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Foreign Banks? A Note*

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Who Owns the Major US Subsidiaries of Foreign Banks? A Note

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Abstract

In 2000 ten foreign banks owned the 12 largest US subsidiaries of foreign banks, which account for over 92% of the assets of all subsidiaries. The parent banks were large and tended to be from English-speaking countries. The novel result is that the parent was often **the** largest bank in its home country, which suggests that domestic limits to growth are a factor in the foreign direct investment decision.

JEL Classification: G2, F2

Keywords: foreign banks, subsidiaries, FDI, resource-based view

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Who Owns the Major US Subsidiaries of Foreign Banks? A Note

1.0 Introduction

In 2000, ten banks owned the 12 largest US affiliates or subsidiaries of foreign banks. Each of the 12 had total assets of US\$5bn or more and in total accounted for almost 90% of the assets in all affiliates or subsidiaries. Together, the ten parents accounted for about 92% of the assets in all affiliates or subsidiaries and about 4% of assets in the US banking system, not including assets the parents' held in agencies and branches.¹ In a recent paper Tschoegl (2002) discussed the histories of the ten largest affiliates and subsidiaries and inferred from the cases that the parent banks were large—often the largest banks in their countries—and tended to be from English-speaking countries. However, the problem of the basis for selection limits the reliability of the inferences from cases; this paper tests whether these case-based inferences hold up to statistical testing.

The issue of the presence of foreign banks in retail banking in the US is important because such a presence is anomalous (Tschoegl 1987). In general, there is no reason to expect foreign banks to be better than local banks in well-developed competitive retail markets. The paper's contribution is that the finding that each parent bank tends to be the largest in its home market is novel to the literature on foreign direct investment (FDI) in banking and suggests explanatory factors not heretofore advanced.

¹ An affiliate is a locally-incorporated entity in which the foreign parent owns less than 50% of the equity. A subsidiary is a legally separate locally-incorporated entity in which the parent owns over 50% of the equity. This paper does not deal with representative offices, agencies or branches, all of which are integral parts of the foreign parent.

What the finding flags is not economies of scale but rather domestic limits to growth. It may also be possible to generalize this factor to other industries as well. The finding is more consistent with a resource-based view (e.g., Penrose 1959) of the growth of the firm than a positioning view (e.g., Porter 1980).

There are at least two reasons that the extant literature has not picked up the issue of the parent's size in its home market. First, much of the literature on FDI in banking has focused on the assets in agencies and branches of foreign banks, or simply subsumed the subsidiaries under total assets in foreign banks in the US. The neglect of the subsidiaries is understandable. Although the subsidiaries have grown in absolute size their share of the assets in the US banking system has been stable and small; the bulk of the assets that foreign banks own in the US are in agencies and branches. (The Federal Reserve reports that in Mar 2002 the US\$314bn in assets of affiliates and subsidiaries of foreign banks represented 23% of the total assets in foreign banks in the US.) Second, much of the literature on FDI in banking has taken an aggregate view with the country as the unit of analysis rather than the company (e.g. Grosse and Goldberg 1991, and Esperanca and Gulamhussen 2001). Although the neglect of subsidiaries is understandable, as Heinkel and Levi (1992) show, subsidiaries are a different phenomenon from agencies and branches. Banks seeking to follow their corporate customers, to finance trade, or to operate in wholesale markets from financial centers will, if not barred from the form by local law, prefer to use branches of the parent. Banks will use subsidiaries when engaging in activities such as general retail and commercial banking in a foreign market. Lastly, as Williams (2002) argues, some modeling of FDI in banking is best done using firm level data.

2.0 Regulatory background

Most of the growth of the assets in affiliates and subsidiaries of foreign banks in the US has occurred in the last quarter of the 20th Century. Since the early-1980s the foreign parents of the largest subsidiaries have participated in the consolidation of banking that has taken place in the US.² The large affiliates and subsidiaries that are the subject of this paper are all the product of mergers and acquisitions that in some cases have doubled and redoubled the size of the US operation. Even so, since the early 1980s, the amount of assets in foreign-owned banks has grown *pari passu* with the growth of the overall US banking sector, leaving the foreigners with a stable 4-5% share of assets, loans and deposits.

The key legislation has been the International Banking Act (IBA), the Foreign Bank Supervision and Enhancement Act (FBSEA), and Riegle-Neal Interstate Banking and Branching Efficiency Act. Prior to the passage of the IBA in 1978, foreign banks could operate in more than one US state but US banks generally could not. (A limited number of US banks had established multi-state operations before the passage of the 1956 Bank Holding Company Act and the Act grandfathered these operations.) What this meant was that when large California banks became available for purchase only foreign banks could bid for them. Out-of-state US banks could not, and large California banks would or could run into anti-trust objections. The IBA restricted foreign banks to a commercial banking subsidiary only in one state. Thus when Hongkong and Shanghai Bank (HSBC)

² In the 1970s the number of FDIC insured banks in the US averaged 14,100, and peaked in 1984 at 14,496. At the end of 2001 the number was 8,080. The number of branches per bank averaged 2.1 in the 1970s and is now 8.1. The number of branches per bank has risen monotonically since the 1930s, 1982 aside.

bought Marine Midland Bank in New York in 1979, as a condition of purchase the Federal Reserve required that HSBC sell Hongkong Bank of California.

In 1991 Congress passed FBSEA. This extended federal regulation over branches and agencies of foreign banks. Congress enacted FEBSEA as a direct reaction to the well-publicized improprieties of the Bank of Credit and Commerce International (BCCI), a Middle Eastern bank chartered in Luxembourg, and Banca Nazionale del Lavoro's agency in Atlanta. Then in 1994 Congress passed the Riegle-Neal Act, effective in 1997. This allowed US and foreign banks to branch interstate by consolidating out-of-state bank subsidiaries into a branch network or by acquiring banks or individual branches through acquisition or merger.

Lastly, in 1999 Congress passed the Financial Services Modernization Act (also known as the Gramm-Leach-Bliley Act-GLBA), which authorized the full affiliation of commercial banking with other financial services, in effect repealing the Glass-Steagall Act of 1933. That is, it authorized banks to register with the Federal Reserve as financial holding companies (FHC), which could serve for linking commercial banks with securities firms, insurance firms, and merchant banking. A foreign banking organization with only branches or agencies in the US can become a FHC if the Federal Reserve certifies it to be well capitalized and well managed.

3.0 Explaining the subsidiaries

The starting point for understanding FDI in general, or in banking in particular, is the internalization approach, which has its genesis in the work of Hymer (1976/1960) and Kindleberger (1969). This approach views FDI as being the result of firms finding it more profitable to exploit opportunities or firm-specific assets via FDI than via licensing

or exporting. In his review of the literature on FDI in banking, Williams (1997) argues that internalization of the market for intangible assets, especially relationships with clients (the defensive expansion argument—Williams 2002), provides an adequate general explanation. However, the defensive expansion explanation is most applicable to FDI in the wholesale and corporate markets (Grubel 1977). When engaging in retail banking foreign banks generally are not following their customers. (The exception is ethnic banking—the provision of banking services to co-ethnics.)

The parent banks of the subsidiaries are large. This is not surprising and is a common result in studies of FDI in corporate and wholesale banking. There the operative factor is relationships with corporate clients. The situation in retail banking is different. Nor are conventional economies of scale an operative factor. Retail banking is a multi-domestic industry; size in one country does not affect one's operating costs or revenues in another country, at least not with respect to operations in the US that already qualify for deposit insurance. Rather, the importance of the parent's size probably reflects managerial factors. What may be most important is the size of the foreign operation relative to the size of the parent. Rosenzweig (1994) has an insightful article on the difficulties that arise when the foreign operation is large relative to the parent. The implication is that generally only large parents can comfortably deal with a large subsidiary, which yields the following hypothesis:

H1: The parent of a large US banking subsidiary will itself be large.

Around the world, mergers between banks in the same country have accelerated. As a result, in many countries banking has become quite concentrated. In response, policymakers have started to bar the banks from further domestic mergers and acquisitions. By buying banks in the US, where many were on sale, the foreign parents

entered a market where they might continue to grow because their acquisitions would be *de minimis* from a regulatory standpoint. Focarelli and Pozzolo (2001) have found that foreign banks prefer to enter markets that are less concentrated and where regulatory restrictions are less stringent.

For an informative analysis of the Canadian case and the role of barriers to domestic mergers as a factor in outward FDI see Bessler and Murtagh (2002). For the case of Australia's largest banks see Merrett (2002) and Fung *et al.*, (2002). To operationalize the idea of domestic limits to growth we focus simply on the largest bank in each country and generate the following hypothesis:

H2: The parent of a large US banking subsidiary will be the largest bank in its home country.

Since the pioneering work of Hymer (1976/60) and Kindleberger (1969), the literature on FDI has noted the impeding effect of managing at a distance and in an unfamiliar environment. More recent research has used the rubric of "the liability of foreignness" (Zaheer 1995). Luo and Mezias (2002) have edited a special issue of the *Journal of International Management* on the topic. In this context, English-language origin reflects not just the managerial convenience of a common language (Guillén and Tschoegl 2000) but also other factors such as familiarity with a Common Law legal system. This yields the last hypothesis:

H3: The parent of a large US banking subsidiary will come from an English-speaking country.

4.0 Data and model

To assess the relative importance of these factors the paper uses both an OLS linear probability model (AKA Discriminant Analysis) and a logit model. Both models use the

same variables and the point of using two different statistical approaches is to control for the robustness of the results to statistical assumptions. Each approach has its strengths and weaknesses; if both give the same (qualitative) results one can be more confident in those results (Ball and Tschoegl 1982).

The population is the 125 largest non-US banks, drawn from *The Banker's* (Jul 2001) list of the 1000 largest banks in the world in 2000. The reason for the cut-off at 125 is that cut-off permits banks well below the size of the smallest bank that has a large US subsidiary (Allied Irish; see Table 1) to enter the population. Given the definition of a large US subsidiary that the paper uses (see next paragraph), for foreign banks ranked below 125th the subsidiary would represent more than 40% of the parent's assets, an improbably large commitment to one foreign market.

The dependent variable is a dummy variable with 1 representing the ownership of at least one affiliate or subsidiary with assets in 2000 of US\$5bn or more and 0 otherwise. Table 1 provides data on the size of the subsidiaries in US\$ terms and relative to the size of the parents. In four cases the subsidiary represents more than 10% of the total assets of the parent bank. It is also worth noting that several of the parents own other, smaller albeit still sizeable, US subsidiaries.

The reason for the US\$5bn cut-off is that below this level the subsidiaries are nascent or are the result of more idiosyncratic factors. For instance, the next four largest subsidiaries are a second subsidiary of Bank of Tokyo-Mitsubishi and subsidiaries of Israel Discount Bank, Bank Leumi Le-Israel and National Bank of Greece. For the last three cases ethnic banking looms large as a motive. In the case of the 10 parent banks of

this paper ethnic banking either was never a factor in their size and growth or the subsidiaries are of a size that it is no longer material (Tschoegl 2002).

The three independent variables are the natural log of the size of the parent –Size– (in US\$ billions in assets), and two (1,0) dummy variables. The logarithmic transform reflects a decreasing marginal influence of size. To facilitate cross-variable comparison, all independent variables entered into the equation in standardized form.

The first dummy –Largest– takes on the value of 1 if the parent bank is the largest bank in its home country and 0 otherwise. Being the largest bank in one’s home country addresses the issue of limits to growth in the home country. Being the largest bank at home does not necessarily put a bank in the upper reaches of the population. Allied Irish, one of the parents of a large US subsidiary, is the largest bank in the Republic of Ireland but ranks 90th among the banks in the population. Twenty-nine banks in the population are the largest bank in their home country.

The second dummy variable –English– takes on a value of 1 if the parent bank is from an English-speaking country and 0 otherwise. The variable represents the role of cultural distance. Twenty-seven banks are from English-speaking countries. Six of these are the largest in their countries and only three of these are parents of one of the largest subsidiaries.

An alternative formulation included four other variables whose coefficients proved to be small, even negligible, and also not statistically significant. The first of the three was the log of per capita GDP (in US\$ adjusted for PPP) in the parent banks’ home countries. This was a proxy for experience in banking in a developed country. The second was the log of the number of countries (including the home country) in which the

bank had a representative office, branch or subsidiary. This was a proxy for experience in operating across borders. The third was a dummy for savings banks and similar mutual institutions. This reflected the observation that mutual and savings banks tend not to own retail banks abroad. In the data there was a weak perfect association between the dummy variable and the absence of a subsidiary and so the variable could not enter into the logit model. The fourth was a dummy variable that took on the value of 1 if the parent bank had a branch or agency in the US in 1975 or earlier and 0 otherwise. The variable was a proxy for experience in the US (Tschoegl 1982) that pre-dated the growth of the US subsidiaries and affiliates.

Table 2 below has the OLS and logit results for both the three-variable and the seven/six variable models. The discussion below focuses on the model with the three variables: Ln(Size), Largest and English.

5.0 Results

Clearly, all three factors matter. In the OLS model being the largest bank in one's home country is more important than the parent's size, though the difference is slight, and the effects are additive. Being from an English-speaking country is a positive factor, though third in importance. In the logit model the parent's size is the most important variable and the coefficients of the two dummy variables tie at second place. A regression of the dependent variable on the fitted values from the OLS and logit regressions below (t-statistics in parentheses) suggests that the OLS regression adds no information to that contained in the logit regression.

$$Y = -0.01 + 0.99 \hat{Y}_{\text{logit}} + 0.04 \hat{Y}_{\text{OLS}} \quad (R^2 = 0.39)$$

(-0.12) (5.4) (0.18)

In the OLS regression, *ceteris paribus*, the probability that the largest bank, Deutsche Bank (DB), which has a subsidiary, would own one of the 10 largest subsidiaries or affiliates was 0.16 larger than the probability that the average bank would own one. The probability that the smallest bank in the group, Türkiye İş Bankası (TIB), which does not have a US subsidiary, would own one was 0.19 less than that for the average bank. A bank that was the largest in its home country would have a probability of ownership 0.20 above that of a bank that wasn't. Lastly, a bank from an English-speaking country would have a probability of ownership of 0.12 higher than one from a non-English speaking country.

In the logit regression, the probability for DB was 0.71, that for TIB was 0.00 and that for a bank of average size, the largest in its country but not from an English-speaking country, was 0.05. Both National Australia Bank (NAB) and Bank of Montreal (BoM) had large subsidiaries and as parents BoM had total assets of US\$152bn and NAB had total assets of US\$151bn. The fitted probability for BoM was 0.08 and for NAB it was 0.58. The difference between the two banks is that NAB was the largest bank in Australia and BoM is the 3rd largest in Canada. As far as the role of English-speaking origin is concerned, the fitted probability for Union Bank of Switzerland (UBS), which is the largest bank in Switzerland, had total assets of US\$614bn and did not have one of the largest commercial banking subsidiaries, was 0.56. The fitted probability for HSBC, which is the largest bank in England and which had total assets of US\$569bn and a large subsidiary, was 0.95.

In terms of classification accuracy, both OLS and logit classify 94% of the observations correctly. However, simply classifying all banks as not having a large US

commercial banking subsidiary would yield a 92% accuracy rate. The OLS model makes three Type I (false positive) and four Type II (false negative) errors. The logit makes five Type I and two Type II errors. Both models agree that Royal Bank of Canada (RBC) and UBS (both the largest banks in their home countries) should have a large US subsidiary, though they do not. Both models agree that Sanwa Bank, BoM, Toronto Dominion Bank (TDB) and Allied Irish should not, though they do.

Being from an English-speaking country is important, but neither necessary nor sufficient. Until the mid to late 1980s several British banks—Barclays, Lloyds, National Westminster and Standard Chartered—owned US subsidiaries but no longer do so. They withdrew after experiencing performance that ranged from mediocre at best to disastrous at worst (Jones 1993; Rodgers 1999). Currently Bank of Scotland is building up a US presence. Other than BoM and TDB, the large Canadian banks either do not have banking subsidiaries in the US or only small ones. Canadian Imperial Bank of Commerce had a small subsidiary in California that it sold and it is currently selling a small Internet bank. TDB also had a California subsidiary that it sold. Since the Canadian government blocked RBC's attempt to merge with BoM, in which Harris Bank, BoM's US subsidiary, was a major attraction, RBC has acquired a small subsidiary in North Carolina.

With the exception of DB, the major Swiss and German banks have eschewed any forays into retail or general commercial banking. All are universal banks and several had securities affiliates in New York. The banks feared that acquiring retail banks would push the Federal Reserve's tolerance to the limit, given the past separation between securities activities and commercial banking mandated of US banks by the Glass-Steagall Act. An additional factor for the Swiss banks may have been that they were net suppliers of US

dollars to the offshore interbank markets and so had no need to own a source of US dollar deposits to support their lending in US dollars (Berlin and Mester 1999).

6.0 Conclusion

The novel finding in this paper is the role in FDI in banking of being the largest bank at home. This finding is consistent with cross-border acquisition of commercial banks becoming important when the parent bank possesses what Kindleberger (1969) has called “surplus managerial resources” because it can no longer grow at home. As banking in many countries has become quite concentrated, policymakers there have started to oppose further domestic mergers among and acquisitions by the largest banks. Then the only remaining possibility for large banks wishing to grow within the same sector is to move across borders. Further research is necessary to refine the concept and measurement of “domestic limits to growth” beyond the simple dummy variable this paper has used.

Furthermore, wanting to grow is one thing; being able to compete with the locals is quite another. In general the US subsidiaries of foreign banks have not done well but Peek *et al.* (1999) found that the poor performance of foreign bank subsidiaries was a result of the foreign banks acquiring poorly performing US banks whose performance they were unable to improve sufficiently within the period examined. However, the current operations of HSBC, BoM, TDB, BoTM and Sanwa are survivors of a winnowing process that saw other banks from the UK, Canada and Japan sell their US subsidiaries, in some cases to the survivors. Berger *et al.* (2000) have proposed one mechanism for the success of foreign banks—the global advantage hypothesis—where they argue that some banks may just generally be better managed. However, they identify the global advantage with US banks. The present paper, focusing as it does on banks from eight

countries investing in the US, suggests that global advantage may inhere to particular banks. Still, it is unfortunately extremely difficult to measure an intangible asset as subtle and hard to define as better management (Denrell 2002). This too is a subject for further research.

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Table 1: The largest subsidiaries and affiliates are not only large in absolute size (>US\$5bn in assets) but in four cases represent more than 10% of the total assets of their parent banks.

Parent bank		US Subsidiary		
<u>Name</u>	<u>Rank</u> ¹	<u>Name</u>	<u>Assets (US\$Bn)</u>	<u>As % of parent</u>
HSBC	6	HSBC Bank USA	73.3	12.9
ABN AMRO	12	LaSalle	48.9	10.6
		European American	15.4	3.3
Bank of Tokyo	3	Union Bank of California	34.0	5.0
Mitsubishi				
Deutsche Bank	1	Bankers Trust	28.5	3.4
Bank of Montreal	54	Harris Trust	20.7	13.6
Allied Irish	89	AllFirst	16.9	25.1
National Australia	55	Michigan National	11.9	7.9
BNP Paribas	2	Bank of the West	11.2	1.6
		First Hawaiian	7.2	1.0
Sanwa Bank	16	Sanwa Bank California	9.3	2.2
Toronto	62	TD Waterhouse Bank	5.5	3.9
Dominion				

Note: 1) Rank in the population.

Source: Federal Reserve, Dec 2000.

Table 2: In the regression of ownership of one of the largest subsidiaries on three characteristics of the parent bank, OLS and Logit produce the parallel result that the probability of ownership is positively related to the size of the parent, whether it is the largest bank in its home country, and whether the national language of the home country is English.

	<u>OLS</u>	<u>Logit</u>	<u>OLS</u>	<u>Logit</u>
Constant	0.080 (3.74)	-4.39 (-4.70)	0.080 (3.71)	-4.70 (-4.41)
Ln(Size)	0.085 (3.95)	1.89 (2.87)	0.070 (2.89)	1.66 (2.26)
Largest	0.092 (4.26)	1.18 (3.01)	0.089 (3.93)	1.19 (2.88)
English	0.066 (3.04)	1.18 (2.78)	0.059 (2.59)	1.29 (2.49)
Ln (Per Capita GDP)			0.016 (0.69)	0.65 (0.51)
Ln (Countries)			0.004 (0.17)	-0.13 (-0.34)
Mutual or savings bank			-0.002 (-0.08)	
US Experience			0.031 (1.28)	0.59 (1.22)
R ² or Pseudo R ²	0.25	0.45	0.26	0.49
F (3,124)	13.2		5.93	
Chi Square		31.4		34.2

Note: t-statistics in parentheses; all coefficients in bold and the F and Chi Square statistics are statistically significant at the 1% level or better.