Observations on BRIC Government Banks and Financial Statecraft:

Competitive Advantages since Liberalization
and
Policy Alternatives for Crisis and Social Inclusion

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DRAFT FOR DISCUSSION. PLEASE DO NOTE CITE. COMMENTS WELCOME.

Introduction[1]

Until 2008, developing countries systematically fared worse during financial crises. After declaration of moratorium on foreign debt payments by Mexico in August 1982, the global south and east experienced financial crises in a seemingly endless sequence. Panic in US financial markets during 2007 quickly spread around the globe and crisis is far from over. However, it is clear that BRIC countries were better prepared to counter shocks and resume growth. This paper explores our findings about Brazilian federal banks (that they have modernized and realized competitive advantages since liberalization *and* provided critical policy alternatives) to Russia, India and China amidst crisis.[2] Although further research will be required (and other factors mattered), evidence suggests that BRIC government banks have indeed realized competitive advantages over private and foreign banks during the 2000s *and* helped provide counter cyclical credit to counter crisis. We also argue that public banks may accelerate social inclusion through new card payment and mobile banking technologies.

These findings differ from the realist tradition of financial statecraft in international political economy, recent market-based banking theory and expectations that privatizations and liberalization would reveal the greater efficiency of private banks and produce transitions to market centered financial systems. Instead, evidence from Brazil and other BRICs (and recent research on alternative banking in Europe)[3] raises new questions about *domestic* financial statecraft, social inclusion and political development. We are currently working with a network of research and policy making institutions to promote the adoption of Core Principles for Alternative Banking and Social Inclusion at large public banks in advanced, developing and emerging countries (while supporting alternative banking groups of occupy movements in the US).[4] Any shortcomings of this draft paper and our still incipient research and policy agenda surely pale in comparison to the devastating consequences of misguided neo-classical ideas in banking theory and neo-liberal excesses of deregulation.

We define financial statecraft as the formulation of procedural rules and policies by agents empowered to act in the name of the state which mandate and regulate basic relationships in state, civil society and markets.[5] Financial statecraft requires balancing political legitimacy and market confidence to regulate the allocation of household savings to firms, increase the mobility of capital and shape growth.[6] Financial statecraft is a specific type of statecraft involving monetary, financial and banking phenomena. Like most concepts in the social sciences, financial statecraft cuts to essentially contested theories and concepts[7] about government intervention, free markets, bureaucracy and policy capacities.

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[1] Earlier versions of this paper were presented at the meeting of Association of BRICS Business Schools, 27 November 2010, Xavier Institute of Management and Entrepreneurship, Bangalore and published as "Government Banking and BRICs in the Recent Financial Crisis," *Journal of Management and Entrepreneurship*, March 2011. I thank Maria Kravchenko, R.S. Deshpande, Huang Lei, Mihalis Chasomeris, C.P. Ravindranathan and Maria Antonieta del Tedesco Lins and anonymous reviewers for comments and suggestions.

[2] Mettenheim, Kurt. *Federal Banking in Brazil: Policies and Competitive Advantages*. London: Pickering and Chatto, 2010.

[3] On alternative banking in Europe: Ayadi et al (2009) *Investigating diversity in the banking sector in Europe: the performance and role of savings banks*, (Brussels: Center for European Policy Studies) and Ayadi et al (2010) *Investigating diversity in the banking sector in Europe;* key *developments, performance and role of cooperative banks*, (Brussels: Center for European Policy Studies).

[4] See appendix 'Core Principles for Alternative Banking and Social Inclusion'.

[5] Conaghan, Catherine and James Malloy. *Unsettling Statecraft: Democracy and Neoliberalism in the Central Andes*. Pittsburgh: University of Pittsburgh Press, 1994

[6] Sola, Lourdes & Whitehead, Laurence. eds. *Statecrafting Monetary Authority: Democracy and Financial Order in Brazil*. Oxford: University of Oxford Centre for Brazilian Studies, 2006

[7] On essentially contested character of concepts in the social sciences, see: Gallie, Collier, Gerring.

The comparative political economy of finance is especially contested. Financial deepening approaches and bank-centered finance strategies (and liberal and coordinated political economy approaches) often see the same phenomena from profoundly different perspectives.[8] Liberal market-economies are driven by equity markets, thrive on public information and spurn coordination. Coordinated market-economies are driven by bank credit, thrive on limited sharing of firm strategy with financiers and spurn markets for their excessive volatility that produce sub-optimal equilibrium.[9] From a market-centered perspective, neo-institutionalism is largely neo-protectionism. From the perspective of coordinated capitalism and developmental states, excessive liberalization and privatization would simply throw babies -- cherished institutions of social policy and domestic control – out with the bathwater. In terms of finance theory, market approaches insist that policies should free agents to 'get prices right,' while coordinated market and bank-centered approaches argue that enough credit be directed to accelerate innovation and 'get planning right'.[10]

These deep differences shape views of financial statecraft and government banking in BRICs. The question of social inclusion may provide more grounds for agreement. Given the huge decline in the number of *bankless* Brazilians (those without bank account) from *80 - 50 percent 2000-2010*, the relation between financial statecraft and democratization appears more positive sum than supposed by most scholars of political economy. Most research on domestic finance (and especially monetary theory and policy) assumes zero sum relations between social inclusion and proper finance, fiscal and monetary policy. However, in contexts of high inequality and financial exclusion, positive sum relations may obtain. This counters conceptions of fiscal constraints to change and reverses causal relations of independent central banking. Instead of seeking to ensure central bank independence from politics and social forces (Alesina and Summers, 1993) or free markets and private banks through privatizations and deregulation (Williamson, 1990), the construction of financial and monetary authority in Brazil (Whitehead, 2002; Sola and Whitehead, 2006) has involved the realization of competitive advantage by large public banks (Mettenheim, 2010). Moreover, basic income policies (albeit conditional, see Soares *et al*, 2010) and other social services have proved more successful than private banking for reaching the bankless.

Reforms during the 1990s and modernization of public (and central) banks during the 2000s thus require rethinking constraints to change. Since the end of the electoral road to socialism exemplified by military coup in Chile against President Allende on 11 September 1973, social scientists and policy communities have largely concurred that markets severely constrain social inclusion. For Gold, Lo and Wright (1975), *structural* theories of the state replaced earlier instrumental and functional traditions in Marxism by better describing how markets constrain social policy and veto political change. Since then, social scientists emphasize how markets cleared by individual investors impose fiscal austerity and set constraints to change. Much of critical and mainstream social science agree that social policies tend to pressure fiscal accounts and lead either to tax increases or adjustment policies that reduced profits and

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[8] On bank-centered and market centered financial systems, see: Zysman, John. *Governents, Markets and Growth Financial Systems and the Politics of Industrial Change.* Ithaca, NY: Cornell University Press, 1983

[9] The terms of this dichotomy are from: Hall, Peter & David Soskice eds. *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*. Oxford: Oxford University Press, 2001

[10] This distinction between prices and planning is from: Dymski, Gary A. 'Banking on Transformation: Financing Development, Overcoming Poverty'. Paper presented to UFRJ Economics Institute, September 2003.

tax revenue. This, in the worst cases, caused political-economic crisis and led to the breakdown of democracy in developing countries (O´Donnell, 1973). Similar forces in advanced economies led to stagflation in the 1970s and electoral turns to neo-conservative governments and neo-liberal policies in the 1980s designed to downsize Welfare States (Pierson, 1996).

These structural explanations are now incomplete. Old views of fiscal dominance fail to capture the implications of advances in monetary economics during the 1990s and bank modernization during the 2000s. Government bank modernization, new regulatory frameworks and better supervision of banks and markets (contrary to deregulation in the US and a few tax havens and financial centers) provide a new setting for what we call *financial roads to social economies*. In other words, structural theories of the state and conceptions of vicious cycles that emphasize fiscal constraints *predate* studies of the credit channel, interest rate channel and the modernization of public banks.

Old views of fiscal dominance remain so prevalent that austerity has often remained in place far beyond necessary in developing countries. Many developing countries have accumulated significant foreign reserves and sustained trade surpluses during years of economic growth. Moreover, in Brazil, transparent policy frameworks such as inflation targeting and flexible foreign exchange regimes have been in place for over a decade (Fraga *et al*, 2004). The situation of many ergo developing countries is thus different. Bank modernization, the accumulation of immense foreign reserves and the consolidation of reforms have approximated markets and public policy. New channels for change are at hand. Our research focuses on the modernization of social banking, especially the ability of new technologies such as electronic card payment channels and mobile banking to bring income grants and access to banking and public services in *vast numbers*. Since opening the Brazilian banking industry in 1995, a back to the future modernization of government banks and basic income policies are big, largely untold storiesl organizations, the competitiveness of private banks or the greater efficiency of market-centered microfinance firms or funds.

This also implies that advocates of central bank independence beg the question of financial statecraft in developing and emerging economies. The construction of monetary authority in Brazil during the 1990s and 2000s differs from standard theories of central bank independence in three ways. First, rather than the imposition of orthodoxy, the construction of monetary authority in Brazil involved heterodox policies of inertial inflation that were used to reduce high and persistent inflation. Second, the successful reduction of inflation while redistributing wealth to the poor provided the political impetus and legitimation for monetary statecraft after military rule, both in terms of economic policies and party politics. Third, central bank authority and capacity emerged in Brazil in precisely the *reverse causal order* expected by economists : Contrary to claims about the need to establish central bank independence to ensure price stability, the reverse occurred. The Central Bank of Brazil expanded prerogatives and built capacity *after price stability* was secured by heterodox policies in 1994.

Domestic Financial Statecraft

Our approach to financial statecraft remits to a long tradition in comparative political economy that focuses on how politics and government policies shape markets. This approach is epitomized by Polany's *The Great Transformation*, Shonfield's *Modern Capitalism*, Zysman's *Governments, Markets and Growth*, Gourevitch's *Politics in Hard Times*, Conaghan & Malloy´s *Unsettling Statecraft* and Sola & Whitehead´s

Statecrafting Monetary Authority: Democracy and Financial Order in Brazil. Peter Kingstone´s analysis of coalitions, Christine Kearney´s analysis of neo-liberal policies and studies of recentralization and federalism by Leslie Armijo, Kent Eaton and David Samuels all explore the *political* determinants of economic policies in Brazil.[11]

Polanyi's *The Great Transformation* and Shonefield's *Modern Capitalism* remain canonic studies of financial statecraft. Polanyi argued that *laissez faire* liberalism during the 19th century generated movements of social self-defense in the form of organized labor, efforts to address the social question and *central banking* to protect private banks from downturns and currency devaluation under the gold standard. Other interventions such as tarrifs, imperialist expansion, subsidies to agriculture and industry and top-down social policies also prevailed over liberalism and free markets, especially after the 1873 depression. Statecrafting, often in authoritarian forms, thus reappeared in the latter 19th century after decades of liberalism. Thereafter, two world wars and recovery from economic depression meant that political imperatives continued to dominate domestic policymaking. After 1945, Shonefield argues that Continental Europeans reshaped government ownership in response to the political and economic imperatives of recovery rather than ideology or nationalist design. This emphasis on necessity and improvisation places the statecrafting tradition closer to Lindblom's *muddling-through* conception of policymaking than Marxist-Leninist or nationalist theories that saw large state banks as means to ideological ends.

Recent scholarship has returned to core ideas of statecrafting. For Kirschner, because the impact of alternative financial arrangements and policies on welfare is often equal or unpredictable, politics rather than independent economic judgements both shape and explain policy choices and the configuration of markets.[12] Statecrafting thus describes the political construction of coalitions to support economic policies and the adoption/adaptation of policies to the particularities of domestic markets, institutions and politics.[13] Hoffman traces how *political* ideas periodically recast the US financial system during critical junctures of change since independence.[14] Laurence, Toya and Amyx also argue that politics explain the origin, character and implementation of 'big bang' financial reforms in Great Britain and Japan in the 1980s.[15] Pérez describes how domestic groups determined banking and finance reforms in Spain.[16] This is consistent with Maxfield's description of how the formation of a banker´s coalition shaped financial reforms and policies in Mexico.[17] However, during the last decades, domestic economic statecrafting has become virtually synonomous with imposing liberal reforms. We report fundamentally different developments from the BRICS: The realization of competitive advantages by government banks since liberalization and the importance of

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[11] Our approach also can be described, from Claus Offe, as a sociological approach to political economy – one that focuses on how social organizations, interests and political coalitions sustain economic policies. Offe, Claus. 'Political Economy: Sociological Perspectives' in Goodin, Robert E. & Klingemann, Hans-Dieter (eds). *A New Handbook of Political Science*. Oxford: Oxford University Press, 1998, pp. 675-690

[12] Kirschner, Jonathan (ed). *Monetary Orders: Ambiguous Economics, Ubiquitous Politics*. Ithaca, NY: Cornell University Press, 2003

13 Conaghan, Catherine M., & James M. Malloy. *Unsettling Statecraft: Democracy and Neoliberalism in the Central Andes*. Pittsburgh, PA: University of Pittsburgh Press, 1994

[14] Hoffmann, Susan. *Politics and Banking: Ideas, Public Policy and the Creation of Financial Institutions*. Ithaca, NY: Cornell University Press, 2001

[15] Laurence, Henry. *Money Rules: The New Politics of Finance in Britain and Japan*. Ithaca, NY: Cornell University Press, 2001

[16] Pérez, Sofía. *Banking on Privilege: The Politics of Spanish Financial Reform*. Ithaca, NY: Cornell University Press, 2003

[17] Maxfield, Sylvia. *Governing Capital: International Finance and Mexican Politics*. Ithaca, NY: Cornell University Press, 1990

these large institutions for domestic policy making, particularly for counter-cyclical credit and social inclusion. This comes at a critical time of reassessment in the US and advanced economies.

Errors of Deregulation and Crisis in the US

A clearer explanation of the financial panic in US sub-prime mortgage markets also helps explain why BRIC countries suffered less and recovered more quickly. From the perspectives of BRICs, the excesses of deregulation and market based banking are the anomalies – not the reality of smoothing the growth curve and encouraging social inclusion. Competing hypotheses rushed to explain the origin and evolution of the US financial panic and crisis (Gorton, 2008). The US Government Commission (2010) split with dissenters presenting separate explanations. However, for purposes of comparison to BRICs, review of antecedents, crisis mechanisms and policy responses suggest both errors of deregulation and particular complementarities in market-centered finance capitalism. Asset bubbles are not new to financial markets. However, the deregulation of capital markets and the dual bubble of long-term housing prices and quick valuation of mortgage backed securities and other derivatives produced unprecedented crisis in 2007. Policy statements, national accounts, Federal Reserve balance sheets and market trends and working papers indicate the following causes and consequences.

First, the steep valuation of the Case-Schiller Home Price Index from 1988-2009 suggests a long-term asset bubble has changed US political economy and produced structural imbalances. From 1895-1995, home prices largely accompanied inflation (Baker, 2007). However, from 1995 to June 2006, home prices outpaced inflation by an estimated *70 percent*. This produced a US$ 2.5 trillion home price bubble and a full US$ 8.0 trillion in housing related wealth effects. Construction alone during this period increased from an estimated 4-6 percent of US GDP.

Second, policies designed to counter financial crisis in 2000 such as low interest rates fueled another round of home price increases while construction and consumption were encouraged by further deregulation of financial markets. Revocation of the Glass-Steagal law (1999), the Commodities and Futures Act of 2000, and the Consolidated Entity Supervision Act of the Securities and Exchange Commission (2004) freed US banks to sell and securitize mortgages and other assets virtually without supervision. Instead of convergence toward International Financial Reporting Standards and Bank for International Settlements (BIS) Basel II Accord capital reserve requirements, US banks were permitted to leverage freely and sell largely without consumer protection regulations. The US turn to deregulation remains an outlier. Elsewhere, domestic regulators, banks and financial institutions have adopted policies and reforms to converge toward BIS domestic bank regulations and more effective capital market supervision.

Third, the valuation of mortgage backed securities and derivatives created a fundamentally new situation once problems appeared in 2007. Data from the Securities Industry and Financial Markets Association suggest how the value of asset backed securities exploded after deregulation. Values of outstanding debt and new debt issued from 1996-2008 reveal an abrupt capitalization of mortgage related and asset backed securities typical of asset bubbles. Longstanding bond markets such as municipal bonds, treasury bonds, corporate debt, federal agency securities, money markets and asset backed bonds all remained on relatively stable growth trajectories until crisis hit in 2007. In comparison, the market value of mortgage related bonds almost doubled from US$3.5 trillion in 2000 to reach US$8.9 trillion before crisis in 2007.

Fourth, central drivers of the financial market bubble in the US were secondary markets for mortgage backed securities and derivatives. For example, throughout the financial panic and crisis, municipal bond markets remained largely stable, despite falling tax receipts and the impact of crisis on sub-national government budgets. The value of US Treasury bonds also *increased* during crisis, reflecting a flight to quality much criticized by surplus countries such as China. This remains a comparative advantage of market-centered finance capitalism. Despite originating crisis, a flight to quality cheapens counter cyclical policies. Corporate bonds also increased during crisis as US Federal Reserve banks and treasury injected funds to keep US firms afloat. Further analysis is needed. However, data from bond markets suggest that market centered finance capitalism retains particular sets of complementarities and policy alternatives.

Fifth, both government policies during crisis and proposals for new regulatory frameworks are designed to tap these complementarities. After September 2008, US government reserves increased from US$ 900 billion to over two trillion dollars, largely through new credit facilities created by the Federal Reserve Board and regional banks of the Federal Reserve System. US government reserves first increased through massive extension of credit, then through central bank swaps, then through acquisition of federal government securities by the US central bank. These policies suggest particular configurations and complementarities in market-centered finance capitalism.

The first program introduced in February 2008 was the Federal Reserve Primary Dealer Credit Facility, an overnight loan facility to ensure funds for primary dealers of treasury securities to sustain demand in financial markets. US government primary credit borrowing increased from under US$20.0 billion through September 2008 to over US$110.0 billion by December 2008, but decreased thereafter to under US$40.0 billion by April 2009. US Federal Reserve Banks also purchased massive amounts of asset backed securities to sustain markets. In November 2008, the Federal Deposit Insurance Corporation created a Temporary Liquidity Guarantee Program, one that provided over US$334.0 billion by April 2009. (Given that FDIC funds are taken from charges on savings accounts, this transfer of funds from savings accounts to emergency financial policy credits has attracted criticism from community banking association members). US monetary authority purchases of GSE mortgage backed securities also reached US$1.25 trillion in GSE “agency” mortgage backed securities, US$200.0 billion in direct agency obligations and permitted purchase of up to US$300.0 billion in treasury securities during 2009. The Federal Reserve Board also created a Term Asset-Backed Securities Loan Facility

In September 2008, the Federal Reserve Board created an Asset-Backed Commercial Paper Money Market Mutual Fund Liquidity Facility to stave off financial panic. Lending through the Federal Reserve Bank of Boston reached US$150.0 billion by September 2008. However, loans under this program declined to near zero in April and remained below US$20.0 billion in May 2009. The Federal Reserve Board also created a Commercial Paper Funding Facility through the Federal Reserve Bank of New York to avert financial panic spreading into commercial paper markets. Loans to banks under this facility reached US$350.0 billion in January 2009, but declined to under US$140.0 billion by June 2009. The Federal Reserve Board also created a Term Auction Facility in December 2009 to ensure liquidity in uninsured interbank lending markets. Lending through this facility remained at approximately US$140.0 billion into October 2008, but increased to almost US$US500.0 billion in March 2009 before declining to an estimated US$ 320.0 billion outstanding in June 2009.

The Federal Reserve Board also created a Money Market Investor Funding Facility that reached over US$152.0 billion in October 2008 (with average outstanding loans over US$120.0 million); but again lending declined to almost zero by April 2009, remaining below US$ 30.0 billion in June 2009. Finally, in November 2008, the Federal Reserve Board created a Term Asset-Backed Securities Loan Facility to ensure the issue of asset backed securities in secondary markets for student loans, auto loans, credit card loans and loans guaranteed by the Small Business Administration. Lending by the Federal Reserve Bank of New York through this facility reached just over US$10.0 billion during May and June 2009. US government policies have increased the value of US Treasury securities from US$ 4.8 trillion in 2006 before the financial crisis to over US$ 6.6 trillion by first quarter 2009. The Federal Reserve Board Balance Sheet increased from US$914.7 billion at year-end 2007 to over US$ 2.24 trillion at year-end 2008. The decision by the Federal Reserve to pursue another round of quantitative easing by purchase of R$600.0 billion of bonds through first semester 2011 has attracted further criticism from BRIC finance ministers and authorities, but continue the unorthodox monetary policies described above designed to secure domestic recovery.

Reports from the US Government Accounting Office indicate far more was spent than commentators tend to and the Federal Reserve Bank balance sheets may indicate.[18] Table 8 of the July 2011 GAO report to Congress sums the value of emergency transfers to *over 16 trillion US dollars*. Even after reducing for double counting of daily emergency loans, we still sum the total value of US government transfers to banks and financial institutions at *over 12 trillion US dollars.* However, this takes us away from our purpose of comparing financial statecraft in the BRICs.

Why BRIC Countries Have Fared Well

Government banks are not the only story from the BRICs. Perhaps most persuasive but still limited explanation of why BRIC countries were better able to adjust to global financial crisis and economic downturn is simply that these countries had their economic fundamentals in order while many advanced economies did not. For theories of the world system and dependent development, center became periphery. Financial markets and risk analysts came to doubt the long term credit worthiness of advanced economies and have increasingly turned to value the long-term credit worthiness of BRIC countries. Having taught political economy at the FGV-EAESP business school for over a decade amidst crises, it was of no comfort for stability to finally arrive in Brazil while it disappeared in the US and Europe. A long line of economists, business leaders, government representatives and independent analysts emphasizing the improving macroeconomic fundamentals of BRIC countries during the last decade reinforces this explanation. Achieving investment grade implies the integration of BRIC countries further into global trade and investment circuits, and best practices in finance, banking and risk analysis. This is a profound achievement – but does not justify affirming the consequence to prove that orthodox policies produced good fundamentals.

A second explanation for BRIC aversion to crisis is that their banks and financial markets have maintained convergence toward BIS Basel Accord capital requirements (and International Financial Reporting Standards) and therefore averted the excessive leverage and errors of deregulation experienced in the US and abroad. This is important,

[18] Government Accounting Office “Federal Reserve System: Opportunities Exist to Strengthen Policies and Processes for Managing Emergency Assistance,” (Washington, DC: GAO, Report to Congressional Addresses, GA)-11-696, July 2011), p. 144

but should not conceal the counter intuitive modernization of government banks alongside (and often ahead) of private and foreign banks.

A third explanation draws from the institutional complementarity hypothesis to argue that different policies in BRICS captured particular complementarities in banking and finance to avert more severe impacts on economic activity. This is a promising approach, but one that exceeds our ability to retrace the domestic policies amidst crisis across four major countries.

A fourth explanation is taken from the World Capitalist System approach and focuses on the profound structural changes implied by recent growth and better adjustment in BRIC countries. This perspective also provides significant opportunities for reflection and interpretation that must remain beyond the scope of this paper. The emergence of BRIC nations as driving force in the global economy is a fundamentally new situation for theories of center-periphery, north-south, dependent development and theories that focus on the specific trajectories of nations in what used to be called late late development.

A final explanation of why BRIC countries have fared comparatively better in the face of global financial crisis is scale. The very large size of these economies provided policy options unavailable to smaller countries. From this perspective, closed economies are less subject to the impacts of sudden stops in foreign finance during and after the financial crisis, and less exposed to export declines during global downturns. Moreover, large closed BRIC economies retain options of turning away from exports toward domestic investment and consumption, a characteristic especially important given atrocious income distribution and social exclusion. This dimension also remains beyond the scope of this paper on public banking and domestic financial statecraft.

Unless we are mistaken, these explanations are complementary to our core claims: that government banks made a difference in terms of avoiding the creation of asset bubbles, realizing competitive advantages over private and foreign banks since liberalization, and providing counter cyclical policy alternatives to ameliorate downturn. Case studies of the BRICs follow.

Brazil

We begin with Brazil. Our research on Brazil suggests that, since price stability, the return to democracy and liberalization of the banking system in 1995, federal banks have realized competitive advantage over private and foreign banks while providing policy alternatives to political and social forces. This article extends this argument to suggest that these institutions have modernized amidst liberalization and globalization across BRIC countries "just in time" to retain client confidence and provide counter-cyclical credit to avert domestic downturns in the face of global crisis.

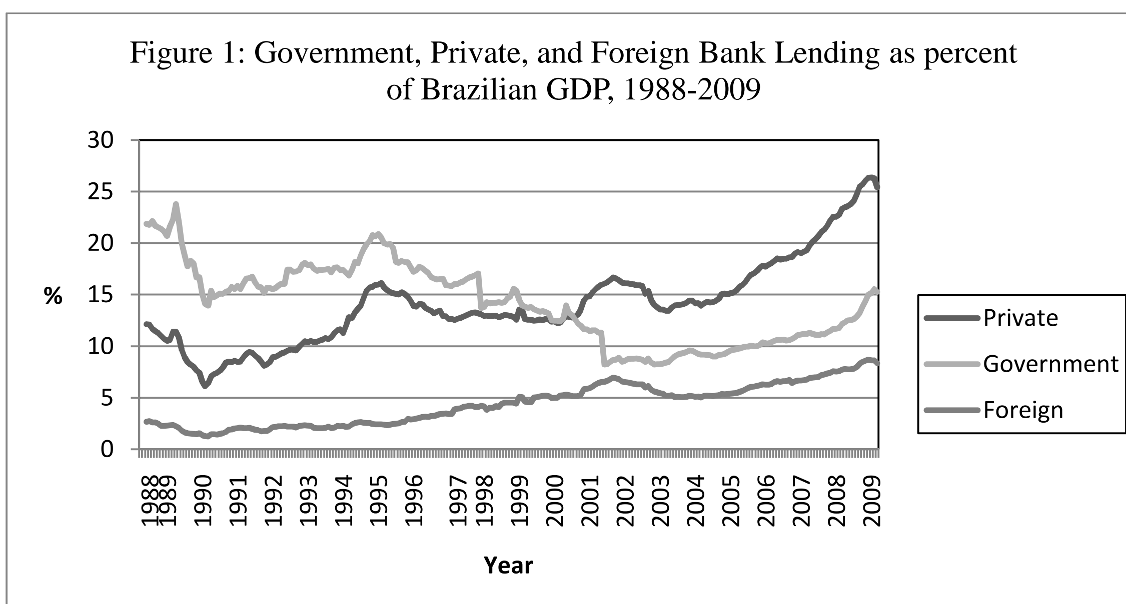


Figure 1: Government, Private, and Foreign Bank Lending as percent of Brazilian GDP, 1988-2009

The market shares of government banks, private banks and foreign banks in domestic Brazilian credit from 1988-2009 are reported in Figure 1. First, the trajectories of credit from government, private and foreign banks suggests that state presence in banking *declined* during the 1990s through privatization of state government banks. However, since capitalization and reform in 2001, government banks increased market share substantially, consistent with our argument that they have modernized to compete alongside private and foreign banks. Further comparison of government, private and foreign bank policies suggest that government banks 1) provide more loans per capita, 2) provide more counter-cyclical credit to help firms and households through economic downturns and 3) hold treasury bonds *for the term* rather than trading or unloading, a difference that helps reduce market pressures to shorten the term and increase the cost of government debt.

Bank Returns in Brazil and Select Latin American and Reference Countries, 2003-2007

		2003	2004	2005	2006	2007
Brazil	Government	23.5	21.5	26.5	33.7	
	Private	16.0	26.2	25.9	27.3	
	Foreign	10.1	6.1	16.6	10.6	
	Bank System	15.8	17.6	21.2	20.6	22.4
Argentina		-22.7	-4.2	7.0	14.3	9.7
Chile		16.7	16.7	17.9	18.6	16.2
Mexico		16.1	17.2	24.4	26.2	20.2
Australia*		24.2	22.8	25.3	27.0	28.1
Canada		14.7	16.7	14.9	20.9	12.5
Spain		13.2	14.1	16.9	19.9	
South Africa		11.6	16.2	15.2	18.3	18.4

*Excludes credits under guarantee. Source: *Bankscope* cited in Central Bank of Brazil. *Financial Stability Report*. November 2008, p. 56 and Central Bank of Brazil, Financial Stability Reports, 2004-7

The above table also suggests that government banks have also systematically *outperformed* private and foreign banks operating in Brazil since capitalization of these institutions to meet Basel II Capital Risk guidelines of the Bank for International Settlements in 2001. This is an anomaly for theories of private bank efficiency and expectations of liberal reforms in the 1990s. Moreover, counter-cylical lending exposes government banks to late

and non-payment of loans. This reduces profits. Strategies to "hold" government securities also reduce profits. Nonetheless, government banks have reported *stronger* returns than foreign and domestic banks, on average, since capitalization in 2001.

The above data may conceal bad banking practices such as crony credit, bad loans and costs that in the end must be passed on to others through fiscal accounts or the money supply. Data from the Central Bank of Brazil help control for these possibilities and provide further comparison of bank performance. This section compares government, private and foreign banks in terms of the Basel Index, bad credit, late loans and stress tests that estimate the impact of hypothetical shocks to bank portfolios from foreign exchange devaluation and/or credit problems.

First, the Basel Index for government, domestic and foreign banks from 2002-2006 suggests that government banks remain capitalized well above levels set in Central Bank of Brazil guidelines (11.0 set in 1999). The Bank for International Settlements suggests an 8.0 level of capital in reserve against possible losses in lending and finance. The average Basel Index for government banks increased from 16.7 percent in 2002 to 19.7 percent in 2006. In comparison, the average Basel Index for private domestic banks increased from 15.1 pecent to 17.0 percent during this period, while foreign banks, on average, reported Basel Indexes of 15.2 in 2002, remaining at 15.4 in 2006. This suggests that government banks in Brazil retain sufficient capital in reserve against risks arising from bad credit or losses in financial markets.

Bank System Basel Index in Brazil, Select Latin American and Reference Countries

		2002	2003	2004	2005	2006
Brazil	Government	16.7	14.8	16.5	17.4	19.7
	Private	15.1	17.1	18.3	17.7	17.0
	Foreign	15.2	16.7	18.7	16.4	15.4
	Chile	14.1	13.6	13.0	12.5	12.0
	Mexico	14.4	14.1	14.5	16.3	15.9
	Australia	10.0	10.4	10.4	10.4	10.3
	Canada	13.4	13.3	12.9	12.5	12.1
	Spain	12.6	12.3	12.2	11.9	
	South Africa	12.4	14.0	12.7	12.3	12.2

Source: Central Bank of Brazil, *Financial Stability Report*, 2002-2006
Note: Basel Index = recommended minimum eleven percent relation between required net worth and risk-weighted total assets.

A closer look at changing Basel indexes reveal the consequences of counter-cyclical lending from federal government banks. Because private domestic and foreign banks adopted more cautious strategies and provided less credit during the downturn of 2002, these institutions maintained levels of capital reserves above levels found in government banks. The average Basel index for the domestic financial system thus remained roughly the same at year-end 2002 (0.6 percent increase to 16.2 over June 2002). However, this average conceals an increase of 2.1 percent in the Basel Index for private banks (largely meaning they chose to hold low risk rated government paper) and a decline of 2.3 percent of the Basel Index for government banks (meaning they incurred risks to lend during downturn and adjustment). Before assuming the worst, readers should note two matters. First, the Central Bank of Brazil requires banks to maintain a Basel Index of 11.0. This is three points greater than the 8.0

suggested in the 1988 Basel Accord and subsequent revisions for capital guidelines. In other words, Brazilian banks set aside almost half again more in additional capital reserves than levels recommended by the Bank for International Settlements. Second, the different Basel Index ratings of government and private banks also reflects the greater weight of credit, and therefore credit risk, in these institutions. And data on bad and late loans since 2001 suggest that the slight and temporarily higher levels of average Basel Indexes reported by government banks do not reflect broader deterioration of portfolios.

Furthermore, Banks in Brazil, and especially government banks, tend to be more conservative; setting aside not only ½ of deposits as compulsory reserves at the Central Bank of Brazil but also retaining additional reserves against bad loans and losses. First, comparative data suggests that Brazilian banks tend to set considerably larger sums aside in reserve against bad loans and other losses. Of the four large Latin American countries and four further economies reported by the IMF and Central Bank of Brazil, Brazil retained substantially larger reserves against bad loans than any country, except Spain during 2007. This confirms the particular characteristics of banking in Brazil; that of a higher cost and lower operating efficiency combined with larger reserves and provisions against losses.

Bank Reserves as Percent of Overdue & Late Loans in Brazil, Select Latin American and Reference Countries

	2003	2004	2005	2006	2007	2008
Brazil	320.0	371.9	287.4	280.0	286.2	270.9
Argentina	79.2	102.9	125.1	130.3	130.3	
Chile	130.9	165.5	177.6	198.5	210.7	
Mexico	167.1	201.8	232.1	207.4	194.7	
Australia	131.8	182.9	203.0	205.2	188.9	
Canada	43.5	47.7	49.3	55.3	44.9	
Spain	245.4	219.6	251.8	273.3		
South Africa	54.2	61.3	64.3			

Source: IMF *Global Financial Stability Report*, 2008, cited in Central Bank of Brazil. *Financial Stability Report*. November 2008, p. 56

The level of bad and late loans in bank portfolios is another measure of bank solidity. The convergence of bad credit levels in government, private and foreign banks from 1988-2008 introduced this study. Further comparison suggests that although government banks retain higher levels of bad and late loans in specific sectors (especially home loans) the value of late loans as a percent of total loans in government banks fell *below* levels in private and foreign banks during 2008 (See table on following page). The value of bad credit (loans over 12 months past due) in government banks decreased from R$37.2 billion in 2001 to R$14.9 billion in June 2006. This places the value of bad credit in government banks *below* the value found in private and foreign banks. Bad credit in private banks increased from R$17.3 billion in 2001 to peak at R$25.5 billion during 2003, declining to R$18.0 billion in 2006. Foreign banks also reported increased values of bad credit, from R$12.3 billion in 2001, peaking at R$14.1 billion in 2003 and declining to R$13.0 billion in 2006. While late loans remained 8.5 percent of total loans in government banks in 2001 (above 7.5 percent in private and 6.5 percent in foreign banks), by 2008 the relation reverses. In 2008, late loans declined to 3.2 percent of total loans at government banks, while remaining at 3.7 percent in private banks and 4.5 percent in foreign banks.

Moreover, government banks in Brazil continue to set aside greater provisions against bad and late loans than private or foreign banks. In 2004, government banks retained 8.6 percent of the value of total loans in provision against losses from non-paying loans, while private banks retained 6.0 percent and foreign banks 5.1 percent. In 2008, the level of provisions at government banks had declined, on average, to 6.8 percent, but still remained well above the levels of 5.2 and 5.1 percent recorded at private and foreign banks.

Late Loans and Provisions in Government, Private and Foreign Banks, 2001-2008

	Government Banks			Private Banks			Foreign Banks		
	R$bi >12m	%Late	%Provision	R$bi >12m	%Late	%Provision	R$bi >12m	%Late	%Provision
2001	37.2	8.5		17.3	7.5		12.3	6.5	
2002	39.4	5.5		20.2	7.3		14.1	6.0	
2003	32.6	7.0		25.5	7.4		15.9	6.6	
2004	13.3	3.5	8.6	16.0	3.1	6.0	10.2	3.2	5.1
2005	13.4	3.9	8.1	16.3	3.5	5.9	10.7	3.5	4.8
2006	14.9	4.2	6.8	18.0	4.4	6.6	13.0	4.5	5.3
2007		3.5	7.5		3.7	5.5		4.3	5.0
2008		3.2	6.8		3.7	5.2		4.5	5.1
2009		3.0			5.6			6.1	
2010		2.0	4.7		4.0	6.6		4.1	5.3
2011		2.0	4.3		4.6	7.1		5.0	5.8

Note: Bad credit = loans past due over 12 months. %Late = percent of total loans >120 days overdue. %Provision = percent of total loan value set aside as reserves against losses. Empty cells reflect lack of data because of changing reporting standards at Central Bank.
Source: Central Bank of Brazil. *Financial Stability Report*. November 2008, p. 56 and 2002-2006

Again, in comparative perspective, the levels of late loans in Brazilian banking remains significantly higher than other countries. Table 2.13 reports the value of late loans as a percent of bank portfolios in Brazil, select Latin American and further countries for reference. This suggests that differences found in Brazilian government banks have to do with differences in the banking system such as judicial preference for debtors over creditors rather than the inferior performance of government banks.

Late Loans as percent of Total Loans in Brazil, Select Latin American and Reference Countries

	2003	2004	2005	2006	2007
Brazil	3.9	3.0	3.5	3.7	3.2
Chile	1.6	1.2	0.9	0.8	0.8
Mexico	2.8	2.2	1.8	2.1	2.5
Australia*	0.3	0.2	0.2	0.2	0.2
Canada	1.2	0.7	0.5	0.4	0.4
Spain	1.7	1.7	1.6	1.4	1.1
South Africa	2.4	1.8	1.5	1.1	1.2

* Does not include credits covered by guarantee.
Source: *Bankscope* cited in Central Bank of Brazil. *Financial Stability Report*. November 2008, p. 56

Further comparative data confirms that the Brazilian banking system tends to run on more expensive credit, higher returns and profits, and higher levels of late and bad loans. Banks operating in Brazil also retain higher levels of administrative and personnel costs. However, Brazilian banks also tend to set aside more generous reserves and provisions against losses. These structural characteristics can be seen in the comparative data in the table below. The data on government, private and foreign banks in Brazil and comparisons suggest that the Brazilian banking system incurs higher operating costs, maintains higher reserves, provisions and capital against losses and risk, but nonetheless produces strong returns.

Indicators of Bank Efficiency, Performance and Provisions in Brazil, Select Latin American and Reference Countries

	Cost/ Income	Op. Exps/ Assets	NPL/ Loans	Provisions/ NPL	Equity/ Assets
Brazil	62	6.5	4.1	153	9
Argentina	84	4.1	6.6	116	12
Chile	53	2.8	1.0	166	7
Colombia	52	5.9	3.2	144	11
Mexico	58	4.7	2.0	232	12
US	54	3.3	0.7	163	8
Spain	56	1.6	0.7	313	12

Source: World Bank. "Brazil: The Industry Structure of Banking Services." Brasília: June 2007, pp.

Comparison of administrative costs in Brazilian banking with levels in other large Latin American and emerging and reference economies suggest that Brazilian banks retain higher costs. From 2001 through 2005, the value of administrative costs as a percent of bank assets in Brazil declined from 6.9 percent to 5.8 percent, but remained significantly above levels reported from Chile (3.0 to 2.7 percent) Mexico (4.7 to 4.6 percent), and well above reference countries such as Australia, Canada and Spain (1.6, 3.6, and 1.1 percent respectively). Although time series lacks comparison after 2005, administrative costs in Brazilian banks decline significantly from 5.8 in 2005 to 4.2 in 2008.

Bank Administrative Costs in Brazil, Select Latin American and Reference Countries (% Assets)

	2001	2002	2003	2004	2005	2006	2007	2008
Brazil	6.9	6.1	6.0	6.1	5.8	5.5	5.1	4.2
Chile	3.0	3.0	2.7	2.7	2.7			
Mexico	4.7	4.8	4.6	4.3	4.6			
Australia	1.7	1.7	1.6	1.6	1.6			
Canada		2.7	2.7	2.7	2.7	2.6		
Spain	1.7	1.7	1.6	1.4	1.1			

* Adjusted average of total assets.
Source: *Bankscope* cited in Central Bank of Brazil. *Financial Stability Report*. November 2008, p. 56

A final comparison of government, private and foreign bank solidity is based on Central Bank of Brazil estimates of the impact of hypothetical shocks to the Brazilian

economy on domestic banks. These estimates are based on the revisions of the widely used Value-at-Risk estimates proposed by Boudoukh, Richardson and Whitelaw that adapts the original *VaR* method developed and commercialised by J.P. Morgan.[19]

Stress Tests for Impact of Credit, Interest Rate and Foreign Exchange Shock on Basel Index: Comparison of Government, Domestic and Foreign Banks, 2001-2006

	2002	2003	2004	2005	2006*
Government	11.2	10.4	11.4	11.3	10.9
Domestic	11.2	13.2	12.6	12.1	10.3
Private	10.3	13.1	13.5	10.8	8.4

Source: Central Bank of Brazil, *Financial Stability Reports*, 2002-2006
Note: Basel Index = Capital risk guideline measure defined by Bank for International Settlements Basel Committee that recommends 8 percent relation between PR and total assets weighted by risk level. Since 2002, Central Bank of Brazil minimum requirements of Basel Index remains 11 percent. For methods of calculation, see Central Bank of Brazil, Financial Stability Report. Brasilia: 2006, p. 76

Central Bank of Brazil tests estimate that, in the face of foreign currency valuation and interest rate shock, government banks would nonetheless remain at, or slightly below, the capital requirements against credit risk recommended by the central bank. Again, it should be noted that Basel Index levels recommended in the BIS Capital Requirements guidelines for the Basel Index of banks are 8.0, while the Central Bank of Brazil has set minimum Basel Index levels of 11.0. Given that federal government bank portfolios include more credit than private banks and, especially, foreign banks, the estimate of a shift to 10.9 in the average Basle index for federal government banks in the face of a credit shock provides further evidence that these financial institutions are solid and their capital reserves sufficient. In sum, comparison of results for government, private and foreign banks in the estimates reported by the Central Bank of Brazil of the likely impact of a shock to the Brazilian economy in terms of interest rates and foreign exchange rates also suggests that government banks appear solid. The average Basel Index reported for government banks in this stress test was 13.5, above the 11.0 Central Bank of Brazil guideline and well above the 8.0 level suggested by the BIS.

Understanding the capacity of Brazilian banks to cope with shocks and risk is not just a theoretical exercise. Since the currency crisis in Mexico during 1994-1995, the newly stabilized currency was tested by shocks from home and abroad. Policies first dramatically increased interest rates under a fixed exchange rate regime, then freed the real to devalue under a flexible foreign exchange rate regime in January 1999. The Asian currency crises during second semester 1997 led the Central Bank of Brazil to increase benchmark Selic interest rates to 43.4 percent in November. In August 1998, the declaration of moratorium on foreign debt payments by Russia the central bank to once again increase Selic interest rates from 20 to 40 percent under the fixed exchange rate regime by November of that year. These shocks from abroad coincided with preparations for national elections during 1998, leading the IMF and other official creditors to provide strong support for the Brazilan government. Nonetheless, by January 1999 (after the election), market pressure led to the abandonment of the fixed foreign exchange rate regime that had served as nominal anchor for economic

[19] Calculation first published in *Resenha BM&F*, Vol 122, 1998 (described in Central Bank of Brazil, *Financial Stability Report*, 2002 & 2003 then as: Boudoukh, Jacob, ‚Matthew Richardson, Richard Stanton & Robert Whitelaw “MaxVaR: Long Horizon Value at Risk in a Mark-to-Market Environment” *Journal of Investment Management*, 2004,Vol. 2, No. 3, pp. 14-19.

policy since 1994. The real quickly devalued from 1.21 to 2.0 against the US dollar by the end of January and led to considerable changes in policy (a flexible foreign exhange rate regime, inflation targeting and the implementation of further fiscal reforms). Once the real revalued from R$2.2 against the dollar in March to R$1.66 in April 1999, the government moved to consolidate this new triad of economic policies. Since 1999, flexible foreign exchange markets, inflation targeting and fiscal reform have remained in place. This suggests that Brazilian banks have weathered volatile parameters and large risks during a marked political business cycle: One involving the transition from reformist President Cardoso to PT President Lula. Since recovery of the economy during 2004, the coalition government under PT President Lula has sought to expand the contribution of government banks to accelerate growth and social inclusion. These policies have not undermined economic fundamentals or eroded the institutional foundations of comparative advantage retained by Brazilian federal government banks.

In sum, the advances of Brazilian banking toward Basel Accord regulations during the 1990s and 2000s, the adoption of more transparent and timely reporting standards, and the modernization of government banks under pressures from liberalization placed federal banks in a new situation in the face of crisis once it hit the country in 2008. A closer look at the big three federal government banks is in order to better understand these changes.

The Banco do Brasil

Upon taking office in 2003, President Lula retained the central economic policies of the Cardoso administration such as inflation targeting, tight fiscal and monetary policy and the operational independence of the Banco do Brasil. However, the recovery of investor confidence during 2003 and the return of stronger growth levels during 2004 led to a period of what the Central Bank of Brazil describes as organic growth at the Banco do Brasil. From 2004-2008, the Banco do Brasil contributed to the deepning of domestic credit markets and emerged as leading investment bank at the Bovespa stock market. Furthermore, once the Bovespa collapsed, credit became short, and a sharp downturn ensued during 2008, the Banco do Brasil provided emergency loans, infusions of capital through stock purchases, and the acquisition of small and mid-sized firms and banks unable to weather the sharp decline and lack of credit. Although the merger of Itaú and Unibanco in 2008 displaced the Banco do Brasil as the largest financial institution in Latin America, the bank retains powerful institutional foundations of comparative advantage and networks that cross Brazilian society, politics and markets.

The Banco do Brasil also remains at the center of Brazilian politics and policy disputes. Indeed, leaders of the PT party faction *articulação* (articulation) includes career employees of the Banco do Brasil and presidents of the Brazilian bank workers union such as Luiz Gushiken and Ricardo Berzioni. Both were nominated to ministerial posts by President Silva in January 2003. By August 2003, 21 of 33 top positions at the Banco do Brasil had been filled by new representatives of the PT, most Banco do Brasil employees and members of the Brazilian bank workers union. Critics decried politicization. However, the resistance of bank representatives described above to presidential appeals to increase credit during 2003 was followed by more neutral appointments during 2004. When Banco do Brasil President Cassio Casseb Lima resigned in November 2004 (under charges of irregularities in consulting contracts at the bank), President Lula nominated Rossano Maranhão Pinto, a career employee and Banco do Brasil vice president to head the bank. Further appointments of PMDB political leaders to cement support for the PT coalition government were also criticized as politicization of the bank. However, Banco do Brasil officials responded that these

experienced political leaders of the PMDB brought competitive advantages to the bank based on their networks that cross the public and private sector. These networks and relations during the second PT coalition government of President Lula also appears different than the first, given the departure from core offices of the presency by longtime advisors to Lula that came from the Banco do Brasil and bank workers union. By late 2006 only one of seven vice presidents of the Banco do Brasil was a member of President Lula´s Workers´ Party (PT).

Again, Banco do Brasil policies and growth since recovery of the economy in 2004 involved first a period of expansion during four years of growth, followed by a turn to counter cyclical lending and finance once financial crisis abroad produced first a severe contraction in credit supply then a sharp economic downturn in fourth quarter 2008. Institutional foundations of comparative advantage are behind Banco do Brasil policies during both periods. First, the capitalization of Brazilian firms on the Bovespa stock market is closely related to the groups that cross politics, government banks, the powerful bank worker labor union, the Banco do Brasil employee private pension fund and bank consortia often led by the Banco do Brasil investment banking division (often joined by the BNDESpar and Caixa investment banking division). Recent developments are complex and will require further research. However, rather than convergence toward private banking and a market-centered financial system, examination of Banco do Brasil policies and market shares during the 2000s suggests that federal government banks not only remain at the center of politics, policy and development strategies but that these institutions have modernized to compete against private and foreign banks.

The large scale and scope of the Banco do Brasil has permitted use of the bank for counter-cyclical lending and leadership in capital markets without deteriorating bank balance sheets. Since 2003, the Banco do Brasil has remained well within domestic bank regulations and Basel Accord guidelines. During 2002 and 2003, reforms at the Banco do Brasil sought to reduce costs and increase efficiency ratings. Indeed, the relation between the Banco do Brasil and President Lula *reversed* past patterns. In the 1950s, conflicts were between national developmentalist groups at the Banco do Brasil and more orthodox Ministers of Finance. In 2003 and once again during the 2008 financial crisis, differences between President Lula and the Banco do Brasil were the reverse: Banco do Brasil management refused to dramatically increase loans in 2003 and resisted requests to reduce the price of credit in 2008. In 2003, the caution imposed by political risk perceptions led President Lula to respect the operational autonomy of the Banco do Brasil. In April 2009, Banco do Brasil President Antonio Francisco de Lima Neto was fired after refusing to reduce interest rates on loans. This reversal of policy positions from the 1950s suggests, in a broader sense, a transition from the macroeconomics of populism to the microeconomics of government banking in the 21st century. Government banks do not provide easy or all solutions. Instead, credit and finance policies are subject to market discipline, credit risk analysis and the realities of business cycles.

Review of the Banco do Brasil's balance sheet from 2002-2008 suggests that the bank developed organically from 2002-2007 with gradual increases reflecting the competitive advantages at the top of Brazilian banking and finance. Policies changed during 2007 and 2008 as the credit shortage caused by international financial crisis led to the Banco do Brasil assuming, once again, lending of last resort functions by extending interbank investments and loans to small and medium sized banks to avert further declines in domestic liquidity. The Banco do Brasil also acquired a 51 percent stake in the Votarantim bank to avert a run on deposits and possible failure while acquiring São Paulo state government savings bank, Nossa Caixa, for R$7.6 billion in 2008. These acquisitions reflect concern about the

replacement of the Banco do Brasil as the largest financial conglomerate in Brazil after the merger of Itaú and Unibanco.

Banco do Brasil Balance Sheet Summary, 2002-2008, R$ billion

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Assets										
Interbank Investments	10.1	5.0	2.7	8.0	17.5	43.4	95.1			
Interbank Deposits	7.6	28.3	13.7	20.9	11.6	7.7	24.2			
Securities	70.9	69.6	73.4	66.4	73.1	75.2	73.2			
Central Bank Deposits*	8.1	18.6	22.1	24.4	28.1	33.4	21.2			
Loans to Private Sector	8.9	65.2	75.7	88.5	117.8	146.3	181.0			
Loans to Public Sector	5.6	4.3	4.1	3.7	4.3	2.4	23.0			
Receivables	29.7	27.3	31.2	35.1	40.4	54.8	80.8			
Other Assets										
Total Assets	204.6	230.1	239.0	252.9	296.3	367.2	507.3			
Liabilities										
Deposits	97.2	110.0	115.5	137.6	158.8	188.2	271.1			
M MKT Borrowing	48.3	40.0	44.5	30.5	49.2	72.2	91.4			
Treasury & BNDES	5.9	7.4	10.6	13.3	14.3	17.5	22.4			
Shareholder Equity	9.2	12.1	14.1	16.8	20.7	24.2	29.9			
Other Liabilities										
Total Liabilities	204.6	230.1	239.0	252.9	296.3	367.2	507.3			

* Compulsory deposits for commercial banks according to Central Bank regulations.
Source: Banco do Brasil Annual Reports, Historical Series, 2002-2008

From 2002 through 2006, the balance sheet of the Banco do Brasil suggests a period of growth based on loans to the private sector, with deposits and shareholder equity increasing largely apace. After 2006, the balance sheet changes fundamentally, with capital injections from money market borrowing increasing from R$49.2 billion in 2006 to R$91.4 billion in 2008, while Banco do Brasil liabilities with Treasury and BNDES increased from R$14.3 billion in 2006 to R$22.4 billion in 2008. The asset side of the balance sheet also suggests fundamental change. Private sector lending increased from R$117.8 billion in 2006 to R$181.0 billion in 2008 reflecting acquisition of portfolios from Nossa Caixa. Interbank investments increased from R$17.5 billion in 2006 to R$95.1 billion in 2008, while interbank deposits also increased from R$11.6 billion in 2006 to R$24.2 billion in 2008. The counter-cyclical lending strategies of the Banco do Brasil during 2008 also included an increase of lending to the public sector from R$2.4 billion in 2007 to R$23.0 billion. Banco do Brasil reponses to government credit policy can also be seen in the release of 40 percent of compulsory deposits retained at the central bank; Banco do Brasil deposits at the central bank declined from R$33.4 billion in 2007 to R$21.2 billion in 2008 – freeing this value for loans and investments.

Networks and relations during the second government of President Lula appear different than the first, given the departure from core offices of the presency by longtime advisors to Lula that came from the Banco do Brasil and bank workers union. By late 2006 only one of seven vice presidents of the Banco do Brasil was a member of President Lula´s Workers´ Party (PT). The corporate profile of the Banco do Brasil suggests, once again, the hybrid character of this government bank, one listed on the Bovespa Novo Mercado but with over 65 percent of shares owned by the Brazilian federal government Treasury.

Banco do Brasil Corporate Profile, 2008

Shareholders	Brazilian Treasury	65.3%
	Foreign Investors	11.5%
	Previ Banco do Brasil Empoyee Pension Fund	10.5%
	Individuals	4.5%
	BNDESpar	2.5%
	Shareholder Equity, December 2008 (R$billion)	521.2
Divisions	Cobra (information technology)	
	BB Leasing	
	BB DTVM (Stock and Bond Broker)	
	BB Cartões (Payment Cards)	
	BB Securities, LLC	
	BB Corretora (Stock Market Trading)	
Investment Bank	BB Securities	
	BB Viena (Foreign Banking)	
	Ativos S.A. (Asset Management)	
	BB Asset Management	
	BB Tourismo (Tourism)	
Insurance Shareholding	Brasil Saude	49.0%
	Aliança do Brasil	100.0%
	Brasil Prev	49.0%
	Brasil Veículos	40.0%
	SBCE	12.0%
	Bovespa	
Shareholding	Visa Vale	35.0%
	Visanet	35%
	Cibrasec	9.0%
	Tecban	35%
	Itapebi	19.0%
	Pronor	1.7%
	Kepler Weber	20.0%
	NeoEnergia	8.8%
Foundation	Fundação Banco do Brasil	

Source: Banco do Brasil Financial Statements, 2008

The large scale and market shares of Banco do Brasil in domestic banking also suggest how these institutional foundations have provided comparative advantage. At year end 2008, the Banco do Brasil retained R$246.3 billion or 20.7 percent of the asset management market, 28.0 and 24.6 percent of export and import foreign exchange markets, 23.2 percent of the mutual fund market, and over R$224.8 billion in loans (R$17.6 billion payroll loans (22.4 percent of market), a full 59.8 percent of rural credit system and R$97.0 billion in business loans. Total funding reached over R$362.6 billion. Banco do Brasil

customers in 2008 reached 47.9 million, with the bank retaining 39,700 AMTs and 76.6 million bank cards (23.9 million credit cards and 52.7 million debit cards). Like the Caixa Econômica Federal, the Banco do Brasil also processes government payments, with retirement and social security payments numbering 74.5 million transactions during 2008. Although this implies administrative costs (and receipts) this also brings customers and prospective customers, into Banco do Brasil branch offices.

During 2008, the Banco do Brasil continued to expand operations, form joint ventures, acquire private and government banks and modernize operations. A secondary offering of stock in January 2008, granting of shares by VISA to the Banco do Brasil, and upgrading of the bank to investment grade BB- by Standard & Poors in April 2008 suggest that market orientation of the bank continues during the Lula administration, despite counter-cyclical credit policies. A Lower Income Segment Department was also created to assume Banco Popular do Brasil operations along with correspondent banking relations and regional sustainable development programs. The Banco do Brasil also received permission to use savings accounts for home loans, enabling the bank to compete on level ground with Caixa Econômica Federal. During 2008, the Banco do Brasil also acquired the state government banks Banco do Piaui, Banco de Santa Catarina (33rd largest bank in Brazil with US$3.0 billion assets at year end 2007), and São Paulo government savings bank, Nossa Caixa (12th largest Bank in Brazil with US$26.7 billion in assets at year end 2007). In sum, the diverse corporate divisions and financial operations of the Banco do Brasil provided policy options during 2008 to counter the credit shortage and help firms and domestic banks to adjust.

Banco do Brasil and Private Bank Returns and Capital Adequacy, 2002-2009

	Basel Index			Return on Assets			Return on Liquid Assets		
	BB	Itaú	Bradesco	BB	Itaú	Bradesco	BB	Itaú	Bradesco
2002	12.2	18.4	17.9	1.2	2.6	2.0	30.2	28.8	28.3
2003	13.7	19.8	19.9	1.1	2.8	1.6	23.1	29.7	22.8
2004	15.2	20.6	18.8	1.3	3.0	2.3	24.0	29.2	30.9
2005	17.1	17.0	17.3	1.2	3.7	2.6	18.7	35.3	28.4
2006	17.3	17.1	18.8	2.8	3.1	2.5	26.7	28.8	26.3
2007	15.6	17.9	15.6	1.4	3.2	2.2	22.2	32.1	24.4
2008	15.2	16.1	16.9	2.5	1.9	1.6	30.4	22.1	21.1
2009*	15.0	16.5	16.6	1.2	1.3	1.4	23.8	18.2	19.5

* Annualized first quarter 2009 results.
Source: Banco do Brasil, Itaú and Bradesco Annual Reports, 2002-2009

Comparison of Banco do Brasil returns and capital adequacy with the two major private Brazilian banks Itaú and Bradesco suggests that the performance and solidity of the Banco do Brasil remains equal or superior to private banks. During 2002 and 2003, the capital adequacy of the Banco do Brasil and return on assets remained below levels reported by the two largest Brazilian private banks, suggesting the impact of counter-cyclical lending. However, after 2004, the Basel index of the Banco do Brasil reached 17.1, far above BIS standards of 8.0 and Central Bank of Brazil requirements of 11.0. Furthermore, from 2006 through first quarter 2009, returns on assets, returns on liquid assets, and the Basel index of the Banco do Brasil exceed levels reported by Itaú and Bradesco. In sum, despite providing counter cyclical credit and despite having been replaced by the Itau-Unibanco merger as the

largest Brazilian bank, the performance and capital adequacy of the Banco do Brasil remains at or above levels reported by the two largest private banks.

In sum, since liberalization of banking and finance and privatization of state government banks during the 1990s, the Banco do Brasil has been transformed from direct state owned bank into one of two very large financial conglomerates that dominate domestic banking in Brazil. Instead of retaining easy access to funds at Treasury to cover losses, the Banco do Brasil has adopted international corporate governance standards to become listed on the Bovespa Novo Mercado and retains an important role in virtually every aspect of Brazilian banking and finance. Although sale of shares in the 1990s were designed to transfer corporate governance and control of the national bank to the private sector, the federal government retains 65 percent of stocks after two sale of stocks capitalized the bank during the 2000s. The massive size and wide scope of Banco do Brasil networks across banking, financial markets, political and social forces, and business have led the bank to realize record profits during the period of growth from 2004-2008 and provide counter-cyclical credit to avert a further decline in industrial activity and the economy as the US and global financial crisis hit Brazil first with a 50 percent decline in the Bovespa stock market and credit shortage followed by a steep but short decline in industrial production in late 2008. The transparency of Banco do Brasil quarterly reports and advances in Central Bank of Brazil supervision of domestic banking clarify the new tensions that have emerged during the PT government of President Lula. These tensions reflect the modernization and competitive advantages of the Banco do Brasil.

Caixa Econômica Federal (Federal Savings Bank, Caixa)

The third largest domestic bank, the wholly government owned Federal Savings Bank, Caixa, was also called on by President Lula during the recent financial crisis to increase the pace of growth, provide counter cyclical credit during downturns and to reduce consumer and corporate interest rates and bank spreads. Review of balance sheets and policies since 2001 suggest that the Caixa retains its core business in urban development, home loans, real estate, transfer of funds for government programs and services and lottery administration. However, investment banking, management of third party funds and the creation of of new products and services have both increased profits and increased popular access to banking and social services. The bank has recorded record profits since: R$1.08 billion (2002), R$1.6 billion (2003) and R$1.4 billion (2004). The Caixa became the fourth largest Brazilian investment bank by 2003, while gaining dealer status from the Central Bank of Brazil in primary and secondary markets for government securities. At year-end 2003, the bank retained an estimated R$76.7 billion of government paper (over ten percent of government paper) in its portfolio, assets earning over R$13.5 billion that year. Since recovery of the Brazilian economy in 2004, the Caixa has reported strong profits and continued to improve the structure of its balance sheet and converge toward international bank reporting standards.

In terms of assets, deposit base and the number of employees and branches, the data suggest that the Caixa has emerged from a process of rationalization and downsizing during the late 1990s and expanded “organically” since capitalization in 2001. Assets declined from over US$99.9 billion in 1997 to US$36.3 billion in 2002 after reorganization and capitalization. Deposits also declined from US$54.1 billion in 1997 to US$21.6 billion in 2002. The number of employees and branches declined from 104.253 and 2316 to 98.971 and 1803 respectively, but returned to 104.934 and 2,428 by 2006. After reorganization and capitalization in June 2001, Basel indexes and the ratio of fixed assets over equity indicate substantial reform and transition toward international banking standards. The Basel Index that measures the adequacy of capital reserves against possible losses and risks increased from

13.5 (4.9 in March 2001 before capitalization) to reach 27.8 and remain twice above the Central Bank minimum of 11.0 at 25.2 in 2006. The ratio of fixed assets as a proportion of equity also declines substantially from 63.8 at year end 2001 to 19.7 in 2007.

Summary of Caixa Structure and Performance, 1995-2007

	Assets	Profits	Deposits	Employees	Branches	Basel	FA/Equity
1995	82.6	67.2	50.3	99,866	2,316		
1996	90.7	235.1	51.5	99,343	2,105		
1997	99.9	87.5	54.1	96,300	1,803		
1998	94.8	169.3	49.9	94,859	1,819		
1999	68.4	157.1	34.4	94,194	1,919		
2000	64.4	136.2	32.2	104,253	1,921		
2001	43.6	-126.5	29.8	98,971	2,013	13.5	63.8
2002	36.3	146.2	21.6	106,548	2,147	14.6	53.7
2003	52.1	261.7	28.1	100,498	2,046	19.2	41.3
2004	55.6	299.9	34.5	100,164	2,135	20.2	36.1
2005	80.6	485.2	45.6	106,729	2,321	27.8	20.1
2006	98.1	487.4	56.7	104,934	2,428	25.2	19.7
2007	140.9	448.5	80.0	106,770	2,052	28.8	12.8
2008	126.6	573.5	70.8	103,895	2,069	20.6	11.9

Note: Assets & Deposits = US$billion. Profits = US$million. Basel = BIS Basel Accord index of capital reserve adequacy. FA/Equity = Fixed Assets / Equity, a summary indicator of bank modernization.
Source: Central Bank of Brazil, Top 50 Banks in Brazil, available at www.bcb.gov.br

Caixa Annual Reports and transition toward Central Bank and international bank accounting standards introduce breaks in the time series of financial performance after 2001. However, international bank reporting standards have been used by the Caixa since 2005 and the data provide further view of the policies and performance of the bank. Table X reports returns on stockholder equity, assets, Basel solvency index, immobilization index, provisions as a percent of credit operations, bank efficiency index and coverage of personnel costs. The data are consistent with the broader comparisons reported in chapter two that suggest high profits and returns alongside higher levels of provisions and reserves against capital risk. Returns on stockholder equity have remained above 20 percent per year, reaching 30.6 percent in 2008. Returns on liquid assets remained between 0.9 percent and 1.3 percent, below the average levels recorded by private and foreign banks. The Basel Index of the Caixa remained well above the 11 percent level required by the Central Bank, declining from 27.9 in 2005 to 20.6 in 2008.

Caixa Performance Indicators, 2005-2008

Indicator	2005	2006	2007	2008	2009	2010	2011
Return on Shareholder Equity	26.1	26.0	22.6	30.6			
Return on Liquid Assets	1.1	1.1	0.9	1.3			
Basel Solvency Index	27.9	25.3	28.9	20.6			
Immobilization Index	20.1	19.7	12.9	12.0			
Provisions as % Credit Operations	10.1	9.8	9.1	8.6			
Efficiency Index	64.5	64.2	75.5	71.8			
Coverage of Personnel Costs	92.5	89.6	94.3	86.8			

Source: Caixa Econômica Federal, Relatórios de Administração, 2005-2011

The immobilization index of the Caixa also declined from 20.1 percent in 2005 to 12.0 percent in 2008, suggesting transition toward standard levels of international banking. However, the value of provisions as a percent of credit operations remains much higher than international bank practices, albeit declining from 10.1 percent in 2005 to 8.6 percent in 2008. Finally, both the substantial increase in efficiency index from 64.5 to 71.8 percent suggests that the Caixa has distanced further from international private bank levels that tend to approach 50.0 percent. This has resulted in the declining level of coverage of personnel costs and indicates the comparatively larger organizational structure and less use of outsourced labor at the Caixa.

Caixa Deposits and Sources of Funds, 2005-2008, R$million

	2005	2006	2007	2008	2009	2010	2011
Bank Deposits	6.92	8.63	11.55	13.20			
Savings Deposits	53.28	60.06	75.60	92.55			
Mid-Term Savings Deposits	38.73	42.19	41.36	48.62			
Certificates	(12.70)	(14.12)	(12.44)	(18.31)			
Escrow	(26.02)	(28.06)	(28.91)	(30.31)			
Funds and Programs	7.94	10.34	13.07	11.00			
Other	0.09	0.15	0.19	0.13			
Caixa Total	106.90	21.39	141.79	65.52			
Bank System Total	682.68	781.48	926.72	274.82			
Caixa Deposits as % Total	(15.6)	(15.5)	(15.31)	(12.9)			

Source: Caixa Econômica Federal, Relatórios de Administração, 2005-2008

The liability side of Caixa balance sheets from 2005-8 suggests that the bank has distanced itself from reliance on official savings programs and funding toward consumer bank and savings deposits. Bank deposits increased from R$6.9 billion in 2005 to over R$13.2 billion in 2008. Savings deposits increased from R$53.2 billion in 2005 to over R$92.5 billion in 2008. Furthermore, the increase of mid-term savings deposits originated from sale of savings certificates instead of escrow held by the Caixa, the latter subject to judicial review and removed from balance sheets in 2008. The value of funds deposited at the Caixa from government funds and programs increased from R$7.9 billion in 2005 to R$11.0 billion in 2008, although it remains less than ten percent of total deposits. In terms of total value of deposits and savings, the Caixa increased total value of deposits from 107 billion to over 165 billion from 2005-8.

Caixa Loans, 2005-8, R$ million

	2005	2006	2007	2008	2009	2020	2011
Commercial	14.652	16.329	19.134	28.854			
Consumer	8.925	9.474	11.063	13.747			
Business	5.727	6.854	8.071	15.107			
Home	20.208	26.113	32.475	45.075			
Sewage and Infrastructure	1.646	2.556	3.585	5.445			
Other	690	691	694	689			
Risk Provision	-3.773	-4.469	-5.090	-6.900			
Total Caixa Loans	37.195	45.689	55.888	80.062			

Source: Caixa Econômica Federal, Relatórios de Administração, 2005-8

In terms of lending, the data suggests that the primary focus of the Caixa on home loans continued during the late 2000s, although substantial increases in commercial lending for consumer credit and businesses suggest the diversification of the Caixa across credit markets. Since 2005, Caixa lending to consumers and business increased from R$8.9 billion to R$13.7 billion and from R$5.7 billion to R$15.1 billion respectively in 2008.

And unlike the high levels of bad and late credit reported during the adjustment to the end of high inflation in 1994-6 and financial crises (1994-5, 1997, 1998, 1999, 2001, 2003), the level level of late loans at the Caixa fell substantially during the years of economic growth and credit expansion from 2006-2008. The percent of late over total loans at the Caixa fell from 6.8 percent in 2006 to 4.0 percent in 2008 for commercial loans generally, and from 6.2 percent to 5.9 percent for consumer loans, and 7.5 percent to 2.2 percent for loans to business. The value of late home loans as a percent of total home loans also fell from 3.1 to 1.7 percent in 2008.

Caixa AA-H Credit Classification, 2001-8

	Days Late	Provision	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
AA	<15	0%	5.9	5.6	6.6	6.3	5.4	5.0	6.3	9.4			
A	<15	0.5%	24.3	26.4	31.3	28.8	39.3	43.5	40.1	33.3			
B	15-30	1%	12.7	12.6	13.7	13.9	14.3	15.8	20.6	27.1			
C	31-60	3%	20.3	16.6	14.5	16.9	16.7	19.2	19.4	19.2			
D	61-90	10%	17.8	26.1	20.7	21.7	13.3	6.0	4.5	3.3			
E	91-120	30%	1.8	1.9	2.0	2.0	2.2	1.3	0.9	0.7			
F	121-50	50%	4.9	1.5	1.5	1.4	1.0	0.7	0.7	0.7			
G	151-80	70%	1.5	0.8	0.9	1.0	0.8	1.0	1.0	0.9			
H	>180	100%	10.4	8.7	8.5	7.7	6.8	7.2	6.1	5.1			
R$billion			20.94	23.53	26.14	30.16	38.55	47.36	57.39	81.8			

Source: Caixa Annual Reports, 2002-2008

The credit risk matrix of Caixa loans from 2001 to 2008 confirms this trend of improvement (See above table). The data also provide evidence of greater transparency and the improvement of bank reporting and accounting standards as well as Central Bank supervision of banks. Instead of two categories of credit (good = all loans up to 90 days overdue; bad = loans over 90 days overdue) the Central Bank of Brazil has adopted international standards of credit classification (from AA to H) and imposed regulations that banks increase or decrease provisions according to the distribution of loans in these categories. The scale of provisions required by the Central Bank vary from zero percent against loans classified as AA to provision of 100 percent of loan values for credits classified as H, that is to say over 180 days late.

The percent of loans over 180 days late has decreased from 10.4 percent of total in 2001 to 5.1 percent in 2008. Furthermore, all categories of late payment, except for loans between 15-30 days late, decreased significantly from 2001 through 2008. In comparison, loans classified as AA (paid and guaranteed) and A (paid on time) increased from 5.9 percent to 9.4 percent and 24.3 percent to 33.3 percent of total loans. The only category of late loans that increased over the period is that of loans 15-30 days overdue, from 12.7 percent to 27.1 percent of total.

The central argument of this study is that Brazilian federal government banks retain institutional foundations of competitive advantage over private and foreign banks. Further

data that suggests this advantage can be seen in the increasing volume and market share of the Caixa in debit and credit cards. The number of Caixa debit cards increased from 22.4 million in 2002 to over 48.2 million in 2008, with Caixa market share of debit cards increased from 19.6 percent ot total card market in 2002 to peak at 23.0 percent in 2005 and remaining at 21.9 percent of the total number of debit cards in Brazil in 2005.

Two examples illustrate the institutional foundations of comparative advantage of the Caixa in the card payment industry. First, like other banks in Brazil, the Caixa shares an agreement with Visa for payment processing. However, unlike other banks in Brazil, the Caixa was contracted by the federal government to distribute ATM citizenship cards to recepients of federal government family grants and other transfer programs. Apparently without seeking approval, the Caixa stamped its brandname on the federal government ATM citizenship card and has continued to do so, despite charges of unfair competition from private domestic banks. Furthermore, a Caixa request to transform its 110 million ATM citizenship cards into bank cards, currently pending at the Central Bank, would dramatically increase the number of bank card holders in Brazil (182.4 million at year end 2007).

Caixa Debit and Credit Card Market Shares, 2002-2008

	Million Debit Cards			Million Credit Cards			Million
	Caixa	Total	%Mkt	Caixa	Total	%Mkt	Interbank Checks
2002	22.4	114.2	(19.6)	1.6	40.7	(3.9)	2,295.0
2003	28.0	125.4	(22.3)	1.8	44.0	(4.0)	2,136.0
2004	32.0	149.1	(21.3)	2.0	53.5	(3.7)	1,967.0
2005	37.7	163.9	(23.0)	2.5	67.5	(3.7)	1,839.0
2006	38.4	174.4	(22.0)	3.1	95.2	(3.2)	1,622.0
2007	40.0	182.4	(21.9)	3.9	117.7	(3.3)	1,449.0
2008	48.2			4.2			

Source: Central Bank of Brazil, Diagnóstico do Sistema de Pagamentos de Varejo do Brasil, Adendo Estatístico – 2007, p. 9 and Caixa annual reports, 2003-2008

Having reviewed the Banco do Brasil and Caixa, a brief look at the counter-cyclical policies and performance of the third Brazilian federal government bank – the BNDES – is in order.

Banco Nacional de Desenvolvimento Econômico e Social (National Bank for Economic and Social Development, BNDES)

The BNDES is a paradigmatic development bank. The trajectory of the BNDES involves a sequence of policies and financial practices that have shaped Brazilian development. During the 1950s, the BNDE supplied direct credits for transportation, electric energy, infrastructure and steel production. During the 1960s, the bank diversified under financial reforms. During the 1970s, the BNDE acted to complete state-led import substitution industrialization by channeling foreign finance and forced savings into capital goods, project lending and regional development programs. During the 1980s, the bank shifted away from public investment under pressure of fiscal crisis and foreign debt. During the 1990s, the BNDES became agent for the privatization of state owned enterprises. The BNDES remained virtually the only source of long-term finance during a decade of financial crises in emerging markets (1994-2003). Since 2000, the bank has shifted toward "second generation" reforms designed to finance the private sector and free market forces, deepen domestic capital and equity markets

and lend to small, medium and micro-enterprises. Since 2004, capital inflows and a booming domestic stock market have reinforced the capacity of the BNDES to underwrite long-term investments and transform large Brazilian firms into multinational corporations. Since 2007, BNDES President Coutinho has pursued a full service approach, attempting to help star-up small and medium firms; provide funds to expand successful firms; and participate in venture capital funds to help enterprises transit toward corporate governance standards and initial or secondary offerings of stock on the Bovespa exchange. In 2008, as financial crisis led to a shortage of credit, collapse of share prices, and sharp decline in industrial production by fourth quarter 2008, the BNDES also provided lending of last resort to major Brazilian corporations while retaining long term goals for massive investments in deep sea petroleum production.

BNDES Market Share of Interbank and Non-Bank Loans, 1995-2008, US$ Billion

	Interbank Loans			Non-Bank Loans		
	BNDES	%Mkt	Total	BNDES	%Mkt	Total
1995	15.6	(32.4)	48.1	8.0	(3.8)	207.1
1996	18.1	(35.4)	51.1	10.9	(4.9)	219.8
1997	19.7	(27.8)	70.7	14.5	(6.8)	210.3
1998	21.6	(35.5)	60.8	23.0	(11.3)	202.0
1999	20.4	(41.0)	49.7	15.0	(3.5)	142.8
2000	24.3	(43.9)	55.3	15.2	(9.6)	157.7
2001	25.9	(50.4)	51.5	14.5	(10.4)	139.1
2002	23.3	(44.3)	52.5	13.7	(13.0)	105.1
2003	26.1	(41.9)	62.2	20.0	(14.1)	141.5
2004	30.6	(40.8)	74.9	21.8	(12.2)	178.6
2005	34.3	(37.3)	91.8	27.7	(11.3)	243.1
2006	38.8	(35.0)	110.6	32.9	(10.2)	323.1
2007	52.4	(33.5)	156.3	43.2	(8.8)	488.5
2008	53.0	(49.3)	107.3	45.6	(9.6)	474.3
2009						
2010						
2011						

Source: Central Bank of Brazil, Top 50 Banks, 1995-2008.

Revew of BNDES lending since 1995 suggests the realization of competitive advantages typical of a large, centralized development bank. Contrary to the extensive branch office networks retained by the Banco do Brasil and Caixa, the BNDES retains under 1900 employees (compared to 105,000 at Caixa) in the Rio de Janeiro and four regional offices. Since 1995, the BNDES increased its market share of non-bank loans from R$8.0 billion (3.8 percent) to R$20.0 billion (14.1 percent) during the economic downturn, risk aversion and credit shortage in 2003. After 2003, the BNDES market share of loans to non-financial entities decreased to 8.8 percent of total loans, albeit increasing during 2008 to 9.6 percent. This suggests that the BNDES has increased its market share of lending to non-financial sector since liberalization of the industry and privatization of state government banks.

BNDES inter-bank lending also increases substantially. Since the Real Plan ended inertial inflation in 1994, the BNDES has expanded its market share of interbank lending from 15.6 billion (32.4 percent) in 1995 to 53.0 billion (49.3 percent) in 2008 during credit shortage and stock market collapse. During previous years of financial crisis and economic reversals, the BNDES also increased interbank lending significantly. For example, during the 1999 and 2001 crises, BNDES interbank lending increased to 41.0 percent and 50.4 percent of total. This marked presence in interbank loan market reflects the role of the BNDES in providing indirect lending to targeted sectors through private, foreign and other government banks in Brazil.

BNDES Loan Approvals by Program, 1995-2007, R$ Billion

Direct Lending	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Finem	5.1	5.5	6.8	13.3	7.9	11.4	13.2	14.5	22.0	28.5	
Capital Markets	1.6	1.9	0.9	0.8	0.9	0.6	2.0	3.4	3.5	10.4	
Export-Import	2.3	3.4	3.9	7.7	6.3	5.6	6.7	4.0	1.3	3.2	
Sub-Total	9.1	10.9	11.8	21.9	15.3	17.7	22.0	22.1	26.9	42.4	
Percent Total	(50.5)	(47.4)	(46.8)	(58.5)	(45.6)	(44.7)	(46.9)	(43.0)	(41.5)	(46.4)	
Indirect Lending											
Finem	3.1	4.0	3.7	1.6	1.2	1.6	1.8	2.7	5.1	6.0	
Finame	1.6	2.5	3.3	4.0	5.3	6.6	9.3	10.7	17.0	22.1	
Finame Agro	0.7	1.3	1.8	3.0	2.8	4.5	2.1	1.4	2.0	2.7	
Finame Leasing	0.0	0.00	0.2	0.2	0.3	0.2	0.4	0.6	1.4	1.6	
Export-Import	1.4	2.3	2.0	4.0	5.6	5.4	7.3	9.7	6.7	9.5	
BNDESautom	1.8	1.7	2.2	2.4	2.7	3.4	3.6	3.5	5.0	5.5	
Sub-Total	8.9	12.0	13.4	15.4	18.2	22.0	24.9	29.2	37.9	48.4	
Percent Total	(49.5)	(52.6)	(53.2)	(41.5)	(54.4)	(55.3)	(53.1)	(57.0)	(58.5)	(53.6)	
BNDES Total	18.0	23.0	25.2	37.4	33.5	39.8	46.9	51.3	64.8	90.8	

Source: BNDES statistics, by modality, available on www.bndes.gov.br

Review of BNDES finance by program suggests the evolution of credit policies from 1995 through 2008 and increasing reliance on indirect lending through other financial intermediaries. The three major programs of direct finance, Financiamento a Empreendimentos (Business Finance, Finem), Mercado de Capitais (Capital Markets) and Export-Import finance remained between 50.5 percent and 41.5 percent of total BNDES lending, with the exception of 2002. Indirect lending through six broad programs remained between 49.5 percent and 58.5 pecent of total BNDES lending, with the exception of 2002. Indirect lending programs include Finem business lending, Financiamento de Maquinas (Machine Finance, Fineme) with agricultural and leasing modalities, Export-Import financing and BNDES automatic lending provisions.

These trends suggest the realization of competitive advantages over private and foreign banks in Brazil. BNDES long term interest rates remained substantially lower than Selic benchmark overnight inter-bank interest rates throughout this period, while the lower cost of small staff and operations of the BNDES made lending at these rates viable. Another competitive advantage of the BNDES over private and foreign banks is the development bank´s mandate as manager of funds from the forced savings fund Fundo de Amparo ao Trabalhador (Worker Asssistance Fund, FAT). Constitutionally mandated investments in productive activities (not government bonds) increased from R$3.1 billion in 2000 to R$10.1

billion in 2008, comprising 17.0 percent of BNDES liabilities. This means that 17.0 percent of BNDES finance and lending is based on long-term deposits that provide no liquidity risk. This provides a competitive advantage over private and foreign banks.

A closer look at BNDES lending by sector suggests that the bank still focuses primarily on industry and infrastructure. Despite the adoption of second generation reforms that seek to free market forces and accelerate innovation and productivity through small and medium enterprises, BNDES lending still focuses on large scale industrial and long-term infrastructure finance. In this respect, the BNDES embodies a persistent need in developing economy for state-led development banking along the lines emphasized by Lewis, Myrdal and development economists 50 years ago. This traditional sense of commanding heights thus still captures the role of the BNDES in Brazilian political economy. Despite more than two decades of privatizations, financial liberalization, bank reforms and a variety of fiscal, financial and economic reforms that have substantially modernized the domestic Brazilian economy and freed market forces, the BNDES remains the single most important source for long-term finance and credit. The capitalization of the Bovespa stock market from 2004-2008, for the first time in Brazilian history, reduced the virtual monopoly of BNDES over long term finance.

BNDES Operations approved and invested, by Sector, 1998-2007, R$billion

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Industry										
approved	9.6	7.9	12.6	15.2	17.1	16.3	14.5	29.0	39.5	40.2
invested	7.6	8.4	10.4	13.2	17.4	16.1	15.8	23.4	27.2	30.6
Infrastructure										
approved	11.6	6.9	11.0	6.5	16.1	14.9	13.7	18.6	24.0	36.9
invested	8.3	6.6	8.6	7.5	13.0	10.0	15.2	17.1	17.0	20.9
Other										
approved	1.8	4.7	4.0	5.4	7.9	9.3	11.7	6.9	10.8	12.6
invested										
Total										
approved	23.0	19.5	27.6	27.1	41.1	40.4	37.9	54.5	74.3	89.7
invested	19.0	18.1	23.0	25.2	37.4	33.5	39.8	47.0	51.3	61.7

Source: BNDES, Annual Reports, 2003-2008 and testimony of BNDES President to Congress, March 2009

Long-term investments have produced substantial profits at the BNDES. The bank has recorded profits each year since 1999, increasing from over R$600 million in 1999, over R$3.2 billion during 2005, reaching over R$7.3 billion in 2007. The long-term character of BNDES finance stands in stark contrast to policies at private banks. Contrary to strategy of private and foreign banks to trade and hold government paper described in chapter three, the BNDES suspended purchase and trading in government paper because of constitutional mandates to contribute to development and employment. Furthermore, the turn to capital markets at the BNDES has provided substantial returns since 2004.

However, this does not mean that BNDES lending protected unproductive industries. Instead of wasting resources to unnecessarily bail out firms or provide crony credit, high returns and strong profits at the BNDES suggest that lending was sound. Standard indicators of bank performance, asset quality and capital reserves against credit and capital risk provide empirical control for this. All these measures suggest that the BNDES weathered the period of adjustment and sustained counter-cyclical investment policies without placing resources at risk beyond Central Bank of Brazil regulations and BIS guidelines. And returns have

increased since recovery in 2004. BNDES participation in the booming Bovespa stock market since 2003 has provided record returns.

The BNDESpar subsidiary that invests in capital markets has also recorded strong returns during the period of economic growth and into the 2008 financial crisis. BNDESpar returns on liquid assets increased from 7.5 percent in 2004 to 27.7 percent in 2007, declining to 24.5 percent in 2008. Average returns on assets and stock holdings also remained high, building the assets held by the BNDESpar subsidiary from 14.1 billion in 2005 to 35.9 billion in 2008.

This increased participation of the BNDES in capital markets involves new relations and networks across government, private sector, labor unions, the private pension funds of government bank and government enterprise employees, and financial markets. By 2007, BNDES participation in stockholding and mutual funds reached across 261 forms and 25 mutual funds, totaling over R$91.0 billion reals. The BNDES thereby retains broad portfolio that represents institutional foundations of comparative advantage. Furthermore, unlike the policy of private and foreign banks to trade and hold high interest rate paying short term government paper during the sudden stop of foreign finance and downturn in the Brazilian business cycle (2002-3) the BNDES expanded credit operations and reduced financial operations in secondary markets for indexed government paper. This countered the perverse impact of the liquidity preference among private and other government banks that increased market pressures and led to shorter terms and higher cost of Brazilian government debt.

BNDES aversion of government paper is required by constitutional mandate to manage forced savings funds in ways that generate employment and income. As noted, a large part of BNDES resources (liabilities) are from domestic official savings programs. The value of FAT resources increased from R$49.2 billion in 2003 to R$66.2 billion in 2005, while the PIS-Pasep fund remained at approximately R$20.0 billion. Foreign capital has also been channeled to the BNDES through multilateral agencies and foreign bond issues. Foreign loans to the BNDES have declined. Multilateral agencies provided R$7.0 billion in 2003, increased funding to R$12.9 billion during 2004 and continued to provide R$10.7 billion to the BNDES during 2005.

Comparison of BNDES structure and performance with development banks abroad suggests both the large scale and scope of BNDES operations and controls for mismanagement and political abuse of the bank. In 2007, BNDES total assets are almost double the value reported by the Inter-American Development Bank (IADB), over ½ the value of total assets held by the World Bank, and almost ten times the value of assets held by the French government development bank, CAF. Furthermore, profits and loans from the BNDES far exceeded all three institutions. The US$33.0 billion in loans reported by the BNDES far exceed the US$6.7 billion from the IADB, the US$11.0 reported by the World Bank and US$5.8 billion reported by the CAF. BNDES profis, returns on assets and return on liquid patrimony also far exceeded those reported by these three development banks that serve as comparative control over performance and policies at the BNDES. Finally, late loans at the BNDES remained at 0.11 percent of total loans, well below levels reported by the World Bank, comparable to the 0.10 percent reported by the IADB, while considerably above the 0.01 percent reported by CAF.

Comparison of BNDES and Regional Development Banks, 2007, US$ billion

	BNDES	IADB	World Bank	CAF
Total Assets	114.4	69.9	208.0	12.5
Liquid Patrimony	14.0	20.3	39.9	4.1
Liquid Profits	3.8	0.1	-0.1	0.4
Desembolsos	33.9	6.7	11.0	5.8
Credit Portfolio	92.8	47.9	97.8	9.5
Capitalization, percent	12.3	29.1	19.2	32.8
Return on Assets, percent	3.8	4.7	n.a.	3.6
Return on PL, percent	33.2	0.7	n.a.	10.5
Late Loans, percent	0.11	0.10	0.86	0.01

Source: BNDES, Annual Report, 2007.

The large scale of BNDES lending and finance make it possible for government policy to provide counter cyclical credit to avert or ameliorate economic downturns and substitute private and foreign credit shortages. In March 2009 testimony to Congress on government policies during financial crisis, BNDES President Coutinho argued that bank policy was to reduce the cost and increase the supply of credit. Resources for counter cyclical lending during 2008-2009 came from Treasury loans to BNDES released by provisional decrees 439 and 414 summing R$17.5 billion, transfer of R$6.0 billion in CVS funds, sale of FGTS Investment Fund and bank certificates summing R$17.0 billion. Furthermore, the third phase of conditional credit facility shared by Inter-American Development Bank and the BNDES provided the last tranch of a total US$6.0 billion for BNDES operations.

Two further means were used by the BNDES to infuse capital during the collapse of the stock market and shortage of credit during 2007-8. The counter cyclical policies of the BNDES can also be seen in the over two fold increase of BNDES holdings in private equity and investment funds. Table 5.12 reports the value of private equity and investment fund holdings of the BNDES in 2007 and 2008. BNDES funds in private equity and mutual funds increased from R$403.8 million in 2007 to over R$1.0 billion in 2008. The capitalization of mutual funds and private equity firms by the BNDES also played an important counter cyclical role during this period.

BNDESpar Shareholding, 2007-8 R$million

	Percent Shares	Value 2008	Value 2007
América Latina Logística	10.6	638.6	-
Aracruz	5.5	129.2	129.2
Banco do Brasil	2.5	1.085.4	1.275.2
Bom Gosto (2)	34.5	245.8	-
Brasil Telecom. Part.	3.0	166.6	195.8
Braskem	5.2	227.5	243.2
Brenco	20.9	140.0	-
CEG	34.5	140.6	-
CESP	5.7	234.7	139.7
Coteminas	10.3	115.0	134.0
CPFL Energia	6.2	608.1	550.6
Cia. Siderúrgica Nacional	3.6	151.3	268.6
CVRD	4.0	1.508.2	709.8

ELETROBRÁS (1)	11.8	2.240.0	2.240.0
EMBRAER	5.0	109.6	109.6
Gerdau	3.5	153.3	49.0
Independência	13.9	250.0	-
JBS	13.0	1.472.2	1.137.0
Klabin	20.2	562.1	-
Light	33.6	822.5	-
Marfrig	14.6	817.6	102.0
MPX Mineração	2.6	179.1	179.1
Ouro Fino	20.0	105.7	84.0
Paranapanema	17.5	125.2	0.8
Petrobrás	7.6	1.022.6	1.022.6
Rede Energia S/A	25.3	263.3	-
Tele Norte Leste Participações	1.6	164.5	164.5
Valepar	9.7	2.625.4	1.558.5
Subtotal		16.305.5	10.294.1
Other firms		1.222.3	1.260.6
Total		17.527.8	11.554.8

Source: BNDESpar, Financial Statements, 2008, pp.

The BNDES also holds blocks of shares in many major Brazilian corporations through its participation subsidiary, BNDESpar. Comparing value of investments in 2007 and 2008 suggests that large purchases capitalized firms precisely as financial crisis and downturn in Bovespa stock market made it difficult for firms to find working capital. Table X reports the percent of total company shares held by the BNDES and their respective market values (adjusted for risk of future losses) at year end 2007 and 2008. During this year of extremely short and expensive credit in Brazil caused by the international financial and banking crisis, the BNDES increased shareholding by over R$6.0 billion reals in 28 private Brazilian enterprises. Further shareholding classified as X in Five firms, (Bertin, 26,9; Brasiliana, 53,8; Copel, 23,9; Rio Polímeros, 25,0; Telemar, 31,3). Once again, the BNDES provided access to capital for firms caught in the sudden credit crunch and stock market collapse unable to meet obligations or raise funds through equity issues or commercial bank credit. This counter cyclical role of government banks has been critical in Brazil since the 19th century.

BNDESpar Private Equity and Fund Participation, 2007-2008, R$million

Fund	Manager	2008	2007
Brasil 21	Dynamo	4.6	6.0
PROT	Mellon Financial Services	462.8	-
Logística Brasil	Bradesco	13.5	-
Fire	BrasilPrivate	26.9	25.0
FIPGG	Governança & Gestão Inv.	28.9	31.1
Opportunity Equity Partners	Mellon Financial Services	104.6	57.8
Brasil Energia	Bradesco	118.4	65.5
InfraBrasil	ABN-Amro	67.7	25.1
Rio Bravo Cinema	Rio Bravo	11.6	11.0
Brascan Petro & Gás Bank	Brascan	13.6	11.3
AG Angra Infra-Estrutura	Bradesco	38.0	30.1
São Paulo Metro Fund	Bradesco	79.1	83.1
Other Funds		65.3	57.2
Total		1.035.6	403.8

Source: BNDESpar, Financial Statements, 2008

Finally, Brazilian federal government triennial plans include investment targets by the BNDES. If current plans are compared to 2004-7 investments, several structural changes in BNDES lending appear. First, BNDES plans for Oil and Petroleum production reveal a profound change for Brazilian political economy. In 1990, roughly 45 percent of oil consumed in Brazil was imported. In 2007, before oil price increased reversed the balance, Brazil reported domestic production levels sufficient to meet domestic consumption. Furthermore, discoveries of substantial deep sea oil reserves have led the BNDES to plan massive investments involving Petrobras and other global petroleum firms. For the 2009-2012 period, investments in petroleum and gas (R$269.7 billion), Petrochemicals (23.7) and Ethanol (19.7) sum to over R$313.0 billion.

BNDES Triennial Investment Plans, 2004-2012

	2004-7	2007-10	2008-11	2009-12
Petroleum & Gas	147.2	183.6	202.8	269.7
Mining	47.2	52.7	81.3	48.0
Petrochemicals	6.4	17.4	26.4	23.7
Steel	19.8	37.1	31.2	24.5
Automotive	15.0	17.6	26.4	23.5
Electronics	14.3	15.6	14.0	24.0
Ethanol	16.6	20.5	20.5	19.7
Paper & Celulose	10.4	20.0	27.4	9.0
Health	5.1	4.6	5.1	8.0
Industry Total	281.6	380.2	443.7	450.1

Source: BNDES, Annual Reports, 2002-2006.

It is of note that President Dilma Roussef was instrumental in reducing the targets for 2009-12 in petroleum and gas, given indications that Petrobras and existing framework for offshore oil prospecting and production proved unable to increase investments accordingly.

The BNDES also retains a presence in government projects by providing management assistance. During 2008, BNDES staff provided management support for implementation of 192 projects involving R$71.0 billion of total R$142 billion PT government growth acceleration projects. BNDES staff also participated in the design, management and implementation of President Lula's Política de Desenvolvimento Produtivo (Policy for Production Development) involving R$210.0 billion targeting production chains designed to maximize employment and regional development benefits. Finally, the BNDES was also charged to create and co-manage a Fundo Amazonia with the Ministry of Environment to provide incentives to reduce deforestation of the Amazon region. BNDES Plans for 2009 include completion of concession for construction of high speed train line and service for Rio de Janeiro-São Paulo corridor, two blocks of highway concession sales involving three major highways in each block of sales, sale of management concessions for regional airports, and the reorganization of INFRAERO federal government airport management company.

These policies reflect the goal of BNDES policy to launch firms on the stock market rather than maintain direct credit and finance. Exceptions during 2008 involve Auto and Ethanol industies, both for strategic and broader policy reasons. Given the sharp downturn in auto sales during fourth quarter 2008, the BNDES provided significant lending to avert further downsizing or failure of auto companies in Brazil. Given the current global redistribution of automobile production, BNDES policies are designed to help the Brazilian

operations of major auto firms through the period of adjustment and increase the attractiveness of domestic operations in global production strategies of multinational auto companies. Ethanol production also received massive funds to sustain an industry seen as critical for alternative and sustainable fuel source capable of replacing petroleum: Ethanol reached over 50 percent of automotive fuel sales in 2007.

Under the Lula government (2003-10, the BNDES also resumed lending to state and municipal governments. Since the renegotiation of municipal and state government debts in the late 1990s, states and municipalities have been largely prohibited from taking on debt. This was emplematic of the recentralization required to control fiscal excesses during military rule and the prolonged period of transition to democracy. Policies during the 1990s were designed to avert overspending seen as critical to maintain price stability under the Real Plan (1994). In 2000, the Lei de Responsibilidade Fiscal (Fiscal Responsibility Law) largely prohibited credit and finance to state and municipal governments. Since 2000, municipalities and states have been required to submit detailed budget statements that, in turn, have been the basis for a gradual return to sub-national government finance. In August 2006, central bank and Treasury regulations freed municipalities to take on credit up to 1.2 times liquid receipts. Since then, the BNDES has led in terms of credits and finance to subnational governments through a Programa Especial de Financiamento aos Estados e Distrito Federal.

The BNDES also has developed the first system in Brazil for risk analysis of municipal governments and has led in the market for municipal credit freed by August 2006 procedures for approval at Treasury, the Central Bank and Conselho Monetário Nacional (National Monetary Council). Prosecution of mayors and firms charged with managing municipal credits with the BNDES revealed fraudulent practices. These funds for sub-national public finance also became critical mechanisms to counter severe budget shortfalls caused by financial crisis during 2008. Given that municipal and state government tax bases are shallow and that federal government transfers provide the bulk of sub-national government resources, the Lula administration allocated R$ 4.0 billion to the Fundo de Participação dos Estados (State Participation Fund) through a Programa Emergencial de Financiamento (Emergency Finance Fund), administered by the BNDES.

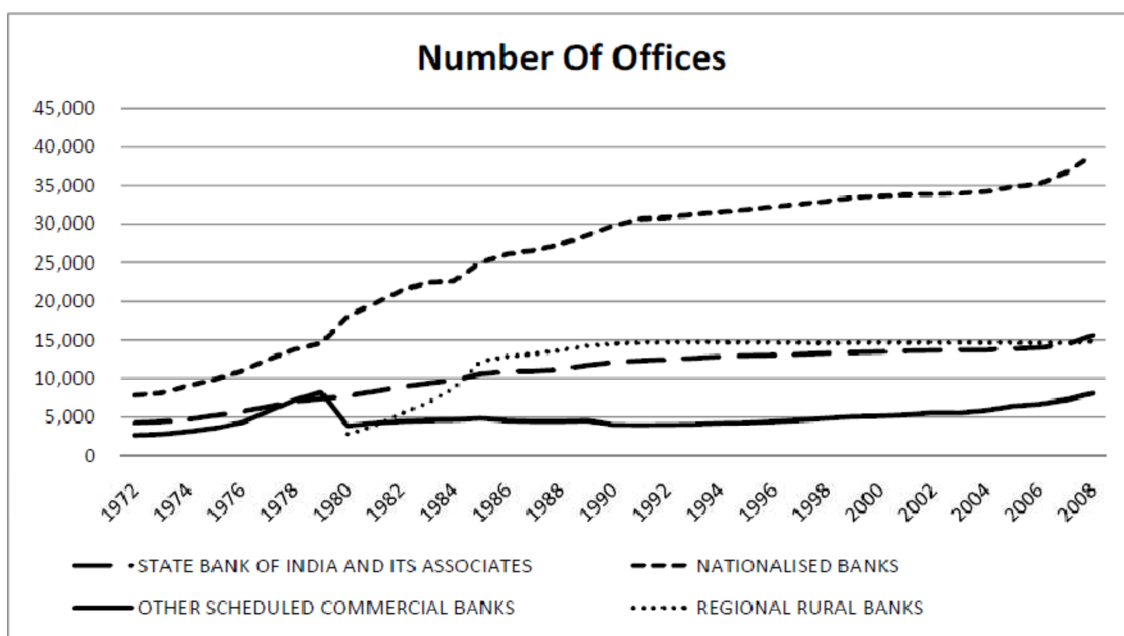
In sum, the BNDES expanded credit and finance operations substantially during four years of sustained growth from 2004-2007. And having helped underwrite the stock market boom and capitalized Brazilian firms directly and indirectly through credit, finance, mutual funds and private equity funds, the BNDES retained sufficient scale, scope, and capital base to provide counter cyclical credit and finance to help firms adjust to financial crisis and credit shortage during 2008. In retrospect, the growth of the BNDES since liberalization and privatizations of state government banks in the 1990s suggest the comparative advantages of development banking. BNDES credit and finance fell to 5.2 percent of fixed capital formation in 1995. Since then, the turn to neo-developmentalism and a period of sustained economic growth during the Lula administration increased the BNDES share of total fixed capital formation during 2006 and 2007 to 12.6 and 14.1 percent. Critics charge that monopoly over FGTS and PIS-PASEP official savings funds as liabilities provide the BNDES with unfair competitive advantage over private banks. In 2008, forced savings funds summed to only 17 percent of BNDES liabilities (resources). The BNDES does not rely exclusively on forced savings for competitive advantage. Instead, market-oriented policies, joint-ventures with private mutual funds, investment funds, private equity firms, large blocks of shareholding in Brazilian firms, and massive amounts of credit and investment to the private sector at below market but still profitable long term interest rates of 6.25 percent suggest that the large scale and scope of BNDES operations provide institutional foundations of competitive advantage over private and foreign banks.

Capitalization of the BNDES by Treasury of over R$230.0 billion 2009-11has captured attention of many observers of Brazilian development. Critics and advocates agree that the BNDES has realized significant competitive advantages over private and foreign banks and continues to serve as significant alternative to capital markets for large scale development projects. However, like the downturn in planned investments by Petrobras for oil and gas exploration and production, BNDES decreased planned investments from R$168.4 billion in 2010 to R$139.7 billion in 2011. We believe this indicates the limits of management and passing of period of crisis, both favoring finance from capital markets, banks and public-private partnerships.

India

Analysis of Brazilian federal banks suggests that these institutions provided policy alternative while realizing competitive advantage over private and foreign banks. The modernization of these institutions helps explain why these large institutions were able to stay the effects of credit crunch and financial market downturn in Brazil. This section explores data from the Reserve Bank of India to compare market shares of types of banks from 1972-2008 and bank performance from 2006-10. Further analysis will be required. However, the data appears to support our core argument; that government banks have modernized and realized competitive advantages over private and foreign banks.

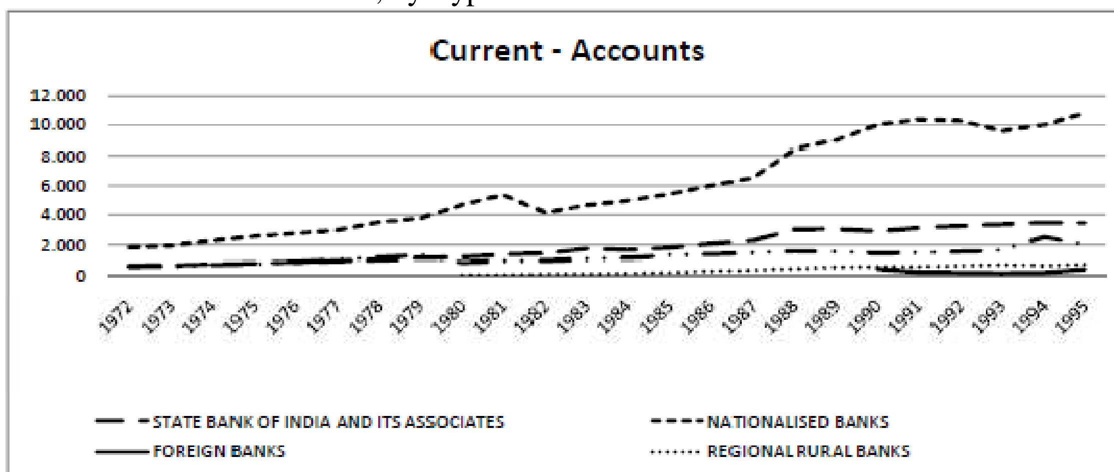
First, the number of branch offices which serves as a measure of institutional coverage across India, of special concern for financial inclusion and the theory that liberalization and privatizations would lead private banks to expand branch offices and increase the supply of services. From this perspective, the trajectory of branch offices suggests that nationalized banks, the State Bank of India, and regional rural banks sustain much larger networks of branch offices, that predominate, while other scheduled commercial (private and foreign) banks retain less than 8000 branch offices.



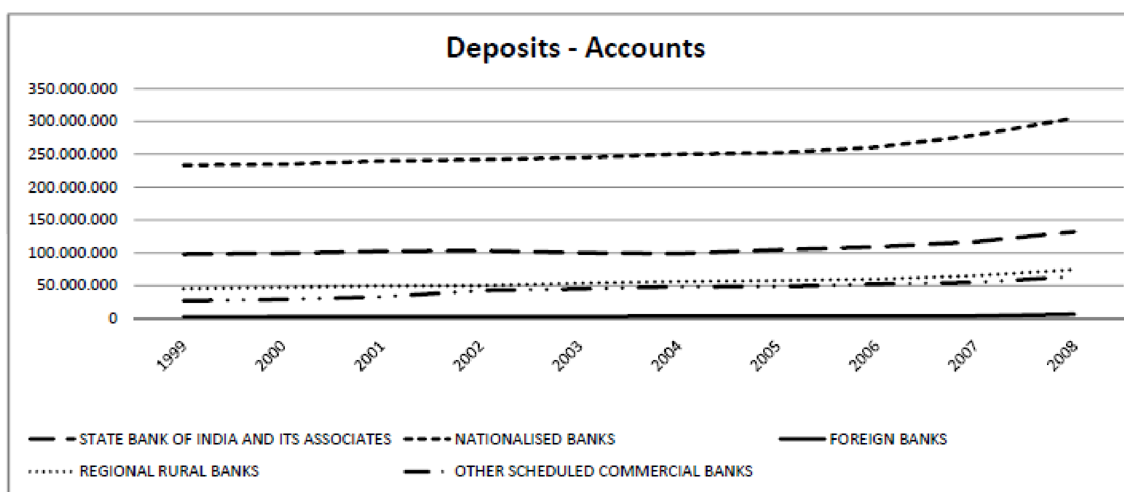
Data from the Reserve Bank of India on the number of current accounts retained by type of bank provide further evidence that the State Bank of India and its associates,

national banks and regional rural banks provide the bulk of banking accounts to the Indian population, while private and foreign banks cherry pick upscale urban markets, reproducing capital drain and inequalities.

Number of Current Accounts, by Type of Bank 1972-1995

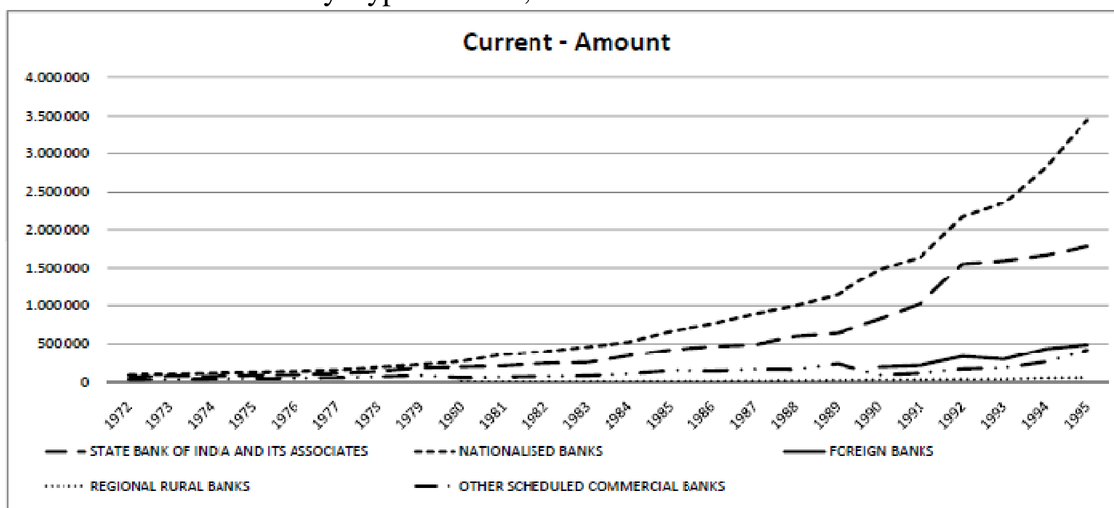


Since 1999, the pattern of predominance by alternative banking institutions and the minor role of other scheduled commercial banks and foreign banks continues.

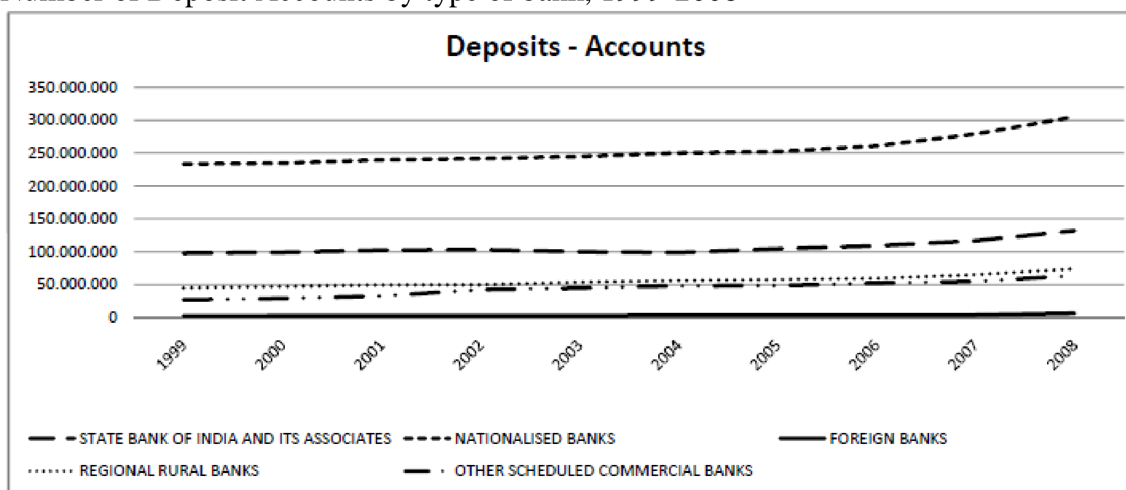


The following figures report the value held in current accounts by type of banks, first from the 1972-1995 period, then from the 1999-2008 period. For both time periods, the trend confirms that private and foreign banks remain at a competitive disadvantage in terms of the broader market, while the State Bank of India and its associates, nationalized banks and regional rural banks tend to predominate.

Current Account Value by Type of Bank, 1972-1995 R

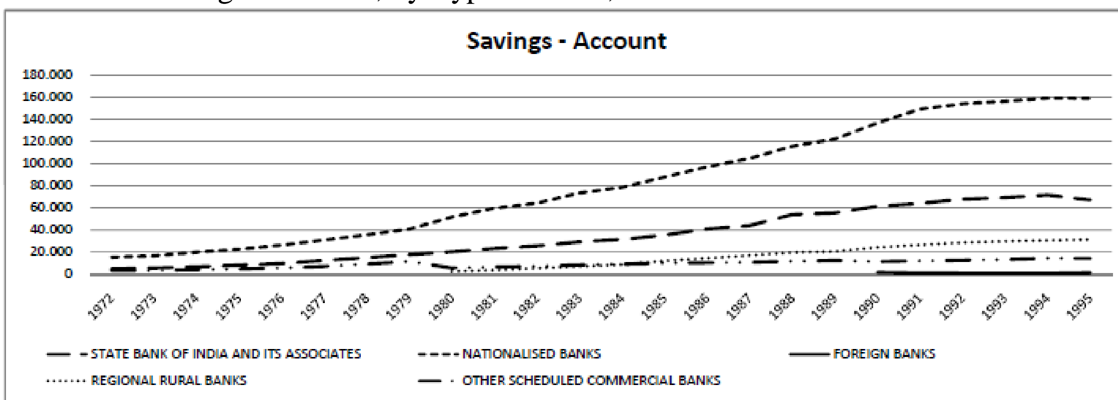


Number of Deposit Accounts by type of bank, 1999-2008

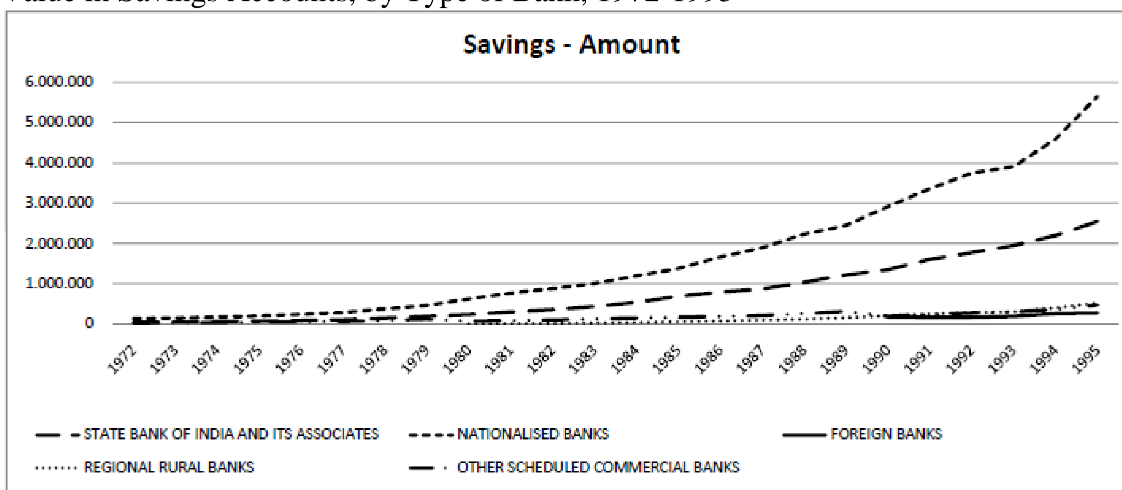


A similar pattern appears for the trajectory of savings accounts, both the number of accounts and the value held in savings accounts, both for the 1972-1995 period. We were unable to organize data from the more recent period.

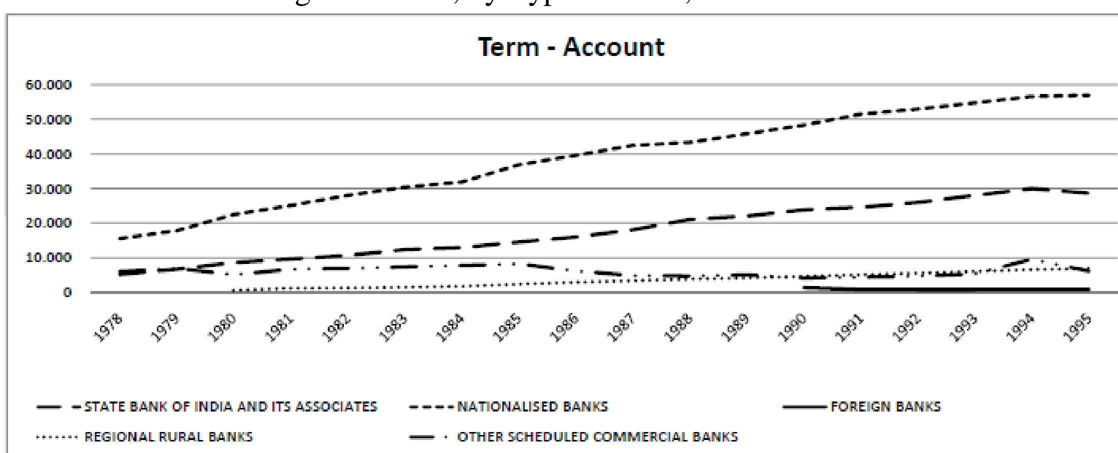
Number of Savings Accounts, by Type of Bank, 1972-1995



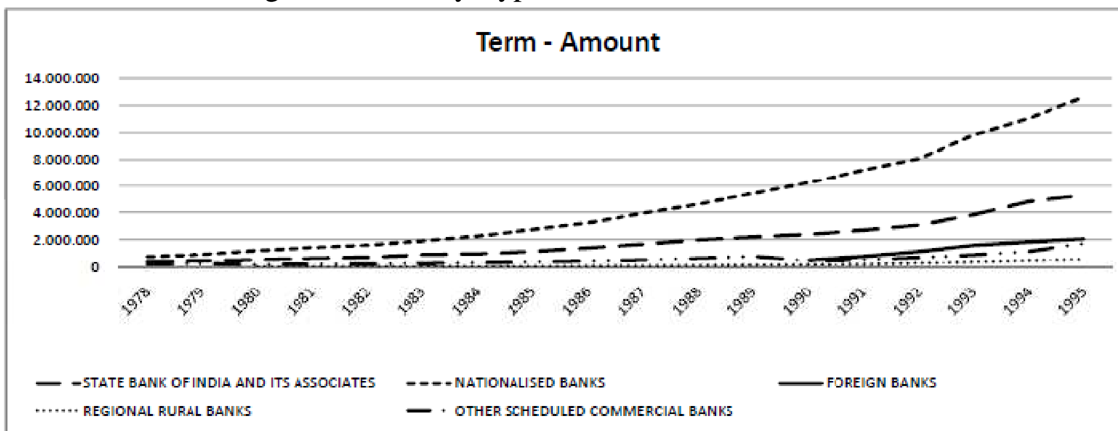
Value in Savings Accounts, by Type of Bank, 1972-1995



Number of Term Savings Accounts, by Type of Bank, 1972-1995

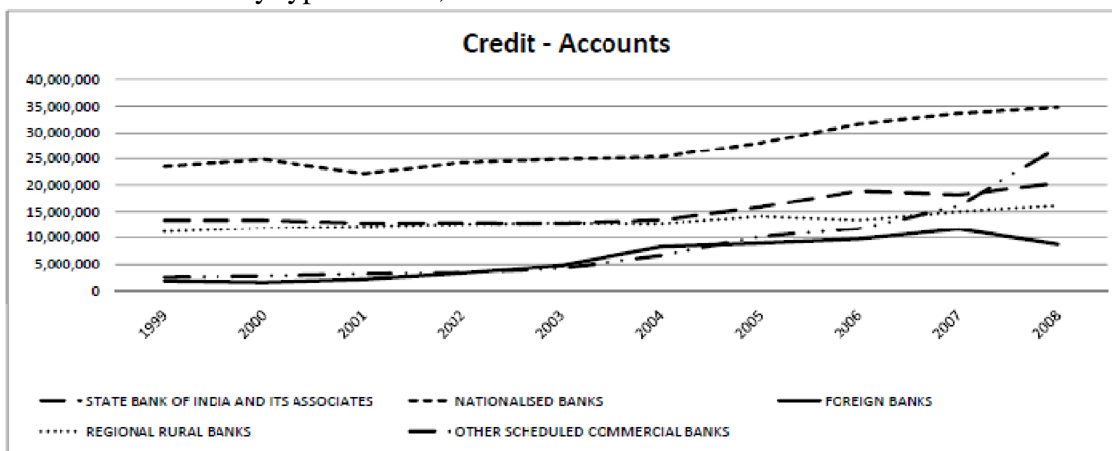


Value in Term Savings Accounts, by Type of Bank, 1972-1995

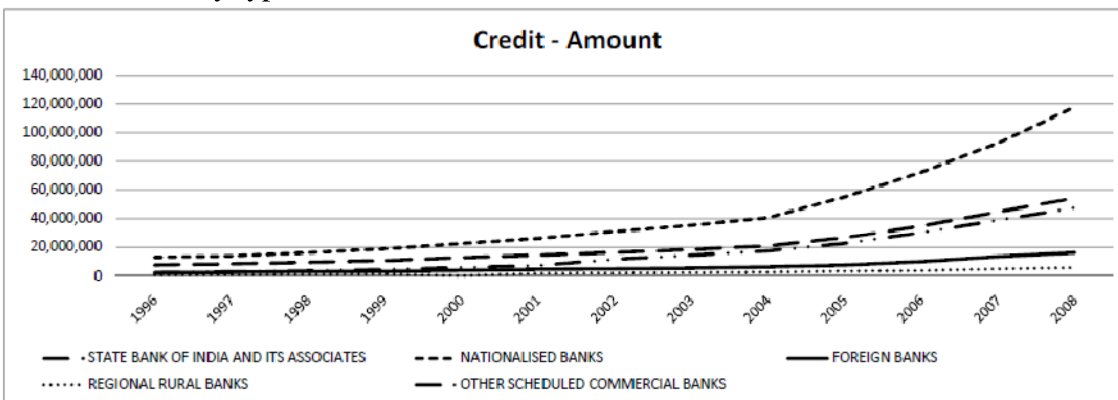


The number and value of credits extended by banks from 1999-2008 appears most promising in terms of comparative analysis of bank performance and behavior. The significant spread at the end of the time series between the State Bank of India and its associates and foreign banks suggests the impact of foreign financial crisis and different domestic policies by these types of banks in India similar to that noted in the Brazilian experience.

Number of credits by type of bank, 1999-2008



Value of credit by type of bank, 1996-2008



Further data from the Reserve Bank of India from 2008-10 permit closer comparison of government, private and foreign banks in the recent financial crisis. In terms of deposits, investments, total assets and net profits, the dominant and expanding role of government banking in India is apparent. Further control variables (not reported) include gross and net NPA, types of income, expenses and expenditures, provisions and contingencies and credit- and investment-deposit ratios provide control for bad banking and confirm the counter cyclical policies during 2008-10 in India.

THE FOLLOWING TABLES REQUIRE INTERPRETATION

Number of Banks	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
State Bank of India & Associates	8	8	7	7	6
Nationalized Banks	20	20	20	20	20
Old Private Sector Banks	17	15	15	15	14
New Private Sector Banks	8	8	7	7	7
Foreign Banks	29	28	31	32	33

Source: RBI, A Profile of Banks, 2010-11

Number of Branch Offices	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
State Bank of India & Associates	14673	15848	16894	18178	18772
Nationalized Banks	37435	39255	40956	43452	45640
Old Private Sector Banks	4723	4690	4908	5220	5011
New Private Sector Banks	2599	3635	4333	5232	6957
Foreign Banks	272	277	295	308	316

Source: RBI, A Profile of Banks, 2010-11

Number of Employees	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
State Bank of India & Associates	255699	249008	268598	266605	282453
Nationalized Banks	473179	466400	462926	473041	475082
Old Private Sector Banks	47994	48700	51341	55052	55075
New Private Sector Banks	91060	110123	124998	127468	163604
Foreign Banks	28426	31301	29582	28012	27968

Source: RBI - India Bank's Association

Business per employee (in lakh)	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
State Bank of India & Associates	436.35	549.22	650.22	737.43	793.06
Nationalized Banks	490.01	618.28	783.16	935.86	1144.77
Old Private Sector Banks	481.59	569.32	638.43	697.49	814.9
New Private Sector Banks	807.82	831.96	787.15	840.41	826.07
Foreign Banks	974.77	1125.5	1282.74	1411.39	1559.74

Note: 'Business' = Deposits + Advances

Profit per employee (in lakh)	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	2.57	3.62	4.43	4.66	4.2
Nationalized Banks	2.87	3.77	4.86	5.67	6.95
Old Private Sector Banks	2.34	4.06	4.69	4.2	5.63
New Private Sector Banks	5.87	6.85	6.77	8.47	8.93
Foreign Banks	16.13	21.12	25.39	16.92	27.59

Capital & Reserves & Surplus (Ycrore)	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	42941	61706	72422	83726	84394
Nationalized Banks	92689	113079	135920	157276	205857
Old Private Sector Banks	10736	15315	17477	20171	23821
New Private Sector Banks	39736	76056	82192	99813	114768
Foreign Banks	33075	49332	59937	69176	80972

Deposits, Ycrore	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	633476	773875	1007041	1108086	1245862
Nationalized Banks	1360724	1679993	2105706	2583934	3127122
Old Private Sector Banks	138249	165589	199274	229897	264157
New Private Sector Banks	413738	509444	537104	592904	738602
Foreign Banks	150750	191161	214076	232099	240689

Investments, Ycrore	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	211875	263823	357624	387473	385697
Nationalized Banks	452981	536018	655042	828125	942837
Old Private Sector Banks	43647	54080	72393	83499	92617
New Private Sector Banks	171008	224498	234139	270618	329403
Foreign Banks	71471	98910	130354	159291	165499

Advances, Ycrore	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	482270	593722	739450	857937	994154
Nationalized Banks	957877	1203678	1519762	1843082	2311478
Old Private Sector Banks	92887	111670	128504	154085	184647
New Private Sector Banks	321865	406733	446824	478356	612886
Foreign Banks	126339	161133	165385	163260	195539

Interest Income, Ycrore	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	53465	70428	89196	97954	109828
Nationalized Banks	110720	142647	183892	208029	256490
Old Private Sector Banks	11474	14614	18790	20497	23299
New Private Sector Banks	38092	56377	66282	62309	73528
Foreign Banks	17924	24417	30322	26390	28520

Other Income, Ycrore	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	9420	11818	16073	18394	19240
Nationalized Banks	14264	20979	26394	30500	28625
Old Private Sector Banks	1568	2184	2782	3152	3029
New Private Sector Banks	10745	14822	15078	17271	17697
Foreign Banks	7044	10588	14894	9951	10972

Interest Expended, Ycrore	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	32607	47809	61770	66229	67018
Nationalized Banks	69353	101093	131676	145712	164135
Old Private Sector Banks	7055	9960	12834	14076	14768
New Private Sector Banks	25802	38535	44123	37130	42347
Foreign Banks	7603	10604	12819	8938	10622

Operating Expenses, Ycrore	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	15987	16993	20088	25283	29146
Nationalized Banks	27268	29670	35416	40792	53819
Old Private Sector Banks	2967	3235	3939	4715	5600
New Private Sector Banks	12353	17032	17840	18136	22006
Foreign Banks	7745	10353	12298	11102	12557

Cost of Funds	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	4.75	5.9	5.94	5.32	4.8
Nationalized Banks	4.8	5.82	6.09	5.37	4.93
Old Private Sector Banks	4.98	6.2	6.67	6.13	5.5
New Private Sector Banks	5.24	6.11	6.04	4.42	4.27
Foreign Banks	4.03	4.33	4.46	2.83	3.11

Cost of Funds = Ratio (%) of interest paid on deposits and borrowings to average of opening and closing balances of deposits and borrowings.

Return on advances adjusted to CoF	2006-7	2007-8	2008-9	2009-10	2010-11
State Bank of India & Associates	3.72	3.65	3.95	3.6	4.05
Nationalized Banks	3.99	3.69	4.09	3.82	4.27
Old Private Sector Banks	4.06	4.26	5.15	4.82	4.92
New Private Sector Banks	4.47	5.05	5.26	5.14	5.16
Foreign Banks	5.74	6.6	8.15	7.16	5.64

	2006-7	2007-8	2008-9	2009-10	2010-11

Wages as % of Total Expenses					
State Bank of India & Associates	21.55	15.89	15.06	17.1	19.21
Nationalized Banks	17.94	14.05	13.31	13.65	16.41
Old Private Sector Banks	16.89	13.67	13.26	14.57	16.75
New Private Sector Banks	9.36	9.56	10.17	12.1	13.83
Foreign Banks	20.08	19.95	19.44	23.48	23.31

Returns on Assets	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
State Bank of India & Associates	0.86	0.97	1.02	0.91	0.79
Nationalized Banks	0.94	1.01	1.03	1.00	1.03
Old Private Sector Banks	0.78	1.14	1.15	0.95	1.12
New Private Sector Banks	1.09	1.13	1.12	1.38	1.51
Foreign Banks	2.28	2.09	1.99	1.26	1.74

Capital Adequacy Ratio	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
State Bank of India & Associates	12.32	13.21	13.96	13.46	12.25
Nationalized Banks	12.37	12.13	13.24	13.18	13.47
Old Private Sector Banks	12.08	14.08	14.76	14.85	14.56
New Private Sector Banks	11.99	14.39	15.33	18.03	16.87
Foreign Banks	12.39	13.05	14.32	17.26	16.72

Note: To 2007-8 = Basel I, From 2008-09 = Basel-II.

Net NPA Ratio	**2006-7**	**2007-8**	**2008-9**	**2009-10**	**2010-11**
State Bank of India & Associates	1.32	1.43	1.47	1.50	1.49
Nationalized Banks	0.94	0.77	0.68	0.91	0.92
Old Private Sector Banks	0.96	0.66	0.9	0.82	0.53
New Private Sector Banks	0.97	1.09	1.29	1.03	0.56
Foreign Banks	0.73	0.77	1.81	1.82	0.67

Net NPA Ratio = Net non-performing assets as % net advances

In sum, descriptive data from the Reserve Bank of India confirm the anomaly and argument drawn from the Brazilian experience. An important dimension of BRIC country recovery from the global financial crisis and downturn is the counter cyclical lending policies and realization of competitive advantages of government banks. This poses a series of new questions for business schools and scholars of public policy. Instead of liberalization and privatization leading to transitions in BRIC countries toward capital market centered financial systems and liberal market economies, public banks have realized competitive advantages over private and foreign banks while providing policy alternatives to BRIC governments in the face of financial crisis and global economic slowdown. We return to these implications in the conclusion.

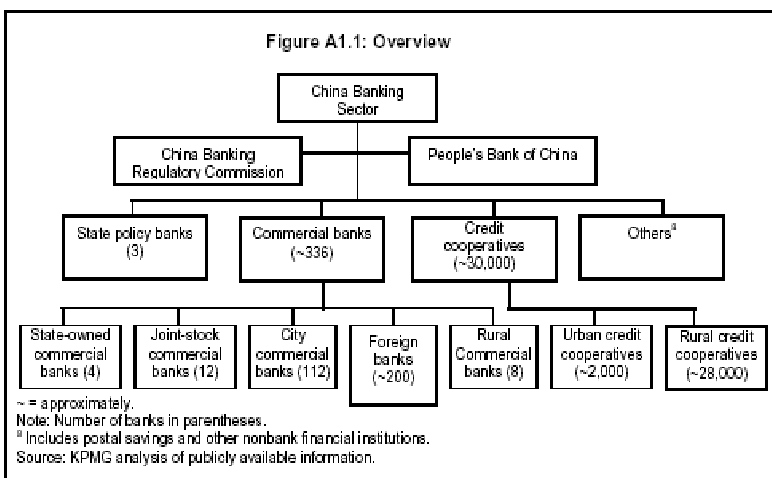
One development of note at the Reserve Bank of India is a policy focus on financial inclusion. The 2008 report of the Committee on Financial Inclusion has been followed by sections of the Reserve Bank of India Annual Report reserved for discussion of financial inclusion. And instead of focusing on liberalization and

privatization to ensure the spread of banking products and services, alternative policies have been explored. One is of special note. The Committee on Financial Inclusion recommended issue of identity cards as bank cards. This would profoundly change the landscape of banking in India and has attracted attention from analysts at the Central Bank of Brazil charged with financial inclusion, as well as the President of Indonesia and, apparently, Uganda officials. Given the revolution in information and card payment technologies, this policy proposal and pilot studies deserve close attention as alternatives to dramatically increase the pace of social inclusion of the bankless.

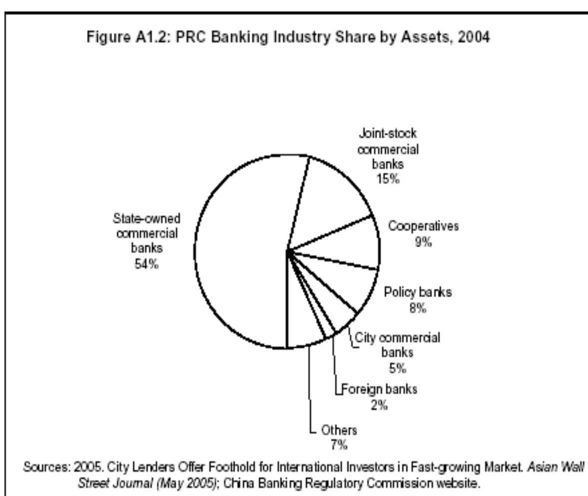
China

This section turns to a brief review of the Chinese banking sector to further explore the role of government banks in terms of their modernization, competitive advantages, policy roles and capacity for counter cyclical credit that help explain why BRIC countries were able to avert the severe consequences of the global financial crisis.

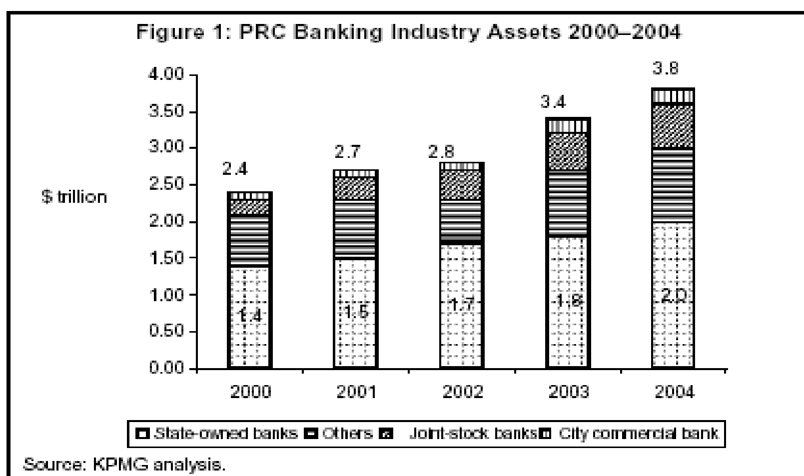
First, figure A1.1 reports the basic structure of the banking system in China.



Although we have been unable to compare the evolution of types of banks across time in similar ways to the above data on India taken from the Reserve Bank of India, our research assistants have gathered the following comparative, macroeconomic, financial and balance sheet data on banking in China. The data appear to be consistent with the core argument presented in this paper – that government banks have modernized since liberalization and provided policy makers with alternative means to counter the effects of financial crisis abroad.



We lack more current information and were unable to collect data directly from official sources in China to compare the trajectory of state owned, private and foreign banks. As a substitute, Figure 1 reports data from 2000-4 that permits initial observation of trends for this earlier period.



Those present may not need reminding of the formidable record of economic growth in China during this 200-4 period that continues until today. However, data from the National Bureau of Statistics suggests that the Chinese banking system expanded at an even greater pace than the remarkable levels of GDP growth recorded for the 2000-4 period. Furthermore, credit expansion was "organic" in the sense that deposits *outpaced* credit growth from 2000-4.

Expansion of Loans in China, 1999-2004

Loan Growth Year	Total Loans CNY billion	Year on Year Growth CNY (%)	Total Deposits[1] CNY billion	Year on Year Growth CNY(%)
1999	9,373	8.3	10,878	13.7
2000	9,937	6.0	12,38	13.8
2001	11,231	13.0	14,362	16.0
2002	13,129	16.9	17,092	19.0
2003	15,9	21.1	20,806	21.7
2004	18,857	18.6	25,319	21.7

[1]Based on preliminary estimates by the National Bureau of Statistics of the People's Republic of China.
Source: National Bureau of Statistics of the PRC.

Although we lack data comparable to that from the Reserve Bank of India able to compare the trajectory of state, private and foreign banks in China, the sectoral breakdown of loans and other banking and national account data confirms the profound capitalization of the Chinese banking system and GDP growth during from 1995-2004.

China Banking Sector Market Dimensions (1995 - 2004)

Year	Total Loans	Corp Loans	Consu Loans	Home Loans	Total Deposits	Excess	Gov Bonds	Corp Bonds	GDP	GDP Growth (%)
1995	5,231.0	—	—	—	5,376	145	330	65	5,848	25.1
1996	6,310.0	—	—	—	6,847	538	436	60	6,788	16.1
1997	7,358.5	7,341	17	13.0	8,212	853	551	52	7,446	9.7
1998	8,500.2	8,447	53	43.0	9,529	1,02	9 777	68	7,835	5.2
1999	9,558.7	9,394	164	136.0	10,831	1,273	1054	78	8,207	4.8
2000	10,876.3	10,453	424	332.0	13,486	2,61	1302	86	8,94	8.9
2001	11,899.0	11,2	699	560.0	15,472	3,573	1562	101	9,593	7.3
2002	13,980.0	12,913	1,067	825.8	18,339	4,359	—	—	10,479	9.2
2003	16,977.0	15,401	1,576	1,330.2	22,036	5,059	—	—	11,669	11.4
2004	19,422.0	16,848	1,988	1,580.0	25,319	5,897	—	—	13,657	17.0

Figures = CNYB

This data reported in terms of percent GDP provides further clarity on the rapid capitalization of loans. It is of note that the bulk of loans during this period were to the corporate sector, with consumer and home loans lagging significantly.

China Banking Sector, Percent GDP

YEAR	Total Loans	Corporate Loans	Consumer Loans	Home Loans	Deposits	Excess Deposits	Gov Bonds	Corp Bonds
1995	89.5	0.0	0.0	0.0	91.9	2.5	5.6	1.1
1996	92.9	0.0	0.0	0.0	100.9	7.9	6.4	0.9
1997	98.8	98.6	0.2	0.2	110.3	11.5	7.4	0.7
1998	108.5	107.8	0.7	0.5	121.6	13.1	9.9	0.9
1999	116.5	114.5	2.0	1.7	132.0	15.5	12.8	0.9
2000	121.7	116.9	4.7	3.7	150.8	29.2	14.6	1.0
2001	124.0	116.7	7.3	5.8	161.3	37.2	16.3	1.1
2002	133.4	123.2	10.2	7.9	175.0	41.6		
2003	145.5	132.0	13.5	11.4	188.8	43.4		
2004	142.2	123.4	14.6	11.6	185.4	43.2		

Sources: China Banking Regulatory Commission, People's Bank of China, and Goldman Sachs research estimates.

Compilation of financial data from a select number of banks in China suggests that the pattern of bank change encountered in Brazil and India also describes the experience of China. The liberalization of the Chinese economy and the modernization of state banks appear to describe the process of bank change instead of a process of transition toward private banking and capital market centered financial system. Although we have been unable to draw data from Chinese monetary authorities, the balance sheet data suggests the clear predominance of large state banks in the political economy of banking and finance in China. How these institutions were used to counter the effects of financial crisis abroad and redirect domestic investment, production and consumption must remain a subject for further research.

Select Financial Data from Chinese Banks, 2004(?)

CNY (billion)	Total Assets	Gross Loans	Customer Deposits	Equity	NPL Ratio (%)	Pre-prov. Profits	Net Profits
State Banks							
ICBC	5,671	3,705	5,105	163	19.0	65.3	2.3
CCB	3,905	2,226	3,489	195	3.9	60.5	48.4
ABC (NA)	—						
BOC	4,27	2,146	3,342	205	5.1	57.8	20.9
Quasi-State							
BoCom	1,145	639	1,023	54	3.0	13.1	1.6
CMB	587	376	513	22	2.9	8.2	3.2
CITIC Industrial	515	306	429	20	6.0	5.2	0.3
SPDB	456	311	397	14	2.4	6.2	2.0
China Everbright	—						
Guangdong Development	345	216	301	—	—	—	3.2
Industrial Bank	341	203	283	10	2.5	3.7	1.1
Quase-Private							
Bank of Shanghai	216	106	179	8.3	5.1	3.2	2.6
Hua Xia	304	181	270	9.2	4.0	2.9	1.0
Shenzhen Development	198	126	166	4.3	11.4	2.8	0.3
Bank of Beijing	209	85	174	7.1	—	2.6	0.7
Sector total		19,422	25,319		12.9		
Three state-banks		2,692	3,979	188			
Second tier banks		2,549	3,733	148			

ABC = Agriculture Bank of China. BOC = Bank of China.
BOCOM = Bank of Communications. CCB = China Construction Bank.
CMB = China Merchant's Bank. CNY = yuan.
ICBC = Industrial and Commercial Bank of China.
NPL = nonperforming loan.ROA = return on assets. ROE = return on equity.
prov. = provisioning.
PRC = People's Republic of China.
SPDB = Shanghai Pudong Development Bank.
Note: Loan and deposit market share for BOC and ICBC are for their domestic operations only.
Sources: Company data, Goldman Sachs research estimates.

Returns on Assets, Equity and Domestic Market Shares of Major China Banks, 2004(?)

CNY (billion)	ROA (%)	ROE (%)	Deposit Mkt Share (%)	Loan Mkt Share (%)	Mortgage Mkt Share(%)
State Banks					
ICBC	0.04	1.4	19.9	18.7	25.3
CCB	1.30	25.4	13.8	11.5	21.7
ABC (NA)					
BOC	0.51	10.2	10.1	8.9	15.2
Quasi-State					
BoCom	0.15	4.5	3.7	2.9	3.4
CMB	0.60	16.1	2.0	1.9	2.9
CITIC Industrial	0.07	1.7	1.7	1.6	1.8
SPDB	0.48	15.3	1.6	1.6	2.6

China Everbright					
Guangdong Development	—	—	1.2	1.1	—
Industrial Bank	0.37	12.6	1.1	1.0	1.0
Quase-Private					
Bank of Shanghai	1.29	36.0	0.7	0.5	1.4
Hua Xia	0.38	11.6	1.1	0.9	0.7
Shenzhen Development	0.17	7.5	0.7	0.6	0.8
Bank of Beijing	0.37	10.8	0.7	0.4	0.7
Sector total					
Three state-banks			43.8	39.1	62.2
Second tier banks			14.4	12.7	15.4

ABC = Agriculture Bank of China, BOC = Bank of China, BOCOM = Bank of Communications, CCB = China Construction Bank, CMB = China Merchant's Bank, CNY = yuan,
ICBC = Industrial and Commercial Bank of China, mkt = market, NPL = nonperforming loan, ROA = return on asset, ROE = return on equity, prov. = provisioning, PRC =
People's Republic of China, SPDB = Shanghai Pudong Development Bank.
Note: Loan and deposit market share for BOC and ICBC are for their domestic operations only.
Sources: Company data, Goldman Sachs research estimates.

Further data from 2006-10 from the Peoples Bank of China suggests that the big 5 state banks continue to outperform the next 12 largest joint stock commercial banks. The big five have launched sales of shares to capitalize while listing on capital markets and adopting reporting of financial data along lines of international standards. This appears to be similar to Banco do Brasil policies that retain majority of shares in federal government control, while capitalizing the bank through issues of stock.

Comparing the Performance of Big 5 State Banks and Next 12 Joint Stock Commercial Banks in China

		2006*	2007*	2008	2009	2010
Profit Margin	Big 5 State Banks	31.16	31.43	25.86	30.26	32.69
	Next 12 JS Commercial Banks	20.50	27.91	17.96	21.59	23.65
Returns (risk adj.)	Big 5 State Banks	5.07	6.06	8.60	6.91	6.75
	Next 12 JS Commercial Banks	4.59	5.70	10.16	7.14	7.23
Op. Risk	Big 5 State Banks	55.48	55.39	52.15	53.19	53.22
	Next 12 JS Commercial Banks	58.86	57.21	57.25	58.31	59.47
Leverage	Big 5 State Banks	16.26	14.82	17.24	17.3	17.34
	Next 12 JS Commercial Banks	28.26	22.51	20.64	20.48	19.36
ROE	Big 5 State Banks	14.24	15.57	19.99	19.25	20.37
	Next 12 JS Commercial Banks	15.64	20.49	21.56	18.40	19.67

* Big 4 and 11 JSCBs.
Source: Peoples Bank of China, China Financial Stability Reports, 2007-11

Performance indicators reported by the Peoples Bank of China for the big 5 state banks and 12 next largest joint stock commercial banks also suggest that the largest government banks in China retain significant competitive advantages – and may provide policy alternatives. Given the current shift of economic policy in China away from industry and export led growth to more sustainable domestic oriented growth and social inclusion, the role of state banks clearly comes to the fore.

Net Operating Income of Big 5 State Banks and Next 12 Commercial Banks, 100 million RMB Yuan

Big 5 State Banks		2006*	2007*	2008	2009	2010
Balance	Net interest income	3497.03	5004.56	5567.90	5322.06	7201.52
	Net fee & commission inc	485.24	1038.17	1384.64	1754.69	2324.91
	Investment income	2160.89	2837.25	3388.65	3240.37	3404.40
	Other business income	(18.07)	(170.54)	475.48	337.91	218.6
	Net operating income	6125.09	8709.44	10816.67	10655.03	13149.43
Percent	Net interest income	57.09	57.46	51.48	49.95	54.77
	Net fee & commission inc	7.92	11.92	12.80	16.46	17.68
	Investment income	35.28	32.58	31.33	30.41	25.89
	Other business income	(0.30)	(1.96)	4.40	3.18	1.66
	Net operating income	100.00	100.00	100.00	100	100
Next 12 Joint Stock Commercial Banks		2006	2007	2008	2009	2010
	Net interest income	872.53	1329.45	1989.65	1912.76	2815.88
	Net fee & commission inc	78.50	162.47	273.19	301.15	420.23
	Investment income	209.59	321.72	448.64	507.67	505.00
	Other business income	23.06	44.98	163.59	103.84	74.00
	Net operating income	1184.68	1858.61	2875.07	2825.42	3815.11
Percent	Net interest income	73.65	71.53	69.20	67.69	73.81
	Net fee & commission inc	6.71	8.74	9.50	10.66	11.01
	Investment income	17.69	17.31	15.60	17.97	13.24
	Other business income	1.95	2.42	5.69	3.68	1.94
	Net operating income	100.00	100.00	100.00	100.00	100.00

Source: Peoples Bank of China, China Financial Stability Reports, 2007-11
* Big 4 and 11 JSCBs
Big 5 = ICBC, ABC, BOC, CCB, BOCOM
Next 12 Joint Stock Commercial Banks = China CITIC Bank, Everbright Bank, Huaxia Bank, Guangdong Development Bank, Shenzhen Development Bank, China Merchants Bank, Shanghai Pudong Development Bank, Industrial Bank, China Minsheng Banking Corporation, Evergrowing Bank, China Zheshang Bank, Bohai Bank.

In conclusion, bank change in China also appears to confirm our findings from Brazil – that state banks have realized competitive advantages and increased market shares since liberalization while providing counter cyclical credit to ameliorate adjustment to crisis. The modernization of the China Postal Savings Bank is of particular interest, given its social mission, downmarket focus and 40,000 branch Offices throughout the country. Expansion of card payment services through the postal bank system confirms the importance of the Brazilian federal savings bank (Caixa Econômica Federal, Caixa) as agent for federal government social policy and agent responsible for management of citizenship cards (12 million) and payment of family grants. This back to the future modernization of savings banks has proved essential for overcoming notorious levels of social exclusion and inequality in Brazil. Although english language materials are unavailable on the China Postal Savings Bank, this institution clearly presents profound opportunities for comparable policies in China.

Reported offer of microfinance services for poverty reduction as part of national economic stimulous plan may point to developments in this direction.

Given that state planning capacity has long been at the center of attention in theories of financial statecraft, the role of Chinese state banks in redirecting policies according to the 12th 5 Year plan for 2011-15 seems critical. From 2000-5, the 10th 5 Year plan emphasized infrastructure and the attraction of investment and labor skills. The 11th 5 Year plan (2006-10) raised concerns about sustainability rather than growth levels, while also seeking to spread improvements to balance development, better serve people and improve the quality of life, continue to support Center and West provinces and revitalize Northeast provinces. In comparison, the 12th 5 Year plan calls for more balanced 'inclusive' growth and structural adjustemts, more than 4 trillion RMB ($US600 billion) for targeted industries and interior regions, a focus on new energy, new materials and information and high technologies, biology and new medicine, energy converstaion and environmental protection, aerospace, marine and advanced manufacturing. This implies fundamental shifts away from industry to services that has been reported in macroeconomic data for 2010. If past studies emphasized directed credit and industrial change, the role of Chinese state banks in realizing transformations certainly warrants study.

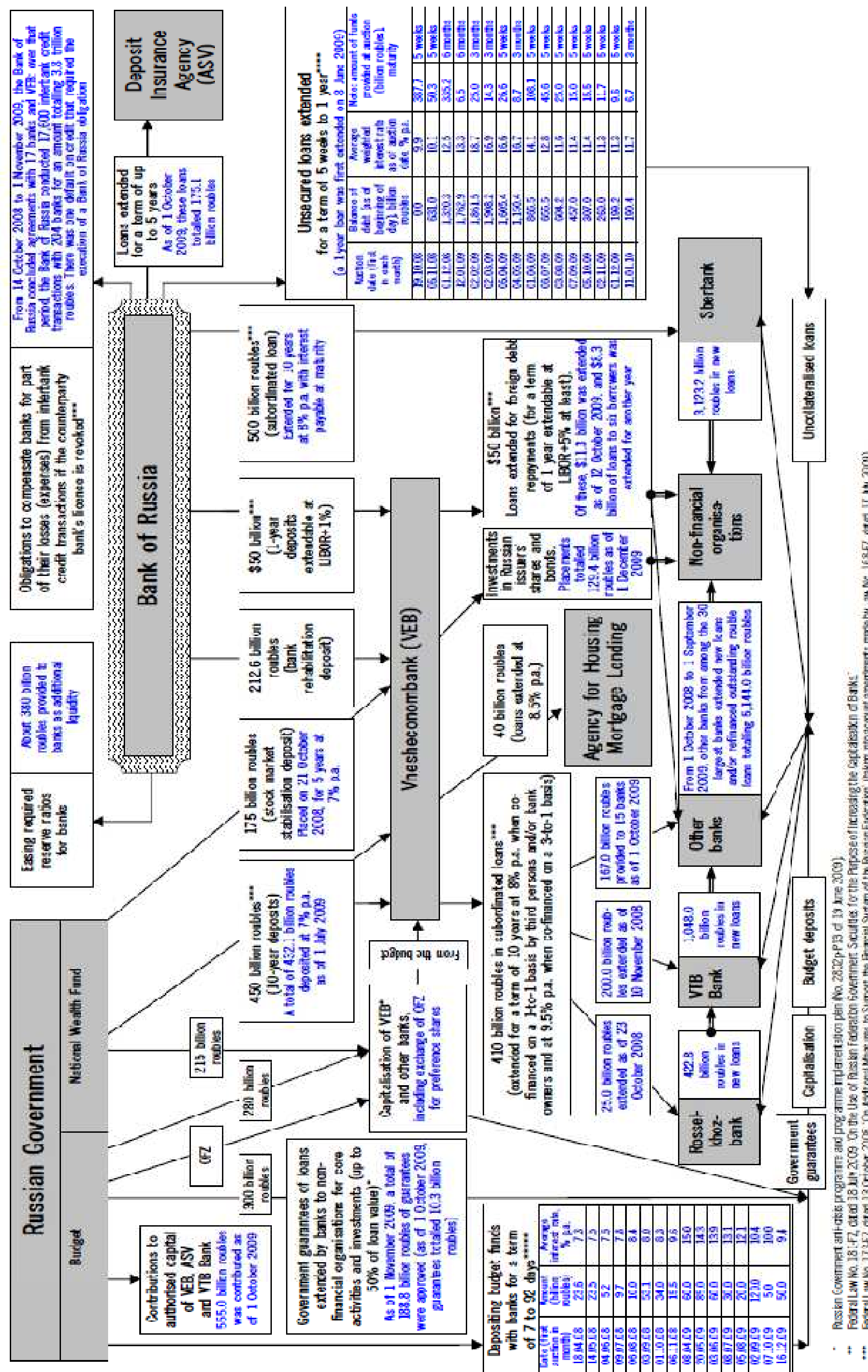
Although the domestic flow of funds, process of liberalization (or the lack thereof) and insertion of banking into Chinese political economy is beyond the scope of this paper, our findings from Brazil appear to provide valuable hypotheses about China. That is to say, the big state banks and other government banks in China remain commanding heights, not in the Marxist sense of providing means to reach socialism, but immense institutions with profound presence throughout politics and markets in the country. In this sense, our findings from Brazil appear to approximate patterns of change in China more than Washington Consensus expectations about liberalization and privatizations to free private and foreign banks. Financial statecraft draws attention to the capitalization of Chinese state banks through stock Sales and listings on capital markets. However, like the Banco do Brasil (that reformers in the 1990s sought to shift control to the private sector, only to increase federal government shareholding), the Chinese experience surely involves unexpected consequences and patterns of change different than a linear transition to the Berle & Means paradigm of corporate governance.

Russia: The New State Duopoly

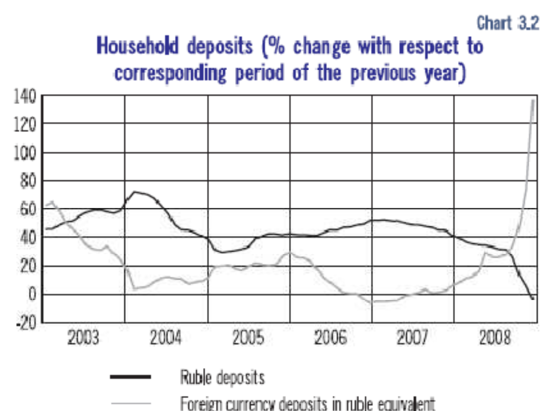
> "The rush of 2003-8 increased the market share of foreign banks to 28,5% from 5,2%. However, "*the state-owned banks received enormous help from the federal budget in the days of the crisis, thereby strengthening their dominant position on the Russian financial market,*" says Sergey Aleksashenko, the former Deputy chairman of Russia's Central Bank, quotes *Russia Profile*. *"Today, one must not harbor any illusion of a fair competition with them: all the main cash flows in Russia are controlled by state-owned banks."*
>
> http://www.barentsnova.com/node/1031

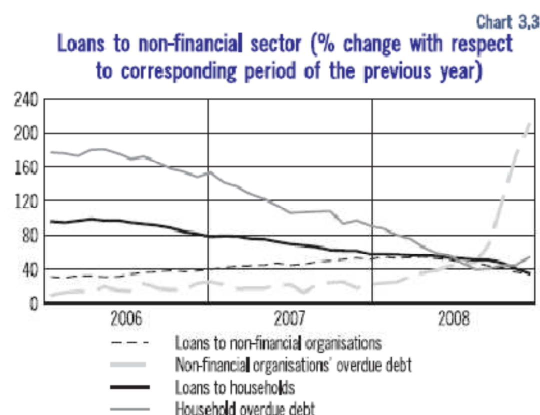
Description of banking policy in Russia during the global financial crisis can be obtained from Bank of Russia annual reports and related publications. The figure on the following page summarizes the financial flows to and from the Bank of Russia. Although central bank policy is beyond the scope of this study, the role of state banks in

channeling counter-cyclical credits released by the Bank of Russia appear to confirm the core argument that emerges from our studies of the Brazilian banking system. Further data on the following pages also suggest that state banks in Russia performed well during 2008-10, confirming on the basis of sparse data taken from Bank of Russia reports and documents that public banks have modernized, provided counter-cyclical credit to reverse credit crunch and economic downturn while realizing competitive advantages over private and foreign banks.

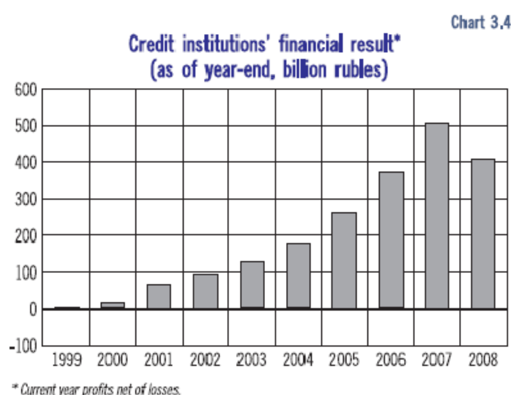


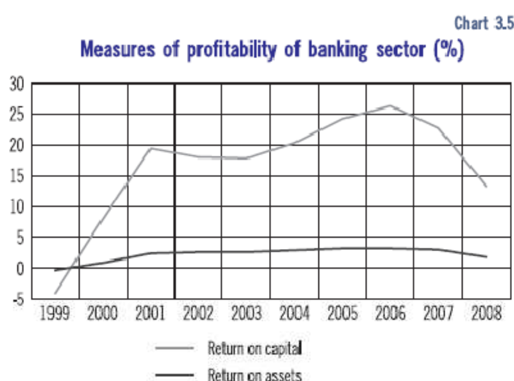
The following aggregate figures reported by the Bank of Russia suggest several trends of significance. First, Chart 3.2 suggests that household deposits shifted from Ruble deposits to foreign currency pegged (or indexed?) during 2008. Second, Chart 3.3 illustrates the substantial increase of non-bank overdue debt during second semester 2008.





Consequently, the financial results and profitability of banks declined significantly during 2008. The greater confidence in deposits with government banks found abroad suggests that this may have been critical in Russia.





Performance data deom 2008-10 provides a clearer picture, one that is consistent with our findings in Brazil. State banks appear to have outperformed all other types of banks except medium and small regional banks. The following table reports the average returns on assets and returns on equity reported by the Bank of Russia 2008-10.

Returns on Assets and Equity, by Type of Bank in Russia, 2008-9

	Return on assets, %			Return on equity, %		
	2008	2009	2010	2008	2009	2010
State Banks	2.2	0.8	2.4	15.7	4.6	14.8
Foreign Banks	1.8	1.1	2.1	14.6	8.3	14.5
Large private banks	1.3	0.3	1.1	10.6	2.8	8.4
Medium-Small Banks, Moscow	1.5	1.2	1.4	6.8	5.2	6.7
Medium-Small Regional Banks	2.1	1.2	1.5	13.1	6.5	9.8

Source: Bank of Russia, Bank Supervision Reports, 2009 and 2010.

Further data from the Bank of Russia on the capital adequacy of Banks during 2009-10 suggest that foreign banks and large private banks remain less capitalized against risks according to Basel II guidelines, albeit at levels almost double that recommended by the Bank for International Settlements (8.0% risk weighted). Although further analysis is needed, this data is consistent from that reported in Brazil that government banks tend to more cautious and more prudent in terms of placing aside higher levels of reserves and patrimony against possible losses.

Capital Adequacy of Banks, by Type of Bank in Russia, 2009-10

	2009	2010	2011
State Banks	18.4	22.7	18.6
Foreign Banks	15.5	19.6	19.5
Large Private Banks	14.0	18.1	15.5
Medium-Small Banks, Moscow	31.6	31.2	26.8
Medium-Small Regional Banks	21.9	24.1	20.7
Non-Bank Credit Institutions	37.2	103.8	67.8

Source: Bank of Russia, Bank Supervision Report, (Moscow) 2009, p. 43

Finally, Bank of Russia bank supervision reports also suggest that state banks expanded their market shares of assets and capital during the years following the global financial crisis. While large private banks and foreign banks lost market share of bank assets and bank capital in Russia, state banks increased their significant market share from 40.5 – 42.6 percent and 47.1-47.6 percent of assets and capital respectively. Unfortunately, data from previous years and for specific banking groups was not obtained. However, this data does appear to indicate that our findings of competitive advantages and policy alternatives

Number and Market Share by Type of Bank

	N Banks			% Assets			% Capital		
Type of Bank	2009	2010	2011	2009	2010	2011	2009	2010	2011
State	17	22	27	40.5	43.9	45.8	47.1	48.9	47.3
Foreign	101	106	108	18.7	18.3	18.0	17.2	16.9	19.1
Large Private	136	139	131	34.6	33.3	30.5	27.6	28.7	26.9
Med-Small Moscow	361	335	317	2.7	2.6	2.6	4.3	3.4	3.5
Medi-Small Regional	443	412	372	2.8	2.8	2.7	3.6	3.1	2.9
Other Credit Institutions	50	51	57	0.7	0.4	0.4	0.1	0.2	0.3
Total	1,108	1,058		100	100	100	100	100	100

Source: Bank of Russia, Bank Supervision Report, 2009 & 2010

In sum, politics and financial statecraft have led to the realization of significant competitive advantage by Russian state banks. Sperbank and Vneshtorgbank increased their share of bank assets from 32 percent in 2005 to over 50 percent by 2011 through mergers and acquisitions and aggressive displacement of foreign banks. Whatever the politics, data from the Bank of Russia suggests that monetary authorities released a

series of counter cyclical credit injections during 2008-9 to domestic banking institutions. Moreover, data suggests that state banks continue to perform at or ahead of levels reported by regional, private and foreign banks. The large market share and improved performance of state banks reported in recent data suggests, although the data is sparse, that government banks in Russia have also modernized, realized competitive advantages and provided policy alternatives against the impact of financial crisis abroad.

We were unable to find evidence of policy making toward social inclusion at the Bank of Russia or Russian state banks, despite the historical trajectory of the Sberbank as a savings bank under communism. The context also appears to differ considerably. A survey of the Zircon Research Group reportedly found that only 15 percent of Russians retain bank accounts because of mistrust in banks and government. This combination of realist politics and the realization of competitive advantages by Russian state banks suggests that theories of economic statecraft in the realist tradition may indeed explain the domestic developments under study.

Conclusion

This paper reports evidence about government bank modernization and financial statecraft in BRIC countries designed to counter the effects of crisis and shape domestic growth. Government banks in BRIC countries have contributed to the widely noted adjustment of these economies to global financial crisis and economic downturn. Contrary to the Washington Consensus that prevailed during much of the 1980s and 1990s (that privatization and liberalization, especially of banking, would free market forces and deepen domestic financial systems), a quite different process of bank change appears to have ensued after financial liberalization in the BRICs.

Instead of replacement of state banks with private banks, government banks remain central agents of domestic credit and growth and have modernized “just in time.” The capitalization and realization of competitive advantages by large government banks during the 2000s meant that, once the US financial panic spread across capital markets, broke highly leveraged private, and produced runs on private bank deposits, policy makers in BRIC countries nonetheless retained counter cyclical policy alternatives through their more solid large state banks.

These findings counter traditional foci on the private sector, individual entrepreneurship and ideals of free markets linked to the political and social advances recorded around the world in the last decades. We report an anomaly for theories of financial repression and the Washington Consensus about the virtues of privatization and liberalization. Although largely blamed for reproducing underdevelopment in the past, BRIC government banks averted excesses of private banking that drove credit bubbles such as home mortgages and derivatives in the US. And since liberalization of banking (we have not adequately discussed how much liberalization occurred in each country), government banks have modernized to compete with private and foreign banks. Government banks have realized competitive advantages and provided policy alternatives. These two arguments help explain why BRIC countries have fare comparatively well in the face of financial crisis in core countries.

Financial statecraft is therefore at the center of BRIC counter cyclical capacities and state planning. Brazil, Russia, India and China fared significantly better than advanced and many developing countries in terms of adjusting to credit crunches and export shocks. This is because government banks proved critical interbank credit to retain confidence in domestic banking systems. These institutions also presented other

policy alternatives for political and social forces. Politics shaped adjustment and recovery through state banks differently in BRIC countries. Given the realities of state centered political realism in Russia, the redirection of state banks toward goals of Chinese Five Year Plans, and the modernization of the State Bank of India amidst an amorphous federalism, the experience of Brazil with democratization and public bank modernization may stand out (Armijo, 2009).

Further analysis of savings banks and cooperative banks also will be required. As members of the World Savings Bank Institute (a global association of savings banks), the Caixa in Brazil, SNI and NABARD in India and China Postal Savings Bank appear to have provided access to very large numbers of previously unbanked citizens. This returns to traditional ideas of social banking and the history of savings banks that were founded throughout Europe since the late 18th century. The upmarket strategy and expansion into investment banking and international banking of the Russian Sberbank constrasts with downmarket strategies of savings banks in Brazil, India and China.

The financial press has recently reported doubts about bad loans in Chinese state banks and cast doubt on the financial results posted and reported in this paper. However, current estimates of 2-5 percent bad loans in Chinese state banks pale in comparison to the US$124.0 billion in bad loans shifted to asset management companies in the mid 2000s before capitalization of these institutions through sale of shares. Critics of state banking in Brazil also point to past levels of bad loans (reaching 30-40 percent!) because of their capture during military government delayed transition. But the cost of capitalization and transfer of bad loans from Brazilian state banks also remained below US$40.0 billion and is still contingent on liquidation of asset management companies created in 2001. In any case, these numbers are very small compared to GAO estimates of US$12.0 trillion in emergency infusions by US monetary authorities to banks and financial institutions from 2007-11.

These are anomalies for recent market-based banking theory and neo-liberal policy designs. However, they do not run counter to orthodoxy in economics and banking theory. Over the last decades, economic reforms (fiscal, financial, monetary and banking) have improved transparency and brought public policy and market expectations closer. However, expectations about deregulation and free market equilibria in banking and finance have succumbed in the face of panic and the still sobering consequences of crisis. The materials presented herein are descriptive and will require more careful analysis. However, given the urgency of searching for alternative development models and different approaches to financial statecraft in BRIC countries and beyond, we have taken the liberty to present research in initial stages and to provoke thought along the lines suggested by our kind conveners.

Appendix on Alternative Banking and Social Inclusion

This appendix describes how ideas about government banking led to further work on alternative banking and social inclusion with help from the Rockefeller Foundation Bellagio Center. In July 2011 we were able to convene a conference designed to gather scholars, alternative banking executives and representatives from savings and cooperative bank associations to rethink strategies for social inclusion in the global south and attempt to launch a new policy agenda. Given the search for alternative strategies to counter crisis, and the advances of stabilization, transparency and banking supervision in developing and emerging economies, we call for alternative banking communities in the global north and south to work together and help shape a new policy agenda for social inclusion. Because savings banks, credit cooperatives and other alternative banking and finance institutions have realized competitive advantages and emerged from crisis, we can now think beyond. We believe that new policies may help developing and emerging nations redirect large domestic institutions such as postal and savings banks toward meeting the UN millennium goals to eliminate poverty by 2015.

Plans include writing a green paper on Core Principles for Alternative Banking and Social Inclusion, convening events to promote these principles through institutional supporters and networks, and seeking adoption of these principles at policy venues such as the World Savings Bank Institute, the International Association of Cooperative Banks, the Bank for International Settlements, the International Financial Reporting Standards foundation, the ISO International Standards Organization, the Charter for Responsible Business, regional development banks and the World Bank. We also plan to submit an edited volume of scholarly contributions on alternative banking and social inclusion by year-end 2012. Interested parties are welcome to participate.

Institutional supporters and networks include:

Institutional Supporters
Columbia University School of International and Public Affairs, New York
Institute for Money, Technology and Financial Inclusion, University of California, Irvine
King´s College Department of Management, London
São Paulo Business School, Getulio Vargas Foundation
Second University of Naples

Networks
Association of Emerging Market Business Schools, São Paulo Brazil
Community of European Management Schools, Brussels
Critical Political Economy Network
European Association of Co-operative Banks, Brussels
Global Public Policy Network, London
International Cooperative Banking Association, Brussels
Social Science Finance Network, Amsterdam
Society for Advancement of Social Economics, Philadelphia
World Savings Bank Institute, Brussels

Core Principles for Alternative Banking and Social Inclusion

Commitment to End Capital Starvation
Promote access to and use of banking and financial services by all through new technologies and distribution channels to capitalize assets among the poor.

Commitment to Universalize Income, Savings, Credit and Finance
Provide basic income via ATM cards and mobile banking to reach the poor and open new channels of access to income, savings, credit, finance, insurance and opportunities.

Prudent Banking and Regulatory Compliance
Alternative banking seeks to work within regulations, guidelines and best practices recommended by domestic monetary authorities and international regulatory institutions such as the Bank for International Settlement Basel II Capital Risk Guidelines.

Corporate Social Responsibility Leadership
Integrate corporate social responsibility into down-market business strategies and institutions of representation and democratization.

Transparency and Accountability
Publish annual reports and balance sheets in accord with international best practices of financial, social and sustainability reporting.

Leadership in Provision of New Banking Services and Products to the Poor
Use competitive advantages in banking and institutional networks to channel more effectively capital, income and finance to the poor.

Generate Sustainable Income and Household Asset Accumulation
Use branch offices and new banking technologies to accelerate progress toward UN millennium goals to eliminate poverty.

Universalize Financial Education
Promote financial education to encourage responsible banking and finance and avert predatory lending and unethical practices.

Adopt Cutting Edge Technology and Management Practices to Provide Competitive Alternative to Private Commercial and Investment Banks
Incorporate electronic card and mobile banking services to better serve the poor.

Contribute to Realization of Bellagio Principles for Sustainability
Promote alternative banking and business practices that contribute to environmentally sustainable income, consumption and production as stated in Bellagio Principles for Sustainability.

Respect and Build on National and Regional Differences
Instead of a single model, alternative banking institutions and international agents may best accelerate social inclusion by respecting different contexts, averting single models and working with existing social and political forces to innovate.