BANCO CENTRAL DO BRASIL

Report on the Brazilian Retail Payment System

Statistical update – Figures for 2008

Department of Banking Operations and Payment Systems
Division of Payment Systems

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Statistical update – Figures for 2008

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This document updates statistical data of the Report on the Brazilian Retail Payment System, which was published in May, 2005.

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Statistical conventions:

… data not available
- nil or non-existence of the event considered
0 or 0.0 less than half the final digit shown

Hyphen (-) between years (1970-1975) indicates the years covered, including the first and the last.
Bar (/) between years (1970/1975) indicates the average for the whole period, including the first and the last year.

Minor discrepancies between the sum of data and the total are due to rounding.

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Introduction

The Banco Central do Brasil elaborated the *Report on Brazilian Retail Payment System* in May 2005 as part of its Payment Instrument Modernization Project, whose main objective is to foster the use of electronic payment instruments in lieu of paper-based ones. The statistics published through the report have been annually updated, and this document contains data related to 2008. For the first time, it is being published the number of transactions by different access channels (Table 29).

Concerning retail payment clearing and settlement infrastructure, *Tecnologia Bancária S.A.* (TecBan) ceased its clearing and settlement activities in November 2008, and since then the related transactions are settled through the *Sistema de Liquidação Diferida das Transferências Interbancárias de Ordens de Crédito – Siloc (Deferred Settlement System for Interbank Credit Orders)*.

Following the trend observed in the last years, the average value of currency held by the public (CHP) increased 17.7% in 2008 as compared to 2007. The CHP per capita, R$ 350.84 in 2007, increased to R$ 408.93 in 2008. In the same period, the indicator CHP/GDP increased from 2.5% to 2.7%. These indicators show the increasing use of cash as a payment instrument.

The use of checks continues to reduce, mainly those presenting small values (they have been replaced mainly by payment cards). In the last five years, electronic payment instruments presented an average annual increase of 17%, while the use of checks presented an average annual reduction of 9.8%. As compared to 2007, in 2008 the use of checks presented a reduction of 5.2%, meaning that its relative participation in the total of non-cash payments decreased from 19% to 16%. It is important to point out, however, that there is room for additional reduction in the use of checks, taking into account their level of use in the main economies of the world.

In 2008, the average value of checks increased 16.6%, reaching R$ 835, against R$ 716 in 2007. Taking into account only payments presenting value lower than R$ 5 thousand, checks' relative participation decreased to 18.6%, from 23% in 2007. Regarding payments larger than R$ 5 thousand, in the same period checks' relative participation had a slight reduction, from 35% to 34%. Such an evolution shows that the replacement of checks has occurred mainly in low value transactions, meaning that there is room for additional facilities that make possible larger value electronic payments from the point of sale.

Concerning electronic payments, retail credit transfers showed an increase of 13.8% in terms of volume, as compared to the previous year. SITRAF and STR, systems through which some credit transfers are settled, presented an increase of 23.5% and 8.5% in number of transactions, respectively. In terms of value, the increment was of 27% and 26%, respectively. Hence, there was an increase in the average value of retail credit transfers settled though STR.

Direct debits presented an increase of 20.8% in 2008 in terms of value, which is slightly above the one observed in the previous year, against an average annual increment of 17% in the five previous years. On the other hand, payment cards stood out due to their large relative participation in the total of non-cash payments, which changed from 50.3% in 2007 to 53.8% in 2008. Considering only payments presenting value lower than R$ 5 thousand, the increase in the payment cards' relative participation was still larger, changing from 55% in 2007 to 59% in 2008.

In 2008, for the first time, debit cards presented a higher growth in the number of transactions than credit cards. The relation between the number of payment cards and the number of deposit accounts remained stable, meaning that the market's future expansion should mainly occur through the inclusion of non-banked population.

There was deceleration in the growth of credit cards in circulation, since the period 2003-2007 presented an average annual increase of 28%, against 17% in 2008. On the other hand, the number of debit cards presented an increase of 14% in 2008, against an average annual increase of 10% in the mentioned period.

Concerning number of transactions, the evolution was similar. While credit cards presented an increment of 17% in 2008, lower than the average annual increase of 19% in the period 2003 - 2007, debit cards presented

an increment of 23% in 2008, against an average annual increase of 27% in the mentioned period, higher than the corresponding rates concerning number of debit cards in circulation, which means that there was an increase in the number of transactions per debit card.

Still in terms of value of transactions, in 2008 debit cards presented a higher growth rate comparatively to the one presented by credit cards: 27% against 20%. Taking also into account the evolution in terms of number of transactions, in 2008 the average value per credit card transaction and per debit card transaction increased 2.9% and 2.7%, respectively.

Concerning the total value of payments per instrument, debit cards presented an increment of 11.1% in 2008 as compared to 2007, higher than the one presented by credit cards (2.5%). Regarding the number of transactions per instrument, in the same period debit cards presented an increase of 8.2%, while this indicator remained stable for credit cards. Although the average number of transactions per credit card in Brazil (18.3 transactions per year) is similar to the ones observed in more developed countries, the same indicator regarding debit cards (10.1 transactions per year) is still low, meaning that there is room to increase the use of the latter payment instrument.

Relating to POS terminals, there was an increment in the number of those capturing credit card transactions (28%), and also in those capturing debit card transactions (27%), which are higher than the increase observed in number of cards in circulation, whether credit or debit cards.

ATM networks continue to be the main access channel to banking services, accounting for 32% of transactions in 2008. Since 2007, internet has been the second most important channel, and in 2008 accounted for 29% of the banking transactions, prevailing over the traditional banking branches through which were carried out 23% of these transactions. As compared to 2007, the number of transactions carried out through *correspondentes bancários* (merchants acting as banking agents) increased 6.7%, maintaining its relative participation in 9.3%. The number of transactions through both call centers and mobile phones presented reduction as compared to 2007, corresponding respectively to 6.4 and 0.3% of the banking transactions carried out in 2008.

In terms of volume, there was an increase of 5.3% in transactions carried out through ATM terminals, which is larger than the increase in terms of number of terminals (3.4%), meaning an increment in the number of transactions per ATM terminal. The relative participation of shared terminals decreased from 45% in 2007 to 43% in 2008. In this period, the relative participation of transactions carried out through open access terminals, made by means of payment cards not issued by the owner of the network, reached 10%.

As compared to the total of ATM transactions (shared networks and non-shared networks), those carried out through payment cards not issued by the owner of the network decreased from 5.1% in 2007 to 4% in 2008. This low percentage can be explained by the fact that few banks authorize their clients to make transactions in ATM terminals owned by other banks. The high number of ATM terminals per inhabitant and the low number of transactions per inhabitant, and also per terminal, as compared to other countries, show that it is still possible to have some gains of efficiency in this area.

Overall, even though Brazilian ATM networks have a fair number of terminals comparatively the size of the population as compared to other countries considered in this document, their level of use is still low despite the number of transactions per inhabitant have presented a significant increase over the period 2003 to 2008.

In number of transactions, the internet channel presented an increase of 13.6% in 2008 as compared to 2007, while the value of these transactions increased 19.2% in the same period.

In sum, the 2008 statistics show that:

a) the use of both cash and electronic payment instruments continue to increase;

b) the reduction in the use of checks face larger obstacles in transactions involving larger values, so there is opportunity for new initiatives in this segment;

c) there was acceleration in the use of debit cards, while the use of credit cards showed a lower growth rate as compared to the ones observed in previous years;

d) taking into account the situation in other countries, there are evidences that debit cards present a higher potential to expand their use, as compared to credit cards;

e) ATM networks continue to be the channel through which the most part of banking transactions are initiated, while the internet is the channel presenting the largest growth; and

f) larger level of interoperability among ATM networks would enable significant cost reduction.

Table 1: Clearing and settlement systems – Volume and value of transactions

System	Volume		Value		Average value
	(Milhões)	%	(R$ milhões)	%	(R$)
CIP – Sitraf [1/]	50	0.7	4,577,304	51.4	91,583
CIP – Siloc	1,637	22.2	849,543	9.5	519
STR [1/]	4	0.1	2,047,334	23.0	554,167
Compe	1,383	18.8	1,141,629	12.8	825
TecBan [2/]	3	0.0	319	0.0	106
Redecard	1,774	24.1	120,778	1.4	68
Visanet	2,525	34.2	173,371	1.9	69
Total	7,377	100.0	8,910,279	100.0	1,208

Source: Banco Central do Brasil, and clearing and settlement system operators.
[1/] Client transactions only. [2/] Only debit card transactions until November 11.

Table 2: Clearing and settlement systems – Distribution of transactions per value

System	Transactions lower than R$ 5 thousand					Transactions larger than R$ 5 thousand				
	Volume		Value		Average value	Volume		Value		Average value
	(Million)	%	(R$ million)	%	(R$)	(Million)	%	(R$ million)	%	(R$)
CIP – Sitraf [1/]	4	0.1	5,278	0.3	1,308	46	62.2	4,572,025	64.4	99,509
CIP – Siloc	1,637	22.4	849,543	46.8	519	–	–	–	–	–
STR [1/]	1	0,0	1,039	0.1	1,262	3	3.9	2,046,295	28.8	712,665
Compe	1,358	18.6	665,312	36.6	490	25	33.9	476.317	6.7	19,053
TecBan [2/ 3/]	3	0.0	319	0.0	106	–	–	–	–	–
Redecard [3/]	1,774	24.3	120,778	6.7	68	–	–	–	–	–
Visanet [3/]	2,525	34.6	173,371	9.5	69	–	–	–	–	–
Total	7,303	100.0	1,815,641	100.0	249	74	100.0	7,094,638	100,0	96,111

Source: Banco Central do Brasil, and clearing and settlement system operators.
[1/] Client transactions only.
[2/] Debit card transactions only.
[3/] All transactions relating to Tecban, Redecard and Visanet were considered lower than R$ 5 thousand, for simplification purposes.
Tecban transactions: until November 26.

Table 3: Use of payment instruments – Volume

Million

Payment instrument	2003	2004	2005	2006	2007	2008	2003 – 2008 (%)
Total	**5,414**	**5,805**	**6,289**	**7,013**	**7,671**	**8,579**	**58**
Check [1/]	2,136	1,967	1,839	1,622	1,449	1,373	-36
Debit card	662	912	1,141	1,428	1,700	2,097	217
Credit card	1,084	1,253	1,501	1,814	2,160	2,520	133
Direct debit	627	657	781	840	853	871	39
Interbank credit transfer	906	1,016	1,027	1,309	1,509	1,718	90

Source: Banco Central do Brasil and financial institutions.
[1/] Excludes "on us" checks.

Table 3a: Use of payment instruments – Volume (including intrabank transactions)

Million

Payment instrument	2005	2006	2007	2008	2005 – 2008 (%)
Total:	**10,714**	**11,553**	**12,666**	**14,103**	32
Check[1/]	2,527	2,210	1,999	1,963	-22
Debit card	1,141	1,428	1,700	2,097	84
Credit card	1,501	1,814	2,160	2,520	68
Direct debit	781	840	853	871	12
Credit transfer	4,764	5,261	5,954	6,651	40

Source: Banco Central do Brasil and financial institutions.
[1/] Includes "on us" checks as well.

Table 4: Use of payment instruments – Number of transactions per inhabitant

Payment instrument	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Total	**31**	**33**	**34**	**38**	**41**	**47**	52
Check [1/]	12	11	10	9	8	7	-38
Debit card	4	5	6	8	9	11	204
Credit card	6	7	8	10	12	14	123
Direct debit	4	4	4	4	5	5	33
Interbank credit transfer	5	6	6	7	8	9	81

Source: Banco Central do Brasil and financial institutions.
[1/] Excludes "on us" checks.

Table 5: Use of payment instruments – Value

R$ billion

Payment instrument	2003	2004	2005	2006	2007	2008	2003– 2008(%)
Total	**3,511**	**3,970**	**4,300**	**5,043**	**6,154**	**7,451**	112
Check [1/]	1,027	1,003	1,025	1,011	1,038	1,147	12
Debit card	30	42	53	67	83	105	256
Credit card	77	93	117	146	182	218	182
Direct debit	97	118	149	154	180	218	124
Interbank credit transfer	2,280	2,714	2,957	3,665	4,672	5,763	153

Source: Banco Central do Brasil and financial institutions.
[1/] Excludes "on us" checks.

Table 5a: Use of payment instruments – Value (including intrabank transactions)

Payment instrument	2005	2006	2007	2008	2005 – 2008 (%)
	10,308	**11,864**	**16,852**	**21,256**	106
Check[1/]	2,213	2,081	2,192	2,554	15
Debit card	53	67	83	105	99
Credit card	117	146	182	218	87
Direct debit	149	154	180	218	47
Credit transfer	7,776	9,416	14,215	18,161	134

Source: Banco Central do Brasil and financial institutions.
[1/] Includes "on us" checks as well.

Table 6: Use of payment instruments – Average value per transaction

R$

Payment instrument	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Check [1/]	481	510	558	623	716	835	74
Debit card	45	46	46	47	49	50	12
Credit card	71	74	78	80	84	86	21
Direct debit	155	180	190	184	212	250	61
Interbank credit transfer	2,517	2,672	2,879	2,799	3,096	3,355	33

Source: Banco Central do Brasil and financial institutions.
[1/] Excludes "on us" checks.

Table 7: Number of payment cards in circulation (end of year)

Thousand

Payment card	2003	2004	2005	2006	2007	2008	2003– 2008(%)
With credit function	44,036	53,499	67,543	85,230	117,723	137,793	212,9
Fluctuation (%)		21	26	26	38	17	
With debit function	125,400	149,148	163,919	174,493	182,396	207,937	65,8
Fluctuation (%)		19	10	6	5	14	

Source: Brazilian financial institutions.

Table 8: Number of payment cards per deposit account (end of year)

Item	2003	2004	2005	2006	2007	2008	2003– 2008(%)
Deposit accounts (thousand)	86,984	90,240	95,147	102,644	112,130	125,667	44.5
Number of debit card/account	1.44	1.65	1.72	1.70	1.63	1.65	14.8
Number of credit card/account	0.51	0.59	0.71	0.83	1.05	1.10	116.6

Source: Banco Central do Brasil and financial institutions.

Table 9: Payment cards – Volume of transactions

Payment instrument	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Credit card (thousand)	**1,083,532**	**1,252,557**	**1,501,249**	**1,813,981**	**2,160,403**	**2,519,832**	**133**
Fluctuation (%)		16	20	21	19	17	
Number of transactions per inhabitant	6	7	8	10	12	13	117
Number of transactions per card	25	23	22	21	18	18	-26
Debit card (thousand)	**661,612**	**912,070**	**1,140,653**	**1,427,684**	**1,700,128**	**2,097,227**	**217**
Fluctuation (%)		38	25	25	19	23	
Number of transactions per inhabitant	4	5	6	8	9	11	196
Number of transactions per card	5	6	7	8	9	10	91

Source: Brazilian financial institutions.

Table 10: Payment cards – Value of transactions

Payment instrument	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Credit card (R$ million)	**77,209**	**92,505**	**116,578**	**145,778**	**181,567**	**217,835**	**182**
Fluctuation (%)	19	20	26	25	25	20	
Average value per transaction (R$)	71	74	78	80	84	86	21
Average value per card (R$)	1,753	1,729	1,726	1,710	1,542	1,581	-10
Debit card (R$ million)	**29,534**	**42,345**	**52,902**	**66,896**	**83,133**	**105,283**	**256**
Fluctuation (%)	50	43	25	26	24	27	
Average value per transaction (R$)	45	46	46	47	49	50	12
Average value per card (R$)	236	284	323	383	456	506	115

Source: Brazilian financial institutions.

Table 11: Relative use of non-cash payment instruments in selected countries (%) [1/]

Country	Check			Debit card/ Credit card			Credit transfer			Direct debit		
	2001	2007	%	2001	2007	%	2001	2007	%	2001	2007	%
Germany	2.6	0.6	-76.9	13.2	14.5	9.8	45.4	36.2	-20.3	38.6	48.3	25.1
Belgium	3.9	0.5	-87.2	32.6	41.0	25.8	48.2	42.8	-11.2	11.5	11.4	-0.9
Brazil [2/]	**52.1**	**18.9**	**-63.7**	**23.9**	**50.3**	**110.3**	**16.0**	**19.7**	**23.3**	**8.0**	**11.1**	**38.6**
Spain	9.9	3.0	-69.9	…	38.0		21.1	14.3	-32.3	68.9	43.4	-37.0
United States	53.8	28.6	-46.8	36.6	54.5	48.9	5.7	6.5	14.0	3.9	10.4	166.7
Finland	0.1	0.0	-63.6	39.1	54.1	38.4	55.5	41.4	-25.4	5.2	4.5	-14.5
France	35.4	23.8	-32.8	30.0	40.0	33.3	17.8	17.0	-4.5	16.8	19.0	13.1
Netherlands	0.2	–		31.9	37.8	18.5	39.1	31.8	-18.7	17.9	26.5	48.0
Italy	21.3	12.5	-41.3	27.3	39.0	42.9	38.2	32.1	-16.0	13.2	14.9	12.9
Japan	5.6	5.3	-5.4	60.6	…		33.8	60.0	77.5	…	…	
Portugal	27.0	14.0	-48.3	56.3	63.5	12.8	4.1	10.1	147.8	11.8	12.4	5.5
United Kingdom	23.1	10.7	-53.7	40.1	48.4	20.7	17.4	21.0	20.7	19.4	19.9	2.6
Sweden	0.2	0.0	-100.0	31.7	61.0	92.4	60.3	29.4	-51.2	7.7	9.6	24.7
Switzerland	0.8	0.1	-87.5	34.1	38.2	12.0	57.4	56.4	-1.7	5.4	3.8	-29.6

Source: Banco Central do Brasil, financial institutions, acquirers, credit card companies, BIS/CPSS, and European Central Bank.

[1/] Card-based e-money is considered on the calculus of the payment instrument's relative use, except in case of Brazil.

[2/] Considers interbank payments only.

Table 12: Payment cards – Average number of transactions per function in selected countries

Country	Cash withdrawal function[1/]			Debit function[2/]			Credit function[2/]		
	2001	2007	%	2001	2007	%	2001	2007	%
Germany	13.1	16.5	26.0	...	18.4		...	...	
Belgium	15.5	17.7	13.8	39.6	33.8	-14.5	...	25.8	
Brazil[3]	**14.4**	**13.2**	**-8.4**	**3.2**	**9.3**	**188.9**	**23.3**	**18.4**	**-21.3**
Spain	...	12.9		–	27.4		...	23.9	
United States	...	...		43.5	110.4	154.1	13.6	17.8	31.1
Finland	40.3	29.6	-26.7	84.2	159.1	89.0	...	21.6	
France	26.9	16.7	-38.0	...	64.4		...	15.4	
Netherlands	15.8	15.0	-4.8	36.6	63.4	73.4	...	12.4	
Italy	18.2	12.2	-33.2	17.4	24.9	43.1	15.7	14.6	-7.1
Japan	...	...		0	0.0	49.8	9.2	...	
Portugal	22.1	26.6	19.9	39.8	50.9	27.9	...	51.8	
United Kingdom	16.4	17.2	4.9	50.8	71.0	39.8	28.2	26.8	-4.7
Sweden	70.3	30.3	-56.8	67.7	124.8	84.4	9.9	24.6	148.0
Switzerland	0.6	9.5	1.484.6	37.2	44.3	19.3	30.0	30.1	0.5

Source: Brazilian financial institutions, acquirers, payment card companies, BIS/CPSS, and European Central Bank.
[1/] Includes withdrawals through cards issued in the country using domestic ATMs only.
[2/] Includes cards issued in the country and domestic transactions only.
[3/] Cards presenting debit function are considered as denominator of the withdrawals function.

Table 13: ATM network – Quantity of terminals per type of access (end of year)

Type of access	2003	2004	2005	2006	2007	2008	2003– 2008(%)
Total	**135,626**	**139,457**	**146,795**	**147,535**	**153,162**	**158,414**	**17**
Open access [1/]	33,857	30,747	50,382	59,187	68,268	68,594	103
Percentage of the total (%)	25	22	34	40	45	43	73
Fluctuation (%)	3	-9	64	17	15	0	
Restricted access [2/]	101,769	108,710	96,413	88,348	84,894	89,820	-12
Percentage of the total (%)	75	78	66	60	55	57	-24
Fluctuation (%)	5	7	-11	-8	-4	6	

Source: Brazilian financial institutions and TecBan.
[1/] ATM terminals enabling cards that were not issued by the bank (or group of banks) owning the network to make a transaction.
[2/] ATM terminals enabling only cards issued by the bank (or group of banks) owning the network to make a transaction.

Table 14: Distribution of ATM and POS terminals per Brazilian state

State	ATM		POS	
	Quantity	%	Quantity	%
Acre	361	0.2	6,239	0.2
Alagoas	1,257	0.8	33,688	1.1
Amapá	346	0.2	6,905	0.2
Amazonas	1,543	1.0	31,940	1.0
Bahia	7,343	4.6	186,642	5.9
Ceará	3,297	2.1	81,737	2.6
Distrito Federal	3,637	2.3	79,218	2.5
Espírito Santo	2,832	1.8	55,943	1.8
Goiás	4,321	2.7	82,102	2.6
Maranhão	1,978	1.2	37,403	1.2
Mato Grosso	1,994	1.3	41,489	1.3
Mato Grosso do Sul	1,887	1.2	30,932	1.0
Minas Gerais	15,770	10.0	263,299	8.3
Pará	2,701	1.7	49,163	1.5
Paraíba	1,793	1.1	42,245	1.3
Paraná	9,722	6.1	198,893	6.3
Pernambuco	4,380	2.8	116,291	3.7
Piauí	1,105	0.7	17,463	0.5
Rio de Janeiro	16,877	10.7	357,138	11.2
Rio Grande do Norte	1,680	1.1	39,955	1.3
Rio Grande do Sul	11,885	7.5	190,990	6,0
Rondônia	790	0.5	15,846	0.5
Roraima	229	0.1	5,827	0.2
Santa Catarina	5,514	3.5	117,427	3.7
São Paulo	53,126	33.5	1,059,615	33.4
Sergipe	1,201	0.8	17,487	0.6
Tocantins	845	0.5	11,023	0.3
Total	158,414	100.0	3,176,900	100.0

Source: Brazilian financial institutions and acquirers.

Table 15: ATM network - Volume of transactions

Item	2003	2004	2005	2006	2007	2008	2003–2008(%)
Number of transactions (million)	5,672	6,192	6,782	7,342	7,553	7,954	40
Number of transactions per inhabitant	32	35	37	40	41	42	31
Number of transactions per terminal	41,824	44,400	46,203	49,762	49,314	50,210	20

Source: Brazilian financial institutions and TecBan.

Table 16: ATM network – Volume of transactions per type of access and function

Million

Type of access and function	2003	2004	2005	2006	2007	2008	2003–2008 (%)
Open access	**2,037**	**2,351**	**2,251**	**2,181**	**2,901**	**3,179**	56
Cash withdrawal	688	830	770	769	1,061	1,169	70
Balance and statement enquiry	727	844	783	747	1,061	1,147	58
Deposit	261	242	228	190	218	229	-12
Bill payment	100	101	107	125	160	175	75
Credit transfer	29	24	23	24	33	38	29
Other functions	233	311	339	327	368	421	80
Restricted access [1/]	**3,635**	**3,841**	**4,531**	**4,996**	**4,652**	**4,775**	31
Cash withdrawal	1,184	1,132	1,376	1,347	1,345	1,434	21
Balance and statement enquiry	1,511	1,710	2,000	2,349	1,992	2,071	37
Deposit	312	343	372	589	552	561	80
Bill payment	85	111	131	167	193	177	110
Credit transfer	67	76	82	87	84	97	46
Other functions	477	470	571	457	485	434	-9
Total	**5,672**	**6,192**	**6,782**	**7,342**	**7,553**	**7,954**	40
Cash withdrawal	1,872	1,961	2,146	2,116	2,406	2,603	39
Balance and statement enquiry	2,237	2,554	2,783	3,072	3,054	3,218	44
Deposit	573	585	600	780	770	790	38
Bill payment	184	212	238	421	354	352	91
Credit transfer	96	99	105	110	117	135	41
Other functions	710	781	910	841	853	855	20

Source: Brazilian financial institutions and TecBan.

[1/] Includes transactions for which the type of access was not informed.

Table 17: ATM network – Value of transactions

R$ billion

Transaction	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Total:	**728**	**917**	**1,001**	**1,039**	**1,268**	**1,522**	109
Cash withdrawal	266	327	386	387	498	565	112
Credit transfer	39	71	45	48	60	78	101
Bill payment	36	84	55	80	99	95	164
Deposit	368	415	487	503	580	677	84
Other financial functions	19	21	28	22	32	105	465

Source: Brazilian financial institutions and TecBan.

Table 18: ATM network – Transactions carried out through open access terminals

Transaction	2006				2007				2008			
	Non-shared[1/]		Shared[2/]		Non-shared[1/]		Shared[2/]		Non-shared[1/]		Shared[2/]	
	Quantity (thousand)	%	Quantity (thousand)	%	Quantity (thousand)	%	Quantity (thousand)	%	Quantity (thousand)	%	Quantity (thousand)	%
Total:	**1,982,935**	90.9	**198,218**	**8.7**	**2,518,578**	**86.8**	**382,763**	**13.2**	**2,861,540**	**90.0**	**317,292**	**10.0**
Cash withdrawal	649,633	84.5	119,500	15.5	830,110	78.3	230,408	21.7	958,515	82.0	210,782	18.0
Credit transfer	23,340	97.9	510	2.1	31,513	96.4	1,175	3.6	37,571	99.2	302	0.8
Bill payment	120,520	96.8	4,010	3.2	154,290	96.3	5,990	3.7	173,437	99.2	1,427	0.8
Deposit	189,095	99.4	1,216	0.6	197,788	90.8	20,125	9.2	226,478	99.0	2,361	1.0
Balance and statement enquiry	677,077	90.7	69,725	9.3	938,027	88.4	123,426	11.6	1,045,362	91.2	101,493	8.8
Other functions	323,270	99.0	3,257	1.0	366,849	99.6	1,639	0.4	420,177	99.8	927	0.2

Source: Brazilian financial institutions.

1/ Transactions carried out through cards issued by the ATM network owner.

2/ Transactions carried out through cards not issued by the ATM network owner.

Table 19: ATM network – Number of terminals, volume of transactions and average value per transaction in selected countries

	Number of terminals per million inhabitants			Number of transactions per inhabitant [1/]			Average value per transaction (USD) [2/]		
	2001	2007	%	2001	2007	%	2001	2007	%
Germany	603	831	37.9	20.0	23.5	17.6	141.6	217.7	53.8
Belgium	1,108	1,448	30.7	21.5	28.9	34.3	90.8	150.8	66.1
Brazil	**646**	**832**	**28.7**	**9.0**	**13.1**	**44.9**	**55.0**	**106.3**	**93.2**
Spain	1,154	1,350	17.0	17.0	21.6	27.2	...	162.9	
United States	1,136	1,375	21.0	47.7	...		...	...	
Finland	835	609	-27.1	48.0	35.9	-25.2	62.5	127.1	103.2
France	604	821	35.9	19.1	24.1	26.1	54.6	95.4	74.7
Netherlands	445	521	17.0	30.5	28.7	-5.9	81.5	161.0	97.4
Italy	643	817	27.1	9.9	8.3	-16.1	114.3	254.6	122.8
Japan	1,121	1,083	-3.4	3.1	3.3	6.1	526.7	445.1	-15.5
Portugal	1,022	1,495	46.2	35.0	39.4	12.5	41.7	97.4	133.5
United Kingdom	620	1,040	67.7	36.8	46.5	26.2	...	...	
Sweden	289	307	6.4	37.7	32.4	-14.1	81.3	123.6	52.1
Switzerland	692	778	12.4	14.8	14.1	-4.5	149.0	183.2	22.9

Source: Brazilian financial institutions, TecBan, BIS/CPSS, and European Central Bank.

[2] Brazil: cash withdrawal transactions only; other countries: includes cash withdrawal and loading transactions.

[2/] Value converted at annual average exchange rate.

Note: Considers ATM terminals located inside the country and cards issued by domestic entities only.

Table 20: ATM network – Volume of transactions per terminal in selected countries

Country	Number of terminals per million inhabitants			Number of transactions per terminal [1/]		
	2001	2007	%	2001	2007	%
Germany	603	831	37.9	33,167	28,340	-14.6
Belgium	1,108	1,448	30.7	19,390	20,067	3.5
Brazil	**646**	**832**	**28.7**	**13,950**	**15,706**	**12.6**
Spain	1,154	1,350	17.0	14,567	16,014	9.9
United States	1,136	1,375	21.0	41,962	...	
Finland	835	609	-27.1	57,485	59,006	2.6
France	604	821	35.9	31,471	29,334	-6.8
Netherlands	445	521	17.0	68,539	55,354	-19.2
Italy	643	817	27.1	15,669	10,176	-35.1
Japan	1,121	1,083	-3.4	2,765	3,036	9.8
Portugal	1,022	1,495	46.2	34,247	26,350	-23.1
United Kingdom	620	1,040	67.7	59,192	44,700	-24.5
Sweden	289	307	6.4	130,450	106,429	-18.4
Switzerland	692	778	12.4	21,387	18,208	-14.9

Source: Brazilian financial institutions, TecBan, BIS/CPSS, and European Central Bank.
[1/] Brazil: cash withdrawal transactions only; other countries: includes cash withdrawal and loading transactions.
Note: Considers ATM terminals located inside the country and cards issued by domestic entities only.

Table 21: POS network – Number of terminals (end of year)

Item	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Credit card	827,697	1,078,763	1,342,183	1,660,825	2,424,646	3,104,662	275
Fluctuation (%)	42	30	24	24	46	28	
Number of terminals per million inhabitants	4,680	6,069	7,287	8,892	13,054	16,856	260
Debit card	824,238	1,106,011	1,277,827	1,556,165	2,044,759	2,601,387	216
Fluctuation (%)	38	34	16	22	31	27	
Number of terminals per million inhabitants	4,660	6,223	6,938	8,332	11,009	14,124	203

Source: acquirers.

Table 22: POS network - Debit card transactions in selected countries

Country	Number of terminals per million inhabitants			Number of transactions per inhabitant			Average value per transaction (USD) [1/]		
	2001	2007	%	2001	2007	%	2001	2007	%
Germany	5,291	6,881	30.1	16.2	21.1	30.2	62.4	83.80	34.4
Belgium	14,047	11,425	-18.7	42.0	71.6	70.4	44.8	69.00	53.9
Brazil	**2,589**	**11,102**	**328.8**	**1.9**	**9.2**	**387.8**	**18.4**	**25.10**	**36.1**
Spain	20,949	30,124	43.8	...	19.2		...	67.72	
United States	10,864	17,039	56.8	36.9	100.1	171.4	36.7	39.10	6.5
Finland	13,878	25,529	83.9	56.5	17.0	-69.9	37.3	47.17	26.6
France	14,795	19,546	32.1	...	...		...	...	
Netherlands	10,333	18,669	80.7	59.7	97.9	64.1	41.5	59.20	42.7
Italy	13,509	20,710	53.3	7.6	14.0	85.1	66.9	127.00	89.8
Japan	7,755	13,169	69.8	0.0	0.1	105.3	403.2	565.60	40.3
Portugal	10,063	19,077	89.6	51.3	75.6	47.4	25.1	49.38	96.5
United Kingdom	13,060	17,232	31.9	46.6	83.4	78.8	51.7	91.30	76.6
Sweden	9,917	20,473	106.4	36.6	125.5	242.6	55.2	64.10	16.1
Switzerland	10,139	16,646	64.2	27.5	40.6	47.4	100.4	134.80	34.2

Source: Brazilian financial institutions, acquirers, TecBan, BIS/CPSS, and European Central Bank.
[1] Value converted at annual average exchange rate.

Table 23: POS network - Credit card transactions in selected countries

Country	Number of terminals per million inhabitant			Number of transactions per inhabitant			Average value per transaction (USD) [1/]		
	2001	2007	%	2001	2007	%	2001	2007	%
Germany	5,291	6,881	30.1	...	0.1		...	...	
Belgium	14,047	11,425	-18.7	...	97.3		...	111.02	
Brazil	**2,555**	**13,164**	415.2	**4.8**	**11.7**	**145.1**	**28.45**	**43.14**	**51.6**
Spain	20,949	30,124	43.8	...	23.1		...	79.89	
United States	10,864	17,039	56.8	58.7	78.2	33.2	77.21	89.10	15.4
Finland	13,878	25,529	83.9	...	17.0		...	93.23	
France	14,795	19,546	32.1	...	7.9		...	...	
Netherlands	10,333	18,669	80.7	...	74.5		...	168.93	
Italy	13,509	20,710	53.3	5.5	8.6	56.7	83.97	142.20	69.3
Japan	7,755	13,169	69.8	17.8	...		84.81	...	
Portugal	10,063	19,077	89.6	...	35.8		...	60.85	
United Kingdom	13,060	17,232	31.9	24.6	29.6	20.1	78.64	125.60	59.7
Sweden	9,917	20,473	106.4	2.6	13.3	414.7	95.65	89.70	-6.2
Switzerland	10,139	16,646	64.2	13.5	17.0	26.2	113.94	166.60	46.2

Source: Brazilian financial institutions, TecBan, BIS/CPSS, and European Central Bank.
[1/] Value converted at annual average exchange rate.

Table 24: Remote access – Volume of transactions

Million

Transaction	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Total	**2,812**	**3,311**	**3,766**	**5,095**	**6,401**	**7,274**	**159**
Credit transfer [1/]	215	339	434	464	530	601	180
Bill payment [2/]	165	246	566	405	540	655	297
Balance and statement enquiry	1,268	1,475	1,529	1,953	2,346	2,567	102
Other:	1,164	1,250	1,236	2,274	2,984	3,451	196
– Financial	622	727	213	398	621	737	18
– Non-financial	542	523	1,023	1,876	2,363	2,714	401

Source: Brazilian financial institutions.
[1/] TED, DOC, TEC and intrabank funds transfers.
[2/] Taxes, contributions, utility bills etc.
Note: includes intrabank and interbank transactions.

Table 25: Remote access – Value of transactions

Transaction	2003	2004	2005	2006	2007	2008	2003– 2008 (%)
Total value (R$ billion)	**1,454**	**1,881**	**3,176**	**3,064**	**5,213**	**6,213**	**327**
Credit transfer [1/]	776	1,099	1,415	1,605	2,535	3,425	342
Bill payment [2/]	668	737	818	595	826	1,082	62
Other	10	45	943	864	1,852	1,706	16,555
Average value per transaction (R$)							
Credit transfer [1/]	3,613	3,241	3,258	3,462	4,778	5,700	58
Bill payment [2/]	4,046	2,994	1,444	1,468	1,530	1,651	-59
Other	2,848	2,197	2,130	1,773	2,037	2,221	-22

Source: Brazilian financial institutions.
[1/] TED, DOC, TEC and intrabank funds transfers.
[2/] Taxes, contributions, utility bills etc.
Note: includes intrabank and interbank transactions.

Table 26: Remote access – Number and value of transaction per user

Item	2003	2004	2005	2006	2007	2008	2003-2008 (%)
Number of transactions per user	122	143	127	164	200	235	93
Value of transactions per user	60,530	72,121	107,227	98,433	162,804	206,882	242

Source: Brazilian financial institutions.

Table 28: ATM network - Use of shared terminals

Item	Relative participation (%)				
	2004	2005	2006	2007	2008
Open access terminal	22	34	40	45	43
Restricted access terminal	78	66	60	55	57
Shared transactions	2	7	9	13	10
Non-shared transactions	98	93	91	87	90

Source: Brazilian financial institutions.

Table 29: Access channel to banking services – Number of transactions

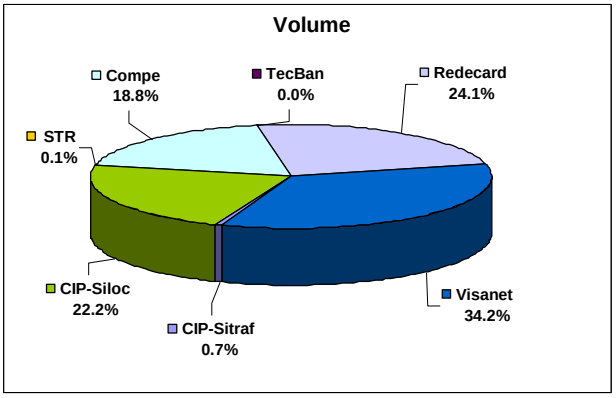
million

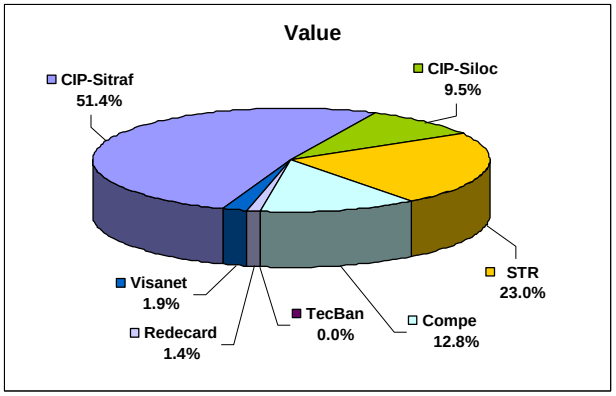
Access channel	2006	2007	2008
ATM	7,158	7,546	7,954
Remote access (internet, home and office banking)	5,107	6,410	7,274
Branches	5,427	5,587	5,774
Banking correspondents	1,806	2,166	2,310
Call center	1,246	1,606	1,596
Mobile phone	48	37	65

Source: Brazilian financial institutions.

GRAPHS

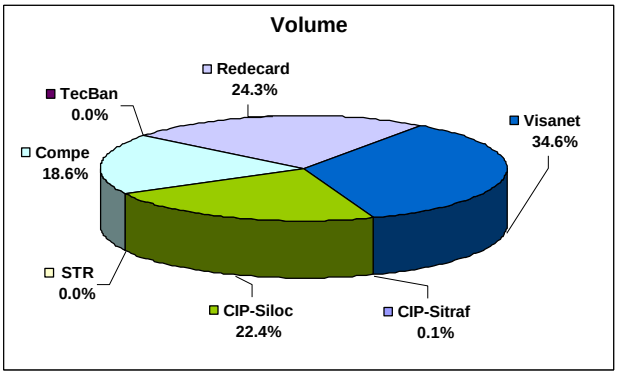
Graph 1: Clearing and settlement systems – Relative participation

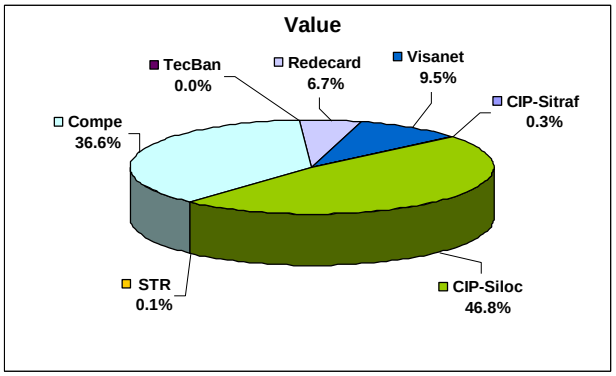




Source: Banco Central do Brasil, and clearing and settlement system operators.
Note: In case of STR and Cip-Sitraf, client transactions only.

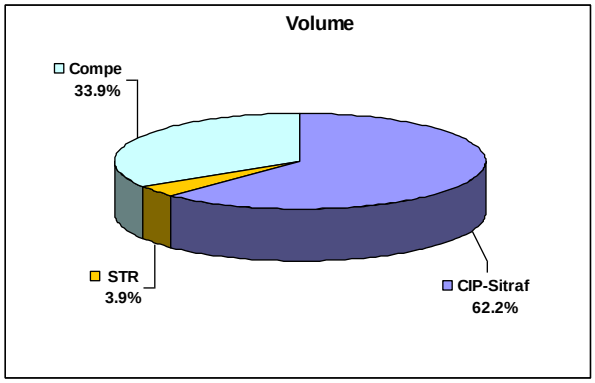
Graph 2: Clearing and settlement systems – Percentage of transactions with value lower than R$ 5 thousand

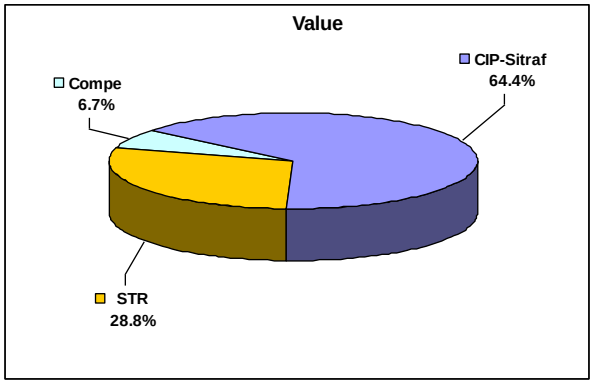




Source: Banco Central do Brasil, and clearing and settlement system operators.
Note: In case of STR and Cip-Sitraf, client transactions only.

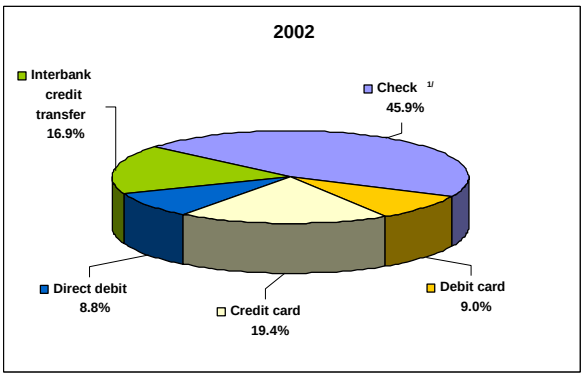
Graph 3: Clearing and settlement systems – Percentage of transactions with value equal or larger than R$ 5 thousand

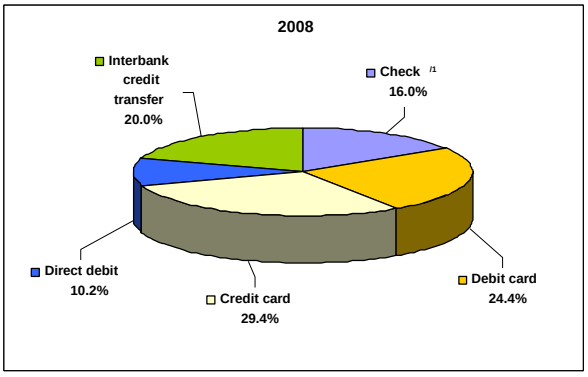




Source: Banco Central do Brasil, and clearing and settlement system operators.
Note: In case of STR and Cip-Sitraf, client transactions only.

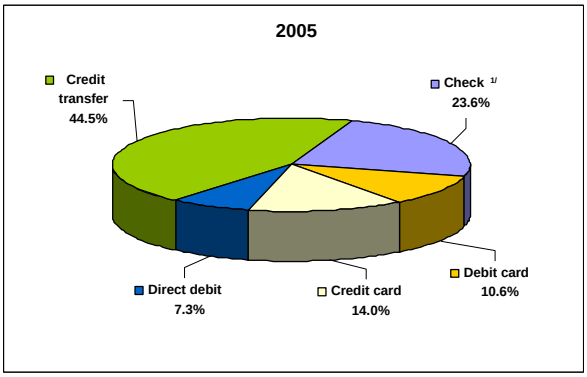
Graph 4: Relative use of payment instruments - Volume

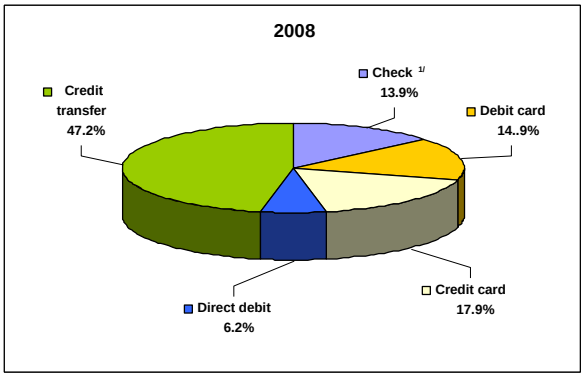




Source: Banco Central do Brasil, and clearing and settlement system operators.
1/Excludes “on us” checks.

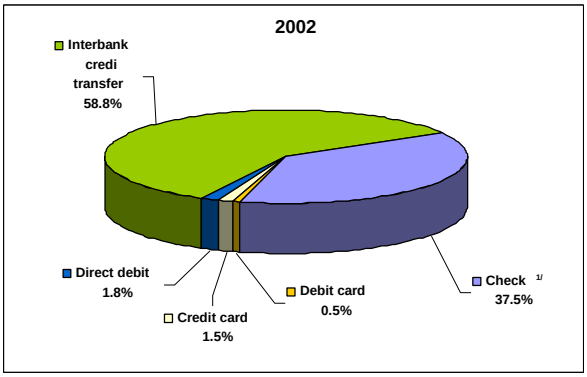
Graph 4a: Relative use of payment instruments – Volume (including intrabank transactions)

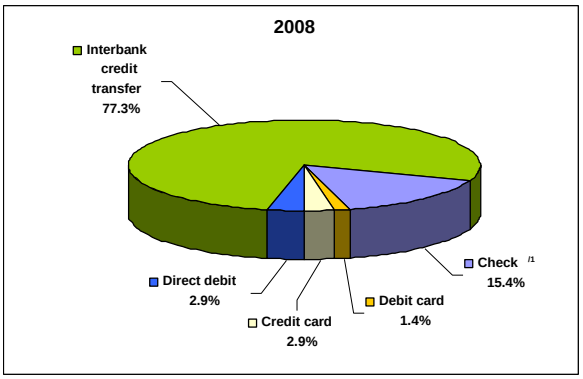




Source: Banco Central do Brasil, and clearing and settlement system operators.
1/ Includes "on us" checks.

Graph 5: Relative use of payment instruments - Value

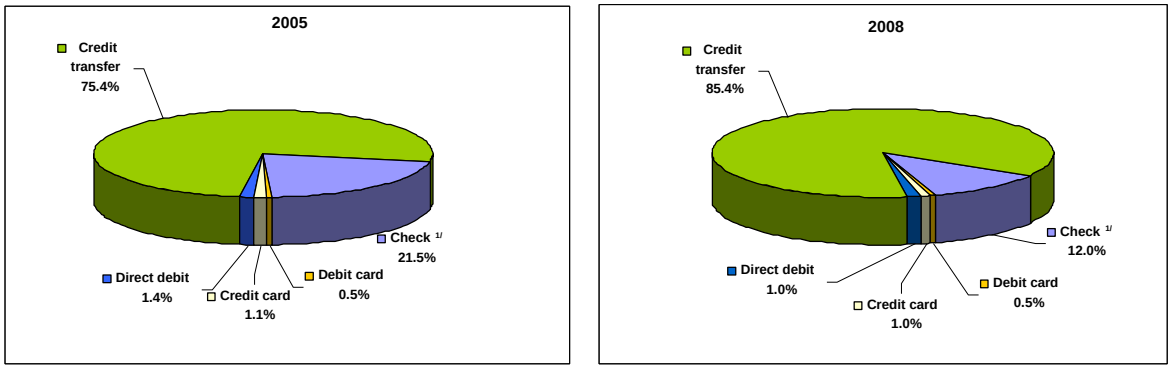




Source: Banco Central do Brasil, and clearing and settlement system operators.
1/Excludes “on us” checks.

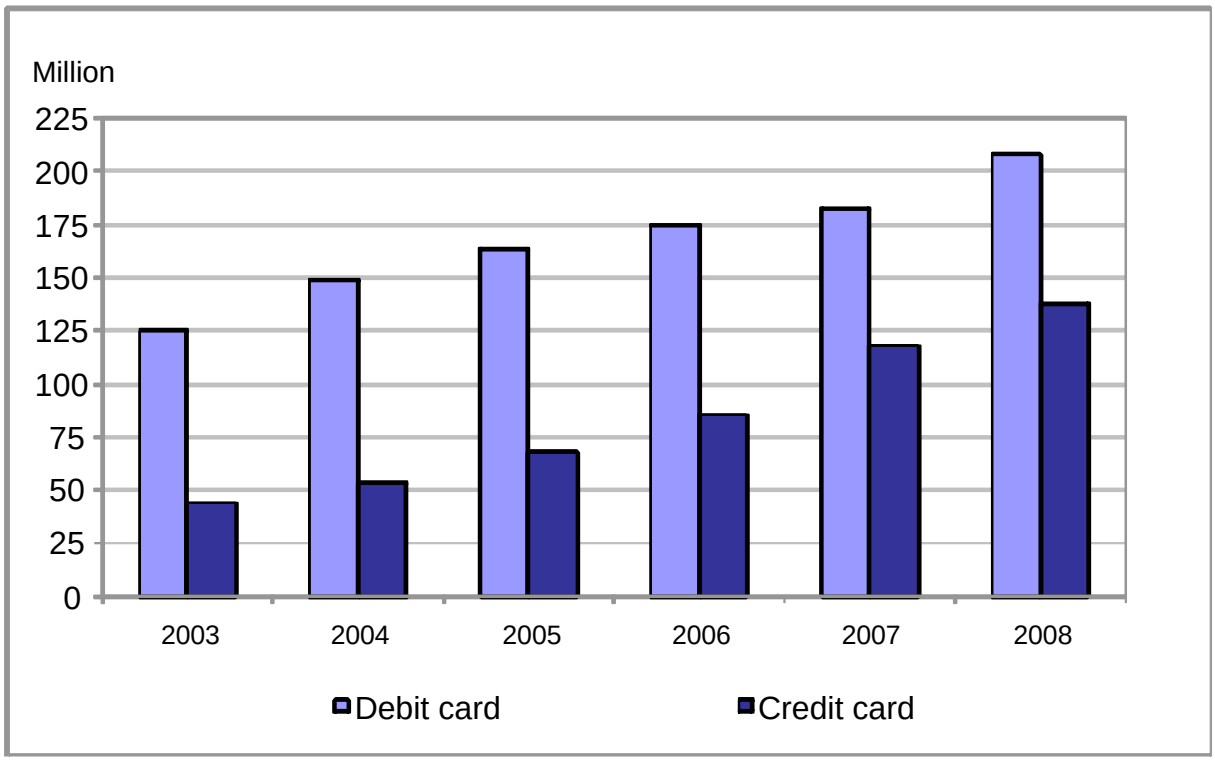
Graph 5a: Relative use of payment instruments – Value (including intrabank transactions)

Source: Banco Central do Brasil, and clearing and settlement system operators.



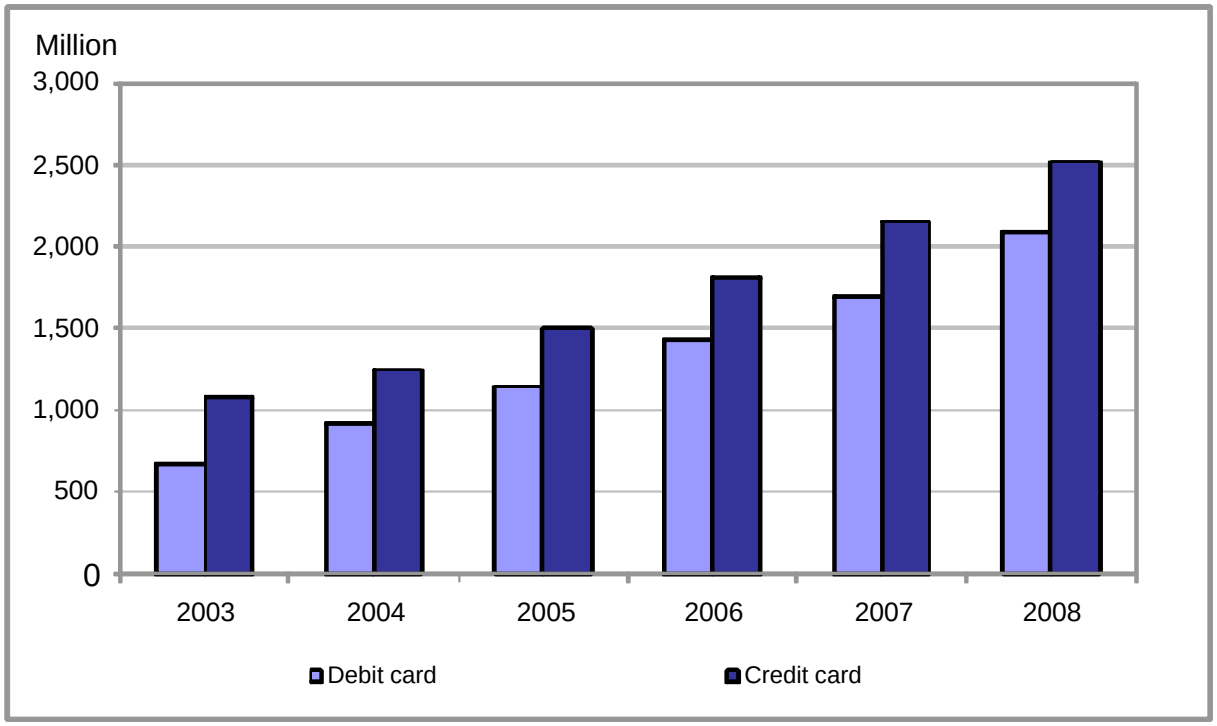
1/ Includes "on us" checks.

Graph 6: Evolution in quantity of payment cards



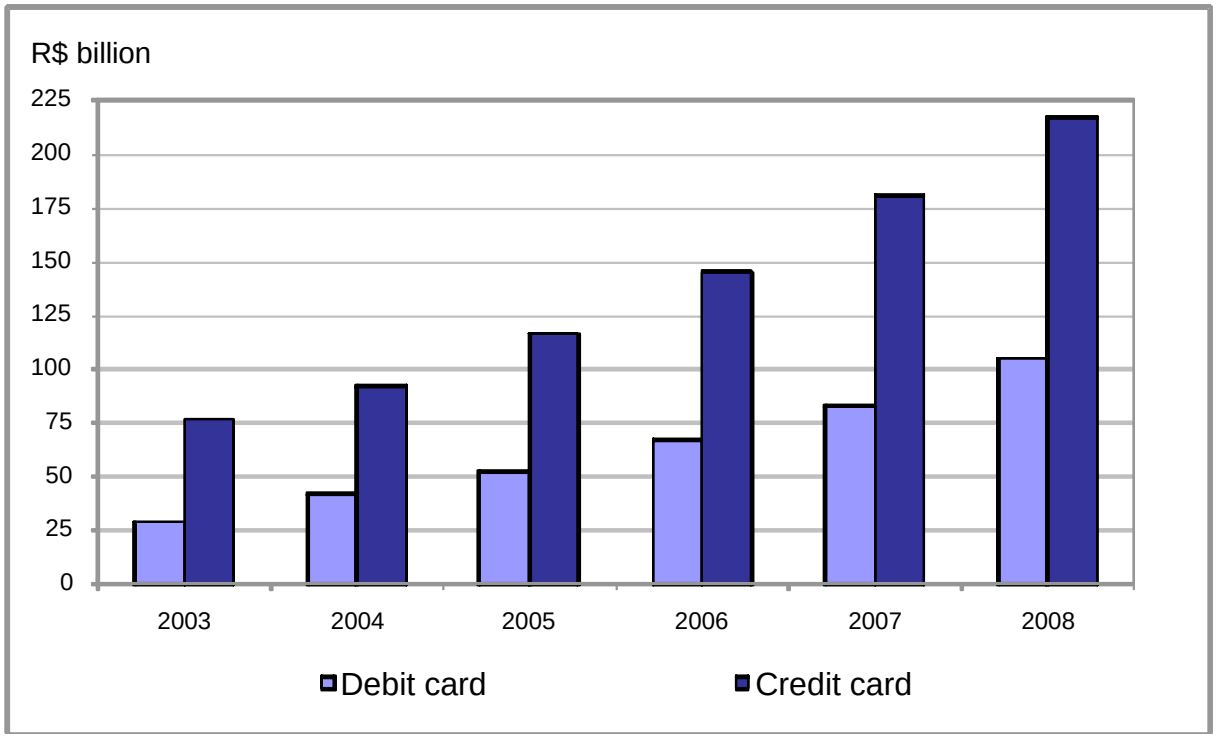
Source: Brazilian financial institutions issuing payment cards.

Graph 7: Payment cards – Evolution in volume of transactions



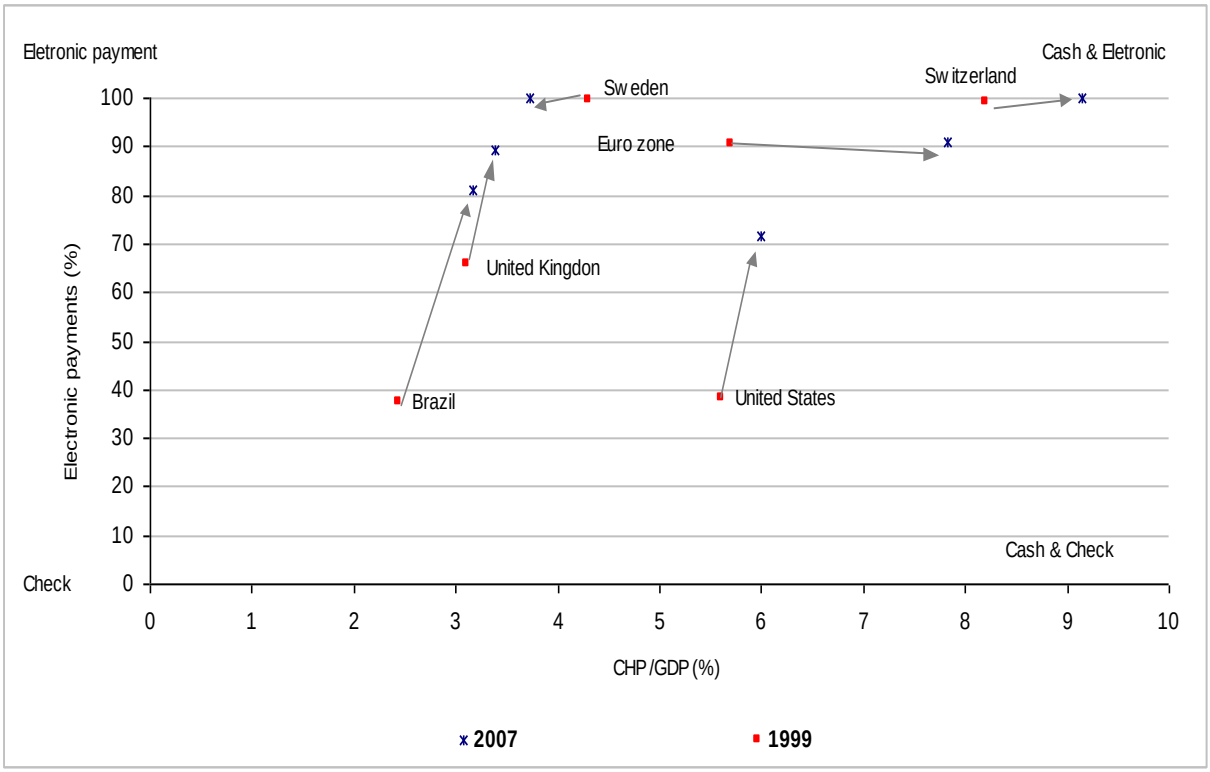
Source: Financial institutions issuing payment cards.

Graph 8: Payment cards – Evolution in value of transactions



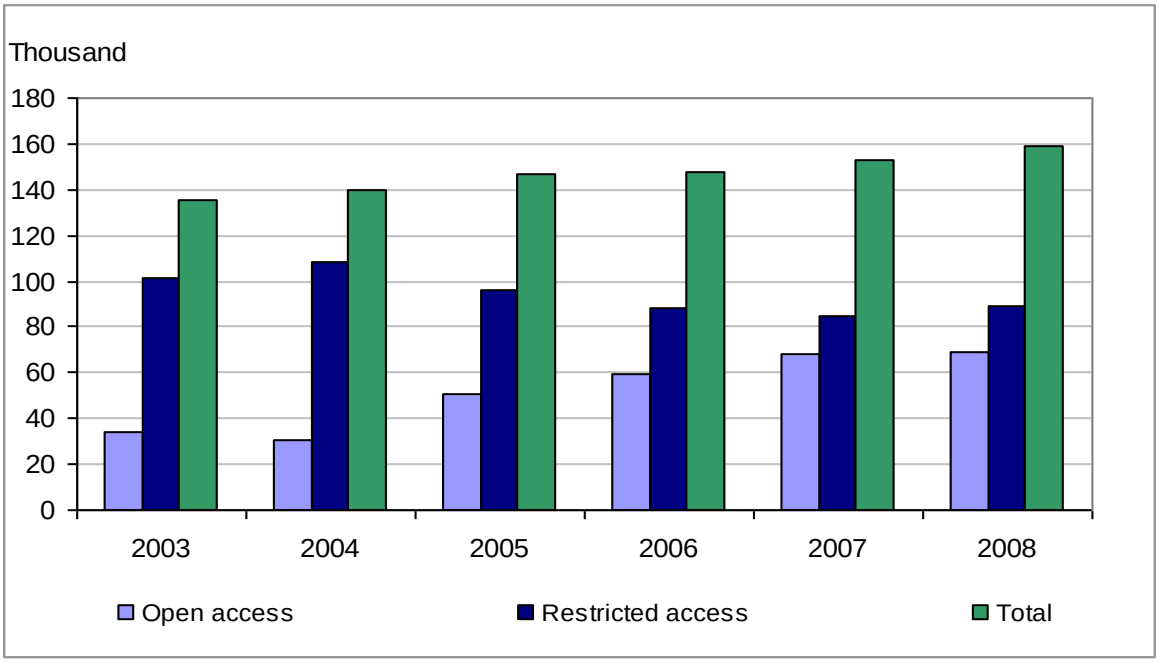
Source: Brazilian financial institutions issuing payment cards.

Graph 9: Use of payment instruments in selected countries (2007)



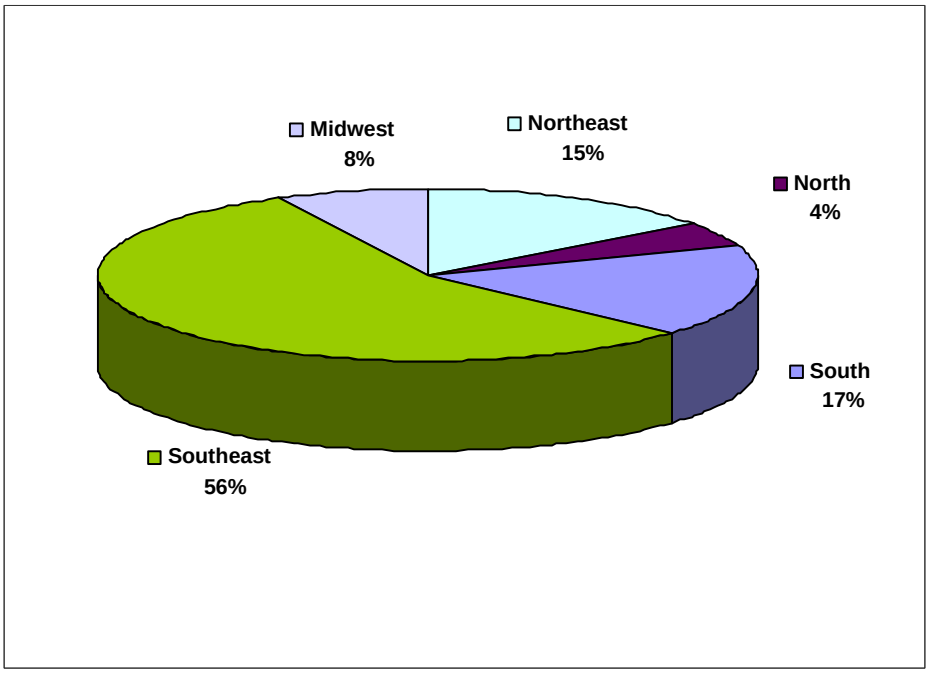
Source: Brazilian financial institutions, acquirers, payment card companies, BIS/CPSS and European Central Bank.

Graph 10: ATM network – Evolution in number of terminals



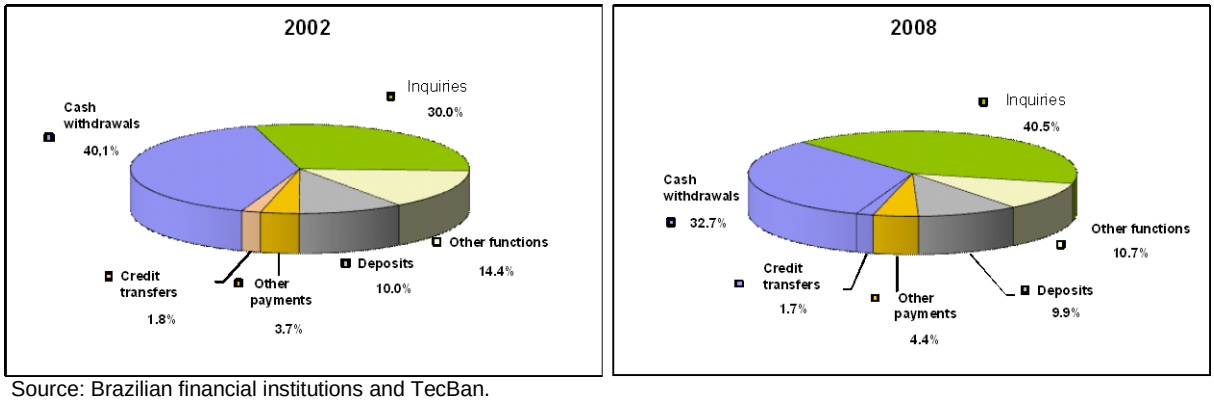
Source: Brazilian financial institutions and TecBan.

Graph 11: ATM terminals – Geographical distribution



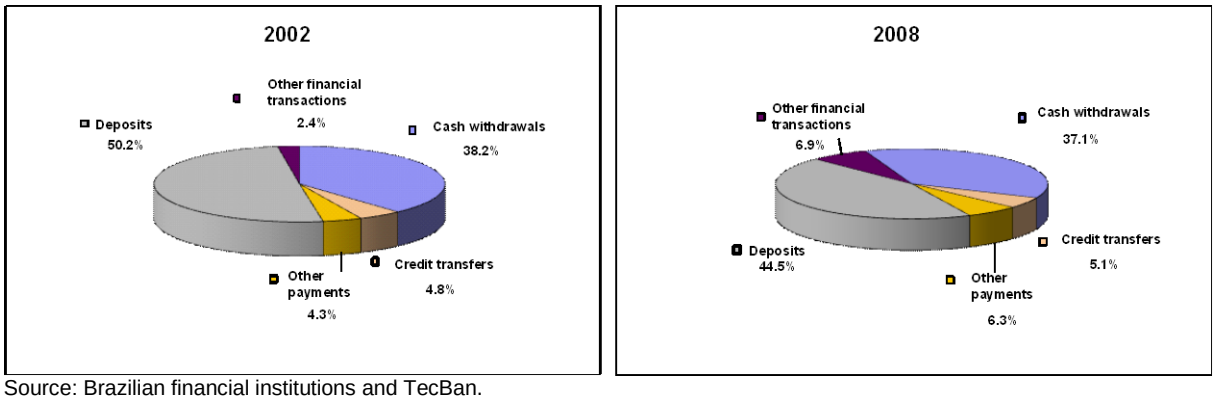
Source: Brazilian financial institutions and TecBan.

Graph 12: ATM network – Relative use per type of transaction – Volume



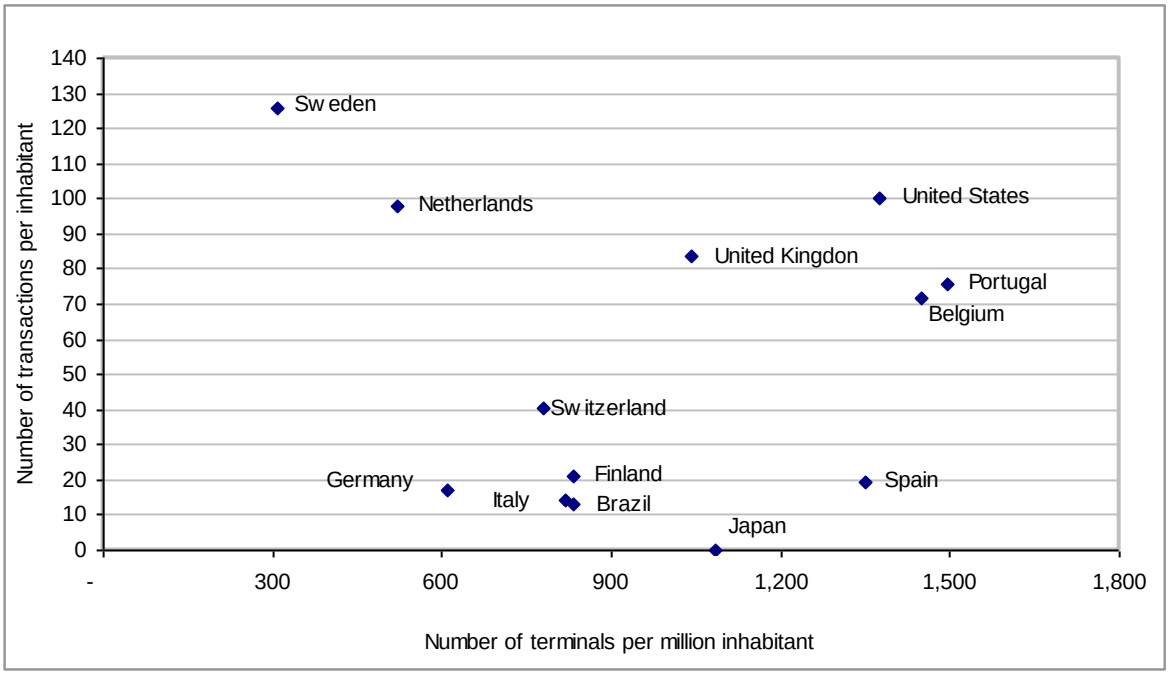
Source: Brazilian financial institutions and TecBan.

Graph 13: ATM network – Relative use per type of transaction – Value



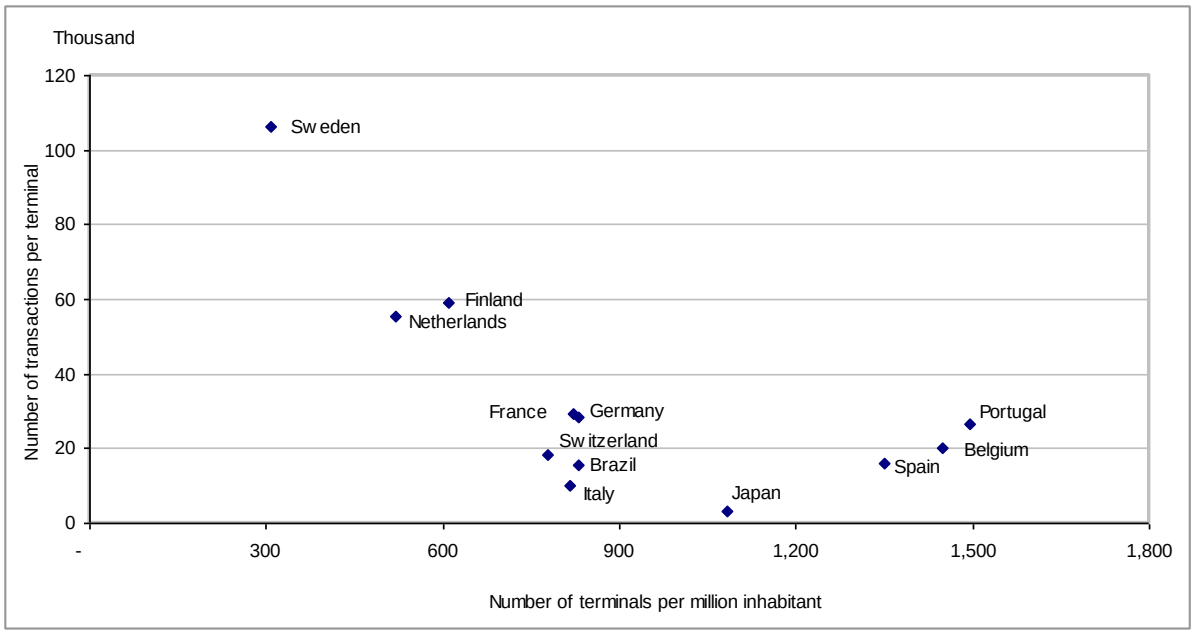
Source: Brazilian financial institutions and TecBan.

Graph 14: ATM network – Number of transactions per inhabitant in selected countries (2007)



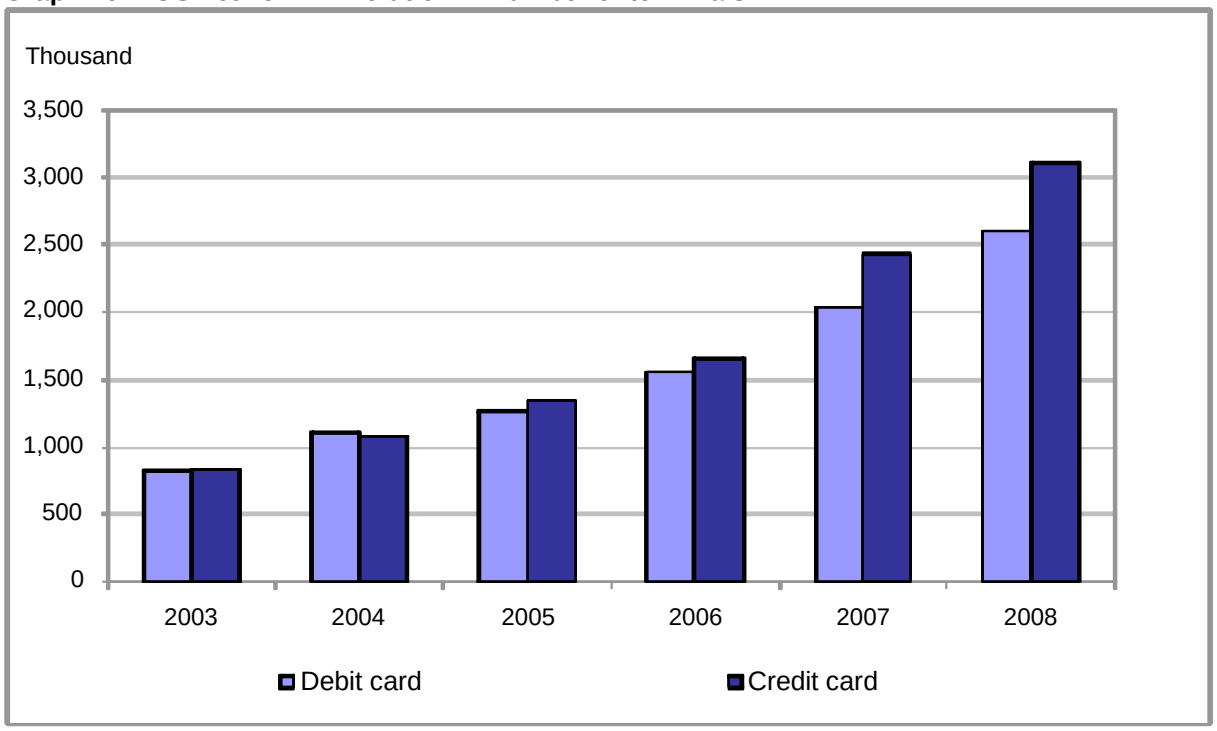
Source: Brazilian financial institutions, BIS/CPSS and European Central Bank.
For Brazil, cash withdrawal transactions only. For other countries, includes reloading transactions as well.

Graph 15: ATM network – Number of transactions per terminal in selected countries (2007)



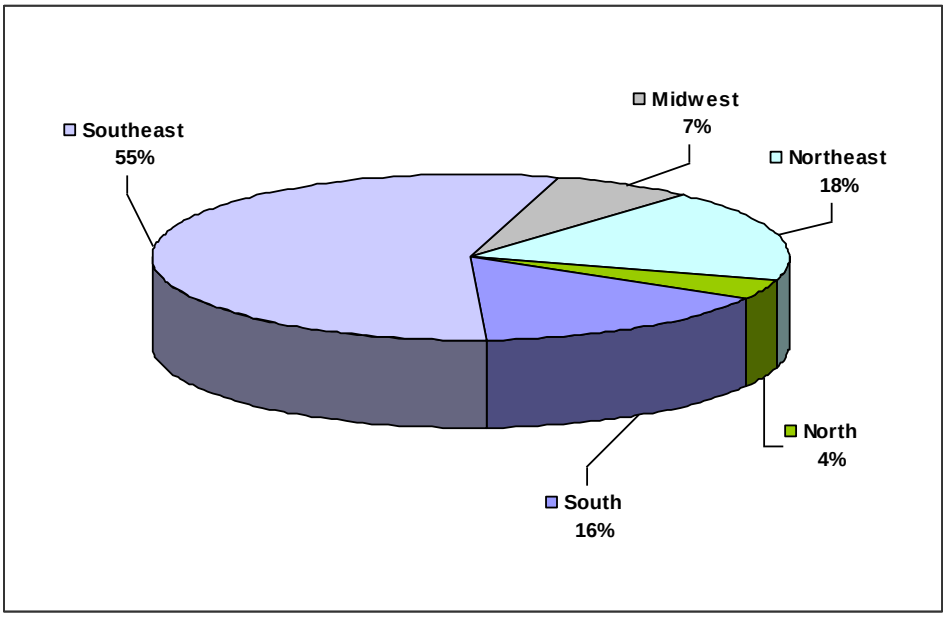
Source: Brazilian financial institutions, BIS/CPSS and European Central Bank.
For Brazil, cash withdrawal transactions only. For other countries, includes reloading transactions as well.

Graph 16: POS network – Evolution in number of terminals



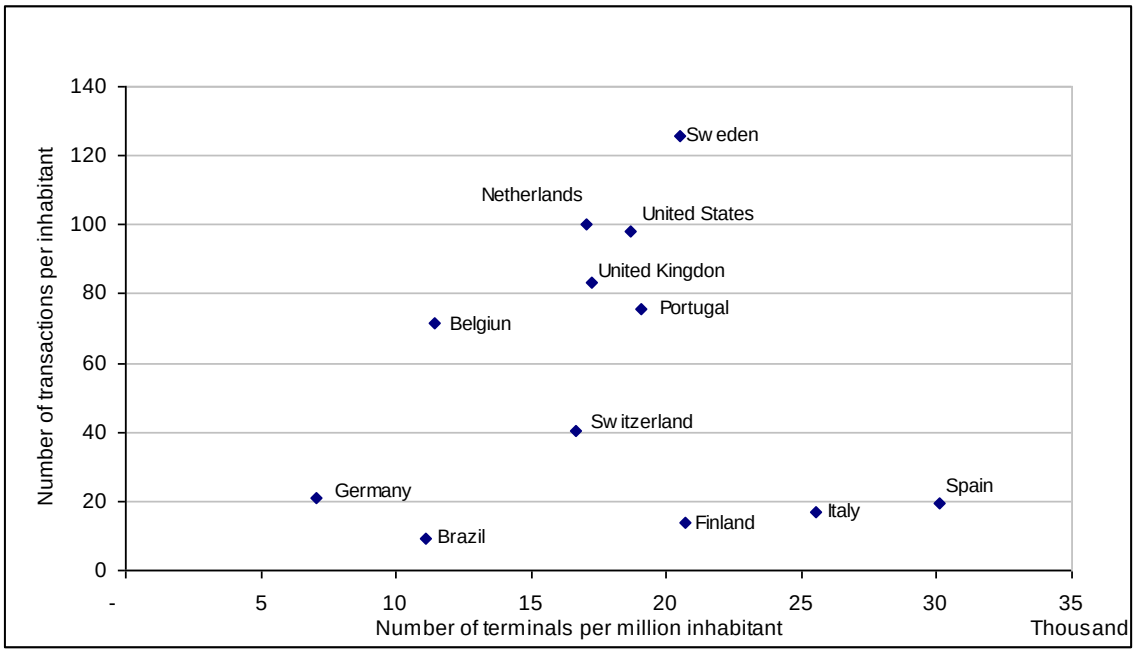
Source: Acquirers.

Graph 17: POS network – Geographical distribution



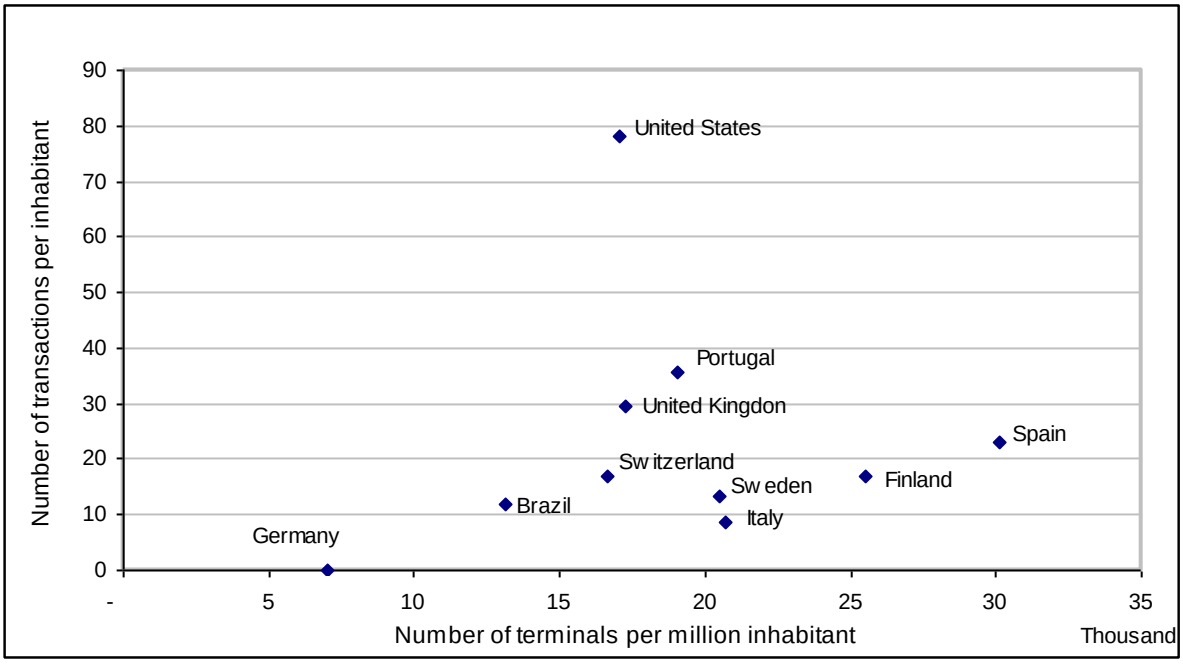
Source: Acquirers.

Graph 18: POS network – Debit card transactions in selected countries (2007)



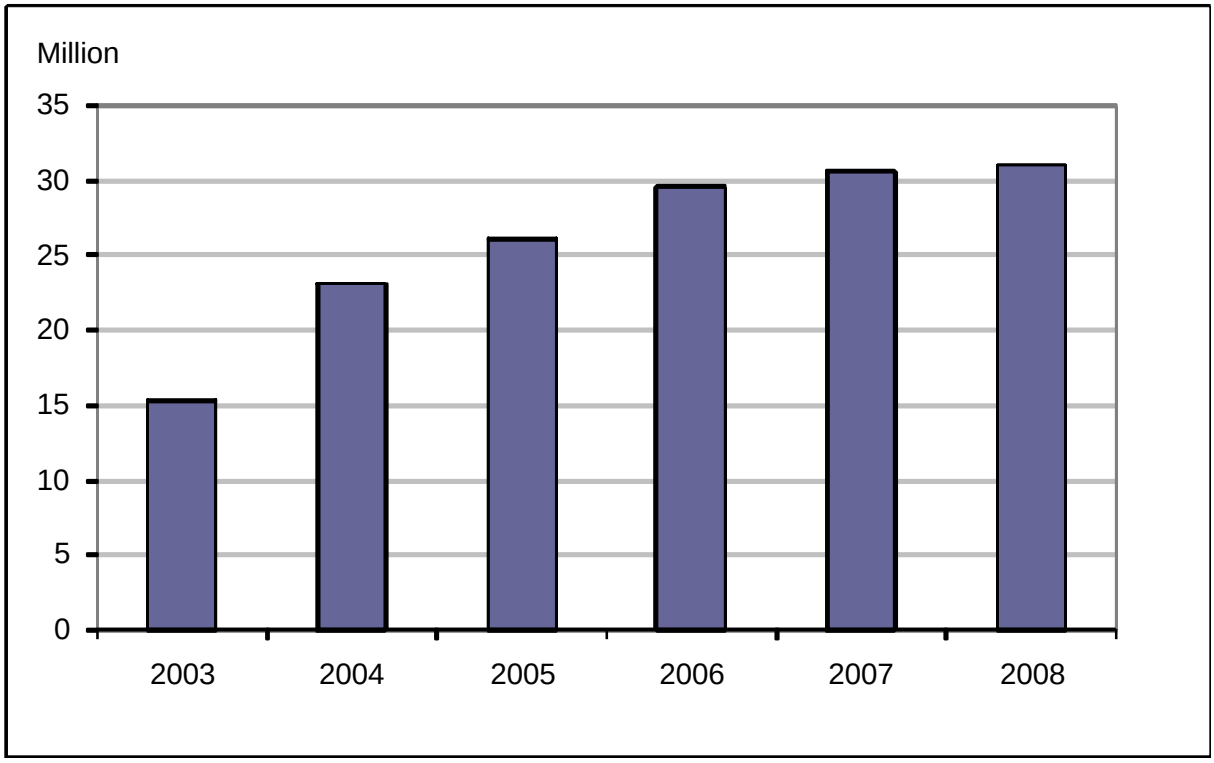
Source: Brazilian financial institutions, BIS/CPSS and European Central Bank.

Graph 19: POS network – Credit card transactions in selected countries (2007)



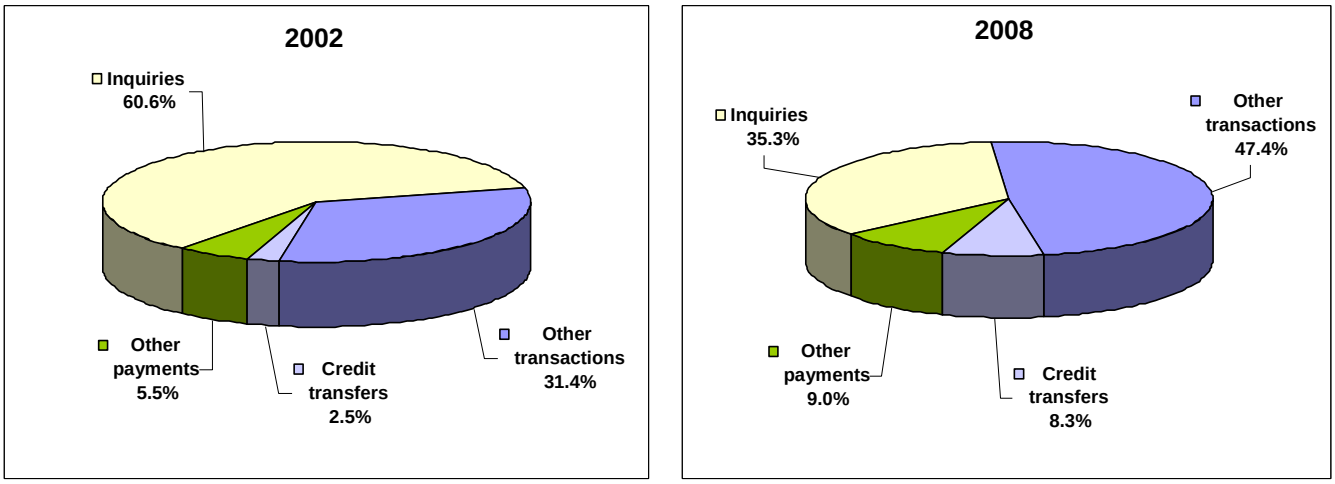
Source: Brazilian financial institutions, BIS/CPSS and European Central Bank.

Graph 20: Remote access – Number of users



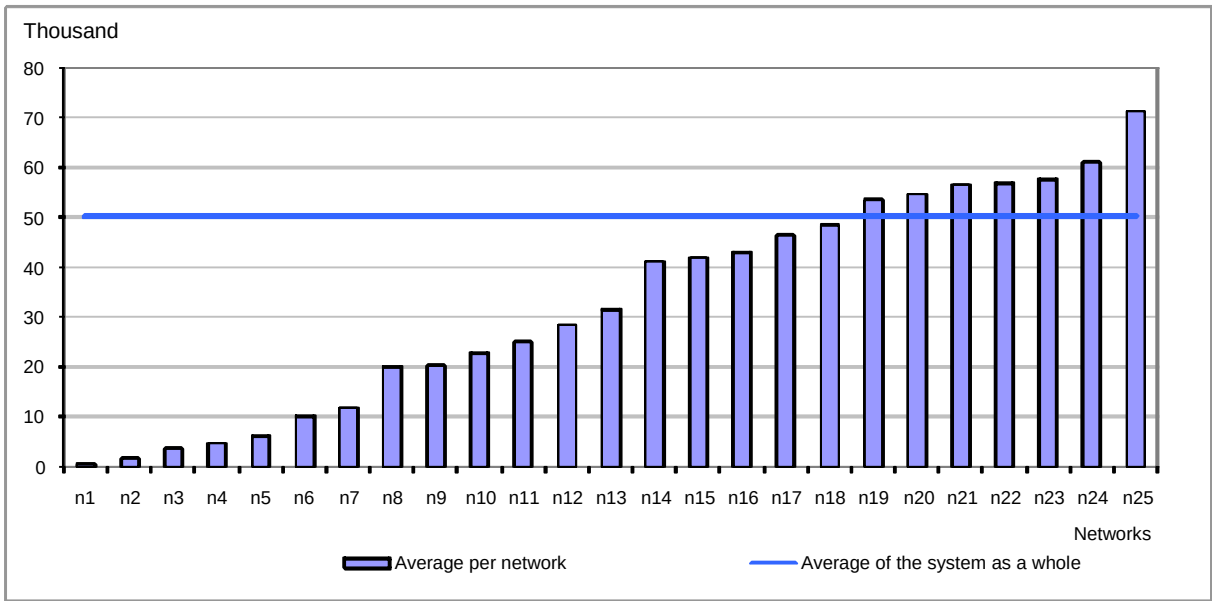
Source: Brazilian financial institutions.

Graph 21: Remote access – Relative use per type of transaction – Volume



Source: Brazilian financial institutions.

Graph 22: ATM network – Average number of transactions per terminal



Source: Brazilian financial institutions and TecBan.