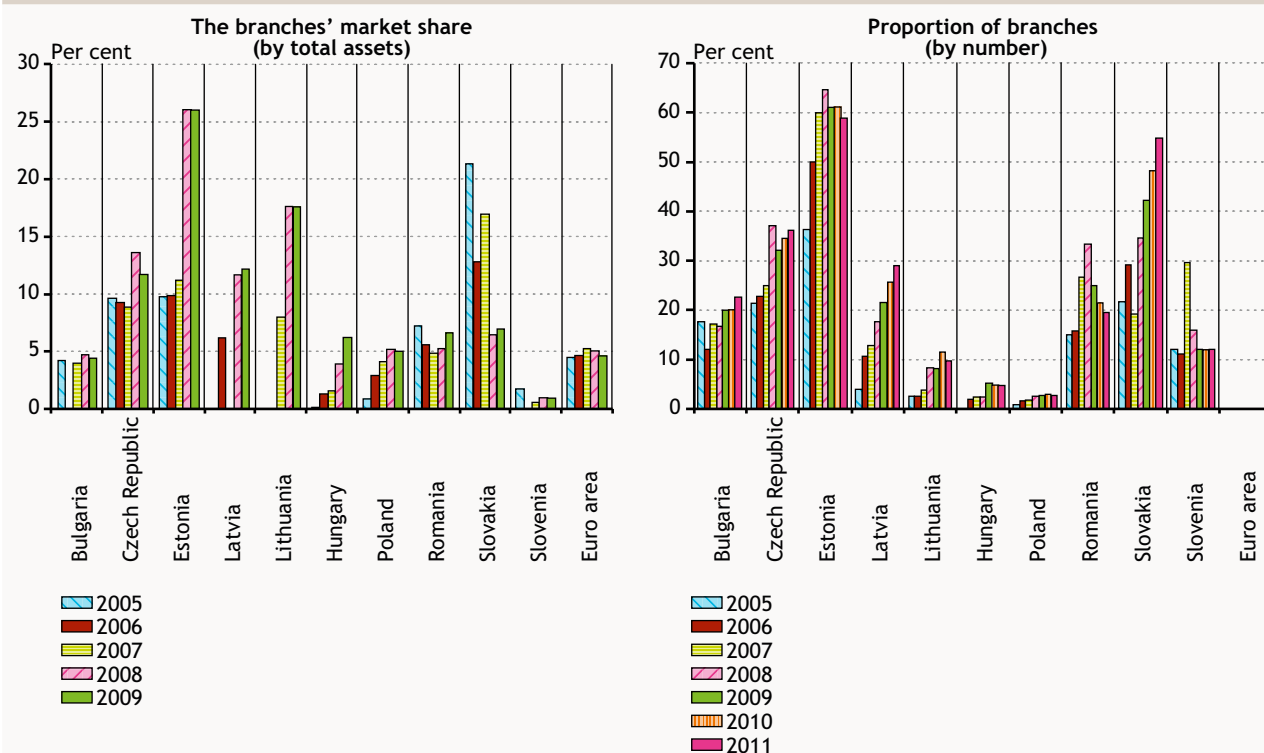
On the whole, descriptive statistics indicate that in Hungary the operational characteristics of branches are rather different from those of subsidiaries, although this may stem mostly from the difference in business models (more large corporation clients, more active treasury operations, niche market strategies) and less from the organisational form. Thus, past experiences with branches are not necessarily relevant in deciding whether the conversion of foreign bank subsidiaries into branches would be beneficial for Hungary.

INTERNATIONAL EXPERIENCE

The relevant empirical literature is rather scarce, but there are some empirical papers discussing the differences in the behaviour of branches and subsidiaries. For instance, Pontines-Siregar (2011) looked at bank-level data from six Asian

Chart 3

Change in the market shares of branches in the banking systems of Central Eastern European (CEE) countries



Note: The ECB (2010) report is not comprehensive as it discloses no data for certain categories of institutions with fewer than 3 members within a country. Thus, the share of branches in total assets may be higher in certain countries than this chart indicates.

Source: ECB reporting and ECB (2010).⁶

⁵ Government Decree 366/2011. (XII. 30.) on liquidity coverage requirements for credit institutions and on the maturity mismatch of foreign currency positions.

⁶ The contradiction in the Slovak data (market share of branches declining as a percentage of the balance sheet total, but increasing in terms of numbers) is explained mostly by the transformation of one of the largest actors (the 4th largest bank at the time with balance sheet total of approximately EUR 5500 million) from a branch into a subsidiary. Before 1 January 2008 the Slovak ČSOB Bank operated as a branch of the Czech ČSOB Bank, then the Slovak financial institution became a separate legal entity.

countries and found that foreign banks operating as branches cut back their lending in the host country more in times of crisis. From this they concluded that regulators in emerging economies need to encourage the presence of foreign banks through subsidiaries rather than through branches.⁷ By contrast, Aiyar (2011) concluded from UK figures that since the onset of the crisis in 2008, subsidiaries and branches reduced their lending at more or less the same rate. (As we saw above, however, none of these experiences were confirmed by the Hungarian data.)

Looking at a different aspect, based on the pre-crisis figures of Uruguay and Argentina from 2001 and 2002, Brei and Winograd (2012) draws the conclusion that branches are much more risk averse than subsidiaries; consequently, during a crisis the default rates on branches' loans are lower, probably because parent banks have unlimited liability for their loan losses. Hungarian branches also tend to have better quality portfolios, though this is explained mostly by the composition of their portfolios (more large corporate loans).

No empirical survey has been conducted on the operation of branches specifically in the Central Eastern European (CEE) region and actual data are also scarce. Based on the ECB figures up to 2009 (ECB 2010), however, we can establish that in most CEE countries, the market share of branches has increased somewhat since 2006, but their share of the balance sheet total of the banking system remains below 15 per cent, with the exception of two Baltic countries (Chart 3).

⁷ However, the econometric model used by the authors does not take into account all indicators relevant for the business model of banks. Consequently, in our opinion, these results should be treated with reservations. For instance, the authors did not control for certain important balance sheet indicators that drive the credit supply of banks such as the loan-to-deposit ratios of banks or the ratio of external funds in their balance sheets; moreover, they did not take into account variables relating to the business models of banks, for instance the share of retail or corporate loans within the total loan portfolio.

2 Banks' considerations: branch or subsidiary?

The legal form of a business unit in a host country is not a primary consideration in terms of the efficient operation of banking groups. As Fiechter et al. (2011) point out: for decentralised banking groups, the subsidiary model is more appropriate while more centralised organisations may prefer the branch model, but in practice, examples of both these legal arrangements can be found in any business model.

In general, the benefits of greater efficiency and flexibility offered by the branch model need to be weighed against the disadvantage that the parent bank has unlimited liability for the obligations of the branch. The branch model has the following efficiency benefits (again, this still relates to banking groups operating under the rules of the EU, or more specifically of the EEA):

- i. *cost advantages*: the branch arrangement may entail lower supervision fee⁸ and corporate governance costs.⁹ By contrast, in case of large, complex local operations the cost advantages of the branch model may vanish, i.e. the cost advantages are probably not independent of size;
- ii. *allocation benefits*: in the case of the branch model, the banking group has more freedom in allocating its capital and income between jurisdictions, which allows for more efficient use of resources and lower costs at on the consolidated level. For instance, in the case of branches the parent bank does not have to maintain a capital buffer locally, which may result in a lower consolidated capital level. Moreover, in their local lending branches are less constrained by large exposure limits (albeit such limits can be easily circumvented in the subsidiary model by syndicated loans provided jointly by the parent bank and the subsidiary);
- iii. *administrative (regulatory) advantages*: in the case of branches, relationships with supervisors are somewhat easier to manage as they tend to be in direct contact with the home country supervisor of the parent bank. On the other hand, as we point out in Chapter 3, they must also comply with the rules and reporting requirements of the host country and in theory the host supervisor may audit them almost as it can audit a subsidiary (even though in practice these burdens are becoming ever lighter);
- iv. *more protection from political risk*: the literature traditionally considers protection from the political risks of the host country, in particular the nationalisation of the assets of the bank, to be the greatest advantage of the branch model. However, political risks of this nature may be negligible within the European Economic Area (EEA), due to the legal safeguards offered by the EU. Branches are not immune to 'normal political risk' such as tax hikes or the imposition of special bank levies. This is clearly reflected by the fact that the recent measures of the Hungarian government imposed on banks (the special bank levy in 2010, the 'early repayment of FX loans' in 2011 and the transaction tax in 2012) also applied to branches.

⁸ Under Hungarian regulations, branches pay a lower supervision fee on average than banks with independent legal personality do (reflecting the lower workload these institutions represent for the host supervisor). However, the difference in the supervision fee is not substantial, amounting to no more than 0.005-0.01 per cent of the balance sheet total under the effective rules. For the detailed methodology of the calculation of the supervision fee see the HFSa website: http://www.pszaf.hu/intezmenyeknek/bal_menu/adatszolgaltatas/adatszolgaltatas_felugyeleti_dij

⁹ For instance, under Hungarian law branches are not obliged to have a Supervisory Board and they may employ fewer senior executives. Nevertheless, Hungarian data do not substantiate this cost advantage definitively: in 2011 the labour costs of branches represented 1.04 per cent of their balance sheet total while the corresponding indicator for banks with separate legal personality was 0.94 per cent. However, the difference is likely to arise from the different business profiles rather than from the legal form of branch.

This underlines that the efficiency benefits of the branch model are not overwhelming; moreover, the conversion of a subsidiary into a branch may entail substantial one-off costs as well (path-dependency).¹⁰ However, the disadvantage of the branch model (the unlimited liability of the parent bank) is also relative, as it becomes relevant only if the management or owners of the banking group feel that they are unable to keep the business risks of their operation in the host country at an affordable level or, as the last resort, they are willing to take the reputation risk arising from 'abandoning' their subsidiary.

In addition, the choice of organisational form may also have bank- and country-specific benefits and disadvantages. This may include e.g. how the host country clients assess foreign bank branches, their home regulators and home deposit insurance schemes compared to the host regulators or deposit insurance schemes. This, however, may vary from country to country and change over time.

EMPIRICAL EVIDENCE

So far only one article, Cerutti et al. (2007), has looked at the factors considered by banking groups when choosing between the branch and subsidiary models in a particular country. The analysis covered banks operating in Latin America and the CEE region and relied on data from 2002, that is, before EU accession. Their model results indicated that the business model of the parent bank has the greatest impact on the choice of organisational form. Accordingly, the probability of the branch model is increased if the parent bank entered the market of the particular country with a greenfield operation, if it tends to be present in other countries through branches and if it focuses on the corporate segment in the host country. (The validity of these factors has been more or less confirmed by experiences in Hungary). The authors also found some host country related factors to be significant in the choice of the branch model. For instance, the probability of the branch model is increased if taxes are higher in the host country, if the political risk is greater (higher risk of nationalisation) and business risks are lower (therefore the parent bank is less likely to have to 'abandon' the subsidiary).

In this paper, we re-estimated the model applied in the above study using a more recent data set including only Central Eastern European banks. We consider re-estimation useful for two reasons: firstly, the original Cerutti et al. article also included Latin American banks, while we are interested specifically in the situation in the EEA. Secondly, in the CEE region important changes – mostly regulatory in nature – have occurred since 2002, the date of the figures used in the article.

Table 2
Key descriptive statistics of the subsidiaries and branches in the sample

	Number of subsidiaries	Number of branches
BG	6	3
CZ	6	10
HU	14	7
PL	11	2
RO	7	3
SK	6	9
Total	50	34
Number of parent banks	19	

	Mean	Standard deviation	Lower quartile	Upper quartile
Size of parent bank (EUR million)	626,150.76	712,135.96	87,845.79	959,898.91
Size of subsidiary (persons)	3,100.68	3,469.01	658.75	3,521.25
Size of branch (persons)	455.00	837.72	39.50	359.25
Expansion strategy of parent bank* (%)	0.15	0.18	0.03	0.21

* Measured as the ratio of number of units in the form of branches to total number of units in other countries (source: Bankers' Almanac, 2011).

¹⁰ The renegotiation of contracts may be a rather complex legal operation, particularly in the case of corporate guarantees. However, regulatory changes may make this somewhat easier as well (assuring legal succession).

After EU accession, the establishment of banks has become easier, provisions governing the banking system have become more uniform and since 2007 switching between organisational forms has also become simpler. Consequently, we conducted our analyses on the most recent figures of end-2011.

Our sample includes 50 subsidiaries and 34 branches in 6 countries of the region (Bulgaria, Czech Republic, Poland, Slovakia, Romania and Hungary), which belong to 19 different banking groups (parent banks). Similarly to the original article, we used a probit estimation model with 3 types of variables: (1) variables on the parent bank level, (2) variables on the branch/subsidiary level, and (3) variables on the host country level.

Organisational form

$$= \beta_0 + \beta_1 \text{ Parent bank size} + \beta_2 \text{ Expansion strategy} + \beta_3 \text{ Acquisition} \\ + \beta_4 \text{ Subsidiary/Branch size} + \beta_5 \text{ Business strategy of subsidiary/branch} \\ + \beta_6 \text{ Corporate tax rate of host country} + \beta_7 \text{ Host country GDP/capita}$$

In the context of our estimation, we should examine potential endogeneity problems that may weaken the causality and the results, as in such cases the directions of causality between independent variables and the dependent variable is not always clear. Still, we consider that this problem is not particularly severe due to the special nature of our database. The parent banks we examined almost all entered the CEE countries through subsidiaries because the differences between branches and subsidiaries could not be exploited under the regulations effective at that time. Consequently, conversion into branches occurred mostly after the EU accession of these countries or following the change of rules facilitating transformation in 2008. Thus, certain characteristics of the subsidiaries/branches that we examined (size, business strategy) evolved long before the change of organisational form. Consequently, most of the potentially endogenous explanatory variables are predetermined, which mitigates the risk of distortion in the estimation.

On the whole, the outcomes of our estimation performed on the narrower sample and recent data largely confirmed the conclusions of Cerutti et al. (2007). For the variables we used, the overwhelming majority of results are identical with those of the original article both in terms of significance and sign:

Table 3
Probit estimations of the likelihood of operation as a branch

Explanatory variables	Dependent variable: Branch = 1 Subsidiary = 0			
	Model 1	Model 2	Model 3	Model 4
Size of parent bank	0.253*	0.0776	0.31	0.0911
Expansion strategy of parent bank	4.267***	1.309**	5.367***	1.577**
Acquisition	-0.271	-0.0818	-0.711	-0.199
Size of subsidiary/branch	-0.000514**	-0.000158***	-0.000475**	-0.000140***
Business strategy of subsidiary/branch	0.970**	0.316**	1.120**	0.354**
Relative corporate tax rate of host country	0.0148	0.00454		
Host country GDP/capita	0.0370*	0.0113*		
Bulgaria			0.504	0.168
Czech Republic			1.864**	0.639***
Poland			-0.461	-0.118
Romania			0.441	0.145
Slovakia			1.323*	0.465*
Number of observations	84	84	84	84
McFadden's pseudo R squared	0.5471		0.6106	

Note: For models 2 and 4 the marginal effects at the mean are disclosed. Several of the significant variables of the Cerutti et al. (2007) article are not included in our estimate. This is because the six countries we looked at have since become EU Member States (and their parent banks are also in the EU), and thus the regulatory framework for the banking system has become more uniform (this is why we omitted the variables for barriers to entry and constraints on banking operations of host countries, the variable for the restrictions of home countries on branching and the variable describing the political risk of the host country). Furthermore, we excluded the year of entry of the parent bank in the host country as this did not show significant variance in the countries examined. The variable for the business risk of the host country has also been omitted as we found no reliable data source for this information.

* $p < 0,1$; ** $p < 0,05$; *** $p < 0,01$.

- In the case of *parent bank size*¹¹ we did not intuitively know what outcome to expect. On the one hand, the larger size of the parent may increase the probability of operation as subsidiary, as the parent will find it easier to raise the capital needed for this organisational form. On the other hand, for larger parent banks operation in the form of a branch may *ceteris paribus* have a smaller risk of contagion as the size of the branch/subsidiary is relatively smaller when compared to the total assets of the parent bank. According to the results this variable is not significant in the choice of organisational forms;
- The *expansion strategy of the parent bank*¹² variable measures the preference of the banking group for branch form in its international expansion. The results reveal that the general expansion strategy of the parent banks is mirrored in their affiliates in CEE countries, i.e. parent banks that prefer the branch form tended to opt for this model in the six countries examined as well;
- In terms of the individual characteristics of the *subsidiary/branch* concerned, we see that a larger size¹³ significantly increases the likelihood of operation as a subsidiary. This is probably because branches tend to operate with a more limited scope of activities and thus have a smaller size;
- In addition to size, we also looked at the *business strategies* of the banks¹⁴ as the literature seemed to indicate¹⁵ that branches are less likely to focus on retail clients. The outcomes confirmed this: of the banks operating in the region, credit institutions with a corporate focus tend to work in a branch form;
- As indicated earlier, the countries we looked at showed a fairly small variance in terms of regulation; however, we also examined the effect of two variables that we considered to be potentially significant for the choice between the two organisational forms. Of these, the increase of the *relative corporate tax rate of the host country*¹⁶ may in theory encourage the choice of the branch model, which facilitates the expatriation of profits. However, the estimation prepared from our sample does not definitively show that this consideration is important, in contrast with the results of the original Cerutti et al. paper. This may be because for the purposes of intragroup income transfer the difference between branches and subsidiaries is diminishing;¹⁷
- As regards the level of *economic development of the host country*,¹⁸ our results confirmed that parents prefer to establish branches in more developed countries because in this case there is less chance for an economic shock that would result in the parent incurring actual losses through its unlimited liability for the obligations of the branch;
- The choice between organisational forms may also be influenced considerably by path-dependency: if the parent bank entered the host country through an *acquisition*,¹⁹ this meant that entry in the form of a subsidiary and the organisational form may have been left as it was as a result of inertia. The findings of Cerutti et al. indicated that this path-dependency was very strong around 2002, while our results show that this effect has weakened and become insignificant. This may indicate that the uniformisation of the regulatory environment and the easier transformation between organisational forms has had an impact on the operation of banks in the region.

¹¹ This explanatory variable was measured by the logarithm of the balance sheet total of the parent banks (source: Bankscope).

¹² Measured as the ratio of number of units in the form of branches to total number of units in other countries (source: Bankers' Almanac, 2011).

¹³ The size of subsidiaries/branches is measured by number of employees as other measures such as balance sheet data are not always available for branches (source: websites of banks).

¹⁴ The business strategy is measured by a dummy variable that takes the value of 1 if the subsidiary/branch focuses predominantly (at least 80 per cent of its assets) on the corporate segment, otherwise it equals 0.

¹⁵ See Goldberg and Saunders (1981) quoted by Cerutti et al. (2007).

¹⁶ Instead of the host country tax rate of the original article, we used a relative tax rate. This variable measures the difference between the corporate tax rates of the home and host countries because the parent decides based on the relative tax rate difference rather than the absolute tax rate (source: Doing Business).

¹⁷ For instance, the difference in transfer pricing between the two organisational forms have significantly declined in the past years, to a large extent due to the incorporation of the so-called OECD Model Convention into the laws of Members States (OECD Model Tax Convention on Income and on Capital, <http://www.oecd.org/tax/treaties/oecdmtcavailableproducts.htm>).

¹⁸ Measured by the per capita GDP of the host country (source: Eurostat).

¹⁹ We measured this using a dummy variable, which equals 1 if the banking group entered the host country through acquisition and 0 if entry was through a greenfield investment.

Based on our estimation results, the expansion strategy of parent banks has the strongest impact, while the variables for the size of the branches/subsidiaries, their business strategies and the level of development of the host country have a smaller effect, though of the same order of magnitude, on the likelihood of operation as a branch.²⁰ Despite the three insignificant variables, the cross-sectional model we estimated has a fairly good fit, the adjusted R-squared is 55 per cent and the estimations show that the model predicts the organisational form of banks in our sample correctly some 87 per cent of the time (Table 4).

Table 4
Classification table of the model

Estimated organisational form	Original organisational form	
	Branch	Subsidiary
Branch	82.3%	10%
Subsidiary	17.7%	90%

Note: For purposes of classification we considered an entity to be a branch above a probability threshold of 0.5.

On the whole, the results of our re-estimation performed on a more focused sample and recent data largely confirmed the conclusions of the original Cerutti et al. paper. Even though in theory the branch model is more efficient than the subsidiary form, in reality certain banking business models (retail profile, larger size, the 'operating traditions' of the parent bank) tend to have more impact on the operational form. That is to say, today in our region it mostly depends on the strategic decisions of parent banks whether their affiliates will operate in the form of branches or as subsidiaries. Based on these results, it is unlikely that large universal banks that constitute close to three quarters of the balance sheet total of the Hungarian banking sector and also operate as large retail service providers will be transformed into branches. Nevertheless, the supervisory authorities need to examine the potential risks arising from that eventuality. This is the subject of the next chapter.

²⁰ The effects are measured for a one standard deviation change from the mean; based on this, the probability of operation as a branch is increased by 25% by a change of one standard deviation in the expansion strategy and by approximately 14 per cent by a similar change in the other three variables (a decrease of the same size in the case of branch/subsidiary size).

3 Regulatory dilemmas

The most important challenge that host country supervisors face is that their supervisory powers and responsibilities are reduced in respect of branches. Reduced responsibility means a risk, but in certain cases it may also have benefits: on the one hand, the host supervisor is more vulnerable to contagion from non-resident banking groups, while on the other hand in certain, although not all, cases the costs of a regulatory failure are borne by the home country rather than themselves.

However, the degree of reduction of the responsibility varies between dimensions of financial regulation (micro- and macro-prudential regulation, consumer protection, bank resolution). In the following, we go through these dimensions, first looking at the legal framework provided by the *acquis* then assessing the extent and risks of the loss of control, in the regulatory dimension concerned, by the host country due to transformation into branches. The review is hindered by the ongoing major changes in the regulation of credit institutions in the European Union: these elements of uncertainty are highlighted in the text. In this chapter, as in the foregoing, we focus exclusively on banking groups operating within the European Union.

3.1 MICRO-PRUDENTIAL SUPERVISION

The purpose of micro-prudential supervision is to assure that the banks of a country operate safely on the stand-alone level without endangering the funds of their depositors. The micro-prudential supervision of branches is different from the supervision of subsidiaries in the following respects:

- i. issue of operating license, verification of conditions of operation:* when a branch is established, the home supervisor of the parent bank issues the operating license and verifies the conditions for operations in the host country as well. Host country authorities have no competence in that matter;²¹
- ii. definition of capital requirement, validation of capital adequacy:* entities operating as subsidiaries must meet the capital requirements calculated according to Pillar I of the European Capital Directive – i.e. based on legislation – also on a stand-alone basis, which is verified by the host country supervisor. Furthermore, pursuant to Pillar II of the Capital Directive, the host supervisor may also impose additional capital requirements on a subsidiary on a discretionary basis – under the so-called supervisory review process (SREP) – if they deem it necessary based on the risk level of the operation of the bank concerned.²² Naturally, this additional capital requirement is also reflected in the consolidated capital adequacy of the banking group. By contrast, as the branch has no capital separate from the parent bank, its capital adequacy under Pillar I is monitored and additional capital requirement under Pillar II may be imposed by the home supervisor of the parent bank. This means that if the host country supervisor considers that the operation of the branch entails higher risks than what would be covered by the capital requirements under Pillar I, they may request the home supervisor to impose additional capital requirements under Pillar II accordingly, but the latter is not obliged to honour that request;
- iii. powers of the host country supervisor to intervene and impose measures:* the host country supervisor has more limited, or at least more complicated, intervention options in respect of branches. In respect of the capital position, they can

²¹ Directive 2006/48/EC Articles 25–26, Act XCII of 1996 Section 14.

²² Act CXII of 1996 Section 146; it should be noted, however, that in the overwhelming majority of cases the supervisory review is conducted in cooperation with the home supervisor within the EU under a so-called joint decision process. In the course of this, home and host authorities cooperate closely to establish the additional capital requirement for subsidiaries.

only communicate their concerns to the home country supervisor while the decision is the exclusive competence of the home supervisor. If other rules, such as liquidity requirements, are violated the host supervisor may call on the branch directly to terminate the violation, even though in case of non-compliance the host must first request the home country supervisor to intervene. If the home supervisor fails to oblige or if the violation relates to consumer protection or severely endangers the financial stability of the host country, the host supervisor may take direct action (impose sanctions) against the branch.²³

However, there are elements of micro-prudential supervision that are identical for branches and subsidiaries:

- iv. *liquidity regulation*: in this respect there is no difference between subsidiaries and branches: the host supervisor can impose liquidity requirements on both organisational forms.²⁴ In practice, however, there are noticeable differences. In Hungary, for instance, some liquidity requirements²⁵ (balance sheet/deposit coverage ratio, FX funding adequacy ratio) currently do not apply to branches, even though it would be possible to extend the regulation to cover them. This regulation, however, may change soon: the liquidity requirements of the new EU bank regulation proposes introducing a significant difference between branches and subsidiaries: while these requirements will not be applicable separately to branches (i.e. compliance on an individual basis will not be required), in the case of subsidiaries group level compliance will be allowed only if certain criteria, which are under discussion at present, are met.
- v. *participation in central bank operations and the payment system*: branches and subsidiaries have the same rights and obligations when participating in the payment systems of the host country and engaging in operations with the central bank. Consequently, the reserve requirement also applies to branches;
- vi. *reporting rules*: even though in practice host supervisors tend to impose a lighter administrative burden on branches, in theory laws allow the same statistics and data to be required from branches and subsidiaries;²⁶
- vii. *participation in consolidated supervision*: in the case of subsidiaries, host country supervisors may participate in the so-called college of supervisors responsible for the consolidated supervision of the banking group. Even though host country supervisors normally have no such right in the case of branches, they may be granted that power if they declare the branch to be a systemically important financial institution;²⁷

On the whole, even though the micro-prudential supervision of branches is primarily the competence of the home supervisor, eventually the host supervisor also has the necessary micro-prudential supervision tools²⁸ in respect of the *operations* of the branch *in the country concerned*. Consequently, the difference between branches and subsidiaries is not the fact that the responsibility of the host authorities would be zero, instead, the nature of the responsibility changes:

- i. in the case of branches, the use of micro-prudential supervisory tools is somewhat more complicated for the host country;
- ii. the *perceived* responsibility of the host country authority may be smaller, for two reasons. On the one hand, the operation of the banking group in the host country is ultimately the responsibility of the home supervisor and on the other hand, the host supervisor has only a very limited responsibility for the operation of the banking group in the home country and is powerless against any risks or contagion originating in the home country. This may distort incentives for the host supervisor (and also for the home supervisor, due to the implicit dual responsibility), which is more likely to lead to excessive supervisory forbearance in respect of certain harmful bank conducts;

²³ Directive 2006/48/EC Articles 30–32, Act XCII of 1996 Section 168/A.

²⁴ Directive 2006/48/EC Article 41.

²⁵ Government Decree No. 366/2011.

²⁶ Directive 2006/48/EC Article 29, Act XCII of 1996 Section 143.

²⁷ The requirements for this are not specified, but the following criteria need to be considered in particular: whether the branch has at least 2% of the deposits of the host country, the likely impact of a suspension or closure of its operations on the payment and settlement systems in the host country and its significance in terms of number of clients. Directive 2006/48/EC Article 42a.

²⁸ For instance, they may impose reporting obligations, conduct on-site examinations and even directly intervene in the operation of branches and they can also sanction their violations or activities endangering the stability of the financial institution. In other words, the host country has this option, but it entails significant consultation obligations.

- iii. the costs arising from inadequate supervision may be largely unrelated to the quality of host supervisory work: on the one hand, the costs of inadequate supervision are borne primarily by the home country and on the other hand, contagion from the home country is more likely to cause problems in the host country as well, irrespective of the quality of the work of host supervisors.

In combination, the above factors may increase the likelihood of 'regulatory failure', although it is difficult to assess the magnitude of this increased probability for the host supervisor. By 'regulatory failure' we mean when a bank needs reorganisation or preventive supervisory intervention; this leads us to the next section.

3.2 CRISIS MANAGEMENT AND BANK RESOLUTION

The difference between branches and subsidiaries is most marked for the host country in the context of the failure of micro-prudential supervision, that is, crisis management relating to a bank/banking group or management of the bankruptcy of the parent bank. The assessment of this issue is rather problematic at this point, as the package regulating the crisis management of financial institutions within the EU is currently only at the Commission proposal stage. Consequently, in the examination of challenges relating to crisis management on the individual bank level the highly uncertain regulatory environment needs to be taken into account:

- i. Because of the unlimited liability, the more integrated and centralised operating and financing model and the absence of 'firewalls' due to the legal form, branches are much more exposed to a contagion from the parent bank. Because of the organisational form, in the event of the bankruptcy of the parent, the home country authority or government decides on a bailout, divestiture of parts of the credit institution or the split-up of the institution. If split-up does not happen, the host country cannot 'help out' the operations of the bank (the branch) in its own jurisdiction, even if this were considered desirable. While under the right fundamental conditions (stable financing from local sources, stable capital position, etc.) subsidiaries may stand on their own feet both in theory and in practice, despite the problems of their parent (or another group member),²⁹ this is close to impossible in the case of branches due to their legal status and integration. Thus, the decentralisation arising from the legal form of subsidiaries may be expressly beneficial. However, this requires that – if needed – the host country has the tools (resources and legal conditions) necessary for a bank resolution. The proposed regulation concerning the bank union may pose additional challenges in the area of contagion from parent banks. Under the proposal, the authority of another Member State as well as the ECB acting as the central supervisor will also be involved in some of the decisions relating to the crisis management of the parent;³⁰
- ii. In the event of the failure of the parent bank, depositors in the branches will be indemnified by the deposit insurance scheme of the consolidating authority. Even though the minimum level of deposit insurance is harmonised in the EU, the coordination and implementation of cross-border deposit insurance claim payments may be considerably more complex and require more time than on the local level. On the one hand, any issues and complaints arising during indemnification must be addressed in different organisational, linguistic and partly legal environments and on the other hand, if the deposit insurance fund of the home country proves insufficient for indemnification, the fiscal contribution of the home country may also pose a risk to timely indemnification, as seen in the example of the bank crisis in Iceland.³¹ Furthermore, the spread of the branch model may in theory cause problems for the deposit insurance scheme of the host country (see Box 1). Also, uninsured depositors will not be indemnified even if the assets of the branch in the host country would provide full cover for the liabilities in the host country.

On the whole, the aspect of the transformation into branches which is potentially the most detrimental to the host country is the reduced availability of tools to protect against external contagion and defend its own depositors. While it is possible that the set of bank resolution rules in the EU which are yet to be elaborated will reduce the related risks, there is no guarantee that this will be the case. (It is no coincidence that an IMF analysis – Fiechter et al. (2011) quoted above – also

²⁹ This is the so-called 'ring fencing', that is, the isolation of subsidiaries from the whole of the group.

³⁰ Early supervisory intervention, withdrawal of operating license, etc.

³¹ After the bankruptcy of Landsbanki in Iceland in 2008, the Icelandic deposit insurance scheme did not sufficiently indemnify Dutch and British depositors. Eventually, the Dutch and British governments indemnified clients and the two countries are still suing Iceland for compensation for the indemnification (in an approximate amount of EUR 3.9 billion).

prefers subsidiary structures operating as independent entities until there is significant progress in the cross-border coordination between supervisors.)

Box 1

Negative effects of transformation into branches on the deposit insurance scheme of the host country and on competition on the market of deposits

The penetration of branches may have a negative impact on the deposit insurance scheme of the host country and may distort competition on the market of deposits, though these negative effects appear to be manageable for the time being.

On the one hand, if an increasing number of foreign subsidiaries are converted into branches (covered by the deposit insurance scheme of their home countries), there will be fewer contributors to the domestic deposit insurance scheme, which will in turn increase the deposit insurance premium payable and the concentration of insured domestic institutions. At the extreme, this may jeopardise the sustainability of the deposit insurance system – irrespective of it being ex ante or ex post funded. However, the balance of the effects of the exit of a bank on the entire system is difficult to specify as it depends not only on the amount paid by the institution into the deposit insurance scheme but also on the probability and of it giving rise to subsequent claim payments and the amount of such claims. Experience seems to indicate that the exit of foreign banks from the Hungarian deposit insurance scheme tends to have a negative net effect, as it would probably reduce the insurance premium collected while outgoing payments would not necessarily change: in the past 20 years the National Deposit Insurance Fund has only made payments to depositors of domestic credit institutions.

The contribution base of the Hungarian deposit insurance scheme has been declining continuously since 2006 upon the conversion of certain subsidiaries into branches and the increase of the market share of those branches: while in 2006 branches held only 0.3 per cent of retail deposits and 4 per cent of corporate deposits, the corresponding figures at end-2012 were 4% and 12%, respectively. The exit of these branches had a negative effect on the Hungarian deposit insurance scheme in excess of their market share, because the premium payments made by these entities as a percentage of the actual indemnification obligation tended to be higher.³² Even so, the exit of branches has caused no perceivable problems in the system, due to their relatively low market share. Furthermore, as the insurance premium is relatively low,³³ the potential exit of additional larger banks would remain manageable for some time: even if members with significant market shares were to leave, the deposit insurance premium payable by the remaining members would increase by no more than 0.01-0.02 per cent of their balance sheet total (if the NDIF were to collect the same amount of total premium).

As another potential problem, in practice the proliferation of branches may distort competition on the market of deposit collection of the host country if depositors have more trust in the deposit insurance scheme of the home countries than of their own country. Such an effect may have already emerged; still, it we have not seen residents placing considerably more deposits in branches coming from countries with more stable fiscal positions than Hungary.

3.3 CONSUMER PROTECTION AND COMPLIANCE WITH OTHER LEGISLATION

Consumer protection rules, just as any other laws of the host country not covered by EU banking law, are equally applicable to branches and subsidiaries. Both subsidiaries and branches are required to comply with national rules adopted 'for the public good' in the context of the consumer protection regulation of financial products.

3.4 MACRO-PRUDENTIAL OVERSIGHT CONSIDERATIONS

The effective EU bank regulation³⁴ does not regulate the details of the macro-prudential oversight of Member States. Member States may devise their own macro-prudential regulations at the national level, but need to take into consideration

³² While banks pay the annual deposit insurance contribution on the total insured deposit portfolio (i.e. also the part above the insured ceiling), the NDIF (National Deposit Insurance Fund) has actual payment obligation only up to the insured ceiling (EUR 100,000). As the banks that have been converted into branches since 2006 tended to focus on deposit collection from large corporations, their exit deprived the NDIF of members whose rate of premium payment was higher in comparison to the potential claim payments.

³³ In 2012 the deposit insurance premium amounted to 0.06 per cent of the insured portfolio.

³⁴ Directive 2006/48/EC.

the recommendations of the European Systemic Risk Board (ESRB).³⁵ The macro-prudential rules thus designed cover both branches and subsidiaries as long as the rules are applicable to both legal forms.³⁶

However, the current regulatory framework will soon undergo a radical change. The new liquidity and capital regulation package of the EU (CRR/CRD IV) is expected to significantly constrain the manoeuvring room of the macro-prudential authority of the host country. The new regulatory framework differentiates between four fundamental asset classes that can in theory also be used for macro-prudential purposes:

- i. As a result of the regulation status of the rules, in respect of a substantial part of the provisions regulated in detail in the package (e.g. outflows) the host macro-prudential authority may not prescribe tighter requirements (this is the so-called maximum harmonisation principle). Thus, these requirements may not be tightened for branches or for subsidiaries either.
- ii. The new rules introduce certain tools specifically for macro-prudential purposes. One of the most important such tools is the so-called countercyclical capital buffer,³⁷ which has the purpose of smoothing fluctuations arising from the procyclical operation of the banking system and preventing any systemic risk stemming from any other structural variable. The countercyclical capital buffer is proposed to be set by national authorities for loans provided to natural and legal persons within their Member States,³⁸ i.e. it will be applicable to branches and subsidiaries alike.
- iii. In respect of the third group of prudential requirements regulated in the CRR/CRD IV,³⁹ the host authority may initiate stricter rules for a limited period of time. However, these tighter rules may enter into force only if – based on the assessment and initiative of the host country authority – they are supported by the European Commission, the European Systemic Risk Board (ESRB) and the European Banking Authority (EBA). In the event of agreement, the European Commission adopts these stricter prudential requirements in a so-called delegated act, for a limited period of time, in respect of one or more sectors, regions or Member States. In this case, the new requirements are applicable, at least in theory, both to branches and subsidiaries.
- iv. The fourth group of prudential requirements comprises assets not regulated in detail by the new CRR/CRD IV. The macro-prudential authority of the host country may directly impose these macro-prudential requirements on subsidiaries (e.g. maximum loan-to-deposit ratio). However, these rules will apply to branches only if the host country authority can convince the macro-prudential authority of the home country about the existing systemic risks and the suitability of the tool proposed for their management.

Accordingly, even though the regulatory manoeuvring room of the macro-prudential authority of the host country becomes more limited in respect of branches, in case of the two latter groups of provisions they may still be able to indirectly impose general macro-prudential requirements (applicable both to branches and subsidiaries). If – despite the warning of the host authority – the home macro-prudential authority rejects the use of the proposed tools to address the risks and the issue escalates, the moral responsibility would clearly lie with the home authority. It is questionable, however, whether this will offer a sufficient incentive to home supervisory authorities even in cases where they are less sensitive to the problems of the host country, due to the low ratio of their exposures to that country. The risks for the host country may be somewhat mitigated by the fact that a number of macro-prudential tools, such as the LTV limits to prevent excessive credit outflow, remains in the competence of Member States.

³⁵ Regulation (EU) No 1092/2010 of the European Parliament and of the Council of 24 November 2010 on European Union macro-prudential oversight of the financial system and establishing a European Systemic Risk Board, OJ L 331, 15. 12. 2010, p. 1.

³⁶ Some instruments are not applicable on the branch level (e.g., tighter capital adequacy requirements).

³⁷ See CRR/CRD IV package Articles 125–132 (Directive section).

³⁸ Under the CRR/CRD IV proposal, the buffer can normally be set between 0% and 2.5% of risk weighted assets. The buffer must be met by capital of highest quality (so-called CET 1 capital). If justified, authorities can even set a buffer beyond 2.5%. The countercyclical capital buffer will be required during periods of excessive credit growth and released in a downturn. The ESRB issues recommendations for the setting and monitoring of the buffer. So long as the countercyclical capital buffer is set below 2.5%, Member States have to mutually recognise and apply the capital charge to banks in their Member States. For parts of the buffer exceeding 2.5%, authorities can choose if they accept the judgement of other Member States and apply the higher rate or leave it at 2.5% for institutions authorised in their Member State.

³⁹ These include, inter alia, the temporary increase in the level of required own funds, the temporary modification of deductions from own funds, temporary modification of own funds requirements for securitisation, credit risk, market risk, operational risk, settlement risk and credit valuation adjustment risk (for more details please refer to: CRR draft, Article 443).

In summary: the situation with macro- and micro-prudential oversight is similar in that the host supervisor may apply most tools to branches as well, even though this will be more complicated in some cases and sometimes the express consent of the home country will also be required. This may have a similar impact on the incentives of the host authorities to the ones described in the micro-prudential context. Ultimately, transformation into branches will increase the likelihood that the host country may be unable to efficiently prevent macro-prudential risks arising in its financial markets.

Box 2

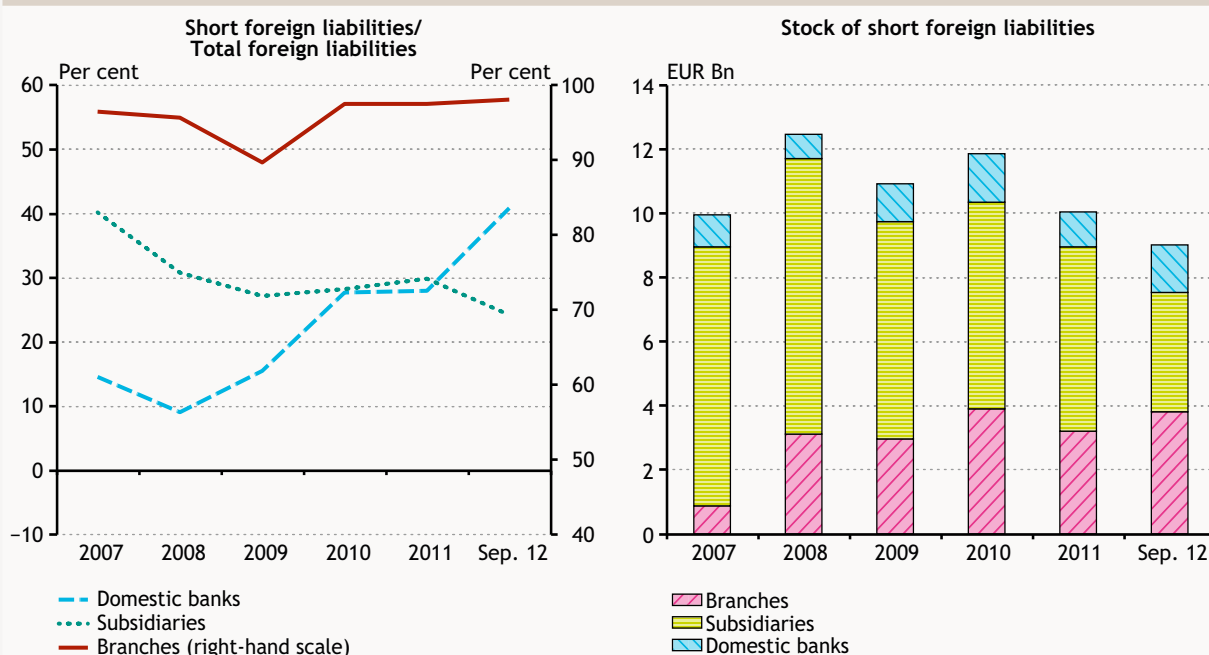
The problems of short-term foreign funds of branches

As liability-side liquidity risks are not applicable to branches on a stand-alone basis, the maturity of funds received by the branch from the parent bank is irrelevant for the management of both the local entity and of the parent bank. However, in the national statistics of the host country the funds extended to the branch by the parent bank are also part of the external debt and worsen the maturity structure in the statistics even if in reality these funds of the branches have no roll-over risk for the host country. This is due to two reasons:

- a) on the one hand, in practice less sophisticated observers make no distinction between the elements of short-term external debt with different actual roll-over risks. Consequently, when the central bank sets the level of foreign exchange reserves based, inter alia, on the level of the short term external debt of the country, it has to include⁴⁰ the short-term external debt of branches and take on the costs resulting from the additionally higher level of foreign exchange reserves⁴¹ (naturally, this issue does not arise in EEA countries using the euro);

Chart 4

Maturity of external funds in credit institutions with different organisational forms



Source: MNB.

⁴⁰ There are several approaches described in literature to the ideal level of the foreign exchange reserves of a country (for a summary see Antal and Gereben, 2011); of these, one of the most prominent tools during the 2008 crisis was the so-called Greenspan-Guidotti rule. This compares the short-term (up to 1 year) external liabilities of a country to the level of foreign exchange reserves.

⁴¹ In highly oversimplified terms, the (marginal) cost of maintaining the FX reserves is the average yield spread between the central bank base rate and the yield of the FX reserves.

b) on the other hand, these short-term liabilities may also have direct roll-over risks if the branch onlends them to other residents for the short term, that is, if they perform no maturity transformation in their own balance sheet;

The Hungarian data indicate that this is a relevant problem. This is because 98 per cent of foreign funds in the balance sheets of branches have maturities of one year or less (Chart 4), and this ratio has not declined since the onset of the crisis. The overwhelming majority of these funds are made available by the parent – even though this has no significance in the sense that the liquidity of the parent bank is available to creditors other than the parent bank as well. As the short-term external liabilities of foreign subsidiaries have declined significantly since 2009, by 2012 over 40 per cent of the short-term external liabilities (by original maturity) of the Hungarian banking system related to branches as opposed to 25 per cent in 2009.

This picture shows the external liquidity risk of Hungary to be higher than it really is, as branches tend to onlend their short-term funds for somewhat longer maturities on average: 30 per cent of their under-one-year funds are used to finance over-one-year assets and even their under-one-year assets have a longer average maturity than their under-one-year liabilities. That is, branches do perform maturity transformation, and thus some of their short-term external assets have no high roll-over risk attached. However, the benefits of this cannot be exploited for the national economy due to the reasons explained in point a) above. This would require branches to adjust the maturity structure of their liabilities to the maturities of their assets: as this would only need a change in the maturity of liabilities of the branch to the parent bank, it could have a more beneficial effect on the host country without effectively worsening the consolidated position of the banking group.

3.5 SUPERVISORY PREFERENCE BETWEEN BRANCHES AND SUBSIDIARIES – A PRACTICAL APPROACH

The approach used so far has been mostly general, while in practice it also depends on the position of a particular country or banking group whether the form of subsidiary or branch is more beneficial for the stability of the financial system in the host country. In this respect, the following factors are key:

- a) *the business model of the bank in the host country*: if a bank engages mostly in lending in the market of the host country and finances this lending largely from external funds, it is better for the host country if it operates as a branch because then the (actual) roll-over risk of external funds is lower (and due to the efficiency benefits of the branch form, in theory the economy can be provided with credit at a lower cost). If, however, the bank is also a major deposit taker in the market (irrespective of its level of activity in lending), then in theory the host country supervisors can more effectively protect resident depositors if the entity operates as a subsidiary. This is particularly true if the bank uses a significant part of domestic deposits to fund external assets;
- b) *the commitment and financial strength of the parent bank*: if the parent bank has the necessary resources and experience shows that it is sufficiently committed to the market of the host country, the branch form offers few benefits to the host country supervisors, because in this case the parent bank is likely to provide the same support to a subsidiary in the event of a liquidity or capital shock as it offers to the branch, even if not legally obliged to do so;
- c) *the financial strength of the sovereign of the home and host countries*: if the fiscal position of the host country allows it to mobilise significant funds, within reasonable limits, for the potential resolution or recapitalisation of banks operating in its jurisdiction, then it can maintain financial stability in the presence of subsidiary banks as well, and thus it may prefer the subsidiary model entailing greater responsibility for the host country. On the other hand, the recent Irish example shows that the reorganisation of the banking system can easily devastate the budget of a country in an otherwise satisfactory fiscal position. If, however, the financial strength of the home country – or its willingness for bank resolution – is greater than that of the host country, the host will take on less risk with the partial releasing of responsibilities inherent in the branch model. If both the host country and the home country appear to have adequate financial strength, the subsidiary model may be more advantageous for the host country, because in addition to assuring the survival of banks, it also has more influence over their operation, for instance the amount of credit they can provide to the economy.

These factors, however, are difficult to assess in advance (for instance, how committed is the parent bank?), and they can change easily even in the short term. In the current situation, due to the limited manoeuvring room of the Hungarian sovereign and the relative financial strength of the parent banks and of their sovereigns,⁴² *in theory* the conversion of subsidiaries into branches may have short-term benefits for financial stability in Hungary. *In practice*, however, in light of the strong commitment the parent banks have exhibited to their Hungarian subsidiaries,⁴³ the subsidiary model does not appear to be noticeably more risky for Hungarian authorities than the branch model. Furthermore, the interests of Hungarian depositors seem to be better protected under the subsidiary scheme in the longer term, at least until the bank resolution mechanisms of the EU are finalised. In summary, the status quo appears to be satisfactory for Hungary.

⁴² The foreign-owned banks structured as joint stock companies responsible for over 90 per cent of the balance sheet total of the banking system have Austrian, Italian, Belgian or German owners, and each of these countries have a better sovereign credit rating than Hungary at the moment.

⁴³ Between 2009 and 2012, non-resident banks implemented capital increases in their Hungarian subsidiaries amounting to 2 per cent of the average GDP of Hungary in the period, and in 2009 the owners of 6 non-resident large banks undertook to maintain their exposures to Hungary in the so-called Vienna Initiative.

4 Conclusions

In our analysis, we examined whether the Hungarian supervisory authorities have anything to fear from the conversion of foreign subsidiaries into branches. We demonstrated that no negative anomalies can be identified in the past operation of branches in Hungary; indeed, branches are useful participants in certain market niche segments. Nevertheless, their aggregate share in the balance sheet total of the Hungarian banking system is still modest.

Even though transformation into branches appears to be more efficient for banks, it has the single disadvantage that the parent bank has unlimited liability for the liabilities of its entity in the host country. However, 'abandoning' a subsidiary is not a realistic option in most cases for the parent bank anyway, because of the reputation risks and also because specifically in Hungary parent banks have exposures to their subsidiaries not only in the form of equity but also through debt funding. In light of experience and the relevant empirical research, it appears unlikely that large foreign-owned Hungarian banks would be converted into branches.

However, the theoretical possibility is there, and Hungarian supervisors must reckon with that risk. In the case of branches, both micro- and macro-prudential oversight is more complicated for the host countries and the use of certain supervisory tools is conditional on the consent of the home country supervisor. Therefore, transformation into branches reduces the powers of the host countries to maintain the stability of their banking systems and renders them more vulnerable to shocks arising in the home country. Based on the above, it would be desirable to maintain the status quo in respect of the organisational form of the Hungarian banking system.

5 References

- AIYAR S. (2001), *How did the crisis in international funding markets affect bank lending? Balance sheet evidence from the United Kingdom*, Bank of England, April.
- ANTAL, JUDIT AND ÁRON GEREKEN (2011), "Foreign reserve strategies for emerging economies – before and after the crisis", *MNB Bulletin*, April.
- BREI, M. AND C. WINOGRAD (2012), "Foreign banks, corporate strategy and financial stability: lessons from the river plate", *Working Paper*, No 2012-26, Paris School of Economics.
- CERUTTI, E., G. DELL'ARICCIA AND M. S. M. PERÍA (2007), "How banks go abroad: Branches or subsidiaries?", *Journal of Banking & Finance*, vol. 31, pp. 1669–1692.
- EUROPEAN CENTRAL BANK (2010), *EU Banking Structures*, September.
- FIECHTER, J., I. ÖTKER-ROBE, A. ILYINA, M. HSU, A. SANTOS AND J. SURTI (2011), "Subsidiaries or Branches: Does One Size Fit All?", *IMF Staff Discussion Paper*, March 7.
- NATIONAL DEPOSIT INSURANCE FUND OF HUNGARY (2011), Annual Report, [URL](#), downloaded 04 Dec. 2012.
- PONTINES, V. AND R. Y. SIREGAR (2012): "How Should We Bank With Foreigners? An Empirical Assessment of Lending Behaviour of International Banks to Six East Asian Countries", *Occasional Paper*, No. 54, SEACEN.

MNB Occasional Papers 106

Transforming subsidiaries into branches – Should we be worrying about it?

August 2013

Print: D-Plus

H-1037 Budapest, Csillaghegyi út 19–21.

