

Research

Paulo Gomes, CFA
Vice President, Latin America
Mexico City Office
Tel +52 55 5093 2773
paulo.gomes@prudential.com

Gretchen Skedsvold
Research Associate
Rio de Janeiro Office
Tel +55 21 2217 3405
gretchen.skedsvold@prudential.com

Prudential Real Estate Investors
8 Campus Drive
Parsippany, NJ 07054
USA

Tel 973.683.1745
Fax 973.734.1319
Web www.prudential.com/prei
E-mail prei.reports@prudential.com

Executive Summary

- Brazil's \$796 billion economy is the world's 11th largest and accounts for over 50% of South America's total GDP. Brazil's GDP may more than double by 2025, making it the world's eighth largest economy.
- Brazil is highly urbanized; the number of Brazilians living in major cities rose from 56% in 1970 to 80% in 2000. After decades of growth, primarily in the biggest cities, this trend has now shifted to second-tier cities.
- Most office properties in Brazil are developed speculatively; pre-leases are relatively rare. Industrial real estate has begun to emerge as an investment class only recently. A few shopping mall groups operate nationally, backed by a growing number of foreign capital sources, such as U.S. or European REITs, pension funds or property firms. Brazil's institutional residential market consists of for-sale units. The rental market does not exist on an institutional level.
- As a way of gaining exposure to Brazil's real estate market, foreign hedge and emerging-market funds have recently taken positions in listed companies. Private equity funds have invested directly in real estate operating companies, while opportunity funds specializing in real estate have invested directly in development with local partners.
- A lack of transparency, a complex fiscal structure and a very large informal sector have all been major obstacles to economic development in Brazil.
- One limiting characteristic of Brazil's real estate markets is the scarcity of fairly priced, long-term financing.
- Investors must be aware of the risks associated with an emerging market. In Brazil, these risks include negative developments in the economic and political environment, as well as risks directly related to real estate activity, such as limited liquidity, lack of financing and real estate legislation that tends to favor tenants.

Introduction

Due to its size and economic potential, Brazil has long been known as the country of the future. However, a lack of transparency, a complex fiscal structure and a very large informal sector have all been major obstacles to economic development. Bouts of economic uncertainty led to a focus on the near term, and the future was left to later generations. Pressures from a growing population caused cities to evolve in a disorganized manner. Regarding real estate, fragmented property ownership created a shortsighted approach to building management, with poor maintenance being one of the most serious consequences. Thus, as existing stock becomes obsolete, entire parts of cities have deteriorated.

Despite these challenges, major changes to the way real estate is financed, developed and owned in Brazil are likely. The dearth of financing for the private sector has meant that capital outlays depend on equity from business activities or new investors. The capital-intensive real estate industry, in particular, had to adapt to the lack of debt financing. Developers traditionally relied on preconstruction sales or their own equity to finance projects. More recently, Brazilian real estate firms have started to tap sources of foreign capital and local capital markets to further their expansions, and the availability of debt capital is just now starting to re-emerge, as it did in Mexico and Chile, which also once faced similar debt-scarce environments.

As interest rates continue to trend down, buyers of property and real estate developers should benefit from greater access to financing. However, although interest rates are declining, permanent financing will remain scarce until real interest rates in Brazil fall below 10%. But portfolios being amassed now will likely encounter a much more favorable debt-financing environment in just a few years. Sources of equity capital are also growing as institutions (local and foreign) turn their attention to Brazil's real estate market.

Brazil's ever more stable economic environment is furthering real estate development. Developers have been supplying new office, retail, industrial and housing space of better quality, albeit in boom and bust cycles. But a focus on long-term positions in income-producing real estate portfolios remains absent.

An Overview of Brazil

Brazil is immense by almost any measure. It encompasses 3.3 million square miles and 184 million inhabitants (see **Exhibit 1**). Only Russia, Canada, China and the U.S. are bigger in terms of landmass, and only China, India, the U.S. and Indonesia have larger populations. Brazil is by far the largest and most populous country in South America, with nearly 50% of the continent's landmass and an equal portion of its inhabitants.

Exhibit 1: A Snapshot of Brazil

Population (Millions)	184
Growth Rate	1.5%
Urban Population (Millions)	155
Urbanization Rate	84.1%
Urban Population Growth	2.3%
Median Age	27.8 years
Life Expectancy at Birth	71.7 years
Literacy Rate	88.6%
Households (Millions)	53
Household Size (Persons)	3.45
Median HH Income (US\$)	4,940
GDP (US\$ Billion)	796
GDP (PPP, US\$ Billion)	1,565
Agriculture Share	8.0%
Industry and Construction	37.9%
Services	54.1%
GDP per Capita (US\$)	4,320
GDP per Capita (PPP, US\$)	8,500
Inflation Rate (2005)	5.7%

Sources: EIU; World Bank; Prudential Real Estate Investors

Brazil is highly urbanized; the number of Brazilians living in major cities rose from 56% in 1970 to 80% in 2000. After decades of growth, primarily in the biggest cities, this trend has now shifted to second-tier cities. Large parts of the country still remain sparsely developed, but growth is increasingly occurring in the interior.

Brazil's 26 states and the Federal District form five regions: North, Northeast, West-Central, Southeast and South (see Exhibit 2). The economically powerful Southeast forms just 10.9% of Brazil's territory but has the largest share of the country's population (63 million, or 39%). It contains Brazil's two leading metropolitan areas, Sao Paulo and Rio de Janeiro, which have populations of 18.3 million and 11.4 million, respectively. The region accounts for most of Brazil's industrial production (the state of Sao Paulo has half the country's industries) and also has the highest per capita GDP.

Exhibit 2: Map of Brazil



Source: Prudential Real Estate Investors

At \$4,320 per year, Brazil’s per capita GDP is one-tenth that of the U.S. Compared with other major Latin American economies, Brazil’s per capita GDP is average. Mexico and Chile’s per capita GDP is more than 60% higher than Brazil’s; per capita GDP in Colombia and Peru is almost 40% lower.

The gap between the lowest and highest income levels in Brazil is very wide (see **Exhibit 3**). The wealthiest 20% of households account for 62.1% of total consumption, while the poorest 20% constitute less than 3% of total consumption. This is similar to most of Brazil’s South American neighbors, but contrasts with the U.S. and Western Europe, where the wealthiest 20% account for 45% of consumption and the poorest 20% constitute closer to 6%.

Exhibit 3: Average Household Income Levels (Metro Areas)

Income Level	Average Annual Income (US\$)	% of Total Households
A1	44,531	1%
A2	26,560	5%
B1	16,023	9%
B2	9,537	14%
C	5,297	36%
D	2,423	31%
E	1,183	4%

Sources: ABEP 2003; Prudential Real Estate Investors

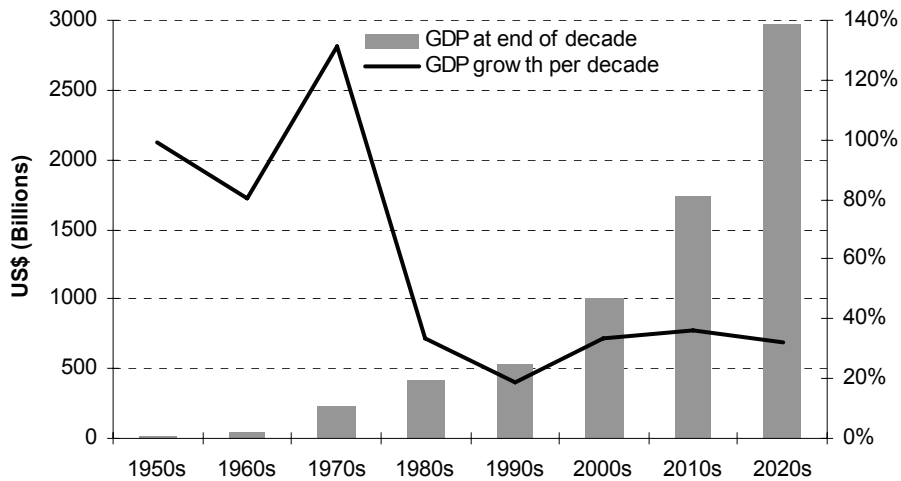
Brazil is both populous and young. The average age is 28. Furthermore, families are becoming smaller, and adults are living longer. The working-age population is still expanding, reflecting the rapid population growth of years past. This has significant implications for the economy, as well as for the real estate sector. The growing number of working-age individuals directly translates into a larger labor force and consumer base, which, together with an expanding economy, will drive demand for commercial real estate and housing.

Economic Growth: Once Erratic, Still Not up to Potential

Brazil’s economic growth has been erratic because of a series of boom and bust cycles. After especially impressive growth in the 1970s, the economy again decelerated when faced with a series of financial crises in the 1980s and 1990s.

Currently, Brazil’s \$796 billion economy is the world’s 11th largest and composes more than half of South America’s total GDP. By current estimates, Brazil’s GDP may more than double by 2025, making it the world’s eighth largest economy (see **Exhibit 4**).

Exhibit 4: End of Decade GDP and Real GDP Growth per Decade, 1950s-2020s (est.)



Sources: IPEA; EIU; Prudential Real Estate Investors

Yet, going forward, it is estimated that Brazil’s economy will only grow about 3% annually, which is less than its potential of 5% to 7%. The main factors curbing more rapid development of the Brazilian economy are the high tax burden and the still-high public debt load, as well as fundamental weaknesses in the judicial system and public security.

Stabilization Brings Investment

Increased economic diversification is one of the forces behind the process of stabilization that began in Brazil in the mid-'90s. Agriculture and mining are still strong elements in the economy, but manufacturing and services are the main drivers of growth. Since the early 1990s, the industrial sector has been a major contributor to the country’s exports and trade surplus.

Increased stability has had an important influence on Brazil’s economy in recent years. Fiscal prudence and tight monetary policy reined in inflation. Despite periodic regression, mainly due to external forces, economic volatility, marked by high inflation, high interest rates and uneven growth, has gradually declined in the past decade (see Exhibit 5).

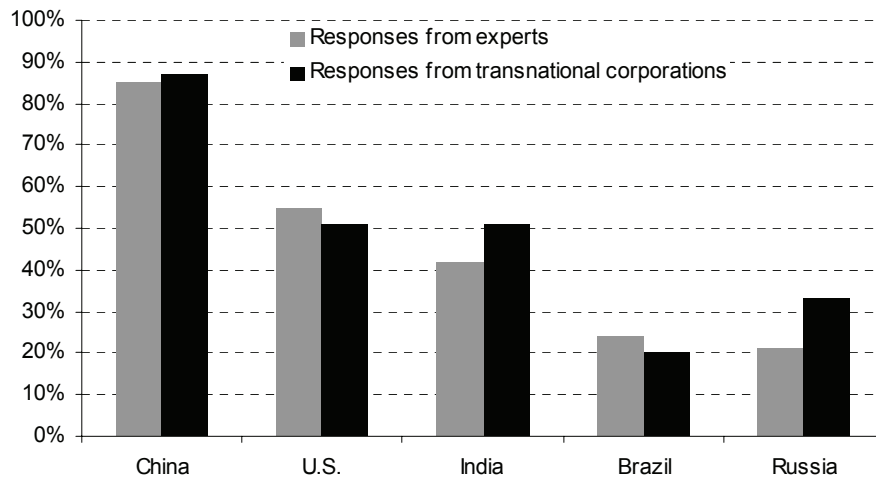
Exhibit 5: Annual Consumer Price Inflation, 9/95-12/10



Sources: IPEA; BCB

Despite the emerging-market volatility of the '90s, Brazil was one of the largest recipients of foreign direct investment (FDI) during that time. Increased economic openness and a privatization process that sought to scale down the government helped attract large sums of investment to Brazil. From 1995 to 2005, foreigners invested \$207 billion, or 3% of GDP. Going forward, Brazil should continue to draw FDI. A 2005 UN survey of FDI prospects notes that Brazil ranked among the five most attractive destinations for investment (see **Exhibit 6**).

Exhibit 6: Most Attractive Global Business Locations



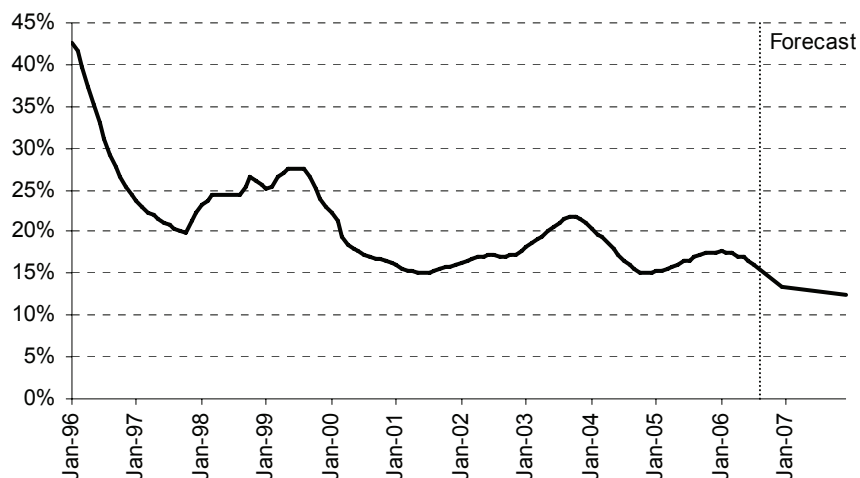
Source: UNCTAD World Investment Report

Expanding Capital Markets

Despite Brazil's potential, the high cost of capital has hampered further development of its economy. Real interest rates there are still among the world's highest. However, improvements

are visible (see Exhibit 7), and because of them, the government can now issue longer-term debt, which is helping to create a market for longer-term, lower-interest Brazilian bonds.

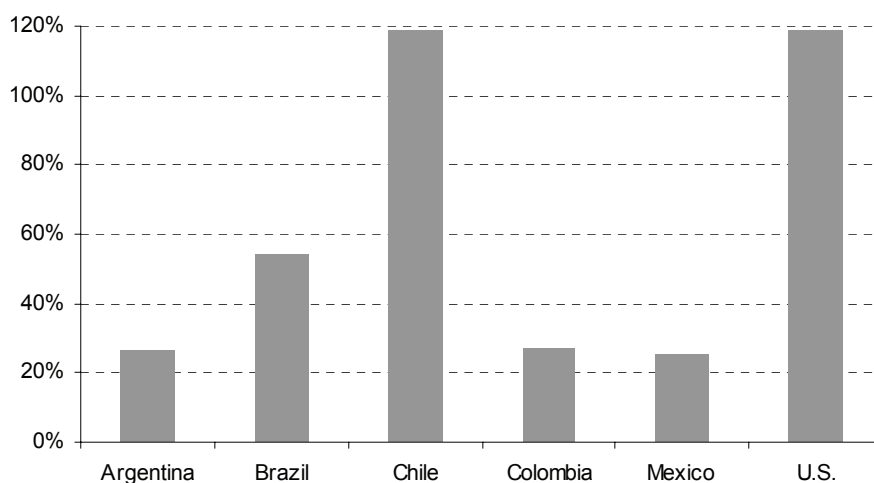
Exhibit 7: Brazil's Short-Term Interest Rates



Source: BCB

Brazil's capital markets are deep by Latin American standards (see Exhibit 8). The Sao Paulo Stock Exchange (the Bovespa) includes 387 listed companies and trades an average of \$850 million per day. These values are 180% greater than those of Mexico's stock exchange (Latin America's second largest).

Exhibit 8: Equity Market Capitalization in Latin America (as a % of GDP, 3-year avg.)



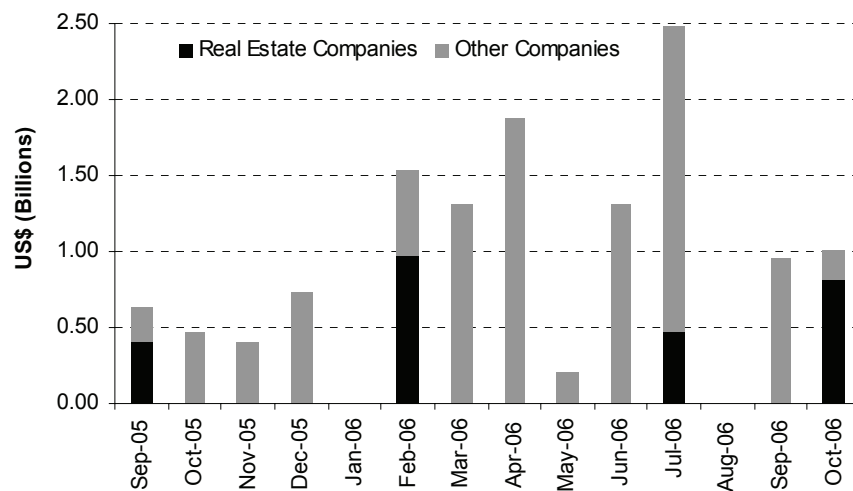
Source: EIU

A four-year rally in the Bovespa, partly driven by high liquidity in international markets but also by perceived improvement in local economic trends, generated an increase in the number of companies seeking to list their shares. Primary and secondary public offerings abounded during the period: since early 2005, companies have raised more than \$13.2 billion.

Sources of Real Estate Financing

In the past, most local real estate companies relied almost entirely on equity provided in private markets, but recently, real estate related firms have made some of the country's most successful public equity offerings. Between September 2005 and October 2006, local real estate developers Gafisa, Cyrela Brazil Realty, Rossi Residencial, Klabin Segall and Brascan raised about \$2.5 billion from primary and secondary equity offerings. Real estate broker Abyara also went public, indicating it would use the \$75 million in proceeds from its equity offering to enter the real estate development business. The company later announced that foreigners had acquired 90% of the shares offered. Other local real estate firms have also registered their IPO intentions. Public equity offerings by real estate companies accounted for 20.6% of the total capital raised by 38 Brazilian companies in the past 13 months (see Exhibit 9).

Exhibit 9: Brazil's Primary and Secondary Public Equity Offerings, 9/05-10/06



Source: CVM

A major limiting characteristic of Brazil's real estate markets is the scarcity of fairly priced, long-term financing. Commercial (and until very recently, large-scale residential) real estate in Brazil is mostly equity financed. The high-interest-rate environment caused real estate developers to avoid financial institutions as a source of medium- to long-term capital. For this reason, the success of Brazil's real estate developers depends on easy access to equity capital, which typically comes from private sources. One source is large corporations, especially construction firms and financial institutions (see Exhibit 10). Many of these corporations have subsidiaries that operate as real estate developers.

Exhibit 10: Sources of Equity for Brazilian Real Estate

	Short Term	Long Term
Public Sources		Real estate funds
Private Sources	Developers	Pension funds
	Investment clubs	Corporations
	Opportunity funds	End-users
	End-users	

Source: Prudential Real Estate Investors

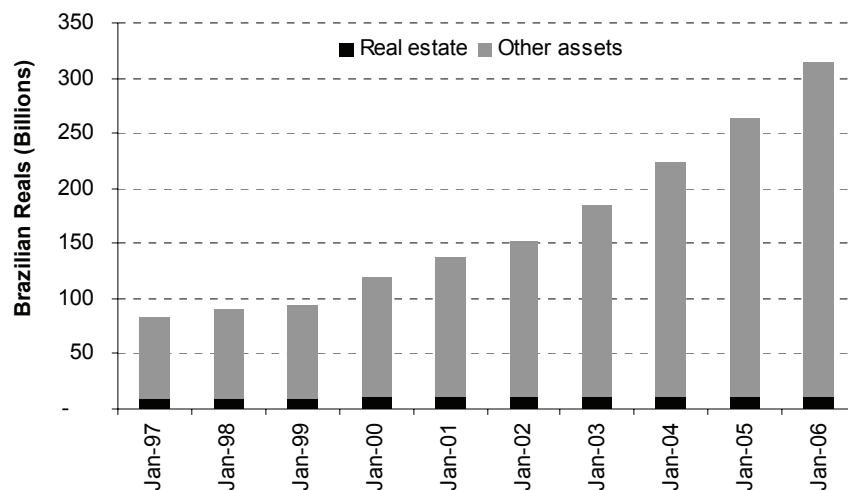
Wealthy individuals are also a source of capital for real estate. Typically opportunistic, these investors form clubs that finance the construction of small-scale real estate projects.

Disbursements are made according to the construction schedule, and each investor owns a portion of the property (floors of office buildings, condos, etc.).

The end-users of properties have been a major source of capital for property development via pre-sales. Under this arrangement, the developer sells units before and during construction. The payment schedule is often established to allow buyers to make monthly payments without using external sources of financing. Thus, the developer finances the buyer, incurring all collection costs and default risks. The mortgage contract is usually sold to a financial institution after construction is done, when only the buyer-default risks remain. This was the most common method of selling apartments/condos in Brazil until recently, and it has allowed a few specialized companies to become active players across different regions (local development firms are still much more common). The pre-sales system remains very important to the housing sector, although banks are more frequently financing the buyer after acquisition.

Pension funds are another source of real estate equity capital. They typically acquire stabilized real estate, but in the '90s they partnered with developers to raise their returns. History shows that, in many cases, pension funds did not correctly assess all the risks of developing real estate, and thus their returns were far from expected. As a result, pension funds moved away from direct real estate investments. Although total assets held by Brazilian pension funds grew 300% in the past nine years, real estate held by pension funds grew just 30% in the same period and today represents less than 4% of pension funds' total investments (see Exhibit 11).

Exhibit 11: Investments of Brazilian Pension Funds



Sources: ABRAPP; Prudential Real Estate Investors

Note: Exchange rate in September 2006: BRL 2.10/\$1.00

While pension funds retrenched in the past decade, the market welcomed a new type of capital source in the form of investment funds. These funds can either be private vehicles for wealthy individuals managed by financial institutions or public vehicles for retail investors. Investment funds have been behind strategies that range from co-investment with developers in residential projects to straight acquisitions of income-producing properties. Though the volume of funds

contained in investment vehicles still pales compared with the remaining investments of pension funds, the former has been growing faster.

The way real estate is owned in Brazil reflects the way it is financed: real estate is considered a long-term asset and is normally owned by the user. The majority of older properties have fragmented ownership, with multiple owners each holding a few units. This limits institutional investment in most existing real estate, as each transaction requires negotiations with several owners, who often have conflicting interests. Large tenants, who typically prefer dealing with only one landlord, face the same problem. This is one of the reasons why most institutions focus on development rather than on acquisition.

Office Markets Gaining Momentum

The main markets for office buildings in Brazil are in the largest cities, Sao Paulo and Rio de Janeiro (see **Exhibit 12**). The total office stock in Sao Paulo is more than 100 million square feet, of which 16% is considered class A. The market has gone through a boom and bust cycle over the past five years, especially as it pertains to class-A space, which represented the majority of new stock added during the period. Vacancy in 2000 was close to 5%, which created an incentive for developers to build. Increased construction added 1.9 million square feet in 2003, right after a volatile economic period. Due to slow absorption, vacancy reached 25%, and new leases plummeted, resulting in a deceleration in construction activity. Construction of office space is just now resuming.

Exhibit 12: Office Market Size (mil. sq. ft.)

	<u>Sao Paulo</u>	<u>Rio de Janeiro</u>
Total Stock	100.0	60.0
Class A		
Total Stock	16.0	6.0
Annual construction (avg. 02-05)	1.2	0.3
Annual gross absorption (avg. 02-05)	1.9	0.5

Sources: CB Richard Ellis; Prudential Real Estate Investors

Although individual investors in the '90s were satisfied with smaller-scale office products, in the past decade the market has begun offering more large, top-quality office buildings. In fact, the city of Sao Paulo has experienced a migration of new office developments from more traditional and central areas (downtown and Paulista Avenue) to areas such as those around the Faria Lima and Marginal avenues, which primarily had residential and retail uses until recently.

The stock of office space in Rio de Janeiro is 60 million square feet, of which only about half is equipped with air-conditioning (in a city whose average summer temperatures reach 90°F). Rio de Janeiro's office market did not go through as severe a downcycle as did that of Sao Paulo because developers have been more reluctant to build new space in the face of volatile demand. Vacancy among class-A properties was 3% in 2000, which prompted lukewarm development activity. Vacancy since then has never topped 10%. About three-quarters of Rio de Janeiro's office space is downtown, where most of the older stock (over 40 years old) is also located. The city has seen an increased amount of higher-quality office development in areas far from the traditional commercial center, particularly in Barra da Tijuca.

Most office properties in Brazil are developed speculatively, with a smaller amount of build-to-suit development for single users – pre-leases are still rare. As most construction is financed exclusively with equity, often from multiple individual investors, or is sold to multiple investors upon completion, office ownership is typically fragmented, which, as noted above, complicates sales. Also, fragmented ownership leads to varying levels of maintenance and differences in floor layouts. This often negatively affects the value of office properties and results in developers focusing on construction of new products in less dense areas – and further expansion of cities. To varying degrees, this is the case in both Sao Paulo and Rio de Janeiro.

Transformation in the Industrial Sector

Industrial real estate began to emerge as an investment class only recently. Most Brazilian companies, especially manufacturers, prefer to own their industrial space. This has resulted in tailor-made space that is more likely to become obsolete and cannot easily be repositioned to suit the needs of other firms.

Distribution space is somewhat more standard, and leases are more common. But the market is only now starting to pick up. Erratic demand, lack of financing and high interest rates, which all translate into high opportunity costs, have caused companies to avoid speculative development. Instead, the preferred structure is the build-to-suit. Such contracts eliminate lease-up uncertainty and provide a cash flow that can be leveraged from the time of construction. Today, most lease contracts that involve high-end space and quality tenants begin as build-to-suits.

Properties are often financed using an almost full commitment of future cash flows for the payment of interest and amortization of a CMBS-type of security (known as a CRI) with a term equal to that of the lease contract. The build-to-suit contract is considered stronger by financial institutions, which value features in this type of contract that make tenant default more difficult than in a straight lease. Sale-leaseback structures are starting to become popular for the same reasons, although in this case the quality of the existing asset is critical.

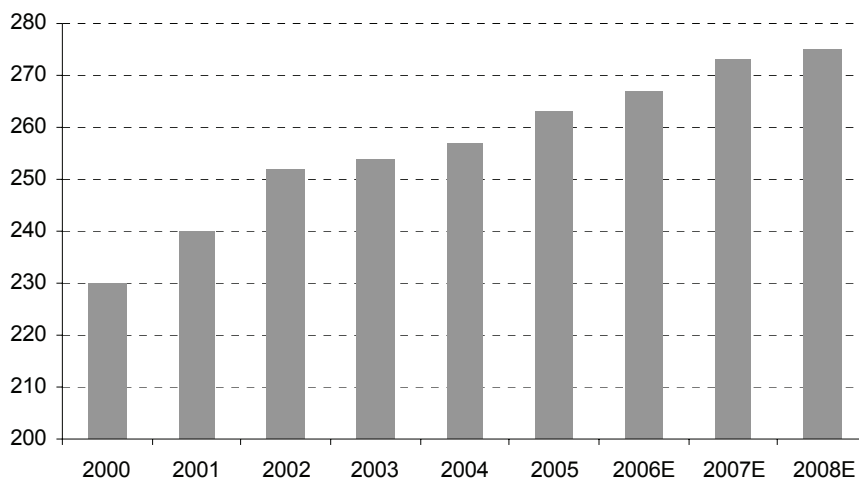
The main locations of industrial/distribution real estate are the large metropolitan areas of Rio de Janeiro and, especially, Sao Paulo. The Sao Paulo metropolitan area has 250 million square feet of industrial space, most of which is largely obsolete and includes small warehouses of less than 10,000 square feet. The area between the cities of Sao Paulo and Campinas, which are 60 miles apart, contains roughly 13 million square feet of the best quality industrial space in the country in terms of location and specifications. This area has started to receive the most attention and capital from investment companies and funds, some of them foreign.

Investors Betting on Retail Expansion

Although Brazil's first shopping mall opened in Sao Paulo in 1966, the first boom in shopping mall development did not occur until two decades later, with the opening of more than 50 properties. The economic stability of the mid-'90s generated marked growth in retail sales, which was followed by a new wave of shopping mall development. Accordingly, shopping mall sales as a percentage of total retail sales rose from less than 10% in the 1980s to 18% in 2006.

The 263 largest regional malls (12 under construction) are the main targets of institutional investors in the retail sector (see Exhibit 13). They total 68 million square feet of gross leasable area; 40% are in the state of Sao Paulo and 24%, or 41 malls, are in the city of Sao Paulo.

Exhibit 13: Number of Regional Malls in Brazil



Source: ABRASCE

As of August 2006, Brazil had more than 600 shopping malls of all sizes in operation (including regional malls, strip centers and small neighborhood centers), of which one-third were in the state of Sao Paulo. Local shopping center tenants' association ALSHOP estimates that \$2.5 billion will be invested in new projects and expansions over the next three years.

Pension funds were the main catalyst for the shopping center boom of the '90s, and when they began to exit the market, new development slowed. The largest Brazilian pension fund, PREVI, with \$40 billion in investments, allocates 29% of its \$1.3 billion in real estate investments, or \$370 million, to malls. PREVI holds an interest in 17 malls, with shares ranging from 15% to 70%, but the pension fund is usually a minority stakeholder. Smaller pension funds also often have minority ownership stakes; they seek to overcome investment limits via controlling agreements. Pension funds usually agree to share control of business ventures via assigned executive boards.

Shopping center development and operation largely remain a local activity. A few shopping mall groups are just starting to operate on a national scale, though none of them have more than 15 malls under management. Most have the backing of foreign capital in the form of REITs, pension funds or property companies from North America or Europe.

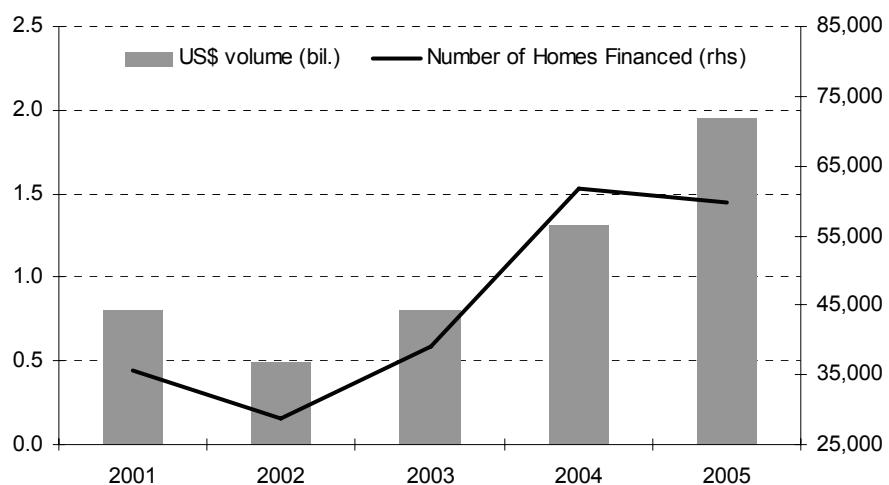
On the Verge of a Housing Boom

Brazil has a chronic housing shortage. A state research agency put the urban housing shortage at 5.5 million in 2000, or 12% of total homes. Brazil's construction chamber, CBIC, estimates that the construction of 600,000 new homes per year over the next 20 years is needed to eliminate the deficit. It is expected that 135,000 homes will be built in 2006, twice that built in 2005, which

highlights the potential of the sector. Not only the existing housing deficit, but also the continued expansion of the adult population, will generate demand for new houses in the years to come.

However, the housing market has not fully taken off, mainly because mortgage financing remains uneven. The Real Estate Financing System, or SFI, implemented in the late '90s, is based on the U.S. residential mortgage industry. Financial institutions are only gradually returning to the business of providing home mortgages (see **Exhibit 14**). Most of the market, however, is still dominated by the government-run savings and loan, Caixa Economica Federal.

Exhibit 14: Housing Financing

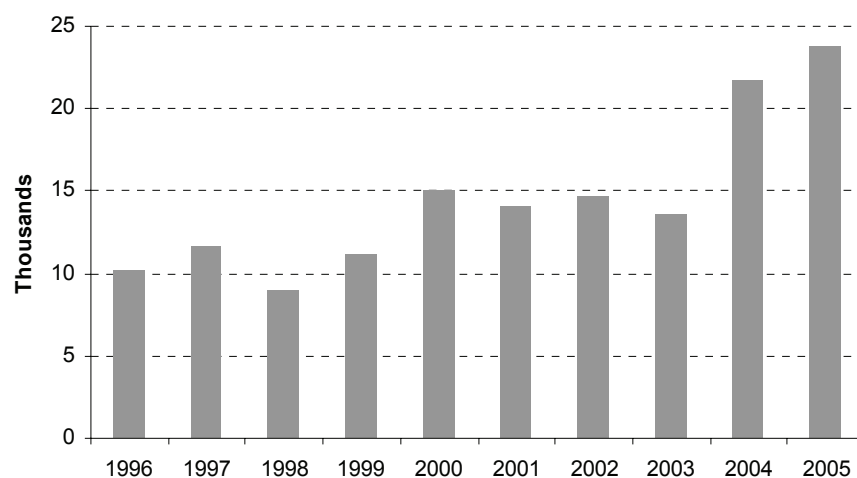


Sources: BCB; Prudential Real Estate Investors

To counter the lack of mortgage financing in the '90s, developers began to offer vendor financing to buyers at the regulated maximum interest rate of 12%. Without construction financing, developers also relied heavily on pre-sales, in which each buyer paid up to 70% of the total price on delivery of the home and refinanced the rest with a financial institution. Land-share deals, in which the landowner receives part of a project's revenues as payment for the land, are another way developers mitigated the lack of construction financing.

Driven by strong demand, the housing market has persevered. The country's largest housing market is the city of Sao Paulo (see **Exhibit 15**), which produces and sells over 20,000 homes worth \$3.5 billion annually (and 50% more in the Sao Paulo metropolitan area).

Exhibit 15: Sao Paulo City New Home Sales



Sources: SECOVI; Prudential Real Estate Investors

Investing in Brazil's residential market involves participating in the for-sale business, since the rental market consists of individuals who acquire units for investment and does not exist on an institutional level. Investors participate in the development, or increasingly, at the company level. As noted, real estate firms recently raised over \$2.5 billion of equity in the capital markets. With their newfound capitalization, these companies have begun to expand nationally through joint ventures with local firms, typically focusing on middle- and higher-income clients.

Downside Risks

Investors in the Brazilian real estate market face two levels of risks: those affecting the country's economy as a whole and those more closely associated with real estate. Not only do these issues constitute the main reason why foreign investment in the sector has been very limited until recently, but they also continue to be an impediment to further investments.

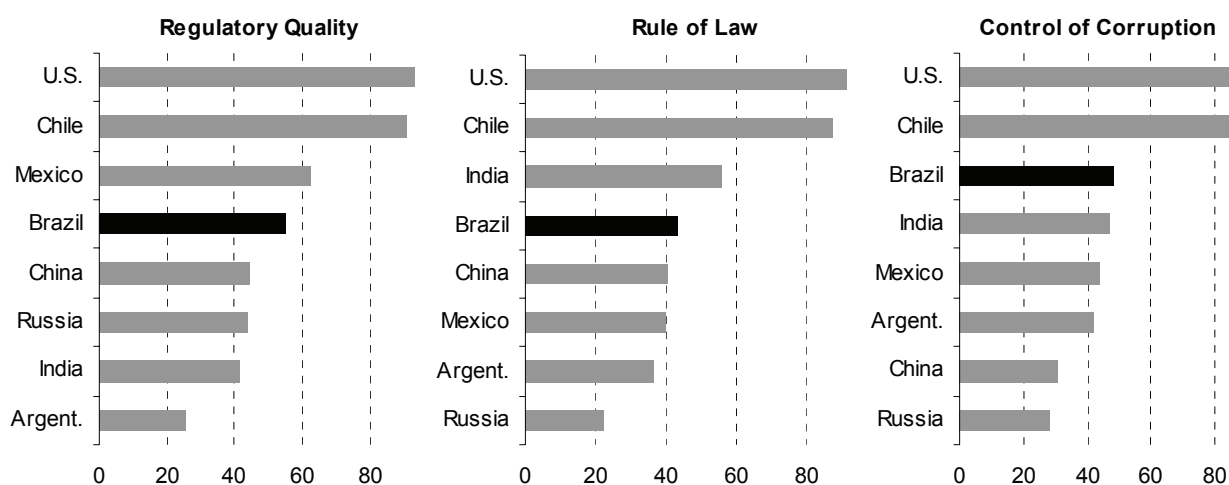
As noted before, economic uncertainty deriving from issues such as high inflation and interest rates have driven real estate investors in Brazil to focus on the short term. Investors have also kept a wary eye on political developments, not because they are concerned with political instability (Brazil has had a series of democratic transitions of power over the past two decades), but rather with the longstanding implications of economic policies for business. In 2002, for example, investors, local and foreign, were concerned about the rise to power of a leftist presidential candidate, who they believed would raise government spending to the detriment of fiscal stringency. In fact, President Luiz Inacio Lula da Silva's economic policies proved to be largely conservative, with a clear focus on inflation control. Current discussions in the country center on whether the authorities practiced an overly hawkish monetary policy, which resulted in excessive interest rates that curbed economic growth. However, public pressure on the government to spend and politicians' tendencies to overspend both persist and may impede the country's future growth.

Brazil has made improvements in combating corruption, but various issues exist at all levels of government. The inefficiency of the judicial system is a major problem and is one of the reasons for the country's high crime rate, which is significant enough to affect business decisions and costs. But judicial inefficiency also affects business activity more directly. First, overloaded courts and various levels of appeals lead to an unpredictable, though typically long, time frame during which final decisions are rendered. Second, a general sense of impunity often leads to corruption.

The complexity of the tax code, along with a high tax burden, sometimes leads companies to engage in unlawful tax avoidance schemes, often causing unfair cost competition with law-abiding firms.

Exhibit 16 shows the percentile rankings for the U.S. and seven leading emerging-market nations based on regulatory quality, rule of law and control of corruption, according to a recent World Bank study of governance indicators. Brazil ranks ahead of other leading emerging-market economies, such as India, China and Russia, in terms of regulatory quality and control of corruption. Brazil stands ahead of China and Russia but behind India in terms of rule of law. When judged against its Latin American peers, Brazil is average in terms of all three indicators. Although it is ahead of Argentina and roughly on par with Mexico, it stands well behind Chile.

Exhibit 16: Percentile Ranking of Governance Indicators (0-100)



Source: The World Bank, 2005

Brazil's currency (the *real*) is also a major concern of many foreigners looking to invest in real estate, which, by law, is only negotiable in *reals*. Due to historical bouts of high inflation, inflation-based adjustments are embedded in rental contracts. The most common index used as a proxy for inflation adjustments is IGP-M, which is based on retail and wholesale prices.

The IGP-M price index is generally considered to allow for purchasing power parity and, in theory, is believed to serve as a hedge against currency depreciation. Brazilian inflation as

measured by the IGP-M in 2005 was just 1.2%, which would be the annual adjustment for local rent contracts. In the case of disinflation, rent would be adjusted downward.

In the past 20 years, Brazil has experienced periods of significant currency depreciation, which were followed by bouts of inflation. For real estate investors whose revenues are tied to an inflation indicator, this currency risk may be somewhat mitigated, but the correlation is not perfect. Moreover, episodes of currency depreciation typically have deeper consequences for the economy overall and often affect investors by softening demand.

Part of the risks investors face in Brazil are directly related to real estate markets. Long-term financing for real estate, although gradually becoming more available, is a recent phenomenon. The availability of debt financing is a direct result of stability, hence there is no assurance that it will improve, let alone remain at current levels.

Lenders have also been reluctant to finance the construction and acquisition of real estate due to relatively lax legislation pertaining to the enforcement of leases. The law, which was largely conceived with residential renters in mind, favors tenants, who are considered the weaker part of the tenant/landlord relationship. Of particular concern are the limitations on default penalties and guaranties, i.e., the uncertainty regarding the enforceability of such provisions in contracts. Mitigators have been introduced, including agreements made outside the scope of leasing law, forceful arbitration and stronger guaranties that can be executed in the case of default. Some investors and financial institutions favor build-to-suit contracts, which, under certain conditions, can be established outside the realm of leasing legislation. But build-to-suit contracts only resolve a small part of the problem, as they only apply to a fraction of all rental contracts. This uncertainty causes real estate investors to focus especially on the solidity of tenants' operations and their ability to meet credit obligations, as well as on the marketability of properties in the case of vacancy.

In the long term, liquidity issues are typically exacerbated by many of the economic characteristics of emerging markets. Brazil is now seeing a rise in the volume of funds directed toward real estate, but this particular source could dry up by the time of an exit.

Finally, cultural aspects must always be considered when entering a new market. Business practices are not drastically different from those of developed countries, but local variations exist. Issues such as language barriers and cultural nuances can easily be overlooked, with negative consequences.

Implications for Investors

Obstacles to greater economic stability in Brazil, such as a lack of transparency, a complex fiscal structure and a very large informal sector, exist, but a counterweight is the real estate sector's rapidly growing access to capital markets, which promise liquidity, particularly for exits.

The availability of debt capital is now starting to re-emerge: financial institutions are showing increasing interest in the residential mortgage sector. As interest rates fall, banks are looking to

shift a greater part of their loan portfolios to mortgage financing, which can be less risky than corporate or consumer lending. This is making debt to the housing sector more available.

Financing for income-producing properties, however, is nascent. Construction financing programs are available but expensive; straight permanent financing will remain scarce until real interest rates in Brazil fall to single digits. To overcome these factors, more complex debt securities have been used, but they are typically linked to single-tenant buildings, particularly those originated as build-to-suits.

Sources of equity capital are also expanding. Besides the typical individual investor who sustained development activity over the past decades, local and foreign institutions are gaining interest in the market. Local pension funds were absent from real estate markets and saw their real estate portfolios dwindle, while total assets under management soared. Local institutions, under more transparent structures, will likely return to the market as real estate returns again become attractive alongside fixed-income returns.

Foreign institutions are starting to test the water. Companies (mainly hedge and emerging-market funds taking positions in listed companies) have gained exposure to Brazil's real estate market through capital markets. A few private equity funds have undertaken direct investments in real estate operating companies, while opportunity funds specializing in real estate have invested directly in development with local developers.

A focus on long-term positions in income-producing real estate portfolios is still rare but is the component needed to take Brazil's real estate markets to the next level. This should allow fresh capital to be channeled back into the system.

PREI Investment Research

The Investment Research Department of Prudential Real Estate Investors publishes reports of interest to institutional real estate investors. Individual reports are available free of charge in hard copy or via the Web at www.prudential.com/prei. Reports may also be purchased in quantity for conferences and classes. To receive reports, update contact information or to be removed from our mailing list, e-mail prei.reports@prudential.com, or call our U.S. office at 973.683.1745.

PREI Reports	Date
• Asian Quarterly Market Perspective	Oct. 2006
• U.S. Quarterly Market Perspective	Oct. 2006
• Latin American Quarterly Market Perspective	Oct. 2006
• European Quarterly Market Perspective	Oct. 2006
• China – Many Opportunities, Unique Risks	Aug. 2006
• The U.S. Office Market: Flirting with Equilibrium	Aug. 2006
• The Evolving German Residential Sector	Aug. 2006
• India – Completing the Investment Universe	July 2006
• Taking Advantage of Long-Term Trends	June 2006
• Asian REITs: A New Dimension for Investors	April 2006
• The Retail-Office Performance Rotation: Implications for Investors	Jan. 2006
• A Move Toward European Retail	Jan. 2006
• Size-Tiered Economic Geography: An Update	Dec. 2005
• The Rising Influence of the Hispanic Population on U.S. Real Estate	Nov. 2005
• Is It Time For Pan-European, Open-End Real Estate Funds?	Oct. 2005
• Water, Water Everywhere	June 2005
• Ask Not Why International, Ask Why Not International	June 2005
• The US Self-Storage Market	March 2005
• Global REITs: A New Platform of Ownership	Jan. 2005
• Employment Recovery Leads to Opportunity	Dec. 2004
• Ten Trends in Mexican Housing	Nov. 2004
• Size-Tiered Economic Geography: A New View of the US Real Estate Markets	Oct. 2004
• Real Estate Cap Rates and Interest Rates – A Complex Relationship	Oct. 2004
• Strategies of Focus and Opportunity: Trends in Public-Market Real Estate Penetration, 1998-2003	Aug. 2004
• Life After the Disconnect	June 2004
• UK REITs – A Step in the Right Direction	June 2004
• Rational Differences Between Public and Private Real Estate	May 2004
• The Drivers of Housing Appreciation	March 2004
• A New Force in Asian Real Estate: Indigenous Demand	March 2004
• The Warehouse Investment Landscape	Jan. 2004
• Unraveling Seniors Housing Starts	Dec. 2003
• Joint Venture Trends in the REIT Industry	Dec. 2003
• The Office Market Recovery Ahead	Nov. 2003
• Population Aging, Pension Reform and Property	Oct. 2003
• Diverging Values and Fundamentals: A Phase or a Transformation?	Sept. 2003
• Finding Niches – Trends in Public-Market Real Estate Penetration, 1997-2002	Aug. 2003

PREI Reports (continued)	Date
• US Apartment Market: Between the Short and Long Run	Aug. 2003
• The Expanding Frontier of Institutional Real Estate	May 2003
• A Bird's Eye View of Global Real Estate Markets	March 2003
• Sizing Up the US Real Estate Investment Market	Jan. 2003
• Private Equity Investing in US Real Estate Companies	Nov. 2002
• Stock Market Rotations and REIT Valuation	Nov. 2002
• Fundamental Features of the Office Property Market	Nov. 2002
• Asset Allocation in the 2000s – More Art, Less Science	Oct. 2002
• Brazil and Mexico: Gateways to an Emerging Latin America	Sept. 2002
• Waiting for REITs to Grow – Trends in Public Market Real Estate Penetration, 1995-2001	July 2002
• Office Supply and Demand – Finding a Balance	July 2002
• Familiar Signs, Different Times	June 2002
• Property Sector Allocations: A Simplified Approach	May 2002
• Private Equity Investing in European Property Companies	April 2002
• A Framework for Constructing International Real Estate Portfolios	Feb. 2002
• Insider Ownership and REIT Performance – Is More Always Better?	Dec. 2001
• Why Do Small Multifamily Properties Bedevil Us?	Dec. 2001
• Global Timber Investing	Nov. 2001
• Apartments in the Real Estate Portfolio – Gimme Shelter	Nov. 2001
• Real Estate Capital Markets Arbitrage	Oct. 2001
• Pension Funds and Real Estate: Still Crazy After All These Years	Fall 2001
• REITs' Share Falls as REIT Shares Rise: Trends in Public Market Real Estate Penetration, 1995-2000	July 2001
• REIT Returns by Economic Location: Implications for Asset Allocations	July 2001
• Value and Stability – Commercial Real Estate in Diversified Portfolios	July 2001
• Trends and Tactics for Successful Real Estate Investing	June 2001
• Impact of Changing Demographics on Real Estate	Summer 2001
• Mezzanine Finance: Completing the Market	May 2001
• Determinants of Mortgage Loan Origination Volume	April 2001
• Hotel Property Investing: An Overview	March 2001
• Dimensions of REIT Pricing: Size, Growth, and Leverage	March 2001
• Converging on Maturity – Trends in CMBS Issuance	Feb. 2001
• International Housing Market Dynamics	Jan. 2001
• Real Estate Merchant Banking	Nov. 2000
• Four Forces Shaping the Commercial Real Estate Industry	Nov. 2000
• Creating an Effective Diversification Strategy	Oct. 2000
• Seniors Housing: An Institutional Investor's Perspective	Sept. 2000
• Differentiating Higher Return Strategies in Property Markets	Aug. 2000
• Technology and Real Estate	June 2000
• Real Estate Challenges and Opportunities for the 2000s	June 2000
• The Relative Importance of Sector versus Regional Diversification	June 2000
• You Say You Want a Revolution: Reflections on REITs at the Millennium	Summer 2000
• A Flowchart for Integrated Real Estate Portfolio Management	May 2000
• Conjectures on the Impact of Technology on Real Estate	March 2000
• Strategies for Implementing an International Portfolio	March 2000

The Investment Research Department of Prudential Real Estate Investors publishes reports on a range of topics of interest to institutional real estate investors. Individual reports are available free of charge in hard copy or via the Web at www.prudential.com/prei. Reports may also be purchased in quantity for conferences and classes. To either receive reports, update contact information or to be removed from our distribution list, please e-mail us at prei.reports@prudential.com, or telephone our New Jersey office at 973.683.1745.

Prudential Real Estate Investors
8 Campus Drive
Parsippany, NJ 07054
USA

Tel 973.683.1745
Fax 973.734.1319
Web www.prudential.com/prei
E-mail prei.reports@prudential.com

© Copyright 2006, Prudential Real Estate Investors

Prudential Real Estate Investors is a business unit of Prudential Investment Management, Inc., a registered Investment Adviser and indirect wholly owned subsidiary of Prudential Financial, Inc., Newark, New Jersey.