THE IMPACT OF AVAILABILITY OF FINANCE IN MATURE AND EMERGING REAL MARKETS: A DESK REVIEW OF THE UK, THE US AND BRAZIL

M. Akhavan Farshchi, C. M. P. De Castro, and L.de Oliveira Royer

ABSTRACT

The recent collapse of the sub-prime mortgage market and the subsequent financial crisis in the US and the rest of the world, have highlighted the intertwined nature of our world's economic systems (Farshchi and Rafferty, 2008; Rafferty and Farshchi, 2009). The social and economic impact of the rising house prices in the Anglo-Saxon world (i.e., the US and the UK) and the subsequent widening of the social gap (housing wealth) in the late 2000s on the one hand and the emerging structural changes in developing economies, e.g., in Brazil, on the other, have posed new questions for the research community as to the importance of private ownership of housing, and the roles that the public and private sectors should play in the provision of housing supply.

Using secondary sources, this paper will first examine the historical trends in housing finance and then explores the interrelationship between financial and housing markets in the US, the UK and Brazil. It will then discuss how the diminishing role of the public/social housing provision in the US and UK has led to the subsequent growth of the sub-prime mortgage sector since the 1990s when technological innovations in the financial sector reduced some of the problems associated with asymmetric information by identifying individuals risk level by computer generated credit score. The question remains with regard to the importance of the private market in the provision of housing in a developing country such as Brazil. Should Brazil follow the privatisation paths of the developed economies?

1 OVERVIEW OF HOUSING POLICY

1.1 Introduction

The dramatic set of developments following the US mortgage crisis spread through the world in 2007 (Ashton, 2009). Investment banks, hedge funds and other investors started to show big losses by early 2007 and "*..wholesale lenders, seeking to limit their exposure to losses, refused to extend lines of credit to originators, speeding the bankruptcy of some of the largest subprime originators…*" (ibid: 1437). With lowering mortgage liquidity came further instability in the already unsteady housing market with the projected loss in real estate wealth of $100 billion, and loss of housing wealth estimated at $4 trillion. The recent financial crisis followed the radical innovations in the financial markets since the 1990s through a process of institutional as well as technical innovations leading to the rise of subprime lending as the 'market completion model' (Chinloy and Macdonald, 2005). Inspired by the idea of democratising finance, the housing finance innovations were believed to solve "problems of gratuitous economic inequality that cannot be justified on rational grounds in terms of difference in effort or talent" (Shiller, 2003: 2). These innovative financial instruments were facilitated and supported by the technical advancements in a way that "mortgage loans to marginal borrowers or with unconventional terms could be more accurately priced for the risks they posed, and allocated to investors with appropriate tolerance for risk" (Ashton, 2009: 1420).

Encouraging private ownership of housing requires accepting the fact that finance has to be made accessible to low income households who naturally impose higher levels of risk on their lenders due to their possibility of defaulting on their payments. It is noteworthy that the increasing role of the private sector in the housing market in the developing countries can provide some positive results in meeting the needs of the low-income households that cannot be met under the state controlled mechanisms. However, expanding the private sector requires policy as well as technological innovations in the supply as well as finance of the stock, and in this context, country specific experiences can help provide more practical solutions to societies in the developed as well as developing countries. Given recent experiences and the interdependencies of the financial and housing markets it can be suggested that policy makers should aim to create stronger and more responsible interrelationships between the public and private sectors so to ensure the provision of quality-low-cost housing in the private sector for the poor does not jeopardise the economy.

Housing in the developing world has faced a somewhat different set of challenges; poor quality and lack of sufficient supply of housing, mixed attitudes towards ownership, suspicion of the effectiveness of free markets as a provider of housing provision, unsophisticated and underdeveloped (or non-existent) institutions, lack of affordable finance due to high economic fluctuations are to name a few (Castro,1999). Mature housing and real estate markets in the US and the UK can provide both positive and negative lessons which should be fed back into the experience of many developing countries whose markets and institutions are currently being formed by public and private forces.

To share these lessons and to guide public policy in the developed world and to inform and promote new organisational and institutional arrangements in the developing countries with significant housing problems such as Brazil this paper will offer a comparative (historical) desk study of housing finance in the UK, the US and Brazil. The case of Brazil is of a high relevance as this developing country is undergoing rapid social and economic changes which are affecting its demand for finance (i.e., loans) to enable wider homeownership (Shimbo,2009). The growing political pressure from the private sector has led to seeking measures to enable banks, real estate developers, and housebuilders to access financial resources from public and semi public funds. The new mortgage system operates through the securitisation and the creation of a secondary market in the Sistema Financeiro Imobiliário-SFI-Real Estate Financial System. This means that public funding will be used to support the operations of the free market (Royer, 2009). This then raises a normative question as to why should public funding be used as an instrument to help the private sector (i.e., the middle income households).

1.2 Housing policy in the US

In his review of the US Federal Government, Erickson (2006) shows three distinct periods in the decentralisation of housing finance in the US. The first period, 1964 to 1980 is known as the "rise and fall of federal bureaucracies; the second period, 1980 to 1986, is signified by cutbacks in federal finance; and the third period witnessed the decentralisation of funds from 1986 to 1996. Current policies show that decentralised funds (block grants and tax credits) fund a network of for-profit and non-profit affordable home builders. This shift in policy subsequently affected the level of transparency of the welfare state which was lost in a confusion of public-private partnerships and back-door financing techniques.

In 1965, the peak annual production of US affordable housing through public housing programme was 71,000 units. The Department of Housing and Urban Development produced public housing up to 1973 when Richard Nixon imposed a moratorium and reached another peak during the Carter administration. In the mid-1980s three indirect funding programmes began to subsidise housing: The 1986 Low-Income Housing Tax Credit helped produce a higher than the historic average number of housing units and by 2000, nearly 115,000 units were produced annually through this scheme (Erickson, 2006). Reagan's revolution on the national level led to dramatic cutbacks of the federal funding. The Reagan's counter revolution at the local level (community groups, local and state governments, and elements of the private sector) is known to have pulled together groups to find ways to build housing for the low-income tenants which in turn have led to the emergence of a decentralised housing network which has grown in sophistication through such programmes as the Community Development Block Grant (1974), LIHTC (1986) and HOME funds from the National Affordable Housing Act in 1990. The state of the public housing in the US has been a political issue; while some aspects of the welfare state have been weakened since the 1970s there have also been innovative approaches to compensate for this changing state. The federal government has used a range of policy tools such as taxation, regulation, loans and loan guarantees to encourage non-governmental players (non-profit corporations and for-profit firms) to participate in shaping new housing programmes. The new decentralised network for the supply of low-income housing does neither operate through discrete market exchanges nor by administrative fiat of firms. The emergence of a decentralised welfare state operating through a network of service providers has been documented in three key reports: 1) Kaiser (1968) report which highlighted the social problems affecting the inner cities and low income tenants; 2) McKenna (1982) report with its direct attack on the housing programmes of the late 1960s and advocating free markets as the solution to the housing problem; and 3) Maxwell and Rouse (1988) report arguing in favour of federal government to get back into the subsidised housing business but only as the coordinator and partial funder of a network of service providers (ibid).

The confidence in government capabilities that was reflected in Kaiser Report did not materialise; high-rise apartment buildings suffered from huge maintenance costs; some were inherently unsafe, lacked adequate supervision, and encouraged criminal behaviour. During this period the federal government attempted to provide improvements by partnering with the private sector to build housing programmes where federal insurance for mortgages were funded in unrestricted McKenna's Report on the other hand put its faith on the genius of the free market and concluded that the market was the answer to the housing problem. This report further indicated that the housing problem was created by the ill-thought or ill-coordinated government policy and therefore advocated an entirely deregulated Savings and Loan industry "empowered to solve its own problems without legal handcuffs and regulatory restrictions." This report also recommended a reduced federal oversight of authorities and making federal park and land available to low-income housing developers (Erickson, 2006). The replacement of the existing federal programmes with unrestricted block grants to states, and vouchers paid directly to low-income tenants was believed to create a less expensive solution.

Following the weakened position of the federal government in providing public housing the issue of raising housing finance for low-income people became of high importance. In such an environment the availability of long-term housing finance on a fairly large and sustainable scale was of course fundamental (Okpala, 1994). Furthermore, in order to achieve such goals the resource base for public housing finance needed to be enlarged, diversified, and interest rates policy managed if the macroeconomic environment were to enjoys stability.

1.2 Housing policy in the UK

In the post-1970 with the adoption of neoliberal policies and dismantling of the welfare state, significant changes in the provision of housing were introduced in the UK in the form of strengthening homeownership. These policies led to a fall in investment for social housing and a decrease in volume of construction. For example, the right-to-buy policy aimed to change social attitudes towards ownership and the withdrawal of the state from housing provision led into policies of privatisation of public stocks, transforming the social rental sector, and in large part, redirecting funds and subsidies to projects involving acquisition, renovation, remodelling and maintenance of existing stockpiles. According to Ball (1988) restructuring occurred with fragmentation of the demand for provision, being treated at smaller projects, presenting a diverse range of types and location in which private agents sought the highest gains with emphasis on speculative aspects. Working conditions on the jobs were affected by the deregulation of the labour market with increased outsourcing, coupled with the decline in fixed capital investment and strengthening of the production planning, management of flows and accounting control. The growing level of private ownership in the UK created greater wealth disparity between home owners and those in rented accommodation. The growing housing wealth in the UK since the 1960s both as a share of total personal wealth and in terms of its impact on individual households has been important (Hamnett, 1992). The first major expansion of home ownership in the post-war period was due to housing ownership from 31 per cent in 1951 to 67 per cent in 1991, which was followed in the second period, i.e., 1970s to 1980s, of house prices by 2.5 per cent in real terms. Moving faster than other asset price increases, the increase in housing prices led to a much larger share of personal wealth compared to earlier post-war periods. Housing wealth increased from 35 per cent of net personal wealth compared to just 17 per cent in 1960. However, as Hamnett (1992) noted by 1988 the proportion had risen to over half (52 per cent) (Inland Revenue, 1990). Housing has become a source of wealth. “Many households have gained more from the housing market in a few years than would have been possible in a lifetime of saving from income” (Pahl,1975: 291). The differential in gains by region has meant that housing wealth can be accumulated disproportionately in certain regions than others, intensifying local differences in income and wealth, affecting lower income groups and further creating potential mobility between different regions (Hamnett, 1992: 308). Declining house prices can further extenuate labour market problems in static or falling regions (Thorns, 1982). With the growing specialisation of the financial sector in the UK housing finance became more expensive. Privatisation of the social housing brought about market volatility and led to the rising house prices (Harloe, 1988).

1.3 Housing policy in Brazil

Brazil like many other developing economies witnessed a massive growth in the number of people living in its major cities between 1940 and 2000. This growth was not however matched by a growth in Brazil's infrastructure and services despite a 7 per cent growth in GDP and the increasing wealth for a large share of population over the same period. One could therefore conclude that Brazil would enter the twenty-first century as a rich country, modern, urbanised and endowed with rich natural resources. However, the reality paints a different picture. For example, according to IPEA (1993) in 1960, the share of national income by the poorest 20 per cent stood at 3.5 per cent while the richest 10 per cent held 39.7 per cent of that income. This gap widened in 1990 (the poorest 20 per cent held 2.3 per cent and the richest 10 per cent held 49.7 per cent of the national income respectively). The widening of the social gap and the uneven distribution of wealth among the population in Brazil has therefore created many social problems such as housing problems. Despite many attempts, social policies have been unable to resolve the growing housing problems in Brazil. Maricato states that (2001, p. 46). "*The analysis of the SFH–Sistema Financeiro da Habitação (Housing Financial System) and the BNH–Banco Nacional da Habitação (Housing National Bank) provides a very appropriate example of modernization with (social) exclusion […] such policy was essential for the structuring of a capitalist property (real estate) market. [...] Combining public investment with regulatory action, the State guarantees the structuring of a capitalist property market to a limited amount of population, while for most remaining the options of favelas (shantytowns), slums' tenement houses or illegal subdivision on the outskirts without urbanization of all metropolises*." Historically, public funds were used to supply housing for middle to high income segments of the population and ignored the social needs of the poor which faced 90 per cent of the housing shortage. The level of unmet housing needs in Brazilian cities indicated of a divided city where informality is accepted by the authorities and serves as an outlet to popular pressure (Maricato, 1996). The housing shortage is manifested by cohabitation, substandard housing and rising rentals (FJP, 2008). The estimated housing shortage in 2006 was 7.935 million households, of which 6.543 million in urban areas: as in previous years, cohabitation of family members disguised the impact of housing shortage – 57.7% of cases, and in absolute numbers, the vast majority of family life was observed in urban areas (3.959 million of the total 4.574 million)[1]. Furthermore, about 1.058 million people, mostly in the metropolitan area of Sao Paulo, lived in rented accommodation (23.5 per cent of the total stock) with excessive rents. The extent of substandard housing, mainly concentrated in the North and Northeast regions, accounts for 18.8 per cent of the population while the number of households with up to three minimum monthly wages adds to 1,867,018 households. These households spend more than 30 per cent of their monthly wages on rent. The housing shortage imposes a more drastic problem for households with earnings up to three minimum wages. Over 90 per cent of households that require new homes have an average monthly income of up to three minimum monthly wages, compared to 82.5 per cent in 2000. In the Southeast, the most industrialised region with cities like Sao Paulo, Rio de Janeiro, Belo Horizonte, this figure was even higher (77.1 per cent in 2000 to 89.9 per cent in 2006).

[1] The calculation of the housing shortage is prepared by the João Pinheiro Foundation with basic data from the Brazilian Institute of Geography and Statistics-IBGE, taken periodically from the Population Census and National Sample Survey of Households-PNAD. In relation to the total stock of dwellings, the deficit represents 14.1% urban and rural, 16.8%.

According to FJP (2008) housing shortage represented a total of 6.579 million households in 2006 (4.823 million of which in urban and 1.755 million in the rural sector). The vacant buildings located in the old areas of central and metropolitan areas are in the core of political disputes of urban revitalisation projects, because of the sheer visibility and potential for valorisation (recovery). These have become the subject of claims of popular movements to solve the housing problems for homeless and families inhabitants in slums. Other problems facing the housing market in Brazil are concerned with urbanisation, land tenure, illegal subdivision of land, lack of urban infrastructure, overcrowding, illegal land tenure, lack of exclusive and indoor sanitary units, inadequate roof and living in precarious settlements and slum housing[2]. These statistics reveal what Maricato (2001) identified as part of the Brazilian urban tragedy, also heightened by the increasing occurrences of flooding, landslides, fires, lack of security, housing overcrowding, traffic chaos, occupation of natural sources, epidemics, lack of decent housing among others. And for Pochman (2003), in recent periods, the indicators of social exclusion and spatial segregation in Brazilian cities confirm that they are a reflection of the development process with the modernisation of the backwardness and the recent restructuring. It is the new social exclusion due to the growth of unemployment's rates, job insecurity, concentration of poor households in the metropolises and escalation of urban violence resulting from the restructuring process, which overlaps the old social exclusion. However, recent statistics highlight a substantial drop in the housing shortage for families with income above five minimum monthly wages suggesting that housing finance is mainly available to those who can enjoy higher levels of income.

The housing policy in Brazil has gone through changes since 2000 when housing was constituted as a Constitutional Law on Amendment 26. Moreover, after the creation of the Ministry of the Cities in 2003, the constitutional principles (articles 182 and 183 of Brazilian Federal Constitution of 1988) regulated by the Statute of the City (Estatuto da Cidade -EC), Law nº 10.257/2001 were adopted on urban and housing policies to ensure fairer, democratic and inclusive cities, the social function of ownership and democratic management with guarantee of citizen participation. The EC also landed advances in urban and housing policies to make them functions of the three Brazilian federal entities (Union, State and Municipality). The Union would discipline the general rules on urban policy, but the local level has the material and legislative competence to develop urban policy as stipulated in Article 182 of the Constitution. Moreover, after a period of crisis in the housing provision, the 2000s signified an important timeframe by which the federal government aimed to stimulate the operation and expansion of the market by devising a new housing policy. Central to the recovery and expansion of housing provision, in the period 2003-2008, there was a cash injection of funds from compulsory and voluntary savings in housing finance which contributed to residential mortgages and led to the reversal in residential care. Since 2007, following the Plan for Accelerated Growth (PAC-

[2] According to FJP (2008), "The urban households with a lack of infrastructure have increased by almost 1 million units since 2000. [...] There were 10.261 million, 11.320 million in 2005 and 11.247 million in 2006. [...] In the metropolitan areas in 2006, 2.634 million housing had problem with infrastructure, 15.4%, indicating better situation compared to the total urban areas of the country .[...] Whatever the area in question, the lack of Infrastructure is the biggest factor of inadequacy." At the end of the 1980s, municipal governments of Brazilian metropolises implanted bills and laws aimed at solving the problems of lack of infrastructure, security and housing in slum areas and illegal subdivisions. The National Program of Slum Urbanization was created by the Ministry of Cities in 2004.

Plano de Aceleração do Crescimento), the PAC has resumed (retake) investments in sanitation after 25 years of lack of investment. Furthermore, the federal government has directed funding and subsidies to lower income strata, although these have not yet reached the proportions needed to reduce inequalities. According to Maricato (2010) for the first time in the history of Brazil the subsidies were addressed to financing social housing by a "housing package" called "My Home, My Life Program" (Programa Minha Casa, Minha Vida): [...] "In 2009 in response to international crisis on September 2008 the Federal Government launched the My Home, My Life Program which intends to finance the construction of one million homes having the private market as protagonist. But for the first time in the history of Brazil, an amount of subsidies is present - R$ 16 billion - to finance social housing".

2 HOUSING FINANCE AND THE FINANCIAL SYSTEM

2.1 Traditional sources of housing finance

Following Okpala (1994) availability of long-term housing finance on a fairly large and sustainable scale is fundamental to the development and success of well working housing market in both developed and developing countries alike. The two dominant modes of housing finance in developing countries have been non-institutional sources (e.g, family savings, loans from friends and relatives) and institutional sources (e.g. loans from banks or building society).

Housing finance systems cannot be studied in isolation from the banking system (Boleat (1985). The purpose of a housing finance system is to provide funds which home buyers need to purchase their homes (ibid: 1). Okpala (1994) suggested that a dominant proportion of housing in developing countries is accounted for by informal non-institutional sources but it has been strongly argued that development of a formal institutional housing finance system is indispensable for an effective response to the quantitative and qualitative inadequacy in housing. It is suggested that one of the most strongly canvassed strategies for housing finance is for it to be integrated into the larger national financial system and for its operation to be based on pure market pricing mechanisms, free of government interference. Mitlin (2007) argued that since the 1990s there have been substantive changes in the financing of shelter in the developing world. Many of the developing countries have become less concerned with direct provision of shelter and have become interested in working with finance to enable greater choices for people. There is now more acceptance of micro finance as part of portfolio finance. Following deregulation there are also more agencies interested in lending mortgage finance in a number of countries.

Summarising the pattern of borrowing, Boleat further stated that the typical household will be a modest lender until a house is purchased, who will then be a substantial net borrower with the extent of indebtedness falling over time until, later in life, the household becomes a substantial net investor. This suggests that the system transfers saving from elderly people who hold most of the savings to younger people who are net borrowers. The balance between renting and ownership is therefore affected by the availability of funds and in the absence of rented sector young people would become more encouraged to become owner-occupiers at an earlier age. In most countries attitudes towards ownership are affected by government policies towards housing finance. Any housing finance system has to be able to provide loans over a long period providing loans over a long period requires sophisticated systems (ibid: 4). Boleat further asserted that the key problem that any housing finance institution has to overcome is to borrow short-term and lend long-term. This can either be done by raising funds on a long term basis or by ensuring that the rate of interest on its long term loans can be changed in line with the rate of interest on the short term savings which it has attracted. It is also important that loans are provided over a long period (the availability of long term loans); sophisticated financing systems are able to offer loans in excess of ten years. On the whole there are five different types of housing finance institutions, two of which are generalist (general banks and saving banks) and the other three specialists (specialist saving banks, contractual institutions, and mortgage banks). All of the above institutions may exist in most developed economies As in the diagram four types of long-term housing finance mechanisms have been identified by Boleat (1985) in Diagram 1 which discusses how the traditional mechanisms for housing finance have been applied to different contexts. In the following section we focus on some of the recent developments in the US and the UK while reporting on the latest challenges and issue relating to housing finance in Brazil.

2.2 New developments in housing finance in developed and developing countries

The integration of the subprime mortgage into global financial markets affected the mortgage market structure in a number of ways. As a response to the traditional arrangements under the New Deal banking system which did not allow banks to price loans according to their risk, the completion model offered opportunities for marginal borrowers who were being shut out of the mortgage market with rationed credit. The concept of pricing two different types of commodities, i.e., credit for low-risk prime borrowers, and credit for subprime borrowers with a higher risk profile relied on technological innovations in profiling borrowers (e.g., automatic numerical weighted credit scoring) informing the lenders of the probability of default of the borrowers. Furthermore, financial deregulation allowed new specialised firms to enter the mortgage market and gave them flexibility in the pricing and structuring of mortgage loans (Ashton, 2009: 1422). Matching the loan product to the characteristics of the subprime borrower pool, these specialised firms were able to offer mortgages of higher interest rates charged as a risk premium, at a higher loan-to-value ratios and variable interest rates. This led to a dramatic expansion in the capital available for subprime loans, with the volume of subprime securities jumping from $10 billion in 1991 to $60 billion in 1997 (Temkin at al, 2002 cited in Ashton, 2003). The new mortgage products were more complex and tended to increase the asymmetries of information between actors at different points in the process (ibid: 1422) which in turn could result in a higher level of risk-taking by the investor. However, despite the promise of greater financial openness, the dramatic scale of defaults of foreclosures which followed have indicated that perpetual expansion of markets is not sustainable. The detrimental effects of the exceptional growth of the housing market in the Anglo-Saxon world (i.e., the US and the UK) in the late 2000s driven by the illusion of perpetually rising housing prices as well as of the positive attitude towards ownership and consumerism is only being examined now as an aftermath. These markets have been enforced by the effortless availability of relatively cheap finance and the poor regulatory controls over the operations of the free market. While many in these countries have gained the benefits of private ownership the social costs of the recent market collapse have been generally underestimated. Griffin and Wallach (1991) stated that during 1987, the climate of international bank lending changed dramatically and prompted major restatements of loan portfolios of the largest US money-centre and regional banks. Several Latin American countries notably Brazil suspended their scheduled interest and principal payments on their

Diagram 1 – Traditional Mechanisms for Housing Finance (Based on Boleat, 1985)

	Source of funds	Mechanism	Type of economy	Key features
Direct route	Funds are sourced directly from individuals with surplus financial assets (relatives)	A vendor (i.e., a relative) may supply funds to a purchaser	Mainly used in a not-well - developed economy and in the absence of institutional framework	An ineffective form – borrowing needs cannot be matched by lenders funds
Contractual route	Part of the funds are raised from the savings of other potential home-buyers or other contractual saving schemes	Regular savings are made over a number of years and receive an interest below the market. the investor then becomes eligible for a loan at an interest below the market level	Suited to countries where people do not purchase their first houses until a relatively late age. In Brazil, a variant of this system is used which uses the social security funds to provide housing loans.	Reliance on Government bonuses to make this scheme attractive The need for the presence of a strong rented sector This system has to be used in tandem with one other routes
Deposit financing route	Short term savings of individuals are channelled into long term loans through intermediaries	Two types: 1) Commercial banks; 2) specialist housing finance organisations, i.e., building societies	Countries with well developed institutions	A variable interest rate is applied on the house purchase loan because these institutions usually do not have long term fixed rate funds with which they can make matching long term fixed rate loans.
Mortgage or bank route	Money raised by bond issues, which are purchased by institutional investors and to a much lesser extent by individuals. A variation of this system is American mortgage bank which makes and services loans but immediately sells them to an institutional investor.	An institution makes loans to house-buyers at a fixed rate of interest and seeks to fund those loans by selling bonds on the capital markets at the going market rate.	This system only works effectively where there is an active bond market. These institutions do not have branches or networks like banks. Bond may be purchased directly by individual investors	The need for financial intermediaries such as insurance and pension companies

foreign debt. The chain of events staring in 1987 with the declaration of a moratorium on interest payments on $67 billion of medium- and long-term bank debt and the freezing of payments on $10 billion of short-term credits and $5 billion of money market deposits produced the largest reported losses in US banking history. Wyly and Hammel (2000) argue that the interaction of seemingly unrelated processes, i.e., mortgage finance and assisted housing policy, individual responsibility and private home-ownership led to the transformation of the American inner cities in the 1990s. The newly devolved and flexible policy infrastructure were particularly evident in the development of Chicago.

(to add a brief discussion on housing finance in the UK)

Brazil has the three first forms of "traditional" routes as in Diagram 1. The first in the informal sector, second and third are through the SFH -(by FGTS and SBPE), the fourth route is in the new SFI. In Brazil the ongoing processes of productive restructuring have been unleashed with changes in housing policy, after the collapse of the National Housing Bank (BNH-Banco Nacional da Habitação), and were conformed to the reform of social policies prescribed in macroeconomic adjustment and opening of the housing market to financial capital through securitization by issuing mortgage-backed securities and real estate investment funds. The State intervention in the provision of housing have been strengthening the functioning of the market which recently have presented results with the expansion of bank credit to the strata of low and middle income as well as the measures that were adopted for the reform of mechanisms for bank intermediation to improve the business environment and provide guarantees to loans, whose performance might be more agile against default (delinquency). Similarly triggered a growing involvement of private agents responsible for the growth of launches residential developments made possible in one hand, by increasing the resources available in financing particularly originated on the savings accounts of the Savings and Loans Brazilian System (SBPE-Sistema Brasileiro de Poupança e Empréstimos) and on the Assurance Fund for Period of Work (FGTS – Fundo de Garantia do Tempo de Serviço)[3] both fundings of the Housing Financial System (SFH-Sistema Financeiro da Habitação) since the biennium 2003/2004 onwards (ROYER, 2009). The offer has also been strengthened with the increased number of launches and of the making of land banks due to the growth of investments by major developers and housebuilders which opened its capital from 2005 onwards (SHIMBO, 2009).

3 CONCLUSIONS

In this paper we endeavoured to show parallels between the UK and US housing policies in general and housing finance in specific over the past few decades. It was discussed that the changes in the financial markets, i.e., availability of finance to the low income households became a reality following technological advances as well as policy changes. As a consequence financial products such as mortgages became available to those who would not be entitled to such finances. The growing private ownership in the housing sector along with rising house prices in the US and the UK allowed the newly joined home owners to draw equities out of their mortgages and consequently contribute to a consumer society.

[3] The FGTS is a Government Severance Indemnity Fund for Employees controlled by a Board of Trustees composed by representatives from Unions, Federal Government, Savings and Loans Federal Bank, and commercial banks entities.

the collapse of the sub-prime market has therefore revealed the central importance of housing policy for any economy. The developing world faces different questions with regard to housing and housing finance. In this paper, following a brief discussion of the new developments in housing finance in Brazil we question the extent of private markets as the significant contributor to the housing supply. It is also of great importance to compare and contrast housing finance policies in the developed and developing countries to save on policy mistakes. As the financial sector in Brazil is yet to become a mature one, it is of high importance to share such experiences and this paper to contribute to this debate in a small way.

4. REFERENECES

Ahsto, Philip (2009) An appetitie for yield: the anatomy of the subprime mortgage crisis, **Environment and Planning A**, 41: 1420-441.
Bates, J. J. and Roberts, M. (1983) Recent Experience with Models Fitted to Stated Preference Data, **Proceedings 11th PTRC Summer Annual Meeting**, University of Sussex, England, 4-7 July 1983.
Berger, A. N. and Humphrey, D. B. (1993) *Bank Scale Economies, Mergers, Concentration, and Efficiency: The U.S. Experience,* **The wharton School, University of Pennsylvania**, Financial Institutions Center (This paper is an English translation of "Economies d'Echelle, Fusions, Concentration et Efficacité: L'Epérience dans la Banque Américaine," which appeared in *Revue Economique Financière, Vol. 27 (Winter 1993): 123-154.)*
Boleat, M. (1985) **National housing finance systems: A comparative study.** Croom Helm Ltd. Australia.
Chinloy, P. and Macdonald, N. (2005) Subprime lenders and mortgage market completion, **Journal of Real Estate Finance and Economics**, 30: 135-165.
Dynamic Approach, 25th Meeting, American Real Estate Society, Monterey, California.
Economic Software (1994) **LIMDEP (Version 6.0) User's Manual and Reference Guide**, Econometric Software Inc., New York and Sydney.
Erickson, David J. (2006) Community Capitalism: How Housing Advocates, the Private Sector, and Government Forged New Low-Income Housing Policy, 1968–1996, **The Journal of Policy History**, 18(2). Copyright © 2006 The Pennsylvania State University, University Park, PA.
Farshchi, Mahtab and Rafferty, Martin 2009) **Construction Crunch: A Systems**
Green, W. H. (1993) **Econometric Analysis**, McMillan, New York.
Griffin, Paul A. and Wallach, Samoa J. R. (1991) Latin American Lending by Major U. S. Banks: The Effects of Disclosures about Nonaccrual Loans and Loan Loss Provisions **The Accounting Review** [0001-4826] Paul yr:1991 vol:66 iss:4 pg:830 -846
Hamnett, C. (1992) The geography of housing wealth and inheritance in Britain **The Geographical Journal**, 158 (3), 307-321
Johnson, L. W. (1990) Discrete Choice Analysis with Ordered Alternatives, in M. M. Fisher, P. Nijkamp and Y. Y. Papageorgiou (eds.), **Spatial Choices and Processes**, North Holland, Amsterdam.
McKelvey, R. D. and Zavoina, W. (1995) A Statistical Model for the Analysis of Ordinal Level Dependent Variables, **Journal of Mathematical Sociology**, 4(2), 103-120.
MITLIN, D (2007) Editorial: Finance for low-income housing and community development, **Environment & Urbanization** Copyright © 2007 International Institute for Environment and Development (IIED).19(2): 331–336. DOI: 10.1177/0956247807082817

Okpala, Don C. I. (1994) Financing housing in developing countries : a review of the pitfalls and potentials in the development of formal housing finance systems, **Urban Studies**, 31(9), 1571-1586.
Pahl, R. (1975) **Whose city?** Harmsworth, Middlesex: Penguin Books.
Rafferty, Martin and Farshchi, Mahtab (2009) **A Simulation Modelling of Property Markets: A Case of the UK Housing Market**, 27th International Conference of the System Dynamics Society July 26-July 30, 2009, Albuquerque, New Mexico, USA.
Renaud, B . (1987) Another look at housing finance in developing countries, **Cities**, February.
Renaud, B. (1986) Resource mobilization, household savings and housing: the emerging agenda. Address to the **Second International Shelter Conference**, Vienna, Austria, 11 September.
Shiller, Robert, J. (2003) **The New Financial Order**, Princeton University Press.
Thorns, D. (1982) Industrial restructuring and change in the labour and property markets in Britain. **Environment. Planning**. A 14, 745-765.
Tomkin, K., Johnson, J. and Levy, D. (2002) **Subprime Markets, the Role of GSEs, and Risk-based Pricing**, Office of Policy Development and Research, US Development of Housing and Urban Development, Washington, DC.
Wyly, E. K. and Hammel, D. J. (2000) Capital's Metropolis: Chicago and the Transformation of American Housing Policy. **Geografiska Annaler.** 83 B (4): 181–206