

**REAL ESTATE SECURITIZATION IN BRAZIL**

by

Renato Ventura

Civil Engineer, 1982  
Escola Politecnica of the University of S. Paulo

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Signature of Author \_\_\_\_\_

Renato Ventura  
Department of Architecture  
August 8, 1997

Certified by \_\_\_\_\_

W. Tod McGrath  
Lecturer, Department of Urban Studies and Planning  
Thesis Supervisor

Accepted by \_\_\_\_\_

William C. Wheaton  
Chairman, Interdepartmental Degree Program in Real Estate Development

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## ABSTRACT

This thesis analyzes the prospects for securitization of real estate assets in Brazil. Brazilian real estate securitization is in its infancy. The economical importance of the country, its relatively well-developed financial markets, the globalization of capital markets, and the increasing demand for real estate securities, however, argues for the advancement of real estate securitization in Brazil.

Real estate operations have been financed with debt and equity securities over the last years. On the debt side, the S.F.I.(Sistema Financeiro Imobiliário), an initiative designed to parallel the mortgage backed securities model in the U.S., is intended to broaden the supply of real estate financing in Brazil and to create a secondary mortgage market. Residential, industrial, commercial and other kinds of real estate loans will serve as collateral. One or more public issuers will buy and package mortgages to issue securities, as Fannie Mae and Freddie Mac do in the U.S.. The Brazilian government is not expected to provide subsidies or guarantees. Standardization and enhancement of legal guarantees on collateral are crucial concerns present in the S.F.I., under approval at the Federal Congress. The S.F.I.'s targeted investors are mostly pension funds, insurance companies and foreign investors. On the equity side, the Fundos de Investimento Imobiliário (F.I.I.), in some aspects comparable to U.S. REITs, have been used mostly for tax advantages in financing new developments. In general, the Brazilian real estate securitization has been private, without a secondary market and targeted to closed groups of investors.

The prospects for real estate securitization in Brazil are broadly linked to the country's macro-economy. High levels of inflation, such as Brazil had seen in the past, bring economic disorganization, and are harmful to the prospects for securitization. Other concerns are related to the information provided to investors and to continual governmental support to the process, in the form of adopting and maintaining a consistent and coherent regulatory structure.

Thesis Supervisor: W. Tod McGrath  
Title: Lecturer, Dept. of Urban Studies and Planning

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## **Chapter 1- Introduction**

This thesis focuses on securitization of real estate assets in Brazil. The first thing to understand is what is securitization, what are its uses, and in which ways may it be related to real estate. These subjects are discussed in Chapter 2.

Chapter 3 analyzes the background information for real estate securitization in Brazil. The increasing importance of Brazil in the global economy opens the chapter, followed by an overview of the country's economic trends and perspectives. This chapter brings to the reader a description of the dynamics of short-term and long-term real estate investments over the last few years, as well as an analysis of the recent history of real estate financing in the country.

Chapter 4 describes the first securitization initiatives and the current state of real estate securitization in Brazil. Debt and equity initiatives are described, as these initiatives are possible linkages to a general and more ambitious securitization plan. Special emphasis is given to the creation of the SFI, an initiative that intends to create a secondary mortgage market to residential, commercial and industrial real estate using the American "Fannie Mae" as a model.

Chapter 5 discusses the agents that are participating or whose participation is intended in the real estate securitization process. The analysis is organized to cover main agents, such as the government and the banks, the capital providers (the pension funds, the insurance

companies, the foreign and the national investors), and the capital users (the developers and contractors, and the borrowers). For each group of participants, the discussion tries to frame the motivations, conflicts and the possible gains or losses derived from the securitization process.

Chapter 6 presents the conclusions of this thesis, intended to summarize the opportunities and challenges of real estate securitization in Brazil.

Appendix A describes relevant tax and legal considerations as well as governmental incentives and restrictions relating to real estate securitization. Appendix B briefly describes the history of real estate securitization in the United States, its recent trends, and how it has acquired the importance that it has today.

## Chapter 2 - Securitization and Real Estate Securitization

Securities are financial assets (pieces of paper) that companies or individuals sell to raise capital. The value of these pieces of paper comes from the claim they have on real assets and the cash-flows those real assets produce<sup>1</sup>. Securitization can generally be defined as the transformation of a financial claim on any asset into a new security. This process generally results in an anticipation of cash receipts from the real asset to the originator and a reward in the form of profit on the sale of the new securities, which then have an indirect (subordinate) claim on the cash-flows from the real asset. If conveniently packaged and tranced, an asset or a pool of assets may generate different classes of securities with different types of risks and returns, that will satisfy diverse investors' investment preferences.

Generally, any asset producing cash flow in a reasonably predictable way may be securitized. For instance, in the beginning of 1997, the singer David Bowie packaged his future royalties into a US\$ 55 million asset-backed bond issue payable over 10 years at 7.9% per year interest<sup>2</sup>. Actually, some industries are currently more securitized than others. The same can be said for countries. When compared to other industries, real estate securitization has been modest, even in the United States. Stewart Meyers argues that securitization is perhaps not as necessary in real estate because the tangibility of the assets

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<sup>1</sup> Brealey, Richard A. and Myers, Stewart C., *Principles of Corporate Finance*, U.S.A., McGraw-Hill, 1996, 5th Edition, pg. 3

<sup>2</sup> Mathews, Jay, *Securities Oddity: the Bowie Bond; with Asset-Backed Debt, the Rock Star Plays a Financial Instrument*, Washington Post, Feb 6, 1997, p.C1.



brings more protection to investors than in other industries<sup>3</sup>. Nonetheless, real estate securitization has grown rapidly in the U.S., has a strong presence in Europe, and is spreading globally in the 90's.

International investment in bonds and stocks is being followed by international real estate investing, increasingly promoting the inclusion of those assets in the global capital markets. In comparison to direct real estate investment, real estate securities are advantageous to investors as they often facilitate the capital flow between real estate and other kind of investments<sup>4</sup>. Eichholtz and Koedijk<sup>5</sup> studied the correlation between returns in real estate securities investments in 25 countries and U.S. REITs. They concluded international diversification contributes to diminish institutional portfolio risks.

The existence of a secondary market is fundamental to securitization. While in a primary market assets are purchased and securities are originated, the secondary market provides liquidity to these securities and an exit strategy to investors, as there the existing securities can be re-traded.

In the case of real estate debt, the secondary mortgage market facilitates the flow of money from investors to lenders, extending the universe of resources to financing behind the originating banks and financial institutions' deposits. The secondary market replenishes

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<sup>3</sup> Meyers, Stewart C., *Unpublished speech*, Semi-Annual Meeting of the MIT Center for Real Estate, May 1997.

<sup>4</sup> McMahan, John, *Changing the Real Estate Environment*, Real Estate Issues, April 1997, pp.3-7.

<sup>5</sup> Eichholtz, Piet M. A. and Koedijk, Kees G., *The Global Real Estate Securities Market*, Real Estate Finance, Spring 1996 Issue, pp. 76-82.

the funds used by mortgage originators, allowing originators to maintain new originations independent of the level of interest rates. Furthermore, a secondary market may also serve to correct imbalances of mortgage credit among a country's diverse regions. To be successful, a secondary market typically needs homogeneity of investment contracts or financial claims to attract investors that did not participate in the primary market and do not have the specific knowledge of the industry other than the securities themselves. A successful secondary market also needs to have a critical mass of operations that will generate information and share trading costs. Equally important, the diverse risks often associated with securitization must be segregated and distributed among participants. Risk segregation is essential to reduce the required yields of investors who will accept the security's intrinsic risks, but would prefer to avoid the risks associated with performance of the originator.

The U.S. model of real estate securitization is generally considered to be very successful. It has managed to bring advantages to borrowers by saving them about 50 basis points on mortgage rates<sup>6</sup>; to lenders, by increasing capital availability; and to investors, by pushing out the limits of the risk-return curve. In 1997, the secondary market for residential mortgages was the largest fixed income investment class in the United States other than government debt. Approximately 50% of the residential mortgage loans and less than 10% of the commercial investments in real estate are securitized in the United States, and these percentages are still growing. Liquidity, non-lumpiness, low transaction costs, easy

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<sup>6</sup> Riddiough, Timothy, *Real Estate Capital Markets Course Notes*, Massachusetts Institute of Technology, Spring 1997, p. 93.

diversification, disclosure, discipline and professional management are the general advantages of real estate securities over direct investment in the underlying properties. Institutional investors, such as pension funds and insurance companies, are increasingly being swayed by these factors, and are destining more of their investment capital to real estate securities.

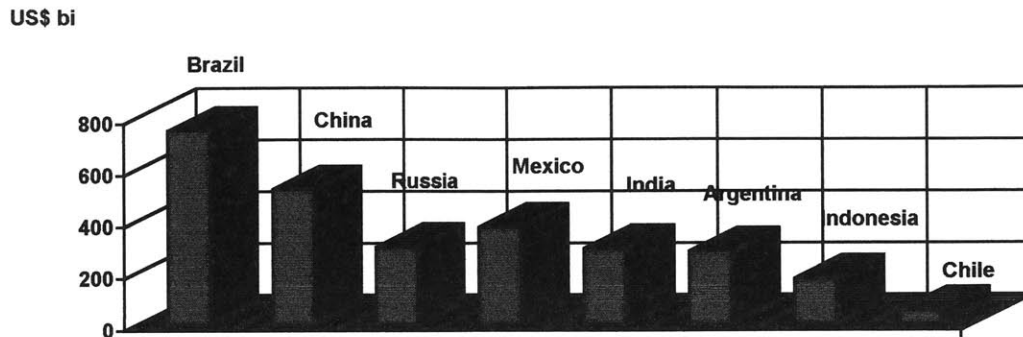
## **Chapter 3 - Background Information for Real Estate Securitization in Brazil**

### ***3.1 Brazil's Economic Trends***

In the last few years, a number of countries have seen their classification in the financial world shift from Developing Countries to Emerging Countries. To emerge is to come into view, as says the Oxford Advanced Learner's Dictionary, and the new designation reflects the increasing importance of these countries in the global economy.

Within this group, Brazil is notable for its size, its demographics, and its economic importance. It is the largest and most populated country in Latin America. The country occupies more than 50% of South America, being slightly larger than the U.S. in its continental portion. With US\$ 750 billion of GDP and 157 million in population, Brazil's economy is the eight-largest in the world. The United States , as a comparison, has more than US\$7 trillion of GDP (approximately ten times larger) and a population in excess of 250 million (two-thirds larger). Interestingly, Brazil's GDP is higher than China's, and had consistently been larger than countries as India, Russia and Mexico.

### GDP (US\$ bi) of 8 emerging countries



Source: Veja<sup>7</sup>

Brazil's economy is considered well-balanced: it has a significant installed capacity of industries and is nearly self-sufficient from the standpoint of agricultural goods and alternative sources of energy. 55% of its exports come from manufactured goods. These exports, corresponding to a very low percentage of the GDP when compared to other countries (6.4%), reached US\$ 47.8 in 1996<sup>8</sup>.

Impressive changes have been observed in the Brazilian economy within the last decade. After enduring severe inflation through ingenious indexation, the Plano Real brought price stability since 1994. It was done fundamentally through a new trustworthy

<sup>7</sup> *A Festa do Investidor*, Revista Veja, p. 132-135, June 18, 1997

<sup>8</sup> Unsigned Article, *Reforming Brazil*, The Economist, May 17, 1997, pp. 38-40

currency and global competition enhancement<sup>9</sup>. Inflation came down from 40% per month to 10% per year in 1996, the lowest rate since the 1950s. In addition, protectionism decreased substantially, with import taxes being reduced since the beginning of the 90's from 42% on average to 13% in 1996, and competition has challenged and changed previously well-protected Brazilian companies. State presence in areas out of its core competence has decreased, with the selling to investors of companies formerly owned by the governmental entities, as the mining conglomerate CVRD ( Companhia Vale do Rio Doce) , sold in May for US\$ 3.2 billion. Recent government declarations about selling the telecommunication system (valued around US\$ 100 billion) to private sector enhance this trend<sup>10</sup>.

On the other hand, trade deficits as a consequence of a lasting 15% overvaluation of the country's currency have been compensated by the privatization process and foreign investments. Fiscal and administrative reforms are still needed, and the government has to make them approved by a Congress formed by volatile political parties and shadowed by the very detailed and state-oriented 1988 Constitution. Even though country fund reserves, in mid-1997 around US\$ 58 billion, seemed to be enough to sustain the government economic policy, foreign investment is primordial to provide the resources to sustain the country's economically competitive position within the world and to enhance the modernization of the economy. Brazil's economy was one of the world's fastest-

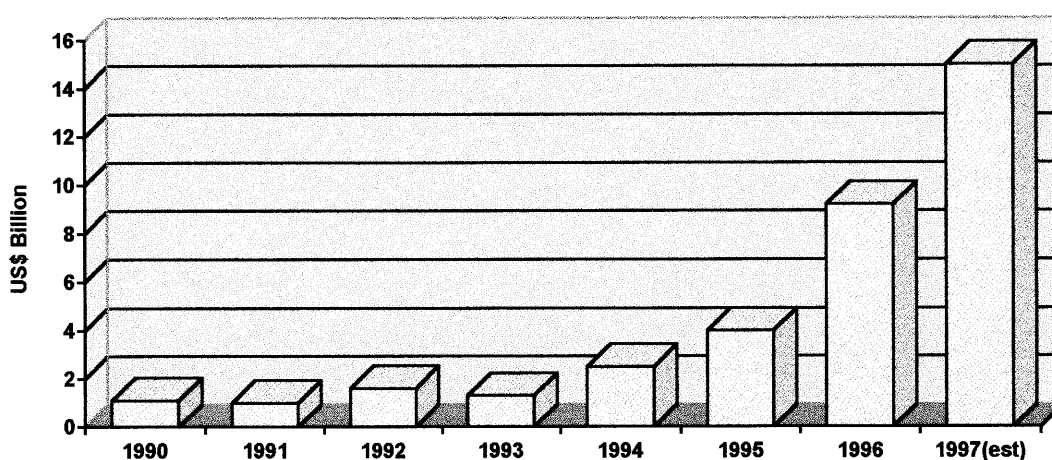
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<sup>9</sup> During a period of 6 months, the country had two currencies, the Cruzado and the URV, the latter relatively indexed to the American dollar. At the end of this period, as the URV gained acceptance as non-inflated, it was transformed in Real, and the Cruzado suppressed. Global competition limited the rising of prices during the process.

<sup>10</sup>The Economist, Ibid.

growing during long periods in this century, and the last years' economic opening to the world intends to increase the current 4% annual GDP growth rate. Stability of prices, declining interest rates and increasing of the GDP are factors that have encouraged the external direct investment in the country, that totaled US\$ 9.2 billion in 1996 and US\$ 5.9 billion in the first five months in 1997.

**Direct Foreign in Investment in Brazil 1990 - 1997**



Source: Sobcet/Veja<sup>11</sup>

One of the country's most serious problems is its rather deep economic inequalities, which has led to widespread poverty. High levels of inflation exacerbated these inequalities, since the poor could not protect their earnings against the purchasing-power erosion as price level increased. It also meant to the companies prioritization of financial engineering instead of production, and printing money, the ultimate cause and consequence of inflation, was the easy way for the government to face an unbalanced budget. The recent low level of inflation has allowed at least 8 million people to get out of the poverty level

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<sup>11</sup>Revista Veja, Ibid.

and enter the consumer market, further enhancing economic growth, accordingly to the U.N. Economic Commission for Latin America<sup>12</sup>. Firms have recently increased their concern with competitiveness, looking at both modernization and alliances to enhance their newly designed medium and long-term strategies.

The last years' economic changes were reflected in the Brazilian capital markets, that have grown remarkably, along with the financial institutions dealing with securities. Created in 1986, the BM&F- Commodities and Future Exchange of Sao Paulo- is the fourth largest derivative trading market in the world, reaching 135 million traded contracts in 1996. The Stock Exchange of Sao Paulo, founded in 1890, is the most important in the country, responsible for more than 80% of Brazilian stock transactions. In 1996 it included 547 registered companies, with a total volume of capitalization of US\$ 189.2 billion. Its average daily trading volume was around US\$ 400 million. Financial institutions were responsible for 53% of the transactions, and foreign investors 24%.

### ***3.2 The Demand for Long-Term Investment Instruments***

In contrast, as a consequence of the recent highly-inflationary period, the instruments of long-term financing have remained relatively underdeveloped. Fixed income long-term investments have been unsuccessfully stimulated by the government in the last 30 years. Most notably, 6 months has been the maximum term accepted by the market. If indexation can deal adequately with the inflation risks, as indeed it did for long periods of time, the

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<sup>12</sup>The Economist, Ibid.



reason for the failure to develop long-term debt instruments is the lack of an adequate demand for these instruments. The Brazilian social security system, for a number of reasons, has worked in a distribution regime, instead of a more desirable capitalization regime, explains the Prof. Mário Henrique Simonsen, ex- Minister of Finance<sup>13</sup>. In this case, distribution of resources prevails over capitalization, generating cumulative deficits to the system's budget. This problem will have to be faced through a social security system reform, as the distribution regime is not sustainable in a country with decreasing birth-rates and increasing life expectancy. Other sources of savings, such as reserve funds for necessities or opportunities, need the liquidity that the long-term fixed income investments have not offered. This situation has changed with the recent increasing presence of the pension funds. In the last years they became the major investors in Brazil. Their long-term and predictable liabilities are well matched by long-term fixed income investments. Even if only continued economic stability will provide the foundations to growth of these instruments, the existence of an important component of demand could be the factor capable of making the market for long-term fixed income securities finally develop.

### **3.3 The S.F.H. -*Sistema Financeiro da Habitação (Residential Financing System)***

Inflation also contributed to exhaust the existing official real estate financing system, the S.F.H. Serving only the residential sector, it was created in 1964 and since then generated more than 6 million home mortgages using mainly the resources from cadernetas de

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<sup>13</sup> Simonsen, Mário H., *Como poderá ser o mercado de hipotecas no Brasil*, SFI - Um Novo Modelo Habitacional Conference Notes, org. by ABECIP, Brasília, Brazil, Nov. 1995, pp 190-192.

poupanca (saving accounts) and from the F.G.T.S. (working period guarantee funds)<sup>14</sup>. Real estate notes issued by financial institutions were envisioned as an additional important source of investments, but their acceptance was low due to their long-term and lack of liquidity. The S.F.H. was constructed with care and ingenuity, and was even used as model for other countries looking for solutions to their residential problems. Price-indexation was a strong concern in its creation, as inflation's presence had contributed to destroy the previous residential financing models. Indexation was used to avoid negative interest rates in the amortization, as inflation could easily surpass the nominal interest rates.

Nominal interest rates are defined as follows:

$$1 + I_{\text{nominal}} = (1 + \text{inflation rate}) (1 + I_{\text{real}})$$

If inflation surpasses the determined nominal interest rates:

$$(1 + \text{inflation rate}) > (1 + I_{\text{nominal}})$$

Then:

$$(1 + I_{\text{real}}) \text{ would be } < 1$$

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<sup>14</sup> Formed by a social security withholding tax varying from 8 to 11% of the monthly wages, with a ceiling of approximately US\$ 1,000 per person in April 1997.

and  $I_{\text{real}}$  would be negative. This possibility is avoided through indexation, which enforces the use of real interest rates and inflation, instead of nominal interest rates.

Indexation served to preserve the buying power of the received cash-flows and to create a system that could attract private savings to the residential mortgage market. Private investors' resources are obtained through saving accounts (cadernetas de poupança), that pay a price variation index plus 6 % real interest per year. For example, with a 10 % annual inflation, a \$ 100 investment would become after one year:

$$\text{\$ } 100 * (1 + \text{inflation rate}) (1 + I_{\text{real}}) = \text{\$ } 100 * 1.10 * 1.06 = \text{\$ } 116.60$$

As the resultant interest rate of 16.6% is nominal, and not real, the investor buying power did not increase at such a percentage. But buying power is, at least in principle preserved, and this fact explains why the cadernetas de poupanca are so popular in the country, with millions of small accounts, and serve as a benchmark of a safe investment in the same way that Treasury Bills do in the U.S..

Just after the creation of the SFH, financial policy refinements began to occur. As mortgage payments were adjusted each three months and wages only each year, the P.E.S. (Wage Equivalency Plan) was created. It ruled that even if the outstanding balance of the loans were adjusted every three months by contractual agreement, the adjustments to the

borrower could only be done annually, using the legal minimum wage variation as the price indexer.

A schematic hypothetical example illustrates this mechanism. Let us suppose a \$ 100,000 loan with a 15-year amortization term, monthly payments, real interest rates of 12% per year and a 2% per month inflation. These are hypothetical numbers, as inflation was very volatile, and interest rates and terms changed with different financing plans.

$$PV = \$100,000 \quad I_{\text{real}} = 12\% = 0.95\% \text{ per month}$$

$$15 \text{ years} = 180 \text{ months}$$

$$\text{Monthly Payments} = \$1,150 \text{ ( * 12 months = } \$13,800 \text{ in the first year)}$$

Year	OLB due (initial)	Payments	OLB due (final) <sup>15</sup>
1	100,000	13,800	128,200
2	128,200	18,180	163,863
3	163,863	23,978	208,707
4	208,707	31,670	264,694
5	264,694	41,284	334,581

<sup>15</sup> The Outstanding Loan Balance (OLB) calculation would use the following rates:

$$1 + I_{\text{nominal}} = (1 + \text{inflation rate}) (1 + I_{\text{real}}) = (1.02)^{12} * (1.120) = 1.420 \text{ annually}$$

The outstanding loan balance in the end of the year would be  $OLB_{\text{due}} = (\$100,000 * 1.420) - \$13,800 = \$128,200$ . Similar calculation may be done for the following years.

To calculate the borrower payment in the second year, let us suppose an initial \$100 minimum wage, adjusted to \$ 120 in one year. His or her payment will be based in the following effective interest rate:

$$(1 + \text{Variation on the minimal wage}) (1 + I_{\text{real}}) = (1.200) * (1.120) = 1.344 \text{ (or 34.4\% per year)}$$

$$\text{OLB}_{\text{payment}} = (\$100,000 * 1.344) - \$13,800 = \$120,600$$

Year	OLB <sub>paymt</sub> (initial)	Payments	OLB <sub>paymt</sub> (final)
1	100,000	13,800	120,600
2	120,600	17,102	144,984
3	144,984	21,216	173,643
4	173,643	26,349	207,027
5	207,027	32,290	245,955

As we see, an increasing gap between the  $\text{OLB}_{\text{due}}$  and the  $\text{OLB}_{\text{payment}}$  would be created. The final resultant gap would be refinanced to the borrower on the same conditions as the original loan through a period equal to 50 % of the original amortization term. In our example, the refinancing period would be of 7.5 years, after the 15-year initial term.

The current gaps and the final residual observed after the refinancing period were covered by the creation of a fund, the F.C.V.S. (Wage Variation Compensation Fund), formed with federal resources and an overtax from borrowers. The system worked well until the late 70's. Then problems began, as the governmental interventions only happened in one direction; in 1979 the wages began to be adjusted semi-annually, but the mortgage payments continued to be adjusted annually. At the end of the 70's, inflation increased to around 100% per year from the previous 40% level. Salaries never matched prices in a high-inflation environment, as explains the ex-minister Mailson da Nóbrega<sup>16</sup>, and indexed mortgaged debt became too heavy to borrowers.

The mere fact that an employee normally received his/her wage on the 10<sup>th</sup> day of the next month contributes meaningfully to this problem. Let us suppose a 10% monthly inflation. Wages would lose more than 10 % of their purchasing power when received, but the loan agreement contracts ensure that the monthly payments would be daily indexed. In this way, the borrower's debt is at least 10% heavier than it was at the contract date, even if indexed to his or her salary.

Things worsened in the early 1980s, as inflation surpassed 200 % per year, and the wages were compressed by new adjustment rules. Default rates increased substantially, and the government began offering subsidies to borrowers. The differences between the borrower's contracted debt and what they were allowed to pay under existing regulations

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<sup>16</sup> Nóbrega, Mailson da, *Casa Própria: Vem Ai uma Revolução*, Folha de S. Paulo, June 6, 97, Caderno Dinheiro, p.2.

were assigned to the F.C.V.S., creating a deficit of more than US\$ 70 billion in its account. The larger creditors of this deficit are the F.G.T.S. (the social security), government social developer entities and lenders ( private and government commercial banks). The still very successful cadernetas de poupança<sup>17</sup> were used more and more to finance this hole instead of their original role of financing residential production (the current solution to this problem includes the transformation of this debt in privatization currency securities).

In the beginning of the 1990s the system was showing clear signs of exhaustion. The 400,000 units financed annually in the 1970s and 1980s were reduced to an average of 55,000 per year between 1993 and 1995. Inflation and demagoguery led to this situation, in Nóbrega's opinion<sup>18</sup>. Inefficiency of the Justice system worsened it, as it benefited distressed borrowers and penalized the market as a whole. The understanding of these problems is crucial to the construction of a new real estate financing model to the country, and they were effectively taken in account in the design of the new S.F.I. (Real Estate Financing System).

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<sup>17</sup> In July 1997, they have the equivalent to approximately US\$ 90 billion in account.

<sup>18</sup> Ibid.

## **Chapter 4 -Current State of Real Estate Securitization in Brazil**

### ***4.1 General Framework***

Compared to the U.S., real estate securitization in Brazil is still in a very early stage of development. The securitization which has occurred was private, largely a result of direct financial interests of originators and investors. In a private securitization, the securities are sold to a close group of investors, and a secondary market does not necessarily exist. This kind of securitization has mostly provided funds to specific developments. Market familiarity with these private forms of financing is, however, increasing.

A fundamental characteristic of any real estate securitization is risk segregation. Investors generally want to be immunized from the company-specific (as opposed to investment-specific) risks associated with the developer or the property manager. This risk segregation may be achieved through structuring each individual investment as a Limited Partnership. This concept regulates the formation of special entities that are legally able to provide that risk segregation, as the S.P.C.s, Special Purpose Companies, and the F.I.I.s, Real Estate Investment Funds.

As Brazil has a roman originated legal system, any new security must be regulated by law to be traded. Consequently, the number of securities available is limited and the financial engineering of projects must generally be adapted to the existing requirements of regulated



securities. Debentures have been the securities most commonly issued to raise capital for real estate projects. These securities are very similar to bonds, particularly with respect to their flexibility and fiscal advantages. Their revenues are considered interest payments, hence deductible expenses for tax purposes. Debentures may have a stated maturity or be perpetual. Debentures can pay fixed yields or pay yields over any form of indexation. Their yields may also include participation mechanisms. The kind of guarantees offered may be subordinate (the debenture holder has priority only to the shareholder), real (guaranteed by mortgages, for example) or floating (guaranteed by the assets of the company, as unsecured debt).

The C.V.M. (Securities And Exchange Commission) has among its attributions the regulation, control and enhancement of the securities market. In 1991, the C.V.M. approved the first conversion of debentures to a condominium participation. This conversion is allowed if the exchanged goods are clearly specified, if the general contractual conditions are maintained, and are subject to the debenture holder's desire. Transactions of debentures instead of apartments may be advantageous, as they are not subject to the IBTI tax<sup>18</sup> payment.

Afterwards, the C.V.M. and the financial marketplace began to accept the notion that a debenture must not necessarily pay interest as a fixed income security. Diverse serial issues

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<sup>18</sup> IBTI (Real Estate Transmission *Inter-Vivos* Tax) is a 2 to 6% tax payable by the buyer when a property is sold or transferred not as a result of death.

with different payment dates began to be accepted to adapt the investment to particular cash needs of new investments. Until 1991, a company's disclosure of information to the market and financial structure were not the only conditions to define it as public. Its size, capital and number of employees were also taken in consideration. After that year, the C.V.M. and the financial marketplace began to accept public companies independently of those last criteria, considering for this classification only disclosure and capital structure. This flexibility made possible the creation of the S.P.C.s, being the next favorable step to securitization, as Vladimir Rioli<sup>19</sup>, ex-president of ABAMEC - Brazilian Association of Capital Market Analysts - explains.

As explained in chapter 3, uncertainties related to long-term fixed income investments in a highly inflationary environment and lack of an appropriate demand for them had inhibited the broader use of debentures in financing real estate for a long time. During the 1990's, the use of debentures was enlarged in a convenient way to be used as a capital source for real estate projects, as above described. This fact, along with economic stabilization and the pension funds prominence, led to the first operations related to real estate securitization in the country.

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<sup>19</sup> Rioli, Vladimir A., *Securitização de Ativos Imobiliários Atraves de Emissão de Debentures por SPCs*, Financiamentos para Empreendimentos Imobiliários Conference Notes, org. by Institute for International Research, S. Paulo, June 1997, pg 7-12.

## **4.2 Debt Securities**

### **4.2.1 Securitization of Receivables**

The securitization of receivables was regulated in June 1986 and has been used since 1992 in 27 different operations. These real estate receivables totaled approximately US\$ 6 billion in 1996. Rioli<sup>20</sup> defines three types of operations that use this kind of securitization in the real estate industry:

- the selling of a project cash flow, normally through perpetual debentures;
- the financing of new developments, generally through the selling of debentures, with maturity determined by the time of construction or the developer's financing necessities;
- the anticipation of revenues, used mainly in residential multi-family projects.

Receivables are used as collateral to issue securities and collect capital. The main risks of these operations are originator risk and credit risk. If possible, a historical analysis of the receivables may minimize the assumed credit risks. The originator risk may be practically eliminated through an efficient segregation. The most effective way of doing that has been through the creation of a S.P.C. (Special Purpose Company) to acquire the receivables and to sell to investors the collateralized securities. Even being able to anticipate the cash-flows with lesser costs, straightforward alternatives, as banks simply buying the

receivables and issuing securities, would not provide the protection derived from this risk segregation.

The S.P.C. is a corporation (S.A.), and must have a defined and unchangeable objective, such as to issue debentures to finance a specific asset. It is a “paper company”, with minimal organizational structure and using outsourced services. A trustee controls all of the operations on behalf of investor. An independent auditor listed by C.V.M. verifies the accounting procedures and a bank is designated to receive and distribute to investors the revenues. Other agents are sometimes employed, depending on the complexity and on the objectives of the operations, as a financial manager, a back-up servicer or a rating agency. Additional debt or any mortgage other than the original liability are not allowed.

Four conditions must be observed to effect an efficient securitization of receivables, accordingly to Pinheiro Neto Advogados<sup>21</sup>:

- True Sale: As definition of Standard & Poor's : “ Unless the Rating Agency concludes that the Seller has absolutely transferred its rights to the assets, the Rating Agency will view the rating of the Seller as a factor in the transaction analysis”.
- S.P.C. independence from the originator.
- consistency of cash-flows between receivables and securities' payment obligations.
- additional guarantees: overcollateralization and funds to cover operational expenses.

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<sup>20</sup> Ibid.

<sup>21</sup> *Securitização de Recebíveis Conference Notes*, Securitização de Recebíveis Conference, org. by FEBRABAN, S. Paulo, June 1997.

Operations targeted to anticipate revenues were recently used in the residential sector. They were originated by developers that had offered long-term credit to buyers to sustain sales and needed capital to pursue new developments. The issued securities are comparable to RMBS, based on their pass-through structure, with a pro-rata distribution of cash-flows without the pre-payment scenario.

The credit risk guarantee in these operations was provided mainly by overcollateralization (use of additional receivables). As the default risk still remains with the developer, who is the guarantor of the receivables, each participant developer contributed to a reserve fund established as a subsidiary of the S.P.C.. This reserve fund would be used to guarantee the substitution of distressed receivables, the hedging and index matching, and would be accessible even in the case of the developer's bankruptcy.

Some general procedures were adopted to restrict the risks: most notably, the receivables should be originated by various developers, from private contracts independent of the S.F.H. (the governmental and sometimes subsidized financing system) regulation and interference, and at least 40% of the real estate acquisition price should have just been paid by the original debtors (this latter condition can be compared to establishing a LTV - Loan to Value- limit of 0.60). The negotiated debentures were normally long-term and, consequently, the S.P.C. would quickly accumulate cash. Prepayment was not yet a concern, as the current conditions do not stimulate refinancing operations.

João Cesar Botelho de Miranda, coordinator of the Financial System Board of SECOVI, the Developers and Property Managers' Association of São Paulo, explains that a full securitization requires yields of inflation indexation plus 15% to investors. Added to this is 3 to 4% of issuance, management and guarantee costs. Even if the private model would reduce these last costs to 1.5 to 2% per year structuring costs, lack of standardization and taxes restricted a lot of this kind of operations<sup>22</sup>.

Until mid 1997, three securitization operations were completed, having as originators the developers Rossi, Cidadela and a group of developers put together by SECOVI. The use of these operations were not supposed to grow too much, as new instruments to be introduced would allow the developers to come back to their development role, leaving the financial task to finance institutions<sup>23</sup>.

#### **4.2.2 The S.F.I. - Sistema Financeiro Imobiliário (Real Estate Finance System)**

##### 4.2.2.1 - Overview

The S.F.I. is the new real estate financing system proposed by the ABECIP (Savings and Real Estate Credit Entities' Brazilian Association) and being directed by the Government.

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<sup>22</sup> Botelho de Miranda, J. C. M., A Engenharia Imobiliária-Financeira nos Fundos Imobiliários e Debentures Imobiliárias. Financiamentos para Empreendimentos Imobiliários Conference, org. by Institute for International Research. S. Paulo, Brazil, June 1997.

<sup>23</sup> Ibid.

It was produced as an answer to the existent financing model exhaustion, and results of an extensive research comparing various overseas experiences. A more stable currency over the last three years, the end of the paternalist rental laws and the growth of importance of institutional investors point out a favorable environment for a new real estate financial system.

Three are the basic components of this proposed new financing system:

- 1) financing conditions are to be freely negotiated between borrower and lender, without any responsibility or liability to the Government Treasury. This would be possible through the differentiation of low-income population financing, that need subsidies and will be financed by social security resources, from the other population sectors.
- 2) the investor's guarantees will be improved, resulting in more capital available to the real estate sector.
- 3) declining costs of real estate finance resulting from 2)

Basically, the model to be approved can be described as follows. The individual who wants to buy a property goes to a real estate loan originator and gets a mortgage loan collateralized by the property to be bought. This originator may be any financial institution authorized to originate mortgage loans, such as a mortgage bank. The institution lends him the money and sells his/her receivables to a companhia securitizadora (securitizing corporation, companies with roles similar to those of Fannie Mae and Freddie Mac in the U.S.), clearing in this way the originator's capacity for new financing.

The S.F.I. regulations are under the Congressional approval process since June 1997, in a maximum priority regime, that is supposed to get this approval in a 3 to 6 month period of time. Governmental concern has been demonstrated through its attribution to the personal responsibility of the Minister of Planning, Antonio Kandir.

#### 4.2.2.2 - Guarantees and Fiduciary Alienation

The guarantees offered to investors are a crucial concern in this process. Borrower's death, permanent disability and property damages will necessarily be insured. Credit risk insurance will be optional, but will be offered, at least in the first years of operation. In the case of new development financing, construction completion and default insurances are optional. All these insurances come to the lender's protection, which ultimately contributes to the investor's comfort. Mortgage, receivables from real estate sale, and a new instrument called real estate fiduciary alienation will be able to serve as collateral.

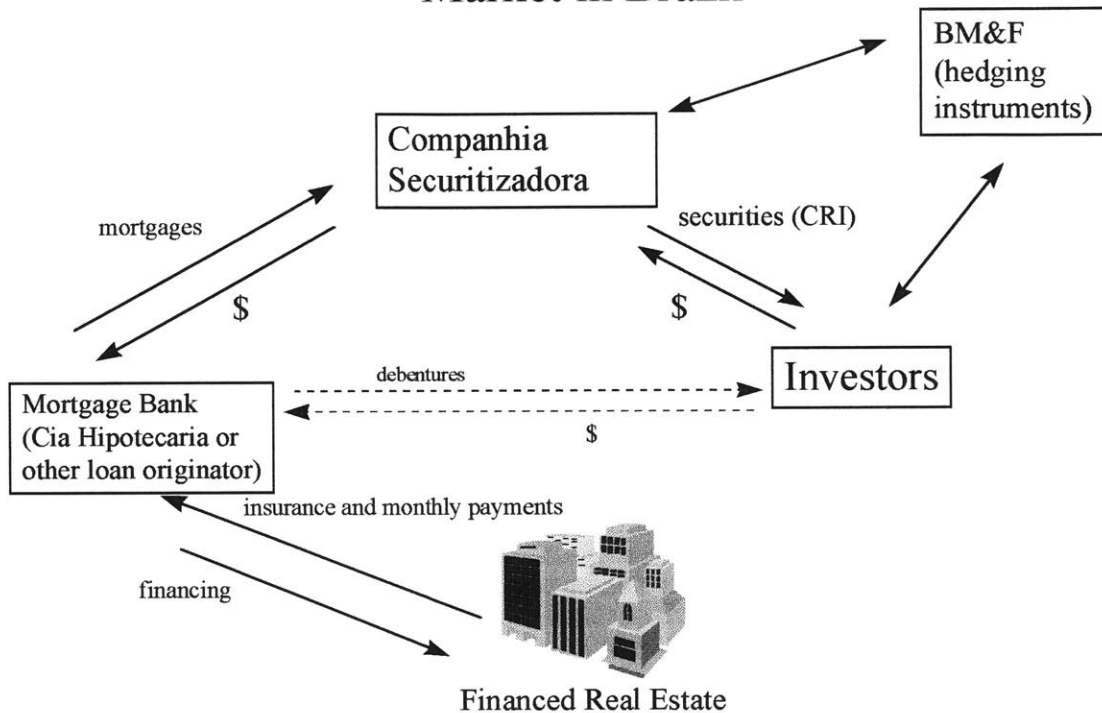
Fiduciary alienation will allow that distressed properties could be taken back in a reasonable time period from the borrower in default. Under current law, this process usually takes from 2 to 5 years to occur. Fiduciary alienation is the fundamental part of the S.F.I. project destined to reduce this period of time. It was adapted from an existing regulation used since 1969 related to cars and other mobile goods sales. Fiduciary alienation divides the possession of a property into direct possession and indirect



possession. The indirect possession is only transferred to the borrower after the last due payment to the loan originator.

Some defense mechanisms to the borrower will be included in the project. Negotiation in the case of default would be stimulated by the exigency of a public auction of the distressed property within 30 days from the date it was taken back. The borrower will have the right to receive any auction income in excess to the debt and expenses related to the process. An arbitrage chamber may be called as a mediator in the case of controversy between lender and borrower. As controversies are expected to increase in inflationary periods, this chamber should allow the system to survive even with a resurgence of inflation. The fiduciary alienation is still a political issue in discussion in the Congress approval process. These discussions might lead to restrict its use for lower income residential borrowers.

## Structure of the Proposed Secondary Mortgage Market in Brazil



Source: ABECIP

----- possible but not probable path, as lacking the risk segregation provided by the companhia securtizadora and the fiduciary regime.

### 4.2.2.3 - The Companhias Securitizadoras (Securitizing Corporations)

The companhias securtizadoras will be public corporations with a central role in creating the mortgage secondary market. Their conception was inspired in the Fannie Mae presence in the U.S. market. Their objective is to increase the supply of real estate finance and to provide liquidity to the securities issued from this financing process, extending the

investor's universe to pension funds, insurance companies and foreign institutions. They will create and enhance credit origination standards, attracting capital market investors while reducing credit risk premiums. They will also manage the structuring of security issues, using scale and their own guarantees to control and distribute risks. They will be responsible for the acceptance of the issued securities as they gain the market's trust.

These securities will be the Certificados de Recebíveis Imobiliários (C.R.I), created by law, collateralized by the mortgage contracts and issued with fixed or adjustable interest rate, plus indexation. The C.R.I. may or may not have a floating guarantee, a general right on the assets of the companhia securitizadora without the power to interdict the negotiation of these assets. The companhia securitizadora would be able to offer the fiduciary regime to investors. This regime establishes the separation of real estate credits of one operation from the companhia securitizadora's assets, segregating risks. In this case, a trustee or fiduciary agent is nominated to operate in name of the investors, collecting and distributing the income. The companhia securitizadora will still be responsible for the general management, accounting and disclosure information about each of the created set of credits. Carlos E. D. Fleury, a juridical consultant with ABECIP, explains that a 50% informal limit relation between the companhia securitizadora's offered credit and its assets will be established at least in the first years of its operation<sup>24</sup>. Credit insurance would be an option probably demanded by investors that would provide the

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<sup>24</sup> Fleury, Carlos E.D., interview on June 9, 1997, S. Paulo, Brazil.

insurance companies the conditions to be the a source of market regulation through their risk analysis instruments.

The first companhia securitizadora to be created will be a non-financial institution called CIBRASEC- Companhia Brasileira Securitizadora. Luís Eduardo Pinto Lima, Vice President of ABECIP and probable designated president to the new company, explains that it will be formed by a partnership among private, public and governmental banks<sup>25</sup>. Its original capital would be US\$ 60 million, and each 10% share of one or a set of institutions will provide a seat on its Board. Ten per cent is also the ceiling limit to any company participation, as any superior level would forbid the operations as a credit originator from any participant. One of the reasons for the Fannie Mae success in the U. S. was the guarantee provided by the government in its first decades. Even in the following decades, they could offer securities with low interest rates accordingly to the low risk level perceived by the market. As CIBRASEC does not present the same favorable conditions, it is being formed by strongly acknowledged institutions in the country. Most of the more important banks operating in Brazil had confirmed their participation in this company. Goldman Sachs and I.F.C. are also expected to join the partnership.

#### 4.2.2.4 - The Mortgage Banks (Companhias Hipotecárias)

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<sup>25</sup> Pinto de Lima, L. E., *Securitização de Recebíveis*, Securitização de Recebíveis Conference org. by FEBRABAN. S. Paulo, Brazil, June 1997.

Another piece of this new financing model are the mortgage banks (companhias hipotecárias), regulated institutions that need an authorization of the Banco Central to operate. Their main operational targets are real estate financing, trade and management of mortgage receivables and of F.I.Is (Real Estate Investment Funds), covering all the real estate sectors, from shopping centers to residential, from hotels to hospitals, without yield ceiling restrictions. The first companhia hipotecária in Brazil was constituted by the Bank of Boston in mid 1996. In mid 1997, three were authorized by the government (Cobansa and Citibank are the others). They may obtain funds through the issue of debentures or other operations authorized by the Banco Central. They may also link the borrower or the loan originator to a companhia securitizadora through the desired standardized procedures.

#### 4.2.2.5 - The S.F.I. Objectives

The SFI is expected to improve the geographical distribution of real estate capital, decentralizing the current preponderance of the SFH in the major cities. It is expected to lead to the creation of a Secondary Mortgage Market in the next months. Risks would be segmented: the credit generation risks, related mostly to documentation, would remain with the loan originator; the borrower default risk would be shifted to the Companhia Securitizadora, and interest rate risks would be conveyed to the final investors. Indexation ultimately transfers inflation risks to borrowers.

The initial target of the S.F.I. would be the existing real estate properties (residential, offices, shopping centers, hotels or industrial). Nonetheless, it is allowed to also finance new developments. As explains Fleury, financing only existing properties is fundamental to diminish the risks at least in the first operation years<sup>26</sup>. Commercial banks, through the S.F.H. if its conditions are met, may offer financing to the shorter-term construction period.

In the residential sector, the S.F.I. may shift the country's general thinking about housing. It may enhance the idea that what is important is the availability of decent housing for all, rented or owned. In the recent past, successive laws supposedly protecting tenants unbalanced the rental residential market in the longer term. The relative deregulation in the last years in this market may permit residential leasing to become an investment opportunity. As the existing S.F.H. still possesses an important volume of generated loans, it still will go on working simultaneously with the S.F.I., continuing to offer loans to the lower income population. Moreover, improvements on some of its new contracts have been suggested to allow that part of its receivables could be used by the S.F.I. These changes would initially be related to free credit analysis, amortization, minimal guarantees, and other property's possession interdiction from the rules that govern the S.F.H. In a second phase, they may include the fiduciary alienation, free interest rates determination and competitively priced credit insurance, provided after open competition.

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<sup>26</sup> Fleury, Carlos E.D., Ibid.

## **4.3 Equity Securities**

### **4.3.1 The F.I.I.s- Fundos de Investimento Imobiliário (Real Estate Funds Investments Funds)**

#### 4.3.1.1 - Overview

This category of investment was created in June of 1993 and regulated in 1994. The first real estate investment funds began to operate in 1995, and in April 1997, 41 were active with approximately US\$500 million in distributed shares<sup>27</sup>. F.I.I.s have been formed as equity funds and need to sell all its shares to be considered effectively constituted. Nevertheless, the new law regulating the S.F.I., under approval of the Congress, allows F.I.I.s to exclusively invest in real estate mortgages and debt securities.

In many respects, the F.I.I.s may be compared to the U.S. REITs (see table 1). Similar to REITs, they are required to concentrate their revenue sources in leasing or selling real estate; they are not allowed to operate owned properties. At least 75% of the F.I.I. assets are required to be allocated to real estate. The management of the funds is done through a financial institution in a fiduciary capacity, segregated from the institution's other assets

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<sup>27</sup> *Fundos Imobiliários Constituídos*, James Andrew International, April 1997.

**Table 1 - Comparison Between F.I.I.s and REITs**

	<b>F.I.I.</b>	<b>REIT</b>
<b>Objective</b>	real estate leasing/selling	real estate leasing/selling
<b>Allocation</b>	> 75% in real estate	>75% in r.e., cash and government securities, among other restrictions
<b>Asset Segregation</b>	yes	yes
<b>Normal Investment Destination</b>	mostly development of one specific project	specified or unespecified
<b>Number of Shares</b>	open-ended	open-ended
<b>Mngt Owning Shares</b>	no	yes ( typically 5 to 45%)
<b>Ownership Dispersion</b>	no	yes (more than 100 shareholders, limits on ownership concentrations)
<b>Dividend Distribution Obligation</b>	no	yes (95% of taxable income)
<b>Minimum Real Property Holding Period</b>	no	yes / no more than 30% of income from property held less than 4 years
<b>Use of Debt</b>	no	yes (normally between 30 and 40%)
<b>Capitalization</b>	US\$ 496 million <sup>28</sup>	US\$ 120 billion <sup>29</sup>
<b>Taxes at Corporate Level</b>	no	no
<b>Varieties</b>	equity (debt F.I.I on approval on S.F.I. law)	equity, debt(mortgage) or hybrid

<sup>28</sup> *Fundos Imobiliários Constituídos*, James Andrew International, April 1997.

<sup>29</sup> As of June 30, 1997. Vinocur, Barry, *Commercial Property in an Early Stage of Ownership Shift*, Barron's, August 4, 1997, p. 42.



and liabilities. Detailed public disclosure of investment's information is required from the managers. The securities' maturity may be stated or not. The investment objective of a F.I.I. may be specific or generic. Most of these funds, however, have a specific investment objective, related to an well determined project.

#### 4.3.1.2 - The Use of the F.I.I. in New Developments

In some aspects, the F.I.I. are less restrained than REITs. Specifically, they do not (I) present ownership dispersion requirements, (II) need to distribute a minimum percentage of annual income in the form of dividends, or (III) have to hold their assets for minimum durations before disposing of them without penalty. The lack of these constraints makes the F.I.I. arguably more appropriate to finance new developments than U.S. REITs. The use of REITs as a vehicle to fund development is polemical in the U.S. REITs seem to be suited for owners of properties that currently generate cash-flow, with the attendant tax advantages and minimum dividend policy.

A development company may be comparable to a high-tech company, whose value is based more in growth opportunities than in current cash-flows. In this case, as most of the cash flow is plowed back to fund investment, dividend distribution requirements are a

constraint, and taxes at the corporate level are not as important<sup>30</sup>. Also, the dispersed ownership required by REIT regulation may not be as appropriate with respect to how decisions have to be made in a development company, and may be not the best way to monitor the management action. The four year asset holding period rule may be an important constraint to the flexibility of a development company. One last issue is the patience required to wait for the results in development transactions; REIT investors are not used to being patient.

The use of F.I.I.s in financing developments, combined with their non-real estate assets limit (25%), are responsible for the partial payment completion profile of most of the F.I.I. issues. Investment is undertaken accordingly to the development necessities, following a budget previously approved. Additional guarantees, such as performance bonds, are offered by the manager as a form of insurance (and included in the fund's expenses) to the F.I.I.'s development investor against construction delays and the consequent beginning of revenues. To be characterized as an equity investment, regulations do not allow the manager of the F.I.I. to guarantee minimum annual yields, but in some cases fund sponsors (the developer, for example) have done it. As a substitute for the lack of a secondary market, some sponsors have offered long-term repurchase agreements as a *de facto* guarantee to their investors.

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<sup>30</sup> Riddiough, Timothy, *ibid*, pg 91.

As the F.I.I.s are exempt from income taxes at the fund level, double taxation is avoided. They are also exempt from PIS<sup>31</sup> and COFINS<sup>32</sup>. Taxes are generally restricted to 10% of profits and capital gains to local investors, and 10% on profits only to foreign investors. Any capital gains arising from liquidation of the portfolio are exempt from income tax. This tax structure may offer substantial competitive advantages to investors in a F.I.I. who are interested in financing a real estate development.

#### 4.3.1.3 - The Structure of a F.I.I.

Five steps are required to form a F.I.I.:

1. The developer defines the investment opportunity, the physical product and secures the necessary entitlements;
2. A financial institution is chosen to secure additional financial permits and to communicate financial information to the market;
3. An independent consultant's report regarding the soundness of the financial statements is required;
4. The project is taken to C.V.M to be analyzed, and approved for securities to be issued;
5. The securities are sold and the project is acquired or developed.

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<sup>31</sup> PIS (Social Integration Program) is a 0.65% over gross income tax, deductible for tax income purposes.

<sup>32</sup> COFINS (Social Contribution for Social Security Financing) is a 2% over the gross income tax deductible for tax income purposes.

Recent securities issues, however, have generally followed a slightly different process. In particular, developers have defined the opportunity and offered the F.I.I. to the most probable investors before taking it to the C.V.M. In doing so, they have collected criticism and suggestions from the targeted investors in advance of issuing the securities, so that changes can be easily made, if necessary.

The managing institution in a F.I.I. is not allowed to buy shares in the F.I.I. it manages. This prohibition was established to avoid agency conflicts, but it also eliminates a desirable alignment of interests between shareholders and managers. The F.I.I.s are not allowed to use debt to finance their operations. As the F.I.I. acquires an property, the transfer tax ITBI (between 2 and 6% of the value of the property, depending on the city regulation) is normally due. To avoid this tax liability, a number of projects have allowed title to the property to remain with the previous owner, when the owner would participate as an investor in the fund. This structure compromises the desired risk segregation that a F.I.I. should provide, as the property would not be protected anymore in the case of the owner's bankruptcy. Other F.I.I.s have been freed from the ITBI payment through municipal incentives. The leverage constraint and the ITBI tax have been frequent obstacles to the F.I.I.'s wider acceptance.

#### 4.3.1.4 - Restrictions to Pension Funds and Foreign Investors

Until recently, investments in F.I.I. received the same regulatory treatment as stocks in pension fund's portfolios, being able to compromise up to 50 % of these investment portfolios. The resolution 2324 of October 1996 from Banco Central subsequently differentiated the real estate funds, limiting their participation to 10% of the pension fund's investments.

In 1993, the selling of fixed-income securities to foreigners was restricted. At that time, the excessive arrival of money taking advantage of the country's very high interest rates and invested in indexed funds exacerbated inflationary effects. Analysts attribute a number of the first F.I.I. issues to a creative way to overcome this hurdle. Until February 1996, if a F.I.I. was not completed, either for not selling all its shares or for project permit problems, for example, the invested funds would be returned to the investor with fixed income yields added. In this way, some FII issues were engineered specifically to not be approved, in a disguised fixed income investment to foreigners. In February 1996, in order to avoid this use of the F.I.I.s, the government established an IOF<sup>33</sup> payment on the ones that do not begin operations and to foreign investments that remain less than one year in the funds.

#### 4.3.1.5 - Recent Trends on F.I.I.s

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<sup>33</sup> IOF is the Tax on Financial Operations. It is levied at varying rates on certain foreign operations, being added to the cost of each transaction. Dividends, repayment of loans, repatriation of capital and remittance of interest payments are in general not subject to IOF; nonetheless, this tax may be used as an instrument to incentive long term investments, decreasing with the term, reaching 0 for investments with terms greater or equal to three-years. In the beginning of 1997, the IOF charged on foreign fixed income investments decreased from 7% to 2%.

The largest F.I.I. thus far is a US\$ 215 million fund (still not closed) formed by Cindam to develop and build a tourist complex north of Salvador, in the Bahia State. It includes selling and leasing revenues, and additionally offers a kind of insurance, guaranteeing payment of dividends to investors after two years from the date of issuance if operations have not begun. The promised yields of most F.I.I. issues have been around 15% per year plus inflation. The historical data of returns on existing F.I.I.s have not been distributed to the market yet. This fact raises doubts as to whether enough attention has been paid to information quality, which is crucial to the development of a secondary market. Sergio Belleza, a consultant with James Andrew International, urges a stronger communication effort with, and the resulting disclosure to the market analysts and their association, ABAMEC, to give to these professionals more relevant information to bring investors to the F.I.I.s<sup>34</sup>.

The law regulating the S.F.I. allows the constitution of F.I.I.s to invest exclusively in any real estate debt security, as the C.R.I.s. Prudent management of these funds would avoid the repetition of the history of the mortgage REITs in the U.S.. These corporations were very active in the late 1960s and early 1970s collecting short-term money in the public markets and financing at long-term construction and new development. This mismatching of liabilities, combined with the recession and inflation of the mid-1970s, provoked losses in operations and high levels of default, in a serious crisis that ended the use of mortgage REITs for the next decades.

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<sup>34</sup> Belleza F., Sérgio O.D. interview on June, 3 1997, S.Paulo, Brazil.

## **Chapter 5 - Participants in the Brazilian Real Estate Securitization Process**

### **5.1 The Government**

Real estate securitization is interesting to the government as it promises to improve the country's investment instruments, enhance its financial system, and improve the credit analysis standards in the market. Securitization can be a powerful instrument to capture foreign investments, a priority to this government's objectives and necessities. Additionally, a successful real estate securitization process would also benefit with additional profits the state-owned banks, with positive effects in government finances. Furthermore, it would convey resources to the construction sector, acknowledged as the most important low-skilled job absorber in the country.

The proposed securitization initiatives are essentially market oriented, managed by private initiative, independent of direct governmental subsidies and not intended to create deficits in the national budget. The government seems to be aware of the damages to this system that could come from introducing subsidies into it. This non-intervention policy has led to the avoidance of governmental guarantees to investors, contrary to what happened in the U.S. real estate securitization. The question here is how will the investors feel about the non- guaranteed yields and the interest rates they will require.

The S.F.I. would not contemplate social projects that can only be achieved through governmental subsidies. However, securitization may be a viable alternative to the existing official real estate financing system, exhausted and carrying financial deformations from the past. It would be able to complement and broaden this system, creating institutional means to finance non-residential real estate developments, such as offices, shopping-centers, hospitals, industrial plants and hotels.

## ***5.2 The Banks and the Financial Institutions***

The S.F.I. project was developed by ABECIP (Savings and Real Estate Credit Entities' Brazilian Association). ABECIP is formed by leading Brazilian and foreign commercial banks dealing with real estate loans and mortgages. In elaborating their proposal, ABECIP studied diverse countries' models to build their model and chose a significant part of its paradigms from the U.S. securitization system. The ABECIP's concern resulted from their concern with risks of an governmental initiative carrying excessive regulation that could deform the system and spoil a good idea. Moreover, ABECIP decided to pioneer a system independent of the government subsidies and political abuse that led to problems as the F.C.V.S. deficit. Real estate investments have been traditionally a profitable sector to the banks, and the S.F.I. is expected to adjust favorably their perspectives in this area. The approval of the fiduciary alienation would bring more tranquillity to the mortgage industry. Best practices in underwriting, production of standards for credit generation with lesser costs of rating and operation, better understanding of guarantees by investors, more liquidity to mortgage loans, and new



services to be offered to the market are the project's pluses to the financial sector, says L. E. Pinto Lima<sup>35</sup>.

### **5.3 Capital Providers**

#### 5.3.1 - Pension Funds and Insurance Companies

Pension funds are a primary target in the Brazilian real estate securitization process, in 1997. In addition to being the biggest institutional investors in the country's economy. Brazilian pension funds are the biggest participants in Brazilian real estate investments. In the beginning of 1997, 349 pension fund entities patronized by 1596 governmental, public and private companies were active in Brazil. They have accumulated in their 19 years of existence approximately US\$ 70 billion in assets. These assets represent less than 10% of the country's GDP, a modest number when compared to the U.S. and U.K. pension funds participation, which represents approximately 70% of GDP. Ten of these pension funds (eight originated from governmental companies) account for approximately 60% of these assets, invested on behalf of 1.8 million of participants and having more than 7 million beneficiaries<sup>36</sup>.

C.M.N.(National Monetary Council) is the governmental organ that establishes rules

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<sup>35</sup> Pinto de Lima, L. E., *Securitização de Recebíveis*, Securitização de Recebíveis Conference, org. by FEBRABAN, S. Paulo, Brazil, June 1997.

<sup>36</sup> Schonenberg, L. G. and Souza Gurgel, J. L., *Os Fundos de Pensão no Brasil*, Revista Trevisan, Issue 107, Jan 1997, pg 24-32.

related to diversification and risk-control in pension funds investment. The Central Bank of Brazil (BACEN) is the institution responsible for the execution of these policies and for the control and regulation of the financial institutions and foreign investment. Its Resolution 2324, released in October 1996, limited direct investments in real estate to 20% of fund assets in 1997, decreasing 1% per year until a 15% cap is reached in 2001. This same resolution also limited investments in real estate funds to 10% of the pension fund's assets, while bonds, in general, are limited to 80% of the pension fund portfolio, and stocks, 50%. The pension funds are still forbidden to participate in more than 20% of any security issue. This last determination brought disincentives to pension funds to invest in smaller real estate projects and was badly received by analysts.

Distortions coming from cumulative defined-benefit plans and early retirement (not with age, but with time of contribution) unbalanced the governmental social security system, with serious effects on the country's economy health. These distortions are the subject of a reform in the pension system also to be approved by the Congress. This reform is expected to contribute to the growing presence of a complementary security funds system. A general shift of the new pension fund plans from defined-benefit to defined-contribution is occurring in Brazil as well as in the U.S., where this shift has enhanced the mutual funds that are offered to the contributor's investment choice. On this trend, Mike Miles argues that mutual funds look for investments with tax advantages, and prefer to invest in

securities instead of direct real estate, making commercial real estate securitization growth inevitable<sup>37</sup>.

The pension funds have changed their investment profile in Brazilian real estate over the last years. In 1996/1997, they preferred to invest in larger high-level office buildings instead of offices in general, as they did some years ago. They have also increased their participation in the governmental companies being privatized and in the previously family owned companies becoming public. They have changed their behavior as investors, too, gradually increasing their participation in the management boards of the companies in which they invest and being active on demanding timely payment of dividends, establishing a practice not yet completely embraced throughout the market. Even if not all the Brazilian pension funds are at the same point in the road between “building-picking” to a more strategic portfolio approach, it is generally acknowledged that real estate investments may be considered a separate asset class, instead of simply another industry sector. This consideration comes from the fact that real estate investments have long duration and residual capital gains matched to pension funds liabilities, and leads to position real estate as a strategic part of the diversification of their portfolios.

The same desired asset/liability matching occurs in insurance companies. A number of companies, among them Aetna, Hartford, MetLife, Travelers and Liberty, with international presence and real estate investment experience, are entering the country

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37 Miles, Mike, *Real Estate Securitization: It is only a question of how much and how soon*, Real Estate Finance, Summer 1996, pg 1-2.

through partnerships or the opening of their own offices. The market expects that they will invest increasingly in real estate with the improving opportunities and instruments available.

### 5.3.2 - The Foreign Investors

The real estate securitization process is also directed toward foreign investment. Naturally, these investments will be attracted to Brazilian real estate securities if their returns adequately compensate for perceived risks. Without a secondary market as an exit strategy, foreign capital requirements may possibly stay in the levels they are today, with yields around 15% per year plus inflation (normally measured by the IGP- Prices General Index). These yields would group the Brazilian real estate securities together with the opportunity investments that currently occupy the periphery of the institutional foreign investor's portfolio, where liquidity is not the fundamental issue. These opportunistic investments constituted 20% of U.S. pension funds real estate investments in 1996, and their participation was supposed to grow in the next years<sup>38</sup>.

Normally, an investment in a foreign country yields a lower correlation to a company's investment portfolio than an investment in its own country. In theory, an investment in Brazil will be less risky to an U.S. investor than to a Brazilian investor. In this way, the diversified foreign investor should require lower yields than those required by a national.

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<sup>38</sup> McCadden, Daniel and McNally, Peter, *U.S. Pension Fund Investments in Real Estate: Current and Future Investment Strategy*, Real Estate Finance, Winter 1997, pg 46-57

But the extra costs incurred to understand and choose between foreign investments, and fear of changing rules, undermine this otherwise rational result.

The general conditions to foreign investments in Brazil should also be examined. Direct international investments in Brazil must be converted to Real through the so-called commercial exchange rate, controlled by the Banco Central. The process is not complicated, but must be managed by a financial institution authorized by the Banco Central. Brazilians and foreign tourists must use the floating exchange rate, normally with higher foreign currency prices. In the beginning of 1997, the Brazilian government lifted a ban on derivative trades as hedging techniques used by foreigners. This ban was imposed in 1995 to avoid “boxed” hedge operations that amounted to the fixed-income instruments, taking advantage of the high interest rates, and fueling inflation. The lifting of that ban was supposed to contribute to the flow of foreign investment to the country.

Currency hedging may be provided through buying NTN Cambiais, securities guaranteed by the government with interest rates of 8% per year, in dollars. The longer maturity NTN Cambiais currently have 3-year terms, with reasonable liquidity, accordingly to Mauro Schneider, economist with the ING Barings Bank, in S. Paulo<sup>39</sup>. The NTN Cambiais can be considered a benchmark to foreign investment in Brazil, as they only carry the country's systematic risk. Other possible benchmarks are the long-term fixed income global bonds, recently issued by the Brazilian government, with yields of around 10% per year, in dollars.

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<sup>39</sup> Schneider, M., telephonic interview on July, 27, 1997.

Comparing the S.F.I. model to the U.S., the Brazilian government is not offering guarantees on issued securities. Additionally, Fannie Mae had no competitors in the U.S. market for a long time, strengthening its position and developing the market's trust. CIBRASEC is supported by strong names, but its monopolist position as a securitizer corporation may only be temporary. Consequently, these factors may have a material effect on the interest rates that foreign investors require.

## **5.4 Capital Users**

### 5.4.1 - The Development and Construction Sector

A successful securitization process is enhanced by a strong real estate market. The development and construction sectors reflect these opportunities, as they will generally produce new supply only with the expectation of rents leading to positive NPVs on the discounted cash-flows.

The construction sector in Brazil represents approximately 8% of the country's GDP, and employing 1.2 million people<sup>40</sup>. The trade opening of the country, the technological

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<sup>40</sup> Unsigned Article. O Setor de Construção Encontrou o seu Caminho, Opinião Trevisan, Issue 107, Jan 1997, pg 6.

improvements, and the availability of new sources of material have all contributed to decrease construction costs by an average of 3% over the last two years<sup>41</sup>.

The available numbers indicate investment and development opportunities in the Brazilian real estate markets. The country's housing deficit is estimated at between 5 and 15 million houses. This extremely large range is fueled by the fact that different organizations use different criteria to measure the deficit, inconsistently including precarious houses in the calculations. The residential deficit is more serious in the cities, as nearly 80 % of Brazil's population lives in urban environments. Even if part of the residential deficit can only be treated through social governmental programs, a large portion of the housing sector may be reached through the right financing instruments. US\$ 35.5 billion is the estimated investment in the housing sector that is needed to meet the current demand in the country<sup>42</sup>.

With respect to the retail sector, shopping center sales have increased more than 30% per year since 1992. Shopping center sales contribution is still small when compared to other countries (in the beginning of 1997, Brazil had 136 shopping centers that contributed to 17% of the country's retail sales, excepting automobile trade, in contrast to 41,235 shopping centers in the U.S. responsible for 58% of the retail sales)<sup>43</sup>. The best investment

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41 Amaral, Paulo N., *Quais as possibilidades de Investimento diante das Estimativas de Taxas de Juros no Biênio 97/98, Financiamentos para Empreendimentos Imobiliários* Conference Notes, org. by Institute for International Research, S. Paulo, June 1997.

42 Unsigned Article, *Habitação: Classe com Preço Baixo*. *Brasil em Exame* 1996, supplement to *Revista Exame*, Jan 1997, pp. 48-51.

43 Pinto de Lima, L. E.. *Securitização de Recebíveis*. *Securitização de Recebíveis* Conference org. by FEBRABAN. S. Paulo, Brazil, June 1997.

and development opportunities seems to reside in the large number of medium cities not served by this kind of retail.

Entertainment centers and hospitality uses also have high growth potential. At the end of 1996, Brazil had only 14 well-equipped resort centers (the Caribbean area had approximately 3,000)<sup>44</sup>.

Industrial investments have been decentralized, as a number of companies have migrated from the metropolitan area of Sao Paulo to the less unionized and less taxed regions of the country.

Commercial investment and development opportunities in the big urban areas have been mapped by local and international brokerage and consulting companies, and must be added to the expanding demand in the medium-sized cities mentioned above. The potential of investment for meeting the demand is estimated in US\$ 25 billion per year, 150% above of what was invested in 1996<sup>45</sup>.

New development and construction opportunities have attracted foreign developers and contractors to the Brazilian market. The most valuable contribution from the foreigners is supposed to occur in areas such as building technology and financial strategies, along with access to broader sources of capital. In 1996, George Soros, through Brazil Realty, a

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<sup>44</sup> O Brasil em Exame 1996, *ibid.*

<sup>45</sup> *Ibid.*



partnership with Brazilian Cyrella, began to invest in the country's shopping-center, residential and commercial markets. Other recent partnerships have put together Metodo from Brazil and Tischman Speyer from the U.S., and Birmann (Brazil) with Turner Construction (U.S.), to invest in commercial and residential opportunities.

Securitization may mean a new and important capital source to the construction sector. This sector has suffered with the constraints of the high cost of financing in the last years. Real estate securitization could mean decreasing the gap between the demand for, and supply of financing. Additionally, institutional investments from pension funds have begun to occur in the country, and securitization may mean more resources to the construction sector, distributed by clearer criteria. Real estate securitization may also change the industry, pushing up its disclosure standards to make them more in line with investor's expectations. Cobansa's (one of the three authorized companhias hipotecarias) service offering illustrates these possible improvements<sup>46</sup>. Accordingly to their proposal, commercialization risks (velocity and conditions of sales/rents) would be understood and quantified through market research, viability studies, formalized credit and sale policies, contractual insurance, and rating of the operations. Construction risks would be hedged through the use of contractor's performance bonds, quality insurance and external monitoring. Credit risks may be better understood through rating and standardized credit policies and instruments. Finally, credit management, related to appropriate funding of

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<sup>46</sup> Klumb, Pedro, *Avaliando a Estrutura das Operações de Securitização de Recebíveis Imobiliários sob a Ótica das Companhias Hipotecárias*, Cobansa S.A..

operations and management of the receivables, would have its risks controlled through disclosure of information, standardized credit management policies, monitoring and rating.

#### 5.4.2 - The Borrowers

Real estate securitization and the S.F.I. may not reach the lower income individual, as the plans do not target the social segments that can only be reached through governmental subsidies. But securitization can broaden the layers of population that have access to mortgage loans. In the U.S., mortgage securitization brought more loans at lower rates through the quasi-governmental agencies Fannie Mae and Freddie Mac<sup>47</sup>, as it avoided the previous funneling of the resources coming only from the commercial banks.

Properties in the S.F.H. protected band (value of the property less than approximately US\$ 150,000) are subject to mortgage loans with interest rates of 12% per year plus indexation. In the last years, developers have offered 8 to 10-year term direct financing plans with the same conditions. In these cases, the S.F.I. interest rates, at least initially, would not possibly be competitive. Borrowers would be benefited if the new system broadened the availability of loans, imposing less credit restrictions to borrowers, if prudent, or serving properties not served by any of these financing options. With the S.F.I. consolidation, lower yields may be required by the investors, allowing the lower rates of

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<sup>47</sup> Recently, these companies have developed computerized underwriting systems to evaluate the credit worthiness of a loan applicant. The non-approved loans have been sold to lending companies as subprimes, to be packaged and sold to investors. This recent trend has been controversial, as it serves the country's affordable house demand, but charging non-affordable interest rates to compensate the assumed risks.

interest rates to borrowers. Furthermore, a secondary mortgage market, should it emerge, may also lengthen habitation financing maturities.

To properties with values in excess of those comprised in the S.F.H. band, direct developer's financing may still be present. But the S.F.I. may represent a competitive option and may bring down the borrower's interest rates on these more valuable properties.

Last but not least, the S.F.I. may serve as an important source of financing to commercial, industrial and other kinds of real estate properties not served by the S.F.H. or by the B.N.D.E.S (National Bank for the Economic and Social Development)<sup>48</sup>. Borrowers would then have a new source of financing, which would possibly reduce the interest rates currently charged to finance such projects.

In all the cases, the general level of interest rates in the economy is primordial: a secondary mortgage market can lower them through efficiency and risk control, but it can not overcome the current interest rates. Professor Mário Henrique Simonsen gives the example<sup>49</sup>: when interest rates go up by 2% per month, the monthly payment due increases 71.5% and maturity extensions do not help meaningfully. High interest rates affect the borrower's payment capacity and menace the financial system's health. Inflation levels

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<sup>48</sup> Governmental institution that grants loans, most of them subsidized, to implement its investment and development policies.

<sup>49</sup> Simonsen, Mário H., *Perspectivas do Sistema Financeiro Imobiliário*, SFI - Um Novo Modelo Habitacional Conference Notes, org. by ABECIP, Brasília, Nov 1995, pg 28-33

matter. High inflation causes bring high price-dispersion and the probable mismatching between the borrower's income and the amount due every month. These gaps are one of the main problems responsible for the S.F.H. problems. On the other hand, economic growth is beneficial to the system, as it increases borrower's paying capacity, thereby decreasing default probabilities.

The fiduciary alienation may seem initially as a menace to the borrower. However, as the current treatment of distressed mortgage loans benefits the distressed borrowers, deregulated loans may include higher yields to cover the weakness of guarantees. Thus, the distressed borrowers are subsidized by the whole universe of borrowers, in this case. The S.F.I. project has some mechanisms to not transform distressed properties in a profitable business to the financial institutions. Auctions in quick period of time, return of money to borrower if the collected funds exceed the debt and a arbitrage chamber would be instruments for the borrower's protection.

## Chapter 6 - Conclusions

The process of real estate securitization in Brazil is in its infancy. The economic importance of Brazil, its maturing financial markets and systems, the globalization of the capital markets and the increasing demand for real estate securities argues for the advancement of this process.

On the debt side, some private securitization has occurred. The securities are generally well structured, but their costs avoid expanding their use. A more comprehensive securitization plan, the S.F.I., is currently being structured. Its mechanisms have much in common with the mortgage backed securities model in the U.S., and is intended to broaden the supply of real estate financing in Brazil. Residential, industrial, commercial and other kinds of real estate loans will serve as collateral. A corporation will buy and package mortgages to issue securities, as Fannie Mae and Freddie Mac do in the U.S. One of S.F.I.'s objectives is the creation of a secondary mortgage market in the country. Standardization and enhancement of legal guarantees on collateral are crucial concerns present in this initiative, currently under approval at the Federal Congress. The S.F.I.'s targeted investors are mostly pension funds, insurance companies and foreign investors.

On the equity side, there are in operation in the country approximately 40 Fundos de Investimento Imobiliário (F.I.I.). Although comparable to U.S. REITs, the differences between them have led the F.I.I. to be used mostly by closed groups for tax advantages in financing new developments. This use of F.I.I. does not lead to the complete achievement

of the advantages of real estate securities over direct investment in the underlying properties, as liquidity, non-lumpiness, low transaction costs, easy diversification, disclosure, discipline and professional management.

In general, all the initiatives related to real estate securitization have been done under the control of the government and the scrutiny of the marketplace. However, the lack of a secondary market has led to a investment preponderance of closed investment groups, effectively defining the current Brazilian real estate securitization as a private securitization. Even though information disclosure is clearly required by these instruments' regulation, private securitization reduces the demand for information dissemination to the public. A better information disclosure culture is a legitimate concern to the advancement of public securitization.

Other concerns are related to the economy as a whole. A macro-economic scenario with uncontrolled government deficits and high inflation rates would probably bring difficulties too large to be surpassed by the securitization process. Inflation brings economic disorganization and conflicts that would interfere in the clear relationships needed to operate securitization. Long-term investment occurs when the investors feel sure that the rules of the game will be maintained and respected. Only constancy and regulatory coherence will enhance the institutional trustworthiness in the country and in its long-term investment opportunities.

Additionally, the continuous governmental support for the securitization process is fundamental. This support must come through control, but without excessive regulation. Tax incentives, as exempting the F.I.I.s from the IBTI tax, could be even considered to decrease the already high equilibrium interest rate of the operations. In a desirable scenario, as the securitization matures and information begins to flow continuously, political and institutional trustworthiness would lead to equilibrium interest rates satisfying to both investors and borrowers, and managing to bring a meaningful volume of capital to Brazilian real estate markets. In this situation, the critical mass needed for a well-functioning system would be achieved, and real estate securitization would be able to progress.

## Appendix A - Taxes and Legal Considerations to Real Estate Security Investments

This appendix includes a very quick overview of the Brazilian taxes and legal dispositions related to real estate securitization.

Corporations and most legal entities pay income taxes at rates of 15% on their annual net income up to R\$ 240,000<sup>50</sup>. There is an additional surtax of 10% on the net income exceeding R\$ 240,000. In any case, there is a surcharge of 8% of Social Contribution on the total net income. To illustrate, supposing a net income of R\$1,000,000:

Net income	1,000,000
Social Contribution (8% * \$1,000,000)	(80,000)
Corporate Income tax (15% * \$240,000)	(36,000)
Corp inc tax + surtax (25% * \$760,000)	(190,000)
Net inc after income tax	694,000
0% withholding inc. tax on dividend	-
Net dividend received by shareholder	694,000

Interest on capital and rents are subject to a 15% withholding income tax, as fixed income

<sup>50</sup> Unsigned Article, *Brazil 1997 Basic Business Information*, Arthur Andersen, 4<sup>th</sup> edition, April 1997,



funds. Dividend payments are exempt of the withholding tax, as shown in the example. Convertible debentures issued by Special Purpose Companies to finance real estate developments are subject to the withholding income tax since May 1997. This measure came as a reaction to capital entering by factoring institutions to finance consumption, which contributed to the country's trade deficit balance. As long-term real estate investments have clearly different characteristics, there are chances that the pressure on Government to open an exception to this kind of investments would be successful.

IOF is the Tax on Financial Operations. It is levied at varying rates on certain foreign operations, being added to the cost of each transaction. In the last years it has been imposed only to payments not characterized as “technology transfer fees”<sup>51</sup>. In any case, this tax is deductible as an expense before the income tax calculation. Dividends, repayment of loans, repatriation of capital and remittance of interest payments are in general not subject to IOF; nonetheless, this tax may be used as an instrument to incentive long term investments, decreasing with the term, reaching 0% to investments with terms superior to three-years. In the beginning of 1997, the IOF charged on foreign fixed income investments came down from 7% to 2%.

Securities financing real estate may bring important competitive fiscal advantages to the financed project. Apart from direct incentives, indirect taxes as COFINS and PIS are not due in securities financed projects. COFINS (Social Contribution for Social Security Financing) is a 2% over the gross income tax deductible for tax income purposes that does

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<sup>51</sup> Ibid., p. 16.

not apply to financial institutions in general. Financing through securities is exempt of the PIS (Social Integration Program) - a 0.65% over gross income, also deductible for tax income purposes.

IPTU ( Urban Territorial Property Tax) is a municipal property tax calculated as a percentage between 0 and 5% of the market value of any urban property. IBTI (Real Estate Transmission Tax) is a 2 to 6% tax payable by the buyer when a property is sold or transferred.

## **Appendix B - A Brief History of U.S. Real Estate Securitization**

The real estate securitization process in the U.S. began in the Roosevelt post-depression era, with the creation of the Federal Home Loan Bank system, which enhanced confidence and liquidity to the market through the setting of deposit insurance. The action of the Federal Housing Administration, targeted to first-time home buyers, enlarged the market and contributed to increased standardization.

FNMA (“Fannie Mae”) was created as an institutional mortgage purchaser, increasing mortgages’ liquidity and contributing to the geographical distribution of the available capital. For many years, Fannie Mae was responsible for these relatively simple and limited activities. Fundamental improvements to the secondary mortgage occurred between 1968 and 1970. In 1968, Fannie Mae was privatized and was allowed to repackage and sell the loans bought in the primary market. Before 1968, even with the FHA guarantee, in case of default the investor still faced problems of delays, resulting in unpredictable cash-flows and reduction of final yields. GNMA (“Ginnie Mae”) solved this problem through charging the buyer a guarantee fee and providing the investor with a guarantee of timely payment of principal and interests and the repayment of outstanding loan balances in the event of prepayment or default. Now default risk was avoided by FHA insurance and timely payment of principal was secured by GNMA, and the timing of outstanding principal prepayment was the only investor’s uncertainty.

However, by the early 1970's, FHA loans mortgages accounted for approximately 20% of total loans, and conventional loans generated by thrifts were not securitizable. In 1970 Congress created FHLMC ("Freddie Mac") to provide the conventional loans with liquidity, as FNMA and GNMA had done for FHA loans. The Federal Home Loan Banks guaranteed FHLMC obligations and competition between FHLMC and FNMA was enhanced.

These measures produced a liquid mortgage market, packaged in standardized instruments, with credit risk eliminated, and access to enormous sources of capital. Maturities were extended, and the typical loans were standardized as long-term (30-year) fully amortizing with fixed interest rates, or 15-year ARM- Adjusted Rate Mortgages, standardized and legitimized in the 70's due to the oil crisis inflation. Standardization of procedures and documentation was improved due to FNMA and FHLMC requirements, allowing the substantial volume of transactions that was reached.

During this process, the positive contribution of the government came fundamentally from tax advantages instead of subsidies. Interest payments on mortgage loans were deductible for the tax purposes; swaps between loans and securities were also exempt of taxation.

From 1970 on, creativity of financial engineering produced new securities that added value to investors, improving information exchange and making possible a better risk distribution among investors, in this way enlarging the investment opportunities. Ginnie Mae's action generated an explosion in the secondary mortgage market and the possibility

of the formation of pools of mortgages to generate “pass-through” mortgage backed securities collateralized by mortgages. The mortgage backed securities are subject to more credit and market risks than other fixed income investments because of both default risks and prepayment risks. Overcollateralizing is a common solution to these additional risks, and is normally easier to implement than offering guarantees. The first issue of MBS by Fannie Mae occurred in 1981.

CMOs (Commercial Mortgage Obligations), generally shift prepayment risk from safe shortest-lived tranches to residual longer-lived ones. CMBSs (Commercial Mortgage Backed Securities) are generally subject to default risk, shifting it from senior to junior tranches.

In 1996, residential mortgage-backed securities reached 50% of this mortgage market, with approximately US\$1.6 trillion outstanding. The enormous expansion of these securities seems to be due to their contribution toward pushing up the risk-return curve of investor’s and the great amount of money available at the end of the 1970s (petrodollars), followed in the 1980s by the Japanese capital and in the 1990s by the global market capital.

The early 1990s commercial real estate depression generated the impressive recent growth of both CMBSs and REITs. Securitization was the way RTC (Resolution Trust Corporation, a governmental entity) chose to liquidate quickly its nearly 6,000 financially distressed commercial loans. In the mid 1990s, many traditional whole loan lenders, such

as insurance companies and banks, decided to liquidate their debt portfolios, frustrated with their poor results. The CMBS structure, with diverse levels of subordination and risks, was then very useful to attract investors to these assets. Normally, outsiders bought the less risky securities (the senior tranches), and the issuers kept the riskier ones (the junior tranches). Growth opportunities from the current depressed prices were enough to cover Wall Street start up costs and underwriting expenses, resulting in good returns to investors.

With the return of private capital to high quality (class A) commercial buildings in 1994, most of CMBS issuances have been generated by conduits, collateralized by loans originated specifically for securitization purposes, normally related to class B commercial buildings.

A secondary market is still not well developed for CMBSs. This lack of an exit possibility added to the regulatory constraints associated with owning lower tranches, have restrained a more expressive volume of pension fund participation in these securities.

REITs are real estate investment corporations exempt from taxation at the corporate level if certain structural and operating requirements are met. The REITs can be separated in two kinds of classes: equity REITs, that own properties and generate cash-flow from leasing and selling the properties, and mortgage REITs, that get revenues mostly from interest received on loans to real estate owners. As REITs are traded as infinite life stocks,

they bring liquidity, non-lumpiness, low transaction costs, easy diversification, disclosure, discipline and professional management to real estate investment.

The current REITs are mostly equity REITs, using little debt and substantial operating economies of scale to compete. Their presence has increased substantially in the mid 1990s, as real estate owners needed to recapitalize their companies and private capital was unavailable. Reaching the public markets through the organization of a REIT was in a number of cases the chosen solution to this problem. In a generally depressed real estate environment, the REITs' growth opportunities were acknowledged and an IPO (Initial Public Offering) boom occurred.

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Carlos Ambrosio - Banco Matrix  
Marcelo Steuer- Banco Rendimento  
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