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Financial Stability Report

November 2006
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BANCO CENTRAL DO BRASIL

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...	Data not available.
-	nil or non-existence of the event considered.
0 ou **0,0**	less than half the final digit shown on the right.
*	preliminary data.

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Preface

Publication of financial system performance analyses by central banks is a widely recommended practice for purposes of monetary authority transparency and convergence of the expectations of economic agents. It is in this context that the Central Bank of Brazil publishes its half-yearly "Financial Stability Report", a publication designed to diagnose National Financial System (SFN) efficiency and solvency.

Basically, this Report is based on data from the first half of 2006 and, in specific situations, the early months of the second half. It is composed of six chapters: Financial Market Evolution; National Financial System Supervision; Brazilian Payments System; National Financial System Organization; National Financial System Regulation; and Selected Studies.

The first chapter contains an evaluation of the recent behavior of both domestic and international financial markets.

Chapter two focuses on the composition and evolution of assets, liabilities and net worth, analysis of results, adjustment to the Basel Capital Ratio and Fixed Asset Ratio, credit and market risks, exchange exposure and stress scenarios, including analyses of the impacts of upward and downward movement in exchange rates, interest rates and loan quality on adequacy levels in relation to the Basel Capital Ratio.

The following chapter – Brazilian Payments System (SPB) – discusses the Central Bank of Brazil's efforts to foster enhanced security, efficiency, integrity and reliability of the payments system, while also structuring important financial system clearing and liquidation arrangements.

Dedicated to financial system organization, chapter four highlights the impacts generated by alterations in the SFN structure caused by entries and withdrawals of institutions, stock control transfers, acquisitions, split-ups, alterations of business objectives or liquidations.

With regard to prudential regulation, the rules issued by the National Monetary Council (CMN) and Central Bank of Brazil during the half-year period just ended are discussed.

The final chapter presents technical papers authored by Central Bank of Brazil employees dealing with themes related to the monetary authority's role in monetary policy implementation and supervision. The following papers were published:

i. Evaluating Country Risk for the International Assets of Brazilian Banks;

ii. Bank Failure Resolution Methods.

Base date June 30, 2006 was utilized in this Report, while the cutoff date for database formation was set at September 4, 2006. In some chapters, available information for the fourth two-month period of 2006 was utilized. Possible differences in relation to the previous issue and to other Central Bank publications are the result of document substitutions by financial institutions in the Central Bank of Brazil Information System (Sisbacen).

Summary

In the first half of 2006, burgeoning internal demand triggered investment growth and rising consumption, confirming the scenario of steady and continued economic expansion. Powered by current economic policy and robust trade surpluses, internal macroeconomic indicators point to a consolidated environment of lesser external vulnerability, with important impacts on the performance of the domestic financial market. Interest rates dropped sharply as expectations of declining inflation were confirmed.

With the benefits of rapidly expanding international trade and world GDP, trade balance results made it possible to sustain projections of current account surpluses. Oil price volatility in the first half of the year did not jeopardize Brazilian economic growth and inflation expectations.

The country has become increasingly resistant to shocks as a result of replenishment of its international reserve position, decreasing inflation, primary fiscal surpluses and an improved internal public debt profile, despite second-quarter concerns with the evolution of the world economy, giving rise to increased emerging country risk aversion.

Notwithstanding the excess international liquidity that marked the start of the year, world markets remained relatively stable. In May, however, both volatility and risk aversion rose sharply in the midst of concerns involving global liquidity and the ongoing process of rising United States interest rates. As a result, investors became somewhat more wary with respect to the emerging economies.

In this environment of relative national and international economic stability, the National Financial System (SFN) demonstrated that it was sufficiently solid and capitalized to cope with stress scenarios capable of increasing the risks to which national financial institutions are exposed.

Growth in personal loans, mostly involving payroll-deducted loans, drove overall expansion in credit operations with

individual borrowers, confirmed to some extent by the steady drop in basic interest rates. On the other hand, banks, particularly private national banks, continued targeting a major share of their resources into loan operations, in detriment to stock and security acquisitions.

The moderate growth registered in business financing matched the steady expansion of the economy as a whole. The 100 largest borrowers reduced their participation in total loans granted. This performance reveals that banks have tended to spread their loan operations out over a much larger borrower base.

Regarding classification of identified credit operations, 59% remained at the same risk level. The participation of levels AA-A dropped, while that of levels E-H increased, generating expansion in the minimum provisions required to cover nonperforming loans. Basically, this resulted from 12% growth in the volume of delinquent loans in the half-year period, posting a cumulative total of R$24.7 billion at the end of June 2006. Average provisions for these operations declined slightly in the period, though they remained well above the minimum level required by current rules.

SFN net worth grew 9.6%, sharply higher than inflation in the six-month period. The participation of foreign banks decreased. Both foreign banks and private national banks diminished their participation in stock and security investments and financial derivative instruments, while the share held by public sector banks continued relatively stable compared to previous half-year periods, principally under the heading of securities held to maturity.

Deposits were the major source of funding. Concentration of these resources in the largest banks remained stable. Just as in previous six-month periods, the segment of foreign banks increased its relative participation in this type of funding operation.

The system's net profits rose 22.1% compared to December 2005, mainly as a result of increased revenues on services and stock positions held primarily by private national banks, the segment that had the lowest operational costs. Following the trend noted in previous half-year periods, the operational costs of foreign banks continued declining, while public banks registered the highest operational costs.

Compared to previous half-year periods, the Basel capital ratio remained stable at a level well above the limit determined for institutions operating in Brazil. This fact

demonstrates that institutions held sufficient amounts of their own resources to cope with possible situations of technical insolvency. Even when submitted to stress tests in scenarios marked by deteriorating loan portfolios and adverse interest and exchange rate fluctuations, the major institutions would not be impacted to the point of systematically jeopardizing SFN solidity.

It became clear that the mechanisms implemented to manage and curtail the various types of risk in the SPB's fund, asset and derivative transfer systems are quite adequate. Evidently, this has contributed to preserving SFN stability.

Back-testing results indicated that clearing and settlement houses have demanded individual guarantees at levels sufficient to attenuate the replenishment risk of operations. At the same time, they have implemented sufficient additional safeguards to cover the exposure of participants. New measurements of clearinghouse resistance to shocks are being studied and should be implemented in the future.

With respect to SFN reorganization, expectations of gradual medium and long-term interest rate reductions and their probable impact on total revenues have led financial institutions, particularly those active in the retail segment, to seek to offset these losses through increased scale, while maintaining strategies aimed at expanding their service structures. Basically, these efforts have involved creation of partnerships with large commercial retail networks. Alterations in the number of institutions on the market have not had any significant impact on the structure of the system.

In the microcredit sector, the segment of credit unions has gone through a turbulent period marked by creation of new institutions, closing of others and mergers among institutions already on the market. These alterations reflect institutional changes that have occurred since 2003, when measures were adopted in the regulatory framework with the aim of enhancing the dynamics of institutions operating in this segment. In more specific terms, new modalities of credit unions were typified according to the type of membership and area of activity, making it possible for these institutions to operate with a more highly diversified public than previously and to expand the scope of their activities. In order to operate in this new format, institutions were obligated to have asset structures compatible with the new operational profile, while also preparing economic-financial feasibility projects that clearly demonstrate the consistency of the business expansion expected to result from changes in membership and activity areas.

In the first half of 2006, prudential SFN regulation was mostly concentrated in creation of new rules aimed at disciplining operations and commitments involving fixed income securities, commonly known as repo operations. The new regulations are aimed at enhancing transparency and eliminating differences in interpretation regarding their operating mechanisms. Rules were adopted with respect to the continuous efforts of open and closed pension fund entity managers and insurance and capitalization companies to generate increased profitability for their contributors, investors and beneficiaries.

Among other rules issued, the most important are those that define the basic principles to be followed by financial institutions in creating internal structures aimed at managing and monitoring operational risk, including specific risk management procedures, as well as that designed to improve regulations on the channeling of savings deposit resources by member institutions of the Brazilian Savings and Loan Association (SBPE).

Finally, the technical study on evaluation of the country risk of the international assets of Brazilian banks offers a preliminary indicator of country credit risk applied to the international assets of banks located in Brazil. The article discusses methods for resolving bank failures, raising highly relevant points to be addressed in elaboration of a new Bank Failure Resolution Law. Questions regarding liquidation of institutions within the judicial or administrative sphere stress, on the one hand, respect for creditor rights and, on the other, the need for regulators to give due consideration to the possibility of contagion within the banking system. Definitions are offered with respect to bank resolution. Further on, the Caldwell model (2005) is used to show the parameters under which restructuring of a bank is preferable to its liquidation. In closing, the model utilized and the empirical regularities indicate that a new Resolution Law must include much broader resolution methods than simple liquidation.

Financial market evolution

1

1.1 Introduction

In the first six months of 2006, internal macroeconomic indicators had highly positive impacts on domestic financial markets. These indicators were driven by current economic policy and high trade surpluses, consolidating an environment of low level external vulnerability. Both short and long-term interest rates dropped sharply in a framework of reductions in both current inflation and inflation expectations, foreign exchange rate appreciation and historically low country risk. The benign internal scenario coupled with positive inflows of external resources stimulated both stock and public debt markets. In early May, the São Paulo Stock Exchange (Ibovespa) set a new record of 41,979 points, and closed the month of August at 36,232 points, corresponding to a high of 8.3% in the year. Progress was also achieved in efforts to improve the Internal Federal Public Securities Debt (DPMFi) profile through increased participation of fixed rate and inflation-indexed earnings and longer debt maturities.

In the second quarter, concerns regarding world economic performance generated increased emerging country risk aversion, with negative repercussions on local financial markets and depreciation of the real, together with losses on investments in the stock market and interest and debt markets. However, these impacts were rapidly offset by the country's solid economic fundamentals and prompt action on the part of both the Central Bank and the National Treasury aimed at reducing market volatility and accelerating the move back to normality.

In early 2006, international financial market performance was impacted by excess liquidity. However, volatility and risk aversion rose sharply in the month of May, in the midst of rising concerns regarding global liquidity and interest rate hikes in the United States. From that point forward, the measures adopted by financial markets closely accompanied

the positions taken by central banks, particularly the United States Federal Reserve.

Starting in May, assets began losing value in an environment of relative financial speculation, particularly in economies with less solid fundamentals. Though part of these concerns soon dissipated, investors adopted a more cautious stance.

Adjustments in various emerging economy currency markets were accompanied by corresponding stock market adjustments. Though emerging markets always reacted rapidly to international stock and security market conditions, in this particular case they were significantly more sensitive to stock market variations. Sales in the period were generated by efforts to reduce risk positions and attempts to undo leveraged positions or less liquid operations. However, one should observe that the sharp rise in sales seems to have been caused more by wariness regarding the global economy than by specific emerging market factors.

1.2 National financial market

Despite expectations of a cutback in international liquidity caused by successive increases in the basic United States interest rate and the outlook for higher interest rates in the other G-7 countries[1], foreign investment flows to the emerging countries continued strong in early 2006. At the same time, the performance of macroeconomic indicators created the conditions required for adoption of external and internal debt management measures[2]. With these steps, the nation's country risk[3] dropped to 215 basis points on February 27.

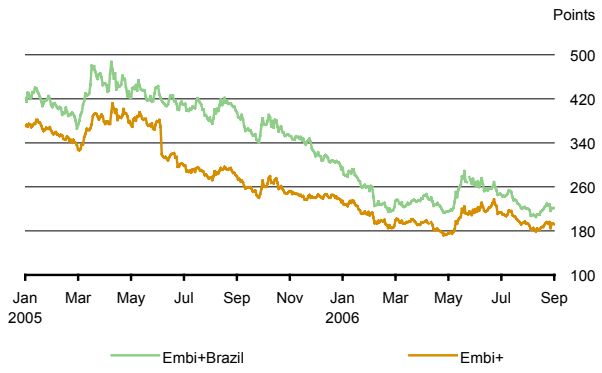
Starting toward the end of the first quarter and in the early days of the second, inflation pressures in the United States generated concerns that the tight monetary policy followed by that country would last longer than initially thought. Fears of a world economic slowdown made foreign investors much more wary of assuming risks in emerging countriesThis wariness produced a shift in portfolio

1/ In March, the European Central Bank raised its basic rate from 2.25% to 2.5% per year. The Bank of England raised its rate from 4.5% to 4.75% per year in August.

2/ On February 10, the government announced a buyback program involving external debt bonds to mature by 2010, with the aim of improving the external public debt profile. Regarding internal debt management, MP 281 was published on February 15 (converted into Law 11,312, dated 6/27/2006), eliminating taxes on foreign investor earnings on federal public securities.

3/ Measured according to the Embi Brazil.

Embi+

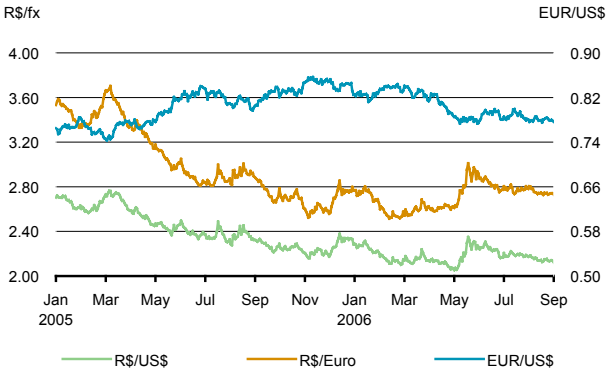


Source: Bloomberg

allocations as investors favored purchases of American Treasury bonds, in detriment to emerging market variable income assets and bonds. At the end of May, outflows of foreign investments resulted in devaluation of domestic financial assets, as the nation's country risk rose to 289 basis points on May 24.

In mid-July, signs of deceleration in the United States economy attenuated inflation risks. As a result, financial markets generated expectations of a pause in the tight monetary cycle followed by that country. Its expectations were confirmed on August 8 with the decision taken by the Federal Reserve Open Market Committee, with the added effect of accelerating foreign investment flows to Brazil, as the country's risk rating reached a historic low of 206 basis points on October 14. During the entire period, steadily rising and highly volatile oil prices represented a major risk factor on the international market[4].

Exchange rate



Source: Bloomberg

The foreign exchange rate accompanied the downturn in Brazil's country risk rating in the first quarter of 2006, due primarily to a US$13.6 billion trade operations in contracted exchange, coupled with net financial inflows of US$4.1 billion. In the latter case, these inflows were stimulated by an income tax exemption granted to foreign investor earnings on federal public securities. Net funding inflows allowed government purchases on the exchange spot market. However, the environment of increased emerging country risk aversion evident since the second quarter generated net outflows of US$ 8.8 billion in the financial balance of contracted exchange operations in the April-June period, compared to inflows of US$14.2 billion in trade operations. At the most critical moment, increased financial asset volatility resulted in 14.4% depreciation of the real, rising to 2.35 R$/US$ on May 23. Adoption of firm public debt management and exchange policies, with suspension of the Central Bank exchange spot market purchases and anticipated redemption of reverse exchange swap contracts, played an important role in normalizing national financial market operations and reducing exchange rate volatility[5].

4/ On the London market, the international price for Brent-type petroleum reached US$78.6 per barrel on 8/7/2006.

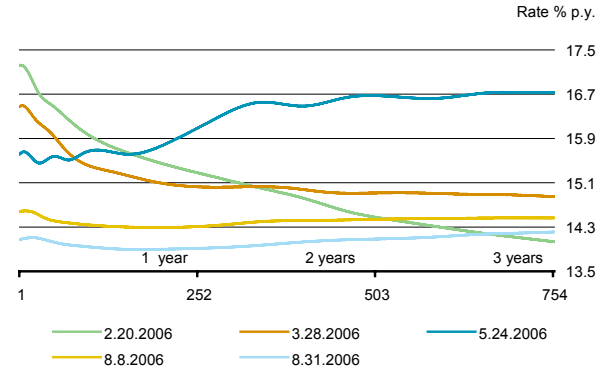
5/ It is important to mention announcement of the program of National Treasury repurchases of external debt securities, a measure that greatly improved the country's image before international creditors, in the midst of intense external turbulence. Between June 5 and 8, proposals were accepted for repurchases of dollar and euro-denominated bonds with maturities between 2007 and 2030. Although initial redemption forecasts indicated a total of up to US$4 billion in principal face value, repurchases came to only US$1.28 billion, demonstrating that investors were not interested in divesting themselves of their positions in Brazilian assets, even at a moment of increased emerging country risk aversion. Auctions were carried out between July 27 and August 2 involving exchanges of external debt securities denominated in dollars and scheduled to mature in 2020 and 2030 for papers to mature in 2037.

With improvements in the external scenario, exchange rates shifted into a downward trajectory once again, while the Central Bank restarted dollar purchases for the purposes of replenishing the nation's international reserve position, which totaled US$71.5 billion in August, compared to US$53.8 billion in December 2005, following anticipated payment of International Monetary Fund (IMF) loans. In the first eight months of 2006, the contracted exchange balance added up to US$26.9 billion, against US$10.8 billion in the same period of the previous year. The cumulative trade surplus expanded 4.8% from January to August, compared to the same period of the preceding year. This growth was generated primarily by increased exports, setting a new 12-month record of US$130.4 billion in August. With implementation of the external debt security buyback program and debt payments to international financial organizations, started in the second half of 2005, the public sector shifted from the position of net external debtor to net external creditor in the amount of US$11.8 billion at the end of August. Measures were taken early in the second half of the year[6] to improve exchange market performance, allowing exporters to maintain abroad up to 30% of the value of their exports, while increasing the period during which the remaining 70% could remain outside the country from 210 to 360 days, though still subject to exchange coverage. On September 4, the foreign exchange rate reached 2.12 R$/US$, indicating 9.1% appreciation in the year.

In the first two months of the year, the combination of low country risk, appreciation of the real and firmly controlled inflation resulted in an interest curve with a negative incline over its entire extension. Starting toward the end of March, however, the long segment of the curve inclined, mostly as a result of uncertainties surrounding the external scenario. In the second quarter, perceptions that emerging countries could bear the brunt of the adverse effects of a sharper than expected United States economic slowdown led investors to adopt a more cautious stance, resulting in the closing of short positions and creation of long positions in interest rate futures. The intermediate and long segments of the interest curve moved into a positive incline, with increased rate volatility.

This movement toward devaluation of domestic assets and futures market interest rate increases intensified at the end of May. As a result, the National Treasury held purchase and sale auctions involving National Treasury Notes – Series B (NTN-B) and the Central Bank interrupted its spot market dollar purchases. At the same time, the Central

Domestic yield curve



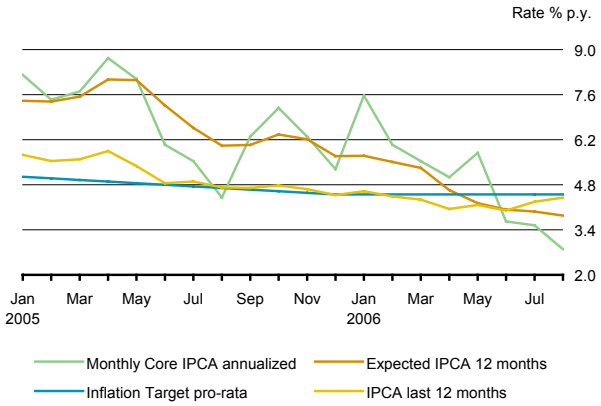
Source: BM&F and Bacen

6/ Resolution 3,389, dated 8/4/2006 and Circular 3,325, dated 8/24/2006.

Bank effected anticipated settlement of reverse exchange rate swap contracts allowing to dampen the rise in futures market interest rates and recover the value of assets that had registered strong cumulative losses.

The benign inflation scenario dating to the second half of 2005 has consolidated over the last eight months. In August, the Broad Consumer Price Index (IPCA) posted a cumulative high of 1.78%, compared to 3.59% in the same period of 2005. At the same time, cumulative year-on-year inflation closed at 3.84%, below the 4.5% target center defined for 2006 by the National Monetary Council (CMN). The prices of foodstuffs and residential goods registered deflation from February to June and were mainly responsible for the downward shift in inflation. In the first quarter, this movement was limited by increases in regulated prices, particularly fuels. However, as of April, fuel prices began pressuring inflation in the opposite direction, as ethanol supply conditions improved. Accompanying the headline index, IPCA cores also dropped. The annualized smoothed trimmed-mean core registered 2.80% in August, against 4.41% in August 2005.

IPCA

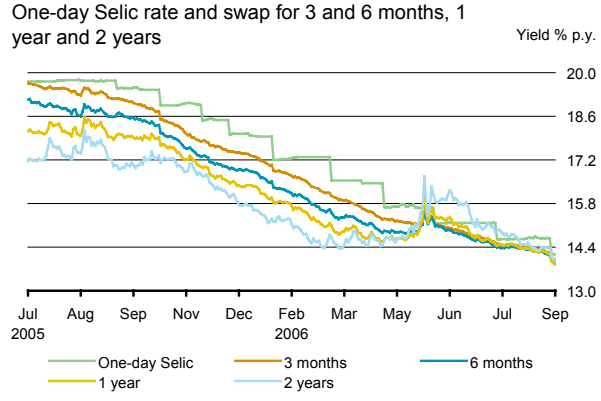


The trajectory of consumer inflation also benefited from the drop in wholesale inflation. According to the Wholesale Price Index (IPA-DI), wholesale inflation registered a 12-month high of 2.56%. The drop in wholesale inflation was caused primarily by agricultural products, with cumulative 12-month 13.18% deflation in March. In August, though still negative, this number moved to 2.41%, indicating some degree of more recent recovery in the prices of this product grouping.

Continued fiscal austerity, lesser external vulnerability and firm monetary policy implementation resulted in steady reductions in inflation expectations for 2006, with a forecast of 3.63% on September 1. The environment of low inflation and firmly controlled expectations, less-than-expected economic activity and continued 81.5% utilization of installed industrial capacity pushed the interest rate curve downward during the entire period. Between January and August 2006, three and six-month interest rate futures dropped from 17.39% and 16.87% to 14.03% and 13.96%, respectively. The one-year rate fell from 16.39% to 13.95%, while the two-year rate slipped from 15.74% to 14.12%. Real one-year interest declined from 11.37% per year in December 2005 to 8.92% per year on September 4[7].

Interest rates

One-day Selic rate and swap for 3 and 6 months, 1 year and 2 years



Sources: BM&F and Bacen

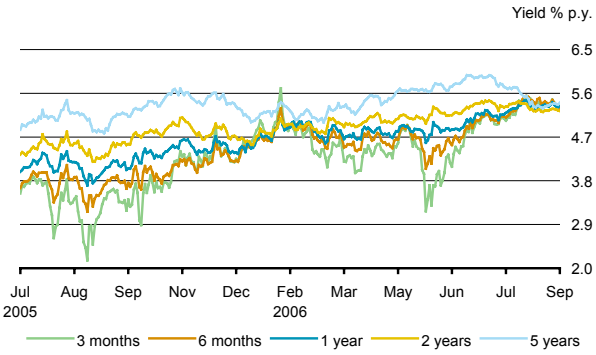
7/ Real one year interest measured by the benchmark rate in 360 day PRE x DI swap operations, announced by the Commodities and Futures Exchange (BM&F), deducting median IPCA inflation expectations for the coming 12 months – smoothed, released by the Central Bank.

In the period from January to August, the Monetary Policy Committee (Copom), which has been meeting eight times a year since 2006, reduced the basic interest rate target 3.75 p.p. to a level of 14.25% per year, at its most recent meeting.

The notional value of interest rate futures contracts on the Commodities and Futures Exchange (BM&F) totaled R$9.1 trillion between January and August 2006, corresponding to 38.8% growth compared to the same period of the previous year. Migration to longer maturities was evident during the period. When January-August 2006 is compared to the same period of 2005, the relative participation of contracts due to mature in less than six months diminished 2.3 p.p. to a level of 38.2% of overall volume, while contracts with maturities of more than two years, driven by the increased participation of foreign investors, registered growth of 3.1 p.p., representing 5.4% of volume. The most commonly negotiated contracts were those scheduled to mature in January 2007 and January 2008, each with about 25% of overall volume in the period.

Financial corporations and national institutional investors began the year with net long positions of R$21.6 billion and R$49.7 billion, respectively, in interest futures, increasing to R$61.0 billion and R$132.1 billion through the end of August. In the same time span, foreign institutional investors increased their net short interest rate positions from R$68.4 billion to R$180.2 billion.

Dollar – Denominated spread
Rate for 3 months, 6 months, 1 year, 2 years and 5 years

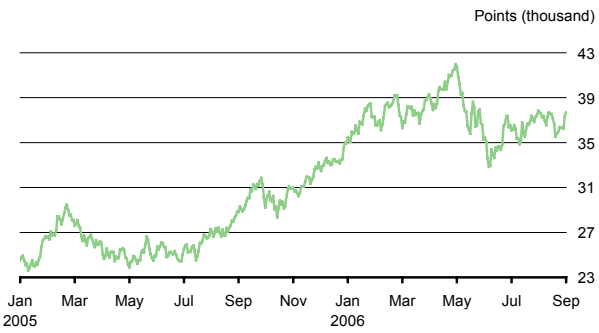


Sources: BM&F and Bacen

Between January and August, the interbank deposit rate versus the US dollar exchange rate variation spread curve increased over its entire extension, accompanying the increase in international interest rates. The short segment of the curve declined sharply in the latter half of May, when the long position held by banks on the spot market increased approximately US$5 billion. In June, the long position dropped gradually and the short-term exchange coupon moved closer to the Libor. Between December 29, 2005 and September 4, 2006, the three and six-month interbank deposit rate versus the US dollar exchange rate variation spread rate rose 0.78 p.p. and 0.87 p.p., while 1, 2 and 5-year rates rose 0.94 p.p., 0.63 p.p. and 0.24 p.p., respectively.

The stock market began 2006 with the momentum generated by the previous year's excellent performance, registering consistent Ibovespa increases until hitting a record high of 41,979 points on May 9, reflecting 25.3% valuation since the start of the year. The benign domestic scenario and high international liquidity were the major factors underlying this rise. In the first four months of the year, foreign capital

Bovespa index



Source: Bovespa

Domestic federal debt held by the public[1/]

Exposure by type of return

R$ billion

Period		Fixed rate		Selic rate		Price index		Exchange rate		Others		Total
		Value	%	Value	%	Value	%	Value	%	Value	%	Value
1999	Dec	40	9	252	57	25	6	101	23	25	6	441
2000	Dec	75	15	267	52	30	6	114	22	24	5	511
2001	Dec	49	8	329	53	44	7	179	29	24	4	624
2002	Dec	14	2	288	46	78	13	231	37	13	2	623
2003	Dec	92	13	366	50	99	14	161	22	13	2	731
2004	Dec	163	20	425	52	121	15	80	10	22	3	810
2005	Jan	155	19	463	56	120	15	66	8	22	3	827
	Feb	173	20	478	57	121	14	51	6	22	3	845
	Mar	188	22	498	57	122	14	43	5	22	3	874
	Apr	177	20	511	58	123	14	40	5	22	3	874
	May	196	22	508	57	124	14	38	4	22	3	888
	Jun	208	23	512	57	126	14	37	4	23	2	906
	Jul	205	22	525	57	125	14	38	4	23	2	916
	Aug	220	24	514	56	126	14	38	4	23	2	921
	Sep	240	26	507	54	127	14	36	4	23	2	933
	Oct	229	24	522	56	130	14	35	4	21	2	937
	Nov	258	27	511	53	139	14	31	3	21	2	960
	Dec	273	28	522	53	152	16	11	1	21	2	980
2006	Jan	263	27	518	53	189	19	-6	-1	21	2	985
	Feb	282	28	515	51	207	20	-14	-1	21	2	1 010
	Mar	294	29	506	50	217	21	-16	-2	21	2	1 021
	Apr	277	28	501	50	220	22	-16	-2	21	2	1 003
	May	295	30	483	48	219	22	-18	-2	20	2	999
	Jun	320	31	470	46	221	22	-15	-1	20	2	1 016
	Jul	308	30	476	47	222	22	-15	-1	23	2	1 014
	Aug	327	31	479	46	224	22	-15	-1	23	2	1 039

1/ Exchange rate swap of Banco Central do Brasil included.

inflows to the stock market totaled approximately US$3.2 billion, concentrated mostly in January (US$ 2.6 billion) and April (US$1.2 billion). In May, deterioration in the external scenario generated a strong process of flight to quality. As a result, foreign investment flows to the stock exchange closed the May-August period with a negative balance of US$5.6 billion. On June 13, the Ibovespa dropped to its lowest point of the year, with 32,847 points. However, in the second half of June, the market recovered and closed August with a cumulative high of 8.3% in the year.

In the first eight months of 2006, DPMFi remained close to R$1 trillion. At the end of August 2006, the total came to R$1,039.0 billion, equivalent to 6.1% growth over the final 2005 position. In that period, the DPMFi profile improved considerably, as participation of inflation-indexed securities rose 6.0 p.p. and the share held by fixed rate securities increased 3.6 p.p., while bonds indexed to the Selic rate dropped 7.2 p.p.

Growth in the participation of inflation-indexed securities resulted from increased issues of NTN-B, principally in the wake of the February 15 issue of Provisional Measure 281 which exempted foreign investors from income tax payments on earnings on investments in Brazilian federal public debt bonds.

With rising demand for NTN-B, the National Treasury was able to advance more rapidly toward the goals set down in the Annual Borrowing Plan, with no offers of Treasury Financing Bills (LFT) in the period extending from February to May.

Average maturities of public security issues increased from 33.3 months in December 2005 to 38.5 months in August 2006, after reaching 55.2 months in March. In the first quarter, this performance was driven by increased issues of inflation-indexed securities, with average issue terms of 82.8 months in March.

Accompanying average issue terms, the average term of outstanding DPMFi increased from 27.4 months last December to 29.8 months in August. The share of DPMFi scheduled to mature in up to 12 months dropped from 41.6% in December 2005 to 39.2% in August 2006. These results were positively impacted by LFT and NTN-B exchange operations, with respective totals of R$ 13.8 billion and R$49.7 billion, respectively, from January to August 2006.

Aside from very short-term repo operations, the Central Bank also carried out weekly repo operations at preset rates and

terms of three and five months, as part of its bank liquidity management efforts. Between January and August 2006, the financial volume of three-month operations totaled R$19.8 billion, while five-month operations totaled R$85.1 billion. At the end of August, five-month operations accounted for 92.5% of the overall balance.

In order to reduce the excess bank liquidity forecast for the subsequent quarter, the Central Bank performed LTN exchange operations, consisting of purchases of securities with shorter-term maturities, coupled with sales of other securities with maturities immediately subsequent to those purchased. In the first eight months of 2006, these operations totaled R$29.5 billion.

1.3 International financial markets

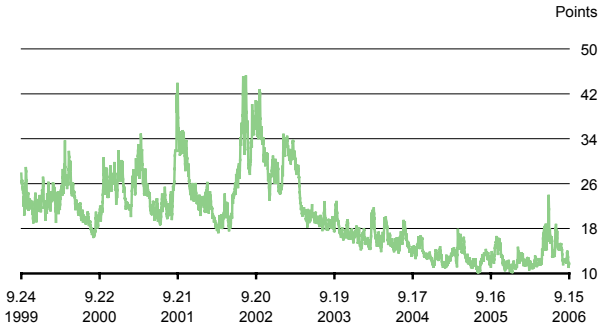
Between January and mid-May 2006, international financial market performance was impacted by the excess liquidity generated by low interest rates practiced by major central banks and by the enormous incomes generated by oil and commodity exporters in their pursuit of higher yield assets. Several emerging countries took advantage of the favorable international financial moment to accumulate international reserves, reduce their external debt and strengthen their public debt profile, making them less vulnerable to external shocks.

Starting in mid-May, uncertainties increased with respect to the extent and intensity of the global monetary adjustment, principally in the United States and Euro Area. The factors underlying international market instability worsened in June, as uncertainties surrounding inflation size of economic slowdown in the United States deepened. This scenario was further potentialized by worsening of geopolitical tensions in the Middle East and North Korea, with consequent increases in the volatility of various national currency rates compared to the American dollar, of emerging country risk premiums and of global stock market indices.

The VIX index, which measures implicit S&P 500 short-term volatility and is used by investors as a measure of risk aversion, ended the first quarter of 2006 at 11.39. On May 10, the index rose to 11.78 and, on June 13, to 23.81 – the highest level of the year.

In mid-June, emerging market indices of country risk, stock markets, bond markets and exchange rates started to show distinct

VIX



Source: Bloomberg

trends, pointing to a growing selectiveness among investors, in favor of those countries with more solid macroeconomic fundamentals. Expectations of further tightening of monetary policy in the United States were reduced when the Federal Open Market Committee (FOMC) raised the Fed funds rate to 5.25% per year, releasing a statement considered dovish by the market. From that point forward, foreign investor pursuit of higher yield assets intensified and emerging economies managed to recover much of what they had lost in May and June. The VIX index reached 11.76 on September 15, returning to the level of the first quarter of 2006.

In 2006, average yield on 10 year United States Treasury notes increased from 4.56% in the first quarter to 5.06% in the second, peaking at 5.24% on June 28, before returning to 4.93% in the third quarter of 2006[8]. Nominal average returns on Japanese bonds increased between the first and second quarters of 2006, moving from 1.58% to 1.9%, before dropping to 1.82% in the third quarter. In the same period, average yields on 10 year Germany bonds increased from 3.5% to 3.97%, ending the third quarter of 2006 with an average of 3.92%.

Excess global liquidity drove the search for higher returns and favored the persistently low risk premiums demanded on international capital markets. The Emerging Market Bond Index Plus (Embi+), an indicator of emerging country external debt risk, which had already declined 33.2% in 2005, dropped an additional 19.7% in the first quarter of 2006, closing at 192 points. On May 1, the Embi+ reached its lowest value in history: 173 points. The perspective for further global monetary tightening provoked shifts in capital flows to lesser risk assets. On June 27, 2006, the Embi+ climbed to 238 points, a rise of 37.6% compared to the May 1 position. From that point forward, expectations that the monetary squeeze in the United States was nearing its end increased and capital flows moved back to the emerging economies. In the third quarter of 2006, the Embi+ moved downward once again and closed September 15 at 192 points.

The repercussions of the increase in risk aversion varied from one emerging economy to another, signaling that investors have become more selective with respect to these markets, particularly in June, showing a distinct preference for countries that had achieved solid macroeconomic fundamentals. The Brazilian Embi+, traditionally higher than in Turkey, dropped below that country index on June 20 and has remained there ever since. The peaks

Yields on Treasury Bonds[1/]
Average rate

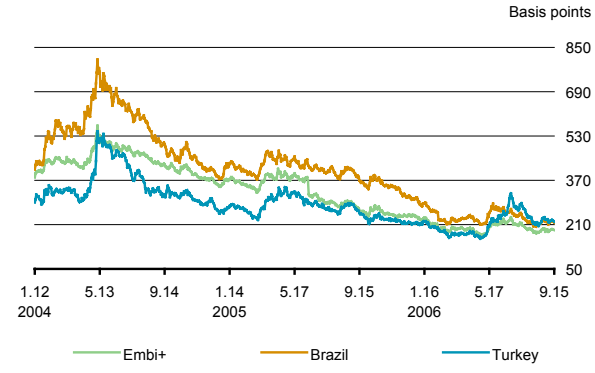
% p.y.

Period		USA	Germany	Japan
2004	I	3.99	4.08	1.32
	II	4.58	4.26	1.60
	III	4.29	4.13	1.65
	IV	4.16	3.79	1.46
2005	I	4.29	3.63	1.41
	II	4.14	3.35	1.27
	III	4.20	3.19	1.35
	IV	4.48	3.37	1.53
2006	I	4.56	3.50	1.58
	II	5.06	3.97	1.90
	III[2/]	4.93	3.92	1.82

Source: Bloomberg

1/ Nominal yields on 10 year's Treasury bonds.
2/ Up to September 15.

Embi+

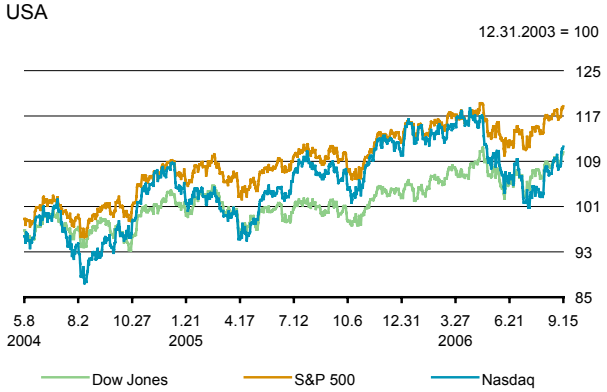


Source: Bloomberg

8/ Through September 15.

registered in various countries occurred on different dates: the Embi+ of Brazil, Russia and Mexico reached their second quarter maximums on June 13, while the South African and Turkish Embi+ hit their high points on June 26 and 27, respectively, suggesting that the two groups of countries had parted ways as of June 13. The Embi+ of Brazil and Turkey ended September 15 at 220 and 225 points, respectively.

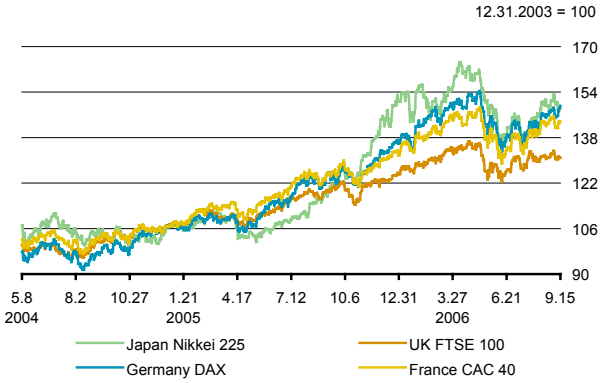
Stock exchanges
USA



Source: Bloomberg

The search for more attractive returns continued through April and early May and was important in driving stock prices higher. Growing risk aversion had a negative impact on the global stock market in the May/June period, influencing the economies of both industrialized and emerging countries. However, the impact on the latter group was greater due to adjustments in their exchange rates. Starting toward the end of June, the signals issued by the FOMC, together with release of positive United States economic indicators, brought some degree of relief to the equity market as the major stock indices recovered part of the losses suffered in May and June.

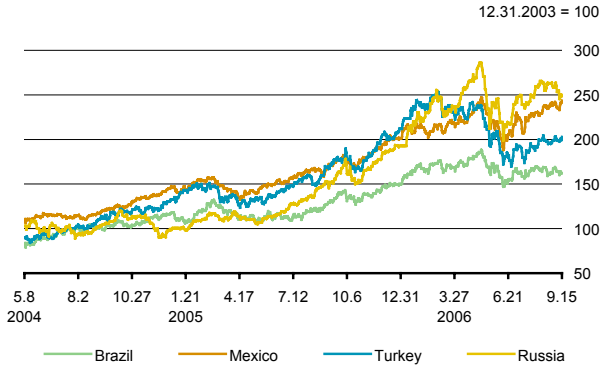
Stock exchanges
Japan and Europe



Source: Bloomberg

In the United States, the Dow Jones, Nasdaq and S&P 500 registered losses of 8%, 10.7% and 7.5%, respectively, between May 10 and June 13. The United Kingdom index (FTSE-100) and the German index (DAX) showed losses of 13.5% and 9.3% in the same period, while the Japanese Nikkei fell 16.1%. Over the same time, the Russian index (RTSI) posted a loss of 28.9% and the South Korean index (Kospi) dropped 17%. Finally, the Brazilian index (Ibovespa) and Mexican index (IPC) fell 21.3% and 23.5% respectively. In Turkey, the XU100 dropped to its lowest level in a somewhat different time frame, falling 26.7% between May 10 and June 26.

Stock exchanges
Emerging economies

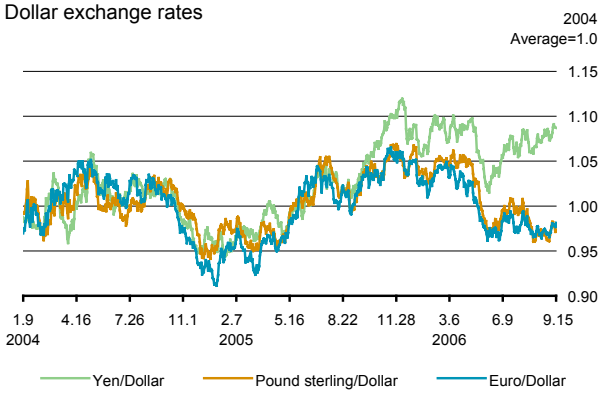


Source: Bloomberg

The turbulence registered on international financial markets eased as of the second half of June, when investors began returning to the stock market. However, several countries were unable to fully recover the losses accumulated in the period. Thus, the Nikkei, Kospi and XU100 accumulated losses of 1.5%, 1.3% and 4.1%, respectively, in the year[9]. On the other hand, the Dow Jones, DAX and FTSE-100 registered cumulative gains of 7.9%, 9.8% and 4.6%, in that order. Among the emerging economies, the Russian, Mexican and Brazilian stock exchanges registered respective gains of 28.6%, 21% and 8.1% between January 1 and September 15.

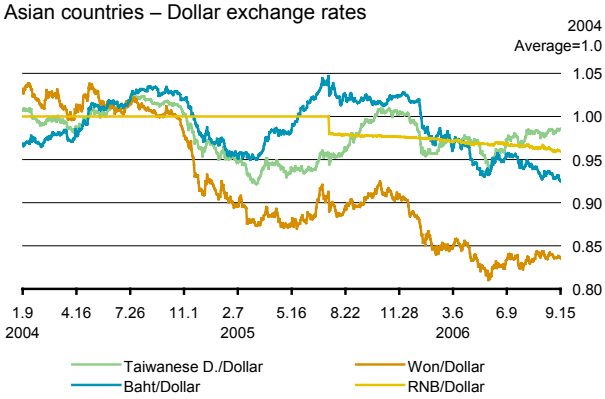
9/ Through September 15.

Developed countries
Dollar exchange rates



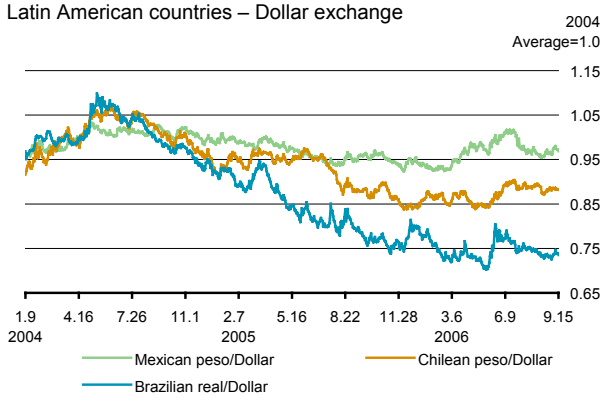
Source: Bloomberg

Emerging markets currencies
Asian countries – Dollar exchange rates



Source: Bloomberg

Emerging markets currencies
Latin American countries – Dollar exchange



Source: Bloomberg

Going on to exchange markets, economic growth in the United States coupled with the interest rate hikes adopted by the Fed were not enough to avoid valuation of the major international currencies against the American dollar, reversing what had occurred last year. On September 15, the value of the euro increased 6.9% against the dollar, compared to the position at the end of the previous year, and 3.8% against the rate in effect on June 30, 2004, when the tight ening bias was adopted by the Fed. In 2006, through September 15, the pound sterling gained 9.2% in value compared to the United States dollar. Since June 30, 2004, the gain was 3,4%. The yen remained stable against the dollar in 2006. Through September 15, it closed with a devaluation of 0.17%.

The exchange inflows registered by large group of emerging economies in the form of positive trade balances and direct investments raised the supply of foreign currency and, consequently, generated appreciation of the currencies of those countries over the course of the year. Through September, the currencies of Brazil, South Korea, the Philippines, Indonesia, Russia and Thailand gained 8.6%, 5.6%, 5.7%, 7.8%, 7.3% and 10.2%, respectively, against the United States dollar. In order to avoid even more accentuated devaluation, these countries resorted to anticipated payments of external liabilities and investments abroad, while also expanding their international reserve positions.

1.3.1 International capital flows

Driven by growth in American Gross Domestic Product (GDP) and the highly positive liquidity conditions generated by relatively low, albeit growing, basic interest rates in the developed countries, generalized world economic growth stimulated allocation of risks and opportunities through financial capital flows.

Solid growth in the United States and excess absorption in relation to domestic product resulted in a cumulative current account deficit of US$431.6 billion in the first six months of the year, thus increasing demand for exports, particularly from the developing countries. This demand was registered under both manufactured goods, mostly from Asia, and commodities, including petroleum, and acted as a powerful incentive for the developing countries to obtain conditions that favored equilibrium in their balance of payments and reductions in exchange rate vulnerability. This was reflected in maintenance of investor confidence and in private capital flows to these countries. According to IMF forecasts

Net capital flows to emerging economies

US$ billion

Itemization	2004	2005	2006[1/]	2007[1/]
Total				
Private capital flows, net	205.9	238.5	211.4	182.2
Private direct investment	176.9	255.9	263.3	246.1
Private portfolio flows	13.9	3.2	-31.1	-4.6
Official flows, net	-64.7	-151.8	-238.7	-174.1
Change in reserves[2/]	-513.5	-592.5	-666.3	-747.9
Asia				
Private capital flows, net	130.4	64.0	97.9	69.0
Private direct investment	57.8	99.6	94.0	96.0
Private portfolio flows	5.2	-12.7	-13.1	-8.4
Official flows, net	-9.1	-11.7	-8.4	-12.0
Change in reserves[2/]	-340.4	-286.6	-344.8	-331.4
Western Hemisphere				
Private capital flows, net	1.1	14.0	12.7	18.5
Private direct investment	46.0	49.2	46.1	46.6
Private portfolio flows	-13.9	25.4	4.3	10.7
Official flows, net	-9.0	-30.1	-12.6	-2.2
Change in reserves[2/]	-23.1	-32.8	-39.9	-49.3
Central and eastern Europe				
Private capital flows, net	70.4	113.5	88.8	84.8
Private direct investment	34.4	47.7	56.7	44.4
Private portfolio flows	26.2	20.4	1.5	11.4
Official flows, net	-6.7	-8.5	-3.2	-2.2
Change in reserves[2/]	-14.6	-46.3	-18.8	-17.1
Others				
Private capital flows, net	4.0	47.0	12.0	9.9
Private direct investment	38.7	59.4	66.5	59.1
Private portfolio flows	-3.6	-29.9	-23.8	-18.3
Official flows, net	-48.9	-131.6	-227.1	-159.9
Change in reserves[2/]	-158.5	-259.6	-302.7	-399.4

Source: World Economic Outlook, September 2006

1/ Forecast.

2/ The negative signal indicates increase of reserves.

published in the September World Economic Outlook (WEO), net outflows of private capital to the developing countries should total US$211.4 billion in 2006, compared to US$238.5 billion last year.

Despite this, events in May and June rocked investor expectations regarding the sustainability of this environment. Investor willingness to assume greater risks in emerging market assets was impacted and demand for the currencies of these countries dropped. Among the hardest hit countries, the most important were those with current account deficits financed through short-term investments: South Africa, Colombia, Hungary and Turkey. The period of instability ended when the FOMC published the minutes of its June 29 meeting, signaling that the end of the tightening cycle of its monetary policy was in sight. This prediction came to fruition at the following meeting. Most of the emerging countries were able to regain investor confidence, in such a way that the financial market turbulence registered in May and June was not representative of the financial environment that prevailed in the first nine months of 2006.

The period of uncertainty did not affect direct investments in the developing countries. These investments remained stable in 2006 compared to the 2005 volume. According to IMF forecasts, the net volume of foreign direct investments in the emerging economies is expected to close 2006 at US$263.3 billion, up 2.9% over the preceding year.

Asia continues as the major target for foreign direct investments, absorbing US$94.0 billion or 35.7% of the total forecast for 2006, compared to 38.9% in 2005. Developing countries from Central and Eastern Europe are forecast to receive US$56.7 billion, thus surpassing total direct investments received by Latin American and Caribbean countries for the first time in the decade. According to forecasts, Latin America and the Caribbean will receive net inflows of US$46.1 billion dropping from a 19% participation level in 2005 to 18% in 2006, compared to 26% in 2004. Africa is expected to repeat the good 2005 result, when it registered net inflows of US$27.6 billion, surpassing the developing countries of the Middle East – US$20.9 billion – and those of the Community of Independent States (CIS) – US$18 billion.

Portfolio investments and other types of private capital are expected to register net outflows of approximately US$52 billion from the emerging economies during the current year. The major sources of capital remitted to the developed

countries are Middle Eastern states, with an estimated total of US$52.7 billion. In contrast to the countries of Central and Eastern Europe, which are forecast to receive US$32.1 billion in 2006, the emerging economies of the Americas are expected to remit US$33.4 billion. In Africa, Asia and the CIS, net flows will be no more than residual.

The emerging countries have taken advantage of the favorable external scenario to amortize their liabilities with government creditors. Net amortizations of debts with government entities are expected to total US$238.7 billion in 2006, according to the World Economic Outlook (WEO), 57.2% more than in 2005 and almost four times the overall total in 2004 (US$64.7 billion). Oil exporter countries played a major role in this process, as evinced by the fact that Middle Eastern nations are expected to remit US$166.5 billion – 69.8% of the total – to government creditors. Russia made early payment of most of its Paris Club debt, contributing significantly to overall CIS country payments totaling US$30.2 billion. In their turn, the countries of Africa are expected to remit US$17.8 billion to government creditors over the course of 2006, US$3.4 billion more than the total remitted in the previous year.

Since most countries have current account surpluses, capital inflows to the developing countries will be channeled primarily into building international reserve positions. According to IMF forecasts, the total for the coming year should reach US$666.3 billion, compared to US$592.5 billion in 2005. Of this total, US$344.8 billion or 51.8% will be accumulated by the countries of Asia, mainly by China. The CIS is expected to accumulate US$115.0 billion, with Middle Eastern countries accounting for an additional US$85.7 billion. International reserves accumulated by the countries of Africa are at their largest volume in a decade, with US$62.0 billion, compared to US$42.2 billion in 2005. This amount is greater than the aggregate total registered by the Latin American and Caribbean countries (US$39.9 billion) and Central and Eastern European nations (US$18.8 billion).

1.3.2 Financial institutions

According to the Quarterly Banking Profile issued by the Federal Deposit Insurance Corporation (FDIC), the profit margins of United States banks and savings institutions covered by the system set a new record. The net result for these institutions came to US$38.1 billion, 3.2% above the

previous quarter's result and 10.9% over the same period of 2005. Nonetheless, only 56.6% of these institutions posted net results greater than those registered a year ago. Average returns on assets (ROA) in the quarter remained unchanged at 1.34% and only 48.7% of these institutions registered better ROA than in the same period of the previous year. Since short-term interest rose more rapidly than long-term interest, the costs of loans at the larger institutions that are more dependent on short-term loans as backing for their assets, increased more rapidly than returns on investments. Consequently, the larger the institution, the tighter its margins.

If, on the one hand, institutions covered by the FDIC added US$ 6.4 billion to provisions for nonperforming loans, bad loans in general totaled US$6.1 billion. The 0.3% increase in provisions did not keep step with the pace of overall growth in loans and loans in arrears. Consequently, the ratio of reserves/loans and total leasings dropped for the 14th consecutive quarter, falling to 1.1%, the lowest level since 1985.

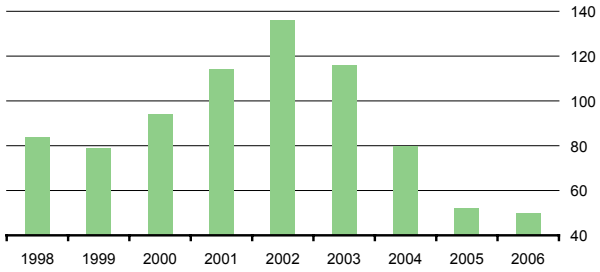
Loan losses remained low. In annualized terms, the ratio of bad loans to total loans and leasings dropped to 0.35%, the second lowest value in 23 years. Though loans in arrears increased 1.1% in the second quarter, the rate of loans in arrears fell to 0.7%, also the lowest point in 23 years.

With strong loan demand, growth (2.8%) in the total assets of institutions covered by the FDIC reached US$314 billion in the second quarter. Loans and leasing operations accounted for 2/3 of the increase, while mortgage loans registered the sharpest growth (2.6%). In the 12-month period ended in June, total growth in these assets reached more than US$1 trillion, the first time volume has surpassed this mark.

For the eighth consecutive quarter, none of the institutions covered by the FDIC went bankrupt. This had never occurred in the 73 years since the federal deposit insurance system was created. However, the number of institutions included in the "list of problem institutions" increased from 48 in the first quarter of 2006 to 50 in the second quarter, and total assets of the respective institutions increased from US$5.4 billion to US$5.5 billion.

In the United Kingdom, the major banks registered good profitability and capitalization indices, despite such recent economic turbulence as that caused by sharp highs in the prices of oil and other commodities, together with falloffs in the prices of several other assets. The fact that these problems were overcome with little or no difficulty was attributed to

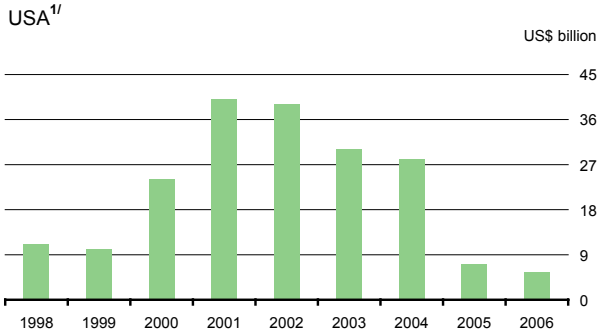
Number of "problems" institutions
USA[1/]



Source: FDIC, FDIC Quarterly Banking Profile, Second Quarter 2006

1/ Include commercial banks and savings institutions.
Obs.: 2006, midyear data.

Assets of "problems" institutions
USA[1/]



Source: FDIC, FDIC Quarterly Banking Profile, Second Quarter 2006

1/ Include commercial banks and savings institutions.
Obs.: 2006, midyear data.

improvements in banking system risk management, coupled with innovations introduced into the British and international capital markets with the aim of diluting risks. Other factors that contributed to this result in recent years were cumulative profitability and capitalization. Capitalization indices have remained comfortably above regulatory levels.

Despite the solidity of the British banking system, the Bank of England highlighted several risks in its July 2006 Financial Stability Report. Large financial institutions that are major players on the international market and hedge funds could be impacted by falloffs in the prices of high-value assets. Another type of risk is related to growing household indebtedness. In this case, the ratio of indebtedness to available income increased 50% since the end of the 1990s. However, this risk is somewhat attenuated by the high proportion of mortgage loans included in this debt, since these loans have very low default rates, at the same time in which the average ratio of loans granted to the value of the real estate in question is also quite low.

According to the May 2006 Financial Stability Report issued by the Bank of Spain, despite sharp competition in the sector and low rates of interest, the country's excellent economic performance has benefited the banking system. Financial institutions were successful in increasing their profitability, while registering stable solvency indices well above minimum regulatory requirements. This situation is also evident in the decreasing volume of non-performing loans and lower risk levels in the credit portfolios of the major banks. Credits granted to the private sector continued expanding, not only keeping pace with economic activity but acting as one of its drivers. Credit volumes targeted to private consumption, mostly involving the real estate sector, including both acquisitions of residential real estate and construction and real estate development activities, increased sharply. On the other hand, however, the level of Spanish household debt increased, at the same time in which families were committing a larger share of available income to paying these debts. Parallel to these developments, the loan growth that has marked recent years was not accompanied by an equivalent expansion in traditional bank deposits. This is a factor that reflects risk and deserves attention. To compensate for the gap in the credit supply, there has been an increasing tendency to resort to capital markets and to the retail market, both of which are higher cost liabilities than traditional deposits.

The positive evolution of the Spanish banking system was also driven by activities carried out abroad. To some extent,

this reflected the intense pace of world economic activity and appreciation of Latin American currencies against the euro. At the same time, the risk profile of financial assets held by Spanish banks in foreign markets has improved. On the one hand, this was caused by increased concentration of business in other European countries and, on the other hand, by improved sovereign debt credit ratings in several Latin American countries. Incorporation of newly acquired foreign institutions into 2005 results also made a positive contribution to the rapid growth in profitability registered by the banking system. In comparative terms, profitability and efficiency indicators remained at levels higher than the averages registered by the banks of other European countries.

French banks took advantage of the positive international scenario and achieved higher profitability levels and more comfortable solvency margins. Furthermore, these results were also influenced by a lesser need to set aside provisions to cover risks. In general, the margins earned on intermediation in credit operations with the different sectors of the economy declined. This was particularly strong in the real estate sector, as a result of sharpened competition among financial institutions. The most recent *Revue de la Stabilité Financière*, issued by the Bank of France (May 2006), calls attention to the risks that could arise as a result of more relaxed credit standards as a way of coping with intense competition, and to the expanding level of indebtedness of French households. With regard to the international exposure of the major banks, potential risks related to acquisitions of institutions in emerging markets, particularly Eastern Europe, are offset by active participation in mergers and acquisitions in other Western European countries, a process that tends to favor diversification of markets and sources of income.

The Financial Services Agency (FSA) of Japan confirms that the number of loans classified as non-performing loans by the Financial Reconstruction Law has declined steadily, dropping approximately ¥4.2 trillion from September 2005 to March of this year. Provisions for non-performing loans also declined, falling 34% in March 2006 compared to the same period of the previous year. This improvement can be attributed to the performance of the Japanese economy, good corporate results and the effects of measures taken to improve Japanese banking system performance, such as the 2002 Financial Revitalization Program.

The Chinese government has been successful in its strategy of improving the quality of bank credits. According to the China Banking Regulatory Commission (CBRC), total non-

performing loans in the second quarter of 2006 represented 7.53% of total loans, compared to 8.03% in the previous quarter and 8.6% in the final quarter of 2005. Total banking system assets registered 18.5% growth in the second quarter of this year, in annual terms.

Driven by economic growth in the first half of this year, the credit supply has expanded at a pace above that considered prudent by monetary authorities. In July 2006, the volume of credits expanded at an annual rate of 16.3%, following 15.2% growth in June. The rapid growth is justified by an increasing number of new projects and injections of resources that local banks obtained by opening their capital to foreign institutions. As a result, greater volumes of resources were available for loans and the need for increasing returns on total assets. The need to avoid an increase in non-performing loans and bring the pace of economic activity down to a more sustainable level generated measures taken to dampen rapidly expanding credit. Among these measures, mention should be made of increased bank reserves, higher demand for real estate financing and restrictions on local government investments.

The Chinese banking system has made important progress in improving its business and risk management structure. According to the CBRC, Chinese banks have managed to diversify their sources of revenues, while increasing total financing granted to small businesses and individual consumers and reducing the volume of medium and long-term loans in their portfolios. Bank fraud involving directors of state-owned financial institutions remain a serious threat to the system's credibility and efficiency. For this reason, Chinese regulatory authorities are perfecting systems designed to detect and prevent these crimes. According to the CBRC, 480 cases of fraud were discovered in the first half of this year, resulting in 231 firings and varied forms of punishment for an additional 1,559 employees.

1.4 Conclusion

Improvements in Brazilian economic fundamentals have strengthened domestic financial markets. With the highly positive international liquidity conditions, the first half of 2006 witnessed important improvements in all of these markets. At the same time, the volatility that marked the second quarter of the year on interest, exchange and stock markets, provoked by a worsening of the external scenario, dissipated once uncertainties diminished regarding foreign markets.

With the exception of the period of greatest volatility, domestic interest rates followed a predominately downward curve from January to August 2006. The major factors underlying this performance were low current levels of inflation and expectations of compliance with established targets in the current year and in 2007. The scenario of controlled inflation, and austere economic policy, reductions in external vulnerability and an improved domestic public debt profile has certainly aided in constructing the framework needed for long-term financial stability.

The global economy's capacity to withstand varied types of shocks has increased. As a result, the outlook for 2007 is quite positive, despite some degree of deterioration in the global economy in recent months. As its baseline scenario, the September WEO forecasts 5.1% global growth in 2006 and 4.9% in 2007. The publication goes on to affirm that the United States will expand 3.4% in 2006, dropping to 2.9% in 2007, mostly as a result of weakening of that country's real estate market which will have a powerful negative impact on growth in consumption and residential investments. From the point of view of inflation, the baseline scenario assumes that inflationary pressures will be curtailed with only moderate increases in the interest rates established by G-3 central banks. This scenario is considered favorable to those emerging economies that have managed to create solid macroeconomic fundamentals.

IMF estimates suggest that there is one chance in six that 2007 global growth will close at 3.25% or less. The risks included in the baseline scenario point to intensified inflationary pressures in the United States, Euro Area and United Kingdom, with adoption of more conservative-than-expected monetary policy positions in those countries; upward oil price pressures, as a result of increased geopolitical tensions and supply and demand mismatches; and a more abrupt downturn in the United States real estate market, resulting in sharper deceleration in that country's economy with very negative impacts on global growth.

All of this could lead authorities throughout the world to take more proactive stances in coping with these risks. Thus, volatility will continue into the future as markets assess the positions taken by the major central banks to cope with the inflation-growth dilemma. A sustained restrictive monetary policy implemented by central banks will more than likely reduce growth in the liquidity volumes that have driven capital flows to the emerging economies, generating concomitant pressures on their assets. However, improvements in the basic fundamentals of emerging country economies should continue attracting new external capital inflows.

National Financial System supervision

2

2.1 Introduction

Distribution of segments – SFN
June, 2006

Itemization	Number of institutions	%	Total assets (R$ billion)	%
Total of the SFN	1 883		1 816	
Banking	1 553	82.5	1 799	99.1
consolidated I	104	5.5	1 560	85.9
consolidated II	30	1.6	212	11.7
consolidated III	1 419	75.4	27	1.5
Non-banking	330	17.5	17	0.9

Source: 50 banks in Brazil by total assets

Distribution of segments – SFN
June, 2006

R$ billion

Itemization	Net worth	%	Net profit/loss	%	Total deposit	%
Total of the SFN	180		22		721	
Banking	174	96.5	22	98.5	718	99.6
consolidated I	143	79.4	18	80.0	670	92.9
consolidated II	25	14.0	4	16.7	36	4.9
consolidated III	6	3.1	0	2.4	12	1.6
Non-banking	6	3.5	0	1.5	3	0.4

Source: 50 banks in Brazil by total assets

This chapter concentrates on discussing the risks to which National Financial System (SFN) member institutions are exposed, the composition and evolution of their assets, liabilities and net worth, including analysis of results and their adjustment to operational limits.

To facilitate this presentation, the SFN was subdivided into two systems[10]: the banking system, composed of financial institutions included in consolidated banking segment I, consolidated banking segment II and consolidated banking segment III; and nonbanking system.

Utilizing the June 2006 database, the report "Top 50 Banks"[11] shows that banking system assets corresponded to 99.1% of the SFN total, representing an increase of 0.1 p.p. compared to the end of the second half of 2005. The number of institutions remained stable at 1,544 and 1,551, respectively, in June and December 2005, compared to 1,553 at the end of the second half of 2005. Participation of these institutions in net profits rose from 97.9% in December 2005 to 98.5% in June of this year.

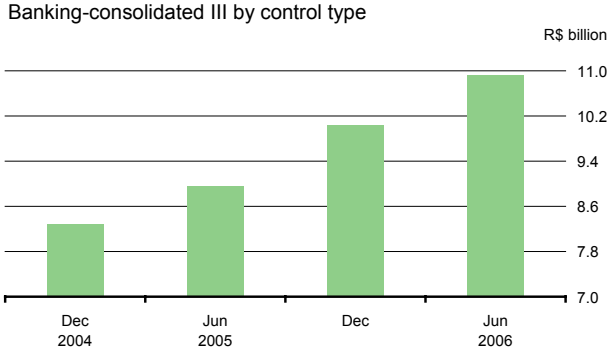
Though net worth and total deposits remain concentrated in the banking system, demonstrating that the financial system is composed essentially of banks, the participation of the nonbanking system in overall SFN assets dropped 0.1 p.p.

In the banking system, the first group, known as consolidated banking segment I and composed of 104 institutions, accounted for the highest share of SFN assets, with 85.9%. Compared to the previous half-year period, slight reductions

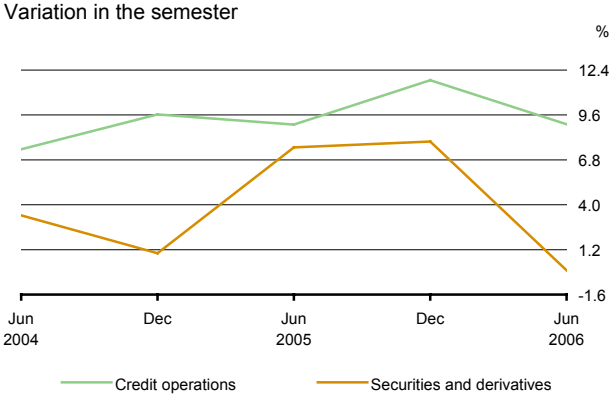
10/ See box "Concepts and Methodologies", pages 68 to 72.

11/ A quarterly electronic Bacen publication (http://www.bcb.gov.br/fis/TOP50/ingl/TOP502006060I.asp) The cutoff date for formation of the database does not coincide with that used in this report. This may result in differences in balances.

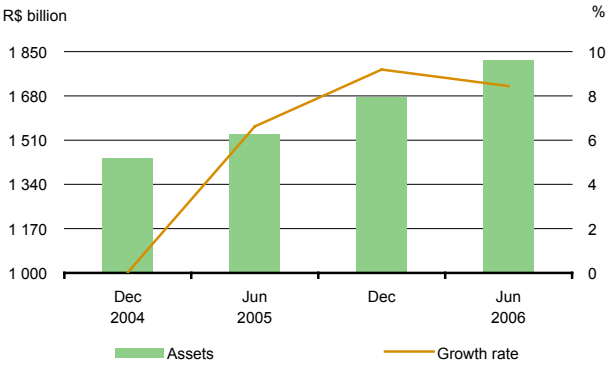
Loans and lease operations
Banking-consolidated III by control type



Main investments – SFN
Variation in the semester



Assets – SFN



occurred in participation in net worth, dropping from 79.6% to 79.4%; in net profits, falling from 85.7% to 80%; and in total deposits, dropping from 93.3% to 92.9%.

In the last four half-year periods, the increase in the participation of credit unions in total SFN assets has been significant, with 1.2% and 1.3%, respectively, against June and December 2004, rising to 1.5% in the second half of 2005. Though still incipient, these numbers demonstrate the growing importance of credit unions. In the last six months, these institutions increased the balance of their portfolios 8.7%, accounting for approximately 1.6% of total credit operations granted in the country.

Banking institutions continued channeling their investments into loan operations, albeit at a lesser growth rate than in the second half of 2005. Investments in stocks and securities dropped 0.1%, totaling R$444.8 billion. These operations expanded less than the volume of resources channeled into credits, with a total balance of R$664 billion, or 9% positive growth.

According to the Inflation Report Volume 8 – Number 2/2006, growth in bank operations targeted to the credit segment reflects recent increases in loans referenced to nonearmarked resources, with growth in operations with both individual borrowers and corporate entities. The upturn in lending to individual borrowers was driven by improved family income and was mostly concentrated under personal loans, particularly payroll-deducted loans. This loan modality, which reached a total of R$39.3 billion in April 2006, accounted for 48.8% of the personal loan portfolio or, in other words, 18.5% of total credits targeted to individual borrowers.

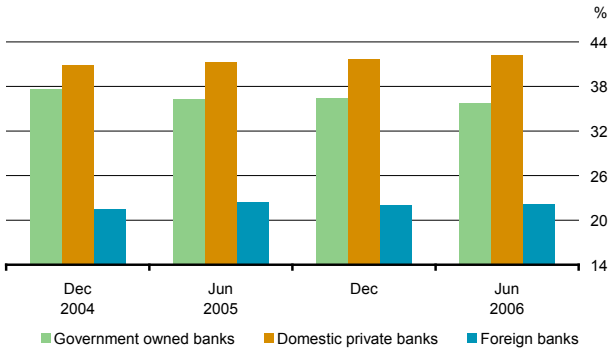
As internal demand has intensified, generating a considerably more dynamic pace of sustained economic activity, business financing has also expanded. Consequently, the ratio between the overall volume of financial system loans and GDP reached 32.6% in May 2006, against 28.3% in May 2005 and 25.5% in May 2004.

2.2 Balance sheet structure

2.2.1 Assets

In the first half of 2006, SFN assets evolved 8.4%, closing at R$1,816 billion. For the most part, this growth reflected credit portfolio expansion, R$52.1 billion, and an increased volume of interbank liquidity investments, R$34.5 billion

Assets
Banking-consolidated I by control type

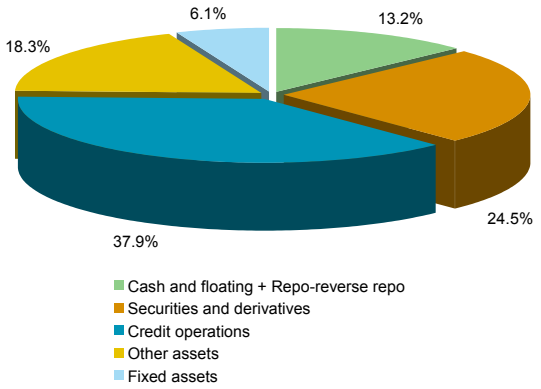


Assets – Banking-consolidated I
Top banks

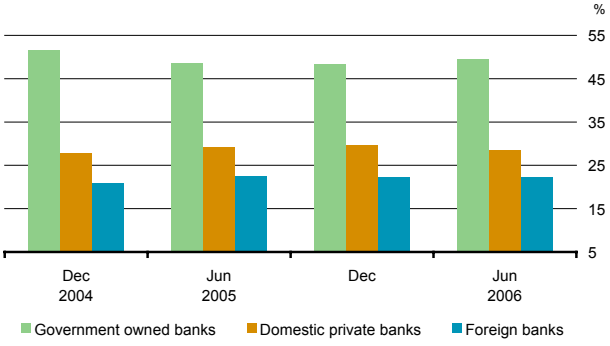
%

Itemization	2004	2005		2006
	Dec	Jun	Dec	Jun
Top 10	79.2	78.8	79.4	79.5
Top 20	91.2	91.1	91.5	91.3
Top 50	98.1	98.2	98.4	98.5

Main investments – SFN
June, 2006



Securities and derivatives
Banking-consolidated I by control type



(18.9%), particularly repo operations, R$37.4 billion (30.5%), in detriment to interbank deposits, which declined 19.9% to R$9 billion. Mention should also be made of growth in other assets, R$41.6 billion (14.3%). In this case, the highlights were growth in the exchange portfolio, R$25.6 billion (43%) and in tax credits, R$5.4 billion (17.6%).

The assets of consolidated banking segment I totaled R$1,560 billion, for growth of R$130.2 billion (9.1%) compared to the previous half-year period. A breakdown according to types of stock control indicates that 35.7% belonged to state-owned banks, 42.2% to private national banks and 22.1% to foreign banks. The participation levels of these institutions changed very little in relation to December 2005. Basically, the share held by private banks increased 0.6 p.p. and that in the hands of foreign banks rose 0.1 p.p., with a proportional reduction in the participation of state-owned banks.

On June 30, 2006, the assets of the 10, 20 and 50 largest banks accounted for 79.5%, 91.3% and 98.5% of total consolidated banking segment I assets. The slight drop in the percentage held by two groups was offset by growth in the third, since no significant changes occurred in the participation of the 50 largest banks compared to the figures for the previous half-year period.

The major investments included in overall SFN assets were credit portfolios, with 37.9% (37.9% in December 2005), followed by stocks and securities and derivative instruments, with 24.5% (26.6% in December 2005).

In June 2006, the institutions belonging to consolidated banking segment I held the equivalent of R$413 billion in stocks and securities and derivative instruments or, in other words, 92.9% of the SFN total (94% in December 2005). The largest share of stocks and securities and derivatives was concentrated once again in public banks, 49.5% (48.3% in December 2005), while national private banks and foreign banks reduced their participation levels to 28.4% and 22.1% of the total, respectively, against 29.6% and 22.2% in December 2005. It is important to stress that state-owned banks carried a very high position as a result of restructuring processes implemented at state government banks, and the fact that these banks act as executors of government policies.

Analyzed individually, the SFN stock and security portfolio totaled R$414 billion, down 0.5% in the half-year period. In December 2005, the Stocks and Securities (TVM) stock of consolidated banking segment I totaled R$391 billion,

Securities
Banking-consolidated I

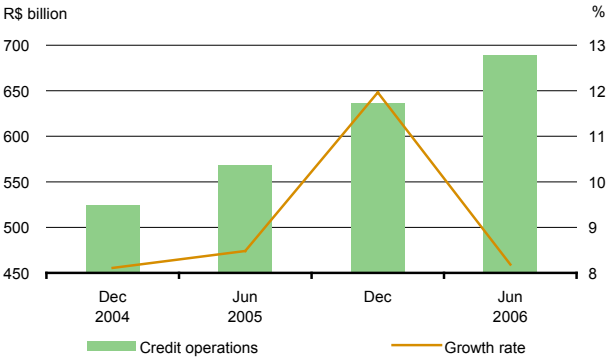
Securities
Banking-consolidated I

%

Itemization[1/]	Trading book[2/]	Available for sale	Held to maturity[3/]
Banks			
government owned	22.6	30.6	46.8
domestic private	57.4	35.1	7.5
foreign	39.9	51.8	8.3

1/ Control type.
2/ Acquired with the intention to be actively and frequently negotiated.
3/ Exists intention and financial capacity to keep them until the expiration.

Credit operations – SFN



down 1.6% in the six-month period. Analysis shows that the reduction was concentrated under securities to be negotiated, which dropped to 15.5% in the period, representing 35.7% of the total portfolio (41.5% in December 2005). Papers available for sale and held to maturity increased 13.8% and 1.8%, respectively, representing 36.2% and 28.2% of the portfolio total, against 31.3% and 27.2%.

When examined according to bank segments segregated by types of control, the TVM portfolio classification structure registered highly different configurations. While state-owned banks concentrated their investments in papers held to maturity, 46.8%, private national banks held the largest share of their investments in securities to be negotiated, 57.4%, and foreign banks targeted their resources mainly into securities available for sale, 51.8%.

The SFN credit portfolio, totaling R$688 billion[12], posted strong 8.2% growth in the second half. This was mostly a consequence of increased operations with individual borrowers, driven by growth in operations with individual borrowers, at the same time in which payroll-deducted loans and auto financing expanded rapidly.

Loans and discounted invoices and financing are the major credit modalities registered at the SFN, representing 39% and 34.3% of the total credit portfolio, respectively.

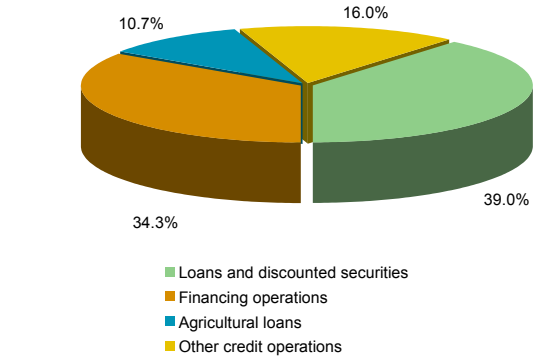
Credit operations registered by consolidated banking segment I member institutions totaled R$574 billion, corresponding to 83.5% of the SFN credit portfolio (82.7% in December 2005). Of this total, public banks held 31% (30.5% in December 2005), private national banks accounted for 46.7% (46.5% in December 2005), and foreign banks held 22.2% (22.9% in December 2005). Foreign banks posted the lowest rate of credit portfolio growth in the half-year period (5.9%), against 9.6% for private national banks and 8.1% for foreign banks.

2.2.2 Liabilities

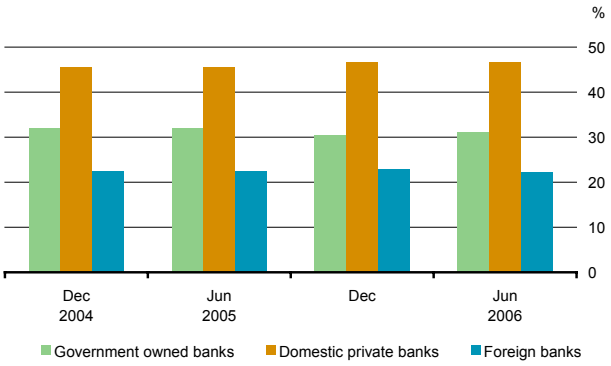
Liabilities represented 90.1% of the origins of SFN resources and totaled R$1,636 billion at the end of June 2006,

12/ Refers to aggregation of accounting balances registered in financial conglomerates and independent institutions and, therefore, also includes information on the classified credit portfolio of subsidiaries and offices abroad belonging to institutions that are part of Brazilian financial conglomerates. One should stress that the amount stated concerns the gross credit portfolio or, in other words, without deducting provisions for nonperforming loans totaling approximately R$43.7 billion, stated under the heading of other assets in the graph "Main Investments – SFN", page 33.

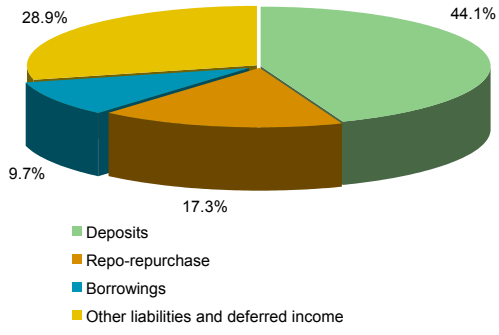
Credit operations – SFN
June, 2006



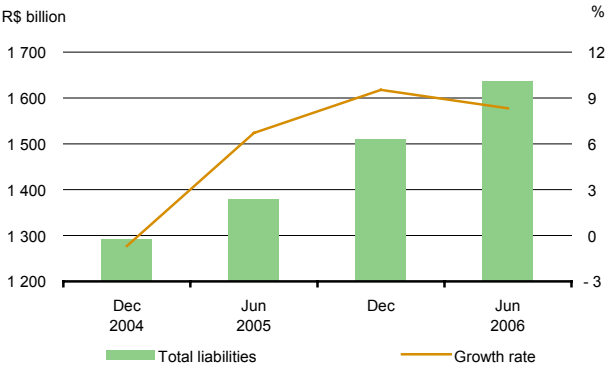
Credit operations
Banking-consolidated I by control type



Main liabilities – SFN
June, 2006



Liabilities – SFN



representing 8.3% growth in the half-year period. Of this total, R$721 billion consisted of deposits, R$283 billion of funding obtained on the open market, R$159 billion of loan and onlending liabilities and R$473 billion of other liabilities.

Deposits remained as the major source of SFN funding operations, posting a total of R$682.7 billion in December 2005, against R$720.7 billion in June 2006, for growth of 5.6% in the period. In June 2006, deposits accounted for 44.1% of callable liabilities (45.2% in December 2005). For the most part, this growth was due to expansion of R$38.4 billion, 11.5%, in time deposits. Institutions classified under consolidated banking segment I held 93% of SFN deposits, with 44.5% in public sector banks, 35.1% in national private banks and 20.4% in foreign banks. Once again, the latter group registered the highest growth rate in the half-year period, with 9.4% compared to 5.6% for private banks and 3.1% for state-owned banks.

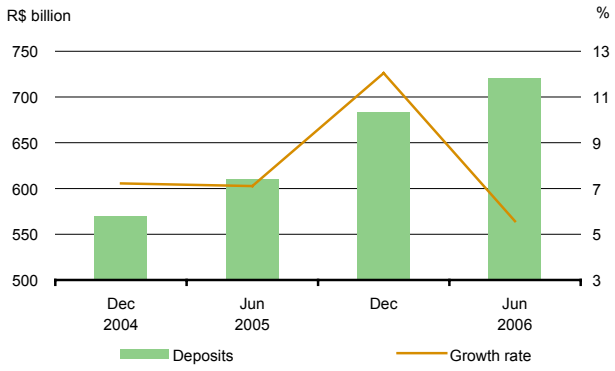
In June 2006, the 10, 20 and 50 largest banks included in consolidated banking segment I accounted for cumulative totals of 87.1%, 94% and 99.1% of the segment's total deposits, respectively. These figures represented a slight reduction in concentration compared to December 2005, particularly in the case of the 10 largest banks.

Once again, the participation of liabilities for loans and onlending operations dropped as a percentage of total liabilities, closing at 9.7% of total SFN third party resources (11.4% in December 2005).

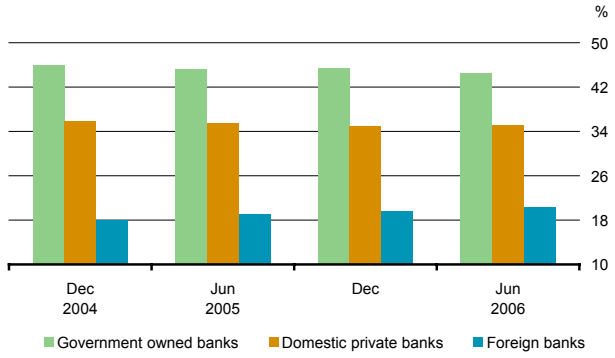
On June 30, 2006, other liabilities, in the amount of R$473 billion or 28.5% of SFN liabilities, consisted mainly of the following headings: loan portfolios and third-party portfolios, R$260.7 billion; subordinated debt, R$101.6 billion; exchange portfolios, R$67.5 billion; resources involving exchange acceptances, real estate and mortgage bills and debentures, R$ 40.4 billion; and others, R$2.8 billion.

Funding obtained on the open market evolved 16.1%, R$39.2 billion, corresponding to 17.3% of liabilities (16.2% in December 2005). Basically, these transactions corresponded to liabilities for repo operations constituted for purposes of financing institutions' own portfolio, with growth of 9.7%, R$15.8 billion in the period. Once again, it is important to stress the gains registered by freely operated portfolios, 75.4%, R$9.6 billion, due primarily to private bank operations.

Deposits – SFN



Deposits
Banking-consolidated I by control type

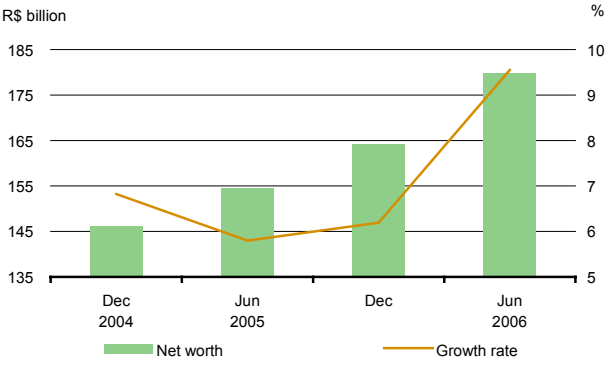


Total deposits – Banking-consolidated I
Top banks

%

Itemization	2004	2005		2006
	Dec	Jun	Dec	Jun
Top 10	86.9	87.2	87.6	87.1
Top 20	94.8	94.7	94.8	94.0
Top 50	99.2	99.2	99.1	99.1

Net worth – SFN



2.2.3 Net worth

Net SFN worth grew from R$164.1 billion on December 31, 2005 to R$179.88 in June 2006, 9.6% growth in the half-year period, due mainly to profit retentions by the institutions involved. This percentage was well above the 6.2% figure registered in the previous six months.

The net worth of institutions included in consolidated banking segment I, R$143 billion in June 2006, expanded 8.5% in the period, representing 79.3% of the SFN's own resources, distributed among national private banks, with 51.1%; foreign banks, with 23.9%; and public banks, with 25%. Foreign bank participation diminished, falling 1.3 p.p. in the first half of 2006.

2.3 Results

2.3.1 Composition and evolution

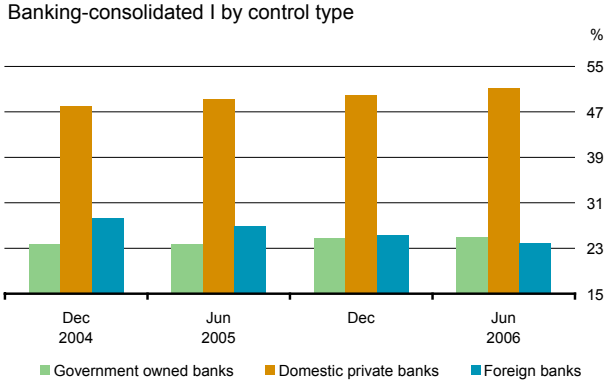
In the first half of 2006, net SFN profits totaled R$22.2 billion, against R$18.2 billion in the previous half-year period. Basically, profits were composed of the results of financial intermediation and revenues earned on services. Growth of 22.1% compared to the second half of 2005 was primarily a result of expanded revenues on services, R$1.6 billion or 6.7% in the period, coupled with increased revenues on stock participation, R$1.1 billion or 31.3%.

The result of financial intermediation, R$48.7 billion, remained practically stable, with growth of just 0.3% over the previous half-year period.

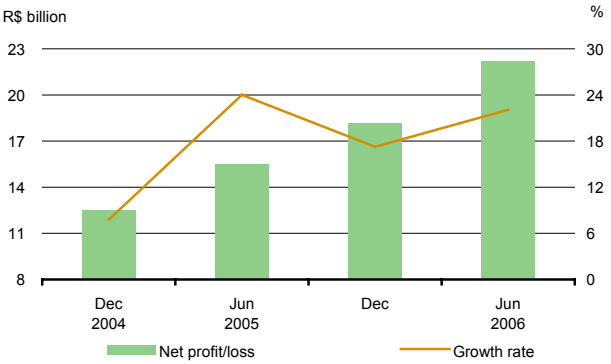
Revenues on financial intermediation totaled R$140 billion, composed predominantly of income on credit and leasing operations, with 58.3% (59.1% in the second half of 2005). No significant changes were registered under this heading in the second half of 2005. The second group of intermediation revenues involved operations with stocks and securities, declining from 33.9% of the total in the second half of 2005 to 32.5% in the six-month period ended in June 2006.

Outlays on funding operations totaled R$58 billion, absorbing 41.3% of revenues on financial intermediation (42.1% in the previous six months). For the most part, these outlays consisted of expenditures on time deposits (36%) and repo operation (33.4%). Spending on provisions for nonperforming loans totaled R$15.9 billion and continued

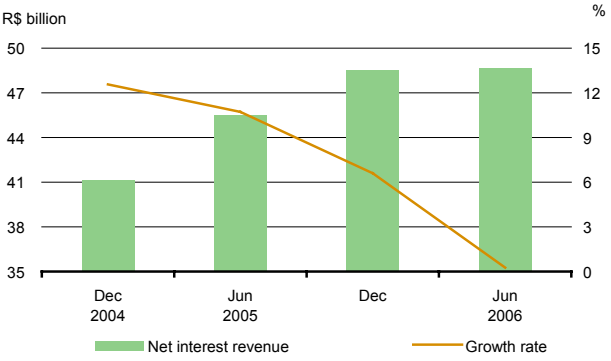
Net worth
Banking-consolidated I by control type



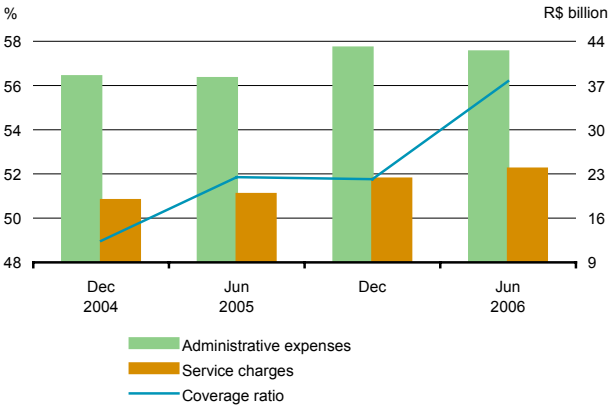
Net profit/loss – SFN



Net interest revenue – SFN
Growth rate



Administrative expenses and service charges



as the second most significant expenditure category under intermediation, absorbing 11.3% of intermediation revenues against 10.2% in the previous half year period.

SFN revenues on services provided increased 6.7% to R$23.8 billion, corresponding to 56.2% of administrative outlays, against 51.8% in the previous half-year period. Another factor that helped improve this indicator was the 1.4% reduction in administrative outlays in the half-year period. Of these, 46.3% referred to personnel and the remainder to other administrative expenditures.

The net profits of consolidated banking segment I expanded 14.1% compared to the previous six months, closing at R$17.8 billion. This result corresponded to 80% of SFN profits, against 86% in the previous half-year period. In this case, the heaviest concentration was found in national private banks, with 56%, while public sector banks accounted for 33.8% and foreign banks for 10.2%.

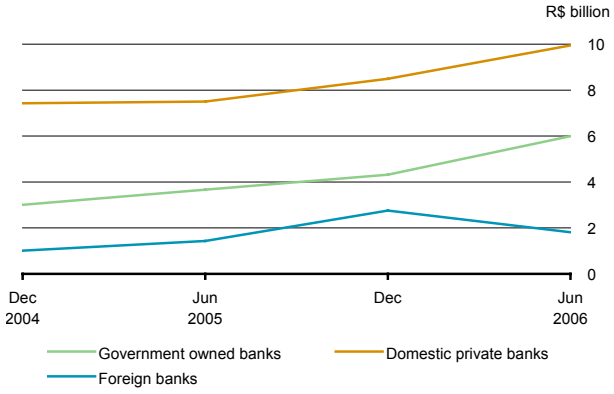
In the first half of 2006, the financial intermediation result posted by consolidated banking segment I member institutions increased R$2.4 billion, 5.4%, accounting for 95.6% of the SFN total. Just as in the case of net profits, these operations were concentrated in private national banks, 45.7%, up 1.4 p.p. compared to the previous half-year period. Foreign banks accounted for 23.7% or one percentage point more than in the previous half-year period, indicating a continued rise in the participation of this group. State-owned banks performed in precisely the opposite manner, as the participation of financial intermediation declined 2.4 p.p. to 30.6%.

2.3.2 Operational costs and rate of return

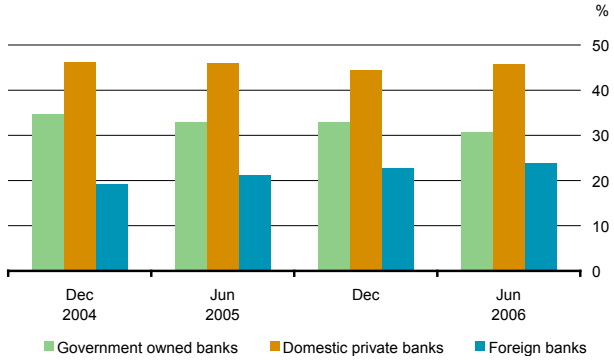
Operational cost is found by dividing administrative outlays by the sum total of the result of financial intermediation and revenues on services provided. In the first half of 2006, this result declined slightly, remaining at practically the same level as in the half-year period ended in June 2005, with 58.5% followed by 60.7% in the six-month period ended in December 2005. More than the slight growth registered in financial intermediation and service revenues, the improved performance of this indicator reflects stability in administrative outlays, including a decline in personnel expenditures.

In the first half of 2006, foreign banks registered the best results in terms of operational cost reductions. This segment generated the strongest growth in financial intermediation

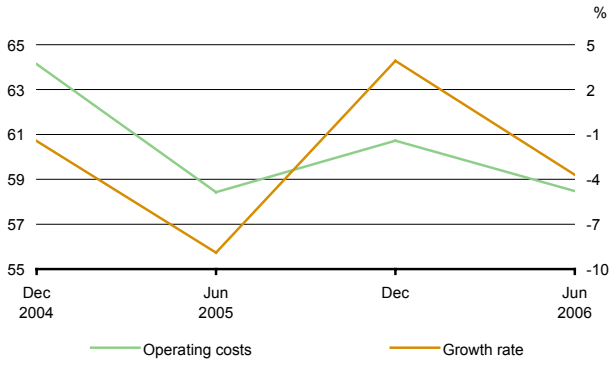
Net profit/loss
Banking-consolidated I by control type



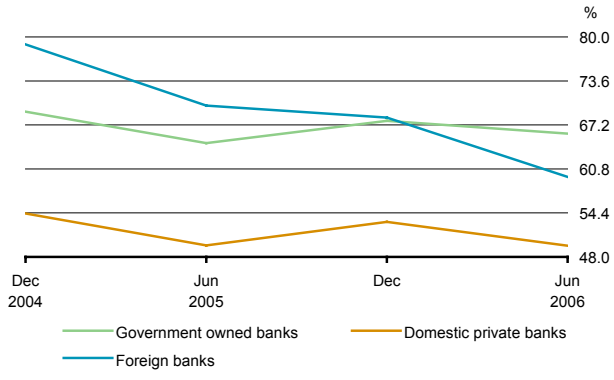
Net interest revenue
Banking-consolidated I by control type



Operating costs – SFN



Operating costs
Banking-consolidated I by control type



revenues (10.1%), coupled with the largest reduction in administrative outlays (3.1%). Consequently, this segment posted an operational cost reduction of 8.7 p.p. (59.6%). On the other hand, the segment of state-owned banks was the only one to register a reduction in intermediation revenues in absolute terms and, therefore, the highest operational costs among the three groups, with 65.9% against 67.8% in the previous half-year period. Finally, private national banks continued with the lowest operational costs in the SFN, with 49.6% compared to 53.1% in the previous half-year period.

With respect to consolidated banking segment I profitability indices, the results were the best in the last five years. Due mainly to excellent growth in net profits (14.1%), consolidated banking segment I annualized returns on net worth (RSPL) continued the 23.7% growth trend in the second half of 2005, moving to 24.9% in the first half of 2006. The index that reflects the ratio between net profits and assets (RSAT) also expanded, moving from 2.2% per year to 2.3% per year.

Among the various segments, public banks registered the highest level of profitability over net worth in the first half of 2006, registering 33.7% per year against 26.5% per year in the previous half-year period. This increase in profitability was mainly due to the segment's R$ 869 million creditor position under the Income Tax and Social Contribution, compared to a debtor position of R$ 2,233 million in the second half of 2005. Despite this, private national banks were still the most profitable in terms of assets, with 3% per year against 2.9% per year in the previous half-year period, clearly corroborating the positive outlook as regards the efficiency demonstrated by the operational cost indicator. In foreign banks, however, improvement in the result of intermediation and the ratio of service revenues to administrative outlays did not generate growth in profitability on net worth or on assets. Quite to the contrary, these indices reached 10.6% and 1% respectively, down 6 p.p. and 0.8 p.p. in the half-year period. In contrast to the public bank segment, the major cause of variations in profitability among foreign banks were increased outlays on the Income Tax and Social Contribution with R$ 1,045 million or 529% in the half-year period.

When one considers the 50 largest banks, returns on assets closed at the same level as consolidated banking segment I, with 2.3%, practically identical to the 2.1% figure registered in the second half of 2005. Returns on net worth of the 50 largest banks increased from 24% to 25.4% and, once again, were driven by improvements in the profitability of the 10 largest institutions, moving from 25.9% in the previous half-year period to 28%.

Rate of return[1/]
Banking-consolidated I

%

Itemization	2004	2005		2006
	Dec	Jun	Dec	Jun
Banks				
Government owned				
Return on				
Equity	21.5	24.9	26.5	33.7
Assets	1.3	1.5	1.7	2.2
Domestic private				
Return on				
Equity	26.2	24.6	25.9	27.3
Assets	3.0	2.8	2.9	3.0
Foreign				
Return on				
Equity	6.1	8.6	16.6	10.6
Assets	0.8	1.0	1.8	1.0
Banking-consolidated I				
Return on				
Equity	19.4	20.4	23.7	24.9
Assets	1.9	1.9	2.2	2.3

1/ Annual taxes.

Return on assets – Banking-consolidated I[1/]
Top banks

%

Itemization	2004	2005		2006
	Dec	Jun	Dec	Jun
Top 10	2.1	2.2	2.2	2.4
Top 20	1.9	2.0	2.2	2.2
Top 50	1.9	1.9	2.1	2.3

1/ Annual taxes.

Return on equity – Banking-consolidated I[1/]
Top banks

%

Itemization	2004	2005		2006
	Dec	Jun	Dec	Jun
Top 10	23.3	24.2	25.9	28.0
Top 20	20.9	22.1	25.4	25.4
Top 50	20.0	20.9	24.0	25.4

1/ Annual taxes.

2.4 Capital and limits

In order to bring its activities into line with the best international supervision practices, Bacen has closely followed the recommendations of the Basel Committee in that which concerns the setting of operational limits to be followed by SFN member institutions.

Among these, the major recommendations involve the Compatibility Limit of Base Capital (PR) with the degree of Asset, Liability and Clearing Account risk (Required Net Worth – PLE) and the Fixed Asset Limit.

2.4.1 Basel Capital Ratio

One of the major objectives of capital allocation is to ensure that institutions maintain sufficient capital resources to protect them from situations of technical insolvency or, in other words, negative base capital, provoked by possible significant and unexpected losses in assets exposed to risk, thus minimizing the risk to which creditors are exposed.

Current regulations determine that PR must be greater than PLE. In international terms, the ratio between these two variables is known as the Basel Capital Ratio. In the Brazilian case, banks must have a ratio above 11%[13]. To make this analysis more understandable, we will utilize this approach as the major analysis parameter.

This topic presents an analysis of the adequacy of SFN institutions and segments to the Basel Capital Ratio, from the perspective of PR and PLE evolution.

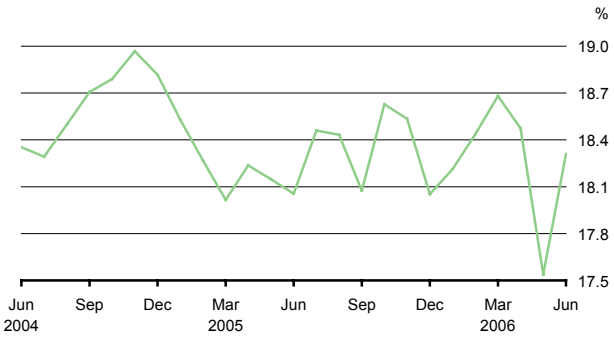
Evolution

In June 2006, the SFN Basel Capital Ratio was 18.3%, 7.3 p.p. above the minimum limit required in Brazil. In the previous 24 months, the ratio oscillated between 17.5% and 19%.

National Financial System PR reached R$219.7 billion, up 12.5% over the previous half-year period. Among the components, Tier I Capital expanded 9.4% and Tier II Capital

13/ Credit unions not affiliated to central credit unions must comply with a Basel Capital Ratio greater than 15% while, in the case of development agencies, the level is greater than 30%. The participation of these institutions is very small in both PR and PLE of the aggregate SFN.

Basel capital ratio
SFN



Evolution of capital base and required net worth[1/]

R$ million

Itemization	2005 Dec		2006 Jun		Half-year change
	Value	%	Value	%	%
Capital base	195 333	100.0	219 706	100.0	12.5
Tier I	161 127	82.5	176 232	80.2	9.4
Tier II	34 206	17.5	43 474	19.8	27.1
Required net worth	119 025	100.0	132 297	100.0	11.2
Assets	105 829	88.9	116 403	88.0	10.0
Interest rate	3 732	3.1	4 854	3.7	30.0
Exchange rate	6 583	5.5	7 861	5.9	19.4
Swap	2 881	2.4	3 181	2.4	10.4

1/ The required net worth represents the minimum capital base demanded by the Banco Central do Brasil.

Capital base and required net worth – Concentration[1/]
June, 2006

%

Itemization	Number of financial institutiions			
	5	10	20	50
Capital base	56.0	74.2	84.1	91.6
Tier I	50.6	69.4	81.1	90.0
Tier II	81.4	95.9	98.3	99.8
Required net worth	57.0	77.6	87.8	94.9
Assets	57.1	78.4	87.7	94.6
Interest rate	53.1	72.7	85.5	95.3
Exchange rate	84.5	95.1	98.4	100.0
Swap	62.5	82.8	95.8	99.8

1/ Participation of the financial institutions in the total of the SFN by item.

increased 27.1%. As a result, the participation of Tier II Capital in PR increased 2.2 p.p. to a level of 19.8%.

With increases in all four components, the PLE of the SFN expanded 11.2% to a level of R$132.3 billion, compared to the previous half-year period.

Here, it is important to underscore growth of approximately 10% or R$ 10.5 billion in Assets Weighted by Risk (APR) and an increase of approximately 30% or R$1.1 billion in capital requirements for fixed rate interest risk, compared to the half-year period ended in December 2005.

With respect to APR, the sharpest impact occurred under assets weighted at 100%, mainly as a result of practically identical growth in loan volume when the results for the last two half-year periods are compared.

Concentration of PR and PLE

In order to analyze the concentration of PR and PLE in the SFN, institutions were listed in decreasing order according to the amounts registered in each one of the PR and PLE components. Later on, participation levels were aggregated and then segregated among the 5, 10, 20 and 50 institutions with the largest amounts in each of the components.

In June 2006, slight alterations were registered in terms of concentration in these components, compared to the previous half-year period in all of the different brackets. At this point, one should highlight that:

a) under PR, increases of concentration were registered in all of the different brackets, particularly 1.9 p.p. growth in the bracket of the five largest institutions. Tier II Capital remains the most heavily concentrated, with a reduction of 3.6 p.p. in the same bracket and stability in the others;

b) under PLE, small increases were registered in all of the different brackets with the strongest upturns among the 10 and 50 largest institutions, with 0.5 p.p. and the 0.3 p.p. As regards capital requirements for exchange risk, reductions occurred in all of the various brackets. Here, emphasis should be given to the 6.7 p.p. reduction in the bracket of the five largest institutions, precisely that with the highest concentration.

Capital base – Components

June, 2006

R$ million

Itemization	No.	Capital base			BCR[1/]
		Total	Tier I	Tier II	
Total of the SFN	1 805	219 706	176 232	43 474	18.3
Banking					
consolidated I	101	174 109	140 320	33 789	17.3
Banks					
government					
owned	12	48 392	34 760	13 632	19.7
domestic					
private	56	87 935	72 041	15 894	17.0
foreign	33	37 782	33 519	4 264	15.4
consolidated II	32	34 648	25 101	9 547	21.6
consolidated III	1 395	5 617	5 545	72	33.8
Non-banking	277	5 332	5 266	66	31.8

1/ Basel capital ratio.

Required net worth – Components

June, 2006

R$ million

Itemization	Total	Assets	Interest rate	Exchange rate	Swap
Total of the SFN	132 297	116 403	4 854	7 861	3 181
Banking					
consolidated I	110 846	95 507	4 533	7 767	3 038
Banks					
government					
owned	26 955	25 079	874	743	259
domestic					
private	56 895	47 805	2 054	6 316	720
foreign	26 996	22 624	1 605	708	2 059
consolidated II	17 606	17 177	210	86	133
consolidated III	1 829	1 759	70	0	0
Non-banking	2 016	1 959	40	7	9

PR and PLE composition by segment

Composed of public sector banks, private banks and foreign banks, consolidated banking segment I registered a Basel Capital Ratio of 17.3%, down 0.1 p.p. compared to December 2005. This consolidated segment accounts for 79.2% of total PR and 83.8% of PLE, broken down as follows:

a) Public sector banks – Registered growth of 11% in PR and 13.2% in PLE, with a Basel Capital Ratio of 19.7%, corresponding to a reduction of 0.4 p.p. compared to December 2005. In the case of PR, Tier I Capital expanded 9.5% and Tier II Capital grew 15%. Consequently, the participation of Tier II Capital increased 1 p.p., rising to 28.2%. Evaluation of capital requirements at the component level shows a reduction of R$30 million exclusively in swaps and a larger absolute increase in APR, totaling R$2.2 billion, coupled with a sharper relative increase in exchange risk with 506.9% or R$620 million.

b) Private sector banks – Posted growth of 14.8% in PR and 14.6% in PLE, with a Basel Capital Ratio of 17%, the same level as in the previous half-year period. With regard to PR, Tier I Capital and Tier II Capital increased 11.2% and 34.8%, respectively. Consequently, the participation of Tier II Capital expanded 2.7 p.p., rising to 18.1%. In the case of PLE, there was a reduction in the component of swap credit risk and increases in the other components. The sharpest absolute growth occurred under capital requirements for assets weighted by risk, R$5.9 billion.

c) Foreign banks – Showed growth of 7.1% in PR and 8.7% in PLE, with a Basel Capital Ratio of 15.4%, reflecting a reduction of 0.2 p.p. compared to December 2005. In PR, Tier I Capital rose 2% and Tier II Capital rose 75%. As a result, the participation of Tier II Capital expanded 4.4 p.p., reaching 11.3%. In PLE, the component of interest rate credit risk declined, while the other components increased. The largest absolute growth occurred under capital requirements for assets weighted by risk, R$1.3 billion or 5.8%.

Consolidated banking segment II – In June 2006, the Basel Capital Ratio of consolidated banking segment II reached 21.6%, up 3 p.p. compared to December 2005. This segment is responsible for 15.7% of total PR and 13.3% of National Financial System PLE.

Consolidated banking segment III – In June 2006, the Basel Capital Ratio of consolidated banking segment III, composed of 1,395 credit unions, responsible for 2.6% of total PR and 1.4% of PLE, reached 33.8%, up 0.1 p.p. compared to the previous half-year.

Consolidated nonbanking segment – In June 2006, the Basel Capital Ratio of the consolidated nonbanking segment, composed of 277 institutions responsible for 2.4% of total PR and 1.5% of PLE, totaled 31.8%, down 5.8 p.p. compared to December 2005.

Noncompliance with Basel limits

On base date June 2006, 1,805 institutions were analyzed. Of this total, only 63 (3.5%) were noncompliant with Resolution 2099/1994. However, these institutions represent a very small share of overall SFN institutions. Capital inflows of R$ 215.3 million, corresponding to less than 0.1% of the SFN's total PR, would be required to offset the total deficiencies of these institutions.

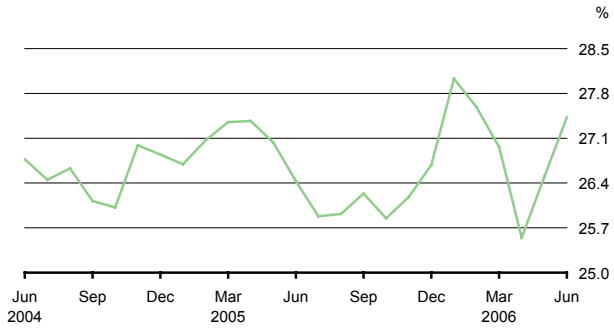
a) Consolidated banking segment I – No noncompliant institutions.

b) Consolidated banking segment II – No noncompliant institutions.

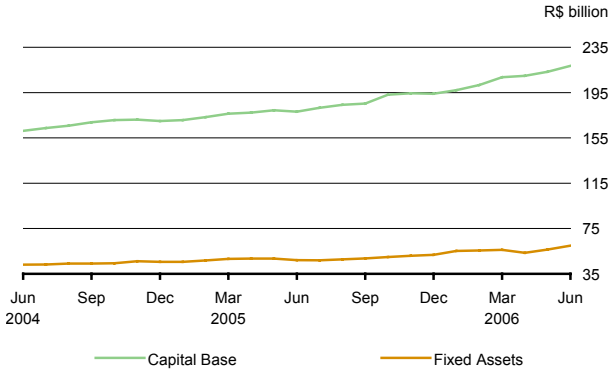
c) Consolidated banking segment III – Total of 55 noncompliant credit unions, compared to 43 in December 2005. The amount required to offset this deficiency was R$37.8 million. The segment was responsible for 17.6% of total deficiencies and for 87.3% of overall noncompliant institutions.

d) Consolidated nonbanking segment – Total of eight noncompliant institutions. The amount of capital required to offset the deficiency was R$177.5 million. This segment accounted for 82.4% of total deficiencies and 12.7% of noncompliant institutions

Fixed assets to equity ratio
SFN



Evolution of capital base and fixed assets
SFN



2.4.2 Fixed asset limit

The major objectives of this limit are to ensure that third party resources are not invested in fixed assets and that institutions operate with a minimum percentage of their own capital. According to the terms of Resolution 2,669/1999,

the maximum level of commitment of Adjusted Base Capital (PRA) in relation to fixed assets (AP) is 50%.

This topic presents an analysis of the adequacy of SFN institutions and segments to the Fixed Asset Limit, with emphasis on AP and PRA.

Evolution

In the period from June 2004 to June 2006, the Fixed Asset Ratio of the SFN segments registered slight growth of 0.7 p.p., with fluctuations between 28% in January 2006 and 25.5% in April 2006, until reaching a level of 27.4% on the base date under analysis, corresponding to 22.6 p.p. leeway in relation to the maximum permitted by the regulations.

In the cases of AP and PRA, the components of this index in the 24 previous months posted increases of 38.5% and 35.6%, respectively. Small upward fluctuations occurred in January 2006, with 6.8%, with downward fluctuations in April 2006 under AP. In the case of PRA, the largest fluctuations in the 24 previous months occurred in October 2005, with growth of 4.2% and a reduction of 0.7% in December 2004.

Composition of Permanent Assets and Adjusted Base Capital by segment

Consolidated banking segment I – In June 2006, the Fixed Asset Ratio of consolidated banking segment I reached 27.8%, down 0.8 p.p. compared to December 2005. This segment accounts for 79.2% of total National Financial System PRA and 80.2% of AP.

a) Public banks – Growth of 11% in PRA and Reduction of 3.7% in AP with a Fixed Asset Ratio of 17.1%, reflecting a reduction of 2.6 p.p. to compared to December 2005.

b) Private Banks – Growth of 14.8% in PRA and 17.1% in AP, with a Fixed Asset Ratio of 37.3%, reflecting an increase of 0.7 p.p. compared to December 2005.

c) Foreign Banks – Growth of 7% in PRA and 6.5% reduction in AP, with a Fixed Asset Ratio of 19.4%, corresponding to a reduction of 2.8 p.p. compared to December 2005.

Consolidated Banking Segment II – In June 2006, the Fixed Asset Ratio of Consolidated Banking Segment II reached 30.8%, up 8.7 p.p. compared to December 2005. This

Adjusted capital base and fixed assets
Banking system

Itemization	Number of institutions		Adjusted capital base[1/]		Fixed assets[1/]		Fixed assets to equity ratio[2/]	
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Total of the SFN	1 817	1 805	194	219	52	60	26.7	27.4
Banking								
consolidated I								
Banks	104	101	155	173	44	48	28.6	27.8
government								
owned	13	12	44	48	9	8	19.7	17.1
domestic								
private	57	56	76	87	28	33	36.6	37.3
foreign	34	33	35	37	8	7	22.2	19.4
consolidated II	31	32	29	35	7	11	22.1	30.8
consolidated III	1 396	1 395	5	6	1	1	16.5	16.2
Non-banking	286	277	5	5	0	0	4.5	5.8

1/ R$ billion.
2/ The maximum allowed is 50%.

segment is responsible for 15.8% of total PRA and 17.7% of SFN AP.

Consolidated Banking Segment III – In June 2006, the Fixed Asset Ratio of Consolidated Banking Segment III, composed of 1,395 credit unions, responsible for 2.6% of total PRA and 1.5% of National Financial System AP, reached 16.2%, down 0.3 p.p. compared to December 2005.

Consolidated Nonbanking Segment – In June 2006, the Fixed Asset Ratio of the Consolidated Nonbanking Segment, which is composed of 277 institutions responsible for 2.4% of total PRA and 0.5% of National Financial System AP, closed at 5.8%, representing an increase of 1.3 p.p. compared to December 2005.

Noncompliance with the Fixed Asset Limit

On the base date under analysis, 94 (5.2%) of the 1,805 institutions evaluated had AP of more than 50% of PRA or, in other words, were noncompliant with this limit. To offset the total deficiencies of these institutions, an insignificant amount of capital would be required, R$117.7 million (less than 0.1% of National Financial System PRA).

a) Consolidated banking segment I – There was one noncompliant institution, with a deficiency of R$25.9 million to be offset, representing 22% of total deficiencies and 1.1% of the number of noncompliant institutions.

b) Consolidated banking segment II – No noncompliant institutions.

c) Consolidated banking segment III – There were 71 noncompliant institutions, with R$24.9 million in deficiencies to be offset, reflecting 21.2% of total deficiencies and 75.5% of noncompliant institutions.

d) Consolidated nonbanking segment – There were 22 noncompliant institutions with overall deficiencies of R$66.9 million, accounting for 56.8% of total deficiencies and 23.4% of noncompliant institutions.

Credit operations – Domestic and abroad

June, 2006

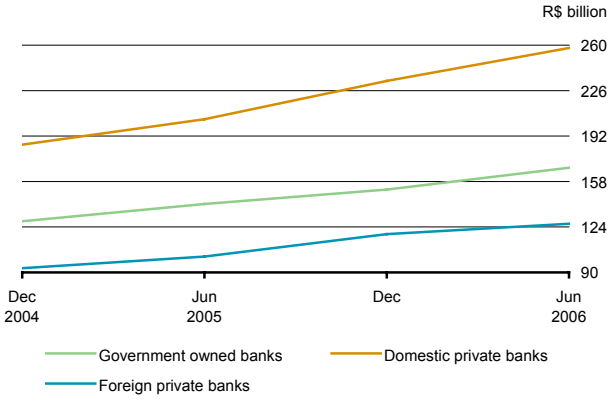
R$ million

Itemization	Domestic credit operations	Abroad credit operations	Eliminated[1/]	Consolidated credit operations
Total of the SFN	664 023	37 229	-12 870	688 383
Banking	657 553	37 229	-12 870	681 912
consolidated I				
Banks	552 637	37 229	-12 870	576 997
government				
owned	168 357	15 412	-5 587	178 182
domestic private	257 873	17 549	-6 910	268 512
foreign	126 407	4 268	- 372	130 303
consolidated II	94 095	0	0	94 095
consolidated III	10 820	0	0	10 820
Non-banking	6 471	0	0	6 471

1/ Eliminations of credit operations realized in the country and abroad between financial institutions owned by the same financial conglomerate.

Credit operations

Consolidated I by control type



Top conglomerates/banks

Participation in the credit of the consolidated I

%

Itemization	2005	2006
	Dec	Jun
10 largest	84.0	84.0
20 largest	93.4	93.3
50 largest	98.9	99.0

2.5 Risks

2.5.1 Loan operations

In the first six months of 2006, 99% of SFN credit operations were carried out by the banking system[14] and the remaining 1% by the nonbanking system. Consolidated banking segment I, which is dominated by financial institutions with commercial portfolios, accounted for 84% of the total banking system credit portfolio, compared to 83.3% in December 2005.

At the end of the first half of 2006, the internal volume of SFN loan operations[15] reached R$664 billion, up 8.7% compared to the previous half-year period. The ratio between overall SFN credits and GDP closed the period at 32.6%, against 31.4% last December. This ratio stood at 29% just one year ago. Growth in the loan operations of consolidated banking segment I accounted for 91.6%, or R$48.8 billion, of total growth in SFN loans in the half-year period. Loans to individual borrowers were the major drivers underlying this growth, particularly personal loans and auto loans. Aside from this, one must also stress the accounting impact of exchange variations in the first half of 2006 – decline of 7.5% in the American dollar against the real – on the balance of operations denominated in foreign currency. According to data from the Central Bank Credit Information System (SCR), this balance reached R$61.3 billion at the end of June 2006.

Broken down by capital control, the volume of credits granted by private banks under national stock control reached R$ 257.9 billion in June 2006, raising the participation of consolidated banking segment I in the overall loan stock from 46.3% to 46.7%. Using the same base date, the volume of loans held by public sector banks totaled R$ 168.4 billion, with relative participation of 30.5% or 0.2 p.p. more than in the previous six months. Finally, foreign bank portfolios accounted for R$126.4 billion, as participation in the consolidated banking segment I loan total dropped from 23.6% to 22.9%.

The stock of credits granted by foreign agencies and subsidiaries of financial conglomerates headquartered in Brazil increased 1.7% in the half-year period, reaching a total of R$37.2 billion last June. This figure represented a

14/ As defined in the item Concepts and Methodologies (Concept – Item "a", page 73)

15/ As defined in the item Concepts and Methodologies (Methodology – Item "b", page 73).

Credit operations

Individuals and legal entities participation

%

Itemization	2005		2006	
	Dec		Jun	
	Quantity	Loans and leases portfolio	Quantity	Loans and leases portfolio
Total	100.0	100.0	100.0	100.0
Individuals	93.2	43.8	93.3	44.8
Banking				
consolidated I	81.0	39.2	90.7	41.3
Banks				
government				
owned	19.7	14.8	20.5	15.1
domestic private	39.6	15.6	45.0	16.9
foreign	21.7	8.7	25.1	9.3
consolidated II	10.2	2.8	0.2	1.7
consolidated III	1.2	1.3	1.5	1.4
Non-banking	0.9	0.4	0.9	0.4
Legal entities	6.8	56.2	6.7	55.2
Banking				
consolidated I	6.5	42.2	6.4	41.9
Banks				
government				
owned	2.5	10.0	2.6	10.2
domestic private	3.1	22.0	3.0	22.0
foreign	0.9	10.2	0.9	9.7
consolidated II	0.2	13.2	0.2	12.5
consolidated III	0.1	0.3	0.2	0.3
Non-banking	0.0	0.6	0.0	0.5

Credit operations in value range

%

Range (R$)	Banking						Non-banking	
	consolidated I		consolidated II		consolidated III			
	2005	2006	2005	2006	2005	2006	2005	2006
	Dec	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Under 5 thousand	21.4	21.7	7.1	0.8	22.0	23.7	18.8	19.9
5 to 100 thousand	33.9	34.7	11.0	11.7	60.4	58.5	18.5	18.8
100 thousand to 1 million	14.7	14.3	8.5	9.4	15.1	15.3	33.2	34.7
1 to 50 millions	24.8	24.5	22.9	32.1	2.5	2.5	24.9	22.8
Over 50 millions	5.1	4.9	50.5	46.0	0.0	0.0	4.6	3.8

reduction in the participation of these resources in total SFN consolidated credit operations from 5.8% to 5.4%.

The stock of credit operations of the 10 largest financial conglomerates included in consolidated banking segment I totaled R$464.2 billion in June 2006, with participation of 84% of the consolidated total, the same level as in December 2005. The share held by private banks increased 0.5 p.p., shifting from 31.1% to 31.6%, while the participation of foreign banks dropped from 20.4% to 20% and that of private national banks slipped from 48.5% to 48.4%. Analysis of the 50 largest financial conglomerates indicates that the concentration level remained unchanged at 99%.

The volume of loans targeted to individual borrowers continued on the robust growth trajectory that marked the first half of 2006, with 11.4% compared to 6.7% in the volume of loans held by corporate entities. As a result the overall participation of this sector increased from 43% to 44% of loans registered at the SCR. In terms of loan operation distribution, individual borrowers accounted for the same 93% level registered in December 2005. Corporate entities, in turn, were responsible for 56% of value and 7% of quantity. The increase in the participation of individual borrowers in total SFN loans reflected a positive performance under personal loans, which accounted for 37.7% of growth in loans to individual borrowers. These operations mainly involved payroll-deducted loans, auto loans (21.5%), real estate loans (10.7%) and leasing operations (10.5%).

At the end of June 2006, consolidated banking segment I was clearly the most important within the overall SFN, accounting for 34.7% of loan operations in the bracket of R$5,000 to R$100,000, as well as 24.5% of the bracket from R$1 million to R$50 million. In December 2005, these brackets accounted for 33.9% and 24.8% of the segment's loan operations. On the same date, public banks, which are also included in consolidated banking segment I, were heavily concentrated in the bracket from R$5,000 to R$100,000, with 43.7%. Among the various segments, the participation of private banks was the most balanced, with significant participation in corporate operations, from R$1 million to R$50 million, with 28.9% for private national banks and 27% for foreign banks. In the case of consolidated banking segment II, in which the National Bank of Economic and Social Development (BNDES) accounted for 71.6% of the total, operations tended to migrate from the bracket above R$50 million to the bracket of R$1 million to R$50 million. This is evident in the fact that the participation of the first bracket dropped from 50.5% to 46% while that of

Credit operations in value range

Consolidated I by control type

%

Range (R$)	Government owned		Private domestic		Private foreign	
	2005 Dec	2006 Jun	2005 Dec	2006 Jun	2005 Dec	2006 Jun
Under 5 thousand	23.0	22.4	20.6	21.2	20.8	21.8
5 to 100 thousand	43.0	43.7	29.4	30.2	31.0	32.0
100 thousand to 1 million	14.1	13.6	15.2	14.8	14.6	14.0
1 to 50 millions	15.7	15.8	28.8	28.9	28.8	27.0
Over 50 millions	4.2	4.6	5.9	5.0	4.7	5.2

Write-offs – SFN

R$ million

Itemization	Write-offs within 12 months		Write-offs from 13 to 48 months	
	2005 Dec	2006 Jun	2005 Dec	2006 Jun
Total of the SFN	16 656	18 368	31 500	32 782
Banking				
consolidated I	15 102	16 964	26 290	28 096
Banks				
government				
owned	6 848	6 333	7 586	8 655
domestic private	4 730	6 176	11 490	11 820
foreign	3 525	4 455	7 214	7 621
consolidated II	1 060	756	4 518	3 876
consolidated III	143	194	211	258
Non-banking	352	454	482	552
Percentage[1/]	2.7%	2.8%	5.2%	4.9%

1/ Percentage of write-offs in relation to the SFN's credit operations.

the latter bracket rose from 22.9% to 32.1%. With respect to consolidated banking segment II, participation in the bracket of amounts below R$5,000 dropped from 7.1% to 0.8%, due mainly to reclassification of one financial institution very active on the retail market to consolidated banking segment I. No significant alterations were registered in the distribution of loans by value brackets in the other SFN consolidated banking segments.

Operations written-off as losses[16]

The volume of credits written-off as losses in the SFN increased 6.2% in the first half of 2006, moving from R$48.2 billion to R$51.2 billion. Despite this increase, the ratio of total losses to overall SFN loans dropped from 7.9% to 7.7% in the period. With the exception of consolidated banking segment II, which managed to reduce losses by R$1 billion, from R$5.6 billion to R$4.6 billion, the losses registered by the other segments increased. Here, for example, private national banks posted an increase of R$1.8 billion, while the losses registered by foreign banks increased R$1.3 billion. It is important to stress that the 27.8% growth in the volume of losses registered by consolidated banking segment III, which includes credit unions, was caused by a sharp increase in the number of institutions covered by the SCR as of June 2006. More specifically, these institutions increased from approximately 700 to about 1300 credit unions.

Joint liabilities[17]

The volume of joint liabilities expanded 19.6% between December 2005 and June 2006, posting a total of R$88.6 billion. Relative participation in the SFN loan portfolio rose from 12.1% in the previous period to 13.3%. Consolidated banking segment I accounted for 97.2% of the change in the volume of joint liabilities registered in the SCR, reflecting growth of R$14.1 billion. Here, the highlights were national private banks, accounting for 72% of this increase or R$10.2 billion. Joint liabilities assumed in credit assignments, corresponding to 14.8% of overall SFN joint liabilities, increased 32.9% in the half year period, as against 17.6% growth in joint liabilities with guarantees. Strong growth in credit assignment operations with joint liabilities targeted

16/ For the updated historical series, see page 65.

17/ For the updated historical series, see page 66.

Joint liabilities – SFN

R$ million

Itemization	Endorsements and sureties		Joint liabilities with credit garanted	
	2005	2006	2005	2006
	Dec	Jun	Dec	Jun
Total of the SFN	64 207	75 502	9 844	13 081
Banking				
consolidated I	62 167	73 601	9 687	12 374
Banks				
government				
owned	9 482	12 179	341	367
domestic private	32 418	40 001	8 912	11 551
foreign	20 267	21 421	435	456
consolidated II	558	833	9	8
consolidated III	952	1 022	8	11
Non-banking	529	45	139	689
Percentage[1/]	10.5%	11.3%	1.6%	2.0%

1/ Percentage of joint liabilities in relation to the SFN's credit operations.

Largest debtors

R$ billion

Debtors	2005			2006		
	Dec			Jun		
	Portfolio[1/]	Debt[2/]	Average[3/]	Portfolio[1/]	Debt[2/]	Average[3/]
100 largests	81.2	95.9	3.2	83.8	101.0	2.9
1º - 10º largest	21.3	25.2	0.5	21.1	26.0	0.4
11º - 20º largest	12.3	13.5	1.0	11.9	13.6	6.1
21º - 50º largest	24.1	29.5	6.7	25.0	28.2	4.3
51º - 100º largest	23.6	27.7	3.2	25.8	33.1	2.0
Total SFN	610.7	732.9	6.4	664.2	803.8	6.8

1/ Loans and lease operations.
2/ Portfolio + joint liabilities + write-offs.
3/ Average provision – % (portfolio).

mainly to large-scale financial institutions is explained by the need for alternative sources of funding on the part of medium size institutions.

Largest SFN debtors

The balance of the active loan portfolios of the 100 largest SFN debtors increased 3.2% in the half-year period, moving from R$81.2 billion in December 2005 to R$ 83.8 billion in June 2006. With this performance, which was well below growth in overall SFN loan operations in the same period of time, the share of total SFN loan operations held by the 100 largest clients dropped from 13.3% to 12.6%.

Average provisions for the group of the 100 largest SFN debtors dropped 0.3 p.p. in the first half of 2006, moving from 3.2% to 2.9%. This result contrasted sharply with the behavior of average overall SFN provisions, which increased 0.4 p.p., moving from 6.4% to 6.8%, compared to the December 2005 position. Taken together, consolidated banking segment II and national private banks accounted for 71% of total credits held by the 100 largest SFN debtors.

The distribution of this group into debt brackets indicates strong growth in the balances held by the 51st to 100th largest debtors, with expansion of 9.3% in the half-year period, representing approximately 85% of the total growth registered by this group. In terms of average provisions, the bracket between the 11th and 20th largest debtors showed the greatest discrepancy, as the indicator rose 5.1 p.p., moving from 1% in December 2005 to 6.1% at the end of June 2006.

Distribution of the 100 largest debtors by economic sector

Following the example of previous half-year periods, the sector of electricity generation and distribution held the largest debt balance with 22% of the group's total active loan portfolio, for a reduction of 2 p.p. compared to December 2005. Other leading sectors in the half-year period were telecommunications, with 11.6% of the group, and paper and pulp production, with 6.8%. The performance of these two sectors represented a reduction of 1.5 p.p. in the group's overall participation in the first case and an increase of 1.3 p.p. in the latter, compared to December 2005. As far as average provisions of these sectors are concerned, within the group analyzed, public administration, defense and social security and land transportation were the economic sectors

Largest debtors

Banks by control type

R$ billion

Itemization	2005			2006		
	Dec			Jun		
	Portfolio[1/]	Debt[2/]	Average[3/]	Portfolio[1/]	Debt[2/]	Average[3/]
100 largests	81.2	95.9	3.2	83.8	101.0	2.9
Banking						
consolidated I	45.9	59.9	0.9	48.5	65.1	0.5
Banks						
government						
owned	10.3	10.7	1.4	12.5	13.0	0.9
domestic						
private	24.3	32.5	0.9	25.1	35.8	0.5
foreign	11.3	16.7	0.4	10.9	16.3	0.2
consolidated II	34.7	35.2	6.3	34.4	34.9	6.3
consolidated III	-	-	-	-	-	-
Non-banking	0.5	0.7	0.8	0.9	1.1	0.5

1/ Loans and lease operations.
2/ Portfolio + joint liabilities + write-offs.
3/ Average provision – % (portfolio).

Credit operations by levels of risk – SFN

%

Levels of risk	2004	2005		2006
	Dec	Jun	Dec	Jun
AA	24.3	23.2	25.3	24.6
A	36.9	38.2	38.1	37.3
B	18.5	18.5	16.6	17.4
C	9.8	10.1	10.0	10.3
D	4.1	4.1	3.5	3.4
E	1.3	1.2	1.3	1.5
F	0.9	0.9	1.0	1.0
G	0.8	0.9	0.9	1.0
H	3.4	3.0	3.3	3.5
Total	100.0	100.0	100	100.0

with the highest risk levels, registering average provisions of 18% and 20.3%, respectively.

Classification of loan operations

Analysis of loan operation risk classification distribution between December 2005 and June 2006 showed a drop in the participation of levels AA and A from 25.3% to 24.6% and from 38.1% to 37.3%, respectively. In contrast, the participation of levels B and C increased from 16.6% to 17.4% and from 10% to 10.3%, in the same order. Another important shift was the 0.5 p.p. rise in the participation of loan operations classified under levels E-H, with 7% of total SFN credits, the highest level registered among the various base dates analyzed.

With the changes that occurred in credit operation risk classifications, the minimum provision to be set aside by SFN financial institutions rose 0.4 p.p., from 5.6% in December 2005 to 6% last June, according to the parameters defined in Resolution 2,682/1999.

With respect to credit operations granted by branches abroad, the total came to R$21.5 billion at the end of June 2006. Distribution by risk level reflected moderate growth in the half-year period, with 64.5% at level AA, 35.1% at levels A-C and 0.3% at levels E-H. The minimum provision required for these operations remained stable at 0.4% compared to the previous period.

Migration matrix and loan classification

The analysis of the migration matrix is not included in this report. The reason for this is that the database of the former Risk Center (CRC), which was discontinued in December 2005, was replaced by the new SCR. This process required alterations in the migration matrix calculation methodology, which is now being refined.

Delinquency

The delinquency analysis covers operations considered fully matured or, in other words, operations with arrears of more than 90 days. In this context, the volume of delinquent credits in the SFN reached R$24.7 billion at the end of June 2006, for an increase of approximately 12%, or R$2.7 billion compared to December 2005. The delinquency indicator,

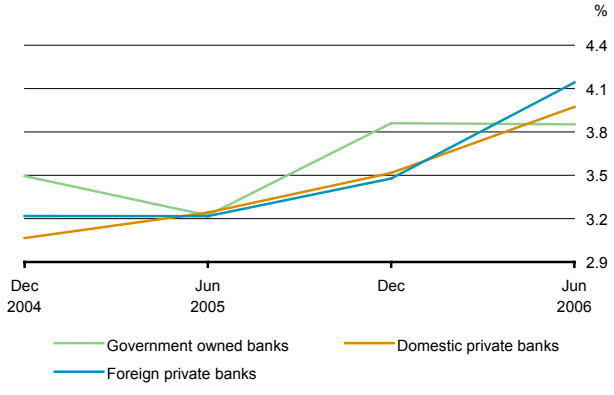
Largest debtors – Economic sectors
100 largest debtors – June, 2006

R$ billion

Itemization	Portfolio[1/]	Debt[2/]	Average[3/]
Total – 100 largest debtors	83.8	101.0	2.9
Total – 20 biggest sectors	73.3	86.9	2.8
Eletric energy production and distribution	18.5	19.6	0.6
Telecommunication	9.7	12.1	0.4
Cellulose, paper and paper products manufacturing	5.7	7.7	0.3
Production of vehicles, pickups and utilitarians	5.5	7.7	1.2
Public administration, defense and social security	5.5	5.5	18.0
Non-specialized retailing	4.2	4.9	0.3
Overland transportation	3.7	3.8	20.3
Production of resins and elastomers	2.5	2.8	0.5
Slaughter and preparation of meat and fish products	2.2	3.1	0.4
Financial intermediation, excluding insurance and private pension plan	2.1	4.2	0.4
Production of tobacco products	1.9	1.9	0.4
Aircraft manufacturing, assembling and repairing	1.7	1.9	0.2
Siderurgy	1.7	2.0	0.2
Personal care and home care whosesale	1.5	1.5	0.5
Production of organic chemistry products	1.3	1.6	0.4
Extraction of metallic ores	1.3	1.6	0.2
Metallurgy of non-iron metals	1.3	1.4	0.0
Trucks and buses production	1.1	1.1	0.2
Crude oil - extraction and correlated activities	1.0	1.2	0.3
Auxiliary activities to transportation and travel agencies	1.0	1.0	0.2
Others	10.5	14.2	3.7

1/ Loans and lease operations.
2/ Portfolio + joint liabilities + write-offs.
3/ Average provision – % (portfolio).

Default/credit operations
Consolidated I by control type



ratio between the credit stock in arrears and total SFN credits, remained stable at 3.6%. It is important to stress that the default rate in consolidated banking segment II dropped from 2.5% to 0.9%, a reduction of R$1.4 billion. This decrease was concentrated under BNDES operations and clearly impacted the delinquency rate for the SFN as a whole, offsetting growth in this indicator for national private banks, from 3.5% to 4%, and for foreign banks, from 3.5% to 4.1%.

Provisions

The balance of provisions set aside by financial institutions to offset nonperforming loans totaled R$46.8 billion at the end of June 2006, an increase of 15.3% compared to the December 2005 balance. The ratio between overall provisions and total SFN credit operations increased 0.4 p.p. in the period, shifting from 6.4% in December 2005 to 6.8% last June. Public sector banks, included under consolidated banking segment I, were the institutions that had the greatest impact on this result, accounting for 41.6% of the increase in SFN provisions. This result reflected 0.6 p.p. growth in the indicator for this group, followed by private national banks, with 32.6% of the increase in SFN provisions and a rise of 0.3 p.p. in the ratio of provisions set aside to the credit portfolio of the segment.

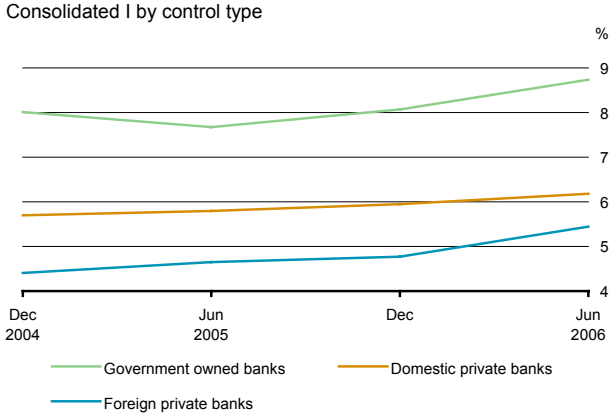
Provisions set aside/minimum provision

Calculated on the basis of credit operation risk classification, the ratio between the indicators of provisions set aside and minimum provisions demonstrates that overall SFN provisions at the end of the first half of 2006 were 13.3% greater than the minimum provision required by Resolution 2,682/1999, compared to 14.3% in the previous half-year period. Private national banks took the most conservative position, with provisions 29.2% greater than the minimum requirement. In contrast, the non-banking segment had the worst ratio with less than 18%.

2.5.2 Exposure in foreign currencies and gold

Evolution of net exposure in the basket of currencies of SFN member institutions in the period extending from January to June 2006 is shown below. This analysis does not include BNDES data, since that institution would be considered

Provision/credit operations
Consolidated I by control type



Constituted provision versus required provision[1/]

%

Itemization	2005		2006	
	Dec		Jun	
	Provision		Provision	
	constituted	required[2/]	constituted	required[2/]
Total of the SFN	6.4	5.6	6.8	6.0
Banking				
consolidated I	6.3	5.5	6.8	6.0
Banks				
government				
owned	8.1	7.5	8.7	8.2
domestic private	5.9	4.6	6.2	4.8
foreign	4.8	4.6	5.6	5.3
consolidated II	6.5	6.1	6.5	5.8
consolidated III	5.0	4.5	5.4	5.0
Non-banking	12.7	11.4	9.1	11.1

1/ Comparison between constituted provision percentage and required provision percentage.
2/ By classification (Res. 2.682/99-Bacen).

atypical for this type of analysis. The data were elaborated in aggregate form and grouped by segment. Information from July and August 2006 were considered only when relevant facts occurred.

The highlights of the period were as follows:

a) increased net exposure mainly in dollars among institutions holding short positions. This increase was caused primarily by three institutions from the national private segment and was particularly strong in July and August 2006;

b) increase in the overall volumes of both long and short positions of the basket, with the dollar representing 92% in both positions;

c) reduction in the use of the prerogative of considering part of net worth as a short position, principally in the segment of private foreign institutions, with the consequent reduction in net long exposure.

Net exposure in the basket of currencies

Expressed in real, net exposure of the basket of currencies registered a short position during the entire half-year period, with an average of R$8.2 billion, well above the short position registered in the previous period, R$41.2 million. The sharpest growth occurred in January and April, with expansion from R$1.5 billion in the short position on January 2, 2006 to R$11 billion short on June 30, 2006. The highest exposure level reached R$12.9 billion on May 29, 2006. The major currency in the basket was the United States dollar, with 87.2%.

Expressed in dollars, the same exposure showed an average short position of US$3.8 billion, a figure significantly higher than the US$20.3 million short position posted in the previous period. Exposure increased US$3.8 billion, moving from US$1.3 billion on January 2, 2006 to US$5.1 billion on June 30, 2006.

In the first two months of the year, the rate of exchange of the real against the dollar dropped from R$2.33/US$ on January 2, 2006 to R$2.11/US$ on March 3, 2006. From that point forward through May 5, the rate declined steadily, albeit at a considerably less intense pace than in the first two months of the year, falling to R$2.05/US$, the low point of the period. In the same month, the rate of exchange of the real against

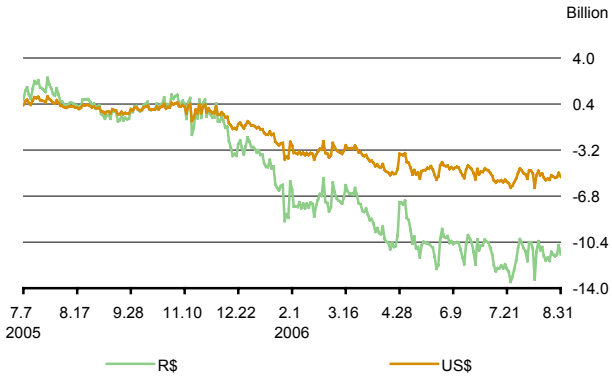
Default versus constituted provision[1/]

%

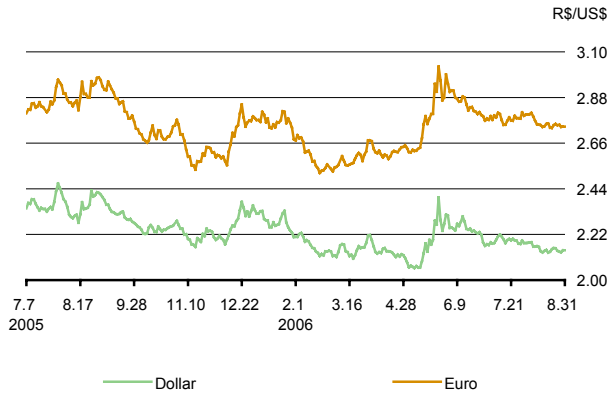
Itemization	2005 Dec		2006 Jun	
	Default	Provision constituted	Default	Provision constituted
Total of the SFN	3.5	6.4	3.6	6.8
Banking				
consolidated I	3.6	6.3	4.0	6.8
Banks				
government				
owned	3.9	8.1	3.9	8.7
domestic private	3.5	5.9	4.0	6.2
foreign	3.5	4.8	4.1	5.6
consolidated II	2.5	6.5	0.9	6.5
consolidated III	2.0	5.0	2.5	5.4
Non-banking	8.4	12.7	10.1	9.1

1/ Comparison between default percentage and constituted provision percentage.

Net exposure



Exchange rate for dollar and euro



the dollar rose sharply once again, reaching R$2.39/dollar on May 24, the highest level of the period.

The rate of exchange of the real against the euro accompanied changes in the dollar rate, dropping sharply in the first two months of the year from R$2.76/euro on January 2, 2006 to R$2.52/euro on February 17, the lowest level of the period. The highest rate in the period was R$3.03/euro on May 24, 2006, coinciding with the date of the sharpest rise in the rate of the real against the dollar.

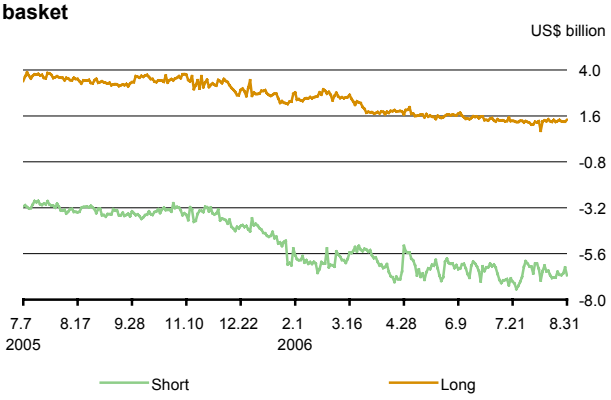
Viewed separately, the net exposures of institutions in long and short positions in the basket followed the same tendency in effect at the end of the previous half-year period, registering a reduction in long exposure and growth in short exposure. This trend was more intense in the first two months of the year, as the net exposure of institutions holding short positions increased US$2.5 billion, moving from US$4.1 billion on January 2, 2006 to US$6.6 billion on February 17, 2006. In the first half of 2006, total growth in the net exposure of institutions holding short positions reached US$2.4 billion, closing the period with US$6.5 billion. In the same period, net exposure of institutions with long positions declined to US$ 1.4 billion, dropping from US$2.8 billion to US$1.4 billion.

The increase in the net exposure of institutions holding short positions was heavily concentrated in three institutions from the private national segment. This was the major determining factor underlying growth in the net short exposure of the basket in the period. In a less relevant manner, the reduction in net long exposure was concentrated in one institution from the foreign segment and two from the national private segment. This performance also contributed to the behavior of net exposure.

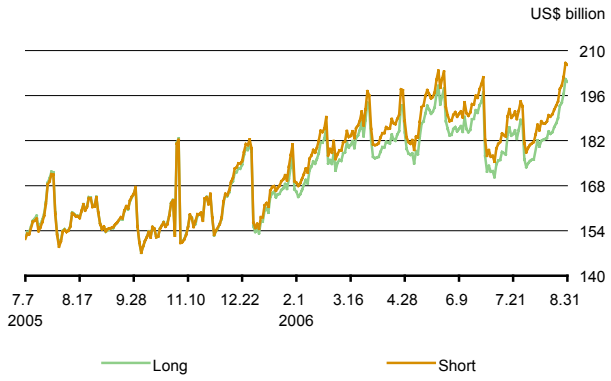
Volume of long and short positions in the basket of currencies

Particular mention should be made of the strong increase in the volumes of long and short positions in the basket of currencies in the first half of 2006, moving from US$153.6 billion to US$177.2 billion and from US$ 154.9 billion to US$182.3 billion, respectively, with peaks always toward the end of each month. The average values were US$179.2 billion and US$183 billion, both of which were greater than the average values registered in the previous period: US$159.6 billion and US$159.7 billion. In absolute terms, the US$27.4 billion increase in the short position was

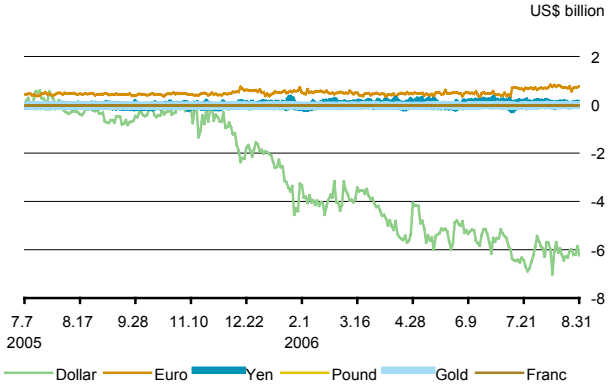
Net exposure – Long and short in currency basket



Volume of currency basket's positions



Net exposure – Currencies of currency basket



Currency basket´s composition – Comparison of the two last semesters

%

Currencies	Average 2nd semester of 2005	Accrued	Average 1st semester of 2006	Accrued
Euro	51.3	51.3	10.9	10.9
Dollar	43.7	95.0	86.8	97.8
Yen	3.0	98.0	1.3	99.1
Pound	1.2	99.2	0.5	99.6
Franc	0.2	99.4	0.1	99.7
Gold	0.6	100.0	0.3	100.0

US$3.8 billion greater than the US$23.6 increase in the long position. As mentioned in the previous item, this was the factor responsible for changes in the net exposure of the basket. The dollar accounted for 92% of both long and short positions during the period.

Starting in early July, the volume of these positions increased steadily through the end of August. Average long and short positions in the July-August period were US$182.1 billion and US$187.4 billion, respectively, with respective peaks of US$201.1 billion in the long position and US$206.1 billion in the short position, both on August 30, 2006.

Net exposure of the basket of currencies

In terms of net exposure, changes occurred in the profile of the basket of currencies. Differently from the previous period, when the euro accounted for the major share with an average of 51.3%, participation of the dollar rose from 43.7% in the previous period to 87.2% in the half-year period under analysis. Not only did total value remain short, but even increased during the period, rising US$3.7 billion, from US$1.9 billion to US$5.6 billion.

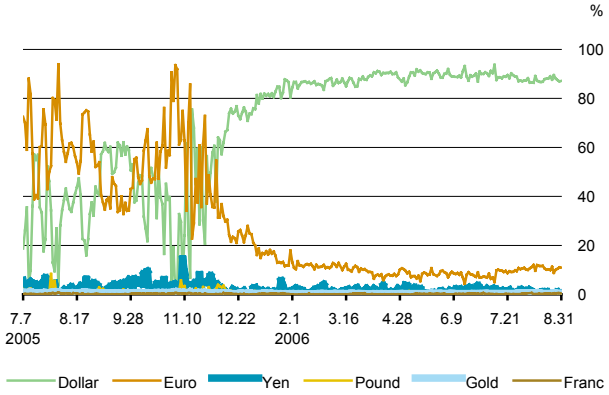
The percentage of net exposure in euro, 10.6%, fell sharply when compared to the previous half-year period, 51.3%. Total value was always long, with an average of US$492 billion compared to US$467 billion in the second half of 2005.

Starting in early July, net short exposure in dollars rose sharply through August, reaching US$6.8 billion on July 26, 2006. The average in that month was US$6.1 billion.

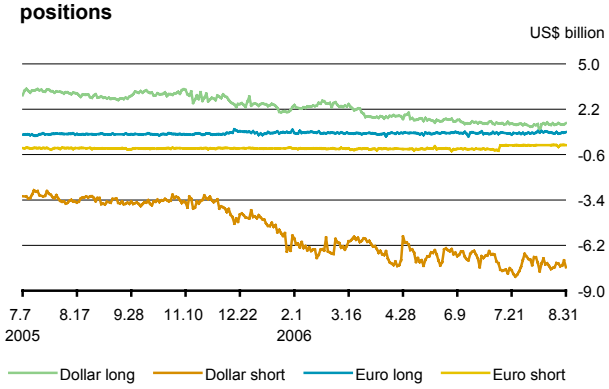
Practically the entirety of net exposure in the basket was composed of dollars and euros, with an average of 97.8%, slightly more than in the previous period, 95%. The yen, gold, pound and franc accounted for an average of just 2.2% in the basket, with average net short exposures of US$47.4 billion, US$14.1 million, US$12.3 billion and US$6.2 million, respectively.

When one analyzes institutions with net long exposure compared to those with net short exposure separately, in terms of dollars and euros, the tendency registered toward the end of the previous period intensified. Starting in January, long exposures in dollars declined, while short exposures rose sharply. Net exposures in euro remained stable. The alterations with the largest volume occurred under net short exposure in dollars, with US$2.5 billion,

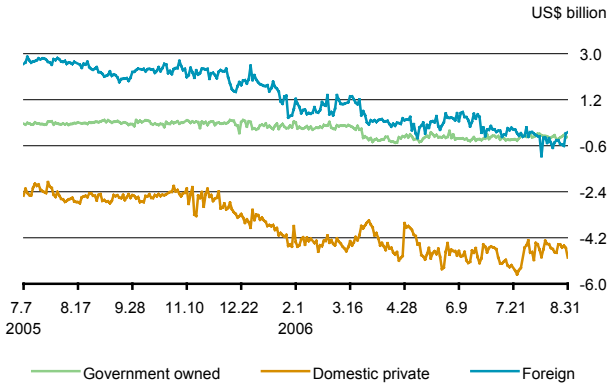
Currency basket´s composition – Net exposures



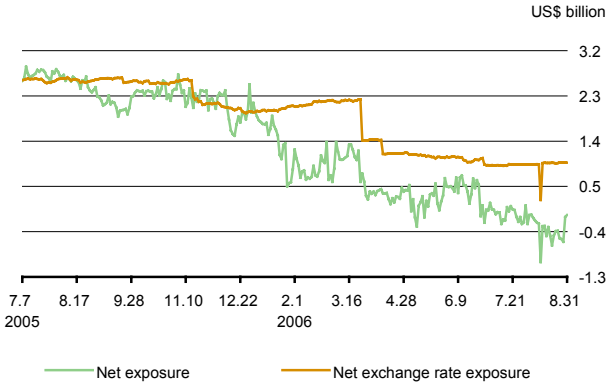
Net exposure – Long and short dollar and euro positions



Net exposure by segment



Foreign banks segment



moving from US$4.5 billion on January 2, 2006 to US$7 billion on June 30, 2006.

Net exposure in currencies not included in the basket

The net average exposure of currencies not included in the basket was US 249.9 million. On average, this exposure represented 5.5% of the net exposure of the basket and remained in a long position during the entire period.

Net exposure in the basket by segment

In the period extending from January 2 to June 30, 2006, the segment of private national banks registered the highest average net exposure in the period, with a US$4.4 billion short position in the basket, well above the US$2.7 billion figure for the previous period. This tendency toward growth in the short position had already been noted as of December of the previous period.

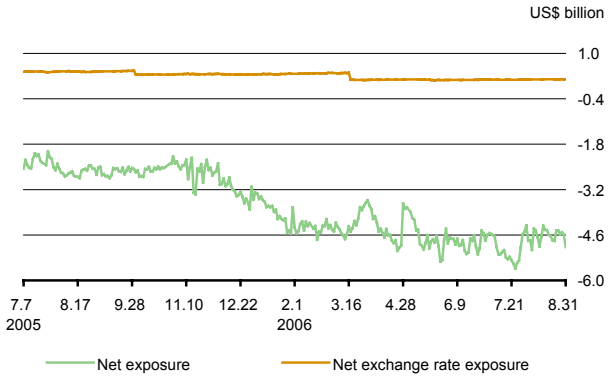
On the other hand, the segment of foreign banks registered the second highest average net exposure in the basket of currencies. In this case, the segment held a long position with a tendency toward decline. This average came to US$710.7 million or less than the US$2.3 billion position of the previous period.

More specifically, the tendency toward decline in the long position in the net exposure of foreign banks, mentioned in the previous paragraph, shifted into a short position as of early July, remaining there during practically all of July and August, with an average of R$199.2 million.

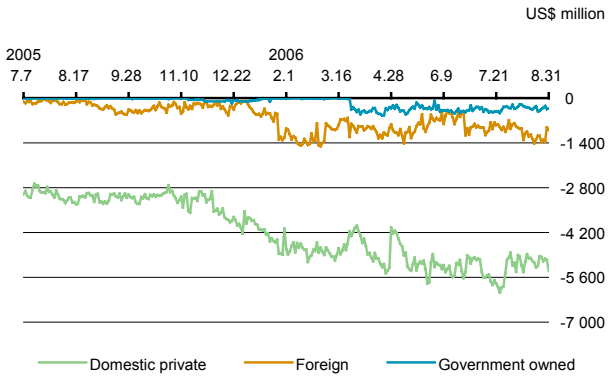
Following the example of the previous period, the segment of public banks began the half-year period with net long exposure. The average through March 24, 2006 was US$141.4 million. Starting at that point, net exposure reversed course and shifted into a short position. The average for the April-June period was US$309.1 million.

Between January and June 2006, the PL-Short of the foreign bank segment declined from US$1.9 billion to US$928 million, with an average of US$1.6 billion. This reduction was strongly concentrated in two institutions, one of which was later acquired by a conglomerate from the private national segment.

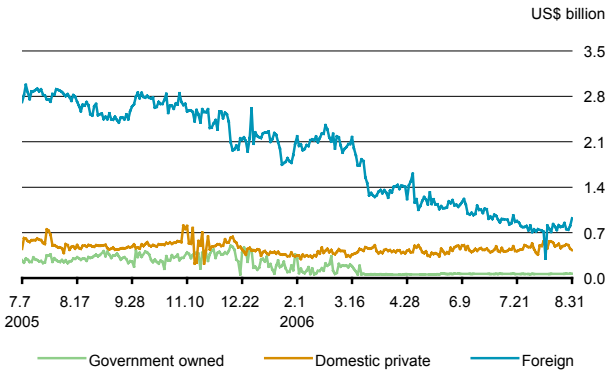
Domestic private banks segment



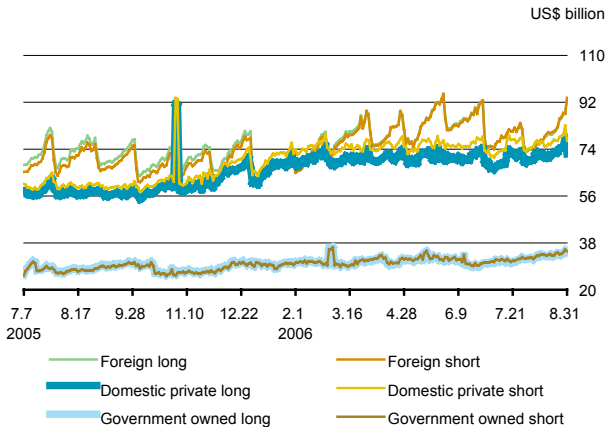
Short net exposure by segment



Net long exposure by segment



Volume of positions by segment



With respect to the segment of national private banks, the PL-Short also declined in the period, dropping from US$348.7 billion to US$265.7 billion, with an average of US$265.7 billion or considerably less than the US$497.3 billion position in the previous period.

Therefore, institutions from both segments diminished utilization of the right to consider part of their net worth as a short position, particularly in the case of the foreign private segment which sharply reduced its long position.

Consequently, the tendency evident toward the end of the previous period was confirmed, with simultaneous increases in the short position of banks from the private national segment and a reduction in the long position of foreign banks. In this way, one can explain the strong growth in the net exposure of the basket during the entire first half of 2006.

Volume of long and short positions in the basket by segment

Despite the fluctuations that occurred, all segments posted sharp increases in their positions during the period, with the exception of public banks which posted less substantial increases.

The segment of private national banks posted the largest increases under both long and short positions. Long positions increased US$10.4 billion, moving from US$60.3 billion to US$70.7 billion in the first half of 2006, while short positions rose US$12 billion, shifting from US$63 billion to US$75 billion in the same period. The fact that the increase in short positions was greater than the increase in long positions explains the reduction in the net long exposure of the segment during the period under consideration.

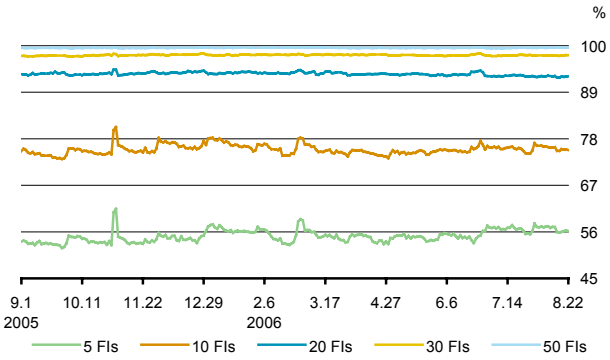
Mention should also be made of positive growth in the average long and short positions of foreign banks, compared to the previous six-month period. In average terms, the volume of long positions increased US$6.9 billion, rising from US$71.2 billion in the second half of 2005 to US$78.1 billion in the first half of 2006. The volume of short positions increased US$8.4 billion, moving from US$68.9 billion to US$77.3 billion in the same period.

Average of volumes by segment

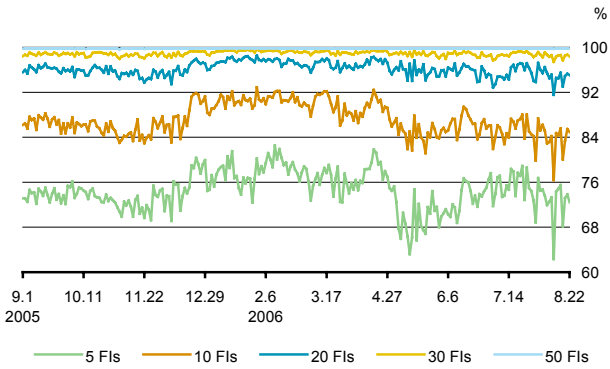
US$ billion

Itenization	2nd semester of 2005		1st semester of 2006	
	Long	Short	Long	Short
Foreign	71.2	68.9	78.1	77.3
Domestic private	60.3	63.0	70.7	75.0
Government owned	28.3	28.0	30.8	30.9

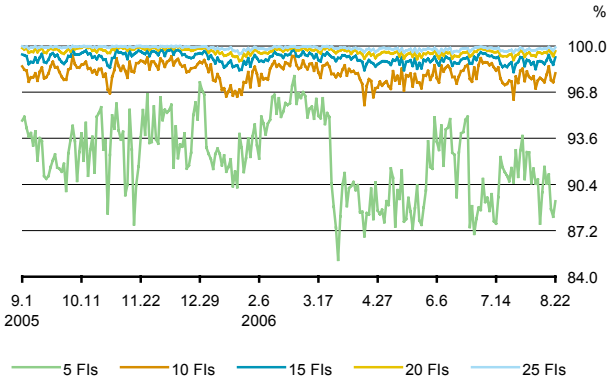
Financial institutions concentration by long positions volume



Concentration of financial institutions with long net exposure



Concentration of financial institutions with short net exposure



SFN concentration

On January 2, 2006, 121 institutions provided information to the Central Bank of Brazil regarding their exchange exposure, as required by current regulations. Of this total, 86 belonged to the banking macrosegment and 35 belonged to the non-banking segment. A breakdown of the institutions that provided information shows that 74 belong to the private national segment, 38 to the foreign segment and 9 to the segment of public banks. On June 30, 2006, the number of informing institutions did not change. The only alteration between the two dates involved distribution of the institutions, with 85 belonging to the banking macro segment and 36 to the nonbanking macro segment. On the other hand, the segment of private national banks showed 75 institutions, with 37 in the segment of private foreign banks. No changes occurred in the segment of public banks.

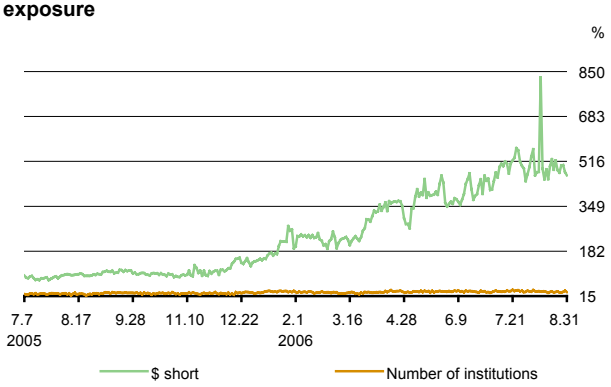
Among SFN institutions, the concentration of the volume of long positions in the basket remained constant from January 2 to June 30, 2006. Five institutions accounted for an average of 55% of the total. When the 10, 20 and 30 institutions with the largest positions are analyzed, they accounted for 75%, 93% and 98%, practically equivalent to the results registered in the previous period.

Institutions with net long exposure showed greater concentration and fluctuations. The average percentages in this case were 75%, 89%, 97% and 99% for the 5, 10, 20 and 30 institutions with the largest exposures. These percentages were also quite close to those posted in the previous period.

Institutions with net short exposures were even more concentrated and registered sharper fluctuations. The average percentages in this case were 92%, 98%, 99% and 100% for the 5, 10, 15 and 20 institutions with the largest exposures. These results were slightly higher than those of the previous period.

The graph "Analysis of net short positions" shows that the sum total of the net exposure of institutions with short positions increased during the entire period. The average for the period was 296.3% of the sum total of net exposure of the institutions holding long positions, compared to 101.9% in the previous period. This period is calculated as having begun on January 2, 2006, with 144.4%, closing on June 30, 2006, with 463.6%.

Analysis of financial institutions with short net exposure



The average percentage of the number of institutions with net short exposure compared to overall SFN institutions that provided information on their exposure to the Central Bank was 31.6%, compared to 25.7% in the previous period. This means that both the number of institutions with short positions and the sum total of exposures increased sharply. One should also stress that the increase in net short exposure was heavily concentrated in just three institutions from the private national segment.

This position intensified even further as of July 2006 through August 2006, as the sum total of net exposure of these institutions peaked at 829% on August 11. The average of the two-month period came to 497%. This peak was caused by strong growth in net short exposure of institutions from the foreign segment on that date.

2.6 Stress scenarios

Stress scenarios are simulations designed to assess capital adequacy in relation to the Basel capital ratio on a specified date, in situations of unexpected losses or, in other words losses not covered by provisions. In this way, one measures the capacity of the PR of SFN banking institutions to withstand changes in PLE caused by significant fluctuations in credit, exchange rate and fixed interest risks. PLE is a measuring rod of system risk, since the risks and their proportions are taken into account in its calculation.

Based on the results of these impacts, two major points are analyzed: a) whether institutions would find themselves in situations of technical insolvency or, in other words, negative net worth; and b) whether there is a need for further capitalization of these institutions in order to continue operating within the parameters of the Basel limits.

These scenarios were not applied to all institutions, since the Central Bank does not obligate all of them to remit such information. The exceptions are institutions that operate below a certain minimum limit, since risk in this case would be negligible, and institutions that do not have credit portfolios.

For purposes of analysis, four stress scenarios were constructed considering fluctuations in fixed interest rates and exchange rates and downgrading in the risk classification of credit operations viewed either individually or simultaneously. Data from end-June 2006 were used in this analysis.

Stress scenarios

Number of financial institutions and conglomerates

Itemization	Exchange or interest rate		Credit risk	
	A[1/]	B[2/]	A[1/]	B[2/]
Banking				
consolidated I	83	18	97	4
Banks				
government owned	10	2	12	0
private	73	16	85	4
domestic	42	14	54	2
foreign	31	2	31	2
consolidated II	16	16	26	6
Total	99	34	123	10

1/ Number of institutions included in the stress test.

2/ Number of institutions not included in the stress test.

Based on data drawn from accounting, exchange exposure and fixed interest rate exposure, the results and respective tax effects were calculated for each scenario and PR, PLE and the Basel capital ratio were recalculated.

2.6.1 Universe analyzed

One hundred and thirty three banking institutions (consolidated banking segments I and II) were chosen for purposes of application of the stress scenarios. Of this total, 128 had information in at least one of the factors analyzed, with 99 submitting information on market risk (interest and/or exchange) and 123 on credit risk.

2.6.2 Credit risk stress

The objective of credit risk stress is to measure the impact of deterioration in financial institution loan portfolios on capital adequacy levels.

For purposes of this stress, balance sheet data are used – classified portfolio – and the classifications of all of the financial institution's clients are downgraded two levels. The new classification is then utilized to obtain a new level of required provisions. One then subtracts current provisions from this result in order to arrive at the required increase in provisions. Following that, the effect of the increase in provisions is calculated taking due account of the impact of tax credits on PLE and PR. The impact on the Basel capital ratio is then calculated.

2.6.3 Interest and exchange rate stress

The selected scenario was that which registered the largest result between calculations based on two risk models, Value-at-Risk (VaR) (parametric model) and the hybrid model (nonparametric model).

The upward scenario consisted of: a) increase of R$0.4664/US$ in the rate of exchange, moving from R$2.1643/US$ to R$2.6307/US$; and b) alteration in the forward interest rate futures structure with an increase of 5.83 p.p. for vertices of 21, 42, 63 and 126 days; 5.91 p.p. for the vertex of 252 days; and 5.64 p.p. for vertices of 504 and 756 days.

The downward scenarios showed: a) drop of R$0.2985/US$ in the rate of exchange, moving from US$2.1643/US$ to R$1.8658/US$; and b) alteration in the forward interest rate

Stress test – Initial situation
June, 2006

Itemization	Basel capital ratio ranges		
	Lower than 11	Higher than 11	Total
Banking			
consolidated I			
Banks			
government owned			
Number of institutions	-	12	12
Basel capital ratio (%)	-	19.7	19.7
domestic private			
Number of institutions	-	56	56
Basel capital ratio (%)	-	17.0	17.0
foreign			
Number of institutions	-	33	33
Basel capital ratio (%)	-	15.4	15.4
consolidated II			
Number of institutions	-	32	32
Basel capital ratio (%)	-	21.6	21.6
Total			
Number of institutions	-	133	133
Basel capital ratio (%)	-	17.9	17.9

futures structure with a reduction of 3.22 p.p. for the vertices of 21, 42, 63 and 126 days; 3.17 p.p. for the vertex of 252 days and 3.48 p.p. for the vertices of 504 and 756 days.

As far as PLE is concerned, the results of rate fluctuations were considered only in the value of requirements for market risk (interest + exchange), without changing APR. In the case of PR, the financial effect of exchange variations on net exposure and of interest rate fluctuations on the financial flows of institutions were considered.

2.6.4 Evaluation of results

2.6.4.1 Initial situation

In June 2006, the 133 selected institutions had PR of R$208.8 billion and PLE corresponding to US$ 128.5 billion, respectively, corresponding to 99.85% of PR and 99.98% of PLE of the National Financial System as a whole, with a Basel capital ratio of 17.9%. On that date, none of the institutions in the universe analyzed had a ratio of less than the regulatory minimum limit of 11%.

2.6.4.2 Upward stress scenarios

Increased credit risk

Growth in credit risk would reduce the Basel capital ratio to 15.1% as a result of a reduction in PR from R$208.8 billion to R$176.2 billion and a strong increase in PLE from R$128.5 billion to R$128.6 billion, an increase of R$108.5 million.

No institution would be classified as technically insolvent. Nonetheless, 21 institutions would be noncompliant and in need of capitalization equivalent to R$1.3 billion or 1% of PLE prior to the simulation.

a) Public banks – Reduction of 5.1 p.p. in the Basel capital ratio (19.7% to 14.6%), due to the R$12.6 billion or 26% cutback in PR, coupled with an increase of R$42 million or 0.2% in PLE. Of the 12 institutions subjected to the stress test, none had a ratio below the regulatory minimum.

b) National private banks – Reduction in the Basel capital ratio equivalent to 2.1 p.p., from 17% to 14.9%, as a result of a decrease of R$11 billion or 12.5% in PR and growth of R$36.7 million or 0.1% in PLE. Of the 54 institutions subjected to the stress test, eight were in need

Credit risk stress test
Increase in the credit risk

Itemization	Basel capital ratio ranges			
	Lower than 11	Higher than 11	A[1/]	Total
Banking				
consolidated I				
Banks				
government owned				
Number of institutions	-	12	-	12
Basel capital ratio (%)	-	14.6	-	14.6
domestic private				
Number of institutions	8	46	2	56
Basel capital ratio (%)	10.5	15.3	180.1	14.9
foreign				
Number of institutions	4	27	2	33
Basel capital ratio (%)	9.8	13.7	34.5	13.5
consolidated II				
Number of institutions	9	17	6	32
Basel capital ratio (%)	7.2	20.2	35.9	18.9
Total				
Number of institutions	21	102	10	133
Basel capital ratio (%)	9.6	15.4	38.1	15.1

1/ Number of institutions not included in the stress test.

of capitalization totaling R$245 million or 0.2% of PLE prior to the simulation.

c) Foreign banks – Reduction of 1.9 p.p. in the Basel capital ratio, from 15.4% to 13.5%, due to the drop of R$4.6 billion or 12.2% in PR and growth of R$15.4 billion or 0.1% in PLE. Of the 31 institutions subjected to the stress test, four required total capitalization of R$272.4 million or 0.2% of PLE prior to the simulation.

d) Consolidated banking segment II – Reduction of 2.7 p.p. in the Basel capital ratio from 21.6% to 18.9%, due to the reduction of R$4.4 billion or 12.6% in PR and to growth of R$14.5 million or 0.1% in PLE. Of the 26 institutions subjected to the stress test, eight required capitalization totaling R$750.7 million or 0.6% of PLE prior to the simulation.

In the simulation of the previous half-year period, 19 institutions were considered noncompliant on base date December 2005.

Increased interest and exchange rates

The increase in interest and exchange rates would reduce the Basel capital ratio to 12.9% as a result of a reduction in PR to R$197.1 billion, with R$10.1 billion referring to the interest rate scenario and R$1.5 billion to the exchange scenario, coupled with an increase in PLE to R$168.3 billion, of which R$30.6 billion referred to the interest rate scenario and R$9.2 billion to the exchange scenario.

In this scenario, no institutions would be considered technically insolvent. However, 30 institutions would be noncompliant requiring total capitalization of R$18.3 billion or 14.3% of PLE prior to the simulation.

a) Public banks – Reduction of 4.7 p.p. in the Basel capital ratio from 19.7% to 15% due to a R$1.9 billion or 4% cutback in PR and an increase of R$7.1 billion in PLE or 26.3%. Of the 10 institutions subjected to the stress test, two required capitalization totaling R$780.6 million or 0.6% of PLE prior to the simulation.

b) National private banks – Reduction of 5.1 p.p. in the Basel capital ratio from 17% to 11.9% as a result of the R$6.2 billion or 7.1% cutback in PR and the R$18.9 billion or 33.2% increase in PLE. Of the 42 institutions subjected

Higher interest and foreign exchange rates stress test

Itemization	Basel capital ratio ranges			
	Lower than 11	Higher than 11	A[1/]	Total
Banking				
consolidated I				
Banks				
government owned				
Number of institutions	2	8	2	12
Basel capital ratio (%)	8.0	15.6	38.6	15.0
domestic private				
Number of institutions	16	26	14	56
Basel capital ratio (%)	9.0	15.8	77.2	11.9
foreign				
Number of institutions	8	23	2	33
Basel capital ratio (%)	8.0	16.5	53.3	9.7
consolidated II				
Number of institutions	4	12	16	32
Basel capital ratio (%)	8.8	20.2	25.7	19.5
Total				
Number of institutions	30	69	34	133
Basel capital ratio (%)	8.6	16.7	40.7	12.9

1/ Number of institutions not included in the stress test.

to the stress test, 16 would require capitalization totaling R$8.7 billion, or 6.8% of PLE prior to the simulation.

c) Foreign banks – Reduction of 5.7 p.p. in the Basel capital ratio from 15.4% to 9.7% due to the R$3.4 billion or 8.9% reduction in PR and the R$18.9 billion or 44.5% increase in PLE. Of the 31 institutions subjected to the stress test, eight would require a total of R$8.5 billion in capitalization or 6.6% of PLE before the simulation.

d) Consolidated banking segment II – Reduction of 2.1 p.p. in the Basel capital ratio from 21.6% to 19.5% caused by a reduction of R$201.2 million or 0.6% of TR and growth of R$1.8 billion or 10.4% in PLE. Of the 16 institutions subjected to the stress test, four required overall capitalization of R$320.6 billion or 0.2% of PLE before the simulation.

Thirty one institutions were considered noncompliant in the simulation carried out in the previous half-year period, base date December 2005.

Increased interest rates, exchange rates and credit risk

The increase in interest rates, exchange rates and credit risk would reduce the Basel capital ratio to 10.6%, as a result of reduction of PR to R$164.5 billion or 21.2% and growth in PLE to R$168.4 billion or 31.1%.

In this scenario, no institutions would be classified as technically insolvent. Nonetheless, 49 institutions would be noncompliant and would require capitalization of R$31.4 billion or 24.5% of PLE prior to the simulation.

a) Public banks – Reduction of 8.8 p.p. in the Basel capital ratio from 19.7% to 10.9% due to a reduction of R$14.5 billion or 30% of PR and growth of R$7.1 billion or 26.5% in PLE. Of the 12 institutions subjected to the stress test, six required capitalization worth R$4.3 billion or 3.3% of PLE before the simulation.

b) National private banks – Reduction of 6.7 p.p. in the Basel capital ratio from 17% to 10.3%, due to a reduction of R$17.2 billion or 19.6% in PR and growth of R$18.9 billion or 33.2% in PLE. Of the 54 institutions subjected to the stress test, 20 required capitalization totaling R$13.9 billion or 10.8% of PLE prior to the simulation.

Higher interest and foreign exchange rates and credit risk stress test

Itemization	Basel capital ratio ranges			
	Lower than 11	Higher than 11	A[1/]	Total
Banking				
consolidated I				
Banks				
government owned				
Number of institutions	6	6	-	12
Basel capital ratio (%)	9.2	17.2	-	10.9
domestic private				
Number of institutions	20	34	2	56
Basel capital ratio (%)	7.8	14.4	180.1	10.3
foreign				
Number of institutions	12	21	-	33
Basel capital ratio (%)	7.0	15.4	-	8.4
consolidated II				
Number of institutions	11	18	3	32
Basel capital ratio (%)	6.7	19.1	152.5	17.0
Total				
Number of institutions	49	79	5	133
Basel capital ratio (%)	7.9	16.2	167.8	10.7

1/ Number of institutions not included in the stress test.

c) Foreign banks – Reduction of 7 p.p. in the Basel capital ratio from 15.4% to 8.4% as a result of a reduction of R$7.9 billion or 21% in PR and an increase of R$12 billion or 44.6% in PLE. Of the 33 institutions subjected to the test, 12 required capitalization worth R$11.9 billion or 9.2% of PLE prior to the simulation.

d) Consolidated banking segment II – Reduction of 4.6 p.p. in the Basel capital ratio from 21.6% to 17%, generated by a R$4.6 billion or 13.1% cutback in PR and growth of R$1.8 billion or 10.5% in PLE. Of the 29 institutions subjected to the test, 11 required capitalization totaling R$1.4 billion or 1.1% of PLE prior to the simulation.

Fifty-three institutions were considered noncompliant in the simulation carried out in the previous half-year period, base date December 2005.

2.6.4.3 Downward stress scenarios

Lower interest and exchange rates

The reduction in interest and exchange rates would reduce the Basel capital ratio to 15.8% as a consequence of the increase of PR to R$216.6 billion, with R$6.5 billion referring to the interest rate scenario and R$1 billion to the exchange rate scenario and of the increase in PLE to R$150.8 billion, with R$18 billion referring to the interest rate scenario and R$4.3 billion to the exchange rate scenario.

In this scenario no institutions would be technically insolvent. However, seven institutions would be noncompliant, requiring total capitalization of R$316.6 million or 0.2% of PLE before simulation.

a) Public banks – Reduction of 2.2 p.p. in the Basel capital ratio from 19.7% to 17.5% due to growth of R$1.2 billion or 2.6% in PR and R$4.2 billion or 15.6% in PLE. Of the 10 institutions subjected to the stress test, none would have ratios below the regulatory minimum.

b) National private banks – Reduction of 1.8 p.p. in the Basel capital ratio from 17% to 15.2% due to growth of R$3.9 billion or 4.5% in PR and R$9.6 billion or 16.9% in PLE. Of the 42 institutions subjected to the stress test, three required capital injections totaling R$52.2 million or 0.04% of PLE before simulation.

Lower interest and foreign exchange rates stress test

Itemization	Basel capital ratio ranges			
	Lower than 11	Higher than 11	A[1/]	Total
Banking				
consolidated I				
Banks				
government owned				
Number of institutions	-	10	2	12
Basel capital ratio (%)	-	17.4	38.6	17.5
domestic private				
Number of institutions	3	39	14	56
Basel capital ratio (%)	10.5	14.9	77.2	15.2
foreign				
Number of institutions	2	29	2	33
Basel capital ratio (%)	10.8	13.8	53.3	12.8
consolidated II				
Number of institutions	2	14	16	32
Basel capital ratio (%)	10.5	20.6	26.1	20.4
Total				
Number of institutions	7	92	34	133
Basel capital ratio (%)	10.7	16.0	41.1	15.8

1/ Number of institutions not included in the stress test.

c) Foreign banks – Reduction of 2.6 p.p. in the Basel capital ratio from 15.4% to 12.8% due to the R$2.1 billion or 5.7% increase in PR and the R$7.2 billion or 26.8% rise in PLE. Of the 31 institutions tested, two would require capitalization of R$225.2 million or 0.18% of PLE prior to the simulation.

d) Consolidated banking segment II – Reduction of 1.3 p.p. in the capital ratio from 21.7% to 20.4%, as a result of the R$135.2 million or 0.4% increase in PR and the R$1.2 billion or 6.7% rise in PLE. Of the 16 institutions tested, two would require capitalization totaling R$39.3 million or 0.03% of PLE, prior to the simulation.

Six institutions were considered noncompliant in the simulation carried out in the previous half-year period, base date December 2005.

2.7 Conclusion

Driven by internal demand, maintenance of the pace of economic activity clearly ratifies the growth trend in the Brazilian economy, with direct impacts on the volume of credit offered by the SFN.

Operations with stocks and bonds declined in the half-year period. Banks continued targeting their resources into loan operations. Steady positive growth in these operations revealed a strong performance in nonearmarked portfolios, particularly personal loans. Growth in credit was sustained primarily by payroll-deducted loans. The volume of SFN credits has grown sharply and, in recent half-year periods, relative participation in GDP has followed an upward curve, moving from 25.5% in May 2004 to 32.6% in May 2006.

Net SFN profits increased 22.1% compared to the previous half-year period. Basically, this result reflected growth in income on credit operations and service revenues in a total amount of R$ 23.8 billion, 56.2% of administrative outlays. Foreign banks registered the sharpest percentage drop in operational costs. The major banks registered annual returns of 24.9% on net worth, following an upward trend in recent months.

In the last 24 months, the Basel capital ratio fluctuated between 17.5% and 19%, well above the minimum limit required by the rules now in effect in Brazil. Stress tests produced satisfactory results, confirming indications evident in recent years according to which SFN institutions

have sufficient levels of capital and net worth to withstand possible extreme fluctuations in interest rates, exchange rates and loan portfolio quality levels. Despite the highly improbable hypothesis of insolvency, some institutions could be considered noncompliant in terms of operational limits. These results were obtained in the context of a 12% rise in the volume of delinquent loans in the half-year period.

Write-Offs – Historical Series of SCR

In function of the migration of the old Credit Risk Center (CRC) for the current Credit Information System (SCR), that it started to consider the operations written-off to 48 months (previously it was considered up to 60 months), as well as identifying the joint liabilities for cession of credit, we divulge annexes with historical data of operations written-off to 12 months and between 12 and 48 months, and sums of joint liabilities with collateral and joint liabilities with cession of credit.

Write-offs – Historical series of SCR

R$ million

Itemization	Write-offs within 12 months						
	2003		2004		2005		2006
	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Total of the SFN	14 608	15 336	18 340	18 036	18 462	16 656	18 368
Banking							
consolidated I	13 891	14 064	14 662	14 431	14 900	15 102	16 964
Banks							
government							
owned	5 331	5 455	5 988	5 751	6 487	6 848	6 333
domestic private	5 415	5 435	5 369	5 019	4 825	4 730	6 176
foreign	3 145	3 175	3 305	3 661	3 588	3 525	4 455
consolidated II	553	1 085	3 409	3 246	3 186	1 060	756
consolidated III[1/]	0	0	101	118	126	143	194
Non-banking	164	186	169	240	250	352	454
Percentage[2/]	3.8%	3.7%	4.0%	3.6%	3.4%	2.7%	2.8%

1/ Credit unions have sent data to SCR since 2004, January.
2/ Percentage of write-offs in relation to the SFN's credit operations.

Write-offs – Historical series of SCR

R$ million

Itemization	Write-offs from 13 to 48 months						
	2003		2004		2005		2006
	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Total of the SFN	40 938	40 621	39 556	27 841	28 783	31 500	32 782
Banking							
consolidated I	38 890	38 527	37 273	25 208	26 020	26 290	28 096
Banks							
government							
owned	22 415	22 122	19 819	7 587	7 471	7 586	8 655
domestic private	9 674	9 213	9 981	10 989	11 695	11 490	11 820
foreign	6 801	7 192	7 473	6 632	6 854	7 214	7 621
consolidated II	1 628	1 597	1 662	2 104	2 180	4 518	3 876
consolidated III[1/]	0	0	162	169	183	211	258
Non-banking	420	497	460	360	400	482	552
Percentage[2/]	10.7%	9.9%	8.7%	5.6%	5.3%	5.2%	4.9%

1/ Credit unions have sent data to SCR since 2004, January.
2/ Percentage of write-offs in relation to the SFN's credit operations.

Joint liabilities – Historical series of SCR

R$ million

Itemization	Endorsements and sureties						
	2003		2004		2005		2006
	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Total of the SFN	45 238	46 465	49 062	51 412	55 107	64 207	75 502
Banking							
consolidated I	44 274	45 441	47 514	49 681	53 464	62 167	73 601
Banks							
government							
owned	6 286	7 465	8 850	8 040	8 772	9 482	12 179
domestic private	21 776	21 918	22 410	25 331	26 972	32 418	40 001
foreign	16 213	16 058	16 253	16 309	17 720	20 267	21 421
consolidated II	924	882	652	570	752	558	833
consolidated III[1/]	0	0	651	792	886	952	1 022
Non-banking	40	142	245	370	4	529	45
Percentage[2/]	11.9%	11.3%	10.8%	10.3%	10.1%	10.5%	11.4%

1/ Credit unions have sent data to SCR since 2004, January.
2/ Percentage of joint liabilities in relation to the SFN's credit operations.

Joint liabilities – Historical series of SCR

R$ million

Itemization	Joint liabilities with credit garanted						
	2003		2004		2005		2006
	Jun	Dec	Jun	Dec	Jun	Dec	Jun
Total of the SFN	1 619	1 690	2 501	3 690	7 537	9 844	13 081
Banking							
consolidated I	1 578	1 652	2 437	3 555	6 991	9 687	12 374
Banks							
government							
owned	178	196	245	261	329	341	367
domestic private	1 135	1 211	2 010	3 109	6 469	8 912	11 551
foreign	265	245	183	185	193	435	456
consolidated II	10	9	9	9	9	9	8
consolidated III[1/]	0	0	9	15	12	8	11
Non-banking	32	28	46	112	524	139	689
Percentage[2/]	0.4%	0.4%	0.5%	0.7%	1.4%	1.6%	2.0%

1/ Credit unions have sent data to SCR since 2004, January.

2/ Percentage of joint liabilities in relation to the SFN's credit operations.

Concepts and Methodologies

Concepts

a) Cosif: Accounting Plan of SFN institutions.

b) National Financial System: For the purposes of this report, this concept is restricted to institutions authorized to operate by Banco Central do Brasil – with the exception of group purchasing pool administrators – independently of whether they are or are not grouped into conglomerates.

c) Banking system: encompasses banking conglomerates and independent banking institutions, as defined below.

d) Nonbanking system: includes leasing companies, stock and security brokerage companies, credit, finance and investment companies, financial conglomerates, real estate credit companies and savings and loan associations, security distribution companies and mortgage companies.

e) Independent banking institutions I: financial institutions that operate as commercial banks, multiple banks with commercial portfolios or savings banks that are not part of conglomerates, referring to Cosif documents 4010 and 4016.

f) Independent banking institutions II: Financial institutions of the multiple bank type without commercial portfolios, investment banks and development banks that are not part of conglomerates.

g) Independent nonbanking institutions: other financial institutions, except those classified as independent banking institutions I or II and credit unions.

h) Banking conglomerate: grouping of financial institutions that consolidate their financial statements, utilizing Cosif documents 4040 and 4046.

i) Banking conglomerate I: conglomerate in which at least one institution is a commercial bank or multiple bank with a commercial portfolio.

j) Banking conglomerate II: conglomerate in which there are no commercial banks and multiple banks with commercial portfolios, but that have at least one institution of the multiple bank type without a commercial portfolio, investment bank and development bank.

k) Nonbanking conglomerate: conglomerate of financial institutions not classified within the concepts of banking conglomerate I or II.

l) Consolidated SFN: corresponds to the aggregation of all the documents considered. Should not be confused with or compared to other statistics published by Banco Central do Brasil, which deal with information on each institution in the different SFN segments.

m) Consolidated banking segment I: grouping of the accounting positions of the banking institutions of the type banking conglomerate I and independent banking institutions I.

n) Consolidated banking segment II: grouping of the accounting positions of the banking institutions of the type banking conglomerate II and independent banking institutions II.

o) Consolidated banking segment III: grouping of the accounting positions of credit unions.

p) Type of control: identifies the origin of the capital control of banking conglomerates or independent banking institutions. Subdivided into the following segments:

1. public;
2. national private;
3. foreign.

q) Base Capital (PR): for purposes of calculating operational limits, this concept is defined as the sum total of Net Worth and asset and liability accounts as itemized below:

1. Tier I Capital – arithmetic result of the balances of the accounting headings: net worth, credit or income accounts, debtor income accounts. For final calculation purposes, the following should also be excluded: revaluation reserves, contingency reserves and special profit reserves related to obligatory non distributed dividends, deducting the amounts referring to noncumulative preferred shares and redeemable preferred shares;

2. Tier II Capital – Arithmetic result of the balances of the following accounting headings: revaluation reserve, contingency reserve, special profit reserves for all obligatory non distributed dividends, noncumulative preferred shares and redeemable preferred shares; eligible subordinate debts and hybrid capital and debt instruments limited to the volume of Tier I, among other restrictions.

r) Adjusted Capital Base (PRA): defined as the PR used for purposes of calculating the Fixed Asset Ratio, as defined in letter l, subitem I.

s) Required Net Worth (PLE): calculated on the basis of credit and market risks (exchange and preset interest) and swap operations, as described in item "c" of the methodology. Represents the minimum amount required for PR, with the objective of withstanding the risks existent in the capital structure.

t) Basel Capital Ratio: concept defined by the Basel Committee which recommends a minimum ratio of 8% between PR and total assets weighted by risk, as demanded by current regulations. In Brazil, the minimum required ratio as of December 2002 is 11% for central credit unions and single credit unions affiliated to central credit unions, 15% for all other credit unions, 30% for development agencies and 11% for all other financial institutions.

Methodologies

a) The analyses are developed on the basis of accounting data remitted monthly by institutions to Banco Central. When the financial statements for the base date under analysis are not available, the immediately previous statement is used.

b) The Basil Capital Ratio and Fixed Asset Ratio are based on the accounting data of financial conglomerates or institutions. The accounting statements of banks and financial conglomerates are used when these institutions opt for the system of consolidated calculation. In the case of conglomerates that do not make this option, the ratios are calculated for each institution as if they were independent.

c) PLE is calculated through utilization of the data recorded by financial institutions in their asset and liability accounts and clearing accounts referring to capital requirements for Assets Weighted by Risk, Swap Credit Risk, Exchange Exposure Risk and Interest Rate Risk. In more simple terms, the PLE formula is described below:

PLE=F . (Assets Weighted by Risk) + Swap Credit Risk + Exchange Exposure Risk + Interest Rate Risk.
Factor F = Factor applicable to assets weighted by risk, stipulated at 0.11 for central credit unions and independent credit unions associated to central credit unions; 0.15 for other credit unions; 0.30 for development agencies; and 011 for other financial institutions.

d) Assets Weighted by Risk = total of the heading of Current Assets and Long-Term Assets multiplied by the corresponding risk factors + Joint Liabilities and Risks in Guarantees Rendered multiplied by the corresponding risk factors.

e) Capital Requirements for Swap Credit Risk = $F' \cdot \sum_{i=1}^{n1} RCDi_i$

F' = factor applicable to the credit risk of swap operations, equal to 0.20 (twenty hundredths);
n1 = number of swap operations registered under Cosif account 3.0.6.10.60-4;
RCDi= credit risk of the i-th swap operation registered under Cosif account 3.0.6.10.60-4, consistent in the weighting of the reference value of the operation at the moment of the respective contracting operation (VNi) by the corresponding potential risk factor, taking due account of the term to elapse.

f) Capital Requirements for Interest Rate Risk = $F'' \cdot \max\left\{ (\sum_{i=1}^{n2} Aprc_i - k \cdot PR); 0 \right\}$, in which:

F' = factor applicable to operations with gold and assets and liabilities referenced to exchange, including those carried out on derivative markets, equal to 0.5.
n2 = number of net positions in each currency and in gold;

$\sum_{i=1}^{n2} Aprc_i$ = sum total of the absolute values of the net position in each currency and in gold;

k = 0.05 (five hundredths) for $\sum_{i=1}^{n2} Aprc_i$ /PR less than or equal to 0.05 (five hundredths)

k = 0 for $\sum_{i=1}^{n2} Aprc_i$ /PR greater than 0.05 hundredths).

g) Capital Requirements for Interest Rate Risk = $\sum_{i=1}^{n3} ECi$, in which:

n3 = number of shares representative of the value of PLE for coverage of interest rate market risk in a specific currency/basis of earnings;
Eci = Share representative of the value of PLE for coverage of interest rate market risk in a specific currency/basis of earnings.

h) Basel Capital Ratio = $\frac{PR \cdot 100}{\{ Apr + [\frac{1}{F} \cdot (Interest\ Rate + Foreign\ Exchange\ Rate + Swap)] \}}$.

i) The values presented in the texts and tables have been rounded off. However, their percentage changes reflect the original figures, considering all of the decimal places.

j) The Fixed Assets Limit indicates the percentage of commitment of PRA in relation to Permanent Assets. The maximum limit permitted is 50%.

k) The following formula is used to obtain the Fixed Assets Ratio:

Fixed Assets Ratio = $\frac{Fixed\ Assets}{Adjusted\ PR} \cdot 100$

I. For calculation of the PRA

Tier I Capital
(+) Tier II Capital
(-) Stock Exchange Capital Securities
(-) Commodities and Futures Market Capital Securities
(-) Cetip Capital Securities
(-) (-) Stocks and Quotas of Clearing and Custody Companies linked to Exchanges
(-) (-) Provisions for Losses in Capital Securities*
(-) Capital Securities – Others*
(-)Premiums in Acquisitions of Capital Securities*
(=) PRA

II. For calculation of Fixed Assets

Fixed
(-) Fixed Assets Leased
(-) Losses in Leasings to be Paid
(-)(-)Accumulated Amortizations of Deferred – Losses in Leasings to be Paid
(-) Stock Exchange Capital Securities
(-) Commodities and Futures Exchange Capital Securities
(-) Cetip Capital Securities
(-) Stocks and Quotas of Clearing and Custody Companies Linked to Exchanges
(-)(-) Provision for Losses in Stocks and Quotas of Clearing and Custody Companies Linked to Exchange
(-)(-) Provision for Losses in Capital Securities*

(-) Capital Securities – Others*
(-) Premiums in Acquisitions of Capital Securities*
(=) Fixed Assets to Fixed Assets Ratio

All references to Fixed Assets in this paper concern Fixed Assets to Fixed Assets Ratio.

* Since the "Provision for Losses in Capital Securities" refers to all the headings of fixed capital, as well as premiums, it was determined that it would only be included in calculations of Adjusted PR and Fixed Assets – Investment when its absolute value exceeds the sum of the headings "Capital Securities – Others" and "Premiums in Acquisitions of Capital Securities". In these cases, the value of the provision to be considered is limited to the amount that exceeds the sum total of the balance of "Capital Securities – Others", with the balance of "Premiums in Acquisitions of Capital Securities".

Concepts and Methodologies – Credit Operations

Credit operations

Concept

a) Banking system: encompasses independent banking institutions and banking conglomerates and is distributed into the following categories: consolidated banking segment I, consolidated banking segment II and consolidated banking segment III, as defined under items "e" to "j" and "n" to "q" of pages 68 and 69 of this Report.

b) Nonbanking system: composed of leasing companies, credit, finance and investment companies, among others, that do not belong to financial conglomerates in which the lead component is a banking institution.

c) Minimum provision: the provision calculated according to the minimum parameters defined by Resolution 2,682, dated December 22, 1999.

d) Default: concept in line with the international standard of nonperformance loans, encompassing credits matured for more than 90 days.

e) Constituted provision: the stock of provisions stated in the balance sheets of financial institutions.

Methodology

a) The volumes of National Financial System (SFN) credit operations were calculated on the basis of documents (balance sheets and Credit Risk Center records) and were aggregated according to member institutions and also on the basis of documents provided by independent financial institutions.

b) Refers to the volume of credit effectively granted by the SFN to economic agents in Brazil excluding, therefore, the amounts granted by Brazilian bank branches and subsidiaries headquartered abroad. Credit operations contracted by microentrepreneur credit companies are also excluded.

Concepts and Methodologies – Exchange Exposure

Exchange exposure

According to current rules, exchange exposure is defined as the net value resulting from positions held in assets and liabilities[1] referenced to variations in the value of exchange and gold assumed by financial institutions and their directly and indirectly controlled entities, including positions on derivative markets and the exchange market itself. Exchange exposure is calculated separately in each currency and converted into reals.

Derivative markets include positions in futures, forward operations, options, swaps and commodities in which the value of the contract is subject to changes in foreign currency or gold values. The determination of assets and liabilities is not clearly defined for these instruments, making it necessary to accompany them through the use of extra-accounting documents.

The exchange market is the environment in which the foreign currencies used to back the other items referenced to them are negotiated. The institutions are duly authorized by Banco Central do Brasil and must comply with specific limits that are not discussed in this chapter. Purchases and sales of foreign currency require accounting records under specific headings in the National Financial System Institutions Accounting Plan (Cosif) which are also taken into consideration in calculating exchange exposure.

Definitions

Long exposure: The sum total of the assets exposed to exchange risk that increase in national currency value and of the liabilities that decrease in value as a result of devaluation of the national currency in relation to other currencies.

Short exposure: the sum total of the assets exposed to exchange risk that decrease in national currency value and of the liabilities that increase in value as a result of devaluation of the national currency in relation to other currencies. (Definitions: Circular 2,894/1999)

Exposure limit: the net exposure of the institutions as defined above and may not be greater than 30% of Base Capital (PR) – Circular 3,156/2002.

1/ All of the asset and liability statement items in some way related to the value of the foreign currency or gold are considered, such as credit operations, securities, investments abroad, credit lines utilized abroad and others.

The exchange exposure of the institution is obtained through the sum total of exchange exposure in each currency in the module:

Exchange Exposure = $\sum_i |\Sigma$ *Long Position* - Σ *Short Position*|.

In which I = currency

Circular 3217 dated December 23, 2003, later substituted by Circular 3229, dated March 25, 2004, instituted the concept of "basket of currencies", making it possible to offset contrary positions in United States dollars, euros, pounds sterling, yen, Swiss francs and gold, in the place of the sum total of the modules of each one.

According to current rules, the share of foreign capital included in the Base Capital of financial institutions may, on the basis of a request submitted to Banco Central do Brasil, be considered as an institution's exchange exposure and is designated the PLA-V (Adjusted Net Worth – Short). However, this provision was not adopted in this Report, since the objective is to demonstrate the real exposure of the institutions defined as Net Exposure, which is calculated through the following formula:

Net Exposure = $\sum_i |\Sigma$ *Long Position* - Σ (*Short Position - PLA_Short*)|.

Calculation of the participation of net exposures of the currencies in the basket

In order to avoid distortions, calculation of the participation in the basket of currencies of each one of the currencies included in it is done through utilization of its module, as shown below:

Net exposure module of each currency in the basket/ $\sum$ Module of the net exposures of the currencies of the basket.

This formula results in the daily participation of the net exposure of each currency included in the basket, which is the basis for the final average of the period.

Concepts and Methodologies – Stress Scenarios

Stress scenarios

For purposes of credit risk stress, the classification of all clients of financial institutions are downgraded two levels, based on balance sheet data – ranked portfolio. A new provision requirement is obtained as a result of the new classification. Real provisions are subtracted from this result in order to determine the required increase in provisions. After that, the impact of the increased provision on PLE and PR is calculated, thus revealing the impact on the Basel capital ratio.

For purposes of identifying the parameters used in market risk stress scenarios (preset interest and exchange rates), we utilized the largest value obtained through application of the two models: VaR and Hybrid. With regard to VaR the basic methodology is the RiskMetrics methodology which operates on the basis of the hypothesis of normal behavior for the algorithm of the returns of the variables under analysis. In its turn, the hybrid model utilizes historic data but does not draw hypotheses on the distribution of the returns of the variables analyzed, making use of the technique of exponential smoothing – combining several characteristics of the VaR, of RiskMetrics – and of the historic simulation methods.

For these two models, the confidence level of 99.6% (equivalent to one error per year) and a period of position maintenance of ten business days are utilized. With regard to the technique of exponential smoothing, which has the purpose of attributing greater weight to more recent observations, diverse factors of decline between 0.9 and one were utilized. Basically, these factors generate equal weights for all the days of the series, noting that only decline factors between 0.9 and 1 were used for the rate reductions scenarios. On each date on which the calculation is made, a series of data encompassing the first business day of January 1999 to the business day immediately prior to the calculation date is used, and the exponential decline chosen is that which generates the largest result.

In applying market risk stress to the PLE, the results of fluctuations in the rates were considered only in the amount of the requirement for market risk (interest + exchange), without altering Assets Weighted by Risk (APR). In PR, the financial impact of exchange variations on net exposure and of changes in interest rates on financial flows of the institutions were considered.

Riskmetrics Methodology to Calculating Value-at-Risk

The RiskMetrics methodology (1994) was developed by the J.P. Morgan financial institution and proposes that value-at-risk (VaR) be calculated through the following equation:

$VaR_t = VMTM \times z_\alpha \times h_t \times \sqrt{\Delta t}$, in which

VMTM Is the value of the assets marked-to-market on date t;
Z_α is the quantile of the normal distribution equivalent to the degree of confidence of the estimate of VaR;
H_t is the conditional volatility on date t for the asset;
Δt is the time interval chosen for calculating VaR.

Principal underlying hypothesis is that of log-normality of asset prices[1].

In order to estimate conditional volatility, RiskMetrics recommends utilization of the Exponentially Weighted Moving Average (EWMA), as shown in the equation below:

$h_t = \sqrt{\lambda h_{t-1}^2 + (1-\lambda) r_{t-1}^2}$, in which

r_t is the return of the asset for period t, defined as $r_t = 1n(P_t/P_{t-1})$, in which P_t price of λ asset in t;
λ is the decline factor, so that $0 < \lambda < 1$.

The most commonly used EWMA formulation in financial series allows for the hypothesis that the average of the λ daily returns of the assets is equal to zero[2].

With respect to the decline factor, RiskMetrics suggests $\lambda = 0.94$ for daily data. However, models exist for the choice of optimum λ, such as the maximum verisimilitude and the principle of average squares. The value of λ close to one reproduces the stylized fact of the volatility being highly persistent.

In the forecast of EWMA, the conditional variants of the returns is composed of two terms. The first [λh_{t-1}] is composed of a self-regressive term that expresses the temporal dependence of the return variance, the stylized fact present in financial series. The second [{1-λ)] represents the contribution of the most recent observation (innovation) for the estimated variance.

1/ It should also be noted that to utilize the time root to convert from one VaR calculation horizon to another, it is admitted that the prices are log-normally distributed and follow a Markov process.

2/ RiskMetrics also presents the equation in which a median of return different from zero is admitted.

The calculation of the VaR of the portfolio is given by:

$VaR_t = \sqrt{VaR' \rho \, VaR}$, in which

VaR is the vector n x 1 containing the VaR of each asset in the portfolio, and n is the number of instruments in the portfolio;
VaR' is the vector 1 x n, vector transposed from vector VaR;
ρ is the matrix nxn containing the correlations among the assets included in the portfolio

The correlation on day t among the assets i and j is calculated through the following formula:

$\rho_{(i,j),t} = \frac{h_{(i,j),t}}{h_{i,t} h_{j,t}}$, in which

$h_{(i,j),t}$ denotes the conditional covariance i and j on date t, which possesses the same principle of conditional variance calculation, and is obtained by the formula:

$h_{(i,j),t} = \sqrt{\lambda h_{(i,j),t-1} + (1-\lambda) r_{i,t-1} r_{j,t-1}}$.

Hybrid Approach to Calculating Value-at-Risk

This box synthesizes the work of Boudoukh et al., published in the Resenha BM&F 122/1998, utilized to calculate value-at-risk in interest and exchange rate stress scenarios. Classified as the hybrid model, this approach consists in recognizing the existent trade-offs in the different methods utilized to calculate value-at-risk and combine these methodologies in such a way as to optimize these trade-offs, while seeking to preserve their respective advantages.

The best known and most commonly used methodologies for calculating value-at-risk consist of the technique of exponential smoothing (the classic example is the RiskMetrics methodology) which uses decreasing weights for past returns, making it possible to perceive the behavior of volatility and historic simulation which ignores hypotheses on the distribution of the returns and utilizes the empirical percentages of the historic distribution of the returns.

The hybrid approach combines these two approaches. The approach of historic simulation uses equal weights to calculate conditional distribution. The proposal is that of using declining weights for past data with these weightings being calculated in a manner similar to the method of exponential smoothing

On making this combination, two undesirable properties of the traditional methods are put aside. On the one hand, the approach of exponential smoothing assumes a multivaried normality, which causes problems as a result of the heavy tails that are found in most financial assets. The historic simulation approach neglects hypotheses on distribution but assumes constant weights for observations of the sampling. The latter hypothesis is quite unrealistic, since the information contained in the returns on current distribution diminishes over time.

In this way, the hybrid approach consists of applying decreasing weights to past returns and encountering the appropriate percentage of this weighted empirical distribution in time. Boudoukh et al. tested the hybrid model for the rate of exchange of the German mark per United States dollar, the spot price of Brent type petroleum, Standard & Poor's 500 index and a generic index of Brady Bonds (J.P. Morgan Brady Bond Index) and concluded that the empirical results show that the hybrid model is superior to the other two, principally in the case of data with heavy tails such as those of the series of petroleum prices and Brady bonds.

Brazilian Payments System

3

3.1 Introduction

A national payment system comprises all institutional and infrastructure arrangements in a financial system for initiating and transferring monetary claims in the form of commercial bank and central bank liabilities[18]. Since the payment system is a key component of the financial infrastructure, its soundness is crucial to the financial stability.

In Brazil, the central bank is in charge of ensuring the payment system's safety, efficiency, integrity and reliability, as well as designating systemically important clearing and settlement arrangements[19]. In more specific terms, it is in charge of authorizing the functioning of all clearing and settlement systems – independently of the nature of the operations processed through them[20] – and overseeing their activities.

In the first half of 2006, important changes were introduced into the framework of BM&F-Derivatives, with the implementation of special settlement accounts (which Portuguese acronym is CEL) and a new system to evaluate the clearinghouse's intraday exposition (Intraday Risk System, which Portuguese acronym is SRI) – see item 3.3.2.

The overall turnover of all clearing and settlement systems amounted to around R$77.7 trillion[21] in the first half of 2006. In general, these payments were made seamlessly, showing that the systems were designed to operate in a robust way.

18/ CPSS (2005), General Guidance for Payment System Development, Consultative Report. Bank for International Settlements.

19/ According to Circular 3,057/2001, all settlement systems are considered systemically important, except those responsible for fund transfers that, in the last six months, have not registered a maximum individual daily value greater than R$10 million and average daily volume of more than R$5 billion.

20/ Some security settlement systems are also subject to Securities and Exchange Commission authorization and supervision.

21/ This amount does not include transaction processed through STR relating to Banco Central do Brasil's intraday credit, as well as those that does not imply a interbank funds transfer.

3.2 Payment clearing and settlement systems

This section will present data on the value and volume of funds transfer system transactions in the first half of 2006.

3.2.1 Reserve Transfer System

The STR, a real-time gross settlement system, is operated by the Banco Central do Brasil and processes mainly high value transfers. Bank reserve accounts maintained by financial institutions at the Banco Central do Brasil are operated through this system. All transactions are settled with intraday finality, so that each funds transfer among reserves accounts becomes final – irrevocable and unconditional – at the moment it is settled. In the case of systemically important systems, settlement in central bank money is mandatory, and the STR is always used to settle the related funds transfers.

Through the STR are settled mainly: securities transactions carried out in the Selic, including those relating to Banco Central do Brasil's intraday credit and monetary policy transactions; either gross or net positions stemming from securities, derivatives, and foreign exchange settlement systems; net positions relating to payment clearinghouses, as well as funds transfers relating to SITRAF's pre-deposits; funds transfers to and from National Treasury's account; funds transfers relating to Banco Central do Brasil's other operations; interbank funds transfers not related to other clearing and settlement systems, that is the so-called Express Electronic Transfers (TED), which can be issued by a participant bank on behalf of its own or of a client. In the first half of 2006, the overall value of fund transfers settled through the STR came to R$51.7 trillion, accumulating R$97.7 trillion in the last two half-year periods. In the first half of 2006, transfers in STR reached a daily average of R$417 billion, meaning that the system has a turnover equivalent to the Brazilian GDP every 4.9 days[22].

The following tables contain a detailed presentation of the evolution of overall funds transfers settled through the STR, which are broken down by value and volume. Gross

STR

Funds transfers – Value – Details

R$ billion

Transaction	2005		2006		Accumulated
	2nd semester		1st semester		
	Value	%1/	Value	%1/	
Settlement systems					
Securities					
Multilateral	1 205.2	2.6	1 619.0	3.1	2 824.2
Gross2/	41 496.1	90.2	46 603.1	90.2	88 099.2
Derivatives					
Multilateral	79.6	0.2	133.8	0.3	213.4
Foreing exchange					
Multilateral	246.6	0.5	285.0	0.6	531.6
Gross	127.3	0.3	107.4	0.2	234.7
Payments					
Multilateral	755.1	1.6	826.2	1.6	1 581.3
Transfers on behalf of customers	630.1	1.4	640.6	1.2	1 270.7
Transfers on behalf of FI	790.7	1.7	866.5	1.7	1 657.3
Government	678.2	1.5	612.5	1.2	1 290.7
Total	46 009.0		51 694.2		97 703.2

Source: Bacen

1/ As a percentage of total settlement.

2/ Includes organized over-the-counter derivatives transactions, and Banco Central do Brasil's intraday and overnight repos.

22/ For purposes of comparison, the Blue Book analysis of high-value transfer systems shows the following average periods for turnover of the value of GDP: Belgium, 4.9 days; the United States, 6.3 days; France, 3.8 days; Italy, 12 days; Holland, 4.1 days; Japan, 6.1 days; the United Kingdom, 5.6 days; Sweden, 5.9 days.

STR

Funds transfers – Volume – Details

Thousands

Transaction	2005 2nd semester Volume	2005 2nd semester % 1/	2006 1st semester Volume	2006 1st semester % 1/	Accumulated
Settlement systems					
Securities					
Multilateral	29.5	0.6	32.0	0.6	61.5
Gross 2/	776.4	15.1	812.6	15.3	1 589.1
Derivatives					
Multilateral	5.8	0.1	5.7	0.1	11.5
Foreing exchange					
Multilateral	5.8	0.1	5.6	0.1	11.3
Gross	7.7	0.1	5.4	0.1	13.1
Payments					
Multilateral	112.0	2.2	109.0	2.1	221.0
Transfers on behalf of customers	1 872.2	36.4	1 715.4	32.3	3 587.6
Transfers on behalf of FI	1 843.1	35.9	2 146.0	40.4	3 989.1
Government	486.1	9.5	479.3	9.0	965.4
Total	5 138.5		5 311.1		10 449.7

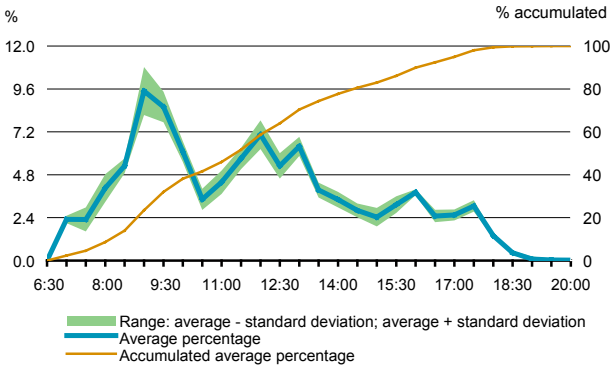
Source: Bacen

1/ As a percentage of total settlement.

2/ Includes organized over-the-counter derivatives transactions, and Banco Central do Brasil's intraday and overnight repos.

STR

Funds transfers – Value – Intraday profile – 1st semester 2006



settlement of government securities, including Banco Central do Brasil´s intraday credit transactions, accounted for 90.2% of the total value. However, these operations corresponded to just 15.3% of the funds transfers in volume.

In terms of volume, TEDs, including those issued both by clients and by banks on their owns, accounted for a share of 73.7% of the overall funds transfers, even though, in value, their participation reached only 2.9%. It is clear, therefore, that this funds transfer order is typically a retail transfer, which normally involve low unit values but an enormous volume of operations.

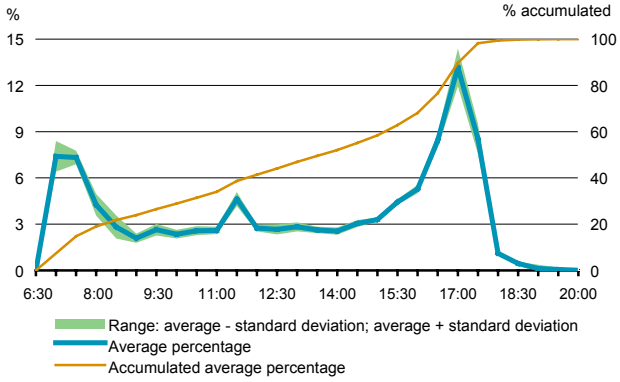
The number of clients' TEDs diminished 8% as compared to the previous semester, while the overall value transferred increased 1.7% over that period. The increment in the value of client TEDs has been consistently greater than the volume of these transfers, due primarily to migration of lower unit value transfers to the Funds Transfer System (Sitraf).

In order to segregate large-scale payments from retail payments, the Banco Central do Brasil has set forth that settlement of checks in individual amounts equal to or greater than R$250,000, and of "bloquetos de cobrança" (bar-coded document for bills payment) in unit values equal to or greater than R$5,000, should be processed bilaterally at aggregate value through the STR. The implementation of this measure in 2005 caused a reduction in the turnover of the system where these payment instruments were previously settled (Centralizer Clearance for Checks and Other Document – Compe), equivalent to 1% in volume, and 30% in value. In the STR payment settlement charts, settlement of these payments is shown under the heading "Transfers on behalf of FI". Elimination of high-value individual documents from the Compe, a multilateral clearing system, was aimed at achieving equilibrium between risk and efficiency, generating a slight growth in liquidity demand and reducing risk. In the first six months of 2006, average daily bilateral settlements came to R$3 billion.

Compared to the previous half-year period, intraday distribution of fund transfers in the STR, clearly a factor of importance to this analysis, has remained stable. In terms of value, 59% of transfers are processed through STR by midday. This concentration is caused primarily by the settlement in the morning period of both repo operations' second leg and securities transactions relating to Banco Central do Basil's intraday credit.

STR

Funds transfers – Volume – Intraday profile – 1st semester 2006



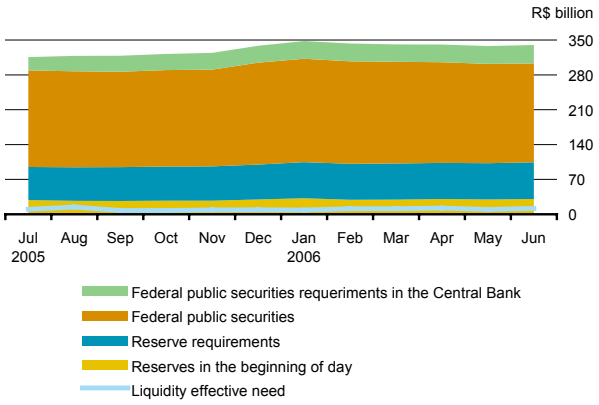
Credit transfer at T + 0 (same day funds) – Volume and value – Average day

Transaction	2005	2006
	2nd semester	1st semester
Volume[1/]	177.3	191.5
Value	22.6	24.7

Source: Bacen

1/ Thousands.

Liquidity effective need



Source: Bacen

In terms of volume, average intraday distribution indicates that 41% of transactions are processed through STR by midday, while 30% of daily transactions are processed between 4:30 p.m. and 5:30 p.m. In general, these are client transactions (permitted only until 5:30 p.m.) with small unit values.

In the last semester, the daily average of funds transfers with settlement on the same day came to R$24.7 billion for 191,000 transactions, corresponding to a growth of 9.2% in value, and 8% in volume, as compared to the previous semester[23].

In order to make their funds transfers during the course of the day, financial institutions count on initial balances in their reserve accounts[24], and also on other sources of liquidity made available by the Banco Central do Brasil. Reserve requirements in cash other than the normal requirement related to sigh deposits[25] can be freely used during the day. Another source of liquidity is the intraday credit line, which has no financial cost and is made available by the Banco Central do Brasil through repo transactions with federal government securities. If, even after making use of these sources, a sending institution does not have sufficient balance in its reserve account, its funds transfer orders are sent to a waiting queue[26].

Effective aggregate demand for intraday liquidity on the part of Brazilian payment system's participants, which is the sum of maximum individual liquidity needs – difference between the final balance of intraday liquidity and the institution's worst balance during the course of the day – remained at an average level of 3.2% of intraday liquidity available in the first six months of 2006.

These indicators show that available liquidity in the system is sufficient to ensure payments flow. In the period under consideration, no gridlocks occurred in the STR.

It is important to stress that liquidity distribution within the system is asymmetrical. In the first half of 2006, the majority of financial conglomerates with access to reserve accounts (99 out of 115), representing 95% of the overall value of payments in the period, required 30% or less of

23/ Here, only TEDs are considered as credit transfers with settlement on the same day. TEDs must be available as credit in the client's account on the same day, though not necessarily in real time. In this case, all TEDs are considered, independently of the source from which they were settled.

24/ End-of-day Reserve account balances served as a way to comply with reserve requirements on demand deposits.

25/ Reserves on savings deposits and additional reserve requirements.

26/ With the exception of operations involving federal public securities settled in the Special System for Settlement and Custody (Selic) and payments related to clearinghouse settlements.

STR

Effective liquidity need

Ranger	2005		2006	
	2nd semester		1st semester	
	Number of FI's	%1/	Number of FI's	%1/
0% – 10%	42	81.0	37	73.9
10% – 20%	42	12.1	45	16.8
20% – 30%	9	1.4	17	4.7
30% – 40%	8	2.5	8	3.4
40% – 50%	4	2.8	0	0.0
50% – 60%	0	0.0	0	0.0
60% – 70%	2	0.1	2	0.0
70% – 80%	1	0.0	2	0.8
80% – 90%	0	0.0	2	0.2
90% – 100%	0	0.0	2	0.2
Total	108	100.0	115	100.0

Source: Bacen

1/ As a percentage of payments.

Turnover at Compe – Volume and value

R$ billion

Transaction	2005	2006	Accumulated
	2nd semester	1st semester	
Volume1/	1.0	0.9	2.0
Value	555.6	535.5	1 091.1

Source: Bacen

1/ Billions.

CIP-Siloc

Turnover – Volume – Details

Million

Transaction	2005		2006		Accumulated
	2nd semester		1st semester		
	Volume	%1/	Volume	%1/	
DOC2/	62.0	10.9	59.8	10.1	121.8
Bloqueto de cobrança3/	507.4	89.1	534.5	89.9	1 041.9

Source: Bacen

1/ As a percentage of total turnover.

2/ Credit transfer at T + 1.

3/ Bar-coded standardized document that allows bills to be paid in any bank.

their liquidity stocks to meet their payment needs over the course of the day. Just eight conglomerates, accounting for 1% of total payment value processed in the STR in the period, required more than 50% of their liquidity stocks for purposes of effecting payments during the day.

3.2.2 Centralizer Clearance for Checks and Other Documents – Compe

Compe clears checks whose individual value is less than R$250,000. Interbank settlement occurs in T+1, and multilateral netting is used. This system is considered not systemically important, and there is no settlement guarantee mechanism. In case of default, unwinding is carried out, and non-default participants' multilateral positions are recalculated.

In the first half of 2006, Compe settled an average daily turnover of R$4.3 billion, which, considered together with the individual value of the payments, bases the classification of the system as not systemically important. In the last two half-year periods, the annual turnover came to R$1.1 trillion, corresponding to 0.8% of the total value of fund transfers settled through the STR. Checks settled through Compe presented an average value of R$555.55.

3.2.3 Interbank Payment Clearinghouse

3.2.3.1 Deferred Settlement System for Interbank Credit Orders – Siloc

Deferred Settlement System for Interbank Credit Orders (Siloc) is a retail payment settlement system operated by the Interbank Payment Clearinghouse (CIP), which is considered not systemically important. The system settles credit transfers related to DOCs (Credit Documents), as well as "bloquetos de cobrança" presenting individual value less than R$5,000. Interbank settlement is in T+1, and based on multilateral net positions.

In the first half of 2006, average daily volume settled in Siloc was R$2.4 billion, which classifies the system as not systemically important. In the whole period, the system settled 594 million credit transfers in an overall amount of R$298 billion, of which the aforementioned "bloquetos de cobrança" accounted for approximately 80% in value, and 90% in volume.

CIP-Siloc

Turnover – Value – Details

R$ billion

Transaction	2005		2006		Accumulated
	2nd semester		1st semester		
	Value	%1/	Value	%1/	
DOC2/	59.7	20.7	58.7	19.7	118.4
Bloqueto de cobrança3/	228.8	79.3	239.2	80.3	468.1

Source: Bacen

1/ As a percentage of total turnover.
2/ Credit transfer at T + 1.
3/ Bar-coded standardized document that allows bills to be paid in any bank.

CIP-Sitraf

Turnover – Value – Details

R$ billion

Transaction	2005		2006		Accumulated
	2nd semester		1st semester		
	Value	%1/	Value	%1/	
TED on behalf of clients	1 217.0	92.8	1 310.5	91.0	2 527.5
TED on behalf of FI	94.2	7.2	129.7	9.0	223.9

Source: Bacen

1/ As a percentage of total turnover.

CIP-Sitraf

Turnover – Volume – Details

Million

Transaction	2005		2006		Accumulated
	2nd semester		1st semester		
	Volume	%1/	Volume	%1/	
TED on behalf of clients	14.9	79.5	15.8	79.3	30.7
TED on behalf of FI	3.9	20.5	4.1	20.7	8.0

Source: Bacen

1/ As a percentage of total turnover.

3.2.3.2 Funds Transfer System – Sitraf

Operated by the CIP, Sitraf is considered systemically important. At the beginning of the day, participat banks transfer funds (pre-deposits) from their reserve accounts to the CIP-Sitraf settlement account at Banco Central do Brasil. This initial deposit is required to the participant in order that it can initiate operations at the clearinghouse and, at any moment whatsoever, the participant may make additional deposits to settle payments. In its turn, the CIP credits the deposits in its own books (settlement accounts in the environment of the system), allowing the participant to process payments through the system.

Since February 2006, the participants can transfer to the STR, at any time of the day, funds that are in excess in the Sitraf environment (previously this was permitted only at the end of the day). Sitraf operates as a hybrid settlement system, since it has combined features of DNS systems and RTGS systems. If the sending participant's account has sufficient balance at the moment in which the transfer is sent, settlement occurs in gross form. Should the opposite occur, the transfer takes its place in a queue and will be submitted to multilateral netting every five minutes. An optimization algorithm is used for this purpose.

In the first half of 2006, the major share of funds transfers – 94% in volume, and 56% of value – was settled at gross value. These figures represent stability in relation to the previous semester. The average daily turnover amounted to R$11.6 billion for 160,000 payments. Cumulative turnover in the last two half-year periods reached R$2.8 trillion for 38.7 million payments, corresponding to 2% of total value and 366% of the total volume of funds transfers processed through the STR.

3.3 Securities, Derivatives and Foreign Exchange Transaction Clearing and Settlement Systems

This section will present details on the turnover, number of transactions, and netting rate[27] in systems clearing and

27/ Clearinghouse's netting rate represents liquidity savings in operation settlements. In RTGS systems, netting rate is equal to zero. In order to calculate this rate, one must draw the difference between the total value of settled operations and the volume of resources required for settlement. After calculating the difference, the basis of comparison to calculate the rate is the total value.

settling securities, derivatives and FX transactions, in the first half of 2006.

Aside from value and volume statistics, the results are also announced for backtesting of clearinghouses that take on the role of central counterparties (CCP)[28] or, in other words, clearinghouses considered systemically important. CCPs ensure settlement of all transactions and, therefore, face different types of risks. One of the most important is the credit risk, which can be divided into principal risk and replacement risk[29].

In Brazil, all clearinghouses that settle securities transactions adopt the delivery-versus-payment mechanism so as to mitigate principal risk (this is mandatory for them according to Banco Central do Brasil's rules). However, in highly volatile markets and situations of stress this is not enough.

The magnitude of replacement risk depends on the volatility of contract prices, and the size and duration of the clearinghouse's exposure. In order to mitigate replacement risk, clearinghouses calculate their exposures to each participant, and require collateral to cover them[30]. In general, Brazilian clearinghouses create additional safeguards (such as mutualized funds) capable of covering possible exposures not covered by the volume of individual collateral.

Through the backtesting methodology, it is possible to evaluate whether the clearinghouse's risk management tools, which are used to base collateral requirements as well as additional safeguards, are appropriate so as to protect it. Two indicators were created for this purpose: Amount of Financial Risk (FR) and Amount of Net Financial Risk (NFR). Based on real changes in securities prices, the FR indicator measures the replacement cost risk regarding each participant, in each day of the considered period. The NFR indicator subtracts the value of the individual collateral deposited by the participant from the calculated financial risk, representing the share of risk exposure that is not covered by individual collateral. Each day, the FR and NFR values of the two participants with the largest NFR values on the day (critical participants) are chosen.

28/ Entity between the counterparties of a specific set of contracts, which acts as buyer in relation to all sellers and as seller in relation to all buyers.

29/ Principal risk is the risk of losing the principal value of the operation when one does not comply with the principle of delivery-versus-payment. Replacement risk is the market risk consequent upon the need for purchasing and/or selling contracts identical to those belonging to the delinquent counterparty, at current prices.

30/ According to the fifth principle of the Core Principles for Systematically Important Payment Systems (BIS, 2001), a system in which multilateral clearing occurs should at least be able to ensure opportune settlement in the case of default on the part of the participant with the largest debt position.

The quality of the assets posted as collateral is also analyzed. According to current regulations, collateral accepted by a CCP must be composed exclusively of assets presenting high liquidity, and low market and credit risk. Here, it is important to highlight that the major share of the collateral accepted by clearinghouses is composed of federal government securities.

3.3.1 Special System for Settlement and Custody – Selic

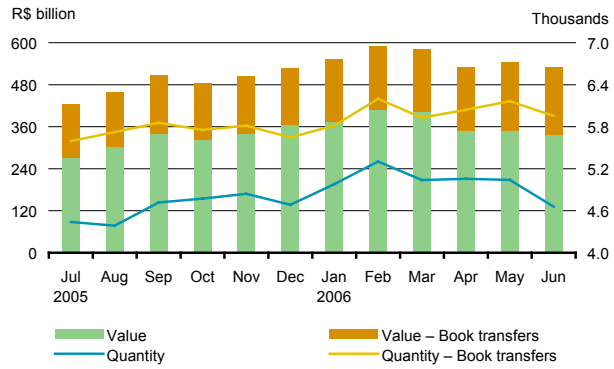
Special System for Settlement and Custody (Selic) is the central depository for government securities, as well as a RTGS securities settlement system. It is operated by the Banco Central do Brasil. Besides secondary market transactions, it settles primary security placements, as well as the Banco Central do Brasil's monetary policy transactions.

Even though, as mentioned, Selic is a RTGS system, some associations of transactions are allowed. In these cases, while settlement is processed operation-by-operation, net positions (securities and funds) of the set of the transactions are considered. This mechanism results in liquidity savings, since one of the participants can process a purchase operation associated to a sale operation, holding only the amount corresponding to the difference between the two operations.

Selic operations may or may not involve transfers among reserve accounts in the Banco Central do Brasil. In the first case, the financial leg is settled through STR since the transaction involves different settlement banks. In the second case, the transaction involves participants that use the same settlement bank.

In the first half of 2006, Selic settled an average of 11,000 transactions per day, corresponding to approximately R$555 billion. Intrabank transactions involved 55% of the volume and 33% of the value of these transactions.

Selic – Operations
Daily average



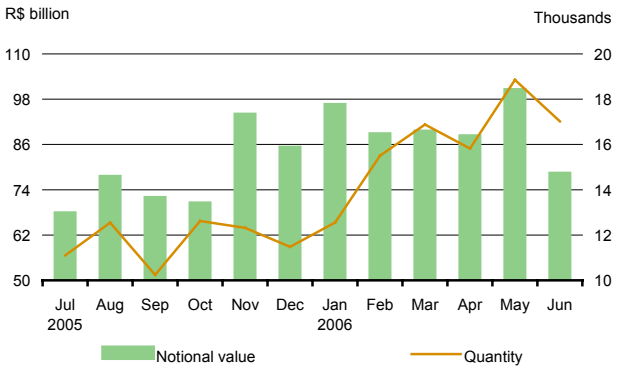
Sources: Bacen and Selic

3.3.2 BM&F Derivatives Clearinghouse – BM&F-Derivatives

BM&F-Derivatives acts as central counterparty for derivative transactions and is considered systemically important.

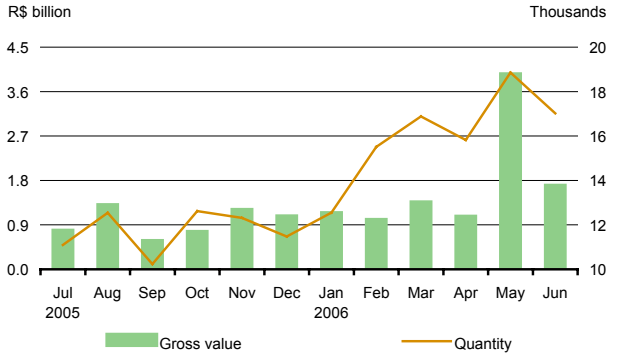
In the first half of 2006, the Banco BM&F made CEL (Portuguese acronym for Special Settlement Account) available to BM&F-Derivatives clients, allowing them to settle their operations directly with the clearinghouse.

BM&F – Derivatives Clearinghouse
Turnover – Notional value – Daily average



Sources: BM&F Derivatives Clearinghouse and Bacen

BM&F – Derivatives Clearinghouse
Turnover – Gross value – Daily average



Sources: BM&F Derivatives Clearinghouse and Bacen

The Banco BM&F will operate the resources of each CEL individually, transferring them to the clearinghouse settlement account in the Banco Central do Brasil or receiving them from that account. The objective is to make it possible to segregate financial settlement of client transactions from the financial flow of the relevant broker.

Aside from this, emphasis should also be given to the adoption of the new BM&F – Derivatives' risk assessment model, the so-called SRI (Portuguese acronym for Intraday Risk System). This model tends to improve management of the financial risk incurred by the clearinghouse, and is detailed in a box at the end of this chapter.

The average daily notional value of BM&F-Derivatives operations was R$90 billion in the first half of 2006, with the highest daily average in May 2006 (R$100.3 billion).

Average gross daily value, corresponding to the sum total of all amounts resulting from trading, including daily and periodic adjustments of derivative contracts, closed the first half of 2006 at R$1.7 billion or approximately 80% more than in the previous half-year period. The increase in gross value without a corresponding increase in notional value was concentrated in the month of May, marked by a sharp volatility in the clearinghouse's primary risk factors.

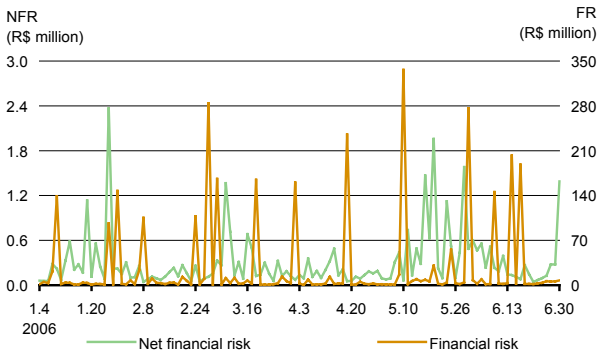
The average daily volume of operations increased in the first six months of 2006, closing at approximately 16.1 thousand operations. Contracts involving interest rate derivatives account for the major share of the total notional value, followed by exchange rate and inflation index derivative contracts.

In the first six months of 2006, the average netting rate of BM&F-Derivatives was 69%, reflecting an average daily liquidity savings of R$ 1.2 billion.

Backtesting analysis shows that the highest FR value found in a single day for the sum total of the two largest participants was R$336 million. When one considers the collateral deposited by critical participants[31], the highest NFR value encountered was R$2.4 million or 1.8% of the amount available in additional safeguards (R$132 million available in the clearinghouse members' Special Fund – MCs – and the Operations Settlement Fund).

31/ Represents those clearinghouse participants that, on a specific day, would bring the two largest NFRs to the clearinghouse, should they become delinquent. The participants are not necessarily the same ones for the different dates.

BM&F – Derivatives Clearinghouse
Financial risk and net financial risk



Sources: BM&F Derivatives Clearinghouse and Bacen

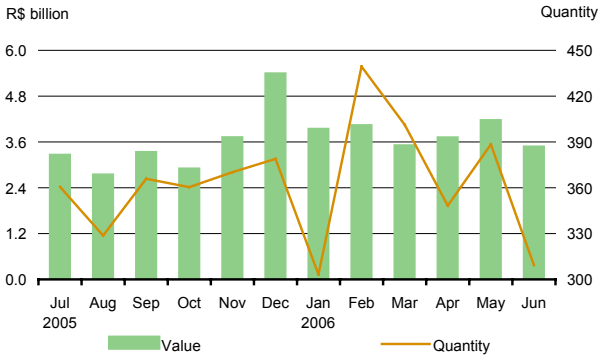
BM&F – Derivatives Clearinghouse
Funds by securities

%

Discrimination	2006					
	Jan	Feb	Mar	Apr	May	Jun
Government Bonds	80.4	81.5	82.5	84.0	81.2	82.0
Letters Guarantee	11.6	11.2	10.3	8.4	11.5	10.5
CD	2.4	2.2	2.3	2.4	2.4	2.5
Stocks	4.9	4.5	4.3	4.4	4.0	4.0
Gold	0.5	0.4	0.4	0.4	0.4	0.4
Cash	0.2	0.2	0.3	0.3	0.4	0.5
Others	0.1	0.1	0.1	0.1	0.1	0.1

Sources: BM&F Derivatives Clearinghouse and Bacen

BM&F – Foreign Exchange Clearinghouse
Turnover – Daily average



Sources: BM&F FX Clearinghouse and Bacen

In the same period, the average daily volume of individual collateral required of the participants with the two largest net financial risks was 92% of the Financial Risks of those participants. Compared to the financial risk of the two largest participants, the percentage of individualized collateral reached a maximum of 100% and a minimum of 58%.

With respect to the securities used as collateral, the most important are federal government securities representing approximately 82% of total guarantees. The second most important, letters of guarantee, accounted for 10.6% of the total.

3.3.3 BM&F Foreign Exchange Clearinghouse – BM&F-Exchange

BM&F-Exchange is considered systemically important, and acts as central counterparty for interbank foreign exchange contracts. Since it observes the payment-versus-payment mechanism the principal risk is managed and contained.

The clearinghouse requires collateral from the participants in order to protect itself from possible changes in the foreign exchange rate up to the date of contract settlement. The clearinghouse settles the transactions at gross value or multilateral net value. Financial settlement can take place on the day of the transaction (T), on the following business day (T+1) or in up to two business days after contracting (T+2). The major share is settled on T+2.

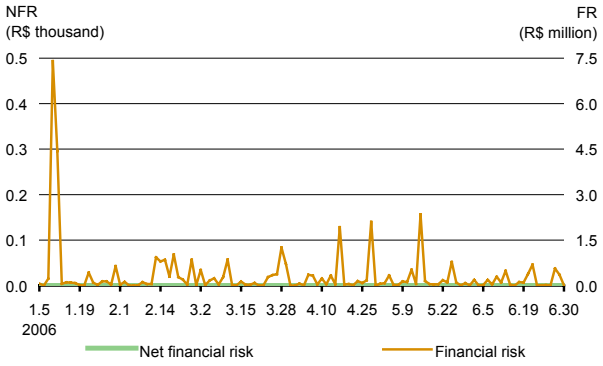
Exchange transactions not settled through the clearinghouse are settled directly by the counterparties, through the STR with respect to the Brazilian currency leg, and through correspondent banks regarding the foreign currency leg.

In the first half of 2006, participation of the clearinghouse in the interbank exchange market reached 83% of the financial volume. The average daily value processed in the same period was R$3.8 billion[32], corresponding to 365 daily transactions. The netting rate was 68%, corresponding to a daily average liquidity savings of R$ 2.6 billion.

BM&F-Exchange backtesting analysis shows that the highest FR value for the two largest participants on a single

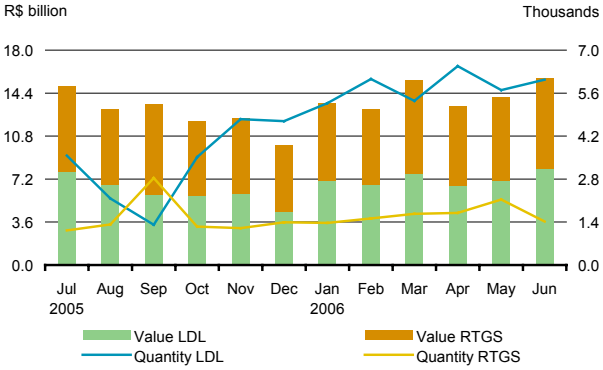
32/ Considered one of the legs of the negotiating process (purchase or sale).

BM&F – FX Clearinghouse
Net financial risk



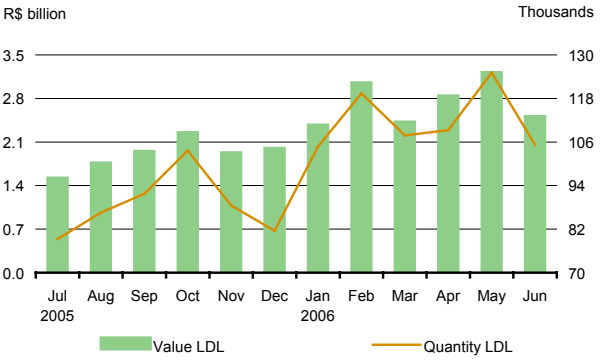
Sources: BM&F FX Clearinghouse and Bacen

Cetip – Clearinghouse
Turnover – Daily average



Sources: Cetip and Bacen

CBLC – Clearinghouse
Turnover – Daily average



Sources: CBLC and Bacen

specified day was R$7.4 million, while NFR value was null on all of the days of the period. This means that the individual collateral of the critical participants would be sufficient for settlement in the case of default. BM&F-Exchange has additional safeguards in the form of the non-mutualized Participation Fund.

3.3.4 Clearinghouse for Custody and Settlement – Cetip

Clearinghouse for Custody and Settlement (Cetip) is a central depository for most private securities and some government securities, and a securities settlement system as well. Though it is considered systemically important, it does not take on the role of central counterparty. Settlement can occur bilaterally at gross value and in real time or at net multilateral value in deferred time[33], depending on the type of transaction to be settled.

In the period under analysis, transactions settled multilaterally (primary market transactions) registered a daily average value of R$7.2 billion. The average netting rate of the clearinghouse was 46%, representing an average daily liquidity savings of approximately R$3.3 billion. Average daily turnover settled in the gross/bilateral modality was R$7.0 billion for 1.6 thousand daily transactions.

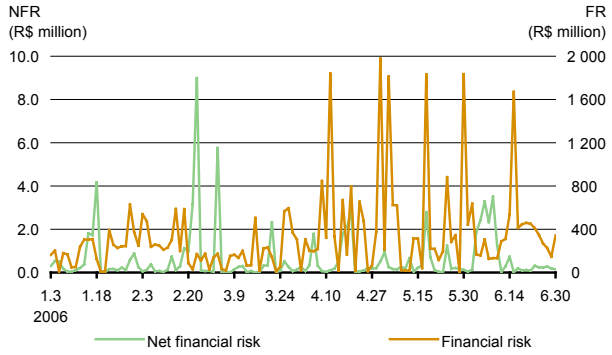
3.3.5 Brazilian Clearing and Depository Corporation – CBLC

Brazilian Clearing and Depository Corporation (CBLC) is the stock market's central depository, and the clearinghouse in charge of settling transactions in this market. It acts as central counterparty, and settlement is made at net multilateral value in deferred time (T for option transactions, and T+1 for regular spot market). It observes delivery-versus-payment mechanisms, and requires collateral from the parties in order to manage and curtail replacement risk. Aside from multilateral settlement, the CBLC uses real time gross settlement to settle transactions relating to initial public offerings (IPOs), and other events such as interest payments and public offering for stock repurchase.

The average daily volume of transactions settled in the multilateral modality during the period under analysis was 111.9 thousand, with an average daily value of R$2.7 billion.

33/ Aside from this, Cetip allows for settlement at net bilateral value in the case of swap contracts.

CBLC – Clearinghouse
Net financial risk



Sources: CBLC and Bacen

CBLC Clearinghouse
Funds by securities[1/]

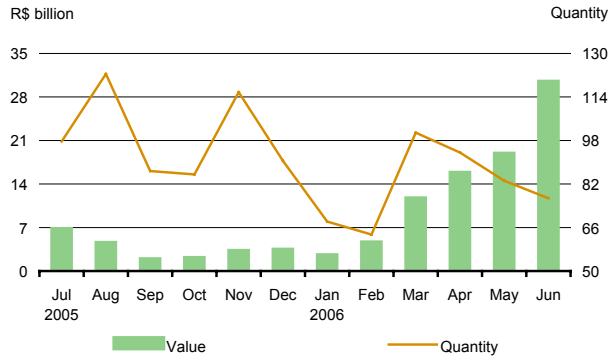
%

Discrimination	2006					
	Jan	Feb	Mar	Apr	May	Jun
Stocks	49.6	49.8	48.4	49.5	42.3	45.5
Government Bonds	39.6	38.5	42.2	40.6	46.6	47.0
International Bonds	5.2	5.5	5.2	5.7	6.8	3.4
Letters Guarantee	2.0	2.5	1.5	1.4	1.3	1.5
CD	2.4	2.3	1.8	2.0	2.0	2.0
Cash	0.6	0.8	0.5	0.4	0.6	0.4
Others	0.6	0.6	0.4	0.5	0.5	0.3

Sources: CBLC Clearinghouse and Bacen

1/ Only linked funds are considered.

BM&F – Securities Clearinghouse
Turnover – Daily average



Sources: BM&F Securities Clearinghouse and Bacen

These transactions represent 96% of total operations processed through the clearinghouse. The average netting rate in the period was 89%, representing a daily liquidity savings of R$2.4 billion.

Based on the CBLC backtesting analysis, the largest FR value found for the two largest participants on a single day was R$2 billion. Considering the value of the individual guarantees, NFR reached a maximum of R$9 million, corresponding to 4.1% of the additional available safeguards (average of R$212 million available in the Settlement Fund in the first half of the year). The guarantees deposited in the clearinghouse were mostly composed of government securities, representing 47.5% and 42% of total.

On average, individualized collateral required in the first half of 2006 corresponded to 99.5% of financial risk for the two largest daily critical participants. The maximum percentage required in a single day was 100% of financial risk, while the minimum closed at approximately 89%.

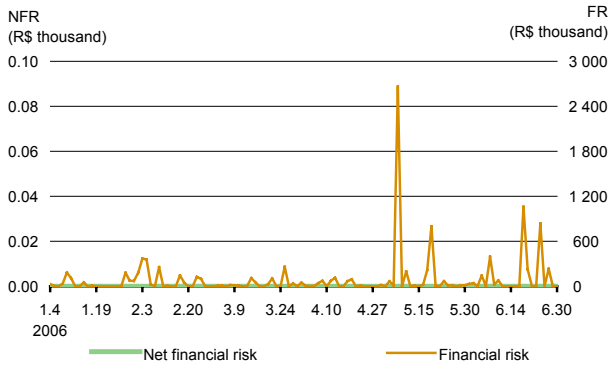
3.3.6 BM&F Securities Clearinghouse – BM&F-Securities

BM&F-Securities is considered systemically important and acts as central counterparty for government securities transactions. Settlement is usually in T+1, and multilateral netting is used. The major modalities are forward-outright transactions and repurchase agreement operations (repo).

In the first half of 2006, the average daily turnover was R$13.9 billion, with an average of 81 daily transactions. The netting rate of the clearinghouse registered an average of 85%, generating a daily liquidity savings of approximately R$12 billion.

Backtesting analysis indicates that the largest FR value found for the two critical participants on each day was R$2.7 million, while the NFR value was null on every day in the period analyzed. It is important to underscore that the BM&F securities clearinghouse also had R$40 million in additional safeguards (Guarantor Fund) for coverage of possible residual credit coverage. The totality of the collateral deposited by the participants is composed of government securities.

BM&F – Securities Clearinghouse
Financial risk and net financial risk



Sources: BM&F Securities Clearinghouse and Bacen

3.4 Conclusion

The major Brazilian payment, securities and derivatives systems are continuously evaluated by the Banco Central do Brasil and clearly show that the mechanisms implemented to manage and curtail the different types of risk are adequate, and act as an additional factor in preserving the national financial system stability.

In terms of the payment infrastructure, large value transfer systems have shown themselves to be secure, while retail transfer systems are constantly monitored in order to avoid generation of risks for the national financial system as a whole.

With regard to the securities, derivatives and exchange clearinghouses, backtesting analysis has demonstrated that risk management at clearinghouses acting as central counterparties has been sufficient to ensure irrevocable and unconditional acceptance of the transactions. A new methodology to assess clearinghouses' resilience to shocks is now under study and should soon be implemented.

Brazilian clearinghouses usually take high-liquidity government securities as collateral, making it possible for them to immediately honor possible failures in the settlement process. Changes introduced into the derivatives clearinghouse also demonstrate that risk management has improved, as required by the ultimate objective of preserving financial stability.

Intraday Risk System

The Intraday Risk System (SRI) utilized by the BM&F Derivatives Clearinghouse has the objective of managing the financial risk to which that Clearinghouse is exposed during the course of the day. This risk originates in the fact that the guarantee margin of final clients is only required on the day subsequent to new operations. This margin is based on the "closing" positions held by final clients, after being specified to the respective clients by the brokerage firms involved.

Therefore, in the period between acceptance of the operation and the new deposit of the guarantee margin by final clients, the Clearinghouse is exposed to the risk of both these new operations and the old operations. In the latter case, even though the margins have already been required, they have been altered as a result of changes in risk scenarios. The SRI allows the Clearinghouse to measure intraday risk, represented by the risk not yet covered by individual guarantees, and to control its exposure in such a way as to hold exposure to levels compatible with the financial resources targeted to risk coverage.

In measuring intraday risk, the SRI calculates the risk of operations not specified by the brokerage company during the course of the day. The broker assumes a position between the final client and clearinghouse member and is responsible for carrying out operations in the negotiating environments and for later specification of these operations to their final clients. The SRI evaluates the risk of the broker's unspecified operations, considering the more conservative scenario in which the broker could specify the subset of operations that resulted in greater risk for a single client without guarantees. Therefore, the risk of this subset of operations impacts the broker's operational limit. At the same time, even in the case of operations already specified by the broker during the day, the SRI evaluates whether the guarantees deposited by the final client are sufficient to cover its portfolio risk. Any residual risk not covered by the guarantees of the final client also impacts the broker's operational limit. One should recall that the BM&F defines a maximum value for the operational limit at the broker level, called the Intraday Risk Limit (LRI).

In general, the SRI aligns itself with the model of charging the guarantee margin at the client level, considering only the residual risk of the portfolio of each of the Clearinghouse's clients or, in other words, the risk not covered by individual guarantees. For unspecified operations, the SRI also calculates risk in a conservative manner, simulating situations in which the broker specifies the subset of operations that generates more risk for a client hypothetically without guarantees.

General overview of the Brazilian Payment System – First semester of 2006

Payment system	Main settled operations	Turnover Daily average value[1/]	Turnover Daily average volume[2/]	Type of settlement	Netting rate	Liquidity savings[1/] Daily average	Central Counterparty	Back Testing Daily average %
Payment clearing and settlement systems								
STR	Selic, clearing houses and other critic[3/] payments	417.0	42.8	RTGS	-	-	-	-
CIP-Sitraf	TED[4/]	11.6	160.0	Hybrid	-	-	Yes	-
CIP-Siloc	DOC and "Bloqueto de cobrança" with individual value lower than R$5 thousand	3.1	4 790.0	DNS	0.9	2.1	-	-
Compe	Cheques with individual value greater than R$250 thousand	4.3	7 575.0	DNS	0.9	3.9	-	-
Securities clearing and settlement systems								
SELIC	Federal government securities	555.0	11.0	RTGS	-	-	-	-
BM&F-Derivatives Clearing house	Commodities, Futures, Options and Swaps	1.7	16.0	DNS	0.7	1.2	Yes	90
BM&F-Foreign Exchange Clearing house	Interbank foreign exchange	3.8	0.4	DNS	0.7	2.6	Yes	100
CETIP	Swaps, Corporate bonds, state and municipal treasure bills	14.2	7.5	RTGS/ DNS	0.5	3.3	No	-
CBLC	Stocks and corporate bonds	2.7	111.9	RTGS/ DNS	0.9	2.4	Yes	100
BM&F-Securities Clearing house	Federal government securities	13.9	0.1	DNS	0.9	12.0	Yes	100

Source: Bacen

1/ R$ billion.
2/ Thousand operations.
3/ Including bilateral settlement of cheques with individual value of at least R$250 thousand and "bloquetos de cobrança" with individual value of at least R$5 thousand.
4/ Electronic Funds Transfers on behalf of clients as well as of FIs.

National Financial System organization 4

4.1 Introduction

Modifications among member institutions provoked by entries and withdrawals of institutions from the market, stock control transfers, acquisitions, split-ups, changes in corporate objectives or liquidations had no significant impact on the overall make-up of the SFN in the first six months of 2006.

The changes that did take place were organic in nature, inherent to the vitality of the system and fully consistent with the evolution of macroeconomic policies and their impacts on interest and exchange rates. It is important to note that, as these policies evolve, SFN member institutions adjust their strategies in order to avoid losses in demand for their services.

The scenario in which these adjustments took place did not produce any significant alterations in the system in recent months, particularly since September 2005, when the Selic rate, the basic interest rate of the economy, moved into a steady downward trajectory.

The major factors underlying this scenario of stability were recovery in consumer purchasing power, generated by systematic declines in inflation, and expanding aggregate demand, as a result of higher levels of employment and income, coupled with declining interest and a more ample credit supply. All of these factors came together to create a highly positive climate for increased investments in the productive sector.

In keeping with this scenario, financial institutions have maintained their strategies of expanding the structures designed to provide client services and generate economies of scale, particularly in the segment of consumer financing.

Total amount of financial institutions

Itemization	2003	2004	2005	2006
	Dec	Dec	Dec	Jun
Banks				
Multiples	141	140	138	139
Domestic	82	83	81	81
with foreing participation	9	10	8	9
under foreing control	50	47	49	49
Commercial and foreign banks full branches	23	23	22	22
Nacional	11	12	14	14
with foreing participation	-	-	-	-
under foreing control	3	2	-	-
Foreing banks full branches	9	9	8	8
Development	4	4	4	4
Investment	21	21	20	20
Saving banks	1	1	1	1
Associations				
Leasing	58	51	45	42
Consumer finance companies	47	46	50	51
Saving and loan companies and saving and loan associations[1/]	18	18	18	18
Securities brokers	147	139	133	127
Exchange brokerage companies	43	47	45	46
Securities dealers	146	138	134	129
Development agencies	11	12	12	12
Mortgage companies	6	6	6	6
Subtotal	666	646	628	617
Credit unions	1 454	1 436	1 439	1 443
Microentrepreneur credit companies	49	51	55	56
Subtotal	2 170	2 133	2 122	2 116
Consortium managers	365	364	342	340
Total	2 535	2 497	2 464	2 456

1/ Institutions that do not catch resources of the public.

One factor that has clearly driven the efforts of institutions in this segment of consumer financing has been formalization of strategic operational agreements and partnerships between financial institutions and retail commercial outlets in various sectors of the economy. Such strategies were used in past years but have now taken on much greater importance.

Illustrating the rapid shift in scale, two operations involving transfers of stock control of financial institutions in the retail segment deserve mention: purchase of the Banco American Express S.A. by Banco Bradesco S.A. and BankBoston Banco Múltiplo S.A. by Banco Itaú S.A.

At the same time, the highly positive scenario has stimulated investments in other segments of the financial market, in which investment banks and the investment portfolios of multiple banks tend to concentrate their operations, focused mainly on corporate demand, and in which real estate credit institutions operate. In the first case, corporations, recognizing the growth in demand for their products, have sought resources to expand productive capacity, thus generating increased business in the investment bank segment. In the second, measures adopted by the government as of 2004 with the aim of creating a more dynamic real estate market, have sharply raised the volume of financing, with reflections on building industry activity as a whole.

4.2 Market strategies and the quantity of SFN institutions

It is no exaggeration to affirm that the internal market has driven burgeoning credit demand on the part of both households and corporations, convincing SFN member institutions to preserve their operational and organizational strategies. This aspect was present in the first half of 2006, when the overall volume of credit expanded 21.7% compared to the same period of 2005[34]. With this performance, credit operations broke through the barrier of 30% of GDP.

Steady growth in the volume of credit granted by financial institutions is essential to their continued profitability, as declining interest rates curb revenues per unit of credit. In this sense, institutions have turned their attention to alternative ways of achieving both organic growth and increasing operational scale.

34/ Central Bank of Brazil data.

Organic growth, which has a somewhat slower impact on the volume of credit operations, has been achieved through operational agreements and partnerships with retail chains. The objective of this strategy is to expand the volume of financial institution credit operations through privileged access to the segment of retail financing, together with additional credit to cover working capital needs, while also placing these institutions in a position to offer specific financial products to their newly acquired clientele. When operational agreements are formalized, there is no need for creating a new financial institution. In the case of partnerships, the financial institution and the retail chain join together as stockholders in credit, finance and investment companies constituted to finance the sales of the partner firm. In the last half-year period, partnerships were created between Banco Bradesco S.A. and Lojas Colombo and Leader S.A. Empreendimentos e Participações, which holds a majority stock position in Leader Magazine, resulting in creation of new financial institutions authorized by the Central Bank.

Growth in scale is achieved through acquisitions, which have an immediate impact on the volume of credit registered by the acquiring institution. Operations in this area were carried out by Banco Bradesco S.A., which acquired Banco American Express S.A.; Banco Itaú S.A., which purchased BankBoston Banco Múltiplo S.A.; UBS AG, which bought out Banco Pactual S.A.; and by Société Générale e Tecnicrédito SGPS, which acquired Banco Pecúnia S.A. It should be stressed that the relevant market in the operation between UBS AG and Banco Pactual S.A. was the business banking niche, particularly third party asset management, a segment in which Pecúnia has a solid tradition.

However, this movement had no significant impacts on the quantity of National Financial System institutions as shown in the chart "Quantity of authorized financial institutions", particularly since several of these operations are still being analyzed by the Central Bank and have yet to be officially registered.

A more specific comment should be made on the segment of investment banks and multiple banks with investment portfolios, focused on meeting corporate demand, particularly in the stock and variable income markets, funds, third-party asset management and securitization. Purchase of the Banco Pactual S.A. by the Swiss UBS AG was a clear sign of foreign investor interest in this segment of the Brazilian financial market.

In the framework of the situation of economic stability, it is important to stress that market indicators clearly demonstrate that plentiful business opportunities are available in the country for foreign investors, particularly on the stock market, when one considers that many companies have begun opening their capital as a way of obtaining the resources needed to expand their productive capacity. This fact, it should be emphasized, must be viewed in the context of the fiscal exemption granted by the government to foreign investments in public securities.

In this framework, financial institutions have moved rapidly to occupy this market niche, seeking to adjust their operations to the demands of this extremely competitive segment through investments in personnel and technology. Evidently, one cannot ignore the hypothesis of further acquisitions, targeted at increasing operational scale.

The dynamics of SFN member institutions are patently clear in their results between January and June 2006, without generating any significant changes that could be classified as structural. This movement, which is inherent to the nature of the system, was more intense in some segments, such as stock and security distribution companies, stock and security brokerage companies and credit unions.

The movements that have occurred in this segment of distribution and brokerage can be explained by recent adjustments in this segment. The underlying causes have been alterations in their operational framework, in which market dynamics have forced institutions to shift their focus or even migrate to other types of companies or, in some cases, withdraw from the financial system. Among these changes, one could cite introduction of new systems of trading on stock exchanges, with implementation of electronic platforms that, to some extent, do not require the intermediation of brokers.

In the credit union segment, the operations of these institutions as a whole still echo the institutional changes wrought by the new regulatory framework defined as of 2003, expanding the scope of activities of this type of financial institution. More detailed attention will be given to this subject in item 4.4.2.

Organic movement on NFS –
January to june 2006
Processes approved and published in the Official Daily Government Newspaper

Events	BM	BC	BI	CFI	DTVM	CTVM	CC	SAM	SCM	Coop.
Authorizations	-	-	-	2	1	-	-	-	3	26
Cancelations	-	-	-	-	6	3	-	2	2	16
Transfers of control	3	1	-	-	3	2	1	-	-	-
Acquisitions	1	-	-	-	-	1	-	3	-	6
Splits	-	-	1	-	-	1	-	1	-	-
Changes of business objective	1	-	-	1	-	2	1	1	-	17
Ordinary liquidation process	-	-	-	-	-	1	-	-	-	-

Source: Official Daily Government Newspaper

4.3 Reorganization processes, capital structure and SFN operational dynamics

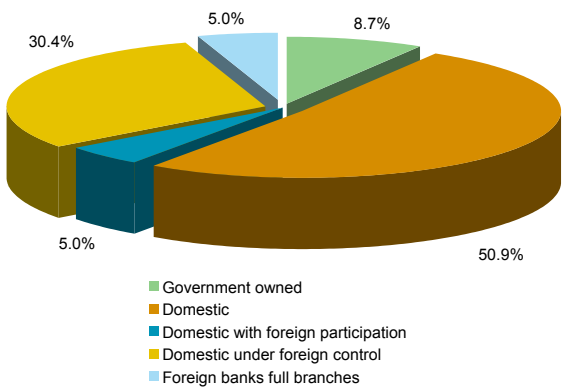
Banking participation in the main financial aggregates of the Mandatory Chart of Accounts of the Brazilian Financial System – December, 2005

%

Itemization	Amount	Equity	Total assets[1/]	Deposits	Credit operations
Banking[2/]					
Government owned[3/]	14	19.0	33.1	37.3	31.3
Private	147	81.0	66.9	62.7	68.7
Domestic	82	37.3	25.5	23.1	22.3
Domestic with foreign participation[4/]	8	18.4	18.2	19.0	19.3
Domestic with foreign ownership[5/]	49	24.6	22.6	20.5	26.6
Foreign banks full branches	8	0.7	0.7	0.1	0.5
Total	161	100.0	100.0	100.0	100.0

1/ It is not diminished by the brokerage.
2/ It includes multiple, commercial bank and Caixa Econômica Federal.
3/ It includes Caixa Econômica Federal.
4/ Foreign participation equal to or greater then 10% and lower than 50%.
5/ Multiple and commercial banks with foreing control.

Distribution of the banking system sorted by capital origin – December, 2005



Joint analysis of the charts, the first of which shows the quantity of authorized financial institutions, while the second indicates organic movements within the SFN, detailing the nature of the changes cited in the first chart, clearly corroborates the understanding that alterations in the system were no more than passing phenomena devoid of any significant structural impact.

This conclusion is consistent with the data shown in the charts and graphs on the participation of financial institutions from the banking segment in major Cosif financial aggregates – net worth, total assets, total deposits and credit operations. As a matter of fact, the merely residual changes in the participation of each stratum of this segment is clearly in keeping with the overall situation of stability of SFN institutions as a whole. The increase of one institution to the number included in this niche, together with migration of institutions from one stratum to another have had no repercussions in terms of their respective market participation, to any extent that would justify migration of values between institutions, as would be expected in the case of important acquisitions or mergers.

Reorganization processes generated by acquisitions in the last decade have been completed and today's financial system is clearly consolidated. This of course does not mean that new acquisitions and mergers capable of altering the dynamics of the sector could not occur, for such events are only natural in any type of structure. Consequently, given the situation of economic stability that reigns in the country, there are no factors exogenous to the SFN in the current scenario capable of generating significant changes in the overall structure. In endogenous terms, the organizational and operational strategies of the institutions result from the need to expand their credit operations at levels that offset revenue losses provoked by declining interest rates.

Today, expectations of downward interest rate movement and upward economic growth are the two variables that have the greatest impact on decisions within the system. Investment decisions aimed at repositioning institutions within this environment were taken years ago and there are no new facts on the horizon capable of changing them.

Another factor that could alter the operational dynamics of the SFN is the increased interest of foreign investors in the

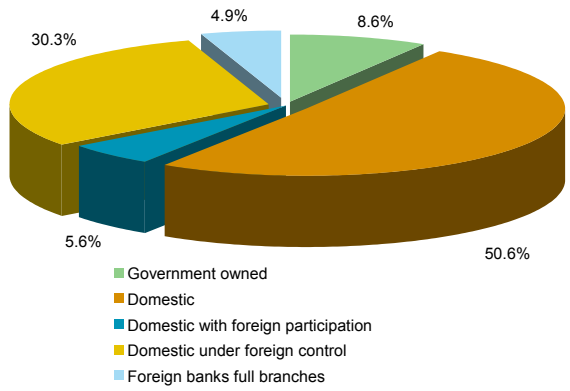
Banking participation in the main financial aggregates of the Mandatory Chart of Accounts of the Brazilian Financial System – June, 2006

%

Itemization	Amount	Equity	Total assets[1/]	Deposits	Credit operations
Banking[2/]					
Government owned[3/]	14	18.4	32.2	36.1	31.5
Private	148	81.6	67.8	63.9	68.5
Domestic	82	40.5	27.1	24.4	22.8
Domestic with foreign participation[4/]	9	17.8	17.7	18.6	19.1
Domestic with foreign ownership[5/]	49	23.0	22.4	20.7	26.3
Foreign banks full branches	8	0.4	0.6	0.2	0.3
Total	162	100.0	100.0	100.0	100.0

1/ It is not diminished by the brokerage.
2/ It includes multiple, commercial bank and Caixa Econômica Federal.
3/ It includes Caixa Econômica Federal.
4/ Foreign participation equal to or greater then 10% and lower than 50%.
5/ Multiple and commercial banks with foreing control.

Distribution of the banking system sorted by capital origin – June, 2006



national capital market, generating greater participation of external capital in the system. Signs of this are plentiful and have already been cited above. Acquisition of Banco Pecúnia S.A. by the Société Générale and Tecnicrédito SGPS and of Banco Pactual S.A. by UBS AG in the last six months are proof of this reality. However, one cannot yet speak of a market trend since two financial institutions controlled by foreign interests were sold to Brazilian national banks in the same period – Banco American Express to Bradesco and BankBoston to Itaú. It should be stressed that, in the latter case, the foreign stockholders converted their participation in BankBoston into minority holdings in Itaú capital.

4.4 Microfinance

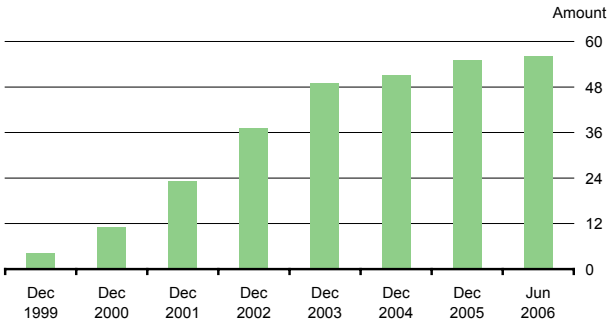
The most important events in the first six months of 2006 in the segment of microfinance operations were the II International Encounter on Microfinance Regulation and Supervision and the V Central Bank Seminar on Microfinance, in Recife (PE) from June 7-9.

These events, which have already been incorporated into the agenda of the microfinance sector, were jointly sponsored by the Brazilian Service of Support to Micro and Small Businesses (Sebrae), the Brazilian Federation of Banks (Febraban), the Credit Union System of Brazil (Sicoob), the Credit Union System (Sicred) and the Unicred System, as well as the Ministries of Agrarian Development and Labor and Employment.

The initiative received the support of Banco Bradesco S.A., Banco do Brasil S.A., Banco do Nordeste do Brasil S.A., the Women's World Banking – WWB, BNDES, Banco Popular do Brasil S.A., the Federal Savings Bank (CEF), the German Confederation of Cooperatives (Deutscher Genossenschafts- und Raiffeisemerband e.V – DGRV), the World Council of Credit Unions – Woccu, the Microfinance Forum of Pernambuco, the Government of the State of Pernambuco, Microinvest Sociedade de Crédito ao Microempreendedor, the Ministry of Finance, the United Nations (United Nations Development Program – UNDP) and the Organization of Brazilian Cooperatives (OCB).

The major objective of the seminar was to announce the results of already implemented measures, while taking advantage of the exchange of experiences and discussions regarding the various aspects of microfinance activity to demonstrate its feasibility as an investment option to investors with available capital. At the same time, attention

Microentrepreneur Credit Companies



was given to the potential contribution that investors could make to the process of social inclusion and development of Brazil by providing the low income population with financial services in a format adjusted to their reality, together with highly simplified credit alternatives for small-scale entrepreneurs.

The seminar was developed in a manner consistent with the guidelines set down by the government for the microfinance sector and marked one more step in the sequence of events held in recent years to disseminate information on this sector and the positive repercussions it can generate on society.

4.4.1 Microentrepreneur credit companies

In the first six months of 2006, three new microentrepreneur credit companies (SCMs) were authorized to operate, while the operating licenses of another two were canceled, generating a positive balance of one institution, as shown in the accompanying chart.

Consequently the number of institutions in this segment continued on the slow growth trajectory that has marked the last four years, with no significant alterations in terms of regional distribution. Basically, this stability was caused by the fact that, of the three companies authorized to operate in the period, one was located in the south – Pólocred – Sociedade de Crédito ao Microempreendedor Ltda. (SC), and two in the southeast – BNS Sociedade de Crédito ao Microempreendedor Ltda. (MG) and Suporte Finanças Sociedade de Crédito ao Microempreendedor Ltda. (SP), while one of the institutions canceled operated in the southeast and the other in the south.

Elaboration of the chart "Microentrepreneur Credit Companies – SCMs – Evolution of Financial Aggregates" utilized data drawn partly from May balance sheets in the line referring to June 2006, since several institutions had not yet submitted their respective balance sheets. It is in this light, therefore, that one should analyze the reductions that occurred in total assets and in the liability accounts.

Distribution of SCMs by region

Amount of SCMs

Region	2000	2001	2002	2003	2004	2005	2006
	Dec	Dec	Dec	Dec	Dec	Dec	Jun
Northeast	0	2	3	4	4	4	4
North	0	0	1	1	2	2	2
Center-West	1	1	1	0	1	1	1
Southeast	9	18	25	36	35	39	40
South	1	2	7	8	9	9	9
Total	11	23	37	49	51	55	56

Microentrepreneur Credit Companies – SCMs – Evolution of financial aggregrates

R$ thousand

Period		Amount	Equity	Total assets[1/]	Credit operations	Liabilities accounts[2/]
1999	Dec[3/]	4	0	0	0	0
2000	Dec	11	2 075	2 262	1 146	187
2001	Dec	23	4 894	7 636	4 734	2 743
2002	Dec	37	7 411	14 680	10 831	7 270
2003	Dec	49	18 014	29 889	17 661	11 875
2004	Dec	51	31 328	42 217	27 206	10 889
2005	Dec	55	43 540	60 844	43 935	17 304
2006	Jun[4/]	56	46 253	59 942	44 870	13 689

1/ It excludes memorandum accounts, but it includes credit operations.
2/ It is equal to total liabilities, dismished by memorandum accounts and net worth.
3/ Since Oct/1999 there have been created SCMs, based on Resolution 2,627, but operations began in Feb/2000.
4/ Part of the aggregrates was gotten in balance sheet of May of 2006.

4.4.2 Credit unions

In the second half of 2006, the credit union segment registered the largest organic volume of operations. During that period, 26 institutions were authorized to operate, 16 had their authorizations canceled, 6 were incorporated by other companies and 17 changed their corporate objectives.

As already mentioned, this movement also reflects the institutional changes introduced into the sector as of 2003, when measures were taken in the regulatory framework with the intention of enhancing the dynamics of institutions operating in this segment. As a matter of fact, new credit union modalities were created, varying in types of membership and operating areas. Institutions were allowed to operate with a more diversified public than had previously been permitted, at the same time in which the scope of their activities was broadened.

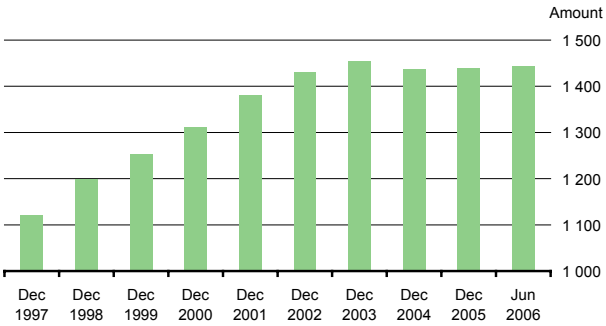
In order to operate in this new framework, institutions had to demonstrate net worth compatible with the new operational profile, at the same time in which they had to submit economic-financial feasibility studies demonstrating the outlook for consistent growth in their operations, as a result of the membership alterations and increased scope of their activities.

The regulatory framework introduced new dynamics, leading several institutions to incorporate others with coincident or similar operating systems, with the aim of achieving the operational scale demanded by the growth project. Consequently, a significant number of institutions has been authorized to operate in the new regulatory framework, while others, unable to compete in this environment, preferred to withdraw from the system.

As indicated in the accompanying chart, the alterations in corporate objectives in the period represented changes in the focus of institutions that had expanded their membership and areas of activity, adjusting to the requirements of the new regulations in order to obtain authorization to expand their activities.

Incorporation processes also indicate pursuit of scale in the credit union segment, in an effort to adjust to the new rules governing the sector. As already stated, these rules require higher levels of capital and net worth for those institutions that desire to expand the scope of their operations and the size of their membership.

Credit unions – Evolution



Credit union participation in the main financial aggregates of Mandatory Chart of Accounts of the Brazilian Financial System[1/]

%

Period	Amount	Equity	Total assets	Deposits	Credit operations
1997 Dec	1 120	1.6	0.4	0.5	0.7
1998 Dec	1 198	1.6	0.5	0.6	0.9
1999 Dec	1 253	1.8	0.7	0.8	1.1
2000 Dec	1 311	2.0	0.8	1.0	1.2
2001 Dec	1 379	2.0	0.9	1.3	1.6
2002 Dec	1 430	2.2	1.0	1.5	1.8
2003 Dec	1 454	2.2	1.3	1.8	2.1
2004 Dec	1 436	2.6	1.4	1.4	2.3
2005 Dec	1 439	2.9	1.5	1.4	2.3
2006 Jun	1 443	2.7	1.5	1.5	2.2

1/ It includes multiple banks, commercial banks, Caixa Econômica Federal and credit union.

Targeting of non-earmarked resources for credit operations

R$ billion

Segments	2002	2003	2004	2005	2006
	Dec	Dec	Dec	Dec	Jun
NFS (%)	25	31	35	39	43
Non-earmarked resources[1/]	494	557	673	846	897
Loans net[2/]	122	174	235	331	383
Credit Unions(%)	43	44	59	57	54
Non-earmarked resources[1/]	9.0	11.7	11.7	14.6	16.4
Loans net[2/]	3.9	5.2	6.9	8.3	8.9

Source: Sisbacen

1/ Considered deposits plus working capital.

2/ On-lending excluded, this occurs because these operations possess defined source of funding of resources.

In this sense, though the number of credit unions declined between December 2003 and December 2004, this movement did not represent a trend, but rather a reflection of previously adopted measures. This is evident in the fact that, between December 2004 and June 2006, the number of institutions shifted upward once again, evidently responding to the sector's new institutional framework.

The participation of credit unions in the major aggregates of the banking segment – net worth, total assets, deposits and credit operations – registered only residual changes between December 2005 and June 2006. Consequently, despite an increase of four institutions in the overall total operating in the segment, no significant alterations took place.

Though the targeting of non-earmarked resources into credit operations dropped three percentage points between December 2005 and June 2006, the sector has continued expanding at a significant pace. In absolute terms, this growth has been higher than the rest of the SFN, clearly evincing the highly important role played in the supply of credit resources by the institutions operating in this sector.

National Financial System regulations

5

Rules issued from 1.1.2006 to 6.30.2006

New regulations on repo operations

Resolution 3,339, dated January 26, 2006, introduced new regulations disciplining operations commonly known as repo operations involving fixed income securities. The objective of the new regulations is to enhance the transparency of these operations and eliminate differences in interpretation regarding the mechanisms through which they function, adjusting them to the best market practices and, at the same time, to the needs of the supervisory entity.

Among the innovations introduced, the most important one is the requirement that repo operations must be registered and settled in the Selic system or in a depository and settlement system or stock and securities clearing and settlement system authorized to operate either by the Central Bank or Securities and Exchange Commission (CVM). The objective here is to avoid double registration in the system responsible for custody of the securities in question (Selic, for example) and in the system through which the operation was processed (a clearinghouse system, for example).

Aside from these questions, doubts have frequently surfaced regarding the possibility of carrying out repo operations with value adjustment clauses based on foreign currency rates. It was clarified that contracting of operations of this type with the cited earnings parameter is prohibited, since no legal fundamentals for such operations exists. In the case of forward purchase or sale operations, a joint assumption of resale or repurchase commitments is permitted. Consequently, operations with fixed income securities with settlement on a specific future date are permitted when such operations contain a commitment that the securities in question will return to their original

owners on a date subsequent to that of settlement of the respective forward operations.

Purchase operations with resale commitments carried out with any type of security and contracted with individual persons or nonfinancial corporate entities are permitted. Previously, these operations could only be contracted when they involved federal public securities.

In light of the very peculiar conditions of free purchase repo operations, in which the committed reseller can freely negotiate the assets, clarifications were issued stating that the securities involved in resale commitments in repo operations that do not have free purchase agreements can not be sold or in any way negotiated, except when they involve new repo operations without free purchase agreements and with repurchase dates that are equal to or prior to the committed resale. Alterations were also introduced into the provision that requires the participation of a qualified institution in repo operations. The purpose here is to make it clear that at least one of the contracting parties must satisfy this requirement, unless the nonqualified institution assumes symmetrical repurchase and resale commitments or contracts purchase and sale operations involving the same securities.

The prohibition on negotiating securities at unit prices sharply different from those practiced by the market was eliminated in repo operations. The reason for this was that it is a common practice, even on international markets, to offer securities at prices different from those of the market. This generates repercussions on the quantity received as backing for the resources transferred in the operation, according to the credit risk attributed to the seller counterparty of the assets. At the same time, the instruments utilized by Central Bank of Brazil supervisory units make it possible to detect signs of irregularities practiced through the use of these operations.

The new regulations specify other fixed income securities that can be used as backing for repo operations, as follows:

a) Rural Product Bills (CPR) with financial settlement, while contracting of these operations with CPR that contain physical settlement clauses continues prohibited;

b) Agribusiness Credit Rights Certificates (CDCA), Agribusiness Credit Bills (LCA) and Agribusiness Certificates of Receivables (CRA);

c) export credit bills and export credit notes, regulated by Law 6,313, dated December 16, 1975, and Decree Law 413, dated January 9, 1969.

Pension funds and insurance and capitalization companies

Resolutions 3,357 and 3,358, both issued on March 31, 2006, are viewed as measures taken with the purpose of supporting the unflagging efforts made by managers of open and closed pension funds and insurance and capitalization companies with the aim of generating increased profitability levels for the resources received from their contributors, investors and beneficiaries, while further fostering capital market development.

Taking advantage of ongoing discussions in the framework of the Capital Market and Long-Term Savings Workgroup, the regulations introduced the possibility of investing the funds of the aforementioned entities in the stocks of companies listed on the new over-the-counter São Paulo Stock Exchange segment known as "Bovespa Mais", provided that maximum defined limits are obeyed.

"Bovespa Mais" admits only open capital corporations listed on the CVM and is designed to gradually attract companies to the capital market that have high growth potential and the conviction that they must base their future growth on transparency and broadening of their stockholder base. In order to participate in "Bovespa Mais", the companies must assume a commitment that they will adopt corporate governance standards similar to those required of companies included in the New Market. At the same time, they must commit themselves to a permanent effort aimed at constructing a strong and liquid secondary market for their assets.

Operational risk management

The Central Bank of Brazil released communiqué 12,746, dated December 9, 2004, in which it announced the schedule for implementation in Brazil of the recommendations put forward by the Basel Committee on Banking Supervision contained in the document "International Convergence of Capital Measurement and Capital Standards: a Revised Framework", known as "Basel II". Though it was developed primarily for internationally active banks of the G-10 countries, the new Basel II capital requirements framework is based on criteria better suited to the risk levels faced in operations carried out by financial institutions in general. As such, just as in the case of the 1988 Basel Accord, Basel II can be extended to other countries and any financial institutions whatsoever.

Compared to the 1988 Accord, Basel II introduces a series of innovations. Among them, one should highlight the institution of a share of capital requirements to cover operational risks. The importance of this measure has increased as a result of such recent factors as growing technological evolution, market integration and increased cross-border operations. Parallel to this, it is important to consider the increased quantity and variety of market participants that has been generated by electronic transactions, as well as the introduction of new and highly complex products, such as securitization instruments and credit derivatives that have important impacts on operational loss indices.

In the National Financial System framework, regulatory treatment of operational risk was introduced by Resolution 3,380, dated June 29, 2006. This instrument defines the basic principles to be followed by financial institutions in establishing internal structures charged with managing and monitoring operational risk, including specific procedures for risk management. Such new structures require identification and control systems that make it possible to constantly monitor all operations carried out by the institution, with the objective of stimulating development of an environment in tune with the need for operational risk management, in such a way as to ensure a smooth transition from the current capital requirement model, which does not include a share of capital to cover operational risk, to the new structure proposed by Basel II.

Aside from the Basel II recommendations, Resolution 3,380 considers the recommendations put forward by the Committee in the document "Sound Practices for the Management and Supervision of Operational Risk", published in February 2003. These practices are set out in 10 principles focused on operational risk management. Elaboration of this Resolution included a period of public hearings in which suggestions received from society in general, more specifically, from professional associations, financial institutions, auditing companies, consulting companies and information security companies were examined, including suggestions submitted even by individual citizens.

For purposes of Resolution 3,380, operational risk is defined as the possibility of losses caused by failures, deficiencies or inadequacy of internal processes, persons and systems, or external events. The operational risk management framework must be compatible with the nature and complexity of the products, activities, processes and systems of the institution, while its risk management policy must be approved and revised at least annually by their respective board of directors

and administrative councils, when such exist. These policies must foresee the following:

I - identification, evaluation, monitoring, control and mitigation of operational risk;

II - documentation and storage of information referring to losses generated by operational risk;

III - elaboration of reports, at least on an annual basis, that make it possible to identify and timely correct deficiencies in operational risk control and management;

IV - carrying out of tests aimed at evaluating operational risk control mechanisms, at least on an annual basis;

V - elaboration and dissemination of operational risk management policy, defining roles and responsibilities for the various levels of the institution's personnel and for providers of third-party services;

VI - existence of a contingency plan, containing the strategies to be adopted to guarantee the presence of the conditions required for continued operation and for curbing grave losses generated by operational risk;

VII - implementation and maintenance of structured communication and information processes.

Resolution 3,380 also requires institutions to publish at least annually reports to which the public can have access, containing a description of the operational risk management structure. In these reports, the council of administration or, in its absence , the institution's board of directors must state their responsibility for the information published. At the same time, together with its half-yearly financial statements, each institution must publish a summarized description of its operational risk management structure, indicating where the report mentioned in this paragraph can be located. Operational risk management must encompass third-party service providers considered relevant to the regular operation of the financial institution, together with the financial and nonfinancial companies included in the respective conglomerate.

Implementation of the operational risk management structure must obey the following schedule:

a) by December 31, 2006, definition of the organizational structure responsible for implementing operational risk management systems, together with indication of the director responsible for such systems;

b) by June 30, 2007, definition of the institutional policy, as well as processes, procedures and systems required for its implementation; and

c) by December 31, 2007, effective and complete implementation of the operational risk management structure, including all of the items specified in the Resolution.

Residential real estate credit

Resolution 3,347, dated February 8, 2006, was issued with the purpose of improving the regulations that cover the channeling of savings accounts deposits by Brazilian Savings and Loan System (SBPE) member institutions. This instrument brought together various provisions scattered about many other resolutions, at the same time in which it took a series of measures for the purpose of adjusting the channeling of these resources. The major objectives of this effort were to broaden the array of operations that institutions would be able to include among the operations suitable to fulfil the necessary levels of investment, while making it possible for other types of financing to be considered apt for the application of already existent multiplication factors. Among these measures, the following deserve mention:

a) permission to include financing granted for purposes of acquisitions of building material, renovations or expansion of real estate by construction companies or real estate incorporators, in order to meet the financing levels required by the Housing Finance System (SFH);

b) application of the same multiplication factors utilized to calculate financing for purposes of acquisitions of real estate worth less than R$ 150 thousand, as created by Resolution 3,259/2005, to financing operations designed to produce real estate, provided that the resources of the undertaking in question be invested exclusively in that project, as required by articles 31-A to 31-F of Law 4,591, dated December 16, 1964, with the text introduced by Law 10,931, dated August 2, 2004;

c) permission for the financing of infrastructure projects in urban development undertakings designed for the construction of residential and commercial real estate or commercial real estate to be included in the real estate financing operation at market rates, making it possible to meet the minimum requirements for investment of savings deposit resources in real estate undertakings;

d) permission for institutions with an excess of investments in the real estate sector to exchange up to 5% of required SFH investments with companies in the opposite position and thereby allowing them to utilize the interbank real estate deposit mechanism.

Tax credits

Resolution 3,355, dated March 31, 2006, alters provisions in Resolution 3,059, dated December 20, 2002, as regards the accounting treatment to be accorded to tax credits. It determines that only credits expected to be received within a period of at least 10 years ahead are apt for registration in the assets of such financial institutions. Up to then tax credits with a term of up to five years could be registered.

The alteration took due account of the volume and composition of SFN tax credits, as well as the maturity of measures taken for purposes of monitoring such credits, as introduced by Resolution 3,059/2002. Aside from this, progress was achieved in the framework of the project designed to achieve a convergence of the accounting rules applicable to institutions subject to Central Bank of Brazil supervision with the international rules published by the International Accounting Standards Board (Iasb), as demonstrated in Communiqué 14,259, dated March 10, 2006. It is important to highlight that IAS 12 - Income Taxes does not establish a specific period for registration of tax credits, provided that the probability of generating future profits be sufficient to offset such credits can be corroborated.

Selected studies

6

This chapter is reserved for publication of studies on topics related to financial stability.

The articles are the sole responsibility of the authors and do not necessarily express positions held by the Central Bank of Brazil.

The following papers are presented in this issue:

a) Evaluating Country Risk for the International Assets of Brazilian Banks;

b) Bank Failure Resolution Methods.

Evaluating Country Risk for the International Assets of Brazilian Banks

Luiz S. Malan[35]
Márcia C. Fiorindo[36]
José Albuquerque Jr.[37]

Summary

The objective of this paper is to elaborate a preliminary country credit risk indicator applied to the international assets of banks located in Brazil. The study utilizes data on these assets drawn from International Banking Statistics (IBS), a document required by the Bank for International Settlements (BIS) and elaborated by the Central Bank of Brazil since 2002, together with the grades granted by international rating agencies for sovereign risk and bank deposit risk.

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1. Introduction[38]

This study is designed to present an initial evaluation of the evolution of the country credit risk of international assets belonging to banks located in Brazil. The Bank for International Settlements (BIS) recommends that standard banking supervision employ country risk identification and monitoring techniques as one of its variables[39]. Since the Central Bank of Brazil has regularly remitted data on the international operations of banks operating in the country to BIS as of 2002, for inclusion in International Banking Statistics, the information in question has been used to elaborate country credit risk evolution indicators, giving due consideration to the countries in which such assets are held. These indicators were estimated for all banks taken as a whole, as well as for the segments of national and foreign control.

As required by the IBS document, utilization of ultimate risk per country can be considered the most appropriate way of evaluating the country credit risk of banks located in Brazil.

At the same time, monitoring of country credit risk can be done on an individual bank-by-bank basis. This system may also be of interest to supervisory activities.

This study is divided into five parts. The first presents a rapid commentary on the concept of country credit risk, highlighting its recent evolution and application of the concept to documents submitted by institutions and organizations. The second section presents and comments on different international experiences in calculating country risk indicators. The following section discusses the data utilized and presents an adapted construction of several indicators used to evaluate those risks for banks located in Brazil. In the fourth section, the results obtained are presented both for the group of banks as a whole and for several specific segments. Finally, the last section synthesizes and comments on the principal results of this study.

38/ The authors are grateful for the important collaboration of Wagner Teles (Depec) in the process of systematizing and organizing the data used in this study.

39/ Among the 25 Core Principles for Effective Banking Supervision (BIS, 1997) the 11th determines that "Banking supervisors must be satisfied that banks have adequate policies and procedures for identifying, monitoring and controlling country risk and transfer risk in their international lending and investment activities, and for maintaining appropriate reserves against such risks." In a recent proposal for revision of the Core Principles, the text of number 11 (which would become number 12) is altered somewhat (changes in bold type) to: "Supervisors must be (…) and processes for identifying, measuring, monitoring (…) and for maintaining adequate provisions and reserves (…)." (BIS, 2006, p.4).

2. Concept of country credit risk

In operations carried out by lenders with borrowers resident in other countries, country credit risk has traditionally been viewed in terms of transfer risk, understood as the impossibility of paying debts contracted mainly by the private sector, due to government-imposed restrictions and/or limitations. Other risks of a macroeconomic or political nature can be considered together with transfer risk. These should also be taken into account in order to evaluate the risk involved in such credit operations in an adequate manner. In this sense, the country risk concept is broader than the concept of sovereign risk, in which the borrower is the government itself or one of its institutions. However, in practical terms, there is a very close correlation between country risk and sovereign risk since both are fundamentally a reflection of measures taken by governments (see, for example, IIF [2000, p. 8 and 9] and Claessens and Embrechts [2002, p. 3 and 4]).

It should be stressed that, as an element of country risk, the importance of transfer risk has declined. This occurred mainly as of the final decade of the last century as international financial markets achieved increasingly greater levels of integration, thus raising the cost to debtors of nonpayment of external liabilities. As a matter of fact, the cost to be borne by a country involved in such a situation can be its exclusion from the world financial market. Consequently, the transfer risk component of country risk declined sharply as of the aforementioned decade (Claessens and Embrechts, p. 4 and 19).

Parallel to these considerations, country risk can be utilized explicitly or implicitly in a specific credit operation, with implications as regards capital allocation. On the one hand, the creditor, when evaluating the risk of an individual borrower, would already be incorporating the risk of the country in which that borrower is located. In contrast to this, the country risk component can be considered explicitly, separately from other effects. In this case, it is incorporated individually into the definition of a specific required share of capital. In this context, a study carried out by the Institute of International Finance (IIF) with 35 international banks in 2000 revealed that: a) 13 of these institutions (approximately 37%) utilize the country risk concept explicitly in defining capital allocations; b) in 12 banks (approximately 34% of the total), the impact of country risk on capital is incorporated into the individual borrower risk; c) only 10

banks (approximately 29% of the total) do not register capital allocations specifically associated to country risk, even though the concept may be used to define the credit limits for the country in question (IIF, 2000, p. 25-27).

Insofar as the Basel Committee on Banking Supervision is concerned, the current Basel 1 Accord determines that weighting of the borrower country depends on whether it is or is not a member of the Organization for Economic Cooperation and Development (OECD), which is now composed of 30 countries. This is the key element in calculating minimum capital requirements for coverage of credit risk. The sovereign credits of member countries receive weighting of 0%, while banks headquartered in those countries are weighted at 20%. Nonmember countries and their respective banks are both weighted at 100%. The only exceptions are credits guaranteed by banks headquartered in OECD countries and credits with residual maturities of less than one year either granted to banks or guaranteed by them. In this case, weighting is set at 20% (BIS, 1988, p. 21-22).

The proposal put forward two years ago (BIS, 2004) for updating the Accord (Basel II) utilizes two wide-ranging methodologies for calculating the capital requirements of banks, both of which are associated to credit risk[40]: use of a standard model, based on external risk evaluations; and use of internal credit risk models, explicitly approved by national bank supervisors.

In the specific case of the standard model, BIS proposes five risk weights for calculating capital requirements associated to sovereign credits (including central banks), varying between 0% (for AAA to AA- ratings, using Standard & Poor's ratings as an example) and 150% (below the B- level) (BIS, 2004, p. 15).

Compared to the 1988 Accord, another proposal for altering the new Basel Accord involves the possibility of eliminating the link between bank ratings and their corresponding countries. Bank ratings would be based on their external credit evaluations and not necessarily on sovereign risk. However, no credit granted to a bank without a credit classification could receive risk weighting below that applied to the respective sovereign (BIS, 2004, p. 17).

40/ The following comments are restricted to the risk of assets maintained with sovereign debtors.

3. Calculating country risk

The research elaborated by Buckle et al. (2000) applied to the English banking system is apparently a pioneering study in empirical measurement of country risk. Starting with a list of countries in which bank assets are maintained (immediate country risk), the authors attribute a probability of default (nonpayment) to each country. This probability, coupled with registered exposure, makes it possible to estimate the value of the total expected loss. The key point, therefore, is estimation of the probability of default. Assuming that the ratings issued by the different agencies are consistent over time and for borrowers in different countries, the authors use Moody's classification levels to calculate the probability of default for each rating level, based on the past history of defaults with corporate bonds (Buckle et al., p. 97). In the case of emerging countries, classification by rating/probability of default, together with the respective exposures, makes it possible to estimate potential losses for the group of banks as a whole[41].

The authors highlight a series of difficulties and restrictions encountered in utilization of this methodology to measure country credit risk. These can be summarized as follows:

a) the methodology considers only external assets specified in the balance sheets of the institutions in question;

b) the effects of contagion among the countries themselves and among the debtors of each country are not considered;

c) the methodology uses sovereign risk for all of the country's counterparties, making it possible to underestimate the effective credit risk.

Based partly on the Buckle et al. research, the September 2003 issue of the BIS Quarterly Review began publishing the average country risk ratings of international assets held in emerging countries by reporting banks (see methodology in BIS, 2003b). The information, published regularly through September 2004 in Chapter 2 of that publication is segmented by emerging country groups (Latin America and the Caribbean, Asia and Pacific region and Europe), broken down by the nationalities in control of their major

41/ In the case of emerging countries, the authors estimate credit risk through the use of another type of market evaluation, based on spreads in the secondary sovereign bond market, obtaining results that are quite similar (Buckle et al., p. 99 to 104). Practically the same methodology is applied with different ratings and default probabilities for the developed countries, despite segmentation of the counterparty by sector (public sector, banks, and nonbanking private sector).

creditor banks. Though it stated that the probability of default calculated for each level defined by the rating agency was based on the Buckle et al. exercise, the BIS did not publish the numbers utilized.

The exposures of each country used by the BIS correspond to the assets of their consolidated banking statistics, considering final debtor country risk. The ratings are those used by Standard & Poor's.

In their turn, Cetorelli and Goldberg (2006) also use sovereign ratings (those adopted by the Fitch agency) to evaluate the country risk of external assets, applied to United States banks. The authors segment the evolution of these assets according to the various rating levels and the participation of total exposure held for investment purposes in investment grade countries and speculative grade countries (Cetorelli and Goldberg, p. 15–19). The study utilizes the concept of ultimate risk and segments total international assets of the banks into those held by banks located in the USA and those held by their branches/subsidiaries abroad.

4. Application to the Brazilian case – Data utilized

The objective is to elaborate a preliminary country risk indicator for the international operations of banks located in Brazil. The banks in question are those that elaborate the IBS document required by the BIS and remitted quarterly to the Central Bank of Brazil by all of the participating institutions[42].

It is important to note that, since March 2003, a summary of the IBS data has been published regularly in the Press Releases entitled Monetary Policy and Financial System Credit Operations, published by the Central Bank Economic Department[43].

The data supplied to BIS and published by the Central Bank of Brazil present international assets in two concepts: local assets (nonconsolidated) and consolidated assets. The main differences between local assets and consolidated assets are:

42/ The grouping of participating banks and other aspects and concepts related to the IBS can be found in Malan, Matos, et al., 2002.

43/ The data can be found in the final six charts at the following address: www.bcb.gov.br/?ECOIPOM.

a) local assets also include foreign currency positions with residents, while consolidated assets include only operations with nonresidents;

b) in contrast to consolidated assets, local assets do not include the assets of external banking units and;

c) local assets do not consolidate positions among banking institutions located in Brazil and abroad and belonging to the same conglomerate.

In March 2006, nonconsolidated international assets maintained by banks resident in Brazil corresponded to 7.8% of their balance sheet´s total assets compared to 7.1% in September 2005[44]. Though the current level of internationalization of the Brazilian banks can be considered rather low, the increasingly greater participation of Brazil in the world economy, particularly through growing trade and Brazilian investments abroad, will certainly expand the nation's role in the future.

Based on ultimate country risk, the data used in elaborating the proposed indicator are consolidated assets maintained with nonresidents and reported by banks located in Brazil, quarterly positions as of June 2002 through March 2006. The consolidated assets utilized are notified by national and foreign banks, the difference being that, as required by BIS, the foreign banks do not consolidate the positions of institutions in Brazil and abroad belonging to the same conglomerate. In March 2006, 71 banks reported such assets. The final figures revealed a high level of concentration with the largest five creditor banks accounting for 64% of total assets.

Table I[45] shows the distribution of assets held internationally by Brazilian banks in March 2006 according to country groupings, with identification of immediate and ultimate country risk, together with the operations involving the corresponding risk transfers.

44/ See statistical series in the chart "International assets and liabilities of the banking system - Participation in total assets and liabilities", in the Press Release, cited in the previous footnote.

45/ Brazil's inclusion as a counterparty country, final ultimate risk, is a consequence of internalization of risk through transfer operations among countries notified in the IBS document. Possible differences in relation to the amounts stated in Appendices 1 and 2 are generated by the treatment used in calculating risk indices which ignored the values of assets at final ultimate risk for counterparty countries with negative balances.

Table 1 – Consolidated international claims of the brazilian banking system – March, 2006

R$ million

Region/Country	Immediate risk	Outward risk transfer[1/]	Inward risk transfer[2/]	Ultimate risk
Developed countries	68 315	1 412	1 663	68 566
Offshore centres	17 503	617	228	17 114
Latin America and Caribbean	2 293	389	53	1 957
Other regions	644	12	17	649
Total	88 755	2 430	1 961	88 286
Brazil ultimate risk: total outward risk transfer minus inward risk transfer				469

Source: Brazil's International Banking Statistics, submitted to BIS.

1/ Refers to operations which imply a reduction in the country group's immediate risk.
2/ Refers to operations which imply an increase in the country group's immediate risk.

Initially, as is clear in Table I, consolidated assets are informed on the basis of the debtor counterpart of the operation. This is the concept of assets according to immediate risk. For example, these initial assets may be guaranteed by residents of other countries. In this case, it would be necessary to add the "inward risk transfer" and subtract the "outward risk transfer" in relation to the immediate risk assets. The resulting value will be the ultimate risk assumed by each counterpart country.

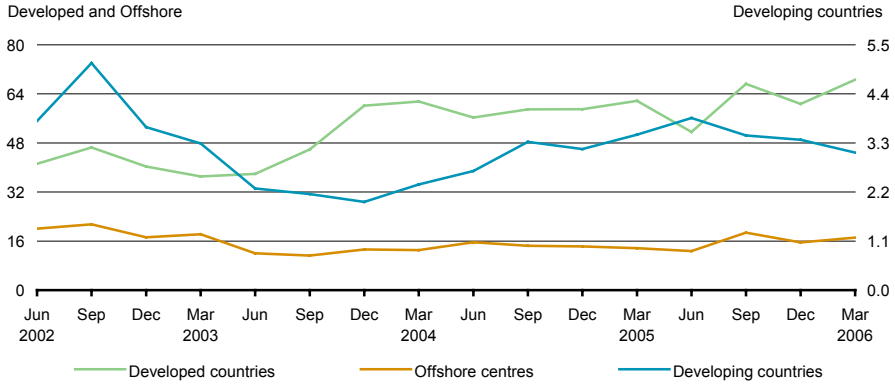
Therefore, the values of assets utilized consider the existence of guarantees and collateral on the part of residents in other countries, as well as the assets maintained in branches of the banks located outside the country of residence of the institution's headquarters (in this case, for example, deposits maintained by a Brazilian bank in the New York branch of a Japanese bank must be considered with Japan as the ultimate risk country of the operation).

The evolution of international assets by groups of counterpart countries, according to ultimate risk, maintained by banks located in Brazil is presented in Graphs 1.1 (values in R$), 1.2 (values in US$) and 1.3 (% participation). These Graphs reveal a stronger preponderance of the developed countries, with approximately 77% of total assets in March 2006. Although they occupied a much higher position when the series was first published (30% on average, between June 2002 and March 2003), offshore centers still occupy second position as counterparts (19.3%, in March 2006). The participation of the developing countries (Latin America and the Caribbean, Other regions and Brazil) as counterpart countries shows a tendency toward declining participation, with just 3.5% in the first quarter of 2006[46]. It should be

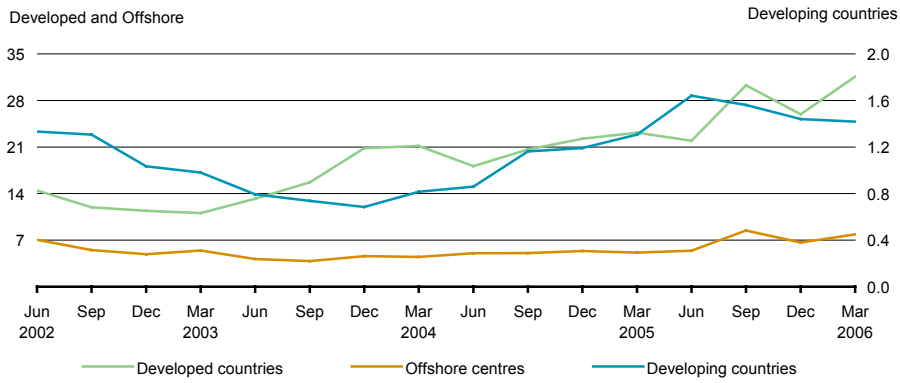
46/ In March 2006, banks located in Brazil held international assets in 81 countries, including 23 developed nations and 46 developing countries (with 17 located in Latin America and the Caribbean) and 12 offshore centers.

stressed that the definition of these groups of countries is that adopted by the BIS, as exemplified in the Statistical Appendices to its Quarterly Reviews.

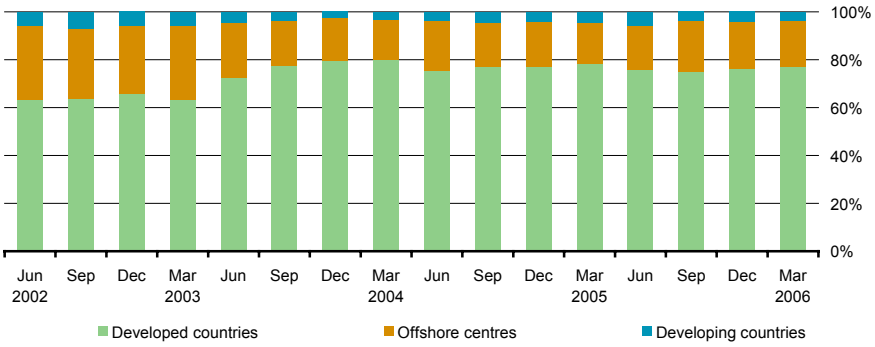
Graph 1.1 – International claims evolution, ultimate risk, by counterparty country groups – R$ billion



Graph 1.2 – International claims evolution, ultimate risk, by counterparty country groups – US$ billion



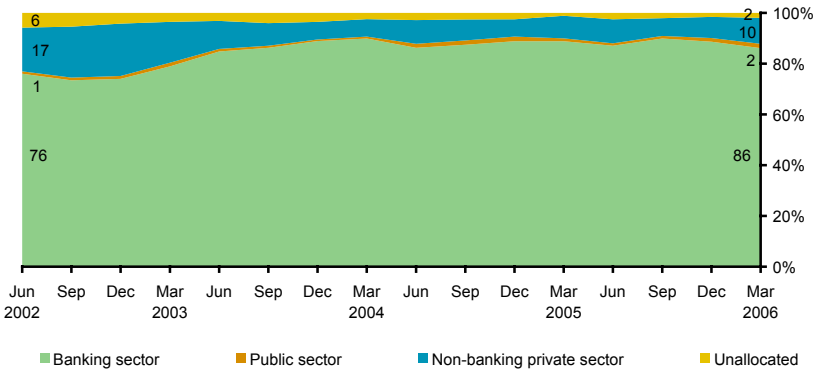
Graph 1.3 – Evolution of counterparty participation in the ultimate risk



The major counterpart countries of the international assets held by Brazilian banks were broken down according to national and foreign capital control. In March 2006, 34 national banking groups reported their international assets, compared to 37 nonconsolidated foreign banks.

Based on the IBS document, the evolution of the segmentation of the international assets of Brazilian banks by the counterpart's large sectors of activity – banking, public (nonbanking) and private (nonbanking) – is presented in Graph 2. Here, one can note the preponderance of the banking sector, the counterpart responsible for approximately 86% of assets in March 2006.

Graph 2 – International claims evolution, counterparty sectors (participation %)



In building a country risk indicator of the external assets held by Brazilian banks, the following procedures were adopted:

a) the ratings attributed by the Moody's international ratings agency in the period were utilized for both government bonds and for bank deposits, both being long-term and expressed in foreign currency[47];

b) a default "probability" was attributed arbitrarily to each one of the rating levels, evolving from 0% for the highest level (Aaa) up to 100% for the lowest level (C). Distribution is shown in Appendix 4. Note that the purpose of this study is not to estimate the absolute value of the risk indicator (nor the expected value of the asset loss), but rather to estimate its evolution over time;

c) the Country Risk Indicator (IRP) is given by the sum total of the default probabilities times exposure (% of total) in relation to the country considered, based on the following expression:

47/ According to Packer (2003, p. 56), since 1996 the number of countries to which sovereign ratings have been attributed in foreign currency by at least one of the three major agencies has increased sharply. In the case of bank deposits, the rating attributed by the agency refers to the ceiling set for the country, applied to the grades given individually to each Bank (Moody's, 2004).

$IRP_t = \sum_i^n PD_i E_i$, (1), in which

IRP_t – country risk indicator in quarter t (varying between 0 and 100)

PD – "probability" of default of country i, in quarter t;

E – exposure of Brazilian banks in country i, in quarter t (% participation).

Initially, IRPs were calculated on the basis of both sovereign ratings and the ratings of banks deposits, both expressed in foreign currency. At the same time, in order to separate the effects of variations in ratings and exposure, adjusted indicators were obtained considering only alterations in exposure broken down by countries. In this way, the ratings determined for the first position of the period and, consequently, the "probabilities" of default remained constant.

At least two restrictions can be identified in the proposed indicator:

a) the exclusive utilization of balance sheet data; and

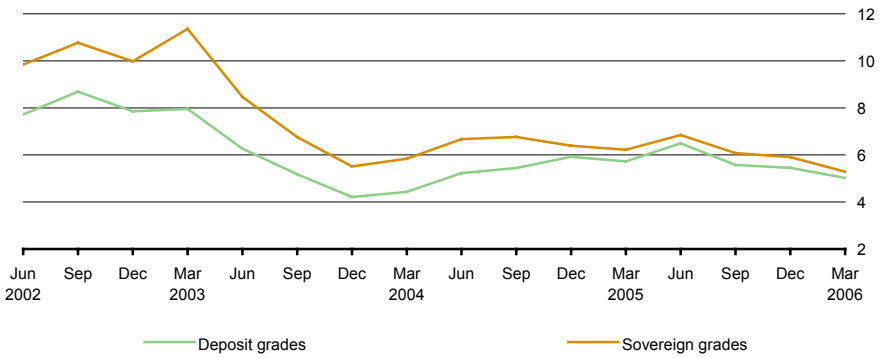
b) utilization of sovereign ratings or the ratings of bank deposits for all counterparties of each country. In this case, the possible alternative would be utilization of a mix of ratings (only long-term and in foreign currency: sovereign; bank deposits; bonds and notes), according to the distribution of counterparties in each country in which the ultimate risk is located.

5. Application to the Brazilian case – Results

The quarterly evolution of the IRP for the grouping of banks located in Brazil is presented in Graph 3 covering the period from June 2002 to March 2006 (the basic data is found in Appendix 1). Based on both sovereign ratings and the ratings of bank deposits, three periods can be identified in the evolution of the IRP: a) accentuated reduction (particularly as of March 2003), through December 2003; b) moderate growth in the subsequent period through June 2005; and c) a moderate reduction through March 2006. In the first quarter of 2003, the IRP based on sovereign ratings reached the highest value of the entire period, while the IRP of deposit ratings registered the second-largest value. However, it is worth noting that, in March 2006, which is the final position available, the sovereign IRP closed at the lowest level in the

statistical series, just half of the average value registered between June 2002 and March 2003, while the IRP for deposits closed at the third lowest value, surpassing only the December 2003 and March 2004 results.

Graph 3 – Country Risk Indicator (IRP) evolution – Sovereign and banking deposit grades



As already stated above, the principal reason for the initial reduction in the indices was the growing importance of the developed countries as counterparties of the international assets of Brazilian banks as of mid-2003, in detriment to both offshore centers and developing countries (see Graph 1.3). This "flight to quality" coincided with the worsening of the ratings of several of the emerging countries considered in the first and second quarters of 2003.

The "flight to quality" is also evident in overall international banking statistics, released by the Bis (Quarterly Review, Table 9A – Consolidated claims of reporting banks on individual countries), showing the totality of the consolidated international assets of the informing countries. As shown in Appendix 3, between March 2002 and December 2004, the major reductions, in relative terms, occurred in assets with residents in Latin America and the Caribbean, dropping from 4.6% to 2.6% of total assets.

With regard to the international assets of Brazilian banks, one should stress the fact that the developed countries assumed increasingly larger positions as a result of increases in both immediate country risk and ultimate risk, due for the most part to reported country risk transfer operations[48].

It is also worth mentioning that the reason underlying the fact that the IRP-deposits is always less than the IRP-sovereign, as demonstrated in Graph 3, is that deposit ratings indicate

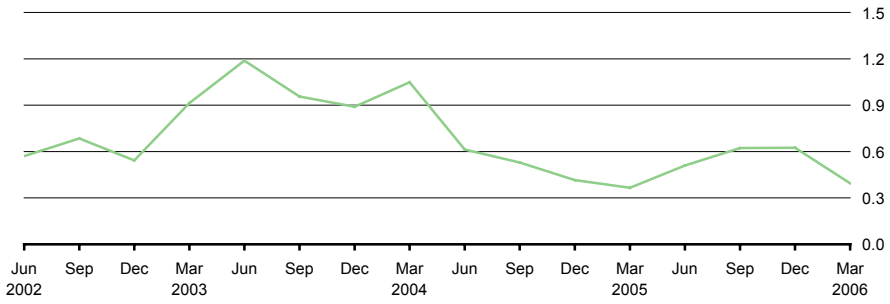
48/ Here, one can mention the joint effort made by the BIS and central banks that report their international banking statistics with the aim of broadening information from their banks with respect to country risk, as of the end of 2004 (see BIS 2003 a).

lesser risk in relation to sovereign ratings in the cases of offshore centers in general, and of two developed countries (Japan between December 2002 and March 2004, and Portugal during the entire period). The effects of this difference were significantly greater than the impact of the existence of a contrary standard in the developing countries which, as shown in Appendix 1, had deposit ratings that, in general, were worse than their sovereign ratings. In the remainder of this study, only the IRP-sovereign will be assessed.

Just as expected, when the IRP is broken down by groups of counterpart countries (Graphs 4.1 and 4.2), the indicators for offshore centers and developing countries are marked by greater volatility than the IRP for developed countries. Though the developing countries do not yet have significant international exposure in the assets of banks located in Brazil (average of approximately 4.5% of international assets, according to ultimate risk – banks with national capital control had slightly larger average participation, with 5.5%[49]), it is important to stress that, following the example of other studies including Buckle et al (2000) and BIS (2003 c. p. 20), evaluation of country risk must focus on those countries precisely because of the greater instability/ volatility shown by their economies, as well as the fact that there is a tendency toward greater exposure of national banks in the Mercosul countries.

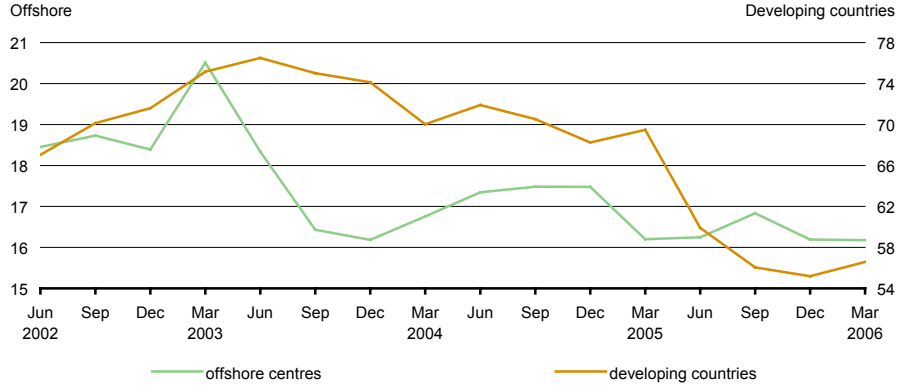
As shown in Graphs 4.1 and 4.2, as expected, the developing countries have much higher and more volatile IRPs than the developed countries and offshore centers. At the same time, contrary to what occurred in the other cases, in March 2006 developed country IRPs reached a level practically equal to that initially registered in the series, despite the fluctuations registered in the period in question.

Graph 4.1 – Evolution of IRP (sovereign) – Developed countries



49/ According to Buckle et al (2000, p. 95) and Cetorelli and Goldberg (2006, pp. 5 and 8), the participation levels of the assets held by British banks (at the end of 1999) and United States banks (in September 2005) in developing countries reached respective levels of 14% and 31% of their total international assets.

Graph 4.2 – Evolution of IRP (sovereign) – Developing countries and offshore centres



One should underscore that the fluctuations registered in the period in the IRPs of the developed counterpart countries and offshore centers were fundamentally a consequence of asset shifts among the counterpart countries, since the only change in sovereign ratings was a change for the better in Japan, in the second quarter of 2004. In the case of offshore centers, up to March 2003 and, particularly, in that quarter, the increase in the index was a consequence of growth in assets with Panamá, a country that had a relatively negative risk evaluation within the cited grouping of countries, while the reductions that occurred in June and September 2003 resulted from liquidation of assets with the same counterpart country. For the developing countries, the rise in the index up to June 2003 was caused by ratings deterioration, while the consecutive reductions resulted from an initial cutback in assets with these countries, coupled with improvement in their ratings, particularly as of the third quarter of 2003. As regards Graph 4.2, one should also highlight the sharp drop in the IRP, developing countries, in the second quarter of 2005, caused mainly by improvement in the rating granted to Argentina.

Table 2 – Sovereign ratings – Number of changes[1/]

Period	Upgrade	Downgrade
3 Q, 2002	-	3[2/]
4 Q, 2002	-	-
1 Q, 2003	-	2[3/]
2 Q, 2003	1 (Saudi Arabia)	2[4/]
3 Q, 2003	-	-
4 Q, 2003	1 (China)	-
1 Q, 2004	-	-
2 Q, 2004	1 (Japan)	-
3 Q, 2004	2[5/]	-
4 Q, 2004	-	-
1 Q, 2005	1 (Mexico)	-
2 Q, 2005	1 (Argentina)	-
3 Q, 2005	-	-
4 Q, 2005	2[6/]	-
1 Q, 2006	-	-

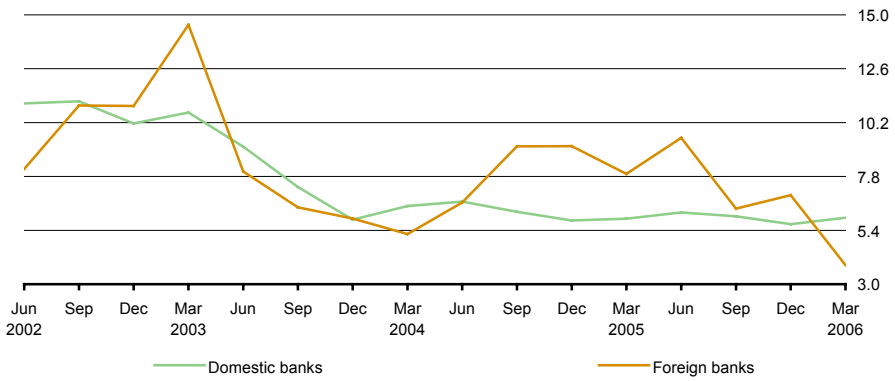
1/ Regarding the 22 indicated countries with grades, in the annex 1, and the changes carried out by Moody's agency.
2/ Uruguay, Venezuela and Brazil.
3/ Venezuela and Bolivia.
4/ Bolivia and Paraguay.
5/ Brazil and Venezuela.
6/ Brazil and Saudi Arabia.

The quarterly evolution of sovereign ratings as of September 2002 for the 22 countries evaluated, as specified in Appendix 1, is presented in Table 2. Analysis shows two distinct movements over the period: worsening up to the second quarter of 2003 followed by stabilization and improvement.

When the banks are segmented according to national and foreign capital control (more than 50% of total capital), Graph 5 shows the indicators for each segment, utilizing sovereign ratings. The total IRP of the foreign banks, which held an average of approximately 21% of the consolidated international assets of the banks located in Brazil, showed greater fluctuations than national banks. The reason for this was the increased participation of offshore banks and of

developing countries, considered as a whole, in the external assets of the foreign banks (average of approximately 37% during the entire period), compared to national banks (average of 24%).

Graph 5 – Evolution of IRP (sovereign) – Domestic and foreign banks



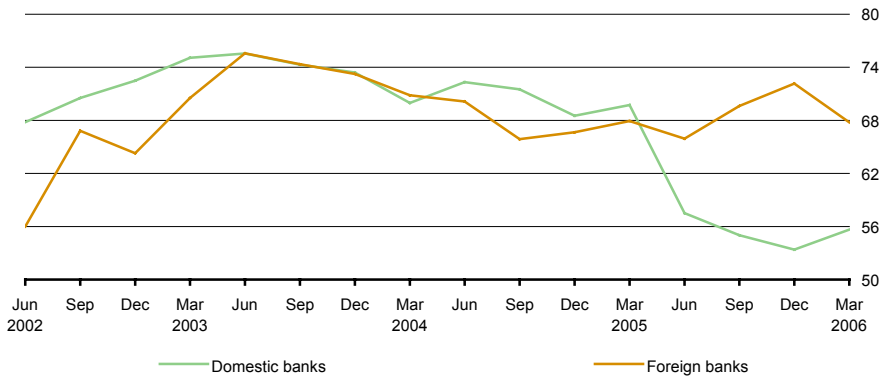
In June 2003, the IRP of the foreign banks dropped sharply, mostly as a result of reductions in assets with offshore centers, particularly Panamá, which had a high sovereign risk level within that grouping. The participation of foreign bank assets with Panamá dropped from 12.6% to 0.4% between March and June 2003 and to zero as of December 2003.

The IRP of foreign banks posted sharper fluctuations as of March 2004, with growth in the quarters in which reductions in exposure with the developed countries declined and exposure with offshore centers increased. In that period, exposure with developed countries reached a minimum of 58% (December 2004) and a maximum of 80% (March 2006). As far as national banks are concerned, the allocation of assets with developed countries was more stable, varying between 81% and 76% in the period extending from March 2004 to March 2006.

When the IRP of the two bank segments is considered, with the developing countries as the sole counterparty, Graph 6 shows distinct evolutions for the two indicators, basically as of the second quarter of 2005. For the most part, the differences are a result of the impact of improvement in Argentina's rating, since national banks had much greater participation in the assets held in that country compared to foreign banks during the period analyzed. One also notes that, in March 2006 in contrast to the results registered by national banks, the foreign bank indicator was well above the levels posted at the start of the series. For the most part, this evolution was a consequence of high concentration of exposure of foreign banks in Uruguay. That country posted a high sovereign risk

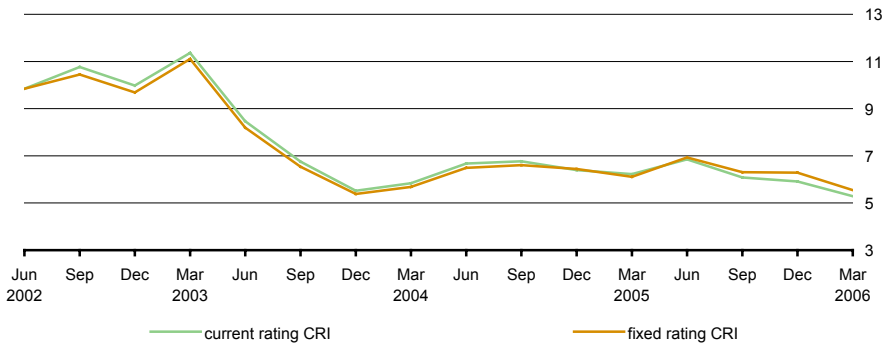
level in September 2002 and, since that time, has maintained the rating at the same level through to the end of the series. Considering the entire period of the series, the minimum exposure of foreign banks with Uruguay accounted for 65% of assets with developing countries, excluding the balance of Brazil risk internalization, while maximum exposure reached 20% in the case of national banks.

Graph 6 – Sovereign IRP of developing countries, by banking sector



Recalculating the IRPs in Appendix 1, with no change in sovereign ratings registered at the start of the series, it becomes possible to isolate the effects of exposure alterations on the country risk indicator. Considering total IRP initially, Graph 7 shows very similar evolution for the two indicators: current ratings and fixed ratings, registered in June 2002. This behavior reflects the high level of participation of developed countries and offshore centers as counterparties; the practical inexistence of sovereign rating changes for the countries included in the segments, the only change being that registered in Japan in June 2004; and the very low level of alteration in the composition of assets among the different countries. Only as of June 2005 did the IRP with current ratings drop below the IRP with fixed ratings. The reason for this was improvement in the sovereign ratings of several developing countries.

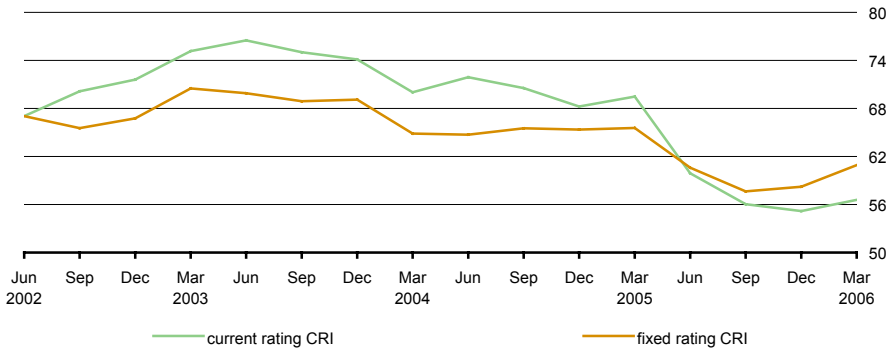
Graph 7 – Evolution of total IRPs (sovereign) current and fixed ratings



As shown in Graph 8, differing evolutions become evident when one considers only the IRPs of the developing countries. At specific moments, the two indicators move in opposite directions. The reasons for this are the "flights to quality" that occurred within this segment, maintaining or even expanding exposure reductions in high risk countries, before reversing them further on when risk evaluations improved. In this sense, the two indicators showed opposing results, widening the gap between them in the quarters ended in September 2002 and June 2003 and narrowing the gap in the third and fourth quarters of 2004.

Starting in June 2005, the current IRP of the developing countries dropped below the value of the fixed IRP, as a result of incorporation of the improved sovereign ratings of the countries included in this group.

Graph 8 – Evolution of IRPs (sovereign) of developing countries



6. Principal results

- The IRP for consolidated external assets of banks located in Brazil was constructed through utilization of the available data series in the IBS document (16 quarters) and the notes issued by the international rating agency.

- The preponderance and growth of the exposure of banks located in Brazil in the developed countries (Graph 1.3), coupled with more recent improvements in the ratings of developing countries, resulted in a downward trend in the total country risk indicator in the period under analysis (Graph 3).

- In contrast to the IRP for the developed countries, the indicator calculated with the developing countries as the sole counterparty remained consistently above 55 points and was marked by considerable volatility. However, this

indicator began dropping as of June 2003 (Graph 4.2). Basically, the decline was due to two distinct movements in the period: first of all, it was caused by reductions in the exposure of Brazilian banks in those countries; and, more recently, by sovereign rating improvements and the new type of "flight to quality", with returns of exposure to these countries.

- In March 2006, contrary to the indicator for the developed countries, both developing countries and offshore centers reached levels well below those in effect at the start of the series (Graphs 4.1 and 4.2).

- The total country risk indicator of the foreign banks vis-a-vis that of national banks was considerably more volatile (Graph 5), primarily as a result of changes in their exposures in offshore centers. Considering only the developing countries as counterparties, the recent IRP of the foreign banks was higher than both the indicator of national banks and the indicator of the foreign banks themselves in the early quarters of the series (Graph 6). These behaviors are explained by important differences in the allocation of their international assets.

- With increasingly more intense commercial and financial relations with these countries, a possible regaining of previous exposure levels of Brazilian banks in the developing countries will necessarily broaden the total country credit risk of these institutions. In this sense, the possibility of having a country risk indicator that allows one to assess the impacts of this new scenario becomes relevant. Furthermore, in relation to national banks, one must stress their greater exposure in developing countries, compared to the foreign banks located in Brazil.

- The Basel Committee recommends that national supervisors have country risk monitoring and evaluation mechanisms. In the case of several other risks, Brazilian supervision defines minimum capital requirements for the banks (concentrated today in credit risk – assets weighted by risk and swap operations – and market risk, interest rate risk and exchange rate risk: in this regard, see, for example, BCB, 2006, p. 74-77). In the same context, to the extent that the international assets of Brazilian banks expand at a more accentuated pace, it may well become interesting to introduce regulations on a diversity of country risk aspects into the country's practices in this area.

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Appendix

Annex 1 – International claims evolution: Brazil's reporting banks (domestic and foreign)

Vis-à-vis countries	Jun/2002 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Sep/2002 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Dec/2002 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign
Developed countries	**41 178**	**0**	**1**	**46 540**	**0**	**1**	**40 319**	**0**	**1**
USA	24 474	0	0	27 906	0	0	23 679	0	0
United Kingdom	6 527	0	0	7 100	0	0	5 871	0	0
Germany	2 667	0	0	2 580	0	0	2 007	0	0
Spain	1 597	0	0	1 358	0	0	911	0	0
Luxembourg	875	0	n.a.	945	0	n.a.	2 126	0	n.a.
Netherlands	962	0	0	1 097	0	0	432	0	0
Japan	804	10	10	1 052	10	10	488	0	10
Portugal	797	0	10	993	0	10	882	0	10
Switzerland	297	0	0	331	0	0	346	0	0
France	598	0	0	960	0	0	1 168	0	0
Others[1/]	1 579			2 218			2 409		
Offshore centres	**20 059**	**12**	**18**	**21 477**	**12**	**19**	**17 246**	**13**	**18**
Cayman	14 294	15	15	15 986	15	15	13 419	15	15
Bahamas	3 832	0	25	3 504	0	25	2 388	0	25
Panama (includes Panama Canal Zone)	771	10	50	1 207	10	50	942	10	50
West Indies (UK)	347	n.a.	n.a.	154	n.a.	n.a.	180	n.a.	n.a.
Others[2/]	816			626			318		
Developing countries	**3 790**	**69**	**67**	**5 091**	**72**	**70**	**3 653**	**73**	**72**
Argentina	1 239	95	95	1 191	95	95	1 123	95	95
Chile	439	30	30	485	30	30	331	30	30
Paraguay	305	75	70	513	75	70	317	75	70
Mexico	179	35	35	270	35	35	228	35	35
Uruguay	799	65	55	735	80	75	678	80	75
Saudi Arabia	3	40	40	6	40	40	9	40	40
Venezuela	47	75	70	56	80	75	55	80	75
Bolivia	41	70	65	46	70	65	45	70	65
China	5	30	25	5	30	25	2	30	25
Others[3/]	160			195			161		
Brazil	573	70	65	1 588	75	70	703	75	70
Total (excluding unallocated)	**65 027**	**8**	**10**	**73 108**	**9**	**11**	**61 218**	**8**	**10**

continues

Annex 1 – International claims evolution: Brazil's reporting banks (domestic and foreign)

Continuation

Vis-à-vis countries	Mar/2003 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Jun/2003 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Sep/2003 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Dec/2003 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign
Developed countries	**37 094**	**0**	**1**	**37 928**	**0**	**1**	**45 894**	**0**	**1**	**60 147**	**0**	**1**
USA	19 738	0	0	19 957	0	0	22 410	0	0	23 985	0	0
United Kingdom	5 202	0	0	3 902	0	0	4 371	0	0	14 008	0	0
Germany	2 206	0	0	4 285	0	0	3 727	0	0	5 669	0	0
Spain	1 001	0	0	452	0	0	739	0	0	479	0	0
Luxembourg	2 219	0	n.a.	1 911	0	n.a.	2 845	0	n.a.	1 699	0	n.a.
Netherlands	149	0	0	652	0	0	1 535	0	0	1 898	0	0
Japan	721	0	10	223	0	10	355	0	10	903	0	10
Portugal	1 117	0	10	1 542	0	10	1 600	0	10	2 176	0	10
Switzerland	260	0	0	350	0	0	347	0	0	447	0	0
France	1 438	0	0	1 343	0	0	2 816	0	0	3 018	0	0
Others[1/]	3 042			3 310			5 150			5 864		
Offshore centres	**18 249**	**12**	**21**	**11 987**	**13**	**18**	**11 291**	**14**	**16**	**13 272**	**14**	**16**
Cayman	13 071	15	15	9 564	15	15	9 697	15	15	11 463	15	15
Bahamas	2 727	0	25	1 374	0	25	1 215	0	25	1 271	0	25
Panama (includes Panama Canal Zone)	2 026	10	50	720	10	50	102	10	50	68	10	50
West Indies (UK)	20	n.a.	n.a.	79	n.a.	n.a.	68	n.a.	n.a.	283	n.a.	n.a.
Others[2/]	405			250			208			187		
Developing countries	**3 290**	**76**	**75**	**2 280**	**77**	**77**	**2 156**	**74**	**75**	**1 979**	**72**	**74**
Argentina	1 183	95	95	799	95	95	717	85	95	741	85	95
Chile	259	30	30	177	30	30	181	30	30	175	30	30
Paraguay	475	75	70	369	85	80	408	85	80	448	85	80
Mexico	158	35	35	124	35	35	129	35	35	141	35	35
Uruguay	604	80	75	465	80	75	367	80	75	282	80	75
Saudi Arabia	0	40	40	0	35	35	3	35	35	36	35	35
Venezuela	43	80	80	31	80	80	45	80	80	31	80	80
Bolivia	21	70	70	27	80	75	20	80	75	12	80	75
China	3	30	25	2	30	25	3	30	25	3	20	20
Others[3/]	128			149			113			111		
Brazil	415	75	70	137	75	70	168	75	70	0	75	70
Total (excluding unallocated)	**58 633**	**8**	**11**	**52 194**	**6**	**8**	**59 340**	**5**	**7**	**75 397**	**4**	**6**

continues

Annex 1 – International claims evolution: Brazil's reporting banks (domestic and foreign)

Continuation

Vis-à-vis countries	Mar/2004			Jun/2004			Sep/2004			Dec/2004		
	Assets (in R$ million) Ultimate risk	Grades Deposits	Sovereign	Assets (in R$ million) Ultimate risk	Grades Deposits	Sovereign	Assets (in R$ million) Ultimate risk	Grades Deposits	Sovereign	Assets (in R$ million) Ultimate risk	Grades Deposits	Sovereign
Developed countries	**61 508**	**0**	**1**	**56 313**	**0**	**1**	**58 948**	**0**	**1**	**59 015**	**0**	**0**
USA	26 117	0	0	28 638	0	0	30 670	0	0	30 624	0	0
United Kingdom	9 800	0	0	7 269	0	0	7 909	0	0	8 788	0	0
Germany	7 782	0	0	5 458	0	0	6 230	0	0	6 532	0	0
Spain	938	0	0	1 155	0	0	642	0	0	693	0	0
Luxembourg	1 419	0	n.a.	2 165	0	n.a.	1 574	0	n.a.	1 484	0	n.a.
Netherlands	1 912	0	0	895	0	0	760	0	0	1 925	0	0
Japan	439	0	10	513	0	0	416	0	0	1 264	0	0
Portugal	1 525	0	10	1 397	0	10	1 054	0	10	616	0	10
Switzerland	399	0	0	1 152	0	0	958	0	0	781	0	0
France	3 088	0	0	2 112	0	0	3 541	0	0	1 846	0	0
Others[1/]	8 088			5 556			5 193			4 461		
Offshore centres	**13 048**	**13**	**17**	**15 622**	**13**	**17**	**14 439**	**13**	**17**	**14 239**	**17**	**17**
Cayman	10 636	15	15	12 387	15	15	11 125	15	15	11 056	15	15
Bahamas	1 770	0	25	1 965	0	25	2 240	0	25	1 980	25	25
Panama (includes Panama Canal Zone)	121	10	50	429	10	50	331	10	50	244	10	50
West Indies (UK)	316	n.a.	n.a.	377	n.a.	n.a.	68	n.a.	n.a.	106	n.a.	n.a.
Others[2/]	206			464			675			853		
Developing countries	**2 371**	**75**	**70**	**2 672**	**74**	**72**	**3 324**	**72**	**71**	**3 162**	**69**	**68**
Argentina	753	85	95	365	85	95	702	85	95	741	85	95
Chile	145	30	30	197	30	30	172	30	30	238	30	30
Paraguay	438	85	80	565	85	80	527	85	80	452	85	80
Mexico	154	35	35	117	35	35	98	35	35	85	35	35
Uruguay	507	80	75	393	80	75	608	80	75	490	80	75
Saudi Arabia	37	35	35	0	35	35	29	35	35	27	35	35
Venezuela	31	80	80	76	80	80	66	75	70	22	75	70
Bolivia	14	80	75	33	80	75	19	80	75	13	80	75
China	1	20	20	4	20	20	3	20	20	5	20	20
Others[3/]	292			85			205			434		
Brazil	0	75	70	837	75	70	895	70	65	654	70	65
Total (excluding unallocated)	**76 928**	**4**	**6**	**74 607**	**5**	**7**	**76 710**	**5**	**7**	**76 415**	**6**	**6**

continues

Annex 1 – International claims evolution: Brazil's reporting banks (domestic and foreign)

Continuation

Vis-à-vis countries	Mar/2005 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Jun/2005 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Sep/2005 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign	Dec/2005 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign
Developed countries	**61 726**	**0**	**0**	**51 612**	**0**	**1**	**67 285**	**0**	**1**	**60 706**	**0**	**1**
USA	30 648	0	0	23 583	0	0	26 908	0	0	23 329	0	0
United Kingdom	10 398	0	0	10 487	0	0	18 562	0	0	17 315	0	0
Germany	6 744	0	0	4 140	0	0	6 024	0	0	4 459	0	0
Spain	866	0	0	817	0	0	1 486	0	0	1 431	0	0
Luxembourg	2 484	0	n.a.	1 299	0	n.a.	1 252	0	n.a.	999	0	n.a.
Netherlands	1 722	0	0	1 434	0	0	1 155	0	0	2 162	0	0
Japan	474	0	0	263	0	0	1 473	0	0	1 962	0	0
Portugal	475	0	10	328	0	10	1 399	0	10	1 139	0	10
Switzerland	530	0	0	712	0	0	315	0	0	604	0	0
France	2 113	0	0	3 035	0	0	2 309	0	0	1 907	0	0
Others[1/]	5 271			5 513			6 401			5 399		
Offshore centres	**13 679**	**16**	**16**	**12 727**	**16**	**16**	**18 769**	**16**	**17**	**15 572**	**16**	**16**
Cayman	11 829	15	15	11 082	15	15	15 176	15	15	13 148	15	15
Bahamas	1 190	25	25	1 086	25	25	2 542	25	25	1 319	25	25
Panama (includes Panama Canal Zone)	113	10	50	129	10	50	214	10	50	121	10	50
West Indies (UK)	95	n.a.	n.a.	84	n.a.	n.a.	77	n.a.	n.a.	49	n.a.	n.a.
Others[2/]	452			345			759			936		
Developing countries	**3 485**	**70**	**69**	**3 858**	**64**	**60**	**3 469**	**60**	**56**	**3 370**	**58**	**55**
Argentina	941	85	95	712	80	75	716	80	75	721	80	75
Chile	242	30	30	310	30	30	344	30	30	335	30	30
Paraguay	500	85	80	456	85	80	436	85	80	449	85	80
Mexico	73	30	30	37	30	30	41	30	30	39	30	30
Uruguay	539	80	75	468	80	75	408	80	75	327	80	75
Saudi Arabia	27	35	35	0	35	35	45	35	35	48	25	25
Venezuela	21	75	70	26	75	70	25	75	70	26	75	70
Bolivia	20	80	75	12	80	75	32	80	75	31	80	75
China	6	20	20	6	20	20	48	20	20	28	20	20
Others[3/]	485			749			1 060			860		
Brazil	632	70	65	1 082	70	65	314	70	65	507	65	60
Total (excluding unallocated)	**78 891**	**6**	**6**	**68 196**	**6**	**7**	**89 522**	**6**	**6**	**79 648**	**5**	**6**

continues

Annex 1 – International claims evolution: Brazil's reporting banks (domestic and foreign)

Continuation

Vis-à-vis countries	Mar/2006 Assets (in R$ million) Ultimate risk	Grades Deposits	Grades Sovereign
Developed countries	**68 620**	**0**	**0**
USA	34 570	0	0
United Kingdom	17 618	0	0
Germany	2 958	0	0
Spain	1 253	0	0
Luxembourg	954	0	n.a.
Netherlands	2 371	0	0
Japan	907	0	0
Portugal	1 403	0	10
Switzerland	557	0	0
France	2 688	0	0
Others[1/]	3 341		
Offshore centres	**17 119**	**16**	**16**
Cayman	14 318	15	15
Bahamas	1 587	25	25
Panama (includes Panama Canal Zone)	78	10	50
West Indies (UK)	67	n.a.	n.a.
Others[2/]	1 070		
Developing countries	**3 082**	**59**	**57**
Argentina	779	80	75
Chile	386	30	30
Paraguay	446	85	80
Mexico	42	30	30
Uruguay	171	80	75
Saudi Arabia	0	25	25
Venezuela	48	75	70
Bolivia	25	80	75
China	6	20	20
Others[3/]	709		
Brazil	469	65	60
Total (excluding unallocated)	**88 821**	**5**	**5**

n.a.: rating not available.

1/ In mar/2006, includes 13 countries with claims, all of them with deposit and sovereign ratings.

2/ In mar/2006, includes 8 countries with claims, six of them with deposit ratings and two with sovereign ratings.

3/ In mar/2006, includes 46 countries with claims, 37 of them with deposit ratings and 32 with sovereign ratings.

Annex 2 – International claims: Brazil's reporting banks (domestic and foreign)[1/]

Jun/02

Vis-à-vis country	Domestic				Foreign				Domestic + foreign banks			
	Assets (in R$ million)		Grades		Assets (in R$ million)		Grades		Assets (in R$ million)		Grades	
	Immediate risk	Ultimate risk	Deposits	Sovereign	Immediate risk	Ultimate risk	Deposits	Sovereign	Immediate risk	Ultimate risk	Deposits	Sovereign
Developed countries	**30 047**	**29 564**	**0**	**1**	**11 087**	**11 614**	**0**	**0**	**41 134**	**41 178**	**0**	**1**
USA	17 927	16 872	0	0	7 478	7 602	0	0	25 405	24 474	0	0
United Kingdom	3 946	5 181	0	0	1 331	1 346	0	0	5 278	6 527	0	0
Germany	2 276	2 276	0	0	360	392	0	0	2 635	2 667	0	0
Spain	497	422	0	0	952	1 175	0	0	1 449	1 597	0	0
Luxembourg	998	872	0	n.a.	2	2	0	n.a.	1 000	875	0	n.a.
Netherlands	939	939	0	0	23	23	0	0	962	962	0	0
Japan	351	329	10	10	475	475	10	10	827	804	10	10
Portugal	797	797	0	10	8	0	0	10	805	797	0	10
Switzerland	643	261	0	0	16	36	0	0	659	297	0	0
France	325	320	0	0	168	278	0	0	493	598	0	0
Others	1 348	1 295			274	284			1 621	1 579		
Offshore centres	**14 704**	**14 379**	**12**	**17**	**5 680**	**5 681**	**12**	**21**	**20 384**	**20 059**	**12**	**18**
Cayman	10 434	10 308	15	15	3 986	3 986	15	15	14 419	14 294	15	15
Bahamas	2 913	2 851	0	25	980	980	0	25	3 893	3 832	0	25
Panama (includes Canal Zone)	119	89	10	50	682	682	10	50	801	771	10	50
West Indies (UK)	423	345	n.a.	n.a.	2	2	n.a.	n.a.	425	347	n.a.	n.a.
Others	815	785			31	31			846	816		
Developing countries	**3 087**	**3 895**	**70**	**68**	**352**	**354**	**63**	**56**	**3 438**	**3 790**	**69**	**67**
Argentina	1 356	1 224	95	95	15	15	95	95	1 371	1 239	95	95
Chile	415	417	30	30	21	22	30	30	436	439	30	30
Paraguay	329	266	75	70	39	39	75	70	368	305	75	70
Mexico	168	168	35	35	11	11	35	35	179	179	35	35
Uruguay	566	565	65	55	233	234	65	55	800	799	65	55
Saudi Arabia	1	1	40	40	1	1	40	40	3	3	40	40
Venezuela	46	46	75	70	2	2	75	70	47	47	75	70
Bolivia	40	40	70	65	1	1	70	65	41	41	70	65
China	3	3	30	25	2	2	30	25	5	5	30	25
Others	163	134			26	26			189	160		
Brazil		1 032	70	65		0	70	65		573	70	65
Total (excluding unallocated)	**47 838**	**47 838**	9	11	**17 119**	**17 648**	5	8	**64 957**	**65 027**	8	10

1/ In this annex, the data of only some quarters are presented. The complete series can be requested to the authors.

n.a: rating not available.

Annex 2 – International claims: Brazil's reporting banks (domestic and foreign)

Dec/03

Vis-à-vis country	Domestic				Foreign				Domestic + foreign banks			
	Assets (in R$ million)		Grades		Assets (in R$ million)		Grades		Assets (in R$ million)		Grades	
	Immediate risk	Ultimate risk	Deposits	Sovereign	Immediate risk	Ultimate risk	Deposits	Sovereign	Immediate risk	Ultimate risk	Deposits	Sovereign
Developed countries	**52 323**	**52 573**	**0**	**1**	**7 066**	**7 574**	**0**	**1**	**59 388**	**60 147**	**0**	**1**
USA	18 407	18 562	0	0	5 035	5 423	0	0	23 442	23 985	0	0
United Kingdom	13 283	13 023	0	0	965	985	0	0	14 248	14 008	0	0
Germany	4 745	4 805	0	0	835	864	0	0	5 580	5 669	0	0
Spain	449	449	0	0	6	29	0	0	456	479	0	0
Luxembourg	1 699	1 699	0	n.a.	0	0	0	n.a.	1 699	1 699	0	n.a.
Netherlands	1 449	1 861	0	0	1	38	0	0	1 450	1 898	0	0
Japan	771	768	0	10	133	135	0	10	904	903	0	10
Portugal	2 233	2 172	0	10	1	4	0	10	2 234	2 176	0	10
Switzerland	435	435	0	0	10	13	0	0	445	447	0	0
France	3 051	3 006	0	0	11	12	0	0	3 062	3 018	0	0
Others	5 801	5 792			68	72			5 869	5 864		
Offshore centres	**9 741**	**9 429**	**13**	**17**	**3 843**	**3 843**	**15**	**15**	**13 584**	**13 272**	**14**	**16**
Cayman	7 841	7 731	15	15	3 731	3 731	15	15	11 573	11 463	15	15
Bahamas	1 207	1 161	0	25	111	111	0	25	1 318	1 271	0	25
Panama (includes Canal Zone)	70	68	10	50	0	0	10	50	70	68	10	50
West Indies (UK)	408	283	n.a.	n.a.	0	0	n.a.	n.a.	408	283	n.a.	n.a.
Others	215	187			1	1			215	187		
Developing countries	**2 229**	**2 290**	**72**	**73**	**94**	**108**	**76**	**73**	**2 323**	**1 979**	**72**	**74**
Argentina	739	735	85	95	3	6	85	95	742	741	85	95
Chile	175	170	30	30	0	5	30	30	175	175	30	30
Paraguay	444	439	85	80	9	9	85	80	453	448	85	80
Mexico	157	139	35	35	0	2	35	35	157	141	35	35
Uruguay	232	201	80	75	78	81	80	75	310	282	80	75
Saudi Arabia	36	36	35	35	0	0	35	35	36	36	35	35
Venezuela	30	30	80	80	0	0	80	80	31	31	80	80
Bolivia	285	12	80	75	0	0	80	75	285	12	80	75
China	2	2	20	20	0	1	20	20	3	3	20	20
Others	129	107			3	4			132	111		
Brazil		420	75	70		0	75	70		0	75	70
Total (excluding unallocated)	**64 292**	**64 292**	4	6	**11 002**	**11 525**	6	6	**75 294**	**75 397**	4	6

n.a: rating not available.

Annex 2 – International claims: Brazil's reporting banks (domestic and foreign)

Mar/06

Vis-à-vis country	Domestic				Foreign				Domestic + foreign banks			
	Assets (in R$ million)		Grades		Assets (in R$ million)		Grades		Assets (in R$ million)		Grades	
	Immediate risk	Ultimate risk	Deposits	Sovereign	Immediate risk	Ultimate risk	Deposits	Sovereign	Immediate risk	Ultimate risk	Deposits	Sovereign
Developed countries	**46 196**	**46 535**	**0**	**1**	**22 119**	**22 085**	**0**	**0**	**68 315**	**68 620**	**0**	**0**
USA	17 828	18 220	0	0	16 850	16 350	0	0	34 678	34 570	0	0
United Kingdom	14 157	14 561	0	0	2 658	3 058	0	0	16 814	17 618	0	0
Germany	2 719	2 720	0	0	230	238	0	0	2 949	2 958	0	0
Spain	740	685	0	0	586	569	0	0	1 327	1 253	0	0
Luxembourg	954	954	0	n.a.	0	0	0	n.a.	954	954	0	n.a.
Netherlands	2 304	2 281	0	0	82	90	0	0	2 386	2 371	0	0
Japan	648	648	0	0	254	259	0	0	902	907	0	0
Portugal	1 732	1 350	0	10	2	53	0	10	1 734	1 403	0	10
Switzerland	365	357	0	0	198	201	0	0	564	557	0	0
France	1 642	1 643	0	0	1 044	1 045	0	0	2 687	2 688	0	0
Others[1/]	3 106	3 117			215	223			3 321	3 341		
Offshore centres	**12 088**	**11 699**	**16**	**16**	**5 416**	**5 421**	**17**	**17**	**17 503**	**17 119**	**16**	**16**
Cayman	9 865	9 775	15	15	4 542	4 542	15	15	14 408	14 318	15	15
Bahamas	757	714	25	25	873	873	25	25	1 630	1 587	25	25
Panama (includes Canal Zone)	118	78	10	50	0	0	10	50	118	78	10	50
West Indies (UK)	119	67	n.a.	n.a.	0	0	n.a.	n.a.	119	67	n.a.	n.a.
Others[2/]	1 229	1 065			0	5			1 229	1 070		
Developing countries	**2 799**	**2 849**	**58**	**56**	**138**	**233**	**73**	**68**	**2 937**	**3 082**	**59**	**57**
Argentina	876	763	80	75	2	16	80	75	878	779	80	75
Chile	382	382	30	30	0	4	30	30	382	386	30	30
Paraguay	439	439	85	80	6	7	85	80	445	446	85	80
Mexico	54	42	30	30	0	0	30	30	54	42	30	30
Uruguay	117	67	80	75	103	104	80	75	220	171	80	75
Saudi Arabia	0	0	25	25	0	0	25	25	0	0	25	25
Venezuela	24	23	75	70	25	25	75	70	48	48	75	70
Bolivia	223	25	80	75	0	1	80	75	223	25	80	75
China	5	5	20	20	0	1	20	20	5	6	20	20
Others[3/]	679	702			2	7			681	709		
Brazil		400	65	60		69	65	60		469	65	60
Total (excluding unallocated)	**61 083**	**61 083**	6	6	**27 672**	**27 739**	4	4	**88 755**	**88 821**	5	5

n.a: rating not available.

1/ In mar/2006, includes 13 countries with claims, all of them with deposit and sovereign ratings.

2/ In mar/2006, includes 8 countries with claims, six of them with deposit ratings and two with sovereign ratings.

3/ In mar/2006, includes 46 countries with claims, 37 of them with deposit ratings and 32 with sovereign ratings.

Annex 3 – Banks' international claims[1/]

US$ billion

Period		All countries	Developed countries	Developing countries	Latin America and Caribbean	Asia[2/]	Europe[2/]	Brazil	Offshore Centres	Others[3/]
2002	I	11 453	9 143	1 329	530	388	269	135	908	73
	II	12 487	10 131	1 337	492	395	297	124	939	79
	III	12 513	10 200	1 292	449	398	294	105	942	79
	IV	13 047	10 695	1 346	480	381	317	103	930	76
2003	I	13 803	11 384	1 362	462	402	328	101	984	74
	II	14 527	12 028	1 403	470	416	343	104	1 015	81
	III	14 659	12 085	1 459	468	447	363	106	1 031	85
	IV	15 684	12 934	1 573	484	476	420	108	1 090	87
2004	I	16 930	14 032	1 645	491	522	421	112	1 169	84
	II	17 112	14 134	1 682	474	552	442	110	1 206	90
	III	17 661	14 556	1 725	487	560	461	116	1 289	90
	IV	19 720	16 322	1 920	519	626	545	120	1 384	95
2005	I	20 474	16 944	1 977	538	647	550	134	1 472	81
	II	20 711	16 969	2 163	559	659	709	145	1 496	82
	III	21 476	17 522	2 325	577	748	700	157	1 545	84
	IV	21 330	17 303	2 415	610	747	752	161	1 530	82

Banks' international claims – Major counterparty participation[1/]

%

Period		All countries (US$ billion)	Developed countries	Developing countries	Latin America and Caribbean	Asia[2/]	Europe[2/]	Brazil	Offshore Centres	Others[3/]
2002	I	11 453	80	12	5	3	2	1	8	1
	II	12 487	81	11	4	3	2	1	8	1
	III	12 513	82	10	4	3	2	1	8	1
	IV	13 047	82	10	4	3	2	1	7	1
2003	I	13 803	82	10	3	3	2	1	7	1
	II	14 527	83	10	3	3	2	1	7	1
	III	14 659	82	10	3	3	2	1	7	1
	IV	15 684	82	10	3	3	3	1	7	1
2004	I	16 930	83	10	3	3	2	1	7	0
	II	17 112	83	10	3	3	3	1	7	1
	III	17 661	82	10	3	3	3	1	7	1
	IV	19 720	83	10	3	3	3	1	7	0
2005	I	20 474	83	10	3	3	3	1	7	0
	II	20 711	82	10	3	3	3	1	7	0
	III	21 476	82	11	3	3	3	1	7	0
	IV	21 330	81	11	3	4	4	1	7	0

Source: BIS (BIS Consolidated Banking Statistics)

1/ Cross-border claims plus their foreign affiliates' claims.

2/ Developing countries.

3/ International organisations and unallocated.

Annex 4

Ratings	Corresponding risk
Aaa	0
Aa1	10
Aa2	10
Aa3	15
A1	20
A2	20
A3	25
Baa1	30
Baa2	35
Baa3	40
Ba1	50
Ba2	55
Ba3	60
B1	65
B2	70
B3	75
Caa1	80
Caa2	85
Caa3	90
Ca	95
C	100

Bank Failure Resolution Methods

Adriana Soares Sales[50]

Summary

This article presents important points for debate during elaboration of new legislation on bank failure resolution. Empirical regularities demonstrate that, when specific bank legislation exists, the regulator always has the power to decree insolvency. Questions as to whether liquidation should occur within a judicial or administrative framework demonstrate respect for creditor rights, on the one hand, and the need for the regulator to consider the possibility of banking system contagion, on the other. Since a uniform definition of bank resolution does not exist, the article attempts to standardize current definitions, while stressing that the different resolution methods generate losses for different agents. Using the Caldwell model (2005), the article indicates the parameters under which restructuring of a bank is preferable to liquidation. Finally, the model utilized and the empirical regularities employed indicate that a new Bank failure resolution Law must include a broader array of methods than simple liquidation.

50/ Central Bank of Brazil, Department of Banking Operations and Payment Systems (adriana.sales@bcb.gov.br). The author is grateful for the comments and suggestions offered by Eduardo Lundberg and Ana Carla Costa (Depep), Gilneu Vivan and Gilson Selicani (Desig), Katherine Hennings (Dipec), Fabiana Melo (Denor) and Gustavo do Valle (Dilid). The positions expressed in this article are the sole responsibility of the author and do not necessarily represent positions held by the Central Bank of Brazil or its employees. A more detailed version of this article is available upon request.

1. Introduction

Proposals for improving regulations on bank failure resolution[51] have been put forward with increasing frequency, as financial crises have broken out in a variety of countries in recent years. In general terms, the regulatory instruments used in the banking industry for purposes of ensuring financial system security and stability are (FREIXAS & ROCHET, 1998): 1) ceilings on interest rates paid on deposits; 2) restrictions on market entries, mergers etc.; 3) portfolio restrictions, including reserve requirements; 4) deposit insurance (guarantees); 5) capital requirements; and 6) regulatory monitoring, including policies governing bank closure proceedings and bank failure resolution.

Since the resolution process generates allocation of losses among a variety of stakeholders, the way in which bank failures are resolved can influence portfolio allocation. An efficient bank failure resolution law can act as an incentive to a policy of optimized bank portfolio management.

Furthermore, in a competitive market, companies enter the market, alter its dimensions and withdraw, utilizing well-defined product prices and quality standards as their parameters. The banking sector, however, is quite different, since it operates with a highly restricted product market. The regulator controls market access, together with the nature of products and their differentials. What is most important, however, is that market exit is also regulated, since the social cost of a bank failure exceeds its private cost (GOODHART, 1999).

This article deals with the methods applied to a specific type of bank "exit" from the market or, more precisely, that applied after a bank has become insolvent. At the same time, it discusses the literature that seeks to develop practices compatible with incentives in bank failure resolution processes, including Beck (2003), Kaufman and Seelig (2002) and Bennett (2001). The article is organized as follows. Section 2 discusses some of the legal aspects of bank insolvency and possible differences between corporate insolvency law and bank insolvency law. Section 3 defines and classifies recovery plans and restructuring methods. Section 4 introduces a small alteration into the Caldwell (2005) model and, in a simplified manner, indicates the parameter space under which it would be preferable to restructure a bank than to close it down. Section 5 presents the conclusions.

51/ Resolution is the policy followed by the regulator after declaring a bank insolvent.

2. Legal aspects of bank insolvency

All insolvency legislation, whether corporate or banking, must cope with the same problem: resolve conflicts among creditors when debtors do not have sufficient resources to pay off their liabilities within a reasonable amount of time. In general, bank insolvency legislation adopts three traditional solutions to this problem[52], which we will designate as resolution methods[53]: (i) liquidation; (ii) reorganization (or composition); and (iii) liability transfers.

Following rules governing priority, liquidation converts a failed institution's assets into funds and distributes the result of the conversion to creditors. This system works on the asset side of the balance sheet. Reorganization seeks to preserve the bank as an entity and to adjust creditor liabilities to the dimensions of the bank's assets. Reorganization generally freezes liabilities and lengthens their maturities in order to gain time to adjust the bank's obligations. In general, liability transfers are quite different in that they involve simultaneous transfers of assets.

In liquidations, the going-concern value[54] of banks is frequently interrupted when, for example, the entire bank is liquidated (primarily in the case of larger institutions). Partial liquidation may, therefore, be preferable in order to minimize this problem.

Reorganizations are more complex than liquidations and may take various forms, such as compositions, which are similar to debt restructuring processes though, in most cases, they are carried out through some type of judicial moratorium. In the case of banks, compositions are very difficult to coordinate due to the large number of creditors involved. One way of coping with this problem is formation of a creditor committee. It is common practice among these committees to prioritize full payment to small scale creditors. The major risk faced by the composition method is that of creating an impasse among creditors, a situation resolved, in some countries, through judicial intervention or "Chapter 11-type reorganizations", which are no more than another type of reorganization[55].

52/ Other solutions outside the realm of bank insolvency legislation are possible, such as private debt work-outs.

53/ Differently from the methods cited in this article, governmental solutions also exist and involve straightforward injections of public funds into institutions and so-called open bank assistance, though these solutions are becoming increasingly less common. Consequently, these solutions are treated separately in section 3.

54/ The value of the bank, should it survive.

55/ This refers to Chapter 11 of the US Bankruptcy Code. Other systems of reorganization involve judicial intervention when negotiations break down. This is the so-called cram-down method in which the judiciary imposes a new capital structure on the company when creditors have been unable to come to a consensus.

Though they also result in balance sheet alterations, liability transfers are quite different from reorganization. In this method, the agent charged with the transfer – designated official administrator (liquidator, receiver etc.) in this article – or the judiciary will transfer liabilities (or a share of them) and often a share of assets to a solvent bank[56].

As will be seen in section 3, several types of liability transfers exist. In general, we can differentiate between those that do not require injections of resources by the regulator or deposit insurer and those that normally do require such injections.

In general, international experience teaches that resolutions are normally long and drawn out[57] and, consequently, generate legal uncertainties (BIS, 2002a). There are two underlying reasons for delays in bank failure resolutions: the process is late getting started, when the value of the company has already deteriorated; once initiated, the process itself is slow. Delays in getting started are a question of incentives. The incentives to creditors to initiate insolvency proceedings are significant, since the probability of recouping their credits increases with the speed of bank closure[58]. In contrast, debtors have very little incentive to speed the process because of their "limited liability" and the possibility of "gambling for resurrection". One assumes that the regulator has a correct mix of skills and incentives to initiate the insolvency process promptly. However, such incentives are at best a mixed bag, except when the regulator has a direct interest as deposit insurer[59].

In legal terms, debtors[60] or regulators are the ones who normally initiate insolvency processes. As already mentioned, though there is no incentive whatsoever to creditors to delay the start of the process, they generally have considerably less information than debtors regarding the real situation of the bank. At the same time, creditors may adopt a strategic stance and their desire to initiate the process may be based on reasons that have nothing to do with insolvency.

56/ Liability transfers are normally quite useful when: (i) liabilities are contingent (for example, insurance or letters of credit); (ii) liabilities have some degree of going-concern value (for example, deposits from small-scale consumers with a reasonable transfer cost); (iii) liabilities are efficiently matched to the assets they support (cheap financing or maturity matches). Liability transfers result in a restructured balance sheet, without the need for negotiations.

57/ Bank insolvency legislation in Japan and the USA encourages more rapid resolution.

58/ One specific point deserves mention. Junior creditors (subordinate debt and stockholders) have a vested interest in slow resolution, since they will be the beneficiaries should the value of the company increase during the process and they will not take significant losses should its value diminish. In other words, the option value of these creditors increases over time, thus creating an incentive to negotiating delays.

59/ In this regard, see Sales (2006).

60/ Notwithstanding the fact that, as already mentioned, debtors have little or no incentive to initiate the process.

In liquidations and asset transfers, resolution models are normally centered on administrators, while traditional compositions and "Chapter 11-type Reorganizations" tend to be centered on creditors. In terms of resolution time, processes centered on creditors are generally quite drawn out, while those centered on administrators may or may not be time consuming.

One crucial distinction in resolution processes is the task of creditors and administrators. In liquidations, creditors do not act collectively except, perhaps, when indicating, monitoring or receiving information from the administrator. Disputes are always bilateral between creditors and the administrator on the one hand, and between the administrator and debtors of the insolvent bank, on the other. In many reorganizations (or compositions), creditors play an active role and frequently act collectively through a committee. Independently of whether they are focused on administrators or creditors, these processes often have to cope with serious governance problems. Those centered on administrators do not have high negotiating costs, but do have significant agency costs. Similar agency costs may be incurred by creditor committees.

Traditional liquidations and reorganizations are highly dependent on the judiciary. In general, liquidations involve major litigations, since debtors have low reputation costs. Renegotiations involve less litigation but more negotiation, though unsecured creditors and those who attempt to avoid preference rules sometimes provoke disputes.

Table 1 – Bank failure resolution methods – Selected countries

Methods	Italy	Japan	Netherlands	UK	USA
Liquidation	Yes	No*	No*	No*	Yes
Composition[1/]	No	No	No	No*	No
Reorganization	Yes	No*	Yes	No*	Yes
Liability Transfer	Yes	Yes	Yes	No	Yes

Source: BIS (2002a).

1/ Creditor's committee.

Obs.: * There is no specific bank resolution law. Corporate bankruptcy law is applied.

Table 1 shows resolution methods in various selected countries. Italy and the USA have specific bank failure legislation. Composition exists only in the UK (in the Corporate Insolvency Law). Though England does not have specific bank failure legislation, it is the only country that does not resolve bank insolvencies through liability transfers.

Appendix I presents the main concepts used in this paper. As already stated, resolution methods include liquidations, reorganizations, liability transfers and government solutions. Aside from resolution methods, the regulatory/supervisory framework also includes recovery plans.

2.1 Differences between Corporate Insolvency Law and Bank Insolvency Law

As shown in Table 1, there are differences from one country to another: some countries have specific bank insolvency legislation, while others limit themselves to corporate insolvency legislation[61]. Though a specific law applicable to banks may not exist, provisions applicable only to banks normally do exist, since it is understood that banking companies are quite different from other businesses[62].

In general, business recovery processes are initiated and implemented by the judiciary, while bank resolution is normally the task of the regulator who maintains control over the process. At the same time, under bank insolvency legislation, resolution takes on a broader meaning than recovery in the framework of corporate insolvency law. In this case, recovery only begins when a company is declared insolvent or when there are strictly established standards that require implementation of recovery plans. However, bank resolution may be preceded by a period in which corrective measures are imposed by the regulator as soon as the first signs of noncompliance with prudential and other requirements are forthcoming[63].

The differences between the two types of legislation have important implications for the protection of creditor rights. In corporate insolvency legislation, these rights are protected by safeguards contained in the law itself and by judicial administration of the recovery process and of liquidation proceedings. In banking resolution, on the other hand, the law contains a lesser number of safeguards and, to a great extent, much of the restructuring process is implemented without judicial administration.

In some countries (WORLD BANK, 2005), the regulator has authority to take corrective measures aimed at protecting the banking system as a whole. This, obviously, can be prejudicial to creditor rights. This occurs because a question of public policy is involved that concerns the regulator's interest in ensuring rapid resolution of the problem in order to avoid banking system contagion.

61/ Corporate Insolvency Law can also be used in a subsidiary way in the framework of Bank Bankruptcy Law.

62/ See, for example, Kaufman (1995).

63/ However, these measures may be supervised by the judiciary. They are known as opportune corrective actions.

In bank liquidations, the general objectives of corporate insolvency[64] law are more pertinent. Even so, there are other questions specific to bank insolvency, such as collection and payment of financial obligations.

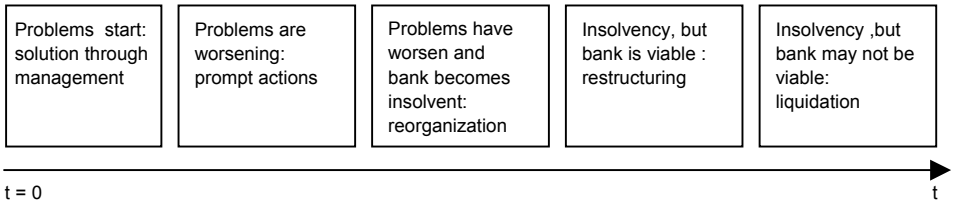
3. Recovery plans and restructuring methods

In general, according to BIS (2002b), problem banks can be divided into the following groups: (i) banks with inadequate capital levels from the market point of view, even though they are in compliance with regulatory demands; (ii) banks that are noncompliant with regulatory demands, but are considered solvent by the market; (iii) banks that are noncompliant with regulatory demands and economically though not legally insolvent; (iv) banks that are insolvent and can not continue operating without a capital injection.

For type (i) banks, market solutions are expected since regulatory intervention is not necessary. Type (ii) and (iv) banks are considered weak (BIS, 2002b). Banks included in group (iv) have reached the point of closure or bailing out[65]. Groups (ii) and (iii) can continue operating, while liquidating their assets at a high discount rate. The major difference between the latter groups is that banks in group (iii) would not possess sufficient value to pay all of their creditors and depositors, even if they desired to do so.

The following diagram shows the stages at which problems arise at banks, together with the recommended measures[66].

Time line of bank's financial distress:



The second and fourth stages of the diagram above will be analyzed in the following subsections[67].

64/ What one desires to model for this type of law is the bargaining process between creditors and debtors so that the value of the company will be maximized at the end of the process.

65/ Understood as bank restructuring.

66/ The groups follow the stages of the diagram in order from left to right, with the exception of group (iv) which can be located in either of the two final stages.

67/ Liquidation and reorganization were discussed in detail in section 2.

3.1 Recovery plans

Since failure of a bank has a greater social cost than private cost, the regulator must take corrective action while the bank still has sufficient capital. In various countries, regulators take "opportune corrective actions" or "early intervention" when a bank stops complying with some important prudential requirement. However, it is empirical regularity that regulators tend to intervene very late[68] (GOODHART, 1999), thus suggesting that early intervention[69] (or corrective action) should preferentially follow discretionary rules[70].

Table 2 indicates the limits of intervention and the corresponding measures for countries that have little discretionary authority in implementing financial institution recovery plans.

3.2 Restructuring methods

In practical terms, resolution of financial institution problems is a highly complex process that may require joint intervention by various regulatory agencies, for purposes of either providing liquidity or managing the crisis. At the same time, the question of who pays the cost of resolution has important monetary policy implications.

In general, bank restructuring[71] – understood as a set of measures designed to substantially alter the operations and financial structure of a bank – seeks various often conflicting objectives: avoid a run on banks; avoid credit rationing; enhance the efficiency of financial intermediation and attract capital to the banking industry. The most common means of restructuring are summarized below as: (i) mergers and incorporations; (ii) purchase and assumption transactions; (iii) splitting the institution into a good bank and a bad bank; (iv) creation of a bridge-bank; (v) in the case of systemic risk, temporary nationalization of the insolvent bank; (vi) injection of capital by the government; (vii) open bank assistance.

68/ In the sense of attempting to avoid bank insolvency.

69/ In this paper, intervention is used in a sense different from bank intervention as understood in Brazilian legislation. Here, intervention is a set of "corrective actions" taken by supervisory authorities in relation to a bank.

70/ The best known rules for corrective measures are the intervention intervals (in relation to bank capital) adopted in the United States and implemented by the Federal Deposit Insurance Corporation (FDICIA) in 1991.

71/ See Appendix I.

Table 2 – Intervals for intervention and rehabilitation plans – Selected countries

Country	Capital level that triggers intervention	Mandatory and discretionary actions
USA[1/]	Total Capital ≥ 10% and Tier 1 Capital ≥ 6% and Leverage Ratio ≥ 5%	Well capitalized. No measures.
	Total Capital ≥ 8% and Tier 1 Capital ≥ 4% and Leverage Ratio ≥ 4% or, in some cases, greater than 3%	Adequately capitalized. Banks are not allowed to make "*brokered deposits*"[2/], except with FDIC approval.
	Total Capital < 8% or Tier 1 Capital < 4% or Leverage Ratio < 4% or 3%	Undercapitalized. Restrictions on dividends; banks must file a capital plan; restrictions on asset growth; prohibitions on making "*brokered deposits*"[2/]; need of approval of supervisor to expand activities.
	Total Capital < 6% or Tier 1 Capital < 3% or Leverage Ratio < 3%	Significantly undercapitalized. Same as undercapitalized. Further restrictions on interest rate paid on demand deposits; restrictions on conglomerate transactions; on executive compensation etc.
	Ratio between intangible assets and total assets ≤ 2%	Critically undercapitalized. Further restrictions on restructuring up to 90 days; subject to closure if banks remain critically undercapitalized up to one year; freezing on the subordinated debt payments; restrictions on some actives.
Korea	6% < Total Capital < 8%	Issue management improvement recommendation, including restrictions on investments and dividend policy etc.
	Total Capital< 6%	Issue management improvement recommendation, including freezing new capital participation, disposal of subsidiaries; merger, take-over etc.
	Distressed institution	Issue management improvement order; including cancellation of stocks, suspension of board of directors; merger, take-over; or request the Finance Ministry to revoke banking license.
Argentina	Total Capital < 11.5%	Bank is fined, must submit recapitalization plan, limit deposit raising, pay no dividends or bonuses and is restricted in opening branches.
Chile	Total Capital < 8% or Tier 1 Capital < 3%	Bank has to raise new capital. If unable supervisors prohibit extension of new credit and restrict the of securities issued by central bank.
	Total Capital < 5% or Tier 1 Capital < 2%	Bank has to prepare credit restructuring agreement. If the agreement is not approved by supervisors (first) and bank creditors (second) the bank is declared under liquidation.

Source: Board of Governors of the Federal Reserve System e Hawkins & Turner (1999).

1/ To USA, we only report mandatory actions.

2/ Certificated of deposit obtained from a *broker*, which acts as depositors agent.

3.2.1 Mergers and incorporations

This case involves a solvent bank that can restructure the insolvent bank without the need for closing the bank. The new proprietors not only acquire the bank's assets and liabilities, but also the property of the insolvent bank. In the case of a weak bank, merger is carried out after the

regulator has declared the institution insolvent. With this, the regulator has the power to force expropriation of the institution and to dispose of the bank's capital or implement similar arrangements.

3.2.2 Purchases & Acquisitions – P&A

The only difference between this and the previous case is legal by nature, since the buyer acquires the bank's operations, but not the legal entity nor its operating license. Several types of P&A transactions exist: the buyer may purchase subunits of the bank (for example, divisions, branches, etc.) or limit itself to receiving the bank's good assets (clean transaction). To a certain extent, the latter type of arrangement is equivalent to separating the good bank and the bad bank.

In the case of a P&A, good assets and an equivalent volume of liabilities are transferred to the other institution. The solvent bank "purchases" the operations of the other bank, but not the bank that went bankrupt. What happens here – and this is quite common – is that sale of part (or the entirety) of the bank may require injection of public resources to cover any liabilities in excess of the market value of assets. This injection would only be justified in those cases in which the P&A generates a lesser cost for the public than would liquidation and payment of insured deposits.

Although P&A transactions can be very useful in resolving bank failures, they require certain market conditions or, in other words, market demand for good assets. This type of transaction would evidently not be feasible were many banks to fail at the same time.

3.2.3 Good bank/bad bank separation

Separation allows the healthy part of an insolvent bank to continue operating normally, while the bad part is liquidated. In this case, the bank survives with the good part and there is a type of injection of public funds.

3.2.4 Bridge-bank

Here, part of the insolvent bank (assets and liabilities that can be covered) is transferred to the "bridge-bank". The part that can not be covered is closed and liquidated. This is a temporary solution for insolvent banks since the

administrator[72] becomes manager of the bank and must run it in a conservative manner. In this type of restructuring, the bank is not closed. The task of bridge-bank management is to preserve the institution's intangible assets (franchise value) and reduce the probability of bank system shocks and ruptures.

3.2.5 Restructuring with public funds (only injection of resources) and temporary nationalization

Currently, restructuring based on public funds is only justified when systemic risk is imminent. When such a risk does not exist, the insurer should carry out some type of recapitalization of the bank up to the limit of the insured deposits. According to available literature, one good practice is for the stockholders to absorb the losses generated by the bank's insolvency.

Nationalization generally occurs when a major bank fails. The government nationalizes the bank, normally expropriating the stockholders, for later resale.

3.2.6 Open bank assistance

In this case, the regulator provides direct financial assistance through loans, purchases of assets or placing of deposits in the insolvent bank. Under normal circumstances, the bank must pay this type of loan to the regulator.

Table 3 shows restructuring and liquidation methods and the allocation of losses for each one of the monitors[73], or, in other words, stockholders, managers, creditors and employees.

72/ In this case, the administrator may be the deposit guarantor, such as the Federal Deposit Insurance Corporation (FDIC), in the USA, and the Canadian Deposit Insurance Corporation (CDIC), in Canada.

73/ The fact is that a method known as payout resolution has not been cited here. In general, this method encompasses direct payment by the deposit guarantor to depositors or transfer of their accounts to another bank. Banks arefrequently closed and the uninsured assets and deposits are transferred to the "receiver" of the liquidation. In the case of Brazil, all resolutions took this form in the wake of Proer.

Table 3 – Alternative resolution methods for failed banks and losses allocation

	Shareholders	Managers	Creditors	Employees
Bank Status Unchanged				
Shareholders' capital injection	No	No	No	No
Government injection	Probably, partly.	Probably.	Possibly, partly.	Probably.
Bank Status Changed				
Merger and acquisition (M&A)	Probably, partly.	Possibly.	Possibly, partly.	Possibly.
Purchase and assumption (P&A)	Yes	Possibly.	Yes if P&A partial	Possibly.
Nationalization/ Bridge bank	Yes, partly.	Probably.	Possibly.	No
Liquidation	Yes	Yes	Yes, uninsured.	Yes

Source: Hoggarth & Reidhill (2003).

4. A simplified model

The notion that restructuring of the bank is always preferable to liquidation is based on the hypothesis of incomplete markets and, to some extent, that of market failings[74]. If capital markets and management were complete and perfect, external finance could purchase and operate all the assets of the insolvent companies, with the results of the purchase being distributed among creditors once insured credits have been satisfied. Since capital markets and management are not complete nor perfect, banks exist to coordinate the production of specific goods and services in markets that do not provide such coordination. In other words, banks have a positive externality in generating product that will be lost should they fail.

Thus, we come to the idea that it is preferable to restructure banks than to liquidate them. However, the improved functioning and development of markets have made company assets increasingly less bank specific, in the sense

74/ It should be stressed that, even in the case of complete markets and no market failings, there is the possibility that restructuring may lead to a more balanced result than liquidation (CALDWELL, 2005).

that they can be utilized in other quasi-bank companies. Parallel to this, intangible assets stand as another justification that leads one to prefer restructuring to liquidation. However, this value tends to decline over time if clients are not carefully monitored. Utilizing a somewhat simplified model adapted from Caldwell (2005), this section will show when restructuring is preferable to liquidation. Differently from Caldwell's position, this paper will consider the case in which the regulator and the deposit insurer are different entities or, more specifically, in which the deposit insurer is a private institution, as happens in Brazil.

4.1 Set-up of the model

The timing of the game is shown in Appendix II. The economy is composed of a bank, insured depositors, uninsured depositors, a supervisor and a deposit insurer. All of them are risk neutral.

The model is as follows. There are two periods of time, the first being t = 0 to t = 1, and the second, de t = 1 to t = 2. This investment is financed with $\$K_1$ in capital (stocks) and \$1 in deposits, or in other words, the bank collects deposits and utilizes its capital for purposes of residual financing. More specifically, these assets require investment of $\$1+K_1$ in t = 0 and generate a random return (gross) of $\widetilde{V}$ in t=2. The bank can invest in an asset in which it can choose the probability of return distribution. We assume that $\widetilde{V}$ has continuous cumulative distribution function F(.) and probability density function f (.), with support $[0,\overline{V}]$ and $\overline{V} > 0$. For purposes of simplification, suppose that the return variable is distributed uniformly in $[\mu - v, \mu + v]$, in which ν (risk level) is the choice variable for the bank. Each portfolio has an expected value equal to μ. Should the bank be liquidated, the recovery technology is imperfect. As a result, each monetary unit invested in the bank has a liquidation value equal to \$ (1-λ) with $1 \geq \lambda > 0$.

Suppose further that, should the regulator have to inject resources into bank resolution, it will do so through taxation that alters relative prices or, in other words, for each \$1 spent, it will have to collect $\$(1 + \theta)$, with $\theta > 0$.

4.2 Information structure

Nature determines the type of bank, considered as μ. A fraction of bank deposits is insured, in such a way that the ratio between insured and uninsured deposits, which is

considered exogenous, is $\theta \in [0,1]$. The interest rate (gross) on insured deposits is normalized to zero, while that on uninsured deposits is $R \equiv (1+r^u)$.

Liabilities of the bank at maturation are $V_0 = \phi + (1-\phi)R$. Se $V \prec V_o$, or, in other words, if the liabilities of the bank are greater than its assets at maturation, the bank is considered insolvent. If $K_1 \neq 0$ or, in other words, if capital requirements different from zero exist, with the regulator being "obligated" to close the bank if it is unable to reach those requirements, the bank is closed on t = 1 if $V \prec V_c$, in which $V_c \equiv \frac{V_0}{(1-K_1)}$, derived from the fact that the bank is closed if $V - V_0 \leq K_1 V$.

Though their obligation to creditors is limited, stockholders lose their capital if the bank is closed.

Consequently, using uniform distribution for purposes of simplification, the expected value of type μ bank is:

$$E(\upsilon) = \int_{V_c}^{\pi+\nu} (V - V_o)\frac{1}{2\nu} dV, \text{ if it chooses risk level } \nu.$$

If $\nu < \mu - V_c$ the bank will not be closed and the expected return will be $E(\nu) = \mu - 1$ Since it must maintain a minimum level of capital, the condition for participation for the bank to make the optimal choice of ν (ν^*), is equal to:
$E(\nu^*) - K_1 \geq 0$

Following the timing of the game, nature determines μ, once the regulator has announced the regulatory regime. Once again, $\mu \sim U[\underline{\mu}, \overline{\mu}]$.

4.3 Payoff of uninsured deposits and the deposit insurer

The bank is either liquidated or merged. In the case of liquidation, the insurer of the deposits subrogates the credits it has guaranteed in the stage of credit qualification. The bank's portfolio is sold for λV. The uninsured depositors receive:

$$B^u(V) = \left[\frac{R(1-\phi)}{R(1-\phi)+\phi}\right]\lambda V = \left[\frac{R(1-\phi)}{V_0}\right]\lambda V$$

the deposit insurer receives[75]:

75/ FGC in the equation stands for Credit Guarantee Fund.

$$B^{FGC}(V) = \frac{\phi\lambda V}{V_0}$$

In the case of mergers, the hypothesis is that the bank will have to receive a capital injection to be able to merge with a solvent bank. It is assumed that uninsured deposits suffer no losses as a result of the merger. Consequently, if the ex-ante belief of the uninsured depositors indicates that a merger will occur, they will demand a lesser risk premium. It is also assumed that the lowest cost solution will be put forward by the deposit insurer, and that the ex-post efficient solution will be submitted by the regulator.

4.4 Lowest cost resolution

4.4.1 Liquidation

If the bank is liquidated, the FGC cost will be:

$$C_L(V) = \phi - B^{FGC}(V) \qquad (1)$$

4.4.2 Merger

A capital injection will be required, in such a way that net wealth before the merger is $K_1 V$. The cost of the merger will be the quantity of funds required for the bank to reach this value of net wealth:

$$C_M(V) = \phi + (1-\phi)R - V + K_1 V \qquad (2)$$

The lowest cost criterion supposes a critical value of V so that $C_M(V_{LCR}) = C_L(V_{LCR})$.

From (1) and (2), one concludes that:

$$V_{LCR} = \frac{V_0(1-\phi)R}{(1-\lambda-K_1)\phi + (1-K_1)(1-\phi)R}$$

Thus, supposing the lowest cost solution, the relevant intervals for V_{LCR} above indicate that if $V \in [V_{LCR}, V_c]$, the bank will be merged. If $V < V_{LCR}$, the bank will be liquidated. Depending on the parameters, it is possible that $V_{LCR} > V_c$ always. In this case, the bank will invariably be liquidated. The region of merger is affected not only by the parameters of the model, but also by earnings on uninsured deposits. It is known however that:

$$\frac{\partial V_{LCR}}{\partial R} = \frac{(1-\lambda-K_1)\phi V_0(1-\phi)}{[(1-\lambda-K_1)\phi+(1-K_1)(1-\phi)R]^2} \qquad (3)$$

Equation (3) is positive if $\lambda + K_1 \leq 1$. If the recovery technology is highly imperfect, making it very costly to liquidate the bank, the asset value that equalizes merger and liquidation costs rises with the interest rate paid on uninsured deposits.

4.5 Ex-Post efficient policy

Suppose that welfare can be measured by the sum total of the economic surplus of all agents in the economy (insured depositors, uninsured depositors and deposit insurers). We will analyze the three cases:

(i) If V > V_c, the bank will not be closed and the welfare is measured by the final wealth (W) of the three classes of agents:

$$W_o(V) = \phi + (1-\phi)R + [V - \phi - (1-\phi)R] = V$$

(ii) If V > V_c, then the bank will be closed. Supposing that it will be merged, there will be a cost of injecting public sector funds and a benefit of the bank returning to a position of net wealth K_1V.

$$W_M(V) = \phi + (1-\phi)R + [(1+\theta)(1-K_1)V - \phi - (1-\phi)R] + K_1V \qquad (4)$$

(iii) Suppose further that V < V_c and that the bank will be liquidated, then;

$$W_L(V) = \phi + \left[\frac{R(1-\phi)}{V_0}\right]\lambda V + \left[\frac{\phi\lambda V}{V_0} - \phi\right] \qquad (5)$$

Therefore, a V* must exist, so that $W_M(V*) = W_L(V*)$.

Resolving the above equation using (4) and (5), one concludes that equation (6) generates a V* equal to:

$$V^* = \frac{\theta - V_c}{(1-\lambda)+\theta(1-K_1)} \qquad (6)$$

Using equation (6), one concludes that:

$$\frac{\partial V^*}{\partial \lambda} = \frac{-(\theta - V_c)}{[(1-\lambda)+\theta(1-K_1)]^2}$$

Since $V_c = \phi + (1-\phi)R$, one supposes that $V_c \geq 1$. Since θ must be smaller or equal to 1, then $\frac{\partial V^*}{\partial \lambda} \leq 0$, implying that, the more imperfect the recovery technology, the lesser will be the assets that equalize the welfare of a merger to that of a liquidation. Note that $\frac{\partial W_L(V)}{\partial V} = 1 \geq \lambda > 0$, meaning that the variation of the welfare resulting from the different assets is fixed and depends only on its recovery technology. Furthermore, for the welfare resulting from the merger[76],

$$\frac{\partial W_M(V)}{\partial V} = 1 + \theta(1 - K_1) \leq 0 \text{ if } k_1 \geq \frac{(1+\theta)}{\theta} \geq 1.$$

Thus, the ex-post efficient policy would be as follows. Supposing $K_1 \leq 1$, then the merger interval would be that between $[V^*, V_c]$. If V < V*, the optimal policy would be to liquidate the bank.

5. Conclusion and extensions

Banks are self-financing, primarily through short-term debt. The banking system'svulnerability to shocks is a consequence of its unique functions of creating liquidity and allocating capital and of the characteristic of private information surrounding bank assets. This results in an "intrinsic financial fragility"[77] in the sector comparing to other sectors in the economy, generating the need for regulating "exit" of banks from the market.

Resolution of bank failures can impact bank portfolio allocation, particularly when one observes that the resolution process generates allocation of losses to different agents.

Though a diversity of legal and institutional resolution arrangements can be found from one country to another, there are various empirical regularities. In countries that have specific bank failure legislation, the regulator seems to play a greater role in the resolution process (World Bank, 2005), and is responsible for decreeing insolvency.

In the case of Brazil, two difficulties are encountered in direct application of corporate insolvency legislation. First of all, since there is a greater need for negotiation among creditors, the insolvency process can drag on. Secondly, in dealing

76/ It is interesting that Caldwell (2005) does not consider that the welfare curve for mergers can have a negative incline, if K satisfies that inequality, which is certainly greater than 1.

77/ In this regard, see Allen & Gale (2001).

with questions related to the externalities of a bank failure, only the supervisory or regulatory entity has the capacity to go beyond the individual interests of creditors. In other words, since creditors do not always take due account of the possibility of banking system contagion, leaving the process in the hands of creditors is often not the best solution.

The question of commencement of the insolvency process is highly relevant. In corporate insolvencies, the process is normally initiated by creditors. In cases of bank insolvency, efforts are made to avoid processes initiated by creditors since, even if the insolvency petition lacks substance, the fact that it was requested by creditors can lead to failure of the institution. The process can be initiated by debtors, though they have little or no incentive to do so.

Another question is bank restructuring. It is essential that new bank failure resolution legislation generate the mechanisms required by such events, particularly for cases of systemic crisis. In other words, to deal with all of these questions, one must go well beyond a simple law on bank liquidations. Another conclusion is that, when banks are holding a share of uninsured deposits and when restructuring generates a need for injections of additional capital, restructuring will not always be a better solution than liquidation.

This article will be extended along three vectors. The first will delve more deeply into the results of section 4, dealing with the theoretical model. The second will discuss the deposit guarantee mechanism in greater detail. It would seem that creation of deposit guarantee schemes backed by insufficient resources or devoid of the legal authority to cope with the problem of bank failures can generate significant inefficiencies in the process, considering that the deposit insurer is a party that has direct interest in resolution of the problem. This is a question that demands further research. The third vector will go into the question of who manages the bad assets resulting from a bank liquidation.

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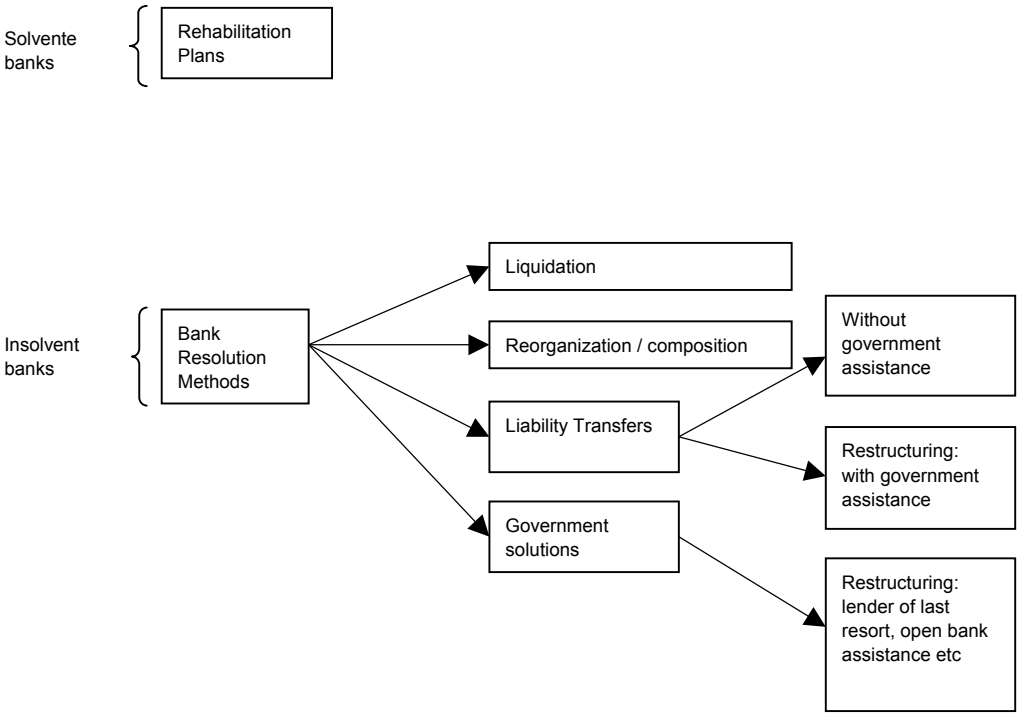
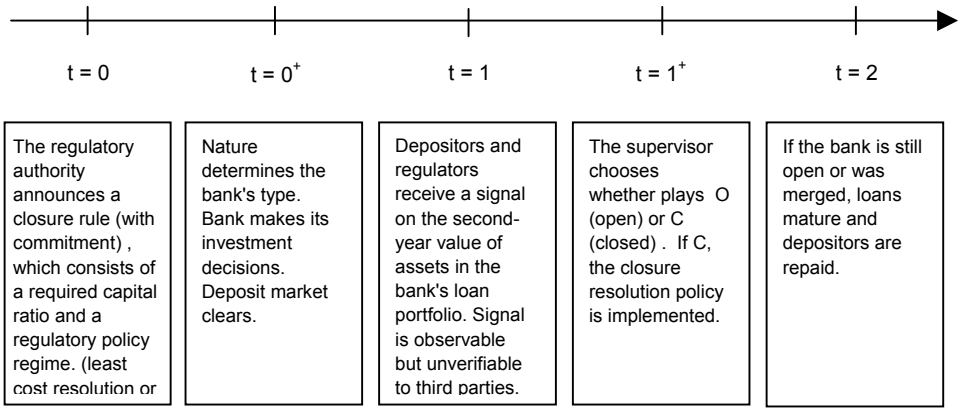
Appendix I



Appendix II



Appendix

Banco Central do Brasil Management

Central units of the Banco Central do Brasil

Acronyms

Banco Central do Brasil Management*

Board

Henrique de Campos Meirelles
Governor

Afonso Sant'Anna Bevilaqua
Deputy Governor

Alexandre Antonio Tombini
Deputy Governor

Antonio Gustavo Matos do Vale
Deputy Governor

João Antônio Fleury Teixeira
Deputy Governor

Mário Magalhães Carvalho Mesquita
Deputy Governor

Paulo Sérgio Cavalheiro
Deputy Governor

Paulo Vieira da Cunha
Deputy Governor

Rodrigo Telles da Rocha Azevedo
Deputy Governor

* Position on 6/30/2006

Executive Secretariat

Milton Luiz de Melo Santos
Executive Secretary

Sérgio Albuquerque de Abreu e Lima
Secretary to the Board of Directors and National Monetary Concil Affairs

Emidio Rodrigues Cordeiro
Secretary for Institutional Relations

Advisors to the Board

Alexandre Pundek Rocha

Carolina de Assis Barros

Clarence Joseph Hillerman Júnior

Dalmir Sérgio Louzada

Eduardo Fernandes

Flávio Pinheiro de Melo

Katherine Hennings

Marco Antonio Belém da Silva

Sidinei Corrêa Marques

Central units of the Banco Central do Brasil

Analysis and Control of Disciplinary Actions Department (Decap)
Head: *Claudio Jaloretto*

Currency Management Department (Mecir)
Head: *João Sidney de Figueiredo Filho*

Department of Bank Liquidation (Deliq)
Head: *José Irenaldo Leite de Ataíde*

Department of Banking Operations and Payments System (Deban)
Head: *José Antonio Marciano*

Department of Economics (Depec)
Head: *Altamir Lopes*

Department of External Debt and International Relations (Derin)
Head, substitute: *Fernando Antonio Gomes*

Department of Financial System Organization (Deorf)
Head: *Luiz Edson Feltrim*

Department of Financial System Regulation (Denor)
Head: *Amaro Luiz de Oliveira Gomes*

Department of Human Resources Administration and Organization (Depes)
Head: *Miriam de Oliveira*

Department of Information Systems Management (Deinf)
Head: *Fernando de Abreu Faria*

Department of International Reserves Operations (Depin)
Head: *Marcio Barreira de Ayrosa Moreira*

Department of Material Resources Administration (Demap)
Head: *Dimas Luis Rodrigues da Costa*

Department of Open Market Operations (Demab)
Head: *Ivan Luis Gonçalves de Oliveira Lima*

Department of Planning and Organization (Depla)
Head: *José Clóvis Batista Dattoli*

Financial Administration Department (Deafi)
Head: *Jefferson Moreira*

Internal Auditing Department (Deaud)
Head: *Eduardo de Lima Rocha*

Legal Department (PGBC)
General Attorney: *Francisco José de Siqueira*

Off-site Supervision and Information Management Department (Desig)
Head: *Cornélio Farias Pimentel*

On-site Supervision Department (Desup)
Head: *Osvaldo Watanabe*

Planning and Management Overview of Supervisory Adtivities Department (Decop)
Head: *Sérgio Almeida de Souza Lima*

Research Department (Depep)
Head: *Carlos Hamilton Vasconcelos Araújo*

Supervisiom os Credit Unions and Non-Banking Financial Institutions and Financial System Consumer Complaints (Desuc)
Head: *Americo Ciccotti*

Surveillance of Ilegal Activities and Supervision of Foreign Exchange and International Capital Flows Department (Decic)
Head: *Ricardo Liáo*

Acronyms

Amex	American Express
AP	Permanent Assets
APR	Assets Weighted by Risk
Asbace	Brazilian Association of State and Regional Banks
ATM	Automated Teller Machine
Banespa	*Banco do Estado de São Paulo S/A*
BC	Commercial Bank
BEG	*Banco do Estado de Goiás S/A*
BI	Investment Bank
BID	Inter-American Development Bank
Bird	International Bank for Reconstruction and Development
BIS	Bank for International Settlements
BM	Multiple Bank
BM&F	Commodities and Futures Exchange
BNDES	National Bank of Economic and Social Development
BoC	Bank of China
BoCOM	Bank of Communications
BoJ	Bank of Japan
Bovespa	São Paulo Stock Exchange
CAC-40	*Cotation Assistée en Continue*
CBLC	Brazilian Clearing and Depository Corporation
CBRC	China Banking Regulatory Commission
CC	Exchange Brokerage Company
CCB	China Construction Bank
CCP	Central Counterparty
CDC	Direct Consumer Credit
CDI	Certificate of Bank Deposit
Cetip	Clearinghouse for Custody and Settlement
CFI	Consumer Finance Company
CIP	Interbank Payment Clearinghouse
CMN	National Monetary Council
Compe	Centralizer Clearance for Checks and Other Documents
Coop.	Credit Union
Copom	Monetary Policy Committee
Cosif	Accounting Plan of National Financial System Institutions
CPMF	Provisional Contribution on Movement or Transmission of Values and Credits and Rights of a Financial Nature
CRI	Certificate of Real Estate Receivables
CRSTE	Constant Returns to Scale
CS	Social Contribution
CTVM	Security Brokerage Company

CVM	Securities and Exchange Commission
DAX	Deutscher Aktienindex
DIM	Interbank Deposits Tied to Microcredit Operations
DOC	Credit Document
DOU	Official Daily Government News
Dow Jones	Dow Jones Industrial Average
DPMFi	Internal Federal Public Security Debt
DTVM	Security Distribution Company
EC	Capital Requirement
ECB	European Central Bank
ECT	Brazilian Post and Telegraph Company
EFTPOS	Eletronic Funds Transfer at Point of Sale
Embi+	Emerging Market Bond Index Plus
EWMA	Exponentially Weighted Moving Average
FDIC	Federal Deposit Insurance Corporation
FED	Federal Reserve
FGC	Credit Guaranty Fund
FGTS	Employment Compensation Fund
FOMC	Federal Open Market Committee
FSA	Financial Services Agency
FTSE-100	Financial Times Securities Exchange Index 100
GDP	Gross Domestic Product
Iasb	International Accounting Standards Board
Ibovespa	São Paulo Stock Exchange Index
ICBC	Industrial and Commercial Bank of China
IGP-M	General Price Index – Market
IIF	Institute of International Finance
IMF	International Monetary Fund
INSS	National Institute of Social Security
IPA-M	Wholesale Price Index – Market
IPCA	Broad National Consumer Price Index
IR	Income Tax
IVA	Intrinsic Value Added
LBC	Banco Central do Brasil Bill
LFT	Treasury Financing Bill
LTN	National Treasury Bills
MIB	Milan Stock Exchange Index
MSCI	Morgan Stanley Capital Index
Nasdaq	National Association of Securities Dealers Automated Quotations
NGO	Non-Governmental Organizations
NIS	Social Identification Number
NPL	Non Performance Loans
NTN-B	National Treasury Notes – Series B
NTN-F	National Treasury Notes – Series F
Oscip	Civil Society Organizations of Public Interest
PAC	Cooperative Service Outposts
PAT	Transitory Service Outposts
PIB	Gross Domestic Product
PL	Net Worth
PLA	Adjusted Net Worth

PLA-Short	Adjusted Net Worth – Short
PLE	Required Net Worth
PMC	Microfinance Program
PNMPO	National Program of Targeted Productive Microfinance
PR	Base Capital
PRA	Adjusted Base Capital
Proer	Program or Stimulus to the Restructuring and Strengthening of the National Financial System
RF	Financial Risk
RFL	Net Financial Risk
RSFN	National Financial System Network
RSPL	Returns on Net Worth
RVA	Green and Yellow Network
S&P	Standard and Poor's
SARS	Severe Acute Respiratory Syndrome
SBPE	Brazilian System of Savings and Loans
SCMs	Micro-entrepreneur Credit Companies
SCR	Credit Information System
Sebrae	Brazilian Service of Support to Micro and Small Businesses
Selic	Special System of Settlement and Custody
SET	Securities Lending Service
SFH	Housing Finance System
SFN	National Financial System
Siloc	Deferred Settlement System for Inter-bank Credit Orders
Sisbacen	Banco Central Information System
Sitraf	Fund Transfer System
SPB	Brazilian Payments System
STR	Reserve Transfer System
TecBan	Banking Technology Corp
TED	Electronic Funds Transfers
TR	Reference Rate
TVM	Stocks and Securities
VaR	Value-at-Risk
VLB-Check	Gross Settlement Reference Value for Checks
VLB-Cobrança	Gross Settlement Reference Value for Charging Documents
VRSTE	Variable Returns to Scale
WEO	World Economic Outlook
WOCCU	World Council of Credit Unions
WTO	World Trade Organization
WWB	Women’s World Banking
XML	Extensible Markup Language