

Instituto Superior de Ciências do Trabalho e da Empresa



THE IMPACT OF FOREIGN OWNERSHIP AND BOARD MEMBERSHIP
ON THE PERFORMANCE OF DOMESTIC BANKS:
EVIDENCE FROM PORTUGAL

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The impact of foreign ownership and board membership on the performance of domestic banks: evidence from Portugal

Abstract

This study examines the effect of foreign ownership and board membership on the performance of domestic banks in Portugal, employing ordinary least-square and two-stage least-square regression analysis. The findings reveal a negative relationship between foreign ownership and bank costs. Foreign ownership implies a reduction in total costs of 4.1% while operating costs decline 1.1%. For each unit of foreign equity total costs go down 11.7% and operational costs fall 3.4%. Evidence also indicates that foreign board members introduce improvements in organizational structure and operational efficiency, according to the significant and negative relationship with operating costs. Furthermore, our results suggest that domestic banks' dependence on traditional banking areas of business is reduced due to foreign board members' experienced insights and understanding of markets and competition beyond the local environment. Foreign board membership reduces the interest margin on average 0.7% and increases the non-interest margin 0.4%. A 1% increase in the number of foreign board members reduces the net interest margin by 2.9%. A CEO with foreign nationality lowers the interest margin by 6.0%. Additionally, foreign directors with major influence on the board seem to be more willing to address the deterioration of asset quality by promoting the adoption of more prudent practices in lending and management of credit risk, which leads to higher levels of provisions for credit losses. These findings indicate that foreign ownership and board membership can play an important role in importing sophisticated managerial practices that can improve the performance of domestic banks. Indeed, the adoption of a global corporate governance system can improve bank performance, especially in countries in their early stages of financial development.

JEL Classification: F36, G30

Keywords: Foreign ownership and board membership, corporate governance

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Resumo

A presente tese analisa a influência que os accionistas e administradores estrangeiros exercem na *performance* dos bancos domésticos em Portugal, utilizando para o efeito os métodos OLS (*Ordinary Least-Square*) e 2SLS (*Two-Stage Least-Square*). Os resultados revelam uma relação negativa entre os accionistas estrangeiros e os custos dos bancos domésticos, traduzindo-se a presença daqueles numa redução dos custos totais e dos custos operacionais de, respectivamente, 4.1% e 1.1%. O estudo realizado sugere igualmente que a existência de membros estrangeiros nos conselhos de administração introduz melhorias na estrutura organizacional e na eficiência operacional dos bancos domésticos (tendo em conta a relação significativa e negativa com os custos operacionais) e reduz a dependência destes em relação às actividades bancárias tradicionais, na medida em que os administradores estrangeiros possuem conhecimentos que vão para além do mercado e da concorrência local na área de negócio em causa (as regressões evidenciam que a presença dos referidos administradores provoca uma diminuição da margem financeira de 0.7% e um aumento da margem não financeira de 0.4%). Por outro lado, quando os membros com maior peso no conselho de administração (presidente e vice-presidentes) são estrangeiros parece existir uma maior disposição para lidar com o problema da deterioração da qualidade dos activos, a qual se concretiza na adopção de práticas mais prudentes na concessão de empréstimos e na gestão do risco de crédito, resultando tal, por sua vez, em níveis de provisionamento mais elevados. Por conseguinte, a análise empírica efectuada indica que os accionistas e administradores estrangeiros podem desempenhar um papel importante na “importação” de práticas de gestão mais sofisticadas, as quais tendem a melhorar a *performance* dos bancos domésticos.

Table of Contents

Acknowledgements	4
1. Introduction	5
2. Compliance with a global corporate governance regime	6
3. Effects of foreign ownership and board membership: The hypotheses	9
4. Corporate governance and the banking sector: The case of Portugal	11
4.1. Corporate governance in Portugal	11
4.2. The Portuguese banking sector	12
5. Data and method	14
5.1. Data and variable definition	14
5.2. Model specification	16
6. Empirical findings	17
7. Summary, implications and conclusions	20
References	22
Tables	25

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The impact of foreign ownership and board membership on the performance of domestic banks: evidence from Portugal

1. Introduction

The process of globalization has become an inexorable trend and one of its many consequences is that it affects the performance and value of firms for a multiplicity of reasons. An important reason for this is that it removes barriers to trade and capital flows. Another, which is the focus of this paper, is because it reduces barriers to corporate governance at the firm-level.

Corporate governance is defined as the legal, institutional, and cultural mechanism adopted by owners and other stakeholders to exercise control over corporate insiders and management. The literature has extensively emphasized the corporate governance system as a key determinant of firm performance (Shleifer and Vishny, 1997; John and Senbet, 1999; Peace and Osmond, 1999).

Corporate governance patterns differ markedly across countries in essential aspects such as the importance of large stockholders, the legal protection of shareholders, the extent to which relevant laws are enforced, the treatment of stakeholders such as labour and the community, the reliance on debt finance, the structure of the board of directors, the way in which executives are compensated, and the frequency and treatment of mergers and takeovers. But the process of economic and financial globalization is assumed to have a significant impact on the convergence of corporate governance systems (Guillen, 1999).

The removal of barriers to cross-border investment has given firms the alternative of breaking away from the corporate governance system of the country in which they have their headquarters. The general creed about corporate governance systems in the finance literature is that the Anglo-American system, the German system or the Japanese system, are reliable proxies for “good” governance system (Shleifer and Vishny, 1997). In this study, we have no means of distinguishing between the different systems. However, we believe that the presence of foreign ownership and board members is a good proxy for a “good” governance system.

This paper analyzes the benefits of breaking away from a domestic governance system through a global corporate governance system by having foreign owners and/or foreign board

members. Using such a corporate governance system as a proxy for a “good” system, we emphasize the potential performance benefits that can be created for domestic banks. In fact, when it comes to handling information problems and agency costs, the switch to foreign ownership and board members results in a lower cost of capital and a higher firm value (Stulz, 1999).

The empirical analysis in this study is based on banks headquartered in Portugal. Large institutions based in small capital markets are likely to obtain the greatest advantages from breaking away from a segmented or partly segmented capital market (Stulz, 1999). The existence of market segmentation or partial segmentation implies that smaller capital markets, such as Portugal, are not fully integrated in the global capital market, usually due to cross-border information asymmetries and/or institutional and legal barriers. Whereas the institutional and legal barriers to foreign investment have become less of an issue in Portugal, cross-border information asymmetries are still very much present. It is also worth noting that Portugal demonstrates a set of information barriers that can be observed in similar middle income countries at an early stage of economic development. Additionally, banks are a critical component of any economy, since they provide financing for commercial enterprises, basic financial services to a broad segment of the population and access to payments systems. Consequently, corporate governance deserves special attention for banking institutions.

The paper is organized as follows. In Section 2 we discuss the attributes and implications of a global corporate governance regime and describe corporate routes to compliance with that regime. Section 3 presents the proposed relationship between foreign ownership, foreign board membership and domestic banks performance. Some fundamentals about corporate governance and banking sector in Portugal are provided in Section 4. In Section 5 we describe the data and methodology. The empirical results and their interpretation are presented in Section 6. Finally, in Section 7 we summarize the key findings and suggest some managerial implications.

2. Compliance with a global corporate governance regime

Corporate governance can be defined as a set of relationships between a company’s management, its board, its shareholders and other stakeholders. Corporate governance also

provides the structure through which the objectives of the company are set, and the means by which attaining those objectives and monitoring performance are determined. Good corporate governance should provide proper incentives for the board and management to pursue objectives that are in the interests of the company and its shareholders and should facilitate effective monitoring. The presence of an effective corporate governance system within an individual company and across an economy as a whole helps to provide a degree of confidence that is necessary for the proper functioning of a market economy; this result in lower cost of capital and improved efficiency through more efficient use of resources which ultimately promotes growth (OECD, 2004).

Until fairly recently, corporate governance was not a topic that attracted much public attention and was reserved for discussion in board rooms or in academic environments. Some recent events, such as the Enron scandal and other corporate governance failure, changed this and brought the important role that it plays in modern economies into the limelight.

Indeed, corporate governance systems impact economic performance because they provide mechanisms affecting the returns on investment by suppliers of external finance to firms. Firms typically have more productive uses for these resources than the actual suppliers of external finance. But asymmetries of information inhibit such opportunities. A good corporate governance system reduces these information asymmetries and eases monitoring, thereby unlocking profitable gains from trade between firms and their financial suppliers (Edwards and Nibler, 2000; p. 239).

The best practices of corporate governance tend to be promoted by the globalization of financial markets, since its cross-national patterns of corporate governance converge to a global corporate governance system. This process of globalizing corporate governance systems seems to offer firms greater financial flexibility, giving them the opportunity to cut down their cost of capital by reducing problems of cross-border information and agency costs (Karolyi, 1998; Stulz, 1999; Bekaert and Harvey, 2000).

Although much of this also applies to banks, it is true that the banking firm has significant differences from corporations in other economic sectors. There is a clear conflict inside the banks between the shareholders' interests and the depositors' interests, since managers are usually willing to take high-risk projects that increase share value at the expense of the value of the deposits. To avoid crisis of confidence and bank runs, small deposits are insured and banks

are regulated. Nevertheless, this conflict increases the moral hazard problem. Therefore, governance problems and, consequently, the issue of global corporate governance systems justify special attention.

We can point two major approaches that enable to banks break away from a domestic corporate governance model to a global corporate governance system: foreign ownership (or foreign stock exchange listing) and foreign board membership.

Foreign ownership, through foreign exchange listing, is the most widely recognized way of breaking out of a segmented home market with the objective of reducing the cost of capital. A foreign exchange listing signals a firm's commitment to the higher disclosure standards prevailing in the market in which it lists and that might boost foreign investors' recognition of the firm and increase the ability to attract new investors. Thus, foreign ownership becomes a means of lowering the cost of capital.

On the other hand, globalization of ownership creates an opportunity for foreign shareholders to buy large stakes in the firm. However, the investors must have confidence that the capital they provide will be properly monitored. For small shareholders the cost of getting involved can be prohibitive, but larger shareholders can afford active monitoring, for instance through foreign board membership (Shleifer and Vishny, 1986). Since board representatives for large foreign shareholders are more likely to use their influence as board members and perform arm's-length monitoring, their entry as owners should increase performance and ultimately firm value.

The alternative of "importing" a more demanding corporate governance system by having one or more representatives of that system as board members signals greater commitment to corporate monitoring and transparency, which is expected to be valued by investors. The presence of at least one foreign member representing a more demanding system will probably result in more active boards that are more independent of management.

Table 1 summarizes the main variables used in previous studies. Of the five studies identified two focus on Korea (Kim and Lee, 2004; Choi and Hasan, 2005), one on Hungary (Hasan and Marton, 2003), one on Phillipines (Unite and Sullivan, 2003) and one on several countries (Levine, 2003). These studies mainly analyze the impact of foreign ownership, measured as a percentage of equity, on the performance of domestic banks. Only one study (Choi and Hasan, 2005) analyzes the impact of a dummy variable that captures the presence of some

form of foreign board membership on the performance of domestic banks. We extend this line of inquiry by analyzing the impact of both foreign ownership and board membership proxied through various measures on a larger range of bank performance indicators.

Summing up, we argue that foreign ownership and board membership strengthens managerial capabilities and this may lead to an increase in performance.

3. Effects of foreign ownership and board membership: The hypotheses

There is extensive literature suggesting that a firm's performance depends on some factors such as the ownership structure and the quality of the monitoring and decision-making undertaken by its board of directors. In this paper we analyze the effect of foreign ownership and foreign board membership on the performance of domestic banks.

In most cases, foreign shareholders are financial institutions. Since it is plausible that the foreign entity would have a more efficient style of conducting business with broader and deeper expertise on these matters than domestic banks, it is likely there would be some transfer of knowledge and technology at least regarding the operational styles and management strategies from the foreign institution. Foreign owners may influence bank management to adapt a more transparent, competitive and efficient operating strategy and might even influence the selection of senior management. In short, foreign ownership is thought to enhance the external monitoring activity and improve the bank's strategic and operational practices. Therefore, we expect an increase in foreign ownership to result in a reduction in costs.

Hypothesis 1: There is a negative relationship between foreign ownership and costs.

In general, corporate governance research is inconclusive regarding the effect of outside board members. Empirical evidence has grown but the results are very conflicting. Studies by Weisbach (1988), Mehran (1995) and Pinteris (2002) have produced evidence in support of a positive role for outside directors on firm performance, while others, like Agrawal and Knoeber (1996), come to the opposite conclusion. There are also studies that have reported no evidence of a significant relationship between firm performance and the proportion of outside directors on

the board (Hermalin and Weisbach, 1991; Yermack, 1996; Bhagat and Black, 1999; Metrick and Ishii, 2002). We add a special perspective to this research by examining the case of external board members representing a foreign corporate governance system, and we argue that foreign board members play a crucial role in improving domestic bank performance.

Outside directors are seen as a value adding influence providing more independent monitoring, because they are not subjected to the same potential conflicts of interest that are likely to affect the judgments of the insider directors. In addition, if the outside director is foreign, such a member is likely to be more independent and have fewer conflicts of interest than even the local outside directors. Their experienced insights and understandings of markets and competition beyond the local environment may bring added perspectives to the domestic banks. In fact, even the simple advice and counselling to top management from alternative, independent and experienced sources make it plausible to assume that the foreign directors will provide performance enhancing benefits to the local banks. For example, Oxelheim and Randøy (2003) investigated the effects of a foreign-based board of director on firm's Tobin's Q and reported a significantly higher firm value for those associated with a foreign director.

Therefore, we posit that the presence of foreign board members reduces domestic banks' dependence on traditional banking areas, making them seek new sources of revenue (engaging more seriously in non-traditional banking activities, such as investment banking and brokerage services).

Hypothesis 2: Foreign board membership is negatively related with interest margin and positively related with non-interest margin.

Moreover, we expect that improvements in organizational structure and managerial and operational efficiency introduced by foreign directors will result in a decrease in operating costs.

Hypothesis 3: There is a negative relationship between foreign board membership and operating costs.

Finally, we suggest that the risk management practices brought by foreign board members may, ultimately, enhance the overall soundness of the domestic banking system.

Indeed, foreign directors appear to encourage the adoption of risk-based practices when lending and managing credit portfolios, defending a higher credit provisioning. This more proactive recognition of losses could adversely affect their profitability indicators. However, they seem more willing to address the deterioration of asset quality, tolerating lower profits in order to build longer-term institutional strength.

Hypothesis 4: There is a positive relationship between foreign board membership and provisions for credit losses.

4. Corporate governance and the banking sector: The case of Portugal

4.1. Corporate governance in Portugal

It is, in practice, difficult to generalize the study of corporate governance systems due to their multiplicity in industrialized countries (Lannoo, 1999; Shleifer and Vishny, 1997). Franks and Mayer (1992) proposed one of the most used distinctions, which differentiates outsider from insider systems. The former, currently dominant in the United Kingdom and the United States, is characteristic of economies with a large number of listed firms, a liquid capital market where ownership and control rights are frequently traded, and little concentration of shareholding. On the other hand, the insider system, attributed to continental Europe and Japan, is characterized by a small number of listed companies, an illiquid capital market where ownership and control are rarely traded, and a high concentration of shareholding in the hands of corporations, institutions, families or government (Lannoo, 1999; p. 272).

Therefore, this distinction, used in most financial economics literature, establishes two main sets of differences between the two systems – also known as shareholder and stakeholder systems. The differences are: the structure of ownership (the Anglo-American system is characterised by a dispersed ownership structure – stakes of less than 3% per investor; in contrast, both Germany and Japan have a system that is typified as a concentrated ownership structure – stakes greater than 10-20%); and the degree of liquidity and depth of financial markets (Rebérioux, 2002; Barker, 2006).

Some authors argue that European corporate governance systems have been moving towards an outsider director system in recent years (Mueller, 2005; Barker, 2006). In fact, they claim that European corporate governance is shifting towards a system in which the monitoring, oversight and control of firms is becoming increasingly undertaken by external investors rather than insider blockholders (Barker, 2006; p. 4).

However, the insider model is still the predominant pattern of corporate governance observed in Portugal, as in most other countries from continental Europe; since investors often have large ownership stakes (the concentrated structure gives owners the possibility to monitor, oversee and control firms from within), there are a small number of listed firms and the capital market is illiquid.

Tavares (2004) examined the level of institutional development in Portugal in the legal, corporate governance and financial systems. The study used three indices to analyze the potential of institutional reform and identified which reforms would have the highest payoff in terms of growth; which are “less costly” to undertake; and which deliver the highest growth per required effort. The results indicate that the corporate governance issue is one of the most promising reform areas, with a higher growth impact and the least required effort. This analysis also identifies reducing the ownership concentration as being an efficient reform.

4.2. The Portuguese banking sector

Banks face a wide range of complex risks in their day-to-day business, including risks relating to credit, liquidity, exposure concentration, interest rates, exchange rates, settlement, and internal operations. The nature of the bank business – particularly the maturity mismatch between assets and liabilities, relatively high gearing and reliance on creditor confidence – creates particular vulnerabilities. The consequences of mismanaging their risks can be severe, not only for the individual bank, but also for the financial system as a whole. This reflects the fact that the failure of one bank can rapidly affect another through inter-institutional exposures and confidence effects.

In order to address this problem, banks need to create and maintain systems that enable them to identify, monitor and control their risks. Therefore, corporate governance is clearly of

fundamental importance, both at the level of the individual bank and for the entire financial system, since it is the foundation for effective risk management.

Focusing on the particular context of the Portuguese banking sector, and given the concentrated ownership structure, we can say that most Portuguese banks do not face a conflict of interest between a large number of owners and entrenched managers who control the bank without an ownership stake. Indeed, an owner holding a substantial fraction of a bank's voting equity will partially internalize the benefits of monitoring management, and thus limit the extent to which managers can pursue their own aims at the expense of the owners in general.

Nevertheless, the relevance of the corporate governance topic has been growing in the past two decades because the country has gone through extensive financial liberalization – as a result of the European integration process – and consequently the banking system has seen huge transformations with regard ownership structure, openness and deregulation. The first and most important changes were the possibility of opening new banks (since 1984), the privatization of the nationalized banks (which began in 1989), the elimination of interest rate controls on lending (1988) and on deposits (1992), the removal of credit ceilings (1990) and of other controls such as on branching and on new products.

Prior to this transformation, the entire Portuguese banking system had been nationalized in 1975 (except for three foreign banks¹) and operated until 1984 under a regime of total dependence on political priorities, directed credit and binding credit ceilings, controlled interest rates and no foreign bank entry.

The structural transformation in the financial sector, and particular in the banking segment, brought about an increase in the number of banks from 18 in 1984 to 51 by 1996. By the end of 2004, the Portuguese banking system comprised 78 banks. This boost resulted not only from new domestic banks but also from a large number of foreign entrants (most of them from Spain and France). These foreign banks entered either by setting up branches or subsidiaries, but a significant number acquired equity in domestic banks.

The increased foreign presence in Portugal raises important questions about the role played by foreign participants and how their presence affects the performance of domestic banks. Thus, it reinforces the interest of analyses of the two internal corporate governance mechanisms (ownership and board of directors) from this perspective (foreign element). Additionally, the

¹ A bank is defined as foreign if at least 50% of the equity is owned by foreigners.

increasing openness of the world economy and the associated increase in foreign investment even within a unified currency area makes the issue particularly important from the standpoint of policy makers interested in opening the banking sector to foreign participants. This papers shows that this can be achieved not only through traditional foreign ownership but also foreign board membership.

5. Data and method

5.1. Data and variable definition

This study uses a data set that comprises 44 banks headquartered in Portugal. The end of year data was obtained from the Portuguese Central Bank and annual reports of banks and covers the time period between 1996 and 2004. It is worth noting that the occurrence of some mergers and acquisitions caused changes in sample banks along the period of observation. Additionally, the sample initially integrated three banks that were later excluded because Spanish entities became their major shareholders (holding more than 50% of the equity). The number of banks considered in each year is shown below:

	Year								
	1996	1997	1998	1999	2000	2001	2002	2003	2004
N.º of banks in sample	31	35	32	34	30	31	33	32	30

To construct the variables used in this analysis, we gathered accounting data and information on the ownership and nationality of board members.

We followed, among others, Claessens, Demirgüç-Kunt and Huizinga (2001) and Choi and Hasan (2005) in selecting our group of performance indicators (dependent variables). Thus, we selected interest margin to total assets (INTMRG) and non-interest margin to total assets (NINTMRG) to measure income; return on average assets (ROA) and return on average equity (ROE) as measures of profit; operating costs to total assets (OPCOST) and total costs to total assets (TCOST) as measures of costs; provisions for credit losses to total credit (PCLTC) to

measure risk; and profit (X-Efficiency) efficiency (PEFF) as a measure of efficiency. These variables and the independent variables referred below are summarized in Table 2.

The profit efficiency was estimated using stochastic frontier analysis, which is a widely applied method in the banking literature (that captures the efficiency scores of banks calculated from a relative score of a best practice bank within the sample). In particular, we used the stochastic frontier model of Battese and Coelli (1992) projected for unbalanced panel data and in which firm effects are assumed to be distributed as truncated normal random variables. Profit is measured by net profit earned by the bank and other variables needed follow the standard procedure for such estimation (Berger and Mester, 1997; Williams, 2004). The vector of variables used to obtain the PEFF indicator is described in Table 3.

In order to investigate the impact of foreign ownership and board membership on the performance of domestic banks, we collected seven independent variables. To measure foreign ownership we used two variables: a dummy that assumes a value of 1 in each year if any percentage of equity is owned by a foreign shareholder, but in other cases 0 (DFOS); and a continuous variable reporting the percentage of equity owned by foreigners in each year (FOSP). Additionally, we used five variables to quantify foreign board membership: a dummy that takes a value of 1 in each year if there is any foreign director on the board, or 0 in other cases (DFBRD); a continuous variable reporting the percentage of foreign directors on the board in each year (FBRDP); a continuous variable that represents the number of foreign directors on the board in each year (FBRDN); a dummy variable that assumes a value of 1 in each year if the president of the board is foreign, or 0 in other cases (DFPRS); and a dummy variable that takes a value of 1 in each year if the president and/or any vice-president of the board is foreign, or 0 in other cases (DFTOPBRD).

Following Claessens, Demirgüç-Kunt and Huizinga (2001) we control for bank-specific variables that includes equity to total assets (CAP), securities to total assets (SEC), credit to total assets (CRED), fixed assets to total assets (FIX), provisions to total assets (PROV), operating costs to total assets (OPCOST), client deposits to total assets (DEP), cash and liquid assets to total assets (LIQ) and overdue credit to total credit (OVDCRED).

Table 4 presents the descriptive statistics of the variables used in the study considering all banks. We can observe that mean values for the percentages of foreign ownership and foreign board membership are 5% and 9%, respectively. In the following tables, we report the

descriptive statistics and the t-test for equality of means between banks with and without foreign ownership (Table 5) and between banks with and without foreign board members (Table 6). As shown in Table 7, there is considerable correlation between some of the seven variables related to foreign ownership and foreign board membership. However, most of the correlation coefficients between independent variables are generally found to be low enough not to cause linear dependence of variables.

5.2. Model specification

The model is defined as

$$I_{it} = \alpha_0 + \beta F_{it} + \gamma C_{it} + \varepsilon_{it} \quad , \quad (1)$$

$$i = 1, \dots, N \quad t = 1996, \dots, 2004$$

where I_{it} is a vector of the eight dependent variables that measure performance of domestic bank i at time t , F_{it} represents one of the seven variables measuring foreign ownership and board membership of domestic bank i at time t – i.e., DFOS, FOSP, DFBRD, FBRDP, FBRDN, DFPRS and DFTOPBRD – and C_{it} is a set of bank-specific control variables for domestic bank i at time t . Finally, α_0 is a constant, β and γ are coefficients and ε_{it} is an error term.

The model is initially estimated through ordinary least-square (OLS). We are interested in estimating the effect of foreign ownership and governance on the performance of domestic banks. In order to evaluate potential reverse causality we also estimate the relation through two-stage least-square (2SLS) weighted with total assets.

Empirical testing of factors that influence the performance of banks in a single host country controls for unobserved host country effects that can obscure the bank-specific factors of interest to the study. Focus on domestic banks in a single country permits the role of bilateral factors to be clearly examined. However, we are aware that our results apply only to banks that have operations in Portugal.

Pooling of the data masks relationships between dependent and independent variables that differ from one bank to another. If one were willing to assume that banks differ not in terms of their variances then a random effects model could also be estimated. Since the time period

under analysis is short, the assumption that the model's parameters are stationary over time appears to be reasonable and hence tests of non-stationarity were not conducted.

6. Empirical findings

The key regression estimates of our proposed relationship between foreign ownership, foreign board membership and bank performance are reported in Tables 8-14. The results indicate that foreign ownership – dummy (DFOS) and continuous (FOSP) variables – is significantly related to operating costs (negative), total costs (negative) and provisions for credit losses (negative). On the other hand, an examination of the relationship between the foreign board membership variables and performance indicators reveals the following connections: the foreign director dummy (DFBRD) is significantly related to interest margin (negative), non-interest margin (positive), operating costs (negative) and total costs (positive); the percentage of foreign directors (FBRDP) and the number of foreign directors (FBRDN) are significantly related to interest margin (negative), operating costs (negative) and total costs (positive); the foreign president dummy (DFPRS) is significantly related to interest margin (negative) and provisions for credit losses (positive); and the foreign top director dummy (DFTOPBRD) is significantly related to total costs (positive) and provisions for credit losses (positive). In fifty-six regressions, only five regressions did not show signs of variables consistent between OLS and 2SLS estimates. Insofar as significant relations are concerned, only four variables produced inconsistent results suggesting that reverse causality may after all not be a major problem.

Concentrating on the foreign ownership variables (Tables 8 and 9), there is a statistically strong negative relationship between the existence (DFOS) and the extent (FPOS) of foreign ownership and bank costs (operating and total costs). The operating costs and total costs regressions ([3] and [4]) show that the coefficients of FOSP have a higher magnitude than the coefficients of DFOS. Additionally, both foreign ownership variables have a stronger impact on total costs than in operating costs. For example, the existence of foreign owners implies a reduction in total costs of 4.1%, while operating costs decline 1.1%. The mere presence of foreign ownership, and not necessarily to a great extent, may lead to a structure and environment that is conducive to knowledge transfer and efficient involvement. It seems that foreign owners

might transfer or require top management to adopt certain operational and management strategies. Thus, as predicted in Hypothesis 1, the existence of foreign directors in domestic banks tends to have the effect of reducing operating expenses and even cost of funding². We do not find a significant impact of foreign ownership in revenues (income, efficiency or profits).

Focusing on the relationship between the foreign board member variables and bank performance (Tables 10–14), we also observed a strong association between governance and some performance indicators. We find that most of the foreign board member variables (in particular, DFBRD, FBRDP, FBRDN and DFPRS) are significantly and negatively related to interest margin. Inversely, almost all variables (more specifically, DFBRD, FBRDP, FBRDN and DFTOPBRD) are positively related to non-interest margin, although only the foreign director dummy has a significant relation. The coefficients of foreign board member variables in interest margin regressions ([1] from Tables 10-14) have a higher magnitude than the coefficients of the same variables in non-interest margin regressions ([2] from Tables 10-14). Foreign board membership reduces the interest margin on average 0.7% and increases the non-interest margin 0.4%. Similar relationships can be observed in the share and number of foreign directors in the overall board structure. A CEO of foreign nationality reduces the interest margin by 6.0%. The decline in interest margin associated with the existence of foreign board members supports the view that a higher level of foreign monitoring reduces domestic banking dependence on traditional banking areas of business. Despite the less significant relationship with non-interest margin, the presence of foreign directors seems to lead to an increase in revenues from non-traditional banking sources (Hypothesis 2).

Furthermore, the foreign board member variables, except the case of foreign president dummy, are negatively related to operating costs and most of these are significant. This shows that having foreign directors on the board brings diversity of knowledge, expertise and objectivity and, consequently, improvements in organizational structure and operational efficiency (Hypothesis 3). Nevertheless, unlike in the foreign ownership regressions and contrary to our expectations, we do not find a negative relationship between any foreign board member variable and total costs. Most of these variables are significantly, but positively, associated with total costs. A possible explanation for this relationship is the fact that our proxy of total costs

² It is worth noting that, similar to others studies – e.g., Bonin, Hasan and Wachtel (2004) and Heffernan and Fu (2005) –, we use the sum of interest and non-interest costs (including costs of funds, labour and fixed assets) as proxy of total costs.

includes the cost of funds, which on average represents more than 50% of the indicator for all banks in the sample. This leads to the possible conclusion that the presence of foreign directors does not reduce funding costs of domestic banks.

In line with Hypothesis 4, the regressions indicate that foreign president and foreign top director dummies are significantly and positively related to our risk variable (PCLTC). Although the mere existence of foreign directors does not affect the provisions level, the presence of foreign directors with major influence on the board seems to promote the adoption of more prudent practices in lending and management of credit risk. Foreigners seem to be more willing to address the deterioration of asset quality and, consequently, their practices appear to lead to higher levels of provisions for credit losses.

On the other hand, foreign ownership variables are significantly, but negatively, related to provisions for credit losses, which could mean that foreign investors are more interested in bank profitability and less concerned with asset quality.

We do not find a significant relationship between foreign board membership and efficiency. With regard to profits, only the foreign president dummy is significantly (and negatively) related to return on assets and return on equity. In fact, it is worth noting that, among foreign board member variables, foreign president dummy presents the highest magnitude of coefficients in most of the regressions, indicating, for example, that the existence of a foreign president on the board raises the level of provisions for credit losses in 50.0% (regression [5] from Table 13).

It is worth noting that we do not find any significant relation between profit efficiency and foreign ownership or foreign board member variables³. This is an issue that needs further investigation.

Overall the results indicate that the existence of foreign directors on the board significantly affects domestic bank performance. These findings are consistent with the view that foreign directors help local banks to adopt more advanced foreign banking practices and strategies. If nothing else, these directors would be more independent than local and inside directors and this independence may play an important role in an effective monitoring and decision making process.

³ We also estimate all profit efficiency regressions ([6] from Tables 8-14) without controlling for bank-specific variables used to obtain the PEFF indicator (i.e., CAP, CRED and PROV). The regressions reveal similar results: insignificant relation between profit efficiency and foreign ownership or foreign board member variables.

7. Summary, implications and conclusions

There are many papers that explore the issue of effective corporate governance as a key determinant of a firm's performance. Our study makes a contribution to this strand of literature by examining the impact of foreign ownership and foreign board members – two approaches that can be used to signal compliance with a global corporate governance system, i.e. can lead to a “good” corporate governance system – on Portuguese banks performance.

The results indicate that there is a negative and statistically significant relationship between the foreign ownership variables and bank cost measures. Evidence shows that the mere existence of foreign owners is enough to reduce operating and total costs, probably because they enhance monitoring activity and influence the bank management to adopt more efficient strategic and operational practices.

There is also a negative and statistically significant relationship between foreign managers on the board and operating costs consistent with the view that foreign directors bring diversity of knowledge, expertise and objectivity and, consequently, improvements in organizational structure and operational efficiency. Unlike foreign ownership variables, foreign board member variables reveal a positive and significant association with total costs, which leads to the possible conclusion that the presence of foreign directors does not reduce funding costs of domestic banks. Furthermore, most of the foreign board member variables are negatively related to interest margin and positively related to non-interest margin. This supports the idea that foreign directors bring new perspectives to the domestic banks reducing their dependence on traditional banking activities as they seek other sources of business. Finally, our results indicate that foreign president and foreign top director variables are significantly and positively related to provisions for credit losses. Foreign directors with major influence on the board seem to be more willing to address deterioration of asset quality, supporting more prudent practices in management of credit risk. This approach tends to build long-term institutional strength and contributes to enhancing the overall soundness of the domestic banking system.

Our empirical results show that the existence of foreign ownership and foreign board members have some positive effects on domestic bank performance; furthermore, since corporate governance assumes great importance in the promotion of financial stability as a means of encouraging banks to effectively identify, monitor and manage their business risks – which is

why banking supervisors are placing greater emphasis on this issue – we could argue that Portuguese banks and most likely banks from similar middle income countries at an early stage of economic development should take the adoption of a global corporate governance system into serious consideration to break away from partly segmented markets.

Traditional policy-making has relied on the liberalization of domestic banking markets by authorizing equity ownership by foreign investors. The findings in hand show that similar results can be achieved by allowing foreign managers to sit on the board of domestic banks. More importantly, domestic customers benefit through the reduction in the net interest margin of local banks.

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Table 1
Summary of the results and comparison with earlier studies

Results/Authors	Country	Independent Variables	Dependent Variables								
			Y ₁	Y ₂	Y ₃	Y ₄	Y ₅	Y ₆	Y ₇	Y ₈	
Unite and Sullivan (2003)	Philippines	X ₂	>0	<0**	>0**					>0	
Levine (2003)	Various	X ₂	>0								
Hasan and Marton (2003)	Hungary	X ₂							>0**		
Hyun Kim and Byung-Yoon Lee (2004)	Korea	X ₂			<0	<0				<0**	<0**
Sungho Choi and Iftekhar Hasan (2005)	Korea	X ₂						<0**	>0*	>0**	>0**
		X ₃						<0	>0*	>0**	>0**
This study (2006)	Portugal	X ₁	<0	<0	<0**	<0**	<0*	<0*	>0	<0	<0
		X ₂	<0*	<0	<0**	<0**	<0*	<0*	>0	<0*	<0
		X ₃	<0**	>0**	<0**	>0**	>0	<0	<0	>0	>0
		X ₄	<0**	>0	<0**	>0**	>0	<0	<0	<0	>0
		X ₅	<0**	>0	<0**	>0**	<0	>0	<0	<0	>0
		X ₆	<0**	<0	>0	>0	>0**	>0	<0*	<0**	<0**
		X ₇	<0	>0	<0	>0**	>0*	>0	>0	>0	>0

<0 indicates a negative correlation; >0 indicates a positive correlation; ** significant at 5% level; * significant at 10% level.

Independent Variables:

- X1: Foreign ownership (dummy)
- X2: Foreign ownership (percentage)
- X3: Foreign governance (dummy)
- X4: Foreign governance (percentage of foreign directors)
- X5: Foreign governance (number of foreign directors)
- X6: Foreign president (dummy)
- X7: Foreign top directors (dummy)

Dependent Variables:

- Y1: Net Interest Income/Total Assets
- Y2: Net Non-Interest Income/Total Assets
- Y3: Operating Costs/Total Assets
- Y4: Total Costs/Total Assets
- Y5: Provisions for Credit Losses/Total Credit
- Y6: Profit Efficiency
- Y7: Return on Assets
- Y8: Return on Equity

Table 2
Description of dependent and independent variables

Variable	Description
<u>Dependent Variables</u>	
INTMRG	Ratio of net interest income to total average assets
NINTMRG	Ratio of net non-interest income to total average assets
OPCOST	Ratio of operating expenses to total average assets
TCOST	Ratio of total costs to total average assets
PCLTC	Ratio of provisions for credit losses to total credit
PEFF	Measure of profit efficiency (X-Efficiency) using stochastic frontier analysis
ROA	Ratio of after-tax profits to total average assets
ROE	Ratio of after-tax profits to total average equity
<u>Independent Variables</u>	
DFOS	Dummy variable that takes a value of 1 if there is any level of foreign ownership in the bank and 0 otherwise
FOSP	Percentage of foreign ownership
DFBRD	Dummy variable that takes a value of 1 if there is any foreign director on the board and 0 otherwise
FBRDP	Percentage of foreign directors to total directors on the board
FBRDN	Number of foreign directors on the board
DFPRS	Dummy variable that takes a value of 1 if the president of the board is foreign and 0 otherwise
DFTOPBRD	Dummy variable that takes a value of 1 if the president and/or any of the vice-president of the board is foreign and 0 otherwise
CAP	Ratio of the book value of shareholder equity to total assets
SEC	Ratio of securities to total assets
CRED	Ratio of total credit to total assets
FIX	Ratio of fixed assets (minus accumulated depreciation and provisions) to total assets
PROV	Ratio of specific and general provisions to total assets
OPCOST	Ratio of operating expenses to total average assets
DEP	Ratio of client deposits to total assets
LIQ	Ratio of cash and liquid assets to total assets
OVDCCRED	Ratio of overdue credit to total credit

Table 3

Description of variables used in stochastic frontier analysis to obtain PEFF variable

Variable	Description
<u>Dependent Variable</u>	
NETPROFIT	After-tax profits
<u>Independent Variables</u>	
SMLBANK	Dummy variable that equals 1 if bank has total assets below 100 million euros and 0 otherwise
MEDBANK	Dummy variable that equals 1 if bank has total assets of 100 to 1,000 million euros and 0 otherwise
LARGBANK	Dummy variable that equals 1 if bank has total assets of 1,000 to 10,000 million euros and 0 otherwise
HUGBANK	Dummy variable that equals 1 if bank has total assets over 10,000 million euros and 0 otherwise
CAP	Ratio of the book value of shareholder equity to total assets
CRED	Ratio of total credit to total assets
PROV	Ratio of specific and general provisions to total credit

Table 4

Descriptive statistics on selected variables for all banks between 1996 and 2004

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVD CRED* is the ratio of overdue credit to total credit.

	Mean	Median	Minimum	Maximum	Std. Dev.	Num. of Obs.
INTMRG	0.03	0.02	-0.01	0.19	0.02	288
NINTMRG	0.02	0.01	-0.03	0.11	0.02	288
OPCOST	0.03	0.02	0.00	0.22	0.02	288
TCOST	0.12	0.09	0.00	0.62	0.10	288
PCLTC	0.04	0.03	0.00	0.68	0.06	288
PEFF	0.32	0.26	0.06	0.92	0.19	288
ROA	0.00	0.01	-0.24	0.09	0.03	288
ROE	0.09	0.07	-0.61	4.64	0.30	288
DFOS	0.19	0.00	0.00	1.00	0.40	288
FOSP	0.05	0.00	0.00	0.50	0.12	288
DFBRD	0.41	0.00	0.00	1.00	0.49	288
FBRDP	0.09	0.00	0.00	0.58	0.12	288
FBRDN	0.92	0.00	0.00	10.00	1.77	288
DFPRS	0.00	0.00	0.00	1.00	0.06	288
DFTOPBRD	0.10	0.00	0.00	1.00	0.30	288
CAP	0.13	0.08	-0.26	0.97	0.16	288
SEC	0.16	0.11	0.00	0.84	0.17	288
CRED	0.47	0.48	0.00	0.99	0.28	288
FIX	0.06	0.04	0.00	0.51	0.07	288
PROV	0.02	0.01	0.00	0.13	0.02	288
DEP	0.38	0.37	0.00	0.90	0.27	288
LIQ	0.06	0.04	0.00	0.92	0.09	288
OVD CRED	0.04	0.02	0.00	0.67	0.06	288

Source: Banco de Portugal and author's calculations.

Table 5

Descriptive statistics on selected variables for banks with and without Foreign Ownership between 1996 and 2004

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREC* is the ratio of overdue credit to total credit.

	Banks with Foreign Ownership					Banks without Foreign Ownership					t-test for equality of means ^a	
	Mean	Median	Minimum	Maximum	Std. Dev.	Mean	Median	Minimum	Maximum	Std. Dev.	t	Sig.(2-tailed)
INTMRG	0.02	0.02	0.00	0.04	0.01	0.03	0.02	-0.01	0.19	0.03	-3.61	0.00
NINTMRG	0.01	0.01	0.00	0.02	0.01	0.02	0.01	-0.03	0.11	0.02	-6.76	0.00
OPCOST	0.01	0.02	0.00	0.03	0.01	0.03	0.02	0.00	0.22	0.03	-8.09	0.00
TCOST	0.07	0.07	0.00	0.16	0.03	0.14	0.10	0.02	0.62	0.11	-7.89	0.00
PCLTC	0.03	0.02	0.01	0.09	0.02	0.04	0.03	0.00	0.68	0.07	-2.47	0.01
PEFF	0.35	0.28	0.12	0.84	0.23	0.31	0.26	0.06	0.92	0.18	1.11	0.27
ROA	0.01	0.01	-0.01	0.03	0.01	0.00	0.00	-0.24	0.09	0.03	1.96	0.05
ROE	0.09	0.08	-0.44	0.28	0.10	0.09	0.06	-0.61	4.64	0.33	0.20	0.84
DFOS	1.00	1.00	1.00	1.00	0.00	-	-	-	-	-	-	-
FOSP	0.25	0.20	0.01	0.50	0.14	-	-	-	-	-	-	-
DFBRD	0.54	1.00	0.00	1.00	0.50	0.38	0.00	0.00	1.00	0.49	2.16	0.03
FBRDP	0.15	0.11	0.00	0.44	0.17	0.07	0.00	0.00	0.58	0.10	3.47	0.00
FBRDN	2.00	1.00	0.00	10.00	2.61	0.66	0.00	0.00	8.00	1.39	3.70	0.00
DFPRS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.00	0.07	-1.00	0.32
DFTOPBRD	0.05	0.00	0.00	1.00	0.23	0.11	0.00	0.00	1.00	0.32	-1.59	0.11
CAP	0.06	0.06	0.01	0.14	0.03	0.15	0.08	-0.26	0.97	0.17	-7.09	0.00
SEC	0.09	0.07	0.00	0.39	0.08	0.18	0.12	0.00	0.84	0.18	-5.15	0.00
CRED	0.53	0.57	0.08	0.98	0.23	0.46	0.45	0.00	0.99	0.29	1.87	0.06
FIX	0.06	0.05	0.00	0.16	0.05	0.06	0.04	0.00	0.51	0.07	0.30	0.76
PROV	0.01	0.01	0.00	0.03	0.01	0.02	0.01	0.00	0.13	0.02	-2.01	0.05
DEP	0.36	0.40	0.00	0.73	0.20	0.38	0.36	0.00	0.90	0.29	-0.65	0.52
LIQ	0.03	0.03	0.00	0.11	0.02	0.06	0.04	0.00	0.92	0.10	-4.29	0.00
OVDCREC	0.03	0.02	0.00	0.14	0.03	0.04	0.03	0.00	0.67	0.07	-2.78	0.01
Num. of Observations	56					232						

Source: Banco de Portugal and author's calculations.

^a Equal variances not assumed.

Table 6

Descriptive statistics on selected variables for banks with and without Foreign Board Members between 1996 and 2004

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREC* is the ratio of overdue credit to total credit.

	Banks with Foreign Board Members					Banks without Foreign Board Members					t-test for equality of means ^a	
	Mean	Median	Minimum	Maximum	Std. Dev.	Mean	Median	Minimum	Maximum	Std. Dev.	t	Sig.(2-tailed)
INTMRG	0.02	0.02	-0.01	0.13	0.02	0.03	0.02	-0.01	0.19	0.03	-3.19	0.00
NINTMRG	0.02	0.01	-0.01	0.07	0.02	0.02	0.01	-0.03	0.11	0.02	0.73	0.47
OPCOST	0.02	0.02	0.00	0.08	0.02	0.03	0.02	0.00	0.22	0.03	-2.62	0.01
TCOST	0.14	0.09	0.00	0.62	0.13	0.11	0.09	0.02	0.57	0.08	2.23	0.03
PCLTC	0.04	0.03	0.01	0.67	0.06	0.04	0.03	0.00	0.68	0.06	-0.38	0.71
PEFF	0.32	0.31	0.10	0.83	0.17	0.31	0.24	0.06	0.92	0.21	0.22	0.83
ROA	0.01	0.01	-0.10	0.04	0.01	0.00	0.00	-0.24	0.09	0.03	1.90	0.06
ROE	0.09	0.09	-0.44	1.06	0.14	0.08	0.06	-0.61	4.64	0.37	0.45	0.65
DFOS	0.26	0.00	0.00	1.00	0.44	0.15	0.00	0.00	1.00	0.36	2.13	0.03
FOSP	0.08	0.00	0.00	0.50	0.15	0.03	0.00	0.00	0.43	0.08	2.95	0.00
DFBRD	1.00	1.00	1.00	1.00	0.00	-	-	-	-	-	-	-
FBRDP	0.22	0.20	0.09	0.58	0.09	-	-	-	-	-	-	-
FBRDN	2.27	1.00	1.00	10.00	2.16	-	-	-	-	-	-	-
DFPRS	0.01	0.00	0.00	1.00	0.09	-	-	-	-	-	-	-
DFTOPBRD	0.25	0.00	0.00	1.00	0.43	-	-	-	-	-	-	-
CAP	0.13	0.09	-0.26	0.74	0.14	0.13	0.08	-0.04	0.97	0.17	0.04	0.97
SEC	0.18	0.13	0.00	0.78	0.16	0.15	0.09	0.00	0.84	0.18	1.22	0.22
CRED	0.48	0.48	0.00	0.98	0.27	0.46	0.48	0.00	0.99	0.29	0.61	0.54
FIX	0.06	0.04	0.00	0.30	0.06	0.06	0.04	0.00	0.51	0.07	-0.25	0.80
PROV	0.02	0.01	0.00	0.10	0.01	0.02	0.01	0.00	0.13	0.02	-0.80	0.42
DEP	0.37	0.36	0.00	0.87	0.24	0.38	0.42	0.00	0.90	0.29	-0.55	0.58
LIQ	0.05	0.03	0.00	0.32	0.06	0.06	0.04	0.00	0.92	0.11	-1.25	0.21
OVDCREC	0.04	0.02	0.00	0.66	0.07	0.04	0.03	0.00	0.67	0.06	-0.76	0.45
Num. of Observations	117					171						

Source: Banco de Portugal and author's calculations.

^a Equal variances not assumed.

Table 7

Pearson correlation matrix ^a

(Number of observations = 288)

Variables	INTMRG	NINTMRG	ROA	ROE	OPCOST	TCOST	PCLTC	PEFF	DFOS	FOSP	DFBRD	FBRDP	FBRDN	DFPRS	DFTOPBRD	CAP	SEC	CRED	FIX	PROV	DEP	LIQ	OVDCCRED
INTMRG	1																						
	-																						
NINTMRG	0.15 (0.00)	1																					
		-																					
ROA	0.27 (0.00)	0.21 (0.00)	1																				
			-																				
ROE	-0.03 (0.34)	0.09 (0.06)	0.08 (0.09)	1																			
				-																			
OPCOST	0.43 (0.00)	0.50 (0.00)	-0.47 (0.00)	-0.05 (0.18)	1																		
				-																			
TCOST	0.04 (0.25)	0.38 (0.00)	0.02 (0.39)	0.01 (0.45)	0.22 (0.00)	1																	
						-																	
PCLTC	-0.03 (0.32)	0.07 (0.13)	-0.33 (0.00)	0.65 (0.00)	0.16 (0.00)	0.13 (0.01)	1																
							-																
PEFF	-0.08 (0.10)	0.02 (0.36)	0.20 (0.00)	0.10 (0.04)	0.10 (0.00)	-0.22 (0.03)	0.11 (0.47)	1															
								-															
DFOS	-0.12 (0.02)	-0.22 (0.00)	0.06 (0.15)	0.01 (0.46)	-0.26 (0.00)	-0.25 (0.00)	-0.08 (0.10)	0.07 (0.09)	1														
									-														
FOSP	-0.11 (0.03)	-0.22 (0.00)	0.04 (0.25)	0.01 (0.43)	-0.24 (0.00)	-0.23 (0.00)	-0.10 (0.04)	0.05 (0.20)	0.85 (0.00)	1													
										-													
DFBRD	-0.17 (0.00)	0.04 (0.24)	0.10 (0.05)	0.02 (0.35)	-0.14 (0.01)	0.14 (0.14)	-0.02 (0.01)	0.01 (0.35)	0.13 (0.42)	0.19 (0.01)	1												
											-												
FBRDP	-0.16 (0.00)	-0.03 (0.31)	0.08 (0.09)	0.02 (0.35)	-0.17 (0.00)	0.08 (0.08)	-0.06 (0.14)	-0.05 (0.22)	0.26 (0.00)	0.39 (0.00)	0.87 (0.00)	1											
												-											
FBRDN	-0.17 (0.00)	-0.03 (0.33)	0.06 (0.15)	0.01 (0.42)	-0.18 (0.00)	0.09 (0.07)	-0.03 (0.29)	0.10 (0.05)	0.30 (0.00)	0.33 (0.00)	0.63 (0.00)	0.79 (0.00)	1										
													-										
DFPRS	-0.08 (0.09)	0.00 (0.49)	-0.25 (0.00)	0.19 (0.00)	0.11 (0.04)	0.11 (0.03)	0.63 (0.00)	-0.03 (0.32)	-0.03 (0.31)	-0.02 (0.34)	0.07 (0.11)	0.03 (0.32)	0.00 (0.48)	1									
														-									
DFTOPBRD	-0.13 (0.01)	0.09 (0.07)	-0.01 (0.46)	0.02 (0.36)	-0.01 (0.44)	0.17 (0.00)	0.07 (0.14)	0.00 (0.48)	-0.08 (0.10)	-0.11 (0.03)	0.40 (0.00)	0.38 (0.00)	0.47 (0.00)	0.18 (0.00)	1								
															-								
CAP	0.21 (0.00)	0.32 (0.00)	-0.12 (0.02)	-0.19 (0.00)	0.47 (0.00)	0.28 (0.00)	-0.16 (0.00)	-0.11 (0.03)	-0.21 (0.00)	-0.20 (0.00)	0.00 (0.48)	-0.06 (0.14)	-0.12 (0.02)	-0.15 (0.01)	0.03 (0.28)	1							
																-							
SEC	-0.34 (0.00)	0.16 (0.00)	0.04 (0.25)	0.03 (0.30)	-0.17 (0.00)	0.44 (0.00)	0.08 (0.08)	0.20 (0.00)	-0.20 (0.00)	-0.22 (0.00)	0.07 (0.12)	-0.03 (0.31)	0.01 (0.40)	0.08 (0.08)	0.10 (0.04)	0.06 (0.16)	1						
																	-						
CRED	0.54 (0.00)	-0.17 (0.00)	0.20 (0.00)	0.01 (0.40)	0.06 (0.16)	-0.36 (0.00)	-0.12 (0.03)	-0.12 (0.02)	0.10 (0.05)	0.17 (0.00)	0.04 (0.27)	0.10 (0.04)	0.04 (0.28)	-0.07 (0.12)	-0.17 (0.00)	-0.19 (0.00)	-0.62 (0.00)	1					
																			-				
FIX	-0.19 (0.00)	0.09 (0.06)	-0.41 (0.00)	0.30 (0.00)	0.15 (0.00)	0.36 (0.00)	0.51 (0.00)	0.29 (0.00)	0.01 (0.41)	-0.03 (0.33)	-0.01 (0.08)	-0.08 (0.46)	0.01 (0.00)	0.21 (0.00)	-0.03 (0.29)	0.10 (0.00)	0.19 (0.00)	-0.35 (0.00)	1				
																				-			
PROV	0.57 (0.00)	0.04 (0.26)	0.03 (0.33)	0.23 (0.00)	0.25 (0.00)	-0.04 (0.24)	0.53 (0.00)	-0.05 (0.20)	-0.08 (0.10)	-0.09 (0.06)	-0.05 (0.22)	-0.06 (0.15)	-0.05 (0.20)	0.32 (0.00)	-0.05 (0.20)	-0.05 (0.19)	-0.33 (0.00)	0.55 (0.00)	0.05 (0.19)	1			
																					-		
DEP	-0.13 (0.01)	-0.22 (0.00)	-0.09 (0.06)	-0.02 (0.39)	-0.06 (0.14)	-0.35 (0.00)	0.01 (0.47)	-0.10 (0.05)	-0.03 (0.30)	-0.11 (0.03)	-0.03 (0.30)	-0.06 (0.17)	-0.03 (0.32)	-0.02 (0.36)	0.12 (0.02)	-0.26 (0.00)	-0.29 (0.00)	0.16 (0.00)	-0.13 (0.00)	0.05 (0.00)	1		
																						-	
LIQ	-0.10 (0.04)	-0.03 (0.31)	-0.23 (0.00)	-0.14 (0.01)	0.12 (0.02)	0.00 (0.48)	-0.01 (0.46)	-0.19 (0.00)	-0.14 (0.01)	-0.14 (0.01)	-0.07 (0.13)	-0.06 (0.16)	-0.08 (0.09)	0.02 (0.35)	0.16 (0.00)	0.18 (0.00)	-0.11 (0.03)	-0.20 (0.00)	-0.07 (0.12)	-0.16 (0.00)	0.30 (0.00)	1	
																							-
OVDCCRED	0.03 (0.29)	0.05 (0.20)	-0.34 (0.00)	0.57 (0.00)	0.19 (0.00)	0.10 (0.05)	0.97 (0.00)	-0.04 (0.26)	-0.10 (0.05)	-0.12 (0.02)	-0.05 (0.22)	-0.08 (0.08)	-0.07 (0.13)	0.57 (0.00)	0.01 (0.44)	-0.14 (0.01)	0.05 (0.20)	-0.06 (0.14)	0.49 (0.00)	0.57 (0.00)	0.02 (0.34)	-0.02 (0.36)	1
																							-

Source: Banco de Portugal and author's calculations.

^a Significance 1-tailed is presented in parentheses.

Table 8

OLS and 2SLS regressions results for the impact of foreign ownership (dummy variable) on performance ^{a b}

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREDED* is the ratio of overdue credit to total credit.

Dependent variab.	OLS								2SLS							
	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE
Independent variab.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DFOS	-0.002 (-0.899)	-0.003 (-1.098)	-0.011*** (-3.531)	-0.041*** (-3.162)	-0.013* (-1.672)	0.000 (0.008)	-0.004 (-1.160)	-0.013 (-0.336)	-0.001 (-0.717)	-0.002 (-0.882)	-0.007*** (-3.109)	-0.038*** (-3.458)	-0.010* (-1.720)	-0.008 (-0.295)	-0.002 (-0.928)	-0.020 (-0.669)
CAP	0.008 (0.997)	-0.001 (-0.123)	0.069*** (8.162)	0.047 (1.333)	-0.130*** (-5.909)	-0.164* (-1.947)	0.012 (1.297)	0.076 (0.656)	0.012 (1.412)	0.002 (0.294)	0.078*** (9.005)	0.098*** (2.449)	-0.135*** (-6.122)	-0.224** (-1.967)	0.018* (1.916)	0.003 (0.021)
SEC	0.001 (0.139)	0.013* (1.757)	-0.031*** (-3.308)	0.181*** (4.607)	0.022 (0.926)	0.166* (1.931)	0.009 (0.906)	-0.044 (-0.376)	-0.001 (-0.148)	0.014** (2.098)	-0.026*** (-3.101)	0.175*** (4.576)	0.020 (0.999)	0.198** (2.023)	0.008 (0.927)	-0.014 (-0.130)
CRED	0.020*** (3.247)	-0.014** (-2.454)	0.002 (0.227)	-0.056* (-1.818)	0.012 (0.809)	-0.061 (-0.934)	-0.006 (-0.888)	0.280*** (3.100)	0.011** (2.093)	-0.013** (-2.549)	0.000 (-0.017)	-0.058** (-2.010)	0.003 (0.237)	-0.060 (-0.827)	-0.010 (-1.632)	0.258*** (3.347)
FIX	-0.026 (-1.453)	-0.012 (-0.713)	0.023 (1.069)	0.494*** (5.430)	0.468*** (9.930)	1.312*** (6.716)	-0.090*** (-4.234)	0.102 (0.381)	-0.025 (-1.505)	0.001 (0.093)	0.004 (0.231)	0.452*** (5.104)	0.357*** (8.664)	1.801*** (8.068)	-0.063*** (-3.349)	0.149 (0.628)
PROV	0.896*** (7.885)	0.154 (1.433)	0.132 (0.961)	1.896*** (3.300)	- (-)	3.728*** (3.024)	0.702*** (5.210)	-7.181*** (-4.248)	1.029*** (8.905)	0.186* (1.753)	0.243* (1.824)	1.940*** (3.175)	- (-)	4.820*** (3.108)	0.813*** (6.196)	-6.249*** (-3.805)
OPCOST	0.312*** (6.317)	0.398*** (8.521)	- (-)	- (-)	0.548*** (3.747)	-1.422*** (-2.652)	-0.529*** (-9.029)	-1.970*** (-2.680)	0.344*** (6.779)	0.430*** (9.197)	- (-)	- (-)	0.613*** (4.575)	-1.725** (-2.531)	-0.476*** (-8.243)	-1.756** (-2.433)
DEP	-0.015*** (-3.704)	-0.007* (-1.797)	-0.002 (-0.406)	-0.083*** (-4.122)	-0.005 (-0.388)	-0.007 (-0.156)	-0.008* (-1.677)	-0.034 (-0.567)	-0.012*** (-3.453)	-0.007** (-2.242)	-0.002 (-0.447)	-0.082*** (-4.399)	-0.001 (-0.132)	0.048 (1.014)	-0.006 (-1.604)	-0.032 (-0.639)
LIQ	0.004 (0.356)	-0.017 (-1.494)	0.006 (0.416)	0.103* (1.678)	0.052 (1.423)	-0.163 (-1.240)	-0.035** (-2.439)	-0.371** (-2.051)	0.002 (0.149)	-0.014 (-1.225)	0.009 (0.671)	0.091 (1.408)	0.039 (1.162)	-0.201 (-1.232)	-0.033** (-2.377)	-0.359** (-2.080)
OVDCREDED	-0.108*** (-4.291)	-0.037 (-1.536)	0.064** (2.124)	-0.387*** (-3.062)	- (-)	-1.278*** (-4.681)	-0.147*** (-4.925)	3.840*** (10.256)	-0.119*** (-4.574)	-0.048** (-2.021)	0.065** (2.151)	-0.362*** (-2.633)	- (-)	-1.683*** (-4.812)	-0.173*** (-5.834)	3.362*** (9.076)
(Constant)	0.004 (0.849)	0.014*** (3.014)	0.018*** (3.125)	0.101*** (4.273)	0.005 (0.371)	0.296*** (5.724)	0.022*** (3.921)	0.005 (0.075)	0.004 (0.979)	0.010*** (2.723)	0.014*** (2.911)	0.098*** (4.490)	0.012 (1.085)	0.272*** (4.869)	0.018*** (3.898)	0.017 (0.290)
N. of Observations	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adjusted R Square	0.59	0.32	0.35	0.39	0.35	0.21	0.46	0.39	0.61	0.37	0.37	0.42	0.29	0.24	0.40	0.31
F-test	42.11***	14.66***	18.37***	21.12***	20.08***	8.80***	25.54***	19.52***	44.96***	18.17***	20.11***	23.68***	15.62***	10.18***	20.17***	14.12***

^a t-values are presented in parentheses.

^b * means statistically significant at 10% level; ** means statistically significant at 5% level; *** means statistically significant at 1% level.

Table 9

OLS and 2SLS regressions results for the impact of foreign ownership (percentage) on performance ^{a b}

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREC* is the ratio of overdue credit to total credit.

Dependent variab.	OLS								2SLS							
	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE
Independent variab.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
FOSP	-0.016*	-0.011	-0.034***	-0.117**	-0.049*	0.003	-0.019*	-0.047	-0.010	-0.007	-0.022***	-0.108***	-0.041**	-0.007	-0.012	-0.062
	(-1.807)	(-1.235)	(-3.141)	(-2.591)	(-1.823)	(0.035)	(-1.784)	(-0.349)	(-1.438)	(-1.143)	(-2.694)	(-2.853)	(-2.143)	(-0.074)	(-1.520)	(-0.615)
CAP	0.007	-0.001	0.070***	0.052	-0.131***	-0.163*	0.011	0.075	0.011	0.002	0.079***	0.103**	-0.136***	-0.222*	0.018*	0.003
	(0.902)	(-0.138)	(8.265)	(1.484)	(-5.947)	(-1.944)	(1.233)	(0.655)	(1.335)	(0.261)	(9.080)	(2.576)	(-6.198)	(-1.944)	(1.852)	(0.023)
SEC	-0.001	0.013*	-0.030***	0.187***	0.022	0.167*	0.007	-0.044	-0.002	0.014**	-0.025***	0.181***	0.018	0.204**	0.006	-0.011
	(-0.087)	(1.741)	(-3.185)	(4.744)	(0.911)	(1.944)	(0.762)	(-0.377)	(-0.337)	(2.046)	(-2.969)	(4.729)	(0.906)	(2.093)	(0.782)	(-0.108)
CRED	0.021***	-0.013**	0.004	-0.046	0.014	-0.062	-0.005	0.283***	0.012**	-0.012**	0.002	-0.047	0.005	-0.059	-0.009	0.264***
	(3.438)	(-2.303)	(0.604)	(-1.481)	(0.932)	(-0.934)	(-0.693)	(3.129)	(2.260)	(-2.393)	(0.337)	(-1.607)	(0.375)	(-0.808)	(-1.440)	(3.407)
FIX	-0.025	-0.012	0.021	0.484***	0.467***	1.311***	-0.090***	0.100	-0.024	0.002	0.002	0.439***	0.357***	1.794***	-0.062***	0.143
	(-1.410)	(-0.730)	(0.957)	(5.296)	(9.923)	(6.730)	(-4.235)	(0.374)	(-1.449)	(0.102)	(0.114)	(4.942)	(8.700)	(8.059)	(-3.323)	(0.608)
PROV	0.869***	0.140	0.093	1.772***	-	3.734***	0.673***	-7.241***	1.006***	0.171	0.208	1.776***	-	4.825***	0.787***	-6.358***
	(7.603)	(1.287)	(0.668)	(3.031)	-	(2.997)	(4.958)	(-4.238)	(8.625)	(1.594)	(1.533)	(2.849)	-	(3.074)	(5.938)	(-3.824)
OPCOST	0.305***	0.398***	-	-	0.546***	-1.419***	-0.535***	-1.966***	0.339***	0.429***	-	-	0.602***	-1.697**	-0.480***	-1.738**
	(6.227)	(8.564)	-	-	(3.754)	(-2.659)	(-9.187)	(-2.687)	(6.730)	(9.224)	-	-	(4.508)	(-2.500)	(-8.368)	(-2.418)
DEP	-0.016***	-0.007*	-0.003	-0.087***	-0.007	-0.006	-0.009*	-0.036	-0.013***	-0.008**	-0.003	-0.086***	-0.004	0.049	-0.007*	-0.035
	(-3.949)	(-1.912)	(-0.684)	(-4.235)	(-0.584)	(-0.147)	(-1.912)	(-0.595)	(-3.643)	(-2.358)	(-0.678)	(-4.520)	(-0.427)	(1.014)	(-1.819)	(-0.686)
LIQ	0.004	-0.017	0.008	0.112*	0.055	-0.163	-0.035**	-0.369**	0.001	-0.014	0.011	0.099	0.040	-0.197	-0.033**	-0.355**
	(0.332)	(-1.471)	(0.558)	(1.815)	(1.492)	(-1.241)	(-2.453)	(-2.046)	(0.119)	(-1.225)	(0.775)	(1.529)	(1.214)	(-1.213)	(-2.404)	(-2.064)
OVDCREC	-0.106***	-0.035	0.071**	-0.362***	-	-1.278***	-0.145***	3.848***	-0.118***	-0.047**	0.070**	-0.334**	-	-1.678***	-0.171***	3.375***
	(-4.243)	(-1.470)	(2.339)	(-2.853)	-	(-4.685)	(-4.865)	(10.284)	(-4.543)	(-1.973)	(2.332)	(-2.416)	-	(-4.802)	(-5.795)	(9.119)
(Constant)	0.005	0.014***	0.017***	0.096***	0.005	0.296***	0.023***	0.005	0.005	0.011***	0.013***	0.092***	0.014	0.267***	0.019***	0.015
	(1.107)	(3.053)	(2.932)	(4.040)	(0.383)	(5.775)	(4.125)	(0.069)	(1.196)	(2.807)	(2.725)	(4.237)	(1.200)	(4.836)	(4.103)	(0.257)
N. of Observations	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adjusted R Square	0.59	0.32	0.35	0.38	0.35	0.21	0.46	0.39	0.61	0.38	0.37	0.41	0.29	0.24	0.40	0.31
F-test	42.73***	14.71***	17.93***	20.52***	20.19***	8.80***	25.89***	19.53***	45.35***	18.25***	19.70***	22.99***	15.91***	10.17***	20.41***	14.11***

^a t-values are presented in parentheses.

^b * means statistically significant at 10% level; ** means statistically significant at 5% level; *** means statistically significant at 1% level.

Table 10

OLS and 2SLS regressions results for the impact of foreign board membership (dummy variable) on performance ^{a b}

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREC* is the ratio of overdue credit to total credit.

Dependent variab.	OLS								2SLS							
	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE
Independent variab.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DFBRD	-0.007*** (-3.473)	0.004** (2.264)	-0.006** (-2.405)	0.028*** (2.854)	0.002 (0.347)	-0.010 (-0.470)	0.001 (0.376)	0.004 (0.151)	-0.006*** (-3.911)	0.004** (2.347)	-0.005** (-2.537)	0.022** (2.557)	0.002 (0.342)	-0.023 (-1.039)	0.000 (-0.262)	0.014 (0.614)
CAP	0.011 (1.462)	-0.002 (-0.226)	0.076*** (9.183)	0.069** (2.005)	-0.128*** (-5.757)	-0.160* (-1.904)	0.013 (1.386)	0.078 (0.679)	0.016* (1.955)	0.001 (0.122)	0.085*** (9.931)	0.122*** (3.109)	-0.133*** (-5.976)	-0.208* (-1.822)	0.020** (2.031)	0.002 (0.019)
SEC	0.005 (0.710)	0.014* (1.950)	-0.021** (-2.220)	0.200*** (5.188)	0.033 (1.418)	0.169** (2.040)	0.011 (1.232)	-0.035 (-0.307)	0.002 (0.349)	0.015** (2.289)	-0.017** (-2.110)	0.200*** (5.357)	0.030 (1.537)	0.214** (2.273)	0.010 (1.257)	0.002 (0.017)
CRED	0.022*** (3.735)	-0.015*** (-2.697)	0.005 (0.614)	-0.063** (-2.036)	0.014 (0.913)	-0.058 (-0.871)	-0.006 (-0.893)	0.279*** (3.069)	0.014*** (2.699)	-0.014*** (-2.863)	0.003 (0.402)	-0.067** (-2.266)	0.004 (0.309)	-0.049 (-0.666)	-0.010 (-1.558)	0.252*** (3.237)
FIX	-0.027 (-1.528)	-0.015 (-0.884)	0.016 (0.747)	0.463*** (5.094)	0.462*** (9.776)	1.313*** (6.767)	-0.093*** (-4.382)	0.091 (0.343)	-0.027* (-1.651)	0.000 (-0.032)	-0.004 (-0.183)	0.409*** (4.626)	0.349*** (8.486)	1.793*** (8.119)	-0.066*** (-3.503)	0.127 (0.541)
PROV	0.875*** (7.851)	0.177* (1.660)	0.140 (1.008)	2.154*** (3.734)	- (-)	3.687*** (2.991)	0.715*** (5.287)	-7.131*** (-4.215)	1.003*** (8.897)	0.208** (1.972)	0.245* (1.826)	2.230*** (3.614)	- (-)	4.736*** (3.056)	0.818*** (6.214)	-6.123*** (-3.724)
OPCOST	0.298*** (6.215)	0.424*** (9.236)	- (-)	- (-)	0.616*** (4.273)	-1.458*** (-2.753)	-0.512*** (-8.819)	-1.904*** (-2.619)	0.322*** (6.543)	0.453*** (9.831)	- (-)	- (-)	0.674*** (5.065)	-1.793*** (-2.650)	-0.468*** (-8.148)	-1.604** (-2.234)
DEP	-0.014*** (-3.671)	-0.006* (-1.707)	0.000 (0.016)	-0.076*** (-3.792)	-0.002 (-0.194)	-0.007 (-0.155)	-0.007 (-1.551)	-0.031 (-0.532)	-0.012*** (-3.560)	-0.007** (-2.109)	0.000 (-0.096)	-0.072*** (-3.889)	0.001 (0.119)	0.048 (1.041)	-0.006 (-1.498)	-0.027 (-0.541)
LIQ	0.004 (0.358)	-0.015 (-1.344)	0.010 (0.693)	0.129** (2.100)	0.059 (1.592)	-0.165 (-1.259)	-0.033** (-2.323)	-0.364** (-2.023)	0.001 (0.079)	-0.012 (-1.074)	0.012 (0.865)	0.120* (1.853)	0.044 (1.322)	-0.202 (-1.249)	-0.032** (-2.308)	-0.345** (-2.004)
OVDCREC	-0.103*** (-4.191)	-0.038 (-1.598)	0.073** (2.401)	-0.368*** (-2.904)	- (-)	-1.273*** (-4.663)	-0.146*** (-4.883)	3.843*** (10.262)	-0.115*** (-4.530)	-0.049** (-2.077)	0.072** (2.389)	-0.334** (-2.413)	- (-)	-1.667*** (-4.775)	-0.171*** (-5.779)	3.365*** (9.088)
(Constant)	0.004 (0.968)	0.011** (2.566)	0.013** (2.329)	0.073*** (3.186)	-0.004 (-0.259)	0.299*** (6.091)	0.020*** (3.677)	-0.004 (-0.056)	0.005 (1.234)	0.008** (2.319)	0.010** (2.244)	0.069*** (3.284)	0.005 (0.469)	0.272*** (5.163)	0.017*** (3.810)	0.000 (-0.002)
N. of Observations	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adjusted R Square	0.60	0.33	0.34	0.38	0.34	0.21	0.46	0.39	0.62	0.38	0.37	0.40	0.28	0.24	0.40	0.31
F-test	44.94***	15.25***	17.24***	20.78***	19.56***	8.83***	25.31***	19.51***	48.68***	18.92***	19.56***	22.70***	15.13***	10.31***	20.04***	14.11***

^a t-values are presented in parentheses.

^b * means statistically significant at 10% level; ** means statistically significant at 5% level; *** means statistically significant at 1% level.

Table 11

OLS and 2SLS regressions results for the impact of foreign board membership (percentage) on performance ^{a b}

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREC* is the ratio of overdue credit to total credit.

Dependent variab. Independent variab.	OLS								2SLS							
	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
FBRDP	-0.029*** (-3.675)	0.012 (1.552)	-0.025** (-2.576)	0.120*** (3.010)	0.001 (0.040)	-0.094 (-1.096)	-0.006 (-0.606)	0.028 (0.237)	-0.026*** (-3.953)	0.009 (1.539)	-0.020*** (-2.651)	0.102*** (2.913)	0.001 (0.061)	-0.144 (-1.616)	-0.009 (-1.199)	0.047 (0.499)
CAP	0.010 (1.287)	-0.001 (-0.071)	0.075*** (9.028)	0.076** (2.207)	-0.127*** (-5.747)	-0.160* (-1.914)	0.013 (1.456)	0.079 (0.686)	0.014* (1.739)	0.002 (0.301)	0.083*** (9.765)	0.130*** (3.311)	-0.132*** (-5.971)	-0.211* (-1.866)	0.020** (2.081)	0.007 (0.061)
SEC	0.003 (0.392)	0.015** (2.153)	-0.023** (-2.452)	0.210*** (5.482)	0.034 (1.453)	0.165** (2.005)	0.011 (1.267)	-0.033 (-0.294)	0.000 (0.061)	0.016** (2.456)	-0.019** (-2.304)	0.207*** (5.577)	0.030 (1.566)	0.207** (2.208)	0.010 (1.244)	0.006 (0.063)
CRED	0.023*** (3.823)	-0.015*** (-2.620)	0.005 (0.675)	-0.065** (-2.103)	0.014 (0.946)	-0.051 (-0.776)	-0.006 (-0.762)	0.277*** (3.047)	0.015*** (2.827)	-0.014*** (-2.771)	0.003 (0.506)	-0.071** (-2.409)	0.004 (0.345)	-0.039 (-0.527)	-0.009 (-1.378)	0.252*** (3.218)
FIX	-0.030* (-1.695)	-0.013 (-0.796)	0.014 (0.633)	0.475*** (5.235)	0.463*** (9.786)	1.306*** (6.739)	-0.093*** (-4.393)	0.094 (0.352)	-0.029* (-1.830)	0.001 (0.040)	-0.006 (-0.302)	0.421*** (4.767)	0.349*** (8.480)	1.777*** (8.061)	-0.067*** (-3.561)	0.132 (0.563)
PROV	0.854*** (7.642)	0.180* (1.673)	0.121 (0.865)	2.246*** (3.880)	- (-)	3.568*** (2.886)	0.702*** (5.169)	-7.101*** (-4.179)	0.979*** (8.644)	0.211** (1.980)	0.225* (1.666)	2.345*** (3.790)	- (-)	4.542*** (2.924)	0.801*** (6.070)	-6.092*** (-3.686)
OPCOST	0.295*** (6.157)	0.420*** (9.093)	- (-)	- (-)	0.609*** (4.213)	-1.511*** (-2.854)	-0.521*** (-8.955)	-1.893*** (-2.601)	0.321*** (6.508)	0.448*** (9.661)	- (-)	- (-)	0.667*** (5.004)	-1.858*** (-2.750)	-0.477*** (-8.305)	-1.614** (-2.245)
DEP	-0.015*** (-3.991)	-0.006 (-1.552)	-0.001 (-0.207)	-0.071*** (-3.525)	-0.002 (-0.187)	-0.011 (-0.247)	-0.008 (-1.593)	-0.030 (-0.510)	-0.013*** (-3.911)	-0.006* (-1.957)	-0.001 (-0.345)	-0.067*** (-3.600)	0.001 (0.117)	0.041 (0.873)	-0.006 (-1.625)	-0.024 (-0.493)
LIQ	0.005 (0.446)	-0.016 (-1.395)	0.011 (0.751)	0.125** (2.037)	0.058 (1.584)	-0.164 (-1.251)	-0.034** (-2.336)	-0.365** (-2.027)	0.002 (0.191)	-0.013 (-1.142)	0.013 (0.936)	0.116* (1.795)	0.044 (1.312)	-0.198 (-1.228)	-0.032** (-2.314)	-0.348** (-2.024)
OVDCREC	-0.101*** (-4.089)	-0.038 (-1.599)	0.076** (2.472)	-0.378*** (-2.986)	- (-)	-1.258*** (-4.608)	-0.144*** (-4.819)	3.839*** (10.237)	-0.112*** (-4.394)	-0.050** (-2.087)	0.074** (2.475)	-0.348** (-2.516)	- (-)	-1.641*** (-4.708)	-0.169*** (-5.712)	3.361*** (9.058)
(Constant)	0.005 (1.203)	0.011** (2.515)	0.014** (2.482)	0.068*** (2.979)	-0.003 (-0.223)	0.305*** (6.185)	0.021*** (3.791)	-0.005 (-0.079)	0.006 (1.434)	0.008** (2.299)	0.011** (2.377)	0.065*** (3.096)	0.005 (0.495)	0.280*** (5.287)	0.018*** (3.957)	-0.001 (-0.015)
N. of Observations	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adjusted R Square	0.61	0.33	0.34	0.38	0.34	0.22	0.46	0.39	0.62	0.38	0.37	0.41	0.28	0.25	0.40	0.31
F-test	45.30***	14.84***	17.38***	20.95***	19.54***	8.95***	25.35***	19.51***	48.77***	18.42***	19.66***	23.05***	15.11***	10.51***	20.27***	14.10***

^a t-values are presented in parentheses.

^b * means statistically significant at 10% level; ** means statistically significant at 5% level; *** means statistically significant at 1% level.

Table 12

OLS and 2SLS regressions results for the impact of foreign board membership (number) on performance ^{a b}

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREC* is the ratio of overdue credit to total credit.

Dependent variab.	OLS								2SLS							
	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE
Independent variab.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
FBRDN	-0.002*** (-2.912)	0.001 (1.405)	-0.001** (-2.055)	0.006** (2.245)	-0.001 (-0.631)	0.003 (0.528)	0.000 (-0.667)	0.002 (0.197)	-0.001*** (-3.056)	0.001 (1.562)	-0.001* (-1.739)	0.005** (2.487)	-0.001 (-0.601)	-0.001 (-0.266)	0.000 (-1.054)	0.001 (0.256)
CAP	0.007 (0.962)	0.001 (0.071)	0.074*** (8.752)	0.082** (2.357)	-0.127*** (-5.771)	-0.161* (-1.930)	0.013 (1.393)	0.081 (0.706)	0.011 (1.332)	0.004 (0.474)	0.082*** (9.482)	0.139*** (3.505)	-0.132*** (-5.996)	-0.222* (-1.959)	0.019* (1.954)	0.012 (0.102)
SEC	0.003 (0.415)	0.015** (2.139)	-0.023** (-2.444)	0.210*** (5.449)	0.034 (1.451)	0.166** (2.005)	0.012 (1.273)	-0.034 (-0.296)	0.001 (0.132)	0.016** (2.419)	-0.019** (-2.278)	0.206*** (5.521)	0.030 (1.576)	0.207** (2.204)	0.010 (1.268)	0.006 (0.057)
CRED	0.021*** (3.432)	-0.014** (-2.482)	0.003 (0.409)	-0.055* (-1.787)	0.015 (0.976)	-0.063 (-0.955)	-0.006 (-0.827)	0.280*** (3.099)	0.012** (2.318)	-0.013*** (-2.628)	0.001 (0.147)	-0.060** (-2.067)	0.005 (0.396)	-0.059 (-0.804)	-0.010 (-1.549)	0.258*** (3.337)
FIX	-0.024 (-1.366)	-0.016 (-0.938)	0.019 (0.853)	0.452*** (4.939)	0.464*** (9.813)	1.304*** (6.704)	-0.092*** (-4.319)	0.088 (0.331)	-0.023 (-1.425)	-0.002 (-0.136)	-0.001 (-0.068)	0.394*** (4.445)	0.350*** (8.508)	1.797*** (8.102)	-0.064*** (-3.427)	0.123 (0.522)
PROV	0.899*** (8.036)	0.162 (1.511)	0.162 (1.163)	2.046*** (3.538)	- (-)	3.732*** (3.034)	0.711*** (5.271)	-7.145*** (-4.234)	1.033*** (9.087)	0.192* (1.810)	0.271** (2.013)	2.117*** (3.441)	- (-)	4.844*** (3.128)	0.820*** (6.255)	-6.190*** (-3.772)
OPCOST	0.304*** (6.332)	0.417*** (9.059)	- (-)	- (-)	0.595*** (4.133)	-1.389*** (-2.629)	-0.520*** (-8.983)	-1.902*** (-2.624)	0.335*** (6.781)	0.445*** (9.649)	- (-)	- (-)	0.655*** (4.958)	-1.707** (-2.533)	-0.472*** (-8.279)	-1.650** (-2.311)
DEP	-0.015*** (-3.788)	-0.006 (-1.624)	0.000 (-0.083)	-0.074*** (-3.658)	-0.003 (-0.218)	-0.006 (-0.137)	-0.007 (-1.574)	-0.031 (-0.523)	-0.012*** (-3.604)	-0.007** (-2.060)	-0.001 (-0.137)	-0.071*** (-3.801)	0.001 (0.074)	0.049 (1.046)	-0.006 (-1.551)	-0.027 (-0.540)
LIQ	0.005 (0.404)	-0.016 (-1.375)	0.011 (0.727)	0.126** (2.043)	0.058 (1.573)	-0.162 (-1.238)	-0.034** (-2.346)	-0.364** (-2.024)	0.002 (0.195)	-0.013 (-1.142)	0.013 (0.949)	0.115* (1.774)	0.043 (1.307)	-0.197 (-1.212)	-0.032** (-2.312)	-0.348** (-2.025)
OVDCREC	-0.110*** (-4.448)	-0.034 (-1.427)	0.068** (2.204)	-0.341*** (-2.675)	- (-)	-1.272*** (-4.658)	-0.147*** (-4.900)	3.849*** (10.276)	-0.123*** (-4.781)	-0.045* (-1.899)	0.067** (2.215)	-0.305** (-2.198)	- (-)	-1.684*** (-4.811)	-0.173*** (-5.851)	3.378*** (9.108)
(Constant)	0.004 (0.996)	0.011** (2.586)	0.013** (2.356)	0.072*** (3.129)	-0.002 (-0.124)	0.293*** (5.942)	0.021*** (3.799)	-0.005 (-0.067)	0.005 (1.165)	0.009** (2.371)	0.010** (2.184)	0.068*** (3.238)	0.006 (0.587)	0.268*** (5.064)	0.018*** (3.912)	0.002 (0.035)
N. of Observations	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adjusted R Square	0.60	0.32	0.33	0.38	0.34	0.21	0.46	0.39	0.62	0.38	0.36	0.40	0.28	0.24	0.40	0.31
F-test	44.04***	14.77***	16.97***	20.22***	19.62***	8.83***	25.37***	19.51***	47.18***	18.43***	18.97***	22.63***	15.17***	10.18***	20.22***	14.07***

^a t-values are presented in parentheses.

^b * means statistically significant at 10% level; ** means statistically significant at 5% level; *** means statistically significant at 1% level.

Table 13

OLS and 2SLS regressions results for the impact of having a foreign president on the board ^{a b}

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREDED* is the ratio of overdue credit to total credit.

Dependent variab.	OLS								2SLS							
	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE
Independent variab.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DFPRS	-0.060*** (-3.115)	-0.020 (-1.055)	0.025 (1.043)	0.129 (1.282)	0.500*** (11.849)	0.047 (0.222)	-0.045* (-1.923)	-0.998*** (-3.484)	-0.059** (-2.548)	-0.015 (-0.671)	0.021 (0.759)	0.127 (0.993)	0.507*** (9.913)	0.060 (0.191)	-0.039 (-1.445)	-0.660** (-1.982)
CAP	0.006 (0.725)	-0.001 (-0.134)	0.077*** (9.090)	0.077** (2.206)	-0.070*** (-3.759)	-0.161* (-1.917)	0.011 (1.189)	0.031 (0.274)	0.010 (1.217)	0.002 (0.307)	0.085*** (9.759)	0.131*** (3.276)	-0.087*** (-4.417)	-0.218* (-1.914)	0.018* (1.851)	-0.016 (-0.129)
SEC	0.004 (0.552)	0.016** (2.187)	-0.023** (-2.511)	0.210*** (5.412)	0.014 (0.741)	0.165** (1.993)	0.012 (1.366)	-0.015 (-0.139)	0.001 (0.173)	0.016** (2.476)	-0.019** (-2.364)	0.208*** (5.526)	0.017 (1.013)	0.206** (2.187)	0.010 (1.309)	0.015 (0.152)
CRED	0.019*** (3.193)	-0.014** (-2.465)	0.003 (0.373)	-0.051 (-1.641)	0.011 (0.894)	-0.061 (-0.924)	-0.007 (-0.938)	0.268*** (3.030)	0.012** (2.145)	-0.013** (-2.527)	0.000 (0.039)	-0.056* (-1.912)	0.001 (0.128)	-0.060 (-0.823)	-0.010 (-1.608)	0.260*** (3.393)
FIX	-0.033* (-1.861)	-0.016 (-0.929)	0.018 (0.801)	0.476*** (5.163)	0.374*** (9.531)	1.316*** (6.749)	-0.097*** (-4.561)	0.009 (0.036)	-0.028* (-1.705)	-0.001 (-0.046)	-0.003 (-0.169)	0.413*** (4.618)	0.289*** (8.023)	1.794*** (8.105)	-0.066*** (-3.555)	0.114 (0.490)
PROV	0.912*** (8.165)	0.164 (1.528)	0.162 (1.153)	1.999*** (3.435)	- (-)	3.719*** (3.021)	0.719*** (5.363)	-6.976*** (-4.221)	1.032*** (9.037)	0.191* (1.799)	0.274** (2.027)	2.096*** (3.376)	- (-)	4.845*** (3.129)	0.819*** (6.261)	-6.204*** (-3.805)
OPCOST	0.331*** (6.934)	0.412*** (8.989)	- (-)	- (-)	0.334*** (2.822)	-1.430*** (-2.721)	-0.508*** (-8.884)	-1.766*** (-2.503)	0.356*** (7.202)	0.439*** (9.527)	- (-)	- (-)	0.463*** (4.023)	-1.695** (-2.525)	-0.462*** (-8.155)	-1.606** (-2.274)
DEP	-0.015*** (-3.921)	-0.007* (-1.759)	0.000 (0.083)	-0.074*** (-3.613)	0.005 (0.475)	-0.006 (-0.140)	-0.008* (-1.709)	-0.048 (-0.823)	-0.012*** (-3.618)	-0.007** (-2.190)	0.000 (0.021)	-0.072*** (-3.815)	0.006 (0.665)	0.050 (1.075)	-0.006 (-1.609)	-0.035 (-0.717)
LIQ	0.008 (0.669)	-0.015 (-1.318)	0.010 (0.689)	0.117* (1.884)	0.025 (0.828)	-0.166 (-1.259)	-0.032** (-2.208)	-0.322* (-1.821)	0.005 (0.392)	-0.012 (-1.101)	0.013 (0.911)	0.108* (1.650)	0.020 (0.688)	-0.198 (-1.221)	-0.030** (-2.202)	-0.325* (-1.899)
OVDCREDED	-0.076*** (-2.850)	-0.025 (-0.990)	0.058* (1.751)	-0.428*** (-3.085)	- (-)	-1.303*** (-4.430)	-0.123*** (-3.830)	4.359*** (11.041)	-0.096*** (-3.524)	-0.042* (-1.660)	0.063* (1.950)	-0.378** (-2.554)	- (-)	-1.701*** (-4.607)	-0.157*** (-5.032)	3.622*** (9.317)
(Constant)	0.002 (0.524)	0.012*** (2.785)	0.012** (2.116)	0.079*** (3.437)	0.004 (0.396)	0.296*** (6.078)	0.020*** (3.722)	-0.008 (-0.116)	0.003 (0.664)	0.009** (2.539)	0.009** (2.025)	0.075*** (3.548)	0.011 (1.189)	0.267*** (5.073)	0.017*** (3.742)	-0.002 (-0.030)
N. of Observations	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adjusted R Square	0.60	0.32	0.33	0.37	0.56	0.21	0.47	0.42	0.61	0.37	0.36	0.39	0.46	0.24	0.40	0.32
F-test	44.35***	14.64***	16.44***	19.61***	46.92***	8.80***	25.99***	21.57***	46.47***	18.12***	18.56***	21.69***	36.52***	10.17***	20.38***	14.63***

^a t-values are presented in parentheses.

^b * means statistically significant at 10% level; ** means statistically significant at 5% level; *** means statistically significant at 1% level.

Table 14

OLS and 2SLS regressions results for the impact of having foreign top directors on the board ^{a b}

INTMRG is the net interest margin; *NINTMRG* is the net non-interest margin; *OPCOST* is the ratio of operating expenses to total average assets; *TCOST* is the ratio of total costs to total average assets; *PCLTC* is the ratio of provisions for credit losses to total credit; *PEFF* is a measure of profit efficiency (X-Efficiency); *ROA* is the return on average assets; *ROE* is the return on average equity; *DFOS* is a dummy representing foreign ownership; *FOSP* is a continuous variable reporting foreign ownership; *DFBRD* is a dummy about foreign board membership; *FBRDP* reports the percentage of foreign directors on the board; *FBRDN* represents the number of foreign directors on the board; *DFPRS* is a dummy for the nationality of the president of the board; *DFTOPBRD* is a dummy for the nationality of president and vice-presidents of the board; *CAP* is the ratio of equity to total assets; *SEC* is the ratio of securities to total assets; *CRED* is the fraction of credit in the total assets; *FIX* is the ratio of fixed assets to total assets; *PROV* is the ratio of provisions to total assets; *DEP* is the ratio of deposits to total assets; *LIQ* is the ratio of cash and liquid assets to total assets; and *OVDCREC* is the ratio of overdue credit to total credit.

Dependent variab.	OLS								2SLS							
	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE	INTMRG	NINTMRG	OPCOST	TCOST	PCLTC	PEFF	ROA	ROE
Independent variab.	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]
DFTOPBRD	-0.005 (-1.469)	0.005 (1.507)	0.000 (-0.117)	0.053*** (3.233)	0.018* (1.820)	0.016 (0.447)	0.001 (0.291)	0.063 (1.317)	-0.004 (-1.411)	0.004 (1.499)	-0.001 (-0.234)	0.040*** (2.800)	0.007 (0.998)	0.020 (0.552)	0.000 (-0.000)	0.061 (1.611)
CAP	0.009 (1.130)	0.000 (-0.028)	0.076*** (9.013)	0.071** (2.064)	-0.128*** (-5.820)	-0.164* (-1.967)	0.013 (1.425)	0.077 (0.677)	0.013 (1.518)	0.003 (0.358)	0.084*** (9.725)	0.125*** (3.195)	-0.133*** (-6.015)	-0.222* (-1.957)	0.019** (2.014)	0.007 (0.060)
SEC	0.004 (0.479)	0.015** (2.062)	-0.023** (-2.459)	0.205*** (5.365)	0.031 (1.353)	0.164** (1.980)	0.011 (1.253)	-0.041 (-0.366)	0.001 (0.127)	0.015** (2.381)	-0.019** (-2.319)	0.204*** (5.485)	0.029 (1.518)	0.204** (2.170)	0.010 (1.239)	-0.002 (-0.015)
CRED	0.019*** (3.061)	-0.013** (-2.210)	0.002 (0.312)	-0.040 (-1.282)	0.017 (1.138)	-0.058 (-0.868)	-0.006 (-0.808)	0.296*** (3.265)	0.010* (1.918)	-0.012** (-2.329)	0.000 (0.014)	-0.046 (-1.559)	0.006 (0.461)	-0.055 (-0.746)	-0.010 (-1.599)	0.275*** (3.549)
FIX	-0.030* (-1.667)	-0.012 (-0.726)	0.016 (0.701)	0.488*** (5.373)	0.469*** (9.952)	1.318*** (6.774)	-0.093*** (-4.343)	0.118 (0.442)	-0.028* (-1.715)	0.001 (0.077)	-0.004 (-0.206)	0.427*** (4.828)	0.353*** (8.556)	1.801*** (8.125)	-0.066*** (-3.495)	0.153 (0.654)
PROV	0.915*** (8.059)	0.148 (1.378)	0.168 (1.193)	1.881*** (3.273)	-	3.684*** (2.986)	0.708*** (5.234)	-7.322*** (-4.338)	1.044*** (9.054)	0.180* (1.700)	0.276** (2.038)	1.980*** (3.220)	-	4.785*** (3.084)	0.820*** (6.230)	-6.372*** (-3.890)
OPCOST	0.321*** (6.653)	0.409*** (8.969)	-	-	0.605*** (4.275)	-1.421*** (-2.710)	-0.515*** (-8.961)	-1.913*** (-2.667)	0.350*** (7.021)	0.438*** (9.556)	-	-	0.667*** (5.097)	-1.684** (-2.513)	-0.466*** (-8.198)	-1.653** (-2.337)
DEP	-0.014*** (-3.428)	-0.007* (-1.853)	0.000 (0.013)	-0.084*** (-4.150)	-0.005 (-0.410)	-0.009 (-0.211)	-0.007 (-1.572)	-0.041 (-0.688)	-0.011*** (-3.252)	-0.007** (-2.278)	0.000 (-0.019)	-0.078*** (-4.196)	0.000 (0.014)	0.047 (1.008)	-0.006 (-1.486)	-0.035 (-0.703)
LIQ	0.007 (0.557)	-0.017 (-1.510)	0.012 (0.772)	0.108* (1.760)	0.053 (1.458)	-0.168 (-1.277)	-0.034** (-2.349)	-0.383** (-2.129)	0.004 (0.298)	-0.014 (-1.240)	0.014 (0.979)	0.102 (1.579)	0.042 (1.263)	-0.202 (-1.242)	-0.032** (-2.295)	-0.365** (-2.127)
OVDCREC	-0.108*** (-4.303)	-0.035 (-1.458)	0.072** (2.319)	-0.349*** (-2.768)	-	-1.275*** (-4.675)	-0.145*** (-4.862)	3.857*** (10.338)	-0.120*** (-4.630)	-0.046* (-1.904)	0.070** (2.313)	-0.307** (-2.221)	-	-1.668*** (-4.768)	-0.172*** (-5.781)	3.406*** (9.223)
(Constant)	0.003 (0.695)	0.011*** (2.690)	0.012** (2.101)	0.073*** (3.215)	-0.005 (-0.339)	0.295*** (6.024)	0.020*** (3.706)	-0.009 (-0.141)	0.004 (0.918)	0.009** (2.425)	0.009** (2.005)	0.068*** (3.262)	0.005 (0.423)	0.263*** (4.994)	0.017*** (3.786)	-0.005 (-0.090)
N. of Observations	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288	288
Adjusted R Square	0.59	0.33	0.32	0.39	0.35	0.21	0.46	0.40	0.61	0.38	0.35	0.41	0.28	0.24	0.40	0.32
F-test	42.45***	14.82***	16.26***	21.20***	20.18***	8.82***	25.30***	19.80***	45.33***	18.40***	18.47***	22.93***	15.28***	10.21***	20.03***	14.44***

^a t-values are presented in parentheses.

^b * means statistically significant at 10% level; ** means statistically significant at 5% level; *** means statistically significant at 1% level.