Foreign Bank Presence and The Stability of Retail Banking in Emerging Markets

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—Foreign Bank Presence and The Stability of Retail Banking in Emerging Markets—

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Abstract: Foreign bank participation in some emerging market economies has risen dramatically over the last two decades. Retail banking has also risen to become an immensely important banking segment in a number of those same countries. Previous literature has asserted that financial instability is not necessarily intrinsic to foreign bank entry. However, a discussion which combines foreign bank entry and the rise of retail banking with financial stability has yet to emerge. This paper contributes to the literature by analyzing the impact of retail banking developments on financial stability, specifically in emerging markets with high foreign bank participation. Here, we statistically demonstrate retail is indeed a crucial banking segment in those countries. Though, we find evidence suggesting a correlation between foreign banks, retail banking and instability in only a few cases. To the contrary, retail bank lending has remained relatively stable in a number of countries despite the unfavorable global economic environment that developed in the wake of the 2008 financial crisis.

Keywords: Retail Banking, Foreign Bank Participation, Financial Globalization
JEL Classifications: G21, G34, F21, F23

1. Introduction

Foreign bank participation levels rose considerably during the 2000s in a number of emerging market banking sectors. Alongside achieving impressive economic growth, many of their banking sectors have transformed drastically as a result of foreign entry. No shortage of academic research has analyzed foreign bank impact, a fair portion of which is persuasive in demonstrating foreign banks have actually contributed to improving banking sector stability. At the same time, the provision of financial services to individuals, or retail banking, is becoming an important segment of commercial banking, in a number of regions (Guillén & Tschoegl, 1999; Obermann, 2006; Clark, Dick, Hirtle, Stiroh, & Williams, 2007)1. As emerging economies grow, so will per capita incomes, which in turn will produce strong demand from individuals for access

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to financial services. Therefore, foreign banks operating in emerging economies will be eager to achieve strong positions in local retail banking markets. Indeed, already in a few cases, foreign banks depend on earnings from retail activities in emerging markets as much as, or more than, home markets (Capgemini, EFMA, & ING, 2008).

Academic literature conjoining these two concepts is still at an early stage. The literature is yet to address the relationship between foreign bank presence, retail banking, and financial stability. This paper’s main contribution is to combine those three aspects of international finance to arrive at a deeper understanding of the impact foreign bank entry has on host markets. Going beyond the question of whether foreign banks have influenced financial stability, we ask whether, in countries with high foreign bank presence, retail banking developments have affected financial stability.

At the moment, this topic is particularly important because of the known relationship between subprime lending and the 2008 financial crisis. Large financial institutions extended vast numbers of risky loans to uncreditworthy individuals, eventually leading to a crisis that is still plaguing the world economy today. Understanding whether risky retail lending occurred in emerging markets with significant foreign bank presence — conceivably festering similar credit bubbles — not only carries important implications for host nations, but also for international financial stability. Therefore, we conduct the below analysis to formulate conclusions about the stability of retail banking in countries with high foreign bank presence.

The paper is organized as follows. In the next section we outline the process for selecting subject countries. The third section reviews the literature, and defines the problem and methodology. We describe the subject countries’ macroeconomic conditions in the fourth section. Then, in the fifth section, we discuss how the subject countries’ banking sectors transformed during the 2000s. The sixth section explains the impact banking sector developments have had on financial stability. The final section concludes.

II. Defining Subject Countries

This section outlines methods for defining the emerging subject countries for analysis. We draw on statistics from The Banker’s Top 1,000 World Banks annual publication for the following two reasons. First, The Banker’s statistics allow for a smooth comparison across a number of countries. Second, they also narrow down banking institutions to the largest, most important entities, which enhances our understanding of financial stability.

1) This paper defines retail banking as the provision of financial services to individuals and households. However, the author acknowledges that some of the discussion may involve financial services provided to small and medium enterprises (SMEs). Where possible this paper limits the discussion to individuals and households.
We identify countries for analysis by applying the following four criteria to *The Banker*’s statistics. First, countries will have a minimum of five total banks, and three foreign owned subsidiary banks in the 2011 publication. Second, countries will have a minimum of 50 billion U.S. dollars in total foreign owned subsidiary assets according to the same year’s publication. The first and second criteria ensure our analysis covers relatively important countries by global comparison, and those where a number of foreign banks operate. Assets are also important to our analysis because below we examine assets in the form retail, and nonperforming, loan percentages within each market. Third, we establish a time duration criterion by eliminating any country with no foreign owned subsidiary bank in *The Banker*’s 2007 or 2005 publications. This ensures the duration of foreign bank presence is long enough to impact the host nation’s banking sector both before and after the 2008 global financial crisis. Lastly, countries will have more than 15 percent of banking assets (of banks in the 2011 publication) controlled by foreign owned subsidiaries. This criterion assures we observe countries where banks have meaningful influence within the host nation’s banking sector.

Applying those criteria we lay out statistics on foreign bank presence in various countries in table one below. Initially applying the first criteria creates a rather sizeable list of 23 countries. However, after applying the second criteria of total asset size, ten countries are eliminated; Argentina, Bulgaria, Egypt, India, Indonesia, Morocco, Serbia, Thailand, Ukraine and Venezuela each had less than 50 billion U.S. dollars in total foreign subsidiary assets. Next, we apply the time duration criteria by eliminating any country without a foreign bank in the 2005 or 2007 publications. This turns out to eliminate only China. In applying the last criteria, a minimum of 15 percent of bank assets controlled by foreign subsidiaries, we can eliminate two more countries: Malaysia and Russia. This leaves us with a group of ten countries to observe: Brazil, Chile, Croatia, Czech Republic, Hong Kong, Hungary, Mexico, Poland, Romania, and Turkey.

Immediately decipherable from this list is that almost all of the remaining countries are from either Latin America or Emerging Europe, with Hong Kong and perhaps (depending on definitions of Emerging Europe) Turkey being exceptions. This geographic concentration is at the very least partially explained by the fact that authorities in Latin America and Emerging Europe opened up their banking systems to foreign acquisition of domestic banks, by comparison, earlier than authorities in other regions. After crises left their banking systems undercapitalized, authorities looked to foreign entry as a means of recapitalization (Crystal, Dages, & Goldberg, 2002; Hernando, Nieto, & Wall, 2009). As Tschoegl (2005) elaborates:

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2) 50 billion U.S. dollars in assets was chosen mainly as a matter of practicality to prevent huge gaps, and thus incomparability, between countries.

3) Please note the percent of foreign bank presence is not the overall presence of foreign owned banks in the entire banking system, it is the foreign bank presence within that country’s largest institutions, i.e. those represented in *The Banker*’s Top 1,000 World Banks in 2011.
[F]requently governments that have permitted some entry have still blocked foreign banks from acquiring control of domestic banks. It is not unusual for the governments to remove this restriction in crises. Foreigners frequently are the only parties able to recapitalize troubled banks as the domestic banks are themselves not strong and the government wishes to limit its expenditures where it can. (p. 23)

Regulations in other emerging markets explicitly prohibit the acquisition, and majority control of, domestic banks. Authorities in those countries have “viewed entry by foreign banks as a threat to domestic banks and as involving a loss of national financial independence” (Petrou, 2009, p. 620). Since foreign banks are only able to grow organically in those countries, gaining a larger presence proves immensely difficult. Grant and Venzin (2009) explain how overcoming this hurdle is especially arduous in retail banking:

In retail financial services, the attractiveness of acquisition-based growth is further enhanced by the need for extensive distribution networks, which makes organic growth difficult. Thus retail banking internationalization has proceeded almost entirely through mergers and acquisitions. (Grant & Venzin, 2009, p. 573)

On top of that, “[s]ome nations also have explicit rules that limit the behavior and expansion of foreign banks after entry” (Berger, 2007, p. 1964). Thus, even if foreign banks were willing to compete organically, it may be next to impossible in some emerging markets due those rules and impediments. As a result, it is perhaps better said that it is still early to expect foreign banks to have attained notable market share in many emerging markets outside of Latin America and Emerging Europe.

The three Latin American and five Emerging European countries, along with Turkey and Hong Kong offer valuable examples for research. Not only because the quantity of countries permits important comparisons, but also because the two outlying countries serve to control for any geographic biases that may appear. By analyzing this group of countries, below we demonstrate how important retail banking has become for the subject countries, and make implications about financial stability.

### III. Literature Review, Problem Definition, & Methodology

(a) Literature Review

Various research has sought to describe the impact foreign bank entry has on host countries. Perhaps one of the most famous articles on this topic was Claessens, Demirguc-Kunt, and Huizinga (2001), which provided empirical evidence for declining domestic bank profitability after

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4) Emphasis added by author.
foreign bank entry. They implied that foreign bank entry has a positive effect on the local banking market, stating, “in the long run, foreign bank entry may improve the functioning of national banking markets, with positive welfare implications for banking customers” (Claessens, Demirguc-Kunt, & Huizinga, 2001, p. 908). However, they heeded an important warning, asserting that foreign banks may have a destabilizing effect on banking systems “if the domestic prudential regulations and supervision are not strong” (Claessens, Demirguc-Kunt, & Huizinga, 2001, p. 909). Thus, while foreign entry may have a positive impact, without the necessary framework, undesired outcomes may emerge.

In another earlier work, Goldberg, Dages, and Kinney (2000) assessed the impact of foreign banks on Mexico and Argentina. They suggested foreign bank participation brought more stability to the banking systems of those two countries. They concluded, “in both Mexico and Argentina, foreign banks exhibited stronger loan growth compared to all domestic-owned banks, with lower associated volatility, contributing to greater stability in overall financial system credit” (Goldberg, Dages, & Kinney, 2000, p. 23). Furthermore, they insisted that rather than focusing on bank ownership, bank health should be the main focus for promoting stability.

Other articles have echoed similar notions about foreign bank involvement. Crystal, Dages, and Goldberg (2002) found that foreign ownership contributes “to sounder and more stable banking systems in emerging markets” (Crystal, Dages, & Goldberg, 2002, p. 5). Tschoegl (2005) extended the idea to the whole economy. “Foreign banks tend to have a stabilizing effect on the economy to the degree that they are present” (Tschoegl, 2005, p. 20). Cull and Pería (2010) examined the consequences of foreign bank participation on financing conditions. “Overall,” they state, “foreign bank entry has enhanced competition and stability in developing countries” (Cull & Pería, 2010, p. 19). Galindo, Micco, and Powell (2004) stated a “combination of domestic and foreign banks may be an optimum for host countries” (Galindo, Micco, & Powell, 2004, p. 27). Thus, on balance, a fair amount of research agrees foreign banks can have a positive impact on host countries, and on banking sector stability.

Literature devoted to retail banking has experienced increasing attention in recent years, albeit somewhat concentrated on developed countries. An early work using the term retail banking was Morison and Frazer (1982). They asserted, as economies grow, so too do individual and household incomes, and consequently, their demand for retail financial services. A determining factor in whether financial institutions are able to meet the demands they face rests with strategies they employ in approaching retail activities, which may lead to the copying of strategies. This makes it “difficult for any one institution to monopolize a successful idea for very long” (Morison & Frazer, 1982, p. 114). So even if banking institutions implement profitable strategies, successful approaches soon become industry-wide staples.

Clark et al. (2007) drew attention to the “return to retail” banking that took place in the United
States banking industry during the 2000s. They indicate retail banking “does cycle in relatively predictable ways with the performance of nonretail banking and financial market activities” (Clark et al., 2007, p. 14). Since, retail may be vulnerable to the same shocks as other banking segments, in conclusion, they make clear that grasping retail banking’s impact on the banking system is imperative.

Obermann (2006) discusses retail banking in developing nations, labeling developments in Latin America a ‘revolution’ in consumer finance. While Obermann’s analysis is certainly attention-worthy, it stops short of making assertions directly related to stability. Although, Obermann concludes by emphasizing the importance of establishing regulatory institutions, or a ‘safety net’, to protect the future of retail banking in the region (Obermann, 2006, p. 13).

(b) Problem Definition

Foreign bank presence may indeed improve banking sector stability. Additionally, demand for retail banking services rises as economies, and per capita incomes in particular, grow. As we will see below, most of the countries we observe have exhibited strong economic growth, and therefore we might expect retail banking is also growing. If retail banking strategies quickly become industry-wide staples though, the possibility exists for retail to expand excessively fast, possibly having a destabilizing effect. Since we already know a major crisis occurred in the United States, with origins in the allocation of loans to individuals; determining whether a similar outcome is likely in the ten subject countries is essential, especially because of the role foreign banks play in their banking sectors.

Therefore, the main focus of this paper centers upon grasping how retail expansion in banking sectors with high foreign bank presence has affected financial stability. We seek to do this in the following four ways. First, we demonstrate the subject countries’ macroeconomic conditions were favorable; establishing the environment upon which retail could expand existed. Second, the paper analyzes financial developments, showing clearly that retail banking is a prominent banking segment in each country. Third, we take the financial analysis one step deeper explaining other important banking sector changes that have occurred. Lastly, we analyze financial stability as it relates to retail banking in the subject countries.

(c) Methodology

This paper takes a country-by-country approach to analyzing economic and financial developments in the subject countries. We begin with economic developments by comparing gross domestic product (GDP) growth rates, GDP per capita rates of growth, in addition to GDP per capita and household consumption levels per capita in constant 2000 U.S. dollars. Then, we examine more specific financial developments by comparing the share of retail loans in total
loans, bank credit as a percent of GDP, loan interest rates, and interest rate spreads. In order to analyze stability we consider both total nonperforming loans (NPLs) and nonperforming loans granted to individuals. We draw on data from the World Bank and respective national banking authorities, in addition to statistics from *The Banker* above.

This approach is not without caveats. Statistics from *The Banker* may have eliminated smaller banking institutions during the country selection process, altering the countries presented. Nonetheless, we feel that since the discussion is focused on retail banking, banks with relative size should be the focus. Clark et al. (2007) explained some of the most important retail banking changes have occurred in the largest commercial banks. “Although there have been other periods in the past few decades when retail banking has been an important area of strategic focus, the recent cycle is particularly significant because of the role of the very largest banks” (Clark et al., 2007, p. 16). Also, there may be slight discrepancies between various authorities’ definitions of borrower type. The author has made every attempt to ensure that borrowers indicated below are individuals, or households. In some cases loans to micro, small, or medium-sized corporations may also be included.

**IV. Macroeconomic Developments**

Strong macroeconomic conditions are essential to the expansion of retail banking. This section shows each subject country experienced robust economic growth during most of the 2000s. Starting with GDP growth rates, table two lays out statistics for each country and averages for the first and second halves of the period. Growth in the first half of the decade averaged over three percent for all countries but Mexico, which was close behind at 2.65 percent. The second half of the decade saw some countries improve over the first half, such as Brazil, Chile and Poland. Others countries slipped in the second half when taken on an average basis, suggesting a deep impact from the crisis. Indeed, with the exception of Poland, all countries experienced negative growth in 2009. Nonetheless, a majority of countries improved in 2010 and 2011, implying most have rebounded from the crisis.

Next, we draw on two statistics to comprehend how economic growth translated into individual income growth over the same period. Table three below displays data on GDP per capita rates of growth and GDP in constant 2000 U.S. dollars. First, in terms of GDP per capita growth rates, a clear difference emerges between the Latin American countries and all other subject countries when comparing averages over the two halves of the decade. Over the first half, Brazil, Chile and Mexico achieved less than three percent average growth, while the other countries’ averaged a minimum of 3.5 percent. In fact, four Emerging European countries (Croatia, Czech Republic, Hungary, and Romania) each achieved four percent growth or higher in the first half of the
decade. The second half of the decade was slightly different, however, as Brazil and Chile improved between 2006 and 2011, to over three percent. During the same time, most of the Emerging European countries (Poland being an exception) saw growth slow considerably. Hong Kong and Turkey saw large growth swings when compared year-by-year. But, when taken as an average, both exhibited significant growth during the period as a whole. Essentially, GDP per capita growth rates signal individual income expanded, albeit in somewhat different years for each country.

GDP per capita in constant 2000 U.S. dollars shows individual income growth, in real terms, was exceptional in most cases. While levels varied by country in 2000, by 2011 almost all countries had achieved more than a twenty-five percent increase, with Mexico the only country unable to achieve that mark. Particularly impressive were eight countries with more than thirty percent increases: Brazil, Chile, Croatia, Czech Republic, Poland, Romania, Hong Kong, and Turkey. When comparing the same change in GDP per capita over the previous decade, 1990 to 1999, we can see that for many countries there is a gaping difference. Some countries did see higher growth in the 1990s though, such as Chile and Mexico, while still others achieved significant growth in both decades, such as Poland, Hong Kong, and Turkey. For Croatia, Czech Republic, Hungary, and Romania GDP per capita barely crawled forward, and even declined in the 1990s; so for them, the 2000s brought renewed growth. Increased GDP per capita, in real terms, set the stage for a transformation in household consumption.

Per capita household consumption expanded considerably over the 2000s. Table four below displays statistics on final household consumption per capita in constant 2000 U.S. dollars. Again, Mexico lagged behind some of the other countries, but it still saw more than twelve percent growth from 2000 through 2010. All other subject countries experienced more than twenty percent overall growth. Six of which, experienced more than a thirty percent rise in a decade: Brazil, Chile, Czech Republic, Poland, Romania, and Hong Kong. Croatia and Turkey too were not far behind at twenty-eight, and twenty-nine percent respectively. Interestingly, the half of the decade in which the majority of growth took place varies by country, and correlates somewhat with the above GDP statistics. Brazil, Chile, Poland, and Hong Kong all experienced faster growth in the second half of the decade. On the other hand, Mexico, Croatia, Czech Republic, Hungary, Romania, and Turkey had faster growth in the first half of the decade. As a comparison, we also include household consumption growth in the United States in table four. Each of the subject countries experienced faster per capita household consumption growth than the United States over the 2000s. At just over ten percent, the majority occurring in the first half of the decade, the United States did not experience growth anywhere near that of the faster subject countries.

In addition, when comparing the decade-long percent change in per capita household consump-
tion with GDP per capita (from constant 2000 U.S. dollars in table three) we can see that household consumption outpaced GDP in four countries: Brazil, Chile, Mexico and Romania. Other countries’ figures were not far behind. In other words, household consumption accelerated as fast as per capita incomes, and in some cases household appetites for consumption may have grown faster than their incomes.

In sum, economic developments indicate the ten subject countries experienced sound growth during the 2000s. Without question, the global financial crisis impacted all countries negatively. Nevertheless, economic growth was fairly high prior to 2009, and recovered thereafter in most cases. Furthermore, for most countries GDP per capita growth was significant over the entire 2000s, especially in comparison to the 1990s, demonstrating individuals attained higher levels of income. Crucially, all countries saw wider household consumption growth, actually outpacing the United States at a time when uncreditworthy individuals are widely known to have borrowed heavily to finance consumption in that country. Moreover, in some subject countries, household consumption growth outpaced GDP per capita growth, indicating many households had to finance consumption via means other than income, such as debt. Thus, conditions were optimal for retail bank lending to individuals and households to expand at an equally rapid pace.

V. Banking Sector Developments

Turning to financial developments, this section confirms extraordinary financial changes occurred during the 2000s. Expectably, foreign banks played a role in shaping those developments because just “by their entry the foreign banks change the environment” (Tschoegl, 2005, p. 7). Inasmuch as all ten subject countries have high levels of foreign bank entry, the potential for comparable banking sector developments would seem high. In the following two subsections we establish that retail loans accelerated during the 2000s as a percentage of total lending. Then, we show statistics on other crucial transformations in bank credit and interest rates that took place in the subject countries’ banking sectors over the same period.

(a) The Rise of Retail Loans

Individuals took on rising debt in many of the subject countries during the 2000s. Figure one below illustrates how loans to individuals as a percent of total loans rose, sometimes dramatically. One clear pattern emerges from these data: by year-end 2011 retail lending accounted for roughly 40 percent of all bank lending in all ten countries.

Dividing subject countries into two groups according to gains retail loans made allows for some interesting interpretations. The first group we call the over-30s and the second group we call the under-30s. Over-30 countries saw retail loans grow more than thirty percent of the entire loan
portfolio during the 2000s - Czech Republic with 39 percent, Hungary with 36 percent, Poland with 41 percent and Romania with 39 percent. This group of countries also began the 2000s with relatively lower percentages of retail loans - Czech Republic with 12.57 percent, Hungary with 10 percent, Romania with just 5 percent, and Poland the highest with 25 percent. They also displayed some of the highest growth in household consumption, as well as GDP per capita. Romania’s experience, as the lowest household consumption and GDP per capita (in constant 2000 dollars) in 2000, represents a particularly swift example of how households probably financed consumption through bank loans. Other over-30s displayed similar trends, so we could say particularly rapid retail loan expansion was related to low starting points, quickly growing incomes and consumption.

Six countries fall into a group we call the under-30s, or those countries that saw retail loans grow less than thirty percent as a share of the portfolio. Of these countries, Turkey had the highest expansion with 23 percent, followed by the Latin American countries of Mexico with 17 percent, Chile with 13 percent, and Brazil with 10 percent, and then by Croatia at 5 percent and Hong Kong at negative 9.4 percent. We should point out that by comparison though, this group of countries began the period with relatively higher levels of retail loans. The slimmest progress in fact occurred in Brazil, Croatia and Hong Kong, all of which were the only countries to have over thirty percent of loans devoted to retail in the early 2000s. Turkey, Chile, and Mexico on the other hand, started with somewhat lower levels of retail loans in the total portfolio, but saw larger expansion. Turkey actually began the period with the lowest percentage in this group, at 14.55 percent, but achieved the widest retail loan expansion. In Hong Kong, retail slid as a percentage of the loan portfolio. Hong Kong began with comparatively high percentages of retail loans, and in fact it was the only country over forty percent in the early 2000s. Relatively high GDP per capita and retail loan share at the beginning of the 2000s might mean Hong Kong’s households had limited desire, or capacity, to take on more debt. Nonetheless, at 38.58 percent, retail was still a significant portion of loans in Hong Kong in 2011. Thus, the degree to which retail loans gained (or lost) total loan share depended heavily upon retail levels in the early 2000s; expansion was the greatest in countries where retail loans started low.

Finally, the 2008 financial crisis negatively impacted retail loans in a number of countries. Mexico and Croatia saw the largest drops after 2007 at 6.9 percent and 7.9 percent of the portfolio respectively, along with Hong Kong at 3.6 percent, Turkey with 4.2 percent and Romania with 2.5. Four of these countries - Mexico, Croatia, Turkey, and Romania - all experienced rather large drops in household consumption during the latter half of the decade as well, suggesting for them a correlation between household consumption and retail bank loan levels. Hong Kong’s household consumption actually climbed faster over the second part of the decade despite retail loans declining as a percent of total loans, particularly post-crisis. GDP per capita growth rates
averaged 3.5 percent from 2006 to 2011 in Hong Kong though (table three), faster than any country
other than Poland. Thus, it may be that households in Hong Kong did not require bank
financing, but instead increased consumption through income growth. Indeed when comparing
Mexico, Croatia, Turkey and Romania we can see that the largest drops in retail loans occurred
in countries where GDP per capita growth rates slowed considerably - Mexico and Croatia. On
balance though, the key point here is mostly all countries had higher percentages of loans
allocated to individuals in 2011 than the beginning of the decade, despite the 2008 crisis.

(b) Other Banking Sector Developments

Other important financial developments also occurred during the 2000s. Among some of the
most noteworthy were the overall growth of credit and shifts in interest rates. We begin by
observing overall developments in bank credit as a percentage of GDP to provide perspective on
retail bank loan expansion. Then, we review the evolution of loan interest rates and interest rate
spreads to arrive at implications on borrowing costs and banking sector competition.

While we have established the share of retail loans climbed in total loans, we now demonstrate
banks were extending accelerated amounts of overall credit during the 2000s. Figure two
illustrates developments in bank credit as a percentage of GDP for select years. In all cases,
domestic bank credit expanded between 2000 and 2011. In fact, the percent increase (relative to
GDP) was over ten percent for each country, and for a number of countries above twenty percent.
Essentially, increased bank credit means, because retail grew as a percentage of total credit,
retail loans were growing at substantially high rates. Also, as mentioned, figure two’s statistics
present credit as a percentage of GDP. The fact that credit expanded during a decade in which
GDP was growing robustly for most subject countries is a further testament to the speed at which
retail loans grew. Or in other words, credit, especially retail loans, was growing faster than
GDP. Certainly, this indicates larger percentages of the population were able to access finance.
But, a looming question relates to whether individuals had the capacity to take on such debt.

Observing loan interest rates allows us to grasp some of the costs facing borrowers in each
country. Figure three shows loan interest rate statistics since 2000. Admittedly, we should
acknowledge the imperfectness of these statistics because, in addition to individuals, they include
other private sector borrowers such as SMEs and other corporations⁵. Nonetheless, these World
Bank statistics permit important inferences because interest rates probably moved in the same
general direction for all private sector borrower types. Immediately, we can see loan interest
rates fell for all countries during the period. There were some rate increases around 2008 for a
number of countries, but that later subsided in most cases. Some of the most notable declines

⁵) The same pertains to interest rate spread statistics below.
were 41.72 percent in Romania, 20 percent in Poland, 12.95 percent in Brazil, and 12 percent in Mexico. Declining interest rates probably lowered borrowing costs for all types of private sector borrowers, thus pricing many individuals into the market for bank loans. Or, in other words, greater numbers of individuals had the capacity to take on debt to finance consumption because borrowing costs fell.

Shifts in interest rate spreads allow us to make important observations on the margin between loan and deposit interest rates. That margin carries important implications for the level of competition within a banking sector. Generally, competition can be thought of as intensifying if interest rate spreads show an overall downward trend in the long run (Claessens, Demirguc-Kunt, & Huizinga, 2001). Figure four presents interest rate spread developments between 2000 and 2010. For almost all of the subject countries, interest rate spreads declined, when taken over the entire decade. Admittedly, spreads did actually increase for three countries: Czech Republic, Croatia and Hong Kong. However, at less than 1 percent, and only 0.29 percent in the cases of Croatia and Hong Kong, the increases were minimal. The crisis likely contributed to slight jumps in spreads around 2008, but in most cases were not prolonged. Thus, we can reasonably conclude that narrowing spreads indicate banks were operating on slimmer margins, and therefore within an increasingly competitive environment in most subject countries. Conditions such as these could have spurred banks to compensate for narrowing margins by rapidly increasing loans.

In sum, retail loans swelled over the 2000s in all countries. Loan interest rates declined, placing more individuals into a position to take on debt. Simultaneously, thinner margins may have conceivably provided banks an incentive to quickly expand lending. Indeed, domestic bank credit accelerated faster than GDP growth over the decade in all cases. Taken together, these developments at least suggest banks could have made a portion of those rapidly rising retail loans to uncreditworthy individuals, possibly jeopardizing banking sector stability.

VI. The Stability of Retail Banking

In this section we examine the ten subject countries’ banking sector stability. We compare total banking sector nonperforming loans (NPLs) and nonperforming loans made to individuals to grasp whether the aforementioned retail banking developments were stable in nature. In the case of overall bank NPLs, we employ available data over the entire 2000s. Historical data on individual NPLs though, is not always obtainable, so we focus on developments since the financial crisis. The main reason for examining NPLs is they provide a definitive means of demonstrating the extent to which loans were made to creditworthy (or uncreditworthy) borrowers. In addition to delivering a sound understanding of stability both before and after the financial crisis, this
approach also offers us the opportunity to make important conclusions about the stability of retail bank lending.

Figure five displays statistics for overall nonperforming bank loans from 2000 to 2011. Perhaps the most important point exhibited by this data is that for all countries NPLs were improving (declining) before the 2008 crisis. Some countries experienced sharp rises in 2008, and as a result, four countries ended the period with higher NPLs than the beginning. In 2011, NPLs in Chile, Croatia, Hungary, and Romania were all higher than 2000 levels, with increases of 0.8, 2.0, 7.4 and 13.4 percent respectively. Nevertheless, the impact was arguably minimal for Chile because despite the increase, they still had less than three percent of total bank loans nonperforming at the end of the period, a relatively low figure compared with other countries. So, despite improving and/or keeping NPLs steady prior to 2008, for three countries, Croatia, Hungary, and Romania, the decade ended with over ten percent of loans nonperforming.

Overall though, a majority, six of the ten countries, exhibited improved results throughout the 2000s. Brazil, Mexico, Czech Republic, Poland, Hong Kong, and Turkey all lowered banking sector NPLs, and in some cases by wide margins, even despite the 2008 crisis. Czech Republic made drastic progress with a drop of 23.7 percent, while Brazil, Mexico, Poland, Hong Kong, and Turkey lowered NPLs by 5.1, 3.8, 7.1, 6.6 and 6.1 percent respectively. With fewer NPLs than in 2000, many retail loan borrowers were probably not only creditworthy, their creditworthiness was strong enough to withstand the financial crisis’ impact. So while across the board the financial crisis had a negative impact on loan performance, it was severe for only a few countries. Thus, taking a general view, financial conditions were relatively stable in a majority of countries.

Next, we investigate individual loan NPLs to understand how retail loans have performed in recent years. We have compiled data on nonperforming loans to individuals by country in figure six. Differences between national authorities’ statistics hinder our ability to make comparisons directly across countries because in two cases (Croatia and Czech Republic) individual loan NPLs are expressed as a percent of total loans, and not a percent of total individual loans as in all other countries. Nonetheless, these statistics permit some decisive observations. First, individual loan NPLs deteriorated drastically\(^6\), in really only two countries, Hungary and Romania. Second, in cases where individual loan NPL increases were milder, conditions soon stabilized (Brazil, Chile, Czech Republic, Croatia, Mexico, Poland). Granted, Croatia, Czech Republic, and Poland all experienced rising NPLs, but the most recent data suggests the overall change will be limited to just a couple percentage points in all three cases. On top of that, being Croatia and Czech Republic are countries where figure six statistics are expressed as a percentage of total loans, we can also infer that because individual NPLs did not surpass total NPL figures (figure

\(^6\) Beyond three percentage points.
five); individual NPLs were not the primary source of loan deterioration. Third, in two countries (Turkey and Hong Kong) individual NPLs improved on aggregate, in spite of the 2008 financial crisis. Lastly, for the two countries where individual loan NPL deterioration was most severe (Hungary and Romania), individual NPLs worsened beyond overall NPL levels (figure five) only in Hungary.

Thus, a majority of retail bank loans in emerging markets with high foreign bank presence have remained relatively stable – withstanding stress from the financial crisis. In fact, for half of the countries: Turkey, Hong Kong, Mexico, Chile⁷, and Brazil, individual NPLs stayed level or even dropped post-crisis. Insomuch as NPL deterioration occurred, it was likely as attributable, if not more attributable, to non-retail loan types. The main finding demonstrated in this section is financial stability does not appear to have been jeopardized in most countries with high foreign bank participation where retail bank loans account for significant portions of lending. To the contrary, given the severity of the global financial crisis, foreign bank presence has, at the very least, enhanced stability in a majority of cases.

VII. Conclusions

This research has shown that countries with high foreign bank participation largely fall in Latin America and Emerging Europe. Rather than concluding foreign banks are uninterested in other markets, we think that these two regions are probably the leaders in foreign entry for two specific reasons: 1) banking regulation has allowed the outright acquisition of local banks, and 2) strong macroeconomic conditions provide attractive opportunities for banks post-entry. The first reason is enhanced by a discussion on retail banking because of the need for local branch networks to connect with customers. Moreover, the second reason is also amplified by retail bank research because foreign banks are more likely to target countries where individual incomes are growing, and thus borrowers have the foreseeable ability to make timely payments towards incurred debt. Going forward, other countries that meet these two criteria will also likely attract interest from foreign banks, especially foreign banks with retail banking aspirations.

This research confirmed macroeconomic developments were fairly sound in all countries observed, especially prior to the financial crisis. Individual incomes rose, accelerating faster over the 2000s than during the previous decade in many cases. Household consumption expanded in all countries, and in some cases, actually grew faster than GDP. In fact, for all countries

⁷ Chile’s individual NPLs are a somewhat special case because authorities split them into mortgages and consumer debt, which had slightly differing experiences after the crisis. Regardless of the fact that minimal increases occurred, we conclude Chile is in fact a country with stable individual NPLs due to its comparatively low percentage of NPLs.
observed, household consumption expanded faster than in the United States during the 2000s. Considering the now well-documented crisis that occurred in the United States had its roots in risky loans to uncreditworthy individuals; an important implication this research has made is that the same situation could potentially unfold in other countries if similar practices became industry-wide staples as suggested by Morison and Frazer (1982).

Two very important financial developments took place within the ten subject countries. First, this paper has shown that loans to individuals are an immensely important loan type. In fact, retail became a crucial banking segment in almost all countries with high foreign bank presence. Hong Kong was somewhat of an outlier, as it actually experienced a decline. Nonetheless, we have confirmed a common trend whereby retail lending accounted for around 40 percent of loans in all countries observed. Second, foreign bank entry coincided with declining loan interest rates and interest rate spreads, signaling both an intensification of banking sector competition and lower borrowing costs. Additionally, credit levels as a percent of GDP were resilient in nearly all countries. Thus, foreign bank entry, and the seemingly fiercer competition that resulted, provided individuals with access to financial services on a much wider scale, and at lower interest rates, not just over the 2000s, but also after the crisis.

This research sought to link those retail loan developments to a conclusion on financial stability. Our main conclusion is that in a majority of the subject countries increased retail lending was not linked with financial instability. Therefore, we agree with findings by Goldberg, Dages, and Kinney (2000) and Tschoegl (2005), among others; foreign bank entry may actually increase financial stability. This paper extends that assertion to retail banking because retail loans did not experience severe deterioration in most cases, despite negative economic spillover from the global financial crisis. Consequently, enhanced financial stability and access to finance for individuals demonstrated through this research might be prime examples of the positive effects Claessens, Demirguc-Kunt, and Huizinga (2001) argued foreign banks could have on host markets.

Since credit is still expanding in many countries, however, there is potential for weaknesses to develop. Given worsening conditions in home markets, foreign banks could turn up attention on emerging markets in order to compensate for dwindling earnings at home. While until recently, retail banking has not severely jeopardized financial stability; that may not remain true indefinitely. Indeed, Hungary, and perhaps Romania, may be early examples of countries where retail banking is overheating. Ultimately, foreign bank entry alone is not a panacea for improving a banking system. Recognizing retail’s significance, host market authorities should prevent predatory and reckless lending practices, similar to those which led to the 2008 financial crisis, from becoming mainstream in their countries. Future research would do well to investigate reasons foreign banks have been able to enter foreign markets, gather borrower information, and
extend retail loans to individuals in those countries in a relatively sustainable manner.

Table 1 - Countries with Significant Foreign Owned Bank Presence
(Source: The Banker, Top 1,000 World Banks, 2011, 2007, & 2005)

<table>
<thead>
<tr>
<th>Country (Min. 5 Banks in Banker &amp; 3 Foreign Banks)</th>
<th>Number of Banks</th>
<th>Number of Foreign Banks</th>
<th>Total Banking Assets in Banker (USD Mil)</th>
<th>Foreign Bank Assets in Banker (USD Mil)</th>
<th>Foreign Share (%) in Total Assets from Banker</th>
<th>Foreign Banks in 2005 Publication</th>
<th>Foreign Banks in 2007 Publication</th>
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<tr>
<td>Argentina</td>
<td>11</td>
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<td>2</td>
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<td>16</td>
<td>4</td>
<td>1,971,413</td>
<td>333,411</td>
<td>16.9%</td>
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<td>6</td>
</tr>
<tr>
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<td>5</td>
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<td>2</td>
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<td>3</td>
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<td>35.3%</td>
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<td>3</td>
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<td>0.1%</td>
<td>0</td>
<td>0</td>
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<td>5</td>
<td>54,327</td>
<td>54,327</td>
<td>100.0%</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
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<td>6</td>
<td>163,210</td>
<td>163,210</td>
<td>100.0%</td>
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<td>5</td>
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<td>9</td>
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<td>1,161,477</td>
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<tr>
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<td>78,951</td>
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<tr>
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<td>3</td>
<td>1,502,025</td>
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<td>17</td>
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<td>12</td>
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<td>4</td>
<td>58,536</td>
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<td>3</td>
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<tr>
<td>Russia</td>
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<td>7</td>
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<td>68,498</td>
<td>9.2%</td>
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</tr>
<tr>
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<td>6</td>
<td>4</td>
<td>15,728</td>
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<td>na</td>
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</tr>
<tr>
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<td>4</td>
<td>326,826</td>
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<td>1</td>
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<tr>
<td>Venezuela</td>
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<td>3</td>
<td>145,201</td>
<td>24,962</td>
<td>17.2%</td>
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Table 2 – Subject Countries GDP Growth Rates 2000-2011  
(Source: World Bank)

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<td>1.31</td>
<td>2.66</td>
<td>1.15</td>
<td>5.71</td>
<td>3.16</td>
<td>3.96</td>
<td>6.09</td>
<td>5.17</td>
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<td>7.53</td>
<td>2.73</td>
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<td>4.19</td>
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<td>4.27</td>
<td>5.69</td>
<td>5.16</td>
<td>3.29</td>
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<td>6.10</td>
<td>5.99</td>
<td>4.05</td>
<td>4.20</td>
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<td>3.21</td>
<td>5.15</td>
<td>3.26</td>
<td>1.19</td>
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<td>3.94</td>
<td>2.65</td>
<td>2.14</td>
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<td>4.28</td>
<td>4.94</td>
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<td>6.75</td>
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<td>2.74</td>
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<td>-0.37</td>
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<td>7.02</td>
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<td>8.40</td>
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<td>2.8</td>
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<td>4.6</td>
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<td>4,717</td>
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<td>7.2%</td>
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<td>5,859</td>
<td>6,100</td>
<td>6,240</td>
<td>6,117</td>
<td>6,430</td>
<td>6,754</td>
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<td>54.0%</td>
</tr>
<tr>
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<td>5,817</td>
<td>5,729</td>
<td>5,703</td>
<td>5,709</td>
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<td>6,327</td>
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<td>7.8%</td>
<td>12.9%</td>
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<td>5,552</td>
<td>5,782</td>
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<td>6,562</td>
<td>6,799</td>
<td>6,399</td>
<td>6,338</td>
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<td>-13.4%</td>
</tr>
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<td>7,803</td>
<td>7,912</td>
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<td>4,722</td>
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<td>5,884</td>
<td>5,947</td>
<td>5,551</td>
<td>5,634</td>
<td>5,746</td>
<td>26.5%</td>
<td>-0.3%</td>
</tr>
<tr>
<td>Poland</td>
<td>4,454</td>
<td>4,532</td>
<td>4,600</td>
<td>4,781</td>
<td>5,039</td>
<td>5,224</td>
<td>5,533</td>
<td>5,932</td>
<td>6,236</td>
<td>6,333</td>
<td>6,574</td>
<td>6,854</td>
<td>53.9%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Romania</td>
<td>1,651</td>
<td>1,770</td>
<td>1,888</td>
<td>1,992</td>
<td>2,165</td>
<td>2,260</td>
<td>2,444</td>
<td>2,596</td>
<td>2,845</td>
<td>2,607</td>
<td>2,637</td>
<td>2,633</td>
<td>59.5%</td>
<td>-14.8%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>25,374</td>
<td>25,313</td>
<td>25,666</td>
<td>26,489</td>
<td>28,509</td>
<td>30,395</td>
<td>32,320</td>
<td>34,044</td>
<td>34,570</td>
<td>33,326</td>
<td>35,537</td>
<td>37,352</td>
<td>47.2%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Turkey</td>
<td>4,189</td>
<td>3,895</td>
<td>4,078</td>
<td>4,235</td>
<td>4,568</td>
<td>4,887</td>
<td>5,155</td>
<td>5,324</td>
<td>5,288</td>
<td>4,969</td>
<td>5,356</td>
<td>5,741</td>
<td>37.0%</td>
<td>15.5%</td>
</tr>
</tbody>
</table>

8) While the exact 1990-1999 dollar figures are not included in the table, the change percentages are derived from the same World Bank Databank source.
### Table 4 - Household Final Consumption Expenditure Per Capita Constant 2000 U.S. Dollars
(Source: World Bank)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Brazil</td>
<td>2,378</td>
<td>2,453</td>
<td>3,095</td>
<td>3.14%</td>
<td>26.17%</td>
<td>30.14%</td>
</tr>
<tr>
<td>Chile</td>
<td>3,113</td>
<td>3,798</td>
<td>4,704</td>
<td>21.99%</td>
<td>23.86%</td>
<td>51.09%</td>
</tr>
<tr>
<td>Mexico</td>
<td>3,896</td>
<td>4,267</td>
<td>4,365</td>
<td>9.53%</td>
<td>2.28%</td>
<td>12.03%</td>
</tr>
<tr>
<td>Croatia</td>
<td>2,935</td>
<td>3,730</td>
<td>3,766</td>
<td>27.10%</td>
<td>0.95%</td>
<td>28.30%</td>
</tr>
<tr>
<td>Czech Republic</td>
<td>2,973</td>
<td>3,552</td>
<td>3,875</td>
<td>19.47%</td>
<td>9.09%</td>
<td>30.33%</td>
</tr>
<tr>
<td>Hungary</td>
<td>2,492</td>
<td>3,227</td>
<td>3,047</td>
<td>29.48%</td>
<td>-5.57%</td>
<td>22.26%</td>
</tr>
<tr>
<td>Poland</td>
<td>2,856</td>
<td>3,319</td>
<td>4,068</td>
<td>16.19%</td>
<td>22.58%</td>
<td>42.42%</td>
</tr>
<tr>
<td>Romania</td>
<td>1,303</td>
<td>1,981</td>
<td>2,660</td>
<td>52.00%</td>
<td>34.28%</td>
<td>104.10%</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>14,966</td>
<td>16,068</td>
<td>19,497</td>
<td>7.37%</td>
<td>21.34%</td>
<td>30.28%</td>
</tr>
<tr>
<td>Turkey</td>
<td>2,954</td>
<td>3,558</td>
<td>3,824</td>
<td>20.46%</td>
<td>7.49%</td>
<td>29.48%</td>
</tr>
<tr>
<td>United States</td>
<td>24,207</td>
<td>26,749</td>
<td>26,777</td>
<td>10.50%</td>
<td>0.10%</td>
<td>10.62%</td>
</tr>
</tbody>
</table>
Figure 1 - Retail Lending as a Share of Total Bank Lending In Subject Countries
(Sources indicated below)⁹

9) To the extent possible, statistics represented here account for loans to individuals and households as a share of total loans extended by banks. Conditions stipulated where necessary. All values at year-end.
10) Source: Central Bank of Brazil. Financial system credit operations to individuals (mortgages included). Total credit includes government credit.
11) Source: Central Bank of Chile. Bank loans to individuals in the form of consumers loans and housing loans as a percent of total private sector credit.
12) Source: Mexico’s National Banking and Securities Commission (Spanish: La Comisión Nacional Bancaria y de Valores (CNBV)). Data represents mortgages and consumer loans as percent of total credit portfolio. Total credit includes financial institutions and governments.
13) Source: Croatian National Bank. Data represents bank loans to households as share of total credit. Total credit includes governments and financial institutions.
14) Source: Czech National Bank. Commercial banks loans to households as a percent of total credit. Total credit includes financial and government institutions. Loans to non-residents excluded.
15) Source: Republic of Hungary Central Bank. Monetary financial institutions loans to households as a percent of total credit. Total credit includes government and financial institutions.
Romania Supplemental Data

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16) Source: National Bank of Poland. Loans and advances of Polish banking sector to households (includes mortgages) as a percentage of total credit. Total credit includes credits to government, but not to financial institutions.

17) Source: Hong Kong Monetary Authority. Data From Hong Kong Monetary Authority’s Annual Reports is for Retail Banks (defined as banks operating a local branch network and active in retail banking business), and represents loans to individuals inside Hong Kong as percentage of total credit. Total credit includes financial companies.

18) Source: The National Bank of Romania. Bank household credits divided by total credits. Total credits includes government and financial institutions. Loans to Non-residents not included. 2000 data taken from The National Bank of Romania’s financial stability reports, since statistics for 2000 were not available directly from the website (supplementary data is included as a way of confirming the 2000 loan level).

19) Source: Central Bank of The Republic of Turkey. Deposit Money Banks Loans to households as a percent of total credit. Total credit includes advances to governments and financial institutions.
Figure 2 - Domestic Credit Provided by Banking Sector (% of GDP) 2000 to 2011
(Source: World Bank)
Figure 3 - 2000-2011 Bank Loan Interest Rate Developments in Subject Countries (%\textsuperscript{20})
(Source: World Bank)

\textsuperscript{20} According to the World Bank Databank, the “lending rate is the bank rate that meets the short- and medium-term financing needs of the private sector. This rate is normally differentiated according to creditworthiness of borrowers and objectives of financing.” Lending interest rates include rates on loans to small and medium enterprises, large corporations, as well as individuals. Data unavailable for Turkey and Poland after 2006.
Figure 4 - 2000-2010 Bank Interest Rate Spread Developments in Subject Countries (%)\(^{23}\)
(Source: World Bank)

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23) According to the World Bank Databank, the “interest rate spread is the interest rate charged by banks on
loans to private sector customers minus the interest rate paid by commercial or similar banks for demand, time,
or savings deposits.” Interest rate spread data includes statistics on loans and deposits with small and medium
enterprises, large corporations, as well as individuals. Data unavailable for Turkey and Poland after 2006.
Figure 5 - Bank Nonperforming Loans to Total Gross Loans (%) 2000 to 2011
(Source: World Bank)
Figure 6 - Nonperforming Retail Loans (%)  
(Sources indicated below)\(^{23}\)

22) Depending on the respective national authorities statistics on nonperforming individual loans differ slightly. We clarify definitions and other conditions related to each country’s statistics below. All values at year-end unless otherwise stipulated.
23) Source: Central Bank of Brazil. Percentage of total credit extended to individuals (non-earmarked funds) in arrears more than 90 days.
24) Source: Central Bank of Mexico. Nonperforming mortgage and consumer loans nonperforming loans as a percent of total mortgage and consumer loans by commercial banks.
25) Source: Central Bank of Chile. Household consumer and mortgage nonperforming loans as a percent of total household consumer and mortgage loans respectively. Nonperforming loans are in arrears more than 90 days.
26) Source: Czech National Bank. Total household nonperforming loans over total loans.
27) Source: Republic of Hungary Central Bank. Composition of household loan portfolio overdue more than 90 days.
28) Source: National Bank of Poland. Average impaired loan ratio for all household loans in banking sector.
Hong Kong\textsuperscript{31)}

Croatia\textsuperscript{32)}

\textsuperscript{29)} Source: Central Bank of The Republic of Turkey. Percent of each loan type nonperforming.

\textsuperscript{30)} Source: National Bank of Romania. Share of past-due loans in total loans due from households as granted by credit institutions.

\textsuperscript{31)} Source: Hong Kong Monetary Authority. Delinquency ratios of residential mortgages and credit card lending.

\textsuperscript{32)} Source: Croatian National Bank. Total non-performing loans to households as a percentage of total loans.
References


Academic Literature. European Credit Research Institute, No. 12, pp. 17-27.
Banks' Lending to Emerging Markets. *International Monetary Fund*, unpublished.


**Other References**


**URL:**


Croatian National Bank (English Version): http://www.hnb.hr/eindex.htm


Mexico’s National Banking and Securities Commission (Spanish: *La Comisión Nacional Bancaria y de Valores* (CNBV)): http://www.cnbv.gob.mx/Paginas/Index.aspx
