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# Are Expatriates Managing Banks' CEE Subsidiaries More Risk Takers?

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This paper looks at the largest credit institutions from Central and East European countries to better understand the role of expatriates and of other top management team's characteristics for banks' risk profile, strategies and lending activity. The results find that credit institutions with expatriate chief executive officers or larger share of expatriates in the top management team are more risk-takers, as indicated by alternative measures of risk (loan-to-deposit ratio, share of risk weighted assets and provisions for loan losses in total assets). On the other hand, banks managed by expatriates and more interconnected with the parent financial institution or other related parties tend to deliver more credit to companies and households (as share in total assets).

**Keywords:** banks; expatriates; top management teams; risk; CEE countries

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#### I. Introduction

The recent financial crisis has highlighted the need for a proper understanding of financial linkages between market players across countries and regions. Given the accelerated speed of globalization, cross-border banking flows and the number of multinational banks heightened. As such, over the last decades, the market shares of foreign banks increased significantly especially in emerging markets, including Central and Eastern Europe (CEE). As of 2013, foreign-controlled subsidiaries and branches accounted for over 72 percent of CEE banking sector assets. Staffing foreign subsidiaries, as well as understanding the particularities, motivations and different behaviors of top management teams within banking groups, including the international assignments aspects, are of particular importance in this context and represent critical issues in international management.

This paper is related to the stream of international staffing and upper echelon literature. In light of the increasingly global nature of banks' activity, it is analyzed how managers' country of origin matters for the activity of the largest credit institutions in five CEE countries. Expatriates are considered the managers originated from parent bank country, as well as third countries nationals (in most cases, those managers had a relatively long international experience in the banking group and are Western European nationals). Empirical evidence on how other chief executive officer's (CEO) and top management teams' characteristics impact banks' risk profile and strategies, including the integration into financial conglomerates, is provided. The scope of this paper is to answer the following questions: i) are expatriates top management teams different than local ones and ii) how are managers' characteristics related to financial stability, namely risk taking of banks and lending activities?

The main contributions of the present work are the following. Firstly, it is focused on five CEE countries (Croatia, Czech Republic, Hungary, Poland and Romania), chosen in this combination sample based on non-euro membership, geographical and similar governance structure. Secondly, starting from the realities met in CEE countries, in which empirical evidence showed that banks managed by expatriates developed riskier behaviors (translated for example in higher

non-performing loans volume and further, in higher provisions for loan losses especially in stress periods), the paper nets out the impact of nationality of banks strategies. The results suggest that even after controlling for banks' specificities (size, profitability, capitalization etc.) credit institutions with expatriate CEOs or higher share of expatriates in top management teams seem to be more risk-takers, the estimations highlighting a stronger relationship between CEO and risk compared to top management teams' composition-risk. Thirdly, the methodologies used account for management endogeneity, one of the methods being propensity score matching techniques. The results also indicate that banks with expatriate managers grant more credit (as share in total assets) towards companies and households. Moreover, the funds from parent bank and from other members of the group have a significant and important role in sustaining lending. Nevertheless, the results are statistically significant in a limited number of cases, which might also be explained by the small sample size. These evidences leave room for a more in-depth analysis of the importance of parent and related parties transactions for subsidiaries' business strategies.

The paper is structured as follows. In Section II, the literature on corporate governance and international staffing is briefly reviewed, while in Section III the sample and information used in the analysis are described. Section IV details the methodological framework, whereas Section V presents the results. Finally, Section VI concludes.

#### II. Related literature

A large number of studies showed that nationality of the ownership, board of directors and management affect firms' performance, cross-cultural awareness and ability to cope with the evolution on foreign markets. Staffing decisions in an international environment are of a high degree of complexity (Torbiorn, 1997), being important to respond to host market conditions, to control subsidiaries' actions and for an effective implementation of business strategy.

As regards the board of directors' composition, Delis et al. (2015) show that adding board directors from countries with different levels of genetic diversity increases firm performance, on a set of listed firms in the North American and U.K. stock markets. Choi and Hasan (2005) shows that the presence of a foreign director on banks' board is significantly associated with return and risk in case of Korean banking industry. On the other hand, Garica-Meca et al. (2015) find that board

diversity in terms of gender increases bank performance, while national diversity inhibits it, of a sample of 159 banks in nine countries during the period 2004–2010.

The nationality of the top management positions is of key interest in multinational organizations, as these positions have a stronger potential to impact a host country subsidiary's effectiveness (Colakoglu et al., 2009). The nationality of the *CEO* and the top management team composition in terms of country of origin influence the activity of the company on international markets and can lead to a stronger interconnectedness with the parent company and group. Particularly, parent country nationals are considered followers of headquarters views, due to their familiarity with the objective, practices and policies of the parent company (Dorrenbacher et al., 2013).

In case of the banking sector, Bogaard and Sonkova (2013) argue that the appointment of managers involves a trade-off between insight into the local business environment and congruence of objectives with those of the parent bank. The authors find that the probability of the parent bank naming a CEO from the host country increases when the supervision and other institutions in the host country are strong. On the other hand, Majnoni et al. (2003) find no impact of the presence of national and foreign CEOs in the Hungarian banks' governing bodies. In case of foreign-controlled subsidiaries and branches, Cardenas et al. (2003) underline that the governance structures of the subsidiaries should be properly designed to reflect both the interests of the parent company and the stakeholders of the subsidiary. Allen et al. (2011) find that related party transactions can generate problems for the stability of foreign banks' subsidiaries and in some cases, to the overall host countries financial stability. The authors attribute this evolution to weak governance in foreign subsidiaries.

Basel Committee on Banking Supervision (2014) draws attention that an effective corporate governance in financial system is crucial for an adequate functioning of the banking and real sector. In this respect, Beltratti and Stulz (2012) argue that bank level governance, country level governance and country regulation explain the variation in banks' performance during the crisis. They find that institutions with more shareholder-oriented boards had a poor performance during the financial turmoil. Minton et al. (2014) show that during the 2007-2008 financial crisis, the financial expertise of independent directors in US banks was associated with a lower performance, as a result of the higher risk assumed by banks with more independent financial experts prior the crisis. Aebi et al. (2012) highlight that the presence of a chief risk

officer in banks' executive boards that directly reports to the board of directors and not to the *CEO* lead to higher stock returns and ROE during the crisis.

An important issue in the corporate governance literature is related to the management's endogeneity. There is a broad variety of studies suggesting that top management teams' structure (Dezso and Ross, 2012; Faccio et al. 2015; Kaczmarek and Ruigrok, 2013 etc.) and top management changes (Fee et al., 2013) are endogenous. For example, Fee et al. (2013) argues that there is a high probability that firms/boards decide to simultaneously make a large set of major changes related to investment and financing decisions, along with leadership changes. In this case, it difficult to determine what role the management plays on firm's choices and performance.

Thus, firm's performance is a result of the previous governance's actions and at the same time, it is a factor that potentially influences the choice of subsequent governance structures. The endogeneity makes it difficult to determine the causal effect of management on the performance indicators of the organization. Sorting out the causality is important, as it helps understanding the relative importance of leadership in explaining the cross-sectional variation in performance, investment decisions, financing patterns and strategies. If managers' appointment is done on the grounds of unobservable characteristics correlated with the error term, traditional regression techniques are invalidated (spurious estimations). The endogeneity is commonly treated by means of instrumental variables, matching techniques or two-steps estimators. For example, Fang et al. (2012) use simultaneous equations, the instrumental variable approach and the event study estimation to solve the endogeneity spanning from the link between CEO social network heterogeneity and firm value. De Andres and Vallelado (2008) find an inverted U-shaped relation between bank performance and board size, as well as between the proportion of non-executive directors and performance, by employing a two-step system estimator.

#### III. Data description

The main scope of this study is to estimate the effect of expatriate management on banks' risk taking, strategy (including financial interconnectedness with the parent bank and other members of the banking group) and lending activity. To this end, information on bank financial indicators and top management team members' characteristics is gathered, out of which the main variable of interest is nationality. The sample used in the empirical exercise consists of 27 credit institutions in five CEE countries: Croatia (5), Czech Republic (5), Hungary (6), Poland (6) and Romania (5). The choice of the sample is based on non-euro membership, geographical proximity and data availability. The choice of countries was also due to their similar governance structure. i.e. dual boards, consisting of management board and supervisory board. In Czech Republic, the board of directors consists of executive and non-executive members, the executive ones being considered top management in this paper (in line with banks' annual reports). The banks were selected among the largest banks in each country by total asset, as big players might have different behavior and strategies compared to smaller banks. The 27 selected banks hold assets totaling approximately 460 billion euros, representing 56 percent of the abovementioned countries banking sectors (as of 2013).

Information related to total balance sheet, profitability indicators, risk indicators (risk weighted assets - RWA, provisions for loan losses - PLL, LTD - loan to deposit ratio), deposits, loans and advances to costumers, equity and other indicators related to asset structure and financial interconnectedness (parent funding, intra-group liabilities) were collected for the period 2007-2013 from banks' annual reports and when available, from Bloomberg database. All nominal values are transformed in millions of euro based on the exchange rates provided by Bloomberg. The summary statistics of the variables used and the correlation matrix are presented in table 1 and table 3. The choice of the risk measures was done based on data availability and the necessity of cross-country/cross-banks comparability (which might not be the case for other variables such as non-performing loans, for example). PLL is used, in line with other studies (Agoraki et al., 2010 and Pool et al., 2015), as a measure of credit risk. Nevertheless, as highlighted by Fonseca and Gonzalez (2008) or El Sood (2012), this indicator can be affected by banks' practices to use loan loss provisions to smooth income. One can consider LTD an adequate measure for the risk derived from banks' excessive dependence on less stable funding sources (wholesale funding/parent bank funding). Moreover, LTD is also one of the macroprudential instruments proposed by ESRB Recommendation

<sup>1.</sup> Parent bank funding refers to received loans, deposits, subordinated debt and other liabilities to the parent company, while intra-group/related party liabilities are computed as the sum of liabilities to parent bank, associated companies, joint ventures and subsidiaries.

TABLE 1. Descriptive statistics of the bank specific variables

		2007			2013	
	Mean	Median	Std. dev	Mean	Median	Std. dev.
total assets (EUR mil.)	13,590	9,682	10,466	16,982	10,553	12,849
ROA (%)	1.58	1.54	0.71	0.63	1.03	1.46
ROE (%)	11.66	11.16	7.64	2.82	5.95	14.47
Risk Weighted Assets (% of total assets)	89.89	65.60	17.20	61.48	62.07	16.03
LTD	1.02	0.99	0.30	0.97	0.95	0.22
Parent funding (% of total assets)	9.78	4.73	11.19	8.81	60.9	8.53
Total related party* liabilities						
(% of total assets)	14.72	10.74	12.75	12.79	8.55	10.30
Equity (% of total assets)	9.81	9.22	4.08	11.59	10.92	3.14
Total loans (% of total assets)	62.75	61.43	10.60	63.13	64.53	11.45
Cash holding (% of total assets)	11.66	7.30	9.61	8.83	8.01	6.31
Interbank assets (% of total assets)	8.89	7.79	7.42	5.03	3.06	4.56

Note: Source: Bloomberg, credit institutions' annual reports.

TABLE 2. Descriptive statistics on managers' characteristics

	Total number of managers (2007 - 2013), out of which*:	Minimum across banks (2007 - 2013)	Maximum across banks (2007 - 2013)
Total	366		
women (percent)	14.48	0	75
men (percent)	85.52	25	100
domestic nationality (percent)	57.7	0	100
expatriates (percent), out of which:	42.3	0	100
parent bank nationals (percent)	31.8	0	100
third country nationals (percent)	10.5	0	100
age (in years)	47.2	33	29
management board tenure (in years)	4.0		22
top management team size (number of members)	6.7	2	18

Note: \*The statistics were computed based on the total number of distinct managers in 2007-2013. The figures for age, tenure and management team size represent the average across the sample. Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, managers' curriculum

TABLE 3. Correlation matrix of the main variables

Variables	TA	RWA	total loans	RWA (% of TA)	total loans (% of TA)	equity	equity (% of TA)	ROA	parent liab. related party (% of TA) liab. (%TA)	elated party liab. (%TA)
assets (TA)	-									
risk weighted assets (RWA)	0.90	-								
total loans	96.0	0.95	_							
RWA(%TA)	-0.21	0.14	-0.04	1						
total loans										
(% of TA)	-0.09	0.14	0.12	0.63	1					
equity	0.92	0.93	0.93	-0.06	-0.01	1				
equity		5	2	7	-	,	-			
(% of 1A)	0.00	0.13	0.04	0.10	-0.01	0.33	-			
ROA	0.35	0.34	0.33	0.01	-0.14	0.41	0.32	_		
parent liab. (% of TA)	-0.34	-0.33	-0.29	0.14	0.26	-0.43	-0.26	-0.51		
related party liab. (% of TA) -0.38	)-0.38	-0.38	-0.32	0.17	0.39	-0.45	-0.26	-0.44	0.86	-

TABLE 3. (Continued)

Variables	TA	RWA	total loans	RWA (% of TA)	RWA total loans (% of TA)	equity	equity (% of TA)	ROA	parent liab. (% of TA)	related party liab. (%TA)
costumer deposits	0.98	0.89	0.95	-0.19	-0.08	0.91	0.03	0.39	-0.46	-0.49
total liabilities	1.00	0.89	96.0	-0.22	-0.10	0.89	-0.04	0.34	-0.32	-0.37
CEO age	0.23	0.13	0.16	-0.26	-0.14	0.20	-0.09	0.01	-0.16	-0.10
CEO nationality	0.18	0.23	0.22	0.01	0.00	0.25	0.21	0.10	-0.11	0.00
average board tenure	0.15	0.07	0.10	-0.16	0.01	0.07	-0.18	90.0	-0.17	-0.25
% expatriate										
managers in board	0.23	0.26	0.23	-0.19	-0.27	0.31	0.19	0.22	-0.03	-0.04
average board age	0.33	0.33	0.31	-0.04	90.0-	0.36	0.03	0.08	-0.19	-0.15
% male managers	0.40	0.34	0.37	-0.26	-0.09	0.35	-0.10	0.16	-0.22	-0.14
management team size	0.05	0.11	0.00	0.18	0.23	0.07	-0.04	0.11	-0.20	0.06
LTD	-0.28	-0.17	-0.15	0.47	0.64	-0.26	-0.04	-0.38	0.74	0.77
Provisions for Loan										
Losses	0.48	0.47	0.52	0.07	0.13	0.48	0.32	-0.13	0.10	0.05
PLL (& TA)	0.03	0.09	0.08	0.05	60.0	0.07	0.13	0.03	-0.15	-0.18

TABLE 3. (Continued)

% expatriate managers

TABLE 3. (Continued)

	(communa)	(5.2										
Variables	costumer deposits	total liab.	CEO age	CEO nationality	average board tenure	% expatriate managers	average board age	% male managers	manag. team size	LTD	PLL	PLL (%TA)
manage- ment												
team size	0.07	0.05	-0.15	-0.01	0.00	0.04	-0.01	0.04	-			
LTD	-0.38	-0.28	-0.27		-0.16	-0.29	-0.18	-0.20	-0.02	-		
Provisions for Loan												
Losses	0.48	0.48	0.27	0.39	0.05	0.26	0.36	0.15	-0.10	0.02	1	
PLL (%TA)	(A)	0.03	-0.03		0.15	0.07	0.02	-0.02	0.18	-0.21	0.52	1

Note: Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculation

2013/1 and can also be interpreted as a measure of liquidity risk.

Data regarding CEOs and members of the top management teams, details about their nationality, birth year and tenure in the current position are collected from banks websites, annual reports, Reuters, Orbis Bureau van Dijk database and managers' curriculum vitae. In the few cases for which the managers' birth countries could not be traced directly, the observations for those managers were excluded from the analysis. The information gathered refers to on a total of 366 distinct managers over the period (table 2). These are, to a large extent, males (86 percent of total number of managers), in late forties (the average age is 47 years). The average management team tenure is 4 years, and the average number of board members is 7. Dummies indicating the nationality of the managers are created, as follows: domestic or host country managers (managers born in the host country), parent bank managers (managers born in the home country of the banking group headquarters) and third country managers (managers born in other countries than host and home country). In the following estimations, binary dummy differentiating between expatriate and domestic CEOs is used. Third countries nationals are assimilated to the category of parent bank managers, since in most cases those managers had a relatively long international experience in the banking group.<sup>2</sup> Using this grouping, around 40 percent of the managers are considered expatriates (out of which 30 percent from parent bank country). However, as reflected in table 2, the banking-level data reflect a quite heterogeneous picture (the share of expatriates in total management team members ranging from 0 to 100 percent). At the same time, during 2007-2013, the share of expatriate managers decreased in all countries except Hungary (from 48 percent to around 40 percent).

#### IV. Methodology

A. Fixed effects regressions

In order to analyze the link between managers' characteristics and bank

<sup>2.</sup> For robustness check, multivariate dummy accounting for all three categories is also used and the conclusions do not change regardless the measure used. An alternative approach would be taking into account cultural zones. However, since the widest majority of expatriate managers are from Western Europe (Netherlands, France, United Kingdom, Austria, Italy etc.) this approach is not justified in the present case.

indicators, traditional fixed effects models is firstly employ. In this framework, two main categories of dependent variables are used: i) measures of risk (LTD, the share of RWA and PLL in total assets) and ii) lending indicators (the share of loans to costumer in banks' portfolio and loans' annual growth rate). Another category of dependent variable is represented by the interconnectedness with the financial conglomerate (parent funding and related party liabilities as share in total assets).

The independent variables are represented by banks and management characteristics, out of which top management team's country of origin is of particular interest. At bank level, the main control variables are related to previous size (log of total assets), profitability indicators (mainly *ROA*), capitalization level (ratio of equity to total assets), while for *CEO* and other management board members age and tenure are controlled for.<sup>3</sup> The control variables for bank characteristics are commonly adopted in the literature (Berrospide and Edge, 2010; Beltratti and Paladino, 2013 etc.).

$$X_{it} = \beta_0 + \beta_v Y_{it-1} + \beta_z Z_{it-1} + u_i + e_{it}$$
 (1)

where  $X_{it}$  is the explained variable for bank i,  $Y_{it-1}$  denotes the control variables for bank factors (one year lagged),  $Z_{it-1}$  a set of top management teams and/or CEO characteristics of bank i,  $u_i$  is bank-specific but time-invariant (fixed effect) and  $e_{it}$  is the i.i.d. disturbance.<sup>4</sup> All estimations are undertaken by including time dummies.

However, as argued in Section II, a simultaneity issue emerges when analyzing the impact of leadership on bank variables as it is possible that the institution decides to simultaneously change its management, due to/along with the evolution of its indicators. For example, Bogaard and Sonkova (2013) argue that profitability problems could determine shareholders to appoint a parent-bank *CEO*. Thus, establishing the causality between management and company performance can prove to be a very difficult task, as bank evolution is both a result of the actions of previous managers and itself could be an important factor influencing the appointment of subsequent leaders. In case of endogeneity of management choices, fixed effects estimators are inconsistent (De

<sup>3.</sup> Gender is found not significant in all the estimates.

<sup>4.</sup> The fixed effects were confirmed by the Hausman test (1978) and F test for significance of fixed effects.

Andres and Vallelado, 2008).

#### B. Propensity score method

In order to accurately estimate the impact of expatriate management (having an expatriate *CEO*), the natural process would be to compare the performance of a credit institution with an expatriate *CEO* with the performance it would have obtained if it had been administered by a domestic manager. Since this result is not observable from the data, the comparison can be done by using a control group, formed of banks with local *CEO*s (the control/counterfactual group). In order to do so, propensity score matching to select the control group is employed, following Rosenbaum and Rubin (1983). This matching method "corrects" the bias in assessing the effects of the treatment by controlling for the existence of confounding factors that might be correlated with both the dependent and the independent variables.

Matching methods (Heckman et al., 1997; Heckman et al., 1998) are used as efficient instrument to deal with problems arising from endogeneity. These have been used for testing the effect of external trade on firms' performance (Wagner, 2002; De Loecker, 2007), the impact of bank financing on micro-level indicators (Giannetti and Ongena, 2012) and more recently, on bank data (Drucker and Puri, 2005; Havrylchyk and Jurzyk, 2011). The main element of interest in these methods is the Average Treatment effect on the Treated (ATT), which is defined as the difference for each "treated" bank between: (i) the effective outcome the bank obtains under the treatment and (ii) the potential outcome resulted if it had not received the treatment. In the present case, a bank is considered in the "treated group" if it is managed by an expatriate *CEO*.

$$ATT = E[X_{it}(1) - X_{it}(0) | CEO\_expatriate_{it} = 1]$$

$$= E[X_{it}(1) | CEO\_expatriate_{it} = 1]$$

$$- E[X_{it}(0) | CEO\_expatriate_{it} = 1]$$
(2)

<sup>5.</sup> In this paper, the treatment is considered having an expat as *CEO* rather than the switch from domestic to expatriate leadership in order not to decrease dramatically the number of treated units (there are very few cases in which such a change took place in the analysed period).

where:  $X_{it}(1)$  is the outcome of the bank i (for example LTD, the ratio of RWA to total assets etc.) in year t (t = 2007 : 2013) given it has an expatriate as CEO in year t and  $X_{it}(0)$  the outcome of the bank provided it had a domestic CEO. CEO\_expatriate $_{it}$  is a dummy that takes the value 1 if the bank is managed by an expatriate CEO in the respective year.

The term  $E[X_{it}(0)|CEO\_expatriate_{it}=1]$  cannot be observed from the data and is named the counterfactual outcome. This can be approximated by the outcome for banks with domestic CEO ( $E[X_{it}(0)|CEO\_expatriate_{it}=0]$ ), provided two assumptions in order to eliminate the selection bias are made: i) the conditional independence assumption and ii) the common support assumption. The conditional independence assumes that the observable variables on which the matching is done are not affected by the treatment, i.e. conditional on the set of covariates  $Z_{it-1}$ , the outcome X is independent of the CEOs nationality:

$$X_{it}(1), X_{it}(0) \perp CEO \mid Z_{it-1}$$
 (3)

In this manner, treatment assignment is considered random and the outcomes of banks with domestic *CEO*s can be used as an approximation of the counterfactual outcome (the outcome the banks with expatriate *CEO*s would have experienced in the absence of such manager). Heckman et al. (1998) show that for an unbiased estimation of ATT, it is necessary to assume mean conditional independence between the control group and the treatment:

$$\begin{split} & \mathbb{E}\big[X_{it}(0) \,|\, Z_{it-1}, CEO\_expatriate_{it} = 1\big] \\ & = \mathbb{E}\big[X_{it}(0) \,|\, Z_{it-1}, CEO\_expatriate_{it} = 0\big] \end{split} \tag{4}$$

In order to construct the counterfactual group, the covariates do not have to be perfect predictors of the treatment status, i.e. for similar characteristics, there are banks having expatriate *CEO* and banks that do not:

$$0 < P(CEO\_expatriate_{it} = 1 \mid Z_{it-1}) < 1$$
 (5)

The common support is a condition which ensures that the treatment and control banks overlap in the propensity scores (Becker and Ichino, 2002): banks which have a propensity score higher than the maximum propensity score of the controls and the control institutions with

propensity score below the lowest propensity score of the treated units are dropped.

To perform the propensity score matching, logit regression is firstly estimated, modeling the probability of being managed by an expatriate *CEO*, as a function of bank and management features:

$$P(CEO\_expatriate_{it} = 1 | Z_{it-1})$$

$$= 1 \text{ if } CEO_{it}^* > 0 \text{ and } 0 \text{ otherwise}$$
(6)

Where  $CEO_{it}^*$  is a latent variable, dependent of bank - management specific observable characteristics, selected to respect the hypotheses: bank size, profitability (ROA), share of expatriate managers in total management team members and average board tenure in the previous year:

$$CEO_{it}^{*} = 1 / \begin{pmatrix} 1 + \exp(-(\beta_{0} + \beta_{1}size_{it-1} + \beta_{2}ROA_{it-1} \\ + \beta_{3}\%expatriate\_managers_{it-1} \\ + \beta_{4}avg\_board\_tenure_{it-1}) \end{pmatrix}$$
(7)

Thus, for each bank, the probability that it has an expatriate *CEO* appointed in a certain year (the propensity score) is a function of observable characteristics in the previous year. After estimating the propensity scores for each bank, in the next step banks with expatriate *CEO* (treated group) are paired with controls (control group) with the closest probability of having an expatriate *CEO* but in reality they have domestic leadership. For pairing the two groups of banks, kernel and nearest-neighbor matching is applied. The kernel matching pairs treated banks with a weighted average of all controls, the used weights being inversely proportional to the distance between the propensity scores of treated and control banks, while in the nearest neighbor method, each treated bank (managed by an expatriate) is matched with a single bank with domestic *CEO* by minimizing the absolute difference between the estimated propensity scores for the treated an control unit.

In this manner, the selection bias is reduced, i.e. the two sets of banks are as similar as possible in terms of variables included in the estimation, except for *CEO* nationality. The remaining difference between banks having an expatriate as *CEO* and matched banks with domestic *CEO*s indicates the causal effect of managers' birth country on

banks' performance. The outcome variables are the same indicators used in the regression analysis: i) the risk indicators (LTD level, the ratio of RWA to total assets and the share of PLL in total assets) and ii) the share of costumer loans to total assets and loans' growth rate. The ATT of interest is obtained by averaging the differences between the two matched groups.

#### V. Results

#### A. Results from panel regressions

The analysis of bank's risk profiles reveals that the nationality of the *CEO* has significant positive coefficients in most of the regression explaining banks' LTD (table 4). On the other hand, the coefficients of the share of expatriate managers in total number of members in the top management teams are in most specifications positive, but generally statistically insignificant. This also holds for other management teams' characteristics (board average age, tenure and size do not have significant impact on LTD). These evidences might indicate a stronger relationship between *CEO* and risk compared to the link between management teams' composition and the risk appetite of credit institutions.

In case of the regressions explaining RWA (as share in total assets), the main determinants are bank specific characteristics (size, capitalization): smaller banks are more risk-takers and higher capitalization also raises the total risk (table 5).<sup>6</sup> The coefficients indicating expatriate management teams or expatriate *CEO* are in most specifications positive, although not statically significant. Management board size has a negative, statistically significant, effect on RWA, which suggests that, as the number of the managers increases, the banks are less risk takers. Similar conclusions are obtained when using PLL (as share in total assets) as a measure of risk. Smaller size and higher dependence of parent funding increases the level of risk. Having an expatriate as *CEO* seems to increase PLL, but the effect is not statistically significant.

The regressions' results for financial interconnectedness in the

Kwan and Eisenbeis (1996) argue that management may be induced to offset higher capitalization by taking more risk.

banking group are displayed in table 7. These indicate that larger, more profitable and banks with higher capitalization benefit to a greater extent by funding from parent companies and related parties. The management characteristics with significant impact on the share of parent and other group parties funding are those related to *CEO* age and tenure and management board tenure. This suggests that more experienced management teams could have a better ability of successfully collecting funds from parent institution or other members of the group. Board size is negatively associated with funds collected from parent institutions or from related parties. Thus, a larger number of members in the top management team might decrease the risk profile of a bank, stemming from a higher reliance on parent funding.

The paper investigates how lending activity is impacted by *CEO*'s country of origin, top management team's composition in terms of nationality and financial interconnectedness of the bank with its financial conglomerate (table 8). The results indicate that the impact of having an expatriate as *CEO* on lending is positive, while a higher share of expatriates in top management team has a mixt impact on lending (however, the results are generally statistically insignificant). At the same time, there is a significant role of parent and group funding for sustaining lending towards companies and households: banks benefiting to a larger extent of funds from the parent financial institution or from other related parties use these resources to deliver more credit to companies and households (as share in total assets). Although this can be considered a positive development, it has to be correlated with the quality/risk associated with the granted loans.

#### B. Propensity score matching results

The estimation of the propensity score is done by means of logistic regression, including country and year fixed effects. It indicates that larger and more profitable banks are more likely to have an expatriate *CEO* (table 9). This result is intuitive since it might be consider normal for an international banking group to hire an expatriate manager in subsidiaries which are more important to the group.

The impact of the share of expatriate managers in bank's boards on the probability of bank being managed by an expatriate *CEO* is negative, although not significant. At the same time, the longer the average board tenure, the lower the probability of the bank having an expatriate as *CEO*. When having experienced boards or the presence of

TABLE 4. Determinants of LTD

VARIABLES	(1) LTD	(2) LTD	(3) LTD	(4) LTD	(5) LTD	(6) LTD	(7) LTD	(8) LTD	(9) LTD	(10) LTD
lag share of expatriate managers	0.109 (0.1251)	0.117 (0.1131) 0.143*	0.0993 (0.1022) 0.101	0.117	0.110 (0.1013)	0.141*	0.122**	0.172*	0.109*	0.0780 (0.1071)
iag CEO nationality lag TA	0.133 (0.1342)	0.268** (0.1173)	(0.0000)			(0.0703) 0.231** (0.1071)	(0.0488) 0.281** (0.1042)	0.0605	(+/50.0)	0.208 (0.1314)
g lag ROA		0.453 (1.536)	1.351 (1.357)	0.807 (1.583)	0.870 (1.493)	0.689 (1.520)	_0.759 (1.180)	1.68 (1.570)	0.666 (1.230)	
alization	3.329** (1.3490)	3.458** (1.2712)				3.270** (1.2414)	3.655** (1.4253)			3.424*** (0.8223)
				0.254** (0.1050)						
lag total loans/TA			0.728***		0.893*** (0.2410)				0.627* (0.3071)	
lag average board age	0.00447 (0.0060)									
lag management team size									•	-0.0247 $(0.0150)$

TABLE 4. (Continued)

VARIABLES	(1) LTD	(2) LTD	(3) LTD	(4) LTD	(5) LTD	(9) LTD	(7) LTD	(8) LTD	(9) LTD	(10) LTD
lag CEO age							0.00760 (0.0070)	0.00618	-0.00495 (0.0071)	
lag CEO tenure								(0.0046)		
Time fixed effects	Yes	Yes	Yes	Yes						
Bank fixed effects	Yes	Yes	Yes	Yes						
R-squared within	0.215	0.298	0.252	0.187	0.221	0.289	0.333	0.213	0.262	0.276
Number of observations	147	153	153	153	153	153	144	153	144	162

Note: Huber- White robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

TABLE 5. Determinants of the share of RWA in total assets

VARIABLES	(1) RWA/TA	(2) RWA/TA	(3) RWA/TA	(4) RWA/TA	(5) RWA/TA	(6) (7) RWA/TA RWA/TA	(7) RWA/TA	(8) RWA/TA	(8) (9) (10) RWA/TA RWA/TA RWA/TA	(10) RWA/TA
lag share of expatriate	-0.0114	-0.00488	0.0394	0.00786	0.0349	0.0620				
managers	(0.0716)	(0.0740)	(0.0716)	(0.0711)	(0.0753)	(0.0899)				
lag CEO						0.0536	0.0652	0.0583	0.0849	0.0521
nationality						(0.0750)	(0.0774)	(0.0628)	(0.0748)	(0.0623)
	-0.218**	-0.224**	-0.108	-0.317**			-0.0593	-0.216*	-0.210*	-0.252**
lag TA	(0.0923)	(0.0938)	(0.0760)	(0.0921)	(0.0782)		(0.1050)	(0.1071)	(0.1211)	(0.11110)
	90.70	0.689		0.800		0.336	0.725	1.07	2.21	1.14
$\log ROA$	(0.9260)	(1.0371)		(1.0382)		(0.9211)	(0.9913)	(1.1504)	(1.3201)	(1.1600)
lag			2.240***		1.159**		1.114**			
capitalization			(0.5891)		(0.5440)		(0.5033)			
lag parent	0.104	0.112						0.150		
funding/TA	(0.1890)	(0.1812)						(0.1801)		
lag related party			0.105	0.395					0.23	0.329
liabilities/TA			(0.2344)	(0.2711)					(0.2161)	(0.2221)
						0.0785		-0.205		-0.261
lag total loans/TA	ſA					(0.1521)		(0.3651)		(0.3700)
lag CEO								-0.0021		-0.0026
tenure								(0.0037)		(0.0037)

(Continued)

TABLE 5. (Continued)

(1) VARIABLES RWA/TA	(1) RWA/TA	(2) RWA/TA I	(3) RWA/TA	(3) (4) (5) (6) RWA/TA RWA/TA RWA/TA	(5) RWA/TA	(6) RWA/TA	(7) RWA/TA RV	(8) RWA/TA	(8) (9) RWA/TA RWA/TA	(10) RWA/TA
lag average board tenure	0.0120 (0.0119)									
lag management team size	±:			-0.0148* (0.0077)						
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared within	0.312	0.292	0.341	0.365	0.263	0.233	0.325	0.329	0.388	0.360
Number of observations	128	128	126	119	157	149	142	128	113	119

Note: Huber- White robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

					(			
VARIABLES	(1) PLL/TA	(2) PLI/TA	(3) PLL/TA	(4) PLL/TA	(5) PLI/TA	(6) PLL/TA	(7) PLL/TA	(8) PLL/TA
lag share of								
expatriate	0.0030	-0.0083	-0.0047	0.0034	-0.0029			
managers	(0.0026)	(0.0091)	(0.0044)	(0.0037)	(0.0027)			
lag CEO					0.00032	0.00052	0.0012	0.0019
nationality					(0.0014)	(0.0014)	(0.0016)	(0.0018)
	*6600.0-	-0.0106*	*6800.0-	-0.0098	-0.0100*	-0.0094*	-0.0093*	-0.0113*
lag TA	(0.0052)	(0.0055)	(0.0046)	(0.0067)	(0.0051)	(0.0048)	(0.0047)	(0.0065)
	-0.1409			-0.1018	-0.1397	-0.1489		
lag ROA	(0.11114)			(0.8260)	(0.1136)	(0.1196)		
lag	0.0315	-0.0014	0.0181		0.0301	0.0354	-0.0075	-0.0217
capitalization	(0.0581)	(0.5170)	(0.0558)		(0.0614)	(6.5690)	(0.0442)	(0.0382)
lag parent				0.0377*				0.0438
funding/TA				(0.0215)				(0.0267)
lag CEO							-0.000191	
tenure							(0.0002)	
lag average			-0.0009	-0.0007				
board tenure			(0.0000)	(0.0000)				
lag average		0.0002						
board age		(0.0003)						

TABLE 6. (Continued)

VARIABLES	(1) PLL/TA	(2) PLL/TA	(3) PLL/TA	(4) PLL/TA	(5) PLL/TA	(6) PLL/TA	(7) PLL/TA	(8) PLL/TA
Time fixed								
effects	Yes							
Bank fixed								
effects	Yes							
R-squared								
within	0.206	0.142	0.167	0.392	0.206	125	131	1111
Number of								
observations	125	119	131	105	125	0.201	0.124	0.320

Note: Huber- White robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

banking group are displayed in table 7. These indicate that larger, more profitable and banks with higher capitalization benefit to a greater extent by funding from parent companies and related parties. The management characteristics with significant impact on the share of parent and other group parties funding are those related to *CEO* age and tenure and management board tenure. This suggests that more experienced management teams could have a better ability of successfully collecting funds from parent institution or other members of the group. Board size is negatively associated with funds collected from parent institutions or from related parties. Thus, a larger number of members in the top management team might decrease the risk profile of a bank, stemming from a higher reliance on parent funding.

The paper investigates how lending activity is impacted by *CEO*'s country of origin, top management team's composition in terms of nationality and financial interconnectedness of the bank with its financial conglomerate (table 8). The results indicate that the impact of having an expatriate as *CEO* on lending is positive, while a higher share of expatriates in top management team has a mixt impact on lending (however, the results are generally statistically insignificant). At the same time, there is a significant role of parent and group funding for sustaining lending towards companies and households: banks benefiting to a larger extent of funds from the parent financial institution or from other related parties use these resources to deliver more credit to companies and households (as share in total assets). Although this can be considered a positive development, it has to be correlated with the quality/risk associated with the granted loans.

#### B. Propensity score matching results

The estimation of the propensity score is done by means of logistic regression, including country and year fixed effects. It indicates that larger and more profitable banks are more likely to have an expatriate *CEO* (table 9). This result is intuitive since it might be consider normal for an international banking group to hire an expatriate manager in subsidiaries which are more important to the group.

The impact of the share of expatriate managers in bank's boards on the probability of bank being managed by an expatriate *CEO* is negative, although not significant. At the same time, the longer the average board tenure, the lower the probability of the bank having an expatriate as *CEO*. When having experienced boards or the presence of

TABLE 7. Determinants of funding from parent credit institution and from related parties

	(1)	(2)	(3)	4)	(5)	(9)	(7)
VARIABLES	lag parent funding/TA	related party liab./TA	related party liab./TA				
lag share of							
expatriate	0.0224	0.0121				0.0235	-0.0016
managers	(0.0323)	(0.0384)				(0.0355)	(0.0677)
lag CEO			0.0169	0.0005	0.0148		
nationality			(0.0315)	(0.0231)	(0.0210)		
	0.0834	0.0392	0.0251	0.0764	0.0237	0.1060*	0.1181**
lag TA	(0.0499)	(0.0521)	(0.0522)	(0.0456)	(0.0543)	(0.0571)	(0.0556)
		0.2661	0.2182		-0.5661	0.0057	
lag ROA		(0.6220)	(0.5770)		(0.3343)	(0.5893)	
	1.0520**			1.0081**			0.6902
lag capitalization	(0.3800)			(0.4061)			(0.4221)
lag parent funding/TA							
lag related party liabilities/TA	0.3813**	0.4432**	0.3594* (0.1840)	0.3844** (0.1730)			
lag average board tenure							
lag management team size		-0.0055** (0.0022)					

TABLE 7. (Continued)

VARIABLES	(8) related party liab./TA	(9) related party liab./TA	(10) related party liab./TA	(11) related party liab./TA	(12) related party liab./TA	(13) related party liab./TA	(14) related party liab./TA
lag share of expatriate managers	0.0292	0.0279	0.0272 (0.0344)	0.0242 (0.0365)			
lag CEO nationality		,	,	0.0058 (0.0199)	0.0124 (0.0141)	0.0192 $(0.0155)$	0.0066 (0.0199)
lag TA	0.0938* (0.0476)	0.1130** $(0.0426)$	0.0996* (0.0484)	0.1072* $(0.0591)$	0.1100*** (0.0376)	0.0512 $(0.0566)$	0.0911 $(0.0605)$
lag ROA		0.3651 $(0.4530)$	0.4680 (0.4672)	0.0320 $(0.5812)$		-0.7191 (0.5010)	
lag capitalization	0.4133 $(0.4214)$				0.8084* $(0.4051)$		
lag parent funding/TA		0.2964*** (0.0841)	0.3103*** (0.0895)		0.2852** (0.1021)		
lag related party liabilities/TA							
lag average board tenure	0.0080* (0.00445)	0.0103** $(0.00407)$					
lag management team size			-0.0045* (0.0025)				

Continued)

TABLE 7. (Continued)

TABLE 7. (Continued)	ntinued)						
VARIABLES	(1) lag parent funding/TA	(2) lag parent funding/TA	(3) lag parent funding/TA	(4) lag parent funding/TA	(5) lag parent funding/TA	(6) related party liab./TA	(7) related party liab./TA
lag CEO age					0.0034**		
,			0.0043**				
lag CEO tenure			(0.0020)				
Time fixed							
effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank fixed							
effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared within	0.400	0.357	0.392	0.397	0.244	0.391	0.427
Number of							
observations	130	122	122	130	126	124	120

TABLE 7. (Continued)

VARIABLES	(8) related party liab./TA	(9) related party liab./TA	(10) related party liab./TA	(11) related party liab./TA	(12) related party liab./TA	(13) related party liab./TA	(14) related party liab./TA
lag CEO age						0.0030**	
lag CEO tenure Time fixed							
effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared within	0.450	0.536	0.498	0.392	0.523	0.411	0.417
Number of observations	132	120	120	124	128	116	121

Note: Huber- White robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

TABLE 8. Determinants of lending activity

VARIABLES	(1) loans/TA	(2) loans/TA	(3) loans/TA	(4) loans/TA	(5) loans/TA	(6) loans/TA	(7) Ioans/TA	(8) Ioans/TA
lag share of expatriate managers	0.0002 (0.0282)	-0.0365 $(0.0317)$	-0.0701* (0.0359)	-0.0705* (0.0376)	-0.0347 $(0.0319)$	-0.0698* (0.0343)		
lag CEO nationality	**************************************	,	0,000	0	0.0297* (0.0166)	0900	0.0314* (0.0171)	0.0268 (0.0195)
lag TA	(0.0230)	(0.0261)	(0.0309)	-0.0100 $(0.0325)$	(0.0241)	(0.0320)	(0.0253)	(0.0194)
lag ROA			0.4102 (0.5942)	0.6051 (0.6453)		0.4104 (0.5982)	0.3454 (0.3813)	
lag ROE	0.6204**	1 4224**			1 2633***		0 7393***	0.8387**
lag capitalization	(0.2580)	(0.3640)			(0.3650)		(0.1691)	(0.2480)
lag parent funding/TA			0.1814*** (0.0583)			0.1813*** (0.0588)		0.0796 (0.0739)
lag related party liabilities/TA				0.2483*** (0.0741)				
lag average board age	-0.0006 (0.0016)							
lag average board tenure		-0.0072* $(0.0040)$						

TABLE 8. (Continued)

VARIABLES	(9) Ioans/TA	(10) yoy loan growth	(11) yoy loan growth	(12) yoy loan growth	(13) yoy loan growth
lag share of expatriate managers		0.0547 (0.0768)	0.1074 (0.119)	0.0457 (0.0716)	0.0733 (0.119)
lag CEO nationality	0.0296 (0.0196)	3	3	6	
lag TA	0.0192 $(0.0304)$	-0.2004* $(0.1110)$	_0.2204* (0.1250)	-0.2183* (0.1110)	-0.3023** $(0.1441)$
lag ROA	0.6223 (0.5491)	1.9634* (1.1040)	0.6404 $(1.5991)$		1.2772 (2.0561)
lag ROE				0.1294** (0.0621)	
lag capitalization			1.2251 (1.2942)		
lag parent funding/TA			,		0.0273 (0.1594)
lag related party liabilities/TA	0.2413*** (0.0650)				
lag average board age			-0.0032 (0.0046)		-0.0012 (0.0058)
lag average board tenure					

TABLE 8. (Continued)

VARIABLES	(1) loans/TA	(2) loans/TA	(3) loans/TA	(4) loans/TA	(5) loans/TA	(6) Ioans/TA	(1) (2) (3) (4) (5) (6) (7) (8) loans/TA loans/TA loans/TA loans/TA loans/TA loans/TA	(8) loans/TA
lag management team size						-0.0004 $(0.0045)$		
Time fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Bank fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
R-squared within	0.117	0.239	0.138	0.156	0.242	0.138	0.159	0.155
Number of								
observations	147	162	130	123	162	130	153	138
			( Com	(Continued)				

TABLE 8. (Continued)

VANIABLES	(9) loans/TA	(10) yoy loan growth	(11) yoy loan growth	(12) yoy loan growth	(13) yoy loan growth
lag management team size					
Time fixed effects	Yes	Yes	Yes	Yes	Yes
Bank fixed effects	Yes	Yes	Yes	Yes	Yes
R-squared within	0.149	0.319	0.299	0.286	0.282
Number of					
observations	123	153	139	150	119

Note: Huber- White robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

TABLE 9. Propensity score estimation. Logistic regression, marginal effects

VARIABLES	(1) P(CEO_expartiate=1)
1 (1 TA)	0.1963***
lag size (log TA)	(0.0757)
1 004/	0.0222
lag ROA (percent)	(0.0446)
1 1 0	-0.0526
lag share of expatriate managers	(0.171)
1	-0.0489*
lag average management team tenure	(0.0291)
	-0.1412
_Icountry_HR	(0.1310)
I IIII	0.0848
_Icountry_HU	(0.1451)
I DI	-0.2733*
_Icountry_PL	(0.1530)
I PO	0.4872***
_Icountry_RO	(0.1610)
	-0.0398
_Iyear_2008	(0.1662)
	-0.0490
_Iyear_2009	(0.1533)
	-0.0016
_Iyear_2010	(0.1421)
	-0.0237
_Iyear_2011	(0.1452)
	0.0289
_Iyear_2012	(0.1392)
Logit Wald chi2	27.2
Logit Pseudo R-squared	0.1757
Number of observations	153

**Note:** Column (1) indicates the average marginal effects on bank's probability of having an expatriate as CEO. Base country is Czech Republic. Huber- White robust standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

expatriates is already significant the interest for the group of sending a *CEO* at the local subsidiary is smaller, as it might feel more comfortable with the respective situation.

There is a relatively large heterogeneity across CEE countries

regarding the probability of having expatriates as *CEO*s. Romania seems to be an outlier in the group of 5 CEE countries. In similar conditions about a bank (dimension, profitability, etc.), the probability for a Romanian bank to have an expatriate *CEO* is considerably higher than in other countries. At the opposite, Polish banks have a lower inclination in appointing expatriates as *CEO*s, all else being equal. In case of Czech Republic, Hungary and Croatia, the behavior is more homogeneous, the banks from these countries having similar propensity for expatriate *CEO*s, after controlling for bank's dimension and profitability and for characteristics of the top management teams (share of expatriates and average tenure).

Based on the estimated probability of banks having an expatriate *CEO*, the treated and control banks groups are matched by kernel and nearest neighbor methods. By imposing the common support condition, the data verifies the balancing hypothesis, banks with close propensity scores having more similar distribution of observable characteristics (table 10 for kernel matching). The comparison between the treated and matched group allows a more accurate assessment of the impact of *CEO* nationality on banks indicators.

The matching methods confirm the regression results regarding the risk profiles of banks with expatriate CEOs. Banks managed by expatriates have a higher inclination for taking risks, as indicated by higher LTD level, as well as a larger ratio of RWA and PLL to total assets. At the same time, credit institutions with expatriate CEOs invest higher proportions of their balance sheets into loans to costumers (table 11). However, the differences among banks' characteristics due to CEO country of origin are in most cases statistically insignificant, including in case of financial interconnectedness with the group. 8 Significantly higher RWA and more involvement in lending to companies and households in case of banks with expatriate CEOs compared to the other banks only results for nearest neighbor matching. In case of PLL (as a share of total assets), banks managed by expatriates are more risk-takers in both unmatched and matched samples (by nearest neighbor and kernel method). The results highlight a stronger relationship between CEO and risk compared to board composition-risk, in line with previous results from panel fixed-effects models.

<sup>7.</sup> In estimating the variance of the treatment effect, the bootstrapping method suggested by Lechner (2002) is applied.

<sup>8.</sup> This also holds for other indicators of asset structure such as the share of cash and cash equivalent and interbank assets to total assets.

TABLE 10. Balancing hypothesis testing. Kernel Matching

	•	)	)					
		Unmatched	Mean				t-test	++
Variable		Matched	Treated	Control	%bias	%reduct bias	t	b>t
		Ω	9.3746	9.4191	-6.8		-0.38	0.705
size (log TA)		M	9.3417	9.4019	-9.2	-35.5	-0.34	0.732
		n	1.2044	0.77932	35.9		1.90	0.059
ROA (percent)		M	1.1655	0.84508	27	24.6	1.34	0.185
		Ω	0.38159	0.31416	32.7		1.85	0.067
share of expatriate managers	managers	M	0.38995	0.32052	33.6	-3	1.49	0.142
		D	3.6365	4.1186	-22.6		-1.24	0.216
average management board tenure	ent board tenure	M	3.4929	3.6204	9-	73.6	-0.25	908.0

Note: Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

TABLE 11. Propensity score estimation. Average treatment of the treated (the treatment= having an expatriate CEO)

Variable	Unmatched	Kernel matching Average treatment of the treated	Nearest neighbor matching Average treatment of the treated.	Observations
	0.0509	0.0149	0.0268	153
LTD	(0.0516)	(0.0849)	(0.0701)	
	0.0633**	0.0623	0.0766*	149
RWA/TA	(0.0279)	(0.0415)	(0.0394)	
	0.4114***	0.5893***	0.5573***	125
PLL/TA	(0.1281)	(0.1940)	(0.1720)	
	0.0402**	0.0376	0.0439**	153
Total loans/TA	(0.0182)	(0.0260)	(0.0190)	
	-0.0008	-0.0437	-0.0247	134
Parent funding/TA	(0.0217)	(0.0305)	(0.0276)	
Related party	0.0080	-0.0591*	-0.0285	124
liabilities/TA	(0.0250)	(0.0344)	(0.0332)	
Cash and cash	0.0231**	-0.0010	-0.0008	153
equivalent/TA	(0.0116)	(0.0158)	(0.0139)	
	-0.0132	0.0008	0.0043	148
Interbank assets/TA	(0.0084)	(0.0103)	(0.0085)	

Note: Bootstrapped standard errors in parentheses; \*\*\* p<0.01, \*\* p<0.05, \* p<0.1 Source: Bloomberg, Reuters, Orbis, credit institutions' annual reports, authors' calculations

#### VI. Conclusions

Based on a panel of banks from 5 CEE countries (Croatia, Czech Republic, Hungary, Poland and Romania), the paper studies how the country origin of the banks' managers matter for financial stability. This study analyzes the link between nationality of the *CEO* and top management teams' composition in terms of expatriates/host country managers on one hand and developments in banks' risk profiles, strategies (including cross-border financial interconnectedness) and lending, on the other hand.

The results from panel fixed effects regressions and matching techniques suggest that credit institutions with expatriate *CEO*s or higher share of expatriates in top management teams are more risk-takers, as indicated by higher loan-to-deposit ratio, higher share of risk weighted assets in total assets and greater provisions for loan losses. The different characteristics of expats are indeed linked with different management decisions and banks' indicators. The results highlight a stronger relationship between *CEO* and risk compared to top management teams' composition-risk. At the same time, being managed by an expatriate *CEO* and having a higher degree of interconnectedness with the financial conglomerate have positive significant role for sustaining lending towards companies and households. A larger number of members in the top management team might decrease the risk profile of a bank.

Nevertheless, the results are statistically significant in a limited number of specifications, suggesting that the differences between expatriate and local management is not very pronounced. This might be due other corporate governance aspects that might matter for banks' activity but are very difficult to quantify (including managers' personality, organizational culture of the banking group).

The inclination for appointing expatriates as *CEO*s is heterogeneous among banks and countries. Larger and more profitable banks are more likely to have an expatriate *CEO*. This result is intuitive since it might be consider normal for an international banking group to hire an expatriate manager in subsidiaries which are more important to the group. This might be considered a more conservative strategy for the parent institution, as it can have a better control over the operations in the host-country through expatriate managers, who are more connected to the group's views and practices.

The longer the average board tenure, the lower the probability of the

bank having an expatriate as *CEO*. The coefficient for the share of expatriate managers in bank's boards is negative, although not significant. This suggest that when having experienced boards or the presence of expatriates is already significant, the interest for the group of sending a *CEO* at the local subsidiary is smaller, as it might feel more comfortable with such a situation.

In similar conditions about a bank (dimension, profitability, etc.), the probability for a Romanian bank to have an expatriate *CEO* is considerably higher than in other countries. At the opposite, Polish banks have a lower inclination than in other countries in appointing expatriates as *CEO*s, all else being equal.

The present paper underlines the importance of appropriate supervision and control from competent authorities regarding the behavior and risk appetite of the members of banks' management teams. This includes a rigorous assessment of expatriate managers competencies and objectives, taking into account their more short-term oriented vision (since they are mainly focused on bank's performance during their tenure, which is smaller compared to domestic managers) and, thus, more risk-takers. Adequate corporate governance is vital for financial stability and has substantial implications for the real economy.

The results in the study are based on data from large banks. For smaller bank, the results might be more acute, having in mind the negative relationship found between the dimension of the bank and certain risk indicators. This is a further direction for research, along with the deepening the analysis by using other indicators measuring risk appetite (Altman Z-score, reserves for losses on loans, net interest income etc.) and banking group characteristics (for example, tenure in a certain country).

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