DIALOGUE BRAZIL AND EUROPEAN UNION: SOCIAL HOUSING, FINANCE AND SUBSIDIES

EDITORS
Christine Whitehead
Fernando Garcia Freitas
Júnia Santa Rosa
Anacláudia Rossbach

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CITIES ALLIANCE FOREWORD

William Cobbett

Represented through the Ministry of Cities, Brazil has been a leading member of Cities Alliance since 2003. A global leader on issues of slum upgrading, citizen participation and the right to the city, Brazil has been very open in responding to many international demands to share this rich experience. For its part, the Cities Alliance has been proud to make modest contributions through its diverse membership to some of the key policy challenges, both at national and local level. We were delighted to play a catalytic role in the design of the National Housing Plan and the Minha Casa Minha Vida Programme, assist in the development of distance training courses on land regularisation, slum upgrading and social work, and contribute to the design of an innovative legal framework that addresses housing programmes and involuntary resettlement. On the international level, we have partnered with the Ministry to support south-south exchanges, including housing policy dialogues between India, Brazil and South Africa.

Internationally, the Brazilian search for effective and innovative ways of reshaping cities marked by inequalities and the stubborn prevalence of poor housing and living conditions is a major contribution to the global search for sustainable urbanisation processes.

We therefore welcomed the opportunity provided by the National Housing Secretary to support this edition of the Brazil – European Union Sector Dialogues on Housing Finance and Subsidies. We believe this publication will share useful lessons from Minha Casa, Minha Vida through the lenses of renowned experts from a range of European countries.

We also hope that this publication will contribute to a better understanding on the potential – and the limitations – of the role of national housing policy in building more equitable and inclusive cities.

BRAZILIAN NATIONAL HOUSING SECRETARY FOREWORD

Inês Magalhães

The National Housing Secretariat of the Ministry of Cities – Brazil (SNH) is pleased to present the publication "Dialogue Brazil and European Union: Social Housing, Finance and Subsidies", which was a result of a project developed by SNH in the context of the European Union-Brazil Sector Dialogues Support Facility.

The European Union-Brazil Sector Dialogues Support Facility is an initiative coordinated by the Brazilian Ministry of Planning, Budget and Management (MPOG) and by the Delegation of the European Union in Brazil (DELBRA). This initiative's main goal is to contribute to the progress and the deepening of the strategic partnership and bilateral relations between the countries by supporting the exchange of technical knowledge.

In recent years, Brazil has been gaining recognition in the international context, especially through its social programs and the vigorous appreciation that it has attributed to housing policy, seeing housing as a fundamental right and requirement for citizenship. In this context, SNH proposed the issue of social housing in the Sector Dialogues, trusting its importance as a human right, in both social and inclusion aspects, as well as in its potential economic impacts.

The proposal made by SNH consisted on a comparative analysis between the financing and subsidies policies in social housing found in Brazil and in the European Union. The two focal points of this study were: developing a better understanding of the intervening elements in the provision of social housing and evaluating the effectiveness of the housing policies.

We would like to thank all of those involved in this project for the determination and technical care with which they developed the work. We hope this study can contribute to the improvement of public financing and subsidy policies for social housing, and to the strengthening of the relationship between Brazil and the European Union.

DIRECTORY OF INSTITUTIONAL DEVELOPMENT AND TECHNICAL COOPERATION FOREWORD

Júnia Santa Rosa

Over the last 20 years, social housing has gained prominence in the housing policy agenda, both in developing and developed countries. Latin American countries such as Chile, Mexico and Brazil began using subsidies, thereby promoting the housing production for the poorest and most vulnerable sectors of society. In the European Union, in turn, the social housing sector went through a deep reconstruction, after its dismantling in the 1980s and early 1990s. During this period, the housing policy was intentionally placed in the background in an context of social expenses reductions.

In the European Union, families perceived a gradual increase of earnings, coupled with the significant growth in the cost of social housing due to the appreciation of land and the enhancement of construction standards. The responses of national policies varied significantly. The United Kingdom, on one hand, supported their policy on the restoration of their supply structures of public real estates for lease. The Scandinavian countries, on the other hand, based their actions in direct complementary subsidy in order to compensate the rise of the housing costs.

In Brazil's case, the housing policy went through a profound transformation starting from 2003, when the political milestone of social housing was defined. In this period, a complementary subsidy designed to allow the beneficiary to enter the formal financial system was instituted and the real estate credit system was restructured. This process also reflected the restructuring of the previous system, Sistema Financeiro da Habitação (SFH), which came to support the production of a considerable number of homes, but was gradually dismantled after the closing of the federal bank dedicated to mortgages credits to real estate (Banco Nacional da Habitação) in 1986.

The "Minha Casa Minha Vida" Program (PMCMV), one of the world's largest social housing programs, was launched in 2009 by the federal government, aiming not only to face housing shortage, but also as an anti-cyclical policy for facing current economic crisis. PMCMV was released along with a set of economic initiatives as a strategy for confronting the international economic crisis that affected the Brazilian economy after mid-2008.

Between 2009 and 2014, the PMCMV hired the production of 3.75 million housing units, with most of the beneficiaries (88 per cent) composed by families with a monthly income below R$ 3,275 (approximately EU$ 1,000). The federal resources committed to the subsidies corresponding to the contracted operations totaled R$ 88.1 billion (EU$ 26.7 billion) until 2014. Given the context of the housing policies in Brazil and the European Union, the National Housing Secretariat (SNH) of the Ministry of Cities, aiming to conduct a comparative analysis focused on financing and subsidy for social housing, found in the EU-Brazil Sector Dialogues Support Facility an excellent opportunity to further this debate. This initiative enabled the hiring of bilateral studies that allowed the exchange of technical knowledge between the countries.

The Sector Dialogues are a new form of cooperation dynamics between the European Union and emerging countries. Currently, there are around 30 Dialogues identified between Brazil and the EU on a wide range of themes, based on the principles of reciprocity and complementarity, aiming to foster the exchange of know-how and experiences in areas of mutual interest.

In the case of the National Housing Secretariat's project, we had the privilege to count with the participation of two important specialists on the theme. We invited Professor Christine Whitehead, from the Economics Department of the London School of Economics and Political Science (LSE), to be the consultant responsible for the analysis and studies on social housing policies in the European Union. For the analysis of the Brazilian housing policy, we counted with the participation of Professor Fernando Garcia de Freitas. The choice of experts was immediately ratified by the Directorate-General for Regional and Urban Policy, the European Union institution responsible for housing policies and also for validating the action proposed by the Brazilian National Housing Secretariat in the Dialogue. The project was developed between June and November 2014.

I would like to highlight the crucial partnership and support received from Cities Alliance. Throughout the Dialogue, William Cobbett and Anacláudia Rossbach spared no efforts to allow that this project could be debated and disseminated through two workshops held in Brazil and in London, as well as enabling the edition of this publication.

Finally, a special thanks to Professors Christine Whitehead and Fernando Garcia de Freitas. Since our first invitation, Professor Whitehead found space in her busy international work agenda and made herself available to participate in this project. In addition to that, she also brought together renowned European Union specialists among her researchers network to participate in the workshop held in the LSE on September 2014.

Professor Fernando Garcia de Freitas, in addition to the outstanding work developed in recent years as a consultant of the Brazilian National Housing Secretariat, has allowed us to organize a critical, but not less propositional, reflection about the financing and subsidy policy of the federal government's social housing programs in the last years. Furthermore, without his patience and careful review, the final edition of this publication, in partnership with the valuable crew of SNH, would not have been possible.

Thanks to everyone who made the accomplishment of this project possible!

President of the Republic
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Dilma Rousseff
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Minister
Nelson Barbosa
National Director of Sector Dialogues Project
Ayrton Martinello

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Minister
Gilberto Kassab
Executive Secretary
Elton Santa Fé Zacarias
National Secretary of Housing
Inês Magalhães
Director of the Department of Institutional Development and Technical Cooperation
Júnia Santa Rosa
Director of the Housing Production Department
Mirna Quinderé Belmino Chaves
Director of the Department of Slum Upgrading
Alessandra D'ávila Vieira

Researchers
Brazil
Fernando Garcia de Freitas
Assistant:
Ana Lélia Magnabosco
European Union
Christine M. E. Whitehead
Assistant:
Melissa Fernández Arrigoitia

Staff Ministry of Cities, Brazil
Coordination
Júnia Santa Rosa
Technical Advisor
Nelson Teixeira da Silva
International Advisor
Bruna Chie Yin Tse
Assistants
Amanda Alves Olalquiaga
Angélia Amelia Soares Faddoul
Rhaiana Bandeira Santana

European Union
London School of Economics
Deputy Director
Christine Whitehead
Research Officer
Melissa Fernandez
Research Assistant
Emma Sagor

Realdania Centre for Housing Economics
Curt Liliegreen

LSE Cities
Ricky Burdett

Participants of the Dialogue European Union
Netherlands
Marietta Haffner
Germany
Thomas Knorr Siedow
Spain
Baralides Alberdi
France
Jean- Pierre Schaefer
Italy
Teresio Poggio
Portugal
Romana Xerez
England
Michael Oxley
Scotland
Mark Stephens
United Kingdom
Kath Scanlon

Cities Alliance
Director
William Cobbett
Regional Adviser for Latin America and the Caribbean
Anacláudia Rossbach

SOCIAL HOUSING: OLD LESSONS TOWARDS NEW APPROACHES

Anaclaudia Rossbach

Social housing has been a long debated and complex topic among researchers ranging from urban planners to social workers, architects, economists and lawyers. Different approaches such as rental models, transitory housing, acquisition, improvements and settlement upgrading within a diverse menu of approaches, scale and arrangements have been tested in different countries.

Why should a country and/or a city follow a certain specific model in detriment of so many others? What is the expected intervention from the public sector, limits for the private sector and social dynamics and resources available? These are all questions one should ask when opting for a social housing model, and they do not have straight forward or easy answers. On the contrary, it is a combination of technical inputs, political pressure and will, social needs and fiscal capacity that will establish the preconditions for decision makers to take one decision over another.

In the case of Europe the reconstruction need was clear and no one would question the housing backlog left by years of war and conflict. In the case of Brazil, our slums often depicted as a giant and lively post card tell us, and the world, about our housing and infrastructure needs and congested cities. Water and energy crises constantly remind us of resource scarcity in the future and set huge challenges not only for the improvement of living conditions, but also for maintaining our current way of life. This is not to mention income and wealth gaps, translated into an improving but still alarming Gini Index of 0.5, reflected by a very unequal society with unequal access to the city and its opportunities.

But Brazil has chosen its path, while struggling to overcome huge social and infrastructure gaps, the country initiated an upward trend in the 2000s following a model that combines heavy investments on infrastructure in slums, progressive land tenure instruments and an impulse on the housing supply with affordable finance and subsidies. This approach was realized through two national programs, the Growth Acceleration Program – Slums, known as PAC Favelas and the housing program Minha Casa Minha Vida – MCMV, both launched between 2007 and 2009.

In Brazil, political will was clearly translated into high level national investments with an unprecedented track history and almost no similarity in other developing countries, with exception of China. It is also important to mention that Brazil is characterized by a very singular form of federalism which is unique: local governments have strong autonomy and carry a variety of attributions and responsibilities for implementing policies, but are still dependent on national budget resources to leverage investments for the cities.

Despite this context political will alone would not be enough to enable large scale and ambitious programs of this nature where the role of local government, private sector and civil society is crucial not only to guarantee a robust quantitative outcome, but to safeguard potential risks and ensure quality for the end users and the city. The option for a model that combines slum upgrading, land tenure and new housing supply is a historical result of very progressive and advanced experiences at the local level, a significant evolution on our legal framework, including the paradigmatic City Statute from 2001 (without it slum upgrading interventions would not be possible), strong social mobilization, development of technical capacity and institutions, in a context of a very positive fiscal window resulting from a period of economic growth.

A first step towards this policy and programmatic improvement was the creation of the Ministry of Cities in 2003, with a National Secretary of Housing and a National Council of Cities, where stakeholders from civil society, academia, private sector and public entities from different spheres can actively participate. The Ministry of Cities, under strong Presidential leadership and coordinated national government articulation, nursed the embryo of the recent policy transformations as a driver of a multiyear planning and institutional strengthening process, involving diverse national actors such as civil society, local governments, academia and private sector. This internal process always kept in perspective what was happening in other emerging countries such as Chile, Mexico, Colombia, India and South Africa, facilitated through international organizations that provided high level access to knowledge, experiences and technical assistance.

Despite the significant shift in terms of scale and investments the implementation of the housing policy is still a big challenge in a diverse country like Brazil, with its territorial dimensions and a variety of cultural features.

Are the subsidies provided by the government well calibrated, balanced and equitable? Is this model sustainable in the long run? Will fiscal resources be available in a context of uncertainties throughout the Latin American continent and the globe in relation to economic growth? Will finance be available and affordable to meet the level of our demand and needs? Is this model affordable and fair? What will be the real social, economic and urban impact on our society?

These are all questions present not only in the minds of decision makers, but also among all the stakeholders active in this model of social housing that Brazil has been implementing. In other words: are we really on the right track?

While Brazil is still answering these questions, many other countries have been looking at the country's experiences, eager for answers and becoming inspired by its housing policies and programs. Delegations from India, South Africa, the Philippines, Mozambique, Angola, Ghana, Ethiopia, Latin American countries, among others have been visiting the country, learning from technical cooperation and policy dialogue with the Brazilian experience. This is an extra weight on Brazil's shoulders, revealing its responsibility as spontaneous role model.

The Sector Dialogue with the European Union, among several other internal initiatives such as surveys, incentive oriented research, consultations and debates, comes into the picture as a new form of high level cooperation between a developing country and the European continent. Of course historical, cultural and social differences must be taken into account, are in a way and no simple comparative exercise is feasible, but a mature look at the Brazilian path with the perspective and lens of experts aware and well versed about the experiences and history of housing policies in Europe, can certainly be useful to enrich a deeper reflection on the challenges and potentials for Brazil in the housing field.

A sequence of debates in São Paulo, Brasília and London with key stakeholders and high level thinkers, researchers and practitioners from the UK, Spain, Germany, Portugal, France, Netherlands, Denmark and Italy held in 2014 opened another window of understanding for Brazil. In a way, listening to the European experiences and the history of high investments in the post war context was important to understand the role of the government and impact that scale investments can provide in terms of covering gaps on access to housing and overall living conditions. If one looks at highly urbanized Brazil and realizes the immense housing and urban infrastructure needs to be covered in at least the next 15, 20 years, it is clear that scale is needed and this level of scale also requires robust investments within a comprehensive approach to deal with the diverse urban reality. On the other hand, even with a dense history of investments and housing policies, European countries still face challenges to cope with new demographic, migration and social trends. Access to housing and sustainability is not guaranteed even in developed countries. Policies had to be reinvented over the years and the roles of private sector, government and civil society can and should change in order to maximize the potential of different forces in our societies and a balanced outcome.

As any other large scale governmental program, both PAC – Favelas and MCMV have been scrutinized and debated by opinion makers, academia, media and civil society. Although they are an outcome of a history of several policy approaches, social and economic matureness, a clear choice was made which is impacting whole urban environments and some cities. It is important for the government to expand its understanding of this impact and be able to see it from a historical and international perspective, taking into the consideration the current context of global economic stagnation, climate change and inequality challenges.

The Sector Dialogue between Brazil and the European Union certainly helped the Brazilian Government to improve its understanding of current policies, perspectives and bottlenecks. Its potential continuity in terms of dissemination and/or potential exchanges and research, considering the range of Brazilian and European institutions involved, might be valuable. For the Cities Alliance, as one of the supporting organizations, this knowledge is precious considering our global mandate and the increasing demand for sustainable alternatives that can help many cities and countries to build equitable, fair and economic active urban environments.

It is just a small piece in the puzzle, but all stakeholders involved with the exchange were at least clear about our choices: the reality is dynamic, needs change and our society has to be open to understand that no model is entirely effective or comprehensive, and changes on policies and roles are crucial along the way. For developing and emerging countries the role that the global north can play with high level and horizontal debates will be key to unfold new possibilities and alternatives to cope with our social and economic dilemmas. There is simply no time. We cannot afford to wait and build internal systems alone. Social, economic and environmental needs increasingly urge for scale, pace and depth.

I.

INTRODUCTORY ISSUES

1. INTRODUCTION

Christine Whitehead

Across the world housing is becoming a more and more important element in the operation and stability of national economies. Housing wealth is a growing part of household assets which, in economies with modern housing finance systems, gives greater capacity to adjust lifetime expenditures in relation to earnings. At the same time it increases the mal-distribution of income between those living and owning in strong markets and those living in low demand and declining areas. Understanding the nature of housing, housing markets and their relation to both macro-economic and welfare policy has, over the last few years, become central to both theoretical and political economic debate.

A major reason for this interest has been the rise in house prices observed in a wide range of industrialised countries together with increasing differentiation between regions. In much of the literature this is related to a mismatch between rapidly growing demand and slow adjustment of housing supply (Barker, 2004). The Brazilian experience clearly shows massive differences in housing pressure between regions and areas and growing concerns around the growth in house prices and housing pressure in the major Southern and South-eastern cities. Equally housing standards across the country are not keeping pace with underlying economic growth while the distribution of income, although significantly improved, leaves many unable to afford adequate housing. Building policy approaches which can address all three of these issues presents a major challenge.

In understanding how housing systems are developing it is relevant to stand back from immediate issues and to analyse how differences in cultural, legal and policy approaches to housing provision across countries impact on outcomes. Of particular importance here is the extent to which housing is seen as basically a private good where policy objectives are mainly to help increase the efficiency of markets or is seen also as a social good supporting cohesion, stability and welfare.

In many countries in Europe the dominant model has become one where markets and social objectives are strongly interlinked. Governments in many European countries are heavily involved not just in housing production and urban development but also in affecting housing consumption. They are trying to develop more efficient markets which can enable governments to withdraw public resources in order to generate sustainable housing systems while at the same time addressing issues of environmental impact and social cohesion as well as meeting the basic housing objective of 'a decent home for every household at a price within their means' (Department of Environment, 1972).

In examining similarities and contrasts between Europe and Brazil there are at least three factors one should take into account. First, the relative importance of public and private involvement and the potential for taking up new partnership initiatives depends very much on the stage of development and the form of subsidy chosen. Brazil is still at the stage of having a dearth of adequate housing, especially in the major cities which negatively impacts on life chances of the population and requires large scale increases in land supply for residential use; the provision of infrastructure to support these populations; the expansion of development capacity; and most importantly, massive government commitment, to ensure a step change in both numbers of units and standards. There is still a very limited capital base from which to develop longer term policy.

It is in this context that Brazil has developed two main strands of policies, slum upgrading and new housing supply. It is important to emphasize that these policies have been developed by central government to help ensure improvement in housing conditions for all groups who cannot effectively provide for themselves. Additionally, like may earlier examples, the policy has being devised as to park a progressive approach to redistribution. And it is imperative to look to the future and learn from both the successes and failures of those who are at a later stage in the development of housing policies.

In Europe this situation applied to the first two decades after the Second World War. But as the housing system matured and the value of public housing assets rose, there were more resources available that could be effectively recycled to add to the stock or to meet broader objectives. If, as has so far been the case in Brazil, the highest priority has been achieving more housing investment using existing tenure arrangements (mainly in the form of owner-occupation), the benefits lie with the occupier and are not available directly to support investment into the longer term. On the other hand the recipients of housing subsidy, having control over their asset, may be better able to support themselves and others into the future.

Second, housing systems are grounded in more fundamental aspects of cultural, legal and policy frameworks. It is important therefore to understand overall systems rather than to assume that it is useful to examine particular processes and policies outside their broader context. This also raises the issue that dialogue does not imply that policies can be transferred across national boundaries without a great deal of care. What works in one environment may be entirely inappropriate in another.

Third, Europe is not a single entity. It is made up of a broad range of countries with different attitudes to housing and at different stages of development. There is therefore no simple picture of how European housing systems operate, although there are relevant general trends as well as Europe-wide initiatives that can provide evidence on how policies might operate in other contexts.

This book addresses a number of issues which are important to the development of housing policy for lower income households in Europe, and analyses the evolution of housing finance in Brazil, with special attention to housing subsidy policies. The analyses presented here came from the reports that discussed the housing policies of these countries made for the Brazilian Ministry of Cities, through the National Housing Secretary, to support the edition of the Brazil – European Union Sector Dialogues on Housing Finance and Subsidies during 2014.

This book concentrates on the major factors which determine the contribution that social housing has made in Europe and Brazil. It is divided into four parts. The first, besides this introduction discuss the principles that lie behind choices with respect to the provision of social housing. The second and the third parts address to the European and the Brazilian experiences in housing finance and subsidy policies during the last 60 years.

Finally, the fourth part discusses the key areas for Dialogue between Brazil and the European Union. This chapter draws on the material brought together in the two sets of events, in Brazil and London, and thus on our un- derstanding of the major issues that Brazil is addressing through their large scale new housing programme. It identifies a number of issues where European experience may indicate lessons that may be learned as a result of this dialogue.

A final point to stress is that the European members of the Dialogue have learned a great deal from the project which will be just as relevant to a better understanding of future opportunities and challenges in Europe as they are to our understanding of the Brazilian system. The Brazilian members of the Dialogue have had the unique opportunity to discuss the European and the Brazilian housing policies with a very qualified team of researchers in this area. In particular we have been immensely impressed by the commitment of everyone who we encountered to doing the best possible with the resources available. We hope that our contribution will help ensure that this can be achieved and that this book can contribute for the understanding on the housing policies limits and benefits.

2. GENERAL PRINCIPLES OF GOVERNMENT INTERVENTION IN HOUSING

Christine Whitehead and Melissa Fernandez

An important starting point is to clarify the economic rationale for government intervention to achieve housing goals and how these link to political priorities. Resources are scarce and need to be used to their best possible advantage. Equally the uneven distribution of income and wealth means that those lower down the system cannot compete for these resources effectively. Moreover housing may add more to social welfare than just providing accommodation – housing helps define neighbourhood, community and the environment in which people live, study and work.

The economic rationale for government intervention comes down to three fundamentals:

Redistribution – depending on house prices in relation to the prices of other goods and services, the mal-distribution of incomes and wealth mean that varying proportions of households across countries will not be able to afford what the government and individuals in that society regard as adequate housing. In addition, allocating housing may be a much easier means of supporting poorer households than direct payments, which are often politically difficult to achieve.

Housing as a social (or merit good) – in many countries housing is seen as an important element in the social contract that binds the society together. Ensuring that everyone is well housed meets broader aims of social cohesion and equity separate from simple redistribution of income. At a practical level this is not normally interpreted as equality in consumption but rather implies ensuring that everyone can achieve minimum standards of housing while still being able to pay for the other necessities of life (Whitehead, 2002; 1998).

Efficiency - housing can be provided through a wide range of instruments and governance arrangements. Moreover housing is only one possible use of scarce resources. Markets for housing are inefficient for a wide range of reasons including spillover effects, monopoly powers, problems of asymmetric information and incomplete contracts, finance market imperfections and the impact of risk. Left to themselves markets will under-invest in housing as compared to the socially optimum level. It is therefore important that government intervention works to produce the necessary housing at the least cost to society both in terms of the resources used and the allocation of what is available.

The economic rationale points to the need for government intervention to ensure the best use of resources to meet individual and social goals. However it does not inherently point to the need for social housing which is simply one of many policy interventions that could be employed. In this context, there are political choices to be made. Most fundamental is the choice between providing households with the purchasing power to obtain the housing they require through demand side subsidies or providing suppliers with subsidies to provide housing at lower rents/prices to those in need. Second is the choice between social versus private demands enabling the achievement of basic standards rather than individual choice. Third determining which market imperfections are better overcome through direct provision – i.e. traditional subsidised housing either in the form of social renting or low cost homeownership – or by developing more effective incentive and regulatory systems within a basically market approach.

One of the most prevalent market failures in housing systems relates to the problems of slow adjustment in supply – and most importantly the fact that in market systems price can adjust far more rapidly than quantity, put- ting adequate housing out of reach for those lower down the income scale. Thus in times of sudden reduction in supply, increases in demand or rapid migration, markets will generate adverse distributional outcomes, some of which will impact on the efficient use of resources. Social production and ownership is the most usual way of addressing this problem in the context of new development.

Even so, the strongest political case for the provision of social housing has never been in terms of efficiency, but rather that housing is a direct and effective means of redistribution and ensuring minimum standards. The main strand of the argument is straightforward: low-income households need assistance to purchase the necessities of life. Less straightforward is the follow-up question: how should this assistance be provided?

In Europe, the most usual approach has been for the social landlord to receive subsidy, often in the form of land as well as financial subsidies, to build additional units and provide them at below market prices to those who are in need. In Brazil the choice has been to enable potential owner-occupiers and in some urban areas co-operatives to build at below market prices. The dwellings are provided through local government development permissions often on subsidised land allocation as well as direct funding and contracting by central government with developers.

In both Europe and Brazil there will inherently be issues around rationing and allocating the housing provided, as below market prices and rents means there will be queues (unless the programme is poorly implemented so that values are not achieved).

An alternative approach to supply subsidies – via developers, landlords or owners which reduce prices and rents for the final consumer – is the payment of income related subsidies directly to the households to be assisted. This approach increases capacity to pay and may allow greater freedom of choice about what is purchased. Overall success of any housing support programme then depends on the efficiency of the market system in generating the required output. The big question is then the extent to which supply is responsive at current prices or whether prices rise because of the subsidy, transferring the subsidy to landowners, landlords and developers. Traditional economic theory tends to argue that demand side subsidies are more efficient than supply side approaches. However there are many practical reasons for a continued emphasis on directly relating subsidies to investment in most countries with a positive policy approach and even in countries that have income related benefits available to lower income households (Hills et al, 1990; Galster, 1996; Yates and Whitehead, 1998). The mix of subsidies may, in turn, impact on the amount of both public and private resources made available and on the relative capacity of the social and private sectors to ensure that provision is forthcoming.

II.

THE EUROPEAN EXPERIENCE

3. TYPOLOGIES AND EUROPEAN HOUSING POLICIES

Christine Whitehead and Melissa Fernandez

In much of Europe there has been general agreement that housing is a social good, to the point where there is a stated political commitment in most Northern European countries to ensure 'a decent home for every household at a price within their means'. In particular in many (especially Northern) European countries there are large social rented sectors provided by municipalities or non-profit organisations aimed at lower income households unable to provide for themselves.

Even so, housing has been treated very differently across Europe, reflecting more general attitudes to the role of the state and the extent of government intervention in welfare provision, as well as the development of housing specific policies since the Second World War. Here we examine in more detail the principles of different approaches and how they have developed in different groups of countries over the last seven decades.

A typology for analysing different approaches to the provision of welfare was set out by Esping-Andersen (1990). This typology distinguished three groups of countries: liberal (market oriented), including particularly the UK; social democratic, notably Scandinavia; and corporatist states, including Germany and France. Kemeny (1995a, 1995b) added an additional complexity in the context of housing by stressing a two-fold classification distinguishing unitary and dualist systems (described in more detail below), while at the same time bringing out the importance of different forms of governance for achieving welfare aims. Figure 3.1 provides a simplified picture of the spectrum of approaches. Obviously categories are changing rapidly and to some extent merging (Esping-Andersen, 1996). Notably the new Eastern European transition economies can now be seen as transferring from a version of state corporatism into strongly market oriented systems.

Developing this approach, Whitehead (2003) identified four major stages of development in housing policy in Northern Europe since 1945 (Figure 3.2): meeting the post-war housing shortage through government subsidy and particularly provision until the 1970s; managing, maintaining and allocating the resultant stock as levels of investment declined and targeting increased in the 1980s; the growing importance of privatisation with increasing emphasis on choice and reducing government direct involvement in housing for the majority of the population in the 1980s and 1990s; and the 're-involvement' of government and its agencies as regeneration of both housing and other urban infrastructure comes to dominate the investment agenda. Since the turn of century we have perhaps entered a further stage based on increasing government withdrawal from direct support and substituting the development of public-private partnerships in finance as well as investment supporting the capacity for social housing providers to recycle assets by borrowing against capital values.

Figure 3.1
Models of housing in welfare provision

Possible Spectrum:

Market pricing and allocation + Demand side subsidies (US, Australia)	Ensure minimum standards for all by Price subsidies and/or Administrative allocation (Northern Europe)	Housing as Social wage State allocation Low or Zero price (Eastern Europe, Russia, China, India)

Directly
via Local authorities

UK

Indirectly via
Independent Social Landlords
Other forms of public/private
partnership

(Netherlands, Scandinavia, France)

What this helps to clarify is that the fundamental problems are relatively consistent across the industrialised countries of Europe but that the means used to achieve these ends differ in relation to the economic and political imperatives of the relevant period; the distinct styles of governance, regulation and subsidy specific to each country; and the changing nature of user needs as Europe has become richer and better housed overall.

The starting point for almost the whole of Europe after the Second World War was a shortage of housing arising from the destruction of or damage to significant proportions of the existing housing stock as well as a lack of new investment throughout the war years. Except in the southern Mediterranean countries (where housing was seen as a lesser priority) housing was seen as an important element of social infrastructure and of political cohesion. The result was that large scale resources were mobilised for housing production but along three distinct lines: the dualist framework which concentrated on subsidising social rented housing, leaving the market with the support of a system of tax reliefs to provide for those further up the income scale; the unitarist systems which subsidised investment across all types of provision; and the state corporatist systems of Eastern Europe which provided government owned rental housing to the exclusion of market provision.

Figure 3.2 also identifies some of the most important distinctions between the unitarist and dualist approaches, reflecting the different attitudes to tenure, types of providers and particularly targets of subsidy.

The unitarist approach exemplified by Sweden and the Netherlands and with somewhat different parameters in Germany was applied with more or less consistency across much of North Western Europe (Lundqvist, 1992). It concentrated on subsidising output and linked rents in the private and social sectors through relatively flexible regulatory regimes, which have enabled choice between the two sectors in many contexts but only because of the large scale subsidies to investment.

As it became obvious that the vast majority of households were well housed, other priorities – particularly health but also macroeconomic stability and the need to decrease public expenditures – started to dominate in the 1980s (Turner and Whitehead, 1993). Greater emphasis began to be placed on targeting assistance towards lower income households and areas – although the ethos of neutrality between tenures within this new agenda was to some extent maintained (Turner and Whitehead, 2002).

During the 1990s problems of low demand and particularly of obsolescent stock began to emerge in many of these unitary systems – in part as a result of changing economic conditions and the decline of manufacturing in some areas as well as of the withdrawal of state assistance to suppliers.

Equally the idea of housing began to be more broadly defined to include not just shelter and security but also a range of neighbourhood, environmental and service attributes. This has helped change the role of social landlords towards that of neighbourhood regeneration and management within a context of capital grants and private public partnerships.

The dualist approach on the other hand increasingly concentrated on targeting assistance through tenure-specific subsidies to municipalities. Initially the resultant provision was available to a wide range of households who were unable to achieve adequate quality housing for themselves. Rent regulation in the private sector also provided low cost housing to those able to find such accommodation. As the physical shortfall in housing provision was overcome and financial deregulation enabled more households to buy into owner-occupation, the emphasis changed to targeting assistance on those on the lowest incomes through a wider range of providers but still within a strongly dualist structure, supported by income related assistance to tenants.

During the 1980s the UK led the move towards the withdrawal of the state from the provision of mainstream housing through their emphasis on privatisation and liberalisation as well as reduced public expenditure. From a position in 1979 when around a third of all housing was provided by municipalities at subsidised rents, the UK moved to a position at the turn of the century when less than 15% of housing was municipally owned and owner-occupation had risen from around 55% to almost 70%. This was achieved by financial deregulation and a generous tax regime as well as by pro-active polices including the Right to Buy and the transfer of municipal housing to independent social landlords. Latterly, subsidies have become more closely targeted on lower income households as well as on deprived areas often dominated by social housing provision and economic decline. This has led to a growth in area and neighbourhood-specific policies aimed at increasing both individual opportunity and the incentive for the private sector to invest in regeneration.

Thus in most European countries where there has been significant government intervention we can observe at least four stages (See Figure 3.2). In the first stage, governments of all types (although most were in

Figure 3.2
The Development of Housing Policy in Europe since 1945

Stage 1
Large scale social sector production
Quality similar to/better than private sector

Stage 2

Unitarist Approach
- Tenure neutrality
- Investment subsidies
- Cost based rents
- Open to all
- Independent providers

Dualist Approach
- Tenure specific subsidies
- Freedom to borrow/revenue subsidies
- Gap between rents and costs
- Concentrated on low income households
- Municipal providers

Stage 3

Modifying government intervention
- reduced assistance
- increased targeting
- shift towards demand side subsidies
- greater emphasis on market finance and allocation

Stage 4

- Public/private partnership regeneration
- neighbourhood
- partnerships
- additional housing in pressure areas
- affordability/accessibility of market housing

Stage 5?

Austerity
- Increasing self- sufficiency among social providers in some countries
- Austerity programmes and further withdrawal of direct housing support
- Greater use of public/ private partnerships in finance and regeneration in particular

actuality to the left) concentrated on new construction to alleviate absolute shortages of housing by a range of direct provision and investment subsidies. The exceptions were some Southern European countries where incomes were low, housing aspirations concentrated on shelter and family based provision dominated especially in rural areas.

In the second stage, as overall shortages began to decline the split between unitarist and dualist systems became more apparent – with a clear divide between countries concentrating support on lower income households and those where social housing was available to the majority of households.

In the third stage in almost all Western European countries to the emphasis was placed more on reducing public expenditure and government involvement – and particularly on improving the management and maintenance of the existing stock, on increasing individual choice and on greater targeting of assistance. In the main this was accompanied by a range of deregulation policies aimed both at rented housing and at housing finance regimes as well as a shift from supply to demand side subsidies. The extremes were seen in the Eastern European transition countries where wholesale privatisation of housing resulted in the near abandonment of government support.

Stage four shifted the emphasis away from new build towards improvement of the existing stock. In part as a result of the large-scale building programmes of the post war period and of changing demographics leading to increasing numbers of areas of low demand, there was a further shift away from new build to renovation and regeneration. Thus in the 1990s the emphasis moved more to upgrading housing provision to higher standards, reflecting higher national incomes and growing concerns around the environment and energy efficiency within broader programmes of improving infrastructure and local services.

The attributes of stage 5 which has been evolving since the late 1990s are as yet unclear. Over the last five decades of government intervention large scale assets – often debt free – have been built up in many countries. The result of this is that some countries, notably the Netherlands and Sweden, social sectors have become self-sufficient while in others, notably Germany, sales to private equity have enabled funding to be recycled.

Especially since the financial crisis of 2007/8 almost all European countries have seen cutbacks in housing investment across all tenures. Initially in some countries this led to the expansion of social housing programmes to help kick-start economies. However the subsequent recession and national government and EU austerity programmes have seen a reversal in government support and a growing interest in using financial innovations to lever in much higher proportions of private finance for infrastructure and housing provision. How this stage will play out has yet to be determined.

Over the last four decades, as extreme numerical shortages have been overcome and finance markets have become more responsive, there has thus been considerable pressure to re-organise housing, housing subsidy and housing finance systems in Europe. The objectives have been to increase the efficiency of housing provision, to ensure that the private sector plays a greater role in funding housing, to increase individual choice, and particularly to reduce public involvement. Privatisation and liberalisation have concentrated on the development of competitive finance markets as well as on achieving large scale cuts in direct public expenditure on housing (Gibb and Whitehead, 2008; Turner and Whitehead, 1993 and 2002). The results have included a larger emphasis on market mechanisms – and far greater exposure to market pressures, including over the last few years, rapidly rising prices.

4. FINANCING AND SUBSIDY

Christine Whitehead and Melissa Fernandez

Governments are generally most interested in the question of how investment is to be financed – and particularly the extent to which that finance must come from the government itself or can be financed in the private sector. However the impact of the investment and its distribution among households depends significantly on the resultant economic subsidy – i.e. the extent to which households pay less than they would have to pay in the market place – which in turn depends on how rents and house prices are set and the capacity of households to obtain debt finance.

In this section we examine some of the issues of principle and practice which have helped to determine the cost to European governments of their housing programmes and in particular the growing capacity to lever in private finance and so reduce governments' long term commitment. The vast majority of European direct housing subsidy programmes (as opposed to tax reliefs) has been in the form rental housing provision. However from the point of view of consumers these have been increasingly supplemented by income related assistance.

Brazil's experience is similar to the early stages of post war policy in Europe in that the emphasis has been on supply side subsidies. However there are clearly big differences because the offer has mainly been in the form of owner-occupied housing, giving consumers control over the housing asset but also the responsibility to repair, maintain and improve that property. The implications that can be drawn from European experience are therefore often indirect although the nature of subsidy and finance remain similar.

4.1 The relationship between financing and subsidy

There are two distinct definitions of subsidy – financial and econom- ic. Financial subsidies include cash flows to social sector landlords and to tenants. Payments to social landlords can be either in the form of revenue subsidies (i.e. annual payments) or capital grants from central and local government. They also include subsidies to interest rates and other costs of production as well as the use of public sector borrowing at below market interest rates. Government guarantees also reduce the costs of finance. In addition, cash and contributions may come from landowners and developers, particularly in the form of support to new building and regeneration, further reducing direct costs. The effect of these direct and indirect subsidies on the production, maintenance and improvement of the stock is the reduction of costs that have to be covered by rents and borrowing.

Economic subsidy is defined in relation not to financial flows but to current values (Whitehead, 2003a). Thus it is best measured by the difference between actual rents for the properties in relation to the rents these properties would attract on the private market. These economic rents therefore relate directly to the location and attractiveness of the dwellings as well as the efficiency by which the properties have been developed and the extent of subsidy.

Economic subsidies may therefore be less than financial subsidies where the finance has been used badly, because costs have been too high or the dwellings do not adequately satisfy consumer demand. In particular they can be below financial subsidy if there is an excess supply of housing in an area – e.g. because of economic decline or changes in the types of dwelling provided.

Economic subsidies, though, are more likely to be greater than financial subsidies, particularly when rents are set in relation to financial outgoings. This is because financial subsidies are measured in historical cost terms. In a generally inflationary world, current values will be higher – especially when house prices are rising faster than general prices (and costs).

An important link between financing and subsidy in this context comes from the way that the values of the social housing stock are determined – and in the rented sector how rents are then set. If values are measured in historic terms – in other words by how much it cost to build the properties at the time of investment and to manage and maintain the properties thereafter – they will be below current market values because of both general and house price inflation. Rents are then set to cover financial costs after subsidy. Economic subsidy then measures the difference between these cost-based rents and market rents. Only if capital values are required to reflect current prices either through current accounting principles (or mark to market) and costs include a rate of return on these values, will financial subsidies either in owner-occupation or the social rented sector be closely related to economic subsidy. In some countries (notably the UK) the definition of social housing requires that actual rents should be held below market levels and therefore implies the existence of economic subsidy. The general definition across Europe relates to how much the government has paid and therefore to the existence of financial supply subsidies.

Under either the financial or economic definitions of subsidy there are, in addition to rent subsidies, income and household circumstance-related subsidies paid to the tenant in the form of housing allowances. These income related benefits may be based directly on the rent of the occupied property or they may relate to area-based rents or some form of standard rules.

While the vast majority of social housing in Europe is provided in the rented sector, some has been provided in the form of owner-occupation often with restrictions on the price at which the dwelling may be bought and sold and on the people who may purchase that dwelling. The development of intermediate products, such as shared equity, which include an element of subsidy as well as varying forms of partial ownership have become an increasingly important means of providing shallow subsidies to enable lower income households to achieve adequate housing. The most popular form across European countries is in the form of a shared equity mortgage where the purchaser buys a proportion with a traditional mortgage but the rest (often 25%) is based on a loan repaid at the market price at the time of sale (Monk and Whitehead, 2010).

The general principles of finance and subsidy underlying these types of intermediate rental and home ownership products do not significantly differ from those for social renting. However a major objective is to make the best use of the household's own resources and their capacity to borrow against future income. The extent of government financial support required will, in general, be much less than that for social renting. Again, the UK and England in particular may provide some of the most relevant examples. However the core form of affordable housing provision remains that of social rented housing.

4.2 Rent Determination

There are three sources of funding for social rented housing: rents; borrowing which must be paid for by some future income stream; and payments by others including both the transfer of equity and direct subsidy.

Rents in social housing in Europe are set using a wide range of methods with different implications for continuing subsidy levels. These include cost based (after supply side subsidy); value based – relating to consumer demand or values in other sectors; and income based. Moreover rents may be set at different scales depending on the dwelling; the estate; the area; and the owner. All of these different types of approaches can be found somewhere in Europe.

Central governments generally determine the basic principles by which rents in the social sector should be determined. However they have varying levels of involvement with respect to the individual property and area. At one extreme, notably in England and the Netherlands, property rents are related to the valuation of the individual property as well as to area based incomes. At the other, as in Denmark, they may be determined by the managers of a specific estate in relation to the costs to be covered for that estate.

Governments are generally looking to ensure a financial framework which puts pressure on owners and managers of the social rented stock both to operate efficiently and to provide effectively for target groups. The most usual approach is to require providers to break-even or to achieve a target rate of return on assets (whether valued at historic or current cost). These financial constraints may operate at the level of the social sector as a whole (the Netherlands); the provider (England); or the estate (Denmark). Each approach generates its own tensions, notably with respect to the capacity to cross subsidise between areas and cohorts of investment.

It is important to recognise the distinction between rent structures and rent levels. The majority of government regulation across Europe concentrates on rent levels; determination of relative rents is left to the owners to be based on values, needs or other criteria.

Rent levels depend upon the interaction between the government regulatory framework, the source of funds, the extent of subsidy and the timing of past investment. Over the last few years, where investment has declined, the pressure to increase rents has also usually lessened. In some countries, notably Sweden, the Netherlands and France, rents are set well below market levels but access to social housing is available to a large proportion of the population. This has become a matter of concern for EU Competition policy (Scanlon et al, 2014). In other countries, notably Ireland and the UK, where rents are often far below market levels access is much more restricted, targeting assistance on poorer households.

There are four basic principles by which social sector rents can be set: in relation to costs; to value; to incomes; and to rents in other sectors.

The major benefit of cost-based rents is that they are most directly related to the subsidy provided because the cost of production and running the stock less subsidy equals rents required. The most obvious problems relate to inefficiency as there is nothing to ensure that costs are at their minimum. There have been many instances, notably in Denmark, Germany and Austria, where costs have clearly been inflated. More complex issues arise when costs become disconnected with values so the economic subsidy may become very large. Then governments may wish to increase rents so that they are more in line with true opportunity costs of provision. This has been a major source of political tension in many countries with cost-based systems.

The benefit of value-based systems is that they relate to what consumers regard as important. However there are then no direct links either to the subsidy that government has provided or to the actual costs of maintaining the social sector stock. Most importantly governments generally require that, given subsidy has been produced, rents should be held below market values and bear a clear relationship to affordability among the target groups of households. There is thus inherently excess demand and few of the allocation benefits that flow from relating rents to value can readily be realised. Both England and the Netherlands have developed systems that set rent structures in relation to capital values but modify the rents actually charged in relation to income.

Income related rents raise major issues with respect to financial viability, especially if the households accommodated are particularly concentrated among lower income groups and if their incomes are rising more slowly than the costs of managing and maintaining the stock. Ireland provides a particular example of these issues within Europe, as do parts of Germany. There are many other examples across the world – notably in the USA, Australia and New Zealand.

Finally there are examples where rents are related to those in the private sector rather than directly to capital values. This approach is particularly prevalent in countries where private rents are also controlled. The most important example of this approach has been Sweden and to a lesser extent the Netherlands and Germany. In this context there is usually an understanding among those who set both social and private rents as to the expected relativities but these are usually a matter of negotiation rather than related to specific formulae. For instance, in Sweden, unions have continued to be at the heart of the negotiation process.

Table 4.1
Social rent determination and the relation of social to private rents

	Country	Rent determination in social rented housing	Social in relation to market rents (average estimates)
Social rents close to market rents	Austria	Cost-based.	Near market.
	Denmark	Cost-based at estate level. 3.4% of building cost plus bank charges.	Near market.
	Germany	Rents vary with building period and funding programme. In some regions rents vary with household income.	Near market.
	Sweden	Set by annual collective bargaining between landlords and Tenants' Union; rents vary with age of building.	Near market.
Social rents 50 – 66% of market rents	France	Central government decrees maximum rents for new construction (which vary according to 4 geographical zones). Related to costs of construction.	Around two-thirds of market but less than 40% in Paris.
	Netherlands	Rent based on points system that reflects 'utility value of dwelling' and target household income level. Proposal to change to percentage of market value. Properties with rents above €681/month in 2013 not subject to controls in social or private rented sector.	Around two-thirds of market.
	Scotland	Locally determined historic cost-based systems for both individual local authorities and housing associations, so no government control.	Around two-thirds of market.
	England	Until 2012 rent restructuring regime based on local earnings and dwelling price; increases RPI plus 0.5/1%. Housing associations and local authorities must cover outgoings. From 2012 for new building and most new lettings, rents up to 80% of market.	A little more than half of market – less than 40% in London.
Social rents less than 50% of market rents	Czech Republic	Cost-based in new stock. Part of municipal stock had regulated rents, but rent control recently lifted.	Less than half of market.
	Hungary	Set by local authorities on various bases but generally so low that they do not cover running costs. Cost rents required under some funding schemes.	Around one-third of market.
	Ireland	By law generally income-related since 1976 for local authority-provided general needs housing though each local authority has own system. Cost rents in special-needs housing provided by housing associations.	Very much below market.
	Spain	Cost-based.	Less than one-third of market.

Source: Scanlon, Whitehead and Fernández Arrigoitia, 2014, pp.322.

Table 4.1 provides some details on how rents are set both in the social and the private sectors across Europe. It reflects all four approaches to rent setting as well as different ways of addressing the issues of historic versus current cost. In some countries, rents together with available subsidies provide social sector revenues that are more than adequate to enable owners to build reserves and to make contributions to additional provision.

This is particularly true of the Netherlands where the housing associations are expected to be self-sustaining; but it is also the case in parts of the HLM (Habitation à Loyer Modéré) sector in France and the HA (Housing As- sociation) sector in England. In other countries the revenues are inadequate to maintain the stock effectively, let alone support new investment, notably in Eastern Europe and in Ireland but also in parts of Germany. In cost based systems the intention is often that developments should be able to pay their way rather than depend upon cross subsidy from earlier investments. In these contexts new or improved dwellings may have much higher rents even though their value to tenants (often because of their location) may be lower.

There is thus very little consistency between countries in the ways that rents are set. Each depends upon a long history of financing and regulation which helps determine both feasibility and viability. History also often affects the link between rents and levels of provision as well as allocation rules. However the evidence across countries suggests that if rental income is not buoyant it will be extremely hard to maintain the social sector stock – leading to problems of dilapidation and social exclusion.

4.3 Equity finance for social housing

The other major source of funding for social housing comes from the equity tied up in the existing stock, in reserves and in other assets owned by social housing providers. Large parts of the social housing sector hold unencumbered capital assets on which no return is required. They also own land and other assets which could, at least in principle, be used to increase provision. The use of such existing assets is often a core element in regeneration projects, especially those that enable increasing density of provision. Finally many social sector providers have significant reserves built up from part subsidies and from rental income. These assets enable rents to be held down. They also present opportunities to support additional investment, particularly by providing internal subsidies in the early years which can be reimbursed as rents rise into the longer term and surpluses are made. There are however often issues around whether the associations with reserves are those that wish to develop – notably in France, the Netherlands and England. One response to this has been the Danish housing association surplus recycling initiative which aims to reallocate funds to those with investment programmes (Gibb et al, 2013).

The most usual approach to increasing the use of equity finance however has been through the sale of homes to sitting tenants, often at a discount. The objective is usually that of enabling tenants to achieve owner-occupation while, at the same time, funds can be recycled to extend social provision (although they may also be used elsewhere). The Right to Buy in England has been the largest such programme, involving the transfer of over 1.9 million units to tenants. These transfers involve a proportion of equity and debt finance put in by the tenant as well as subsidy from government. Other countries have similar programmes, although the extent of subsidy is usually less than was originally involved in the Right to Buy. Ireland has had a long standing programme which has enabled large scale sales. The Netherland has had a significant programme for a decade or more and is looking to extend it. Both France and Sweden are also putting in place policies to make sales more attractive to tenants. More generally, supporting owner-occupation is seen as a cost effective way for government to subsidise provision of housing for those able to make a larger contribution to their housing costs than the majority of those in social housing. Linked to this has been a growth in interest in programmes to support low cost home ownership where purchasers are able to purchase part of their homes under a wide range of specific schemes that fit the legal and institutional arrangements of individual countries. The cooperative home ownership schemes that are prevalent in Scandinavia are perhaps the best established. Community Land Trusts are also important in a number of countries, notably Germany. A wide range of new approaches are being developed in many Northern European countries with the objective of limiting and recycling subsidies more effectively and increasing individual households' equity stakes (Lawson et al 2012).

Arguably the most dramatic initiatives involve bringing private equity into the ownership of the existing stock of social rented housing. Thus far, Germany provides the only working example of large scale private equity involvement in the existing stock (Kofner et al 2012; Stephens et al in Scanlon et al, 2014). There have been two main approaches: the sale of the whole

Table 4.2
Three approaches to privatising of social housing

	Purchaser			
	Private social providers	**Commercial landlords**	**Owner-occupiers**	**Social owner-occupiers**
UK	From local authorities to housing associations (Large Scale Voluntary Transfers)***		From local authorities and housing associations to home owners (Right to Buy)***	Very limited shared ownership/ equity ('Social Homebuy' in England) *
Netherlands	From local authorities to housing associations***		From housing associations to home owners**	Social owner-occupation*
Germany	From public social to co-operatives*	Sale of municipal housing to private equity funds ***	From public social owners to residents*	From public social owners to co-operatives*

*Key: * = very limited; ** = extensive; *** very extensive*
Source: Table 22.2 in Elsinga, Stephens and Knorr-Siedow, 2014.

municipal stock in a small number of large cities, notably Dresden and Kiel in the East; and far more limited sales of parts of the stock across a range of smaller municipalities, mainly in what was West Germany.

The principles involved are straightforward. A license is specified, clarifying the conditions under which tenancies are to be provided, including how rents may be set, when evictions may take place, etc. It also determines the rights of the new owner to sell, demolish and redevelop properties as well as their responsibilities with respect to management, maintenance and improvement. These conditions help to determine the price at which the properties are sold. A second issue is whether this is simply a way to enable the municipalities to get out of direct housing management and to realise assets (although their responsibility to house the vulnerable remains). More positively it can be a way of increasing the efficiency of social housing provision and the better use of public resources. The evidence so far however is not particularly positive particularly because the refinancing regime for private equity has been adversely affected by the financial crisis (Kofner et al 2012).

Other initiatives are emerging because of the financial crisis and the lack of easily accessible debt finance. Ireland for instance is looking at a range of leasing arrangements, most of which continue to involve government ownership. France on the other hand has a system by which private investors lease back properties to HLMs to be let as social housing (CECODHAS 2009). In both England and the Netherlands there are public-private partnership initiatives for development and regeneration which could include both developer and institutional equity finance. More generally landlords are looking at the potential for institutional investors (such as pension funds) to take a stake in social housing perhaps in the form of social housing REITs – although the mechanisms are not yet fully developed (House of Commons 2012).

4.4 Subsidies to social housing provision

The incentives and capacities for social providers to expand supply must ultimately depend upon the extent of subsidy. This is because regulated rents do not cover the current costs of adding to the stock and therefore, without subsidy, providers must reduce their reserves or increase rents to existing tenants to pay for that investment.

Social housing has traditionally involved large scale government subsidy in the form of capital grants, revenue subsides or interest rate reductions. To take one example, British Governments have provided financial subsidies for housing for almost a century. For most of the 20th century the emphasis of policy was on the provision of new public rental housing let at below-market rents, although during the inter-war period there were also tenure neutral grants to new building. The principal Government subsidy came in the form of a recurrent revenue subsidy to local authorities. In contrast, capital grants from the Exchequer formed the basis of subsidies for housing associations, which became the principal providers of new social rented housing after 1988. Below-market rents were also the norm in the private rented sector for most of the 20th century, since tenancies were generally subject to one form of rent control or another, until new tenancies were de-regulated in 1989. At its peak in the late 1970s, one-third of the UK population benefited from general supply-side subsidies. Since then, this proportion has fallen to around 17% as public housing has either been sold under Right to Buy or demolished, whilst private sector building outstripped new social supply. In some other European countries, notably the Netherlands Austria and Denmark, the proportions benefitting were even greater although now it is only in the Netherlands where proportions remain above 30%. In most of continental Europe the main emphasis was on revenue subsidies that reduced interest rates to levels which made the housing affordable to the target group of households (Turner and Whitehead, 2002).

Since the 1970s when, as we have already noted, most post war numerical shortages had been addressed and there was increasing pressure on public finances the aim has been to reduce direct subsidies. This has generally been achieved first by moving away from revenue and interest subsidies, particularly because these tend to be open ended, toward capital grants that can both be cash limited and targeted more effectively and then by cutting assistance to suppliers altogether - notably in the Netherlands Sweden and potentially in England (Turner and Whitehead 1993, 2002; Williams et al 2012). Germany has no formal social sector and government contributions to social housing in Eastern Europe are generally very limited. The countries that have most obviously bucked this trend are France and Austria, both of which have maintained a range of supply subsidy instruments.

The general trend at local level is similarly towards reduced municipal involvement, in part because of the growth of independent social landlords but mainly because of financial constraints and limited borrowing powers.

In many European countries the cutbacks in supply subsidies have at least in part been offset by increases in income-related benefits for those unable to afford even social sector rents. These payments to individuals are available to a greater or lesser degree in all the countries included in our latest research (Scanlon et al, 2014) except for Ireland (where rents are themselves income related) and Spain. These payments become increasingly important as rents go up to support additional borrowing. The revenue from these demand side subsidies provides a relatively secure income stream which helps to increase the availability and reduce the cost of funds.

Additional investment increasingly depends on recycling past subsidies by increasing rents, running down landlords' reserves and/or in some countries diversifying into profit making activities such as market rent and low cost homeownership products. Again the Netherlands and Britain are in the forefront of such activities. In the Netherlands in particular social landlords have considerable capacity to increase investment without recourse to subsidy but the incentives to do so are limited, especially given their increasing responsibilities with respect to regeneration and local area management. In Britain some social landlords have developed large numbers of shared ownership units which generate sales income and recycle subsidy to allow further investment – but this is a model which does not work very effectively in recession (Whitehead & Monk 2011).

The most important alternative source of potential supply subsidy comes from land values – in the forms of public land for social housing at below opportunity cost and of contributions by landowners and developers to social and affordable housing. The very large post-war growth in social sector supply across Northern Europe was often supported by the provision of free or cheap public sector land (Whitehead 2003). Over the last few years there has again been increasing emphasis on this source of funding, often because the transactions may not appear on public sector borrowing accounts especially if the ownership of land is not transferred and the land does not have to be valued at current opportunity cost. Initiatives using publicly owned land are in place in most Western European countries, including in particular Denmark, the Netherlands, some parts of Germany, France, England, Italy and Spain (CECODHAS 2009). Their use is often complemented by other means of reducing costs, notably by subsidised mortgages in Spain and special financing arrangements for instance in Italy.

A rather different approach is to require contributions to affordable housing from developers, usually through ensuring that a proportion of affordable housing is included at least in major developments. England's Section 106 policy is probably the most developed, currently supporting well over 50% of new affordable housing provision (Crook & Monk 2011). Similar initiatives and related public private partnerships to ensure mixed communities are in place in Ireland, the Netherlands, some parts of Germany and Spain (Calavita & Mallach 2010).

Overall social sector housing is becoming more self-sufficient. This situation is most transparent in the Netherlands where housing associations have received no direct supply side subsidies for almost twenty years. In Sweden housing makes a net contribution to the public purse. In England the realisation of social housing assets helped to contain overall public expenditure and borrowing. More generally, increasing capital values and deregulated private finance markets have enabled lower government subsidies and the restructuring of housing finance away from public to private debt. Rents have been increased and initiatives have been introduced to provide incentives to better off tenants to transfer to other tenures.

There are exceptions, notably Austria and France, where supply subsidies and special circuits of housing finance continue. Equally there are countries, including Germany, Norway and in Eastern Europe, where little or no social housing remains. As part of this transition there are also trends towards declining municipal involvement and increasing reliance on not-for-profit and even private landlords.

Other general trends in subsidy and finance provision include (I) significant shifts from supply side to income related subsidies; (II) the substitution of debt finance for subsidy; (III) increasing emphasis on payments in kind, mostly in the form of public land which is made available at below market prices; (IV) the substitution of contributions by other actors, notably land owners both private and public for government subsidy; and (V) growing interest in the introduction of private equity into social housing, both through public-private partnerships and direct private purchase of existing stock.

Although one can identify certain trends, the picture is not straightforward. There are many differences between how countries are responding to basically similar pressures. Often these differences reflect distinct institutional frameworks and opportunities. In particular many of the countries studied continue to have strong regulatory frameworks impacting on both the social and the private sectors. Equally in many countries the government is still regarded as the main source of funding with private finance seen as something of a threat to the nature of social housing. Experience in some countries, notably the Netherlands, England and now Germany, however, shows that private funding without direct subsidy, although usually (and increasingly) with some form of explicit or implicit government guarantee, can be employed both to fund the existing stock and to some extent enable new investment.

Over the next few years, especially if the financial crisis and recession are overcome, private finance is likely to grow in importance – through increasing use of tenants' own equity as they purchase or part purchase their homes; through public-private partnerships implementing regeneration and new investment programmes; and through the introduction of private equity involvement in the ownership of the existing stock.

Currently there is considerable political interest in expanding output as a means of supporting economic growth as well as helping those on low-incomes access well managed affordable homes. However, much of the immediate interest lies in developing new ways of providing housing which involves at best only shallow subsidy – and therefore involves significant proportions of private debt or equity finance (Williams et al, 2012). Support for increasing investment in more traditional forms of social rented housing which require far higher levels of direct government subsidy is much less clear cut.

4.5 Private finance for social housing

As a result of these very different paths of development, the nature of the social housing debt and the capacity for self-sufficiency on offer across Europe varies across a number of particularly important attributes.

Asset base

The asset base against which the funding is provided can be determined in a number of different ways. It can be:

- the total existing stock owned by the social sector – this implicitly lay behind earlier versions of government based funding and enabled reallocation of subsidy between providers; this approach is highly centrist and is becoming far less usual;
- the total stock owned by the individual providers – this version is most consistent with general debt financing in that the assets of the organisation lie behind the debt;
- the new investment being undertaken by the sector as a whole – identifying the rents associated with that new investment as the avai lable revenues; this allows pooling but only across a vintage of investment and raises particular difficulties in situations where the em phasis is on improvement and regeneration where rents are not ne cessarily particularly buoyant; and
- project funding based simply on the specific development – thus in cluding no mechanism for rent pooling.

The mechanisms actually chosen in each country usually relate quite closely to the way in which the social sector has been developed within the public sector. Equally the possible range of instruments enables mixes between these four models, for instance splitting revenue streams from the asset base. Thus the UK approach concentrates on the second – clarifying ownership but allowing rent pooling across different vintages of property and relating the asset base to the rental stream. The Netherlands has tended to require the individual providers to support one another but has maintained separat funding, organisation by organisation. Funding each tranche of investment (and therefore each site) separately is the mechanism most consistent with the traditional ways in which social housing was funded within the public sector in much of Scandinavia.

The revenue stream

The question of the revenue stream, and indeed the quality of the asset base, is related to two distinct issues: the extent of government guarantees and the restrictions on the individual providers to set their own rents. In terms of guarantees it is clear that the principle of privatisation excludes formal guarantees from government. Yet, historically funding had often been formally guaranteed by local government particularly in the case of project funding based systems and by national government in more centralised systems. A fundamental attribute of the changes over the last two decades has been to transfer risk to providers. However there has clearly been some continuation of implicit guarantees as well as the development of mechanisms for pooling and spreading risk. In England the grants (which are actually loans in that they are repayable to government in the event of sale) from government are subordinate to private funding and the regulatory framework provides a mechanism for restructuring ownership in the face of financial problems. In the Netherlands there are formal mechanisms for pooling between different groups of housing association – as well as a long tradition of municipal involvement in partnership which provides some comfort to lenders. Similarly in France the direct involvement of municipalities in what is anyway a very integrated system of funding with strong implicit guarantees ensures that very little risk is transferred to financial institutions.

A rather different way in which the sector rent stream can be guaranteed is through the provision of housing allowances and other social security benefits. In all the countries included in this issue there are large-scale housing specific benefits available to those on the lowest incomes and sometimes for those in low paid employment which implicitly guarantee the revenue stream. In the UK this currently pays the full rent for those eligible for benefit in the social sector in part because of the very low levels of more general social security available. In the Netherlands, most of Scandinavia, Germany and France social security is itself more generous and housing specific assistance tends to be less than 100% of the rent – but still extremely generous for those on the lowest incomes or in particularly high cost housing. Such safety nets are inherently subject to political risk but have been core elements in the provision of the welfare systems which exist across Northern Europe (Stephens et al, 2011; Scanlon et al 2014, chapter 1).

Partly linked to the provision of household specific assistance is the question of how much freedom social housing providers have to set their own rents – a fundamental factor in assessing the risks involved in long term funding. To the extent that governments pay for the housing – whether by supply subsidies or through assistance to relevant households – there is an incentive for those governments to intervene in setting rents. This is particularly true in countries where the more general regulatory frameworks are based on controlling prices – e.g. through an RPI (i.e. the inflation rate) plus/minus x formula – i.e. the UK and countries that have followed their example with respect to privatisation. Equally it tends to be more relevant where social housing is equated with rents below market levels. This approach formally distinguishes those countries where social housing is seen as an integral part of the housing system and therefore investment is expected to be adequate to lower rents in general and to allocate social housing in relation to demand with those countries where demand tends to outstrip supply because rents are subsidised or controlled in one sector more than in others.

In practice the distinction is nowhere near so clear cut – in part because of the different traditions about how markets in general should be managed. In Sweden for instance, while investment does ensure adequate supply in many areas, there is still a mirror system of rent determination in which the trades unions and other stakeholders play a part which links private and social rents directly but where it is the costs in the social sector that help to determine the outcomes. In the Netherlands rents are cost related with market rents as the limiting possibility. In England the initial legislation which enabled the introduction of private finance was based on the same principles – but now rents in the social sector are determined by formulae relating to incomes and capital values in the locality and wider labour market area. This aims to introduce pressures to restrict cost increases – in line with the wider privatisation principles – but it equally impacts on the risks faced by financial institutions.

These examples show how important it is for the private sector to understand both the current situation in relation to government safety nets for the sector and the extent to which what is on offer is truly open to the usual risks of changing costs and demand. The other side of this story must be the extent to which it is political risk rather than market risk which determines the value of the instrument.

More fundamental concerns relate to the nature of the assets in terms of both the existing housing stock and of new investment and who demands social housing and therefore the security of the revenue stream.

Costs

The costs associated with social housing have been falling sharply over the last few years in countries where variable interest rates predominate. This has helped to provide quite a benign environment for introducing private finance – and has meant that there has often been little pressure for increased efficiency in provision.

On the other hand labour costs and in particular the costs of management and maintenance have risen more rapidly than inflation and can be expected to continue to do so, meaning that rent regimes unrelated to costs bring with them significant risks.

Management costs vary widely across countries – notably with respect to the range of services included in the provision of social housing and the extent to which neighbourhood management comes within the same remit. One of the most important aspects of privatisation in England for instance was intended to be to increase incentives for managerial efficiency. However the evidence so far is that costs per unit have actually risen: in part in order to provide a better service; in part because the types of tenants are changing, increasing the need for additional inputs to maintain the same level of services; and in part because of sales to tenants which result in greater fragmentation of ownership. This pattern has been less obvious in countries where the social sector covers a wider proportion of the population – but is of growing concern across Europe. In Finland for instance it is recognised that it is no longer possible to manage the housing without significant investment in the neighbourhood, financed through a range of housing and other social infrastructure subsidies as well as through rents. In the Netherlands there is a strong movement towards selling property to established tenants.

Equally much of the existing stock in many European countries that had large scale building programmes in the 1950s and 1960s are looking to undertake comprehensive rehabilitation and redevelopment of their social sector stock. While this may be entirely necessary in order to ensure adequate provision it is not at all obvious that increased rental streams will necessarily meet the increased costs. It is in this context that large scale voluntary transfers have been introduced in the UK with at least three major objectives – to enable investment to bring property up to standard paid for by implicit subsidies in the price; to allow the restructuring of the stock to provide higher densities and mixed development and therefore a larger stream of revenue; and to introduce private finance and private incentive and management structures into social housing provision. Other countries tend to be looking more to partnership relationships but the general principles – and the associated higher costs – are similar.

Overall it is likely that interest rate costs will stabilise or perhaps even decline slightly in some countries. However both annual management and maintenance and improvement investment costs will rise – implying that rents will need to rise faster than inflation. There is thus both interest rate risk and concern about real increases in total costs.

The ultimate security for all private financing lies either with the government's preparedness to guarantee demand and the revenue stream either explicitly or implicitly or with the right to sell the property in the market place. Again each country has different approaches and each country has concentrations of different types of dwelling. Outside the UK and Ireland the majority of social housing tends to be in the form of apartments – so the capacity to sell depends on the nature of the leasehold and condominium relationships. What is fairly clear however is that in a world where the majority of households aspire to home ownership (true across the whole of Europe for traditional types of household), long term provision must include mechanisms for enabling these aspirations to be met.

4.6 Overview

The potential for private financing of social housing across many parts of Europe is significant. Mature markets exist in most of Scandinavia, the Netherlands and the UK and there is growing interest in other countries, notably France and Germany.

The mechanisms used have so far mainly been in the form of retail funding even when large packages of funds are being put together to purchase existing assets. Securitisation has not generally been attempted, except in Finland, even though in many ways the scale and standardisation aspects of the debt fit the requirements for efficient securitisation more than some of the owner-occupied mortgage based issues which are of growing importance in parts of Europe. What is perhaps even more surprising is that, up to now, there is little or no evidence of private equity involvement in the provision of social housing. The ownership of social housing assets remains firmly with the housing associations or other social landlord. However the UK government, in particular, has been looking at new approaches to the possibility of ownership including partnership between developers or institutional owners and housing associations (CCHPR, 2012)

The nature of social housing must inherently be that it is provided for those who need some element of assistance to be properly housed at affordable rents. Depending on the country social housing may or may not be available to more mainstream households able to pay their own way. The implication is that government policy will always be of importance in determining the risks and returns involved – and political risk may well be as difficult to assess as the more normal set of risks associated with property. In the majority of countries the extent to which government is providing explicit or implicit guarantees is declining. This means that social housing has to stand more on its own risks and returns – increasing the relative benefits of diversification both geographically and by asset type.

Some of the factors affecting costs and revenues are similar across countries – notably those to do with funding. Others including the likely client base, the nature of the stock and the extent of potential cross-subsidy between schemes differ greatly depending on the specifics of development in each country. Equally important are the terms and conditions under which housing can be transferred between tenures and the nature of property rights involved in redevelopment programmes. What is clear across Europe is that aspirations are rising and only housing which meets those aspirations will be acceptable into the longer term.

Social housing can, under some circumstances, provide a significant market for certain types of private financial institutions – but those thinking of being involved need to understand the specifics of the market in a way which is very different from more traditional asset categories.

5. DISTRIBUTIONAL ISSUES

Christine Whitehead and Melissa Fernandez

The distributional effects of social housing depend fundamentally on (I) the size of the stock; (II) the ways rents are determined and their relationship to market rents; (III) the way the stock is allocated; and, (IV) the extent to which housing benefit is available.

The scale of provision shows proportions ranging from more than 30% of households to only a tiny percentage. How rents are determined and their relationship to market rents is clarified in chapter 3. The evidence suggests that the extent of subsidy depends significantly on when the properties were built and on whether rents are related to historic costs or to the attributes of the dwelling and ultimately market values. In most countries in Western Europe social rents are on average well below market rents so provide significant subsidy. Equally the extent of that subsidy varies with the degree of market pressure – so the extent to which social tenants benefit tends to be higher in major and particularly capital cities where market rents are high. Only in the Netherlands is there formal consistency between rents in social and private housing so that all tenants renting in either sector have rents controlled to below 700 euros per month. Sweden and a number of other countries have had 'mirror' approaches. A number of other countries have rent stabilisation policies.

Table 5.1 describes some of the current demographics of social hous- ing across Europe. While historically social housing was often provided for working households and rarely for those at the bottom end of the income scale, the trend in almost all countries with significant social sectors is to move towards providing for more vulnerable households and particularly those who are formally designated as homeless. As a result, the majority – usually the vast majority – of households in the social sector would find it hard to afford housing in the market sector.

Table 5.2 gives a more general indication of the extent to which rented and particularly social housing supports lower income households. In the vast majority of countries with the exception of Germany, private renting is

Table 5.1
Demographics of social housing

Country	Age/household type	Income
Austria	Young families (on new estates); older people/singles (on older estates)	Municipal housing: working class/low income. Housing associations: more middle income.
Czech Republic	Pensioners and unemployed slightly overrepresented.	Lower than average.
Denmark	57% of social tenant households are single persons (most often women), and 68% have only one adult. Children and young people.	Average household income 68% of national average.
England	Single parents; older and single households	Low incomes—on average 50% of overall average household income
France	Somewhat younger than households nationally, though not as young as in the PRS. Single people and single parents over-represented	Increasing concentration of low-income households in sector since 1984.
Germany	Single parents, single people, childless couples.	Increasing concentration of low-income households.
Hungary	Single-parent families are over-represented.	Low income and social status.
Ireland	Single-parent families and couples with children.	62% have incomes below 60% of median (vs 22% overall); dependent on state transfers.
Netherlands	Households older and smaller than national average, more likely to be on benefit and to be non-Dutch.	Lower than average and falling, but there is still some 'skewness'—i.e., occupation by households not in target income groups. Some call this social mix.
Scotland	Strong pattern of 'hollowing out' leaving young and old; singles and single parents.	Low incomes—on average half the median household income for owner-occupier, 2011 data £22k to £13k
Spain	Low income households, first-time buyers, young or old people, female victims of domestic violence, victims of terrorism, large families, gypsies, one-parent families, and handicapped and dependent people	Lower than average
Sweden	Single parents; elderly single people	Below average.

France: L'Union Sociale Pour l'Habitat Données Statistiques 2012
Source: Table 1.5 in Scanlon, Whitehead and Fernández Arrigoitia, 2014

Table 5.2
Low-income households by tenure (2008) and households receiving housing allowances

	Percentage of persons living in low income households			60% of median equivalised income in PPS [1]	Percentage of households receiving housing allowance	Avarage Personal Aid (euro/year per household)
	Total	Owner	Rent			
Austria	12	9	18	11,406	5.4	1,622
Belgium	15	10	28	10,791		
Bulgaria	22	21	28	1,303		
Cyprus	16	15	30	10,059		
Czech Republic	10	7	17	3,641	3.0	467
Denmark	12	8	20	14,497	20.8	2,764
Estonia	19	19	24	3,328		9
Finland	13	9	27	11,889	19.8	1,951
France	13	9	22	10,538	19.8	2,470
Germany	15	8	24	10,986	11.0	
Greece	20	19	25	6,480		
Hungary	12	12	25	2,640	na	na
Ireland	18	13	26	13,772		
Italy	20	16	29	9,383	5.5	1,188
Latvia	21	24	36	2,899	4.0	125
Lithuania	19	19	40	2,502		
Luxembourg	14	9	29	18,550	na	na
Malta	14	13	21	5,735	20.0	130
Netherlands	10	6	20	11,713	15.4	1,708
Poland	17	17	22	2,493	3.2	452
Portugal	18	17	24	4,886		
Romania	25	24	16	1,173		
Slovak Republic	11	10	18	2,875	1.7	na
Slovenia	12	11	25	6,536		
Spain	20	18	31	7,770	na	na
Sweden	11	7	23	12,344	3.8[2]	1,979[3]
United Kingdom	19	14	32	13,211		

(1) Low-income households are defined as having an income less than 60% of median equivalised net income; (2) Housing allowances can only be received by households with children and by households in the ages 18-28 without children. In addition, there is a special housing allowance for pensioners that is granted to persons and not to households. The number of pensioners (including both old-age and sickness pensions) receiving housing allowance amounted to 409,000 persons in 2008. These comprise about 4.4% of total population; (3) Average personal aid is per number of households receiving aid, not per total number of household.
Source for percentage of low-income households by tenure: Eurostat DS-066431
Source for 60% median net equivalised net income: Eurostat (ilc_di03) and TU Delft calculation
Other data provided by national statistical institutes GR Income and Condition of Life Research, 2007 SE The Swedish Social Insurance Agency

by far the minority rental tenure but also accommodates a concentration of poorer households. The table reflects the wide variation in the distribution of income, and general income support, across European countries – with the proportion of households below 60% median income varying from 25% in Romania to 10% in the Czech Republic. In the majority of Western European countries the proportion lies between 12% and 18%, with these groups heavily concentrated in the rental sector and particularly in social housing and thus in receipt of additional housing support via submarket rents.

In addition to rental subsidies, social (and other) tenants will generally be eligible for income related benefits. In the UK for instance two thirds of all social tenant households and 25% of all private tenants are in receipt of housing benefit. In other countries, where the concentration of poverty is lower and the income distribution less uneven, the proportions will be lower. However across Western Europe as a whole, housing allowances in one form or another provide a major form of income support for social tenants as well as low-income households in other tenures (Table 5.3). What perhaps should be stressed here is that income related benefits are generally universal for the relevant category of households while supply side subsidies are inherently limited by the extent of available supply.

The role of housing allowances in ensuring housing affordability

There are essentially two notions of housing affordability. The first is the idea that housing costs should not assume too high a proportion of in- come, and thus become what the European Commission calls a 'burden'. This results in affordability measures that suggest that housing costs should not consume more than a certain percentage (usually 30 or 40%) of income. This approach is widely criticised by academics as being arbitrary and having no theoretical foundation. Nonetheless, it has strong intuitive appeal, has been adopted as the indicator of housing affordability by the European Commis- sion and is used in US housing policy.

The second approach identifies housing as being unaffordable when the cost of housing of an adequate size and standard reduces income to a level whereby essential non-housing consumption cannot be met. This is known as a 'residual income' approach.

These approaches are – to an extent – reflected in the design of housing allowance systems.

In most Northwestern European countries, housing allowances have been developed within the context of social security systems that do make an allowance for housing costs within mainstream social security benefits. Housing allowance systems are based on the 'gap' principle whereby, for a given income, the housing allowance meets a certain proportion of rent above a minimum contribution up to a maximum level. In circumstances whereby unmet housing costs take residual income below the social assistance minimum, the social assistance system itself often steps in. The clearest example of this structure exists in Germany, whereby following the Hartz reforms, housing allowance (Wohngeld) is available for people in work or in receipt of social insurance benefits. People receiving social assistance instead receive support for housing costs from the social assistance system.

In contrast, the British Housing Benefit system is designed to prevent residual incomes from falling below social assistance levels after housing costs have been met. This accounts for two unique aspects of Housing Benefit: it can meet 100% of rent, and it can meet all of the marginal cost of housing (so if rent rises by £1, Housing Benefit rises by £1). However, the commitment to protecting post-rent income has never been unconditional, and its rising costs have led to an increasing array of restrictions. In the mid-1990s, the 'single room rent' limited the eligible rent for single people aged under 25 living in private rented accommodation to that of shared accommodation, whilst the 'local reference rent' limited eligible private rents to the median in the relevant market area. Post-2010, restrictions on eligible rent have intensified. Eligible private rents are now limited to 30% of the local median, and this will be uprated only by general inflation. The shared accommodation restriction has been extended to single people under 35 years of age. Meanwhile – most controversially – the 'spare room subsidy' has been extended to the social rented sector. Reductions in the eligible rent for people with resident 'non-dependants' have also been introduced. Table 5.2 gives some very limited information on the costs to some governments of general and housing specific support – but these, as we have noted, relate to very different tax and welfare systems so are not only partial but difficult to interpret.

Table 5.4 provides some Europe-wide evidence on how households perceive their housing position although like all such comparative tables there a major issues with respect to interpretation. It suggests that owner-occupiers

Table 5.3
Income-related housing subsidies

Country	Available to: Social renters	Available to: Private renters	Available to: Owner-occupiers	Eligibility	Amount
Austria	•	•	•	Three types, related to income, housing size/household type/ dwelling size, rent levels, or rent increases,	Varies across regions
Czech Republic	•	•	•	Two benefits: 1. Housing benefit - all households that spend more than 30% of income (35% in Prague) on housing. Living space and housing costs ceilings apply. 2. Housing supplement for people in material need.	1. Housing benefit – costs above ceiling are covered. Living space and housing costs ceilings apply. 2. Can cover full housing costs with no ceiling applied, based on decision of particular social department of municipality.
Denmark	•	•	•*	Low-income households with children and pensioners	For pensioners maximum €410/month; others €398
England	•	•	**	Rent: Based on rent of specific property, household income and characteristics *Support for Mortgage Interest:* Covers interest payments on loans of up to £200,000 for maximum of two years.	Rent: Maximum 100% of rent and eligible service charges for appropriate sized unit—additional limits in the private rented sector SMI: Calculated on basis of Bank of England average mortgage rate
France	•	•	•	Depends on income and household size, but all tenures eligible. Current recipients include 5m tenants and 500,000 owner-occupiers.	All households must pay a minimum of about €30/month. Above that a percentage of 'eligible rent' (which varies by area and is lower than actual rents) is covered. This percentage varies and is up to 100% for the very poor. Maximum APL is about 90% of maximum social rent. Average APL/AL in 2010 was €238/month.
Germany	•	•	•	1. Wohngeld: federal housing-payment subsidy related to income and (cold) rent or mortgage payment. For lower- to medium-income group. 2. Recipients of social benefits, subject to limits on floor space and rent level	1. Complex formulae apply. 2. Rent is paid in full

Hungary	•	•	•	There is a national housing-allowance scheme as well as rent subsidies managed by municipalities. Typically limited to the public sector, but there are some special programmes for private rentals.	Various rates, but generally too low to cover all housing expenses especially when energy use included.
Ireland		•		Private renting tenants in receipt of social security benefits, or participants on return-to-work or education schemes.	Tenants must pay a small flat contribution to their rent—currently €30 per week. The maximum rent subsidy available is subject to a ceiling which relates to household type and their location.
Netherlands	•	•		Households who meet income criteria, and rent below €681/month (in 2013).	Maximum €300/month.
Scotland	•	•		Private renting tenants can receive a rent allowance, based on eligible rent for that area and their household income and characteristics. Social renting tenants get the rent covered depending on household income and characteristics, although property considerations are about to be introduced.	Maximum 100% of rent and eligible service charges, but this rarely covers 100% of the actual as opposed to eligible rent within private sector.
Spain		Regional		National renta básica de emancipacion was removed in December 2011 although tenants already in receipt of the allowance can continue to receive it until the end of its four-year term.	Allowances still exist in some regions but are very limited.
Sweden	•	•	•	The elderly and low-income households with children	Maximum amount does not depend on housing cost, and may not cover rent on new apartments.

**only pensioners; ** state covers interest element of mortgage payment for some borrowers who become unemployed for up to 2 years. France: France: Union Sociale pour l'Habitat Données Statistiques 2012 CGEDD SOeS 2012; Ministry of Housing statistical department Comptes du logement*
Source: Table 1.4 in Scanlon, Whitehead and Fernández Arrigoitia, 2014

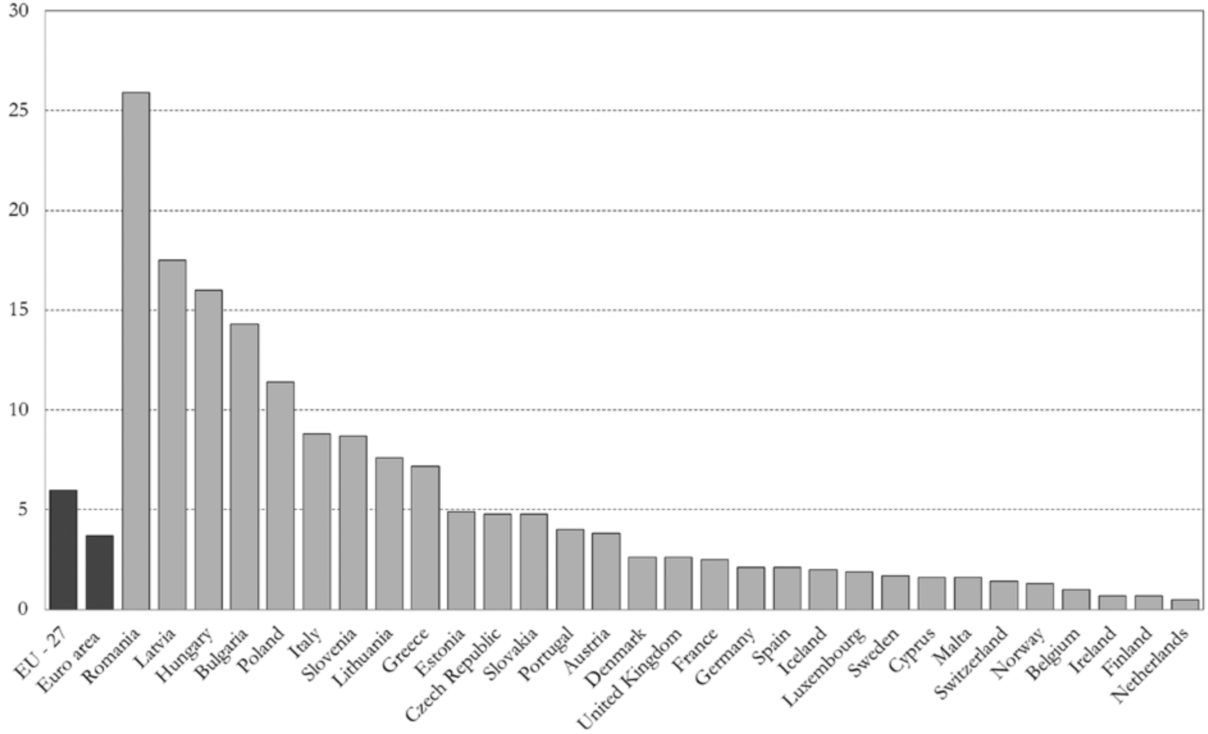
Table 5.4
Housing cost overburden rate by tenure status, 2013 (% of population)

	Total population	Owner occupied, with mortgage or loan	Owner occupied, no outstanding mortgage or housing loan	Tenant, market price	Tenant, reduced price or free
EU - 27	11.0	7.6	6.8	25.7	10.7
Euro area -17	11.2	7.8	5.6	25.4	10.8
Belgium	9.6	3.8	1.6	34.0	12.8
Bulgaria	14.3	11.6	13.4	36.3	17.7
Czech Republic	11.7	10.8	6.7	32.7	7.6
Denmark	18.9	7.5	6.8	38.6	:
Germany	16.4	12.2	12.1	22.3	15.8
Estonia	7.2	9.2	4.8	25.6	10.4
Ireland	4.9	1.4	1.7	17.8	6.8
Greece	36.9	28.6	32.2	58.3	38.0
Spain	10.3	8.2	2.8	42.3	9.5
France	5.0	1.2	0.7	15.8	8.3
Croatia	8.4	26.4	6.7	49.8	9.8
Italy	8.7	6.7	2.7	32.9	10.4
Cyprus	3.3	5.2	0.5	17.7	0.9
Latvia	11.4	16.2	9.9	17.1	12.7
Lithuania	8.2	15.1	7.1	23.5	11.1
Luxembourg	5.6	1.2	0.5	21.4	4.6
Hungary	12.7	29.8	6.7	36.2	12.0
Malta	2.6	4.6	1.3	28.2	2.3
Netherlands	15.7	13.2	3.7	23.2	0.0
Austria	7.2	2.9	2.8	15.5	8.7
Poland	10.3	13.8	8.4	28.5	13.0
Portugal	8.3	6.8	2.5	35.2	6.3
Romania	15.4	23.4	14.8	43.4	18.8
Slovenia	6.0	11.6	3.4	25.8	6.8
Slovakia	8.3	26.5	5.7	12.9	11.9
Finland	4.9	2.6	2.6	15.0	8.5
Sweden	7.9	2.9	8.2	17.6	69.2
United Kingdom	7.9	4.3	1.5	25.2	8.1
Iceland	8.8	6.8	7.0	17.9	14.4
Norway	9.6	7.7	4.3	28.7	14.4
Switzerland	10.6	5.6	5.1	15.2	9.2
Serbia	28.0	33.4	25.2	62.4	33.1

Source Eurostat (online data codes: ilc_lvho07c and ilc_lvho07a).

Graph 5.1

Severe Housing Deprivation, 2013 (% of population)



Source Eurostat (online data codes: ilc_mdho06a). (1) Population below 60% of median equivalised income.

with or without a mortgage relatively rarely feel overburdened – but of course this in part reflects the fact that on average owner-occupiers have higher income and wealth than tenants. It also shows that those in the market rented sector are far more likely to face a high burden of costs than those in social housing and that those in the Euro area generally have lower costs in the social rented sector than those in the rest of Europe – reflecting the reliance on historic cost pricing in many of these countries.

Finally Graph 5.1 gives an estimate of the proportion of households who face severe housing deprivation. It shows that countries with more than 5% of their population in severe deprivation are mainly located either in Eastern Europe where the rapid transition from state owned housing to private ownership has raised many difficult issues or in Southern European countries where social housing has not been a major area of policy. More generally those at risk of poverty are also more likely to live outside the Eurozone but the differential is less. The relative differentials with respect to housing specific deprivation suggest that the massive privatisations of the 1990s have helped to generate major affordability problems for households in much of Eastern Europe.

6. EMERGING CROSS NATIONAL TRENDS

Christine Whitehead and Melissa Fernandez

There are some clear general economic and social trends across Europe, which are impacting how housing systems operate. These include on the positive side:

- the fact that the massive post war numerical shortage of housing has been addressed at least at the national level in most European countries – usually with significant assistance from governments especially in Northern Europe;
- average standards of living have risen in all the major countries, enabling the vast majority of people to pay for higher quality housing and to pay a lower proportion of their incomes for the basics of shelter and security. This has however not been the case in some of the transition economies which have suffered large scale medium term reductions in GNP that have adversely affected the capacity to invest in housing and the maintenance of infrastructure more generally;
- continued liberalisation of finance markets and the near extinction in many countries of special circuits of housing finance – which have both helped to reduce the market price of funding; to extend the range of mortgage and savings instruments available; and to provide access to finance for a much wider range of households in most European countries – although at the expense of increasing housing costs for those who traditionally benefited from the special circuit of finance;
- in many countries there have been significant reductions in rent regulation in private rented sectors which has helped improve access to housing for those entering the market or moving to another area. However again this has often been at the cost of reduced security of tenure and increased rents for those who were able to obtain rent controlled properties;
- lower nominal interest rates, especially since the financial crisis and markets have built in expectations of a low interest rate regime con-

tinuing into the medium term. This helps overcome the problems of high initial costs of mortgages but at the expense of the weight of debt continuing for much longer periods.

Thus the supply of housing has increased and better meets household requirements for those with reasonable incomes; access to market housing has been expanded meaning that even those further down the market are able better to obtain accommodation; housing standards have improved as incomes and wealth increase; finance markets allow a better match between lifetime earnings and lifetime housing requirements; and financing costs in nominal terms have declined in some cases improving the affordability of market housing.

However, by no means are all cross-national trends positive. Significant factors that pose challenges to ensuring adequate and affordable housing for all include:

- demographic and social changes which increase household fission and fusion and generate larger demands on the housing system – notably the continuing move towards smaller households; the impact of increasing divorce and separation; and most fundamentally the aging population which leads not only to having to house four generations rather than three but also to different types of housing and housing services requirements as well as major problems of affordability. Some of these can be addressed via improved financial instruments which enable owner-occupiers to realise housing wealth – but many others, especially in the rented sectors, will have inadequate resources to meet their needs;
- increased migration into Europe, within Europe, within the countries of Europe and even sometimes within particular regions and cites. These pressures tend to increase the overall demand; to increase the mismatch between the location of demand and supply; to increase the need for flexible housing markets and easy access housing; and to generate areas of social exclusion and deprivation which have important implications for the management and maintenance of existing housing as well as for new and regeneration investment;
- continuing reductions in government commitment to housing, together with greater targeting of assistance at the lowest income groups. This reduces overall investment in housing especially as

there is growing evidence that demand side subsides do not produce as much additional housing output as do direct supply side subsidies;

- the adverse impact of deregulation on housing costs for those who traditionally had been protected from the full extent of market forces – which worsens affordability for more marginal households who have now to find accommodation on the market; and more generally a worsening distribution of income and wealth which makes it difficult for those further down the system to compete effectively for adequate accommodation;
- the increasing financial risks associated with the deregulation of finance markets – by which many more households across Europe are open to interest rate risk and to risks associated with loss of income and unemployment;
- the aging of the existing stock and the need to undertake large scale improvement, renovation and regeneration programmes which are time consuming and resource intensive as well as increasingly complex as objectives relating to high density provision, mixed communities and neighbourhood cohesion become more important;
- the need for large scale energy efficiency programmes particularly in Eastern Europe where energy and other utility costs have been greatly increased as a result of privatisation making housing related services if not housing itself less affordable;
- issues around the governance of multi-family housing again mainly in Eastern Europe where there has been large scale privatisation and inadequate contractual arrangements to ensure that the building is kept in good repair and management and maintenance is carried out effectively and affordably;
- environmental and other sustainability requirements which are both directly increasing the costs of housing provision – although not necessarily the overall costs to society – and tending to generate greater constraints on new building because of growing NIMBY-ism[1] among those who are already well housed;
- more fundamental increases in the costs of housing provision, associated with increasing demands for better located land, higher basic standards and relatively poor productivity in much of the house building industry;

1 - NIMBYism express the idea of "Not In My Back Yard". It refers to the opposition of existing residents to any new residential construction.

- stock market uncertainties which are tending to bring housing more into the mainstream of portfolio investment and probably increasing the volatility of demand for housing for investment purposes – as well as increasing vacancy rates as owners invest in housing for portfolio reasons and do not always put properties on the market, especially in countries where there is still rent regulation and significant security of tenure for private tenants.

These tensions have generated some clear cross-national patterns – whether the country's housing system is market oriented, social democratic, corporatist or minimalist. The most important general trends, not all of which apply to all countries, but which resonate with many housing commentators across Europe include:

- rising house prices, especially in urban centres and regions where the economy is expanding rapidly. This has been exacerbated by the shift from a high to a low inflation economy with the resultant reduction in nominal interest rates and user costs of owner-occupation;
- growing regional imbalances leading to low demand in some areas while at the same time increasing pressure in others. These pressures are closely linked to increasing concentrations of productivity which in turn lead to greater spatial polarisation with respect to skills and education and worsening distribution of incomes and wealth between household groups and between areas;
- aging populations, many of whom have much of their wealth in housing assets but who have relatively limited means of accessing these resources in order to pay for their requirements during their retirement;
- increasing problems of access to adequate housing especially among younger households in high demand areas – leading to pressures on governments to introduce further targeted subsidies to assist young professionals;
- a growing emphasis on regeneration, arising both from industrial restructuring and the increasing obsolescence of much of the stock built in the post-war period as well as rising aspirations with respect to housing standards;
- emerging pressures to increase both output and density levels of new housing in high demand areas while at the same time maintaining the rural environment and developing more sustainable, compact cities.

The global financial crisis has added a range of additional pressures to the effective provision of decent affordable housing for all:

- there have been enormous cutbacks in housing investment in many parts of Europe resulting in the re-emergence of numerical housing shortages in many higher demand areas and reduced capacity in construction industries;
- while in many countries interest rates have declined to historically low levels, access to owner-occupied housing has become more difficult because of increasing regulation of the mortgage market. There are thus many groups of households who could afford to buy over their lifetime but who cannot obtain debt finance;
- the growing importance of private renting in a number of Western European countries with associated higher rents, lower tenure security and affordability problems;
- increasing concern that cutbacks together with growing housing needs have resulted in inadequate provision of social housing to address the housing requirements of more vulnerable households;
- simultaneous, continuing pressures to reduce government involvement in housing provision and to supplement these increasingly limited resources with innovative financial instruments which enable private finance to be brought into the sector, often with the help of government guarantees.

What is perhaps most obvious from this discussion is that while the nature of intervention has changed significantly, governments in much of Europe remain heavily involved in housing systems. Moreover this remains the case even though incomes have generally risen to levels where it might be expected they could provide housing for themselves and markets in both housing and housing finance have developed rapidly. Much of the intervention is for distributional reasons – in part to achieve wider political ends – but there are also continuing market failures especially in the context of land use and regeneration which governments are often only just starting to address.

III.

THE BRAZILIAN EXPERIENCE

7. THE BRAZILIAN HOUSING POLICY

Ana Lelia Magnabosco and Fernando Garcia de Freitas

Housing subsidy programs – as a large scale and nationwide policy – started with the 1960's reforms and the creation of the housing credit system and a state-owned bank for housing credit in 1965: Sistema Financeiro da Habitação (SFH) and Banco Nacional da Habitação (BNH). This system was responsible for the subsidy and credit funding of more than 2.4 million social interest dwellings between 1965 and 1982. Nevertheless, the SFH faced a severe financial crisis in 1982 due to imbalances between assets and liabilities. This crisis led to the bankruptcy of BNH in 1986. The number of housing units financed fell dramatically, and the institutions in charge of the housing policy lost their political importance.

It was only after a long period of time that the Brazilian government creates a new housing subsidy system. This new policy only started after the control of the hyperinflationary process was achieved with a macroeconomic program which was in place from 1994 to 2004. With restored macroeconomic conditions and the pending financial obligations of former BNH properly consolidated, the Federal government started to restructure the housing policy starting with the creation of the Ministério das Cidades (Ministry of Cities) in 2003, the federal government Ministry dedicated to urban and housing issues.

This chapter brings a historical background of the Brazilian housing credit and subsidy programs. Additionally, we present some figures of the past and current housing finance, such as the number of housing units financed and the number of families beneficiated with some kind of subsidy granted from 1964 onward.

7.1 The housing credit system in Brazil

Up until the 1930s, the private sector was fully in charge of homebuilding in Brazil, as mentioned by Azevedo and Andrade (1982). With rapid industrialization and urbanization, the government began to intervene in this process by providing infrastructure urban services and building the first housing projects.

The *Fundação da Casa Popular* (FCP) was created in 1946 as a public foundation in charge of building affordable houses. The goal of this organization was to finance: (I) infrastructure such as water supply, sewage and electricity as well as other initiatives aiming to improve people's welfare; (II) investments in the building material manufacturing; (III) research and development to reduce building costs; and (IV) the construction of affordable housing to be sold or rented to low-income families. It was the first national institution in charge of the provision of housing to low-income populations.

These measures showed, at that time, the perception that is was not possible to address the housing problem without resolving urban infrastructure issues (especially, basic sanitation). It was believed to be necessary to strengthen the market, by stimulating the production of building materials. However, as Azevedo and Andrade (1982, p.22) pointed out, this task was disproportional to the capabilities and financial resources of FCP. Even with later changes to its scope and priorities, the performance of FCP was not very significant. By 1960, only 17 thousand homes had been built throughout the Brazilian territory, a number that fell well below the country's needs. According to Azevedo and Andrade (1982), the housing deficit in Brazil was 3.6 million homes in the beginning of the 1950s, not to mention the large number of families living in slums and cortiços or tenement houses in the outskirts of large cities.

Adding to the lack of credit, the supply of housing units for rent did not achieve the demand. In 1942, the first Tenancy Law had been enacted, establishing an undetermined duration for residential rental contracts. In practice, this meant that, once a property was rented, the rent remained unchanged until the contract was terminated at the will of the tenant. In a high inflation economy, the real value of rents depreciated over time. Thus, the Tenancy Law discouraged private investors to produce or acquire real estate for rental purposes.

In 1964, the *Fundação da Casa Popular* was closed, and Law 4.380, dated August 21 of 1964, created the *Plano Nacional de Habitação* (the national housing policy) and established the *Sistema Financeiro da Habitação* (the system of housing financing, SFH), the *Banco Nacional da Habitação* (BNH, the Brazilian Housing Bank) and the *Serviço Federal de Habitação e Urbanismo* (SFHU), a public office dedicated to develop urban planning. These reforms took place side by side with a deep reformulation of the national monetary and financial systems, as discussed in Martone et al (1986). The SFH gathered all agents responsible for savings and loans, developments and housing construction. BNH was assigned the objective to guide and control the SFH and to promote the building and financing of homes for low-income families. The SFHU replaced the *Fundação Casa Popular* in its urban planning issues, which involved promoting research and development of building and building materials manufacturing.

This set of institutions became, in practice, the first Brazilian experience with a structured policy for the building and financing of large scale social housing. According to Azevedo and Andrade (1982), BNH was innovative in the Brazilian housing policy for three reasons: (I) it was a development bank, as opposed to *Fundação Casa Popular*, which was a public office attached to the federal fiscal budget; (II) BNH loans included indexation, thus offsetting the deleterious effects of inflation on credit; and (III) BNH interconnected the public sector (the agent responsible for planning and funding affordable houses) with the private sector (the agent responsible for building and sales). On the other hand, the *Plano Nacional de Habitação* (the national housing policy) created a decision-making process with a standardized set of norms and policies.

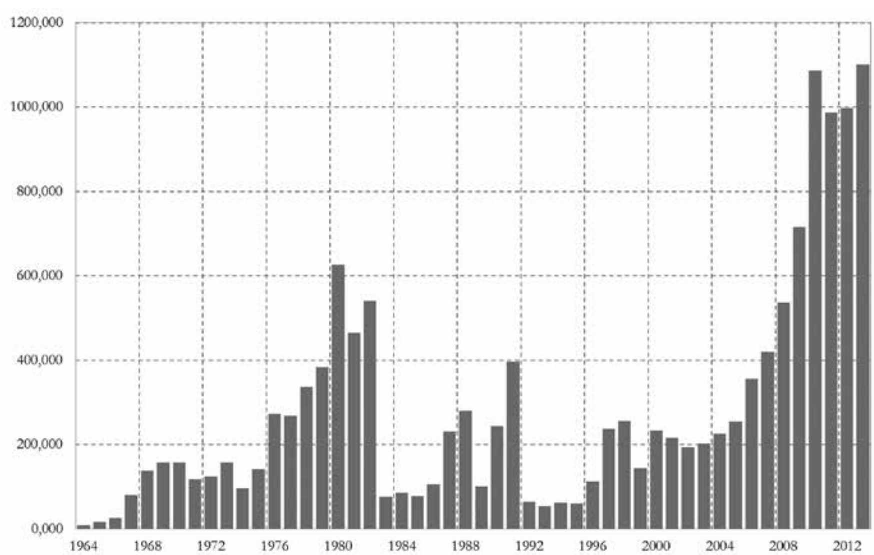
The credit system followed the standards of the Savings and Loans in the United States of America, which had been also adopted in Chile and Uruguay. Savings came through two basic instruments: (I) voluntary savings, coming from individual savings accounts and real estate bonds; and (II) compulsory savings, coming from *Fundo de Garantia do Tempo de Serviço* (FGTS), a public fund that collects 8% of monthly wages of all workers in the formal labor market to finance the retirement or the cost of living of the labor class during unemployment periods. There were two different financial agents in the system:

(I) the public housing companies (called COHABS) that were dedicated to the low-income market, comprising households with monthly earnings up to three minimum wages; and (II) the Sociedades de Crédito Imobiliário (real estate funds) and the *Associações de Poupança e Empréstimos* (savings and loans banks) for the middle income market. The erection of real estate projects was under the responsibility of the private sector, although the COHABS could also act as developers.

In 1967, the *Fundo de Compensação de Variações Salariais* (FCVS) was created aiming to clear the imbalances between assets and liabilities that emerged with the increase of the inflation rates. This fund was financed by a compulsory contribution charged in the installments to be paid by all borrowers. Until the installment was adjusted for past inflation, which would happen every 12 months, the correction mismatches in outstanding balances, corrected every 3 months according to monetary restatement of savings accounts, were covered by this fund. In 1969, a new indexation method, called *Coeficiente de Equiparação Salarial* (CES), was created to diminish the increasing mismatches between installment adjustments and outstanding balances. Additionally, in this period, a system of cross subsidies was established, consisting of increasing interest rates charged according to the loan amount.

The housing financing system was fundamental for the country's economic growth and for urban development, since it generated a great volume of loans to low-income families and a great volume of funds for investment. The total number of housing units financed per year was a little over 8.5 thousand by 1964. The system hit a record mark of 627 thousand units per year financed in 1980, when the SFH was able to supply credit to 70 per cent of the annual increase in the demand for new housing units. It is important to highlight that, between 1964 and 1980, 32 per cent of SFH-financed dwellings served the low-income segment of the housing market.

Graph 7.1
Housing units financed by SFH



Source: Banco Nacional da Habitação and Caixa Econômica Federal.

Between 1982 and 2003, however, the Brazilian housing financing system faced a deep crisis, with the bankruptcy and disbanding of the *Banco Nacional da Habitação* in 1986 and the resulting dramatic reduction in the number of housing units financed. Graph 7.1 illustrates this rapid breakdown of real estate financing in Brazil. The system, which at one point was meeting 65 per cent of the demand for new housing units between 1980 and 1982, was not even capable of meeting 10 per cent of the demand from 1983 to 1986. The average annual volume of units financed fell from 545 thousand in the former period to 82 thousand in the latter.

The crisis of this system in the 1980s was caused in essence by the acceleration of the inflation process. With an accelerating inflation, which reached 100 per cent per annum in 1982 and 239 per cent per annum in 1985, the FCVS resources became insufficient to cover the difference between as sets and liabilities of BNH, and this coverage became merely an accounting one. This accounting imbalance quickly grew and, in 1986, during the macro economic stabilization program, savings accounts withdrawals reduced even further the availability of funds for new loans.

It is important to highlight that, after the 1982 crisis, the SFH failed to satisfactorily serve the low-income market. This population required specific loan and subsidy policies to supply their housing needs, and those policies no longer existed. In 1986, it was announced the bankruptcy of BNH. The mission of BNH was passed on to *Caixa Econômica Federal* (CEF), which be came the exclusive agent to operate the FGTS funds. Still, CEF lacked the necessary instruments for planning. The federal government was no longer capable of managing the housing policy, and federal investments in the sector became negligible. Investments by state governments, especially the state of São Paulo, increased gradually, but not sufficiently to offset the retraction of federal investments.

Over a period of two decades, there was a dramatic reduction in the volume of investments in housing for both low-income and middle class families, and the housing backlog grew to 7.5 million of housing units in the end of the century – Magnabosco, Cunha and Garcia (2012). These years were also marked by great economic instability, high inflation rates and no growth. Even with inflation stabilization policies from 1994 to 2004, the housing financing system continued to show poor results until 2006. Credit recovery in recent years resulted from institutional advancements beginning in the 2000s. Chart 7.1 summarizes the more important institutional changes.

Chart 7.1

Institutional changes in the Brazilian housing and credit policies

1997 Law 9.514 introduced a new branch in the financial market to finance real estate, called Sistema Financeiro Imobiliário (SFI). It established a direct connection between the capital market and real estate business. Real estate credit securitization companies were established, mortgage-backed securities (Certificados de Recebíveis Imobiliários – CRIs) were created, and the trust deed of properties was introduced, altogether expediting the execution of collaterals.
2001 Law 10.257 created a new regulatory framework in the urban policy chapter of the Federal Constitution (articles 182 and 183). It defined the social function of cities and the urban property, and delegated this task to the municipalities, offering them a set of intervention instruments over their territories.
2002 Resolution 3.005 of the Brazilian Central Bank set forth changes to the accounting of the Fundo de Compensação de Variações Salariais (FCVS), increasing the portion of funds destined for mortgages. The expansive effects were amplified by resolution 3.177, of 2004.
2003 The establishment of the Ministry of Cities represented the institutional framework for the reactivation of the housing and urban infrastructure policy in Brazil.
2003/04 The Programa de Subsídio à Habitação de Interesse Social (PSH), regulated by Law 10.998 and by Decree 5.247, started using budget resources to provide upfront subsidies linked to credit.
2004 Law 10.931 reduced the risk of a property buyer in case of developers' insolvency or negligence, thus avoiding the loss of the payments made during construction (the so-called "patrimônio de afetação").
2004 Law 10.931 also introduced a rule that decreased the credit risk of the banks. According to Brazilian Constitution, the maximum interest rate should be 12 per cent per year. Since it is not clear that this rate applies to real interest rate, the borrower could challenge the interest rates charged by banks in times of high inflation, when nominal interest rates became higher than 12 per cent per year. Before Law 10.931, a borrower could challenge the value of interest payments in court, and during the legal dispute, that could last ten years, the borrower would stop paying the installments and other legal obligations, which reduced the banks returns. After the enactment of the law, a borrower must discriminate in the initial petition the portion of the installments that they disagree with (the interest rate) and those which are not being challenged should be paid, reducing the credit risk considerably.
2004 Law 10.931 regulates the trust deed/fiduciary lien, or chattel mortgage, created in 1997, enabling more expeditious recovery of a property by financial institutions in case of borrowers not fulfilling their contractual financial commitments.
2004 Resolution No. 460 of the FGTS Board of Trustees allows this funding source to provide upfront subsidies attached to housing loans at below market interest rates.
2005 The Sistema Nacional de Habitação de Interesse Social (SNHIS) and the Fundo Nacional de Habitação de Interesse Social (FNHIS) were created by Federal Law 11.124, aiming to integrate all social housing programs existing at all levels of government.
2008 The Plano Nacional da Habitação (PlanHab), concluded in 2008, set forth the housing policy guidelines. It was a comprehensive document integrating housing and urban policy, and brought along innovations in the policy targeting low-income households.
2009 The Program Minha Casa Minha Vida (PMCMV) was created to integrate credit facilities and subsidies for housing production. Demand started to be coordinated by the municipal government and housing construction passed totally on to the hands of private companies.

Source: based on Magnabosco (2012).

The institutional changes gradually adopted in the Lula and Rousseff administrations were responsible for recovering: (I) the credibility of the lending system, consolidating collaterals for creditors; (II) the planning capability of the federal government, with the creation of the Ministry of Cities (2003) and the new national policy in 2008 – *Plano Nacional da Habitação*; (III) the subsidy policy instruments in 2004 and 2005 – *Programa de Subsídio à Habitação de Interesse Social* (PSH), *Sistema Nacional de Habitação de Interesse Social* (SNHIS), and *Fundo Nacional de Habitação de Interesse Social* (FNHIS); and (IV) the *Minha Casa, Minha Vida* Program, PMCMV, with the reintroduction of subsidies in the housing credit for low and middle-income households.

During these years, mortgages reappeared. As illustrated in Graph 7.1, the number of units financed jumped from 68 thousand in 1996 to over 200 thousand in 2003. As of 2006, the financial market resumed lending to more than 500 thousand families per year. In 2009 and 2010, mortgages witnessed a step change driven by PMCMV and, in 2013, the housing units financed in Brazil hit the record number of 1.1 million.

7.2 A historical perspective of housing subsidies in Brazil

In order to understand how important housing subsidies are at present, it is opportune to have a historical view of subsidy programs in Brazil. Major nationwide housing subsidy programs first appeared with the establishment of the SFH in 1964. The model adopted then was fundamental for large-scale home loans for low-income households, and its original design prevailed until the beginning of the 2000s, when a reformulation process began. The new subsidy policy of the Federal government, started in 2003, brought the Brazilian system closer to the model adopted in Chile, where subsidy is explicit, proportional to property value, and used directly for the acquisition of new homes.

In the SFH, low-income housing subsidies came about in one of two ways. The first type was implemented in the interest rates charged on loans granted with FGTS funds. FGTS lending had an interest rate cross subsidy, which increased according to borrowers' household income. Lower-income families paid lower interest rates, while better off households paid relatively higher rates. Since FGTS savings receive an interest rate of 4.5 per cent p.a., loans to families earning more than R$910 provided the necessary resources to offset interest rates applicable to loans granted to households earning less than R$ 910, which were lower than the regular 4.5%. Table 7.1 illustrates this distribution.

Table 7.1
The structure of FGTS rates, until 1998

Monthly income bracket	Interest rates (per cent per year)
up to R$ 390.00	3.0
from R$ 390.01 to R$ 650.00	3.5
from R$ 650.01 to R$ 910.00	4.3
from R$ 910.01 to R$ 1,170.00	5.1
from R$ 1,170.01 to R$ 1,430.00	5.9
from R$ 1,430.01 to R$ 1,560.00	7.0

Source: Caixa Econômica Federal.

The second type of subsidy would transfer resources in the form of land donation and infrastructure for housing settlements. This type of transfer was done by local, state and federal governments, and these resources partially covered development costs. The housing companies (COHABS) were created to select the demand and produce affordable housing units for BNH. These were mixed-capital entities controlled by the public sector. COHABS' plans and programs, as well as their building projects, should be approved by BNH, and funding came from FGTS. In COHABS projects, municipal governments almost always paid for the urbanization of the land. Sometimes, the local government also participated by donating land, and, in other instances, the company itself would acquire land at market price. Homebuilding itself was in the hands of private homebuilders chosen by a public tender process (one for every project).

In essence, this structure remains to date, although the COHABS have gone through very distinct moments over time. According to Azevedo and Andrade (1982), between 1964 and 1980, the trajectory of the COHABS can be divided into three phases – their establishment, fall and revival.

The first phase, from 1964 to 1969, is the establishment period. During that time, BNH and SFH started to operate, and FGTS funds were introduced – every month, eight per cent of the wages of formally employed workers in Brazil started to be transferred to the fund. The program enjoyed a successful beginning, and the COHABS led the production of a significant number of homes. Between 1964 and 1969, 290 thousand dwellings were financed with FGTS resources, which accounted for 68 per cent of all SFH loans.

From 1970 to 1974, the COHABS lost their momentum. Two hundred and seventy-seven thousand housing units were financed, an annual reduction to almost half of the volume financed in 1969. However, there was an increase in mortgage loans for middle-income households, a more attractive market, with better prices and higher returns for both financial agents and homebuilders. The situation deteriorated even further with the aggravation of the economic situation of low-income households, which led to high default rates.

Between 1975 and 1980, however, the COHABS were revitalized, and there was a total turnaround. Default rates were reduced to 12.6 per cent of contracts. Moreover, to work around the crisis, the market expanded: initially, the COHABS served households with a monthly income of one to three minimum wages, and, in this period, they started to serve families earning up to five minimum wages a month. With this measure, the COHABS privileged the higher end of the down-market (three to five minimum wages). The number of housing units financed by FGTS achieved 1.4 million between 1975 and 1980.

Higher real estate prices and rents led low-middle income families to see the COHABS as an economic alternative. The fact that these were non-profit organizations, with part of their construction costs subsidized by local governments (infrastructure and land), offering loans at reduced interest rates put their supply in high demand in the real estate market. During this period, it was not uncommon for COHABS housing units to be rented at amounts higher than their monthly installments, or for a significant premium to be charged on a loan transferred to another borrower. Therefore, default rates approaches zero, since, in case of families facing difficulties to pay back their loans, they could pass on the property and make a profit with the premium charged, or simply rent it for a higher value than the installment due.

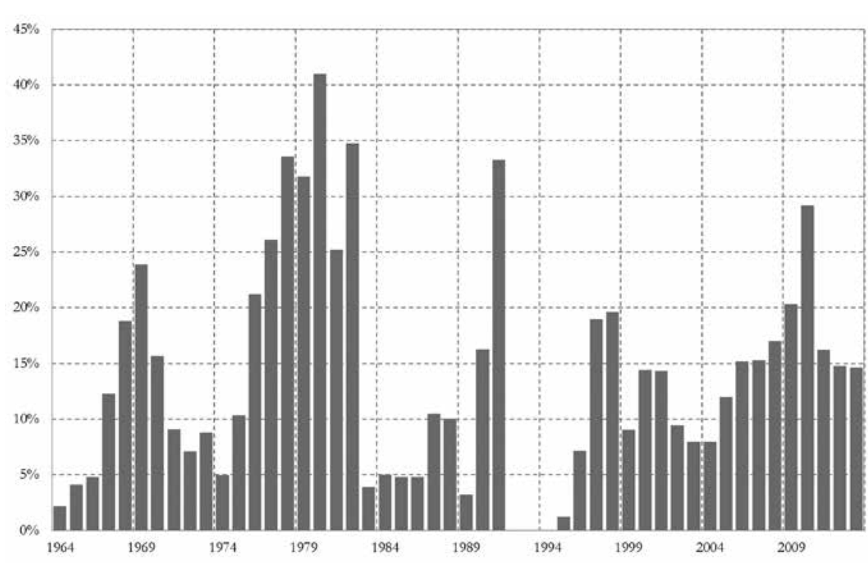
Graph 7.2 shows the share of housing units financed by FGTS in the total demand for new homes in Brazil. During this period of revitalized COHABS, their operations using FGTS resources were able to meet more than 40 per cent of the demand for new homes in the country. But the previously mentioned SFH crisis and higher unemployment rates, with negative impacts on FGTS funds, led to an abrupt reduction in COHABS operations. From 1983 to 1989, the number of COHABS financed units using FGTS funds achieved 375 thousand, corresponding to an average of 53.5 thousand units per year. This volume is almost one fifth of the units financed in the previous 7 year period (1976 to 1982), which totaled 253.6 thousand per year.

The volume of operations by the COHABS using FGTS funds grew again only in 1990 and 1991. However, this growth was disastrous. In the first year of president Collor's administration, a reckless program was established to build affordable homes financed by FGTS funds, which in less than two years depleted the fund's financing capacity, taking it close to bankruptcy. During these two years, the number of FGTS financed homes exceeded 525 thousand – almost 263 thousand units per year. As a result, in subsequent years (1992 to 1996), the number of COHABS financed units dropped to less than 20 thousand per year. Only in 1997 did the FGTS fund recover its financial health and resume its lending operations. Still, the share of FGTS loans in total mortgage lending only exceeded the mark of 20 per cent of new homes built per year in 2005.

Starting in 1998, subsidies applied in FGTS lending went through a number of changes, which made more transparent the amount of transfers in a loan, and gradually increased the subsidized portion of the total value of a property. These changes were applied to housing programs created in the second half of the 1990s, such as *Programa Pró-Moradia* and *Carta de Crédito Individual* and *Carta de Crédito Associativo* programs (individual and collective loans). Programs launched in the 2000s also included these changes in FGTS subsidy rules.

Graph 7.2

Percentage of new homes financed with FGTS funds



Source: Banco Nacional da Habitação, Caixa Econômica Federal, and Instituto Brasileiro de Geografia e Estatística.

In 1998, Article 9 of Law 8.036, dated May 11 of 1990, was amended to introduce subsidies as discounts in FGTS mortgage loans granted to individuals – Provisional Measure Nº 1.671, dated June 24 of 1998, currently Provisional Measure No. 2.197-43, dated August 24 of 2001. This discount was called desconto equilíbrio (equilibrium discount). Like cross-subsidization, desconto equilíbrio was pegged to the beneficiary's earnings. With this Law, interest rates were unified at six per cent per annum, and loan calculation started to enjoy a discount defined as the difference between the loan amount calculated with the old interest rate (in Table 7.1) and the loan amount calculated with the unified interest rate of six per cent p.a.. Therefore, borrowers earning less than R$1,430.00 per month now enjoyed a subsidy discount in the interests charged between 0.1 per cent and three per cent per year. This value was then covered by the higher interest rates paid by other loans of FGTS funds.

In 2000, an additional interest rate of 2 per cent annually was introduced as bank spread over the usual six per cent per annum interest rates, thus reducing the discount. This measure was introduced to ensure balance between the financial agent and the fund, since the fund for compensation of salary variations (FCVS) no longer existed. Discontinued in 2000, it was created in 1967 with a mandate to settle residual debt obligations resulting from the mismatch between installment adjustments and outstanding balance adjustments. In periods of high inflation, residual values were quite substantial, and FCVS resources fell way below its expenses, leading to its discontinuation.

The nature of FGTS, a compulsory savings fund for formal employees, served as the foundation to meet a social demand by investing its funds in low-income housing. In order to enable mortgage loans to very low-income families, the Programa de Subsídio à Habitação de Interesse Social (PSH) was instated by Provisional Measure Nº 2.212, of August 24, 2001. PSH supplemented, in the form of a subsidy, resources of every origin destined to housing production, such as land, construction materials etc. These values formed the so called desconto complemento (an upfront subsidy), which was fixed at R$4,500.00 at the time. This discount reduced the total loan amount and, consequently, reduced the value of installments.

In 2004, with Law 10.998, dated December 15 of 2004, and Resolution No. 460 of the FGTS Board of Trustees, the upfront subsidy was consolidated in FGTS lending, adding funds to finance real estate acquisition or building to existing lending funds. The maximum subsidy was set at R$ 14,000.00 in 2004, a cap that was raised to R$23,000.00 in 2009, enabled through the PMCMV large scale new subsidies program.

This subsidy policy was based on guidelines which pursued efficiency and justice: (I) a citizen is allowed to access subsidies only once; (II) the production or acquisition of new properties was prioritized; (III) municipalities with a population of 100 thousand or more, capital cities and cities which are part of metropolitan regions have priority access; and (IV) the value of the subsidy is inversely proportional to the borrower's ability to pay.

So as to guide the market and set subsidy levels, standards were established for housing units, with a cap value for every housing modality and a maximum threshold of R$ 72,000.00. In case of a mortgage loan for the acquisition of new property, the discount value was determined by the difference between the pre-defined normative value for this modality and the presumed loan amount that depletes the family's ability to pay. In case of a loan to finance construction, the desconto complemento (upfront subsidy) was calculated by the difference between the normative value and value of the loan granted by the financial agent, plus the respective counterpart or third-party funds.

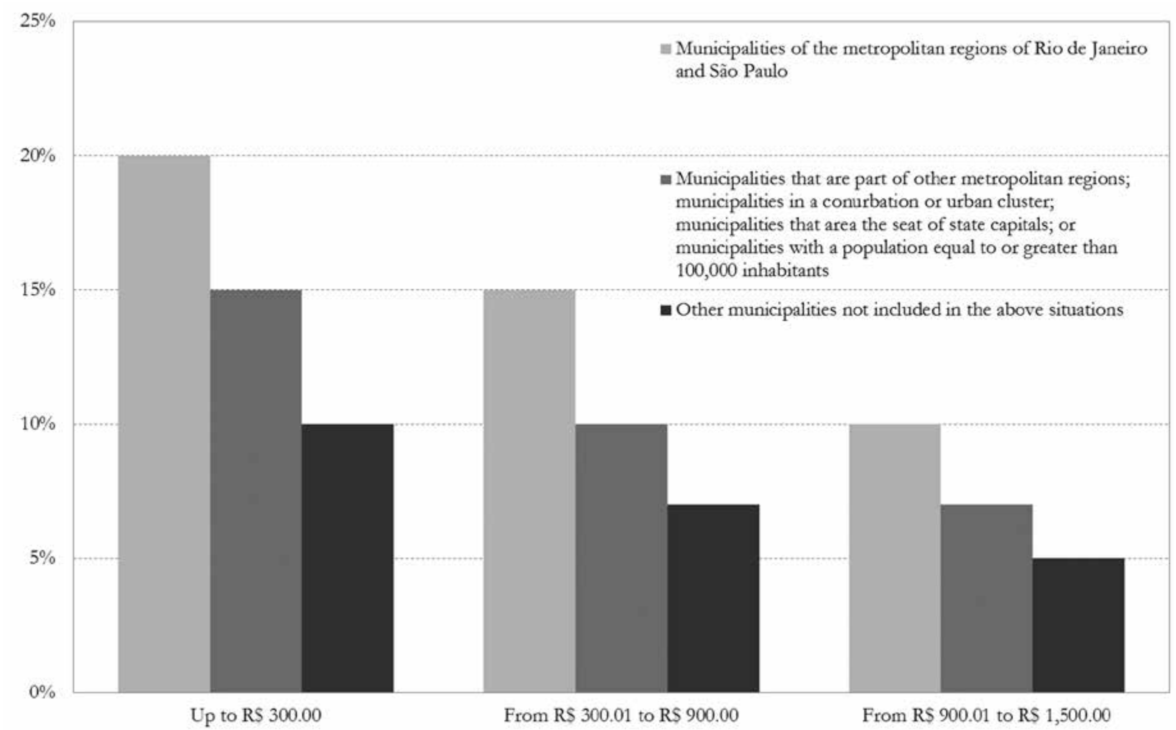
Later, reduction factors were applied based on beneficiary's income and location of the property. The reduction factor aimed at assigning higher subsidies to lower-income families residing in bigger municipalities.

In 2006, after Resolution Nº 518 of the FGTS Board of Trustees, the assumptions and conditions to calculate the subsidy started to be regulated by the Ministry of Cities. Guidelines previously adopted were effective in the regulations which prevailed until 2009: (I) the individual subsidy was limited to R$ 14,000.00; (II) it should be inversely proportional to beneficiary's income, also considering their maximum ability to pay as defined by financial agents; (III) it should take into account the location of the property to be financed; and (IV) greater subsidy for loans destined to the production or acquisition of new properties.

In 2009, the new large scale subsidies program, "*Minha Casa, Minha Vida*" (PMCMV) was launched, and the new regulatory framework introduced an income segmented upfront subsidies model, linked to a new set of housing finance conditions for mainly new housing production. From that moment on, families earning up to R$ 1,395.00 (equivalent to three current minimum wages) were entitled with an upfront subsidy which varied accord-

Graph 7.3

Limiting discount percentage, by income bracket and property location



Source: FGTS Board of Trustees

ing to property location and operational modality (new property acquisition; used property acquisition; construction with or without land acquisition; etc.). For families earning from R$ 1,395.01 to R$ 2,790.00 (equivalent to six current minimum wages), the upfront subsidy decreased progressively, as income increased.

8. HOUSING SUBSIDIES IN BRAZIL

Fernando Garcia de Freitas and Ana Lelia Magnabosco

The historic evolution of housing financing in Brazil finally resulted in a structure that brings together credit resources, prior savings and subsidies to finance real estate investments. This financing model is used at length in Latin America, especially in Chile and in Mexico, countries that, after having restructured their housing financing systems before Brazil, are a benchmark for changes in the way of operating financing sources.

Beginning in 2005, the Brazilian real estate finance system, the Sistema Nacional da Habitação (SNH), came about based on two subsystems: one dedicated to market operations, the Sistema de Habitação de Mercado (SHM) and another for social housing, the Sistema Nacional de Habitação de Interesse Social (SNHIS). The creation of the SNHIS, and of a governmental fund for subsidies, the Fundo Nacional de Habitação de Interesse Social (FNHIS), through Act 11.124, from 2005, brought together all of the programs destined to social interest housing at all levels of government, favoring housing policies in Brazil.

The SNHIS programs include actions for integrated urbanization in precarious settlements, housing provisions, technical assistance and support to the drafting of housing plans. As a financing source, they use the resources from the Fundo de Garantia do Tempo de Serviço (FGTS), complemented by individual housing subsidies of the national budget, such as the federal fund for housing leasing called Fundo de Arrendamento Residencial (FAR)[1], the federal fund for social development, Fundo de Desenvolvimento Social (FDS), and from the FNHIS (mainly from the national public budget or Orçamento Geral da União - OGU).

The market housing system had the aim of providing funds to higher income families – those with monthly earnings of six to ten minimum wages[2]. Builders and developers were supposed to be the promoting agents and gov-

1 - The Minha Casa, Minha Vida Program made use of the legal framework of the housing leasing program (PAR), nevertheless it aims the final acquisition of the property by the subsidy recipient.

2 - Family earnings ranging between R$ 4,300.00 and R$ 7,250.00, that is, earnings between EU$ 1,430.00 and EU$ 2,380.00 approximately.

ernment would restrict itself to give subsides for the trustee fund to insure the system[3]. To fund such operations, the system uses the resources originated from savings accounts (SBPE) and from other institutional and individual financial funds that buy mortgage-backed securities.

This chapter gives a brief description of the present-day structure of housing subsidies in Brazil, and presents the features of the housing programs that started to operate since 2000. Finally, we present some figures of housing subsidies in Brazil, with special attention to the recent experience – 2009 to 2013 – offered by the most important subsidy program in the country.

8.1 The structure of housing subsidies in Brazil

The present structure of housing subsidies in Brazil involves resources from four sources: (I) the National Public Budget - OGU; (II) the federal fund for housing leasing or *Fundo de Arrendamento Residencial* (FAR); (III) the *Fundo de Garantia do Tempo de Serviço* (FGTS) that allocates funds to housing financing; and (IV) land and other infrastructure donated by states and municipalities to build social housing. These types of subsidies are used individually or in a combined manner in different housing programs.

A considerable part of the resources to pay for the subsidies comes from the federal budget. The federal government can allocate resources of its budget on housing funds – the *Fundo de Desenvolvimento Social* (FDS), *Fundo de Arrendamento Residencial* (FAR) and *Fundo Nacional de Habitação de Interesse Social* (FNHIS). The two public banks – Banco do Brasil and Caixa Econômica Federal – use these resources to contract housing developments. The FAR, whose legal and financial framework was later on adapted to house the *Programa Minha Casa Minha Vida*, can also receive deposits from other sources such as state or municipal budgets or from the financial agents themselves, who raise resources in the financial market.

The *Programa Minha Casa Minha Vida* (PMCMV) was created in 2009 by Act nº 11.977, dated July 7, 2009, and rapidly become the most important program in terms of the amounts of housing units built, and the volumes of subsidies transferred to Brazilian low and middle-income families. Initially, the proposal was to contract one million housing units for families with earnings of up to ten minimum wages, with credit resources and subsidies from the FGTS and the federal budget. Subsequently, PMCMV expanded its goals

3 - The FNHIS usually receives resources from states and municipalities as a counterpart to federal subsidies.

and its scope, adding financing for rural property.

Since 2009, the program has been operating with financing for the acquisition of housing, residential leasing for vulnerable families and credit insurance. The program operates based on three monthly earning brackets. Bracket 1 encompasses families with earnings of up to R$ 1,600.00. In this modality, the lease is given for housing units produced by building companies and acquired by the program´s financial agents – Caixa Econômica Federal and Banco do Brasil – or units built by associations, unions, or cooperatives. The subsidy, as mentioned before, is given based on the difference between the cost of the housing unit, that cannot exceed R$ 76,000.00 (EU$ 28,600.00 approximately), and receiving 120 installments amounting to 5 per cent of the family monthly income, which will raise a maximum of R$ 9,600.00 in ten years (EU$ 3,600.00 approximately).

Bracket 2 offers credit from the FGTS and credit insurance to families with earnings of up to R$ 3,275.00. In this case, the subsidy is incorporated into the FGTS financing plan, as set forth in the previous section. Bracket 3 offers credit insurance to families with earnings between R$ 3,275.01 and R$ 5,000.00. These families also receive small subsidies from FGTS and credit insurance[4].

For families with monthly earnings of up to R$ 1,600.00, every month, the family pays an installment that is equivalent to 5% of their income during ten years (120 installments). Upon conclusion of this period, ownership of the real estate property is transferred to the family. In this system, the amount of the subsidy will vary according to the acquisition value of the property and decreases as the family income rises. At the most, the family will repay the fund an amount of R$ 9,600.00 (EU$ 3,600.00, approximately)[5] for a real estate property whose construction price, in certain regions, is of R$ 76,000.00 (EU$ 28,600.00 approximately).

Another part of the subsidies comes from the FGTS budget. It is worthwhile remembering that the FGTS is a public mandatory savings fund that receives monthly deposits corresponding to 8 per cent of the current salaries of all of those employed formally (except civil servants). These resources are deposited in individual accounts and can be withdrawn under four conditions: at retirement, to acquire or to build a housing unit, in case of a serious disease (AIDS, cancer etc.) and when a worker loses his/her job; for this reason, resources in this fund are of the social security type. The returns

4 - There is a description of the system underlying this program further ahead.

5 - The conversion of Brazilian monetary units to Euros has considered the average exchange rate from 2009 to 2014.

on loans given with resources from the FGTS have been greater than remuneration in individual accounts, which allows the FGTS to accumulate its own equity. This equity has been used to pay for subsidies. In June of 2014, the FGTS had about 130 million active accounts, with a balance from deposits amounting to R$ 290 billion (or EU$ 109 billion), a monthly collection of R$ 8.5 billion (EU$ 3.2 billion) and monthly withdrawals of R$ 4.8 billion (EU$ 1.8 billion).

The present structure of FGTS subsidies is an evolution of the so-called "discounts", described in the previous chapter. Resolution No. 702 from the FGTS Board of Trustees, dated October 4 2012, set forth the present-day rules. There is a subsidy applied to the housing financing interest rates (*desconto equilíbrio*), and another subsidy characterized by an upfront subsidy known as discount (*desconto complemento*). Tables 8.1 to 8.3 define the parameters for these subsidies.

Table 8.1

Interest rate for mortgage financing, per family income bracket, per cent per year

Monthly income brackets	Interest Rate (per cent per year)
Up to R$ 2,455.00	5.00
From R$ 2,455.01 to R$ 3,275.00	6.00
From R$ 3,275.01 to R$ 5,000.00	7.16
From R$ 5,000.01 up to R$ 5,400.00	8.16

Source: FGTS.

In housing financing for families with monthly earnings of up to R$ 2,455.00 – equivalent to approximately to EU$ 925.00 per month –, the loans are granted with interest rates of 5 per cent a year (Table 8.1)[6], which is equal to the cost of funding (FGTS). Thus, the bank spread of 2.16 per cent is completely subsidized (Table 8.2). This amount is covered with the difference between the returns from FGTS loans for families with higher-income and the returns of individual accounts of FGTS. As the monthly family income increases, interest rates on the loan also increase, and can reach 8.16 per cent a year for families with earnings between R$ 5,000.01 and R$ 5,400.00. Returns of FGTS loans also grow as the borrower´s family income grows. Above a monthly income of R$ 3,275.01, the FGTS remuneration increases to 6 per cent a year. The subsidy, on the contrary, is decreasing. For families with monthly earnings higher than R$ 3,275.00, the subsidy in the interest rate is null.

6 - Instalments are calculated through the constant amortization system (SAC).

Table 8.2

FGTS quotas returns, spread and subsidy, per family income bracket, per cent per year

Monthly income brackets	FGTS quotas returns	Spread	Subsidy in the interest rate
Up to R$ 2,455.00	5.00	2.16	2.16
From R$ 2,455.01 up to R$ 3,275.00	5.00	2.16	1.16
From R$ 3,275.01 up to R$ 5,000.00	6.00	1.16	0.00
From R$ 5,000.01 up to R$ 5,400.00	6.00	2.16	0.00

Source: FGTS.

The discount, which is nothing more than an upfront subsidy, reduces one portion of the loan taken on by families using FGTS funds. This discount is granted to families with monthly earnings of up to R$ 3,275.00, and is reduced as the income of the borrowing families increases. The highest discount amount is of R$ 25,000.00, and is given to families with monthly earnings of up to R$ 1,600.00. The discount is also different according to the location of the housing unit. The Government has defined five areas within the country, privileging metropolitan areas and state capitals[7]. The modality of the housing program in which the subsidy is applied also has an impact on the amount, with larger amounts of discounts granted to finance the construction or acquisition of new housing units. The financing modalities are: (1) the construction or acquisition of a new property; (2) the construction on one's own land; and (3) the acquisition of used property.

Table 8.3 shows the structure of the discount for families with monthly earnings of up to R$ 1,600.00, in accordance with the modality applied and the five regions. For example, imagine a household with

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7 - The calculation methodology and the granting of the discount divides the national territory into 5 (five) regions, specified below:

a) Region I: represented by the set of municipalities that are part of the metropolitan regions of the States of Rio de Janeiro and Sao Paulo and the Federal District;

b) Region II: represented by the set of municipalities with a population equal to or greater than 100,000 (one hundred thousand) inhabitants, municipalities that area the seat of state capitals and municipalities that are part of the metropolitan regions not specified in sub-paragraph "a" or integrated development regions;

c) Region III: represented by the set of municipalities with a population located in the range below 100,000 (one hundred thousand) and equal to or greater than 50,000 (fifty thousand) inhabitants, not part of the metropolitan regions or integrated development regions;

d) Region IV: represented by the set of municipalities with a population located in the range below 50,000 (fifty thousand) inhabitants and equal to or greater than 20,000 (twenty thousand) inhabitants, not part of the metropolitan regions nor integrated development regions; and

e) Region V: represented by the set of municipalities with a population of less than 20,000 (twenty thousand) inhabitants, not part of the metropolitan regions or of the integrated development regions.

earnings of less than R$ 1,600.00 that acquires a new house (modality I) worth R$ 75,000.00 in city of São Paulo (Region I). By taking an FGTS loan, this family will receive a discount (subsidy) of R$ 25,000.00, which implies that the family receives from the FGTS a loan amounting to R$ 75,000.00, but the debt taken on as a counterpart of this credit amounts to R$ 50,000.00. Based on this amount, the installments (interests and amortization) will be calculated[8].

Table 8.3

Discount amounts for the FGTS*, per region and financing modality, R$

Region	Construction or acquisition of new housing units	Construction on one's own land	Acquisition of old housing units
I	25,000.00	15,847.00	6,339.00
II	17,960.00	12,677.00	5,282.00
III	13,735.00	10,565.00	4,226.00
IV	11,621.00	9,509.00	3,169.00
V	9,509.00	8,452.00	2,113.00

Source: FGTS. (*) for households with monthly earnings of up to R$ 1,600.00.

Chart 8.1 shows the structure of the discount for families with monthly earnings between R$ 1,600.01 and R$ 3,275.00 for the construction or acquisition of new housing units in the five regions. To exemplify how the subsidy is calculated, imagine a family earning R$ 2,000.00 per month that will acquire a new housing unit costing R$ 75,000.00, in a municipality in the Metropolitan Region of Rio de Janeiro (Region I). In this case, the application of the formula that is equivalent to this modality, region and monthly earnings bracket implies a discount of R$ 16,842.40, an amount equivalent to 54,131.00-18.6443*2,000.00, the latter element designating the factor that leads to the decreasing discount, according to the family's income.

By taking on the FGTS credit, this family receives a loan amounting to R$ 75,000.00 from the FGTS, however, the debt contracted as a counterpart of that credit amounts to R$ 58,157.60. It is based on that amount that the installments will be calculated. Graph 8.1 carries out a simulation of the amount of the upfront subsidy for different family earning brackets, taking as reference an operation in the modality of acquisition

8 - It is worthing noting that there is a maximum granting value for buildings of each region. The maximum granting prices are: Region I, R$ 190.000; Region II, R$ 170.000; Region III, R$ 145.000; Region IV, R$ 115.000; and Region V, R$ 90.000.

Chart 8.1

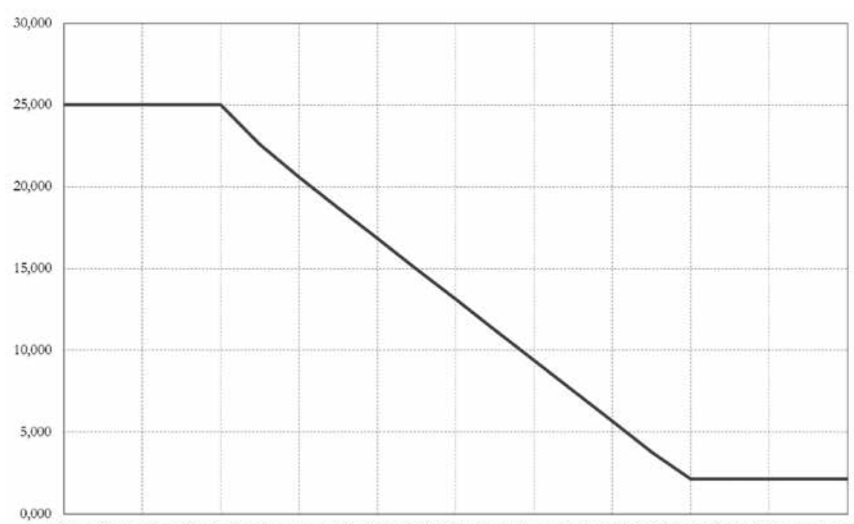
Calculation formulas for the discount subsidy* of FGTS, per region and per monthly income bracket, in R$

<table>
<tr><th>Monthly income brackets</th><th>I</th><th>II</th><th>III</th><th>IV</th><th>V</th></tr>
<tr><td>From R$ 1,600.01 to R$ 1,643.00</td><td>62,209.30 - 23.2558*R</td><td rowspan="4">52,931.00 – 21.8568*R</td><td rowspan="4">39,847.00 – 16.3202*R</td><td rowspan="4">33,767.00 – 13.8415*R</td><td rowspan="4">28,159.00 – 11.6567*R</td></tr>
<tr><td>From R$ 1,643.01 to R$ 1,690.00</td><td>58,957.40 – 21.2765*R</td></tr>
<tr><td>From R$ 1,690.01 to R$ 1,708.00</td><td>89,942.80 – 39.6111*R</td></tr>
<tr><td>From R$ 1,708.01 to R$ 2,325.00</td><td rowspan="2">54,131.00 – 18.6443*R</td></tr>
<tr><td>From R$ 2,325.01 to R$ 2,790.00</td><td rowspan="2">2,113.00</td><td rowspan="2">1,902.00</td><td rowspan="2">1,585.00</td><td rowspan="2">1,057.00</td></tr>
<tr><td>From R$ 2,790.01 to R$ 3,275.00</td><td>2,113.00</td></tr>
</table>

Source: FGTS. R = family´s monthly earnings. (*) For construction or acquisition of new housing units.

Graph 8.1

Amount of the discount subsidy*, Region I, per monthly income bracket, in R$



Source: Simulation based on formulas from Chart 8.1. (*) For construction or acquisition of new housing units.

of new housing unit built in region 1. The subsidies will vary from R$ 25,000.00 for families with monthly earnings of up to R$ 1,600.00, up to R$ 2,113.00 for families with earnings of R$ 3,275.00.

The third type of subsidy is the reduction of investment amounts and of credits obtained by using land donated by both local and state governments for construction. Donations have a considerable effect on the final amount of the investment, and can reach 15 per cent of the property value. This reduces the loan amount, and represents the transfer of wealth from the State to the families. This transfer depends above all on the value of the land, which varies significantly from one region to another, and within the regions of the country. For this reason, the amount of the subsidy obtained with a land donation does not follow a clear parametric logic. Notwithstanding this, this mechanism is a way of counting upon the federal participation for municipalities and state governments that might not have the financial flows to pay for housing subsidies.

8.2 Federal housing programs

Before the introduction of the current housing finance framework, there were six federal housing programs active and co-existing, based on loans to individuals, organizations and/or local governments, all operated by public banks – Caixa Econômica Federal and Banco do Brasil. They involved loan granting, subsidies and credit insurance for the acquisition, lease, construction, renovation and expansion of property, and for land acquisition and regularization. These federal programs had different ways of interacting with the public and were destined to specific social groups, and remained active until all operations were closed, giving floor to the current large scale and main government program, the *Minha Casa, Minha Vida*, PMCMV, launched in 2009.

It is important to highlight that side by side to these programs, the Ministry of Cities also managed and ran the large scale slum upgrading program, the *Programa de Aceleração do Crescimento* (PAC), an internationally known and progressive program of public budget transfers to local governments aiming the improvement of housing, infrastructure and tenure conditions in slums. This program was launched in 2007 and until now was responsible for the mobilization of a budget above US$ 20 billion according to the Ministry of Cities.

During the 2000 decade, a broad set of programs were in place as instruments for the Federal Government to deal with the quantitative and qualitative housing backlog. Their scale was limited at region and income levels, and the availability of budget quite inferior to the allocations made by the large scale programs *Programa de Aceleração do Crescimento* (PAC) and *Minha Casa, Minha Vida* (PMCMV). To mention a few of them:

The Prómoradia program (PP) supplied funds to state governments, local governments and public companies for the acquisition of housing, upgrading and regularization of precarious settlements, as well as for the institutional development of public administration.

The leasing program, called *Programa de Arrendamento Residencial* (PAR), was destined to the construction of housing for lease. The properties were destined to families with earnings of up to 6 (six) minimum wages that lived in municipalities with more than 100,000 inhabitants.

The lease term in this program was 180 months and the residential lease was contracted by means of a contract of residential lease with an option to purchase. The initial amount of the property lease fee was equal to 0.7 per cent of the purchase value of the property. Delays of more than 60 consecutive days in the payment of these lease fees was a valid reason to immediately take back the property, without the right to reimbursement of the amounts paid as lease fees. The leased property could be replaced by another equivalent one or with a different value, as long as there was available property, under request of the lessor and the express agreement of the Caixa Econômica Federal.

The Federal Government had two programs dedicated to collective financing. The first of these was the *Carta de Crédito Associativo* (CCA). This financing modality was destined to the construction on one's own land, acquisition of land for construction purposes or urbanization. Credit was granted to people grouped in condominiums, unions, cooperatives, associations or private entities dedicated to housing production. The local government housing companies, COHABS, could also obtain this financing.

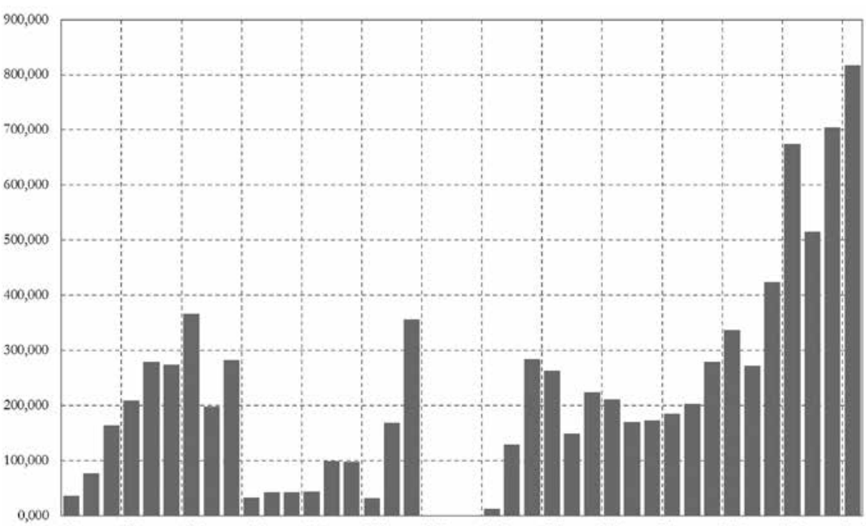
The *Programa Crédito Solidário* (PCS) was the second program designed to collective financing to people grouped in condominiums, unions, cooperatives, associations and other private entities focused on housing production. This program financed the acquisition of land for construction, the construction on one´s own land or that of third parties, the expansion or renovation of housing, the acquisition of housing, and the acquisition of properties for urban rehabilitation with housing purposes. The program was geared to families with gross earnings of up to R$ 1,900.00. The program also received funding through the FGTS resources, under the same conditions as the *Carta de Crédito Associativo*.

8.3 Social housing subsidies: number of beneficiaries and amounts

As mentioned in chapter 7, housing credit resurfaced in recent years and has grown significantly in terms of the volume of subsidies. As Graph 8.2 illustrates, the number of units financed with resources from federal subsidies took a leap from 13.5 thousand in 1995 to more than 173 thousand in 2003. From that point onwards, the number of contracts with housing subsidies grew, and was subsidizing more than 800 thousand families in 2013. This change in the level of property credit is notorious: between 1992 and 2002, the number of housing units financed with subsidies reached 1.45 million; from 2003 to 2013, this figure reached 4.59 million, a volume 3.2-fold greater than that of the previous eleven years (1992 to 2002).

Graph 8.2

Number of housing units financed with subsidies (federal programs)



Source: Caixa Econômica Federal. Note: (*) preliminary data.

The share of units subsidized in the total demand for housing property in the country once again grew in the last few years. Considering that the pace of expansion on the number of houses was of 1.112 million per year between 1990 and 2000, the number of units financed with subsidies encompassed little more than 12 per cent of this demand. In the following decade, from 2000 to 2010, the percentage of new housing that received financing or contributions from subsidies jumped to 21 per cent. Considering the growth in the number of families in 2013, estimated at 1.4 million, credit programs with subsidies serviced more than 58 per cent of this demand last year.

The *Programa Minha Casa Minha Vida* stood out in this context of growth of the subsidized financing. Based on 4.887 million units financed with subsidies between 2009 and 2013, PMCMV accounted for about 66.3 per cent, that is, 3.240 million contracts. The program is also highly expressive in terms of the financing amounts: between 2009 and 2013, the program financed about R$ 110 billion of a total investment of R$ 216 billion (50 per cent, approximately).

The data in Table 8.4 shows the distribution of investment amounts (subsidies, credit and previous savings) from PMCMV, per earnings bracket. Note that the contracts in Brackets 1 and 2, housing units that received subsidies from the National Public Budget and from the FGTS, account for 87 per cent of the program contracts and 71 per cent of the amount invested. The subsidies represent about 42 per cent of the amount invested by PMCMV. In the earnings bracket that includes the poorest population, the explicit and implicit subsidies in the lease program represented

Table 8.4.

Credit and subsidies of PMCMV,per monthly income bracket, from 2009 to 2013, in R$

	Earnings bracket of up to R$ 1,600.00	Earnings bracket between R$ 1,600.01 and R$ 3,275.00	Earnings bracket between R$ 3,275,01 and R$ 5,000.00	Total
Housing units	1,527,379	1,294,919	417,361	3,239,659
Credit	10,997,128,800.00	66,675,298,088.20	31,371,647,964.90	109,044,074,853.10
Total subsidy	62,404,222,509.42	24,779,633,728.17	2,730,073,132.55	89,913,929,370.14
Balance subsidy*	3,296,202,719.12	5,710,642,775.18	648,874,459.17	9,655,719,953.47
Union Budget subsidy	59,108,019,790.30	19,068,990,952.99	2,081,198,673.39	80,258,209,416.67
Amount of the Investment	73,401,351,309.42	91,454,931,816.37	34,101,721,097.45	198,958,004,223.24

Source: Caixa Econômica Federal.

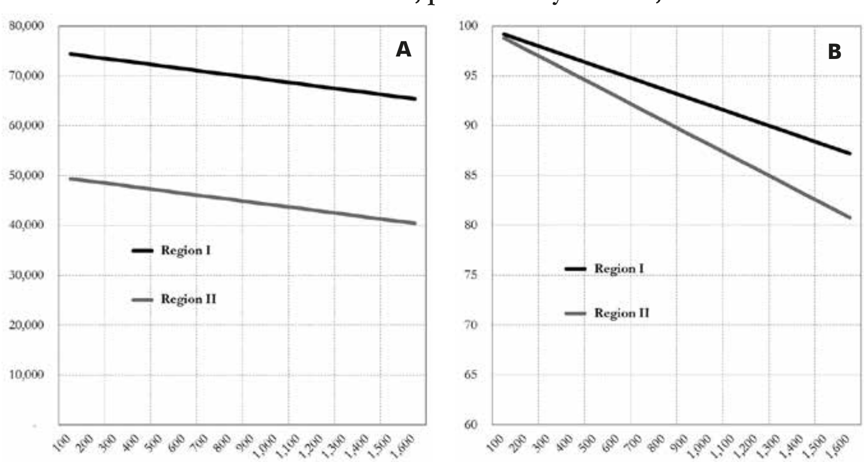
85 per cent of the investment amount. For the families with the highest purchasing power (Bracket 3), subsidies have a weight of only 7 per cent of the value of the property.

This data reveals the decreasing marginal subsidies according to in- come in PMCMV, that is corroborated by the decreasing subsidies relative to income among families that belong to the same income bracket. Graphs 8.3 and 8.4 show these figures and also present the subsidy amounts per value of the housing units in Brackets 1 and 2 in Regions I and II. Considering the case of housing units built in Region I of the program (metropolitan regions of Rio de Janeiro and São Paulo, and the Federal District), it can be noted that the subsidy drops from R$ 74.4 thousand for families with earnings close to zero to R$ 65.4 thousand in the case of families with earnings close to the upper limit of inclusion in Bracket 1.

The same dynamic is observed in the Bracket 1 subsidies destined to housing in the cities belonging to Region II – made up by a series of municipalities with a population equal to or greater than one hundred thousand inhabitants; municipalities that are seats of state capitals, and municipalities that are part of the metropolitan regions not specified in Region I nor the integrated development regions. The difference of R$ 25

Graph 8.3

Amount of the subsidy per housing unit, in R$ and share of the investment, per monthly income, Bracket 1



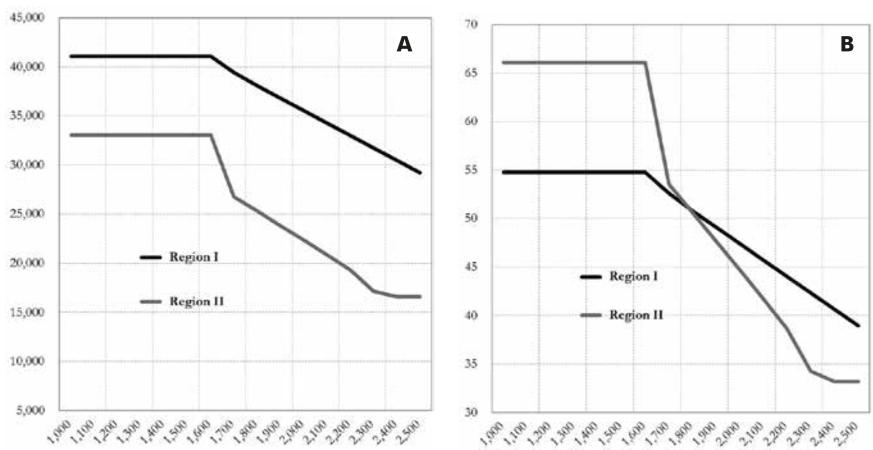
Source: Ministry of Cities, Brazil.

thousand between these two regions is due to the cost of land, supposedly higher in Region I. It is worthwhile observing, nevertheless, that the decline in the subsidy curve (%) is steeper in Region II, indicating that the contribution of subsidies in the financing composition drops faster.

In the case of Bracket 2, subsidies remain constant up to the earnings of R$ 1.6 thousand, a point as of which the subsidies drop, both in absolute and relative terms. In Region II, due to the composition of the funds to finance subsidies (National Public Budget and FGTS), the reduction in subsidies is no longer linear or gradual, although complying with the decreasing subsidy principle. Contrary to what is observed in Graph 8.4 A, the weight of the subsidies in the investment amount is on average proportionally higher in Region II.

Graph 8.4

Amount of the subsidy per housing unit, in R$ and share of the investment, per monthly income, Bracket 2

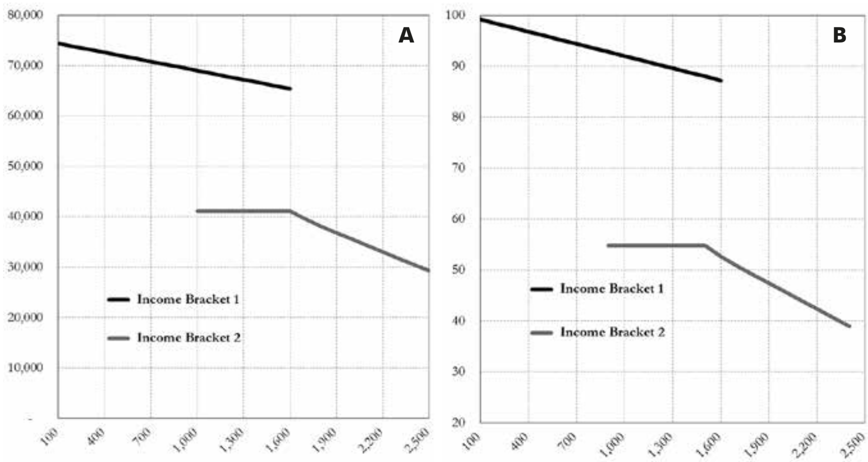


Source: Ministry of Cities, Brazil.

It is important to observe that there is an overlay between the sub-pro- grams of Brackets 1 and 2 of PMCMV, as a family with income lower than R$ 1,600.00, albeit with the capacity to pay, can either lease a housing unit in Bracket 1 or acquire a financed one from Bracket 2. When the subsidy curves from Brackets 1 and 2 overlap, the amount of the subsidies that a family can take differs greatly between the two options.

Graph 8.5

Amount of the subsidy per housing unit, in R$ and share of the investment, per monthly income, Brackets 1 and 2, Region I



Source: Ministry of Cities, Brazil.

Graph 8.5 illustrates this idea for Region I. Families with earnings between R$ 1,000.00 and R$ 1,600.00 are entitled to receive either a subsidy of R$ 40,000.00 for home acquisition (including both National Public Budget and FGTS resources), or a much higher subsidy for the lease option. On the other hand, if a family with earnings of up to R$ 1,600.00 can gain a subsidy of R$ 65.4 thousand, another family with just one additional real in its earnings will obtain at most R$ 39.5 thousand in subsidy. In terms of the relative weight in the value of the property, the subsidy drops from 87 per cent to 53 per cent upon migrating from Bracket 1 to Bracket 2. This drop is lower in the properties of Region 2, but still very high. In this case, the amount of the subsidy drops from R$ 40.4 thousand to R$ 26.8 thousand.

9. SOCIAL AND ECONOMIC PROFILE OF THE PMCMV BENEFICIARIES

Fernando Garcia de Freitas and Ana Lelia Magnabosco

This chapter addresses the profile of beneficiaries in the *Programa Minha Casa Minha Vida* (PMCMV). First we analyze the potential extension of the program, considering the share of Brazilian families that are entitled according to subsidy rules. After that, we present the profile of the beneficiaries of PMCMV, by income bracket, based on cadastral data of Caixa Econômica Federal, the financial agent of the system, also responsible for contracts. This profile is compared to the standards of Brazilian households according to the national household survey (PNAD) of 2013. Additionally, we describe a set of more detailed information for beneficiaries of income Bracket 1. This data come from a sample survey conducted by the Ministry of Cities and by the *Instituto de Pesquisa Econômica Aplicada* (IPEA), a federal institute dedicated to applied social and economic research.

9.1 Families entitled to the housing subsidy programs

The families entitled to receiving housing subsidies from the FGTS, FAR and the National Public Budget cover a large part of Brazilian households. Data on the family income distribution in the country obtained from the national survey of households of 2013 – *Pesquisa Nacional por Amostra de Domicílios* (PNAD) – reveals that about half of the Brazilian families were entitled to receiving the housing subsidy, given the level of their income. Considering all earnings from all sources (work, transfers, remuneration of financial assets etc.) and from all members in the family, except non-family household members and domestic servants, it is possible to calculate how many families could be contemplated with credit grants and subsidies from PMCMV in each program bracket. The conclusion of this analysis is extensible directly to all of the other programs, since the subsidy rules of FGTS are the same for all federal housing programs.

Table 9.1 presents the share of families potentially entitled to PMCMV, per income brackets and regions of the country. In September of 2013, there

Table 9.1

Share of families entitled to PMCMV, per cent of total per income bracket and region, September 2013

States and Regions	Number of families	by earning bracket (%) of total up to R$ 1,600	up to R$ 3,275	from R$ 3,275 to R$ 5,000	families with earnings greater than R$ 5,000
North	**4,667,097**	**58.2**	**26.2**	**8.3**	**7.4**
Rondônia	570,086	51.8	30.3	10.3	7.6
Acre	227,178	60.2	24.4	8.2	6.6
Amazonas	1,089,513	53.4	27.3	9.5	5.7
Roraima	163,345	58.4	23.5	8.8	10.6
Pará	2,411,549	62.3	25.0	7.0	4.8
Amapá	205,426	50.9	25.9	11.3	9.1
Tocantins	485,207	59.4	24.9	7.3	7.3
Northeast	**18,019,962**	**66.8**	**21.8**	**5.6**	**4.9**
Maranhão	1,954,672	67.5	22.1	6.0	3.3
Piauí	1,029,185	66.2	23.1	4.4	4.5
Ceará	2,810,680	68.9	21.0	5.2	5.0
Rio Grande do Norte	1,111,884	61.0	23.4	7.3	6.9
Paraíba	1,287,720	66.9	21.3	5.6	5.9
Pernambuco	3,003,223	66.5	22.4	6.0	4.9
Alagoas	1,023,643	70.9	19.8	4.8	3.1
Sergipe	738,673	67.2	20.0	6.2	5.7
Bahia	5,060,282	66.2	21.9	5.4	5.1
Southeast	**29,182,581**	**38.9**	**33.3**	**13.6**	**12.7**
Minas Gerais	7,151,964	44.9	32.3	11.8	9.4
Espírito Santo	1,347,705	46.4	31.7	11.6	11.2
Rio de Janeiro	5,845,821	42.5	31.0	12.1	12.6
São Paulo	14,837,091	33.9	34.7	15.3	14.5
South	**10,292,113**	**35.1**	**34.9**	**15.5**	**12.2**
Paraná	3,814,615	36.1	34.2	14.9	12.5
Santa Catarina	2,350,863	30.6	36.0	17.8	13.0
Rio Grande do Sul	4,126,635	36.7	35.0	14.9	11.5
Centre-West	**5,158,835**	**40.8**	**31.4**	**12.3**	**13.6**
Mato Grosso do Sul	906,529	40.9	32.4	12.8	11.9
Mato Grosso	1,095,690	44.8	31.1	12.4	9.9
Goiás	2,221,333	43.0	34.0	11.4	10.0
Distrito Federal	935,283	30.7	24.7	14.2	28.6
Brazil	**67,320,588**	**47.3**	**29.8**	**11.3**	**10.1**

Source: IBGE.

were 67.3 million families in Brazil. Of these families, 31.8 million (47.3 per cent of the total) had earnings of less than R$ 1.6 thousand monthly, which entitled them to potentially become beneficiaries of the program´s Bracket 1. Another 20.1 million had monthly earnings between R$ 1.6 thousand and R$ 3,275.00, totaling 51.9 million families (77.1 per cent of the total) with incomes that would entitle them to benefit from the products in the program´s Bracket 2.[1] In the country there were 7.6 million families with earnings belonging to the PMCMV Bracket 3 and a similar number of families with earn- ings higher than the maximum (R$ 5 thousand) permitted in the program.

Regarding Bracket 1, it can be observed that, albeit 47.3 per cent of the families were entitled to Bracket 1 of the program, as an average throughout the country, just 35.1 per cent and 38.9 per cent of the population fell within Bracket 1 in the South and Southeastern regions, respectively. In the North and Northeast of Brazil, the number of families entitled to PMCMV was higher: 58.2 per cent and 66.8 per cent, respectively.

Maranhão, Ceará and Alagoas, states with the lowest average family earnings in the country, are the regions in which there are larger percentages of the population falling into Bracket 1 (67.5 per cent, 68.9 per cent, and 70.9 per cent, respectively). In Santa Catarina and in the Federal District, on the other hand, only 30.6 per cent and 30.7 per cent of the families would gain access to the products in Bracket 1 of PMCMV, as their average earnings are greater, and families with incomes of R$ 1.6 thousand tend to be less frequent.

9.2 Social and economic profile of beneficiaries

This section presents the profile of beneficiaries of income brackets 1, 2 and 3 of PMCMV. Tables A.1.1 to A.1.4 of Annex A.1 show the profile of Income Bracket 1 households per unit of the Brazilian Federation. This profile considers cadastral data at the execution of the PMCMV contracts, and the profile makes reference to gender, age and family monthly income. In order to evaluate this profile relative to standard Brazilian families, Tables

A.1.5 to A.1.6 of the same annex inform gender and age distribution

1 - As criteria for becoming a beneficiary, only the higher income limit was considered. The lower limit would demand determining the amounts of earnings that would be compromised per type of family, which was deemed unnecessary for the purposes of this study. By construction, the families falling into Bracket 1 would also fall into Bracket 2.

of Brazilian heads of households with family income potentially eligible to be in the PMCMV Bracket 1. These data were obtained in the national survey of households of 2013 (PNAD). Table A.1.7 brings these families' average income per unit of the Federation, as well as per gender of the head of the household.

The profile of families that executed contracts in income brackets 2 and 3 of PMCMV and the equivalent profile of Brazilian households according to PNAD are detailed in Tables A.1.8 to A.1.14. As said before, these income brackets of the program serve families earning up to R$ 5,000.00 and there is no minimum income threshold, but the family must have enough income to afford to pay monthly installments, since in these income brackets of the program, families take on loans. In the Caixa Econômica Federal database, there were no families earning less than R$ 1,000.00 that took loans of FGTS. Thus, for comparison sake, PNAD data were tallied considering households earning from R$ 1,000.00 to R$ 5,000.00 per month.

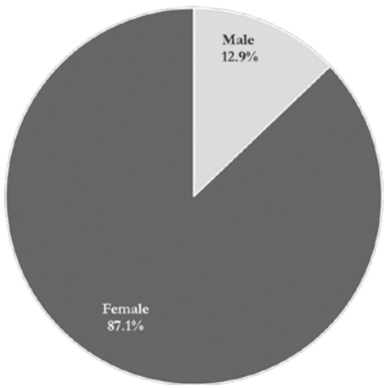
Between 2009 and 2013, PMCMV benefitted 498,300 households in Bracket 1. Of these, 434,100 contracts were signed by women, accounting for 87.1 per cent. This percentage varies by region, but in all Brazilian states, the percentage of women signing the contracts is significantly higher. When the leasing time ends, the property will be transferred to these women. This is due to the subsidy granting system itself, which privileges women. This profile of beneficiaries is quite distinct from the gender distribution of heads of household in Brazil, where female-headed households account for only 43.4 per cent of the total (Table A.1.5 and Graph 9.1).

The mean age of beneficiaries in the PMCMV Bracket 1 in the year when contracts were executed was 38.5, with men being a little older, with a mean age of 39.3 (please refer to Graph 9.2). This mean did not oscillate much among the states. The North region of the country posted the lowest mean – 36.1 years of age, and the South region, the highest – 41.3 (Table A.1.2). Comparing with 2013 PNAD data, it is to be noted that the PMCMV Bracket 1 beneficiaries are, on average, younger than Brazilian heads of household (Table A.1.6 and Graph 9.6).

The average income of beneficiary families was R$645.16 per month in the year when the contract was executed. Women's income was slightly higher compared to that of the men in the country's average – please refer to Graph 9.3. The South and Centre-West regions showed the highest income – R$ 745.01 and R$ 735.82 per month, respectively. The lowest incomes were observed in the states of the Northeast region, averaging R$535.55 per month.

Graph 9.1

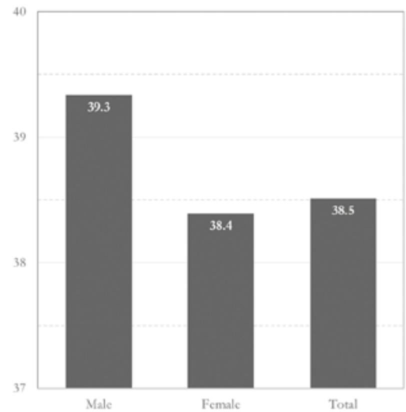
Beneficiaries by gender, Bracket 1, 2009 to 2013



Source: Caixa Econômica Federal.

Graph 9.2

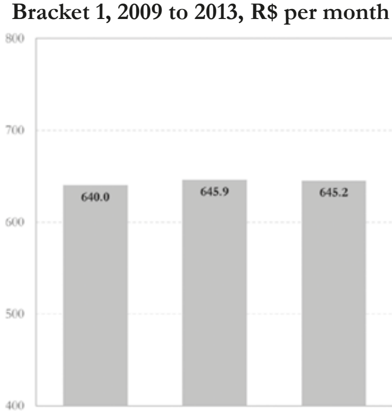
Age* of beneficiaries by gender, Bracket 1, 2009 to 2013



Source: Caixa Econômica Federal.
(*) Age of beneficiary on the date of contract.

Graph 9.3

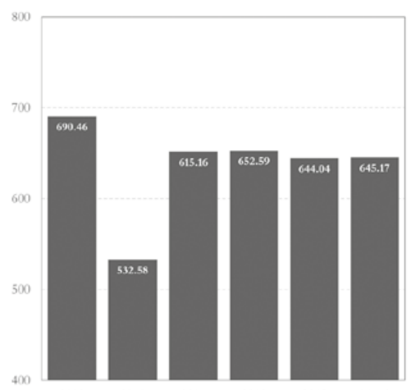
Average household income by gender, Bracket 1, 2009 to 2013, R$ per month



Source: Caixa Econômica Federal.

Graph 9.4

Average household income per year, Bracket 1, 2009 to 2013, R$ per month



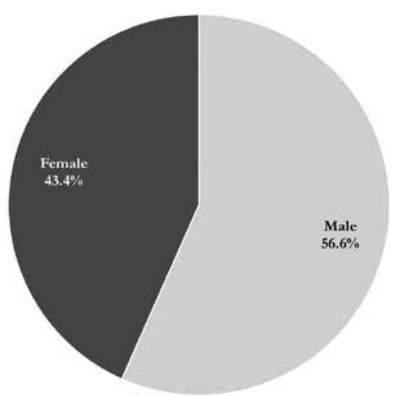
Source: Caixa Econômica Federal.

According to Graph 9.4, it can be observed that the average income of beneficiaries in the PMCMV Bracket 1 did not vary a lot from 2009 to 2013. On average for the whole period, household income was R$645.16 per month while, in 2013, it was R$644.04 per month. The most marked variations in average income over time were observed in the North and South regions. In the former, the average household income decreased from R$ 796.99 per month in 2009 to R$ 570.24 per month in 2013, while in the latter (the South region), average household income increased from R$ 516.79 per month in 2009 to R$ 744.74 per month in 2013. It is important to note that, in 2009, in the Northeast and Centre-West regions of the country, no families received housing units or signed contracts in Bracket 1 of the program.

Comparing the average household income of beneficiaries of the PMCMV Bracket 1 who signed contracts in 2013 with PNAD household income

Graph 9.5.

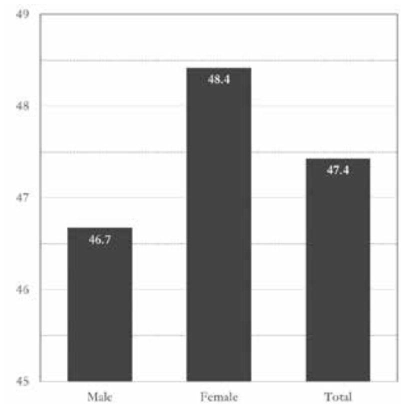
Distribution by gender of the heads of household with income up to R$ 1,600.00, 2013



Source: PNAD 2013.

Graph 9.6.

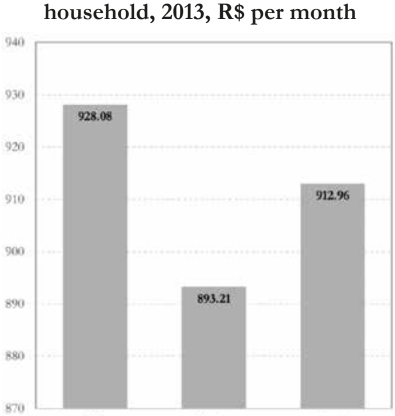
Age of heads of household with income up to R$ 1,600.00, by gender, 2013



Source: PNAD 2013.

Graph 9.7.

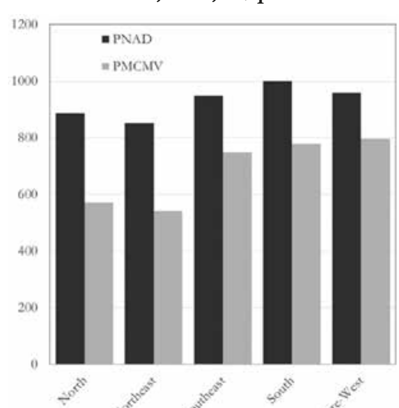
Average family income earning up to R$ 1,600.00, by gender of heads of household, 2013, R$ per month



Source: PNAD 2013.

Graph 9.7.

Average family income earning up to R$ 1,600.00, by gender of heads of household, 2013, R$ per month

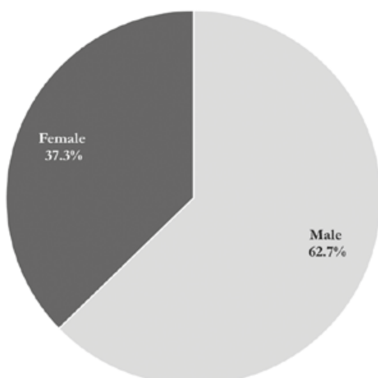


Source: PNAD 2013 and Caixa Econômica Federal.

data for that same year, one sees a difference in favor of the latter – Tables A.1.4 and A.1.7. Income difference amounted to R$ 267.80, suggesting that the program was prioritizing relatively poorer families. This is a recurring difference in all of the regions of the country, as illustrated in Graph 9.8.

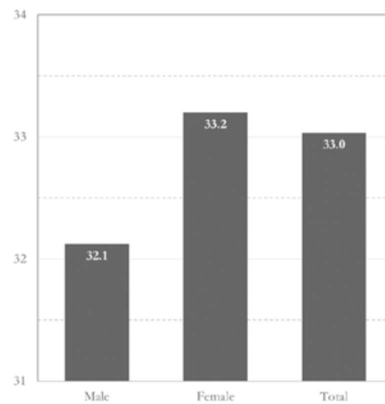
Between 2009 and 2013, 1.26 million families took loans and subsidies in Brackets 2 and 3 of PMCMV. Unlike Bracket 1, the majority of contracts

Graph 9.9.
Beneficiaries by gender, Brackets 2 and 3, 2009 to 2013



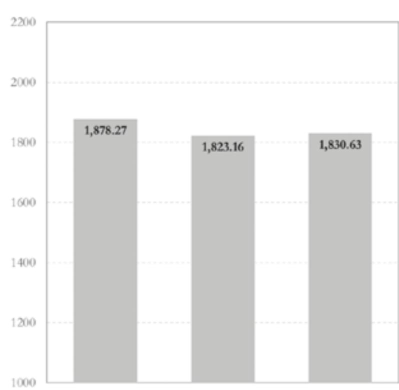
Source: Caixa Econômica Federal.

Graph 9.10.
Age* of beneficiaries by gender, Brackets 2 and 3, 2009 to 2013



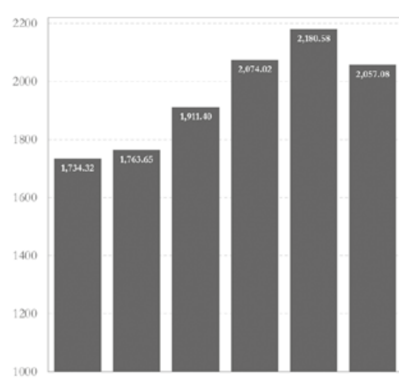
Source: Caixa Econômica Federal.
(*) Age of beneficiary on the date of contract execution.

Graph 9.11.
Average family income by gender of the head of household, Brackets 2 and 3, 2009 to 2013, R$ per month



Source: Caixa Econômica Federal.

Graph 9.12.
Average family income by year of contract, Brackets 2 and 3, 2009 to 2013, R$ per month



Source: Caixa Econômica Federal.

in these categories were signed by men, totaling 793,500 contracts or 62.7 per cent of the total. This percentage varies by geographical location, but in almost all units of the Federation the percentage of men was higher, with the exception of Acre, Roraima, Amapá and Maranhão states. This percentage is very close to the share of men as heads of households earning between R$1,000.00 and R$5,000.00 per month in 2013 (potential beneficiaries of the program), which was 62.4 per cent according to PNAD data.

The mean age of beneficiaries in Brackets 2 and 3 of PMCMV in the year of contract was 33, quite lower than the mean age of Bracket 1 beneficiaries. On average, men were 32.1 years old, while women were 33.2 – Graph 9.10. Among Brazilian states, mean age did not oscillate much, ranging from 31.7 years of age in Roraima to 35.6 in Amapá. This is also a younger group compared to Brazilian heads of household, who were on average 48.4 years old, according to 2013 PNAD data (Graph 9.14).

In the year of contract execution, the income of beneficiary families in Brackets 2 and 3 was R$ 1,830.63 per month (average between 2009 and 2013). Considering the country's average, the family income of women who signed the contract was slightly lower than that of the men – see Graph 9.11. The North and Southeast regions posted the highest household incomes, of R$ 2,089.01 per month and R$ 2,050.38 per month, respectively. The lowest incomes were seen in the states of the South region, averaging R$1,453.56 per month in the period.

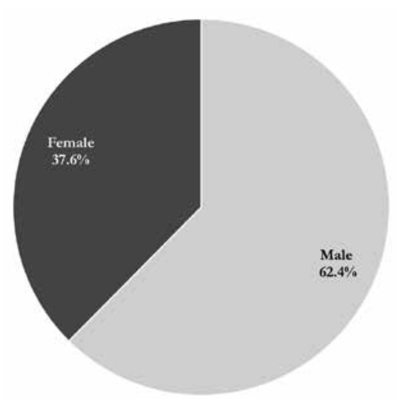
The average family income of beneficiaries in Brackets 2 and 3 of PMCMV is presented in Graph 9.12, by year of contract execution. One can observe that income grew by 5.9 per cent per year, from R$ 1,734.32 per month in 2009 to R$ 2,180.58 per month in 2013. Average income for the period was R$ 2.057.08 per month. The most pronounced variations in income were seen in the South and Centre-West of Brazil – 6.8 per cent per annum in both regions. In the former, the average family income increased from R$ 1,657.33 per month in 2009 to R$ 2,156.84 per month in 2013, while in the Centre-West, the average family income increased from R$ 1,640.07 per month in 2009 to R$ 2,136.11 per month in 2013. It is important to note that, unlike Bracket 1 of the program, contracts were executed in all states since the beginning of the program, in 2009.

The average family income of potential beneficiaries of Brackets 2 and 3 of PMCMV was R$ 2,300.35, according to PNAD (Table A.1.14

and Graph 9.15). It is slightly higher (5.5 per cent) than the average family income of those beneficiaries who did sign contracts in 2013, which was R$ 2,180.58. This is consistent with the age difference of heads of households, also higher in the PNAD survey average. Analyzing averages per region, in-

Graph 9.13.

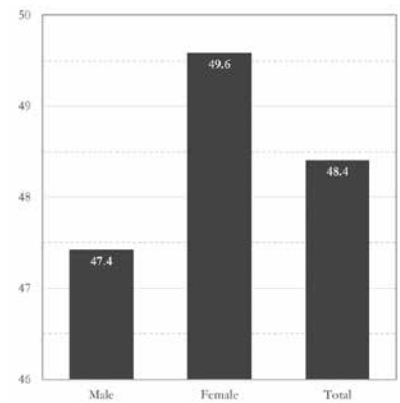
Distribution by gender of the heads of household with income from R$ 1,000.00 up to R$ 5,000.00, 2013



Source: PNAD 2013.

Graph 9.14.

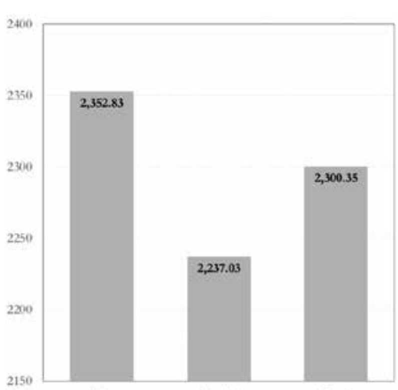
Age of heads of household with income from R$1,000.01 to R$5,000.00, by gender, 2013



Source: PNAD 2013.

Graph 9.15.

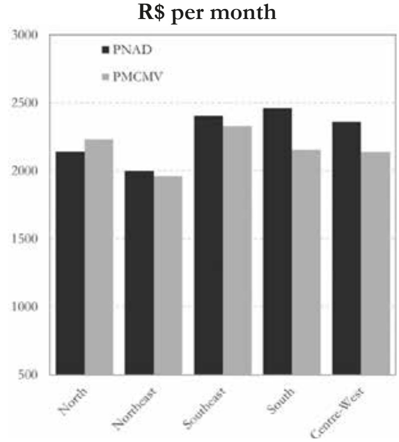
Average income of household earning from R$ 1,000.00 up to R$ 5,000.00, by gender of heads of household, 2013, R$ per month



Source: PNAD 2013.

Graph 9.16.

Average family income of heads of households earning from R$1,000.01 to R$ 5,000.00 and of beneficiaries of the PMCMV Bracket 2 and 3, 2013, R$ per month



Source: PNAD 2013 and Caixa Econômica Federal.

comes are quite similar; however, when considering the units of the Federation individually, there are substantial differences, such as the case of Amapá (66.6 per cent more among the PMCMV beneficiaries).

The data presented in this section clearly show how different the two subprograms are. While housing projects developed for Brackets 2 and 3 attracted families with a similar profile to that of the Brazilian standards, reflecting a "market" behavior in this segment, the beneficiaries of Bracket 1 have a different profile than their respective population group, and this is due to explicit choice criteria – gender, income and wealth – thus, favoring women, the poorest among households earning up to R$ 1,600.00 and those who do not own property (a prerequisite to have access to the subsidy).[2]

9.3 Some additional data on the profile of families in Bracket 1

A survey conducted by the Ministry of Cities and by the IPEA provides additional information on the profile of families of Bracket 1 of PMCMV. This was a nationwide field sample survey conducted from July to August 2013 to collect information on the families and dwellers' perception regarding some aspects of their dwellings. The survey sampled 7,252 house- holds, accounting for 2.96 per cent of the universe of 245,205 families in Bracket 1 who received housing units until December 31, 2012.

In 96.1 per cent of the households visited, there was only one family living, and in 3.9 per cent, there were two or three families living. The average number of dwellers per household was 3.73 in the national average, higher than the equivalent average for families in this income bracket in the PNAD 2013 database (3.20). The average number of dwellers per bedroom, in turn, was 1.84. In the national average, the number of dwellers per bedroom was also a little lower, 1.72, in 2013 (PNAD). Survey data point to some cases of excessive dweller density.[3] This situation was seen in 3.4 per cent of the households interviewed, while, in the national average of families earning up to R$ 1,600.00 per month, 1.43 per cent of families lived in households with excessive dweller density.

2 - Another selection criterion that may influence these profile differences, including the age difference, is the fact that PMCMV prioritizes housing for families living in risk areas or who became homeless due to natural disasters (landslides and flooding).

3 - Homes in which there are more than three people per bedroom.

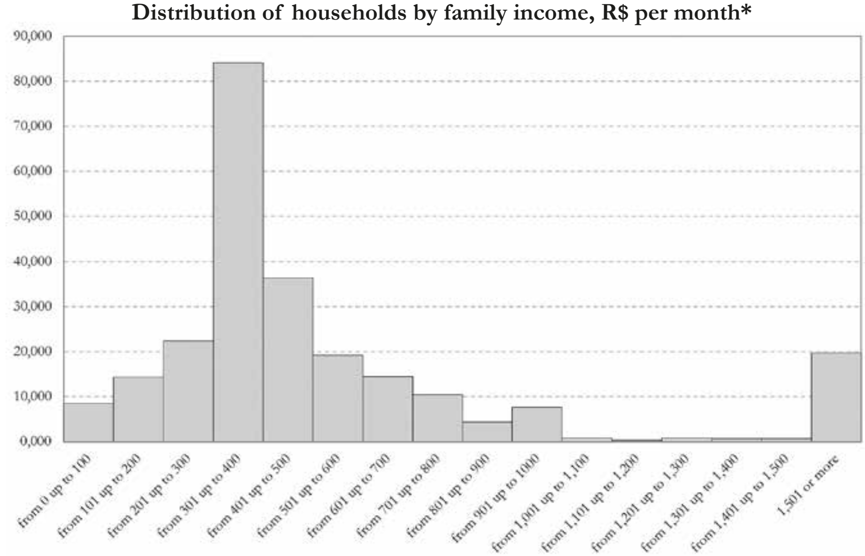
The field survey identified that 68.5 per cent of the PMCMV Bracket 1 households had children (under 14 years old). In most cases, these families had one or two children (51.6 per cent of the total). The average number of children per family was 1.28, a number relatively higher than the average for families earning up to R$ 1,600.00 per month, of 0.60, according PNAD 2013. Families with three children or more accounted for 16.9 per cent. In 15.7 per cent of the households visited, there were elderly people (aged 60 or older), with an average number of elderly people per family of 0.17, a number relatively lower than the average of families earning up to R$ 1,600.00 per month, of 0.38, in PNAD 2013.

In 12.1 per cent of households, there were people with physical disabilities, totaling an average of 0.13 per family. It is important to note that in half of the housing units in Bracket 1 of PMCMV, there was at least one person who also received an allowance from the Programa Bolsa Família (BFP) and the *Programa de Erradicação do Trabalho Infantil* (PETI), two conditional cash transfer programs by the federal government.

Family income informed in the survey brings important informa- tion to put into perspective the analyses made based on income informed at contract with Caixa Econômica Federal. According to the survey, the average family income of beneficiaries of Bracket 1 was R$ 907.57 (between July

Graph 9.17

Distribution of households by family income, R$ per month*



Source: Ministry of Cities and IPEA (*) weighted frequency according to sampling weights.

and August of 2013), very close to the national average for this social group estimated with data from the PNAD survey, that was of R$ 912.96 in September 2013, and much higher than the income informed when the family contracted the leasing option with Caixa Econômica Federal, which was of R$ 645.16. Graph 9.17 shows the distribution of households per monthly income (weighted frequency).

10. EFFECTS OF THE PMCMV SUBSIDIES ON INCOME DISTRIBUTION

Fernando Garcia de Freitas and Ana Lelia Magnabosco

In the previous chapter, the social and economic profile of the PMCMV beneficiaries was analyzed, with special attention to families in the Bracket 1 of the program. This analysis brings to the conclusion that while housing projects developed to Brackets 2 and 3 attracted families with a similar profile to that of the Brazilian standards, reflecting a "market" behavior in this segment, the beneficiaries of Bracket 1 have a different profile than their respective population group, favoring women, the poorest among households earning up to R$ 1,600.00 and those who do not own property. This fact has implications on the disposable income of the families with potential effects on wealth distribution in Brazil.

This chapter first presents the share of the subsidies to Brackets 1, 2 and 3 of *Programa Minha Casa Minha Vida* (PMCMV) relative to the amount of the investments and to the average household income of beneficiaries. The first measure provides a good idea of the importance of the program for the supply side of the housing policy: the incentive to build new housing units in areas with large housing deficits. The second helps us understand the extension of the program in distributional terms.

The chapter also presents a discussion on the impacts of subsidies – granted in Brackets 1, 2 and 3 leasing and loans – on the expenses of beneficiary families. This analysis is based on cadastral data of Caixa Econômica Fed- eral and on information from the survey conducted by the Ministry of Cities and by the IPEA, which collected more detailed information on families and households of the PMCMV Bracket 1. This analysis shows a reduction in housing costs felt by beneficiary families, with the resulting either increase in disposable income or increases in demand for housing services.

Additionally, the potential effects of the program on wealth distribution in Brazil are also analyzed. As there is no such thing as an updated and reliable inventory of financial and real estate assets of Brazilian households, a choice was made to study these effects considering families' flow of income, a variable with good statistical monitoring. This analysis starts with the assumption that subsidies granted at the time of home acquisition and during the installment or payment period can be considered as monthly flows of transfers, from the State to citizens, to complement household income. Thus, it is possible to simulate the effect of these transfers on households' income distribution. This effect is compared with that of other direct or indirect income transfer policies in Brazil in order to assess its relative contribution to reduce inequalities.

10.1 Subsidies, investments and household income

In Bracket 1 of PMCMV, around 500 thousand families received their new housing units from 2009 to 2013, with dwellings costing R$ 40 thousand on average.[1] These housing units were assigned to beneficiary families who should pay, as a counterpart, 120 installments of 5 per cent or 10 per cent of their monthly income. The weighted average income informed by the families was of R$ 645.19 per month, and the average of monthly installments was of R$ 33.18, equivalent to approximately 5.14 per cent of the families' monthly income.[2] This estimate is presented in Table 10.1.

The difference between the amount paid by the Fundo de Arrendamento Residencial (FAR), managed by Caixa Econômica Federal, and the

Table 10.1

Beneficiaries, unitary cost of dwellings, monthly family income and monthly instalments, Bracket 1, 2009 to 2013

States and Regions	Number of beneficiaries	Unitary cost of dwellings (R$)	Family income (R$ per month)	Instalments	
				R$ per month	Per cent of monthly income
North	47,189	38,607.02	614.74	30.93	5.03
Northeast	189,319	38,885.84	535.56	27.30	5.10
Southeast	129,067	44,852.55	717.56	36.92	5.14
South	89,339	35,768.79	744.97	38.66	5.19
Centre-West	43,388	40,932.41	735.90	38.96	5.29
Brazil	**498,302**	**40,024.25**	**645.19**	**33.18**	**5.14**

Source: Caixa Econômica Federal.

1 - This corresponds to one-third of the 1.5 million of housing units contracted by federal government (see Chapter 8).

2 - The share of families who signed contracts paying 10 per cent of their income is very small, and that is why the average is close to 5 percent.

installments paid by beneficiaries is the total subsidy embedded in the value of dwellings at cost price. Nevertheless, in order to calculate the subsidy, it is not enough to subtract the sum of the 120 installments, because Caixa pays for the new housing units during the building period and the installments are to be paid over a 10 - year period after the housing unit is concluded, thus entailing a carrying cost of the installments outstanding. In order to calculate the financial subsidy given by government, it is sufficient to accept as the amount to be paid by beneficiaries the present value of the 120 installments, considering a discount rate equivalent to the interest rates of FGTS for families earning up to R$ 1,600.00 per month (5 per cent per year).

These estimates are presented in Table 10.2 for Brazil and its regions. The average present value of the 120 installments is R$ 3,144.68, lower than the amount that would result from a simple multiplication of the average monthly installment by 120 months – R$ 33.18 X 120 (R$ 3,982.05). The gap between the average value paid for properties in each region and the present value of the 120 installments is equivalent to the expected financial subsidy.[3] Thus, the financial subsidy was R$ 36,879.57 on average for the 2009-2013 period. This equals asset transfers of around 92.1 per cent of the average value of properties in the country.

Another way to assess the effect of subsidies on income of Bracket 1 beneficiaries is to make a comparison between how much the dwellings would cost to the families without the subsidy, on a monthly basis, and the installments that were actually paid. This can be done by computing the in-

Table 10.2

Beneficiaries, unitary cost of dwellings, present value of instalments and financial subsidies, Bracket 1, 2009 to 2013

States and Regions	Number of beneficiaries	Unitary cost of dwellings (R$)	Present value of the 120 instalments (R$)	Subsidies	
				R$	Per cent of the of unitary cost dwellings
North	47,189	38,607.02	2,930.63	35,676.39	92.4
Northeast	189,319	38,885.84	2,586.66	36,299.18	93.3
Southeast	129,067	44,852.55	3,498.45	41,354.10	92.2
South	89,339	35,768.79	3,663.48	32,105.31	89.8
Centre-West	43,388	40,932.41	3,691.69	37,240.71	91.0
Brazil	**498,302**	**40,024.25**	**3,144.68**	**36,879.57**	**92.1**

Source: Caixa Econômica Federal.

3 - This calculation takes into account the simplistic assumption that all beneficiaries will pay their 120 installments on time.

stallment value equivalent to a loan of 100 per cent of property value for 120 months, considering FGTS interest rates of 5 per cent per year. To facilitate the comparison, the Price Amortization System was adopted, generating flat installments. The values are presented in Table 10.3 for Brazil and its regions.

The average installment in the country would be of R$ 422.35 without the subsidy, 12.7 times higher than installments actually paid by the families on average. Without the subsidy, the installment would equal 65.5 per cent of the average family income at the time of contract execution, signaling an unfeasible loan share as a percentage of disposable household income.

These data points to an equivalent financial subsidy in the installment of R$ 389.17 on average. This means around 60 per cent of the households' monthly income as declared at contract execution. The highest subsidies, as a percentage of monthly income, are seen in the Northeast and North of Brazil, the regions with relatively lower income levels. This shows that the differences in dwellings costs among regions, which follow the limits fixed by the Ministry of Cities regulatory prices, are less pronounced than regional differences in family income.

Finally, it is worth pointing out that, after the contract period, during which average transfers amount to R$ 389.17 per month – i.e. the gap between subsidized and interest-bearing installments – there is a monthly financial transfer equivalent to the residual value of the dwelling. Assuming a depreciation rate of 5 per cent per year, and disregarding any sort of real estate appreciation, the value of properties at current prices would be R$ 24,581.42, or 61.4 per cent of the property acquisition value, on average. Since, at the end of ten years, the property is definitively transferred to the beneficiary, this

Table 10.3

Beneficiaries, financial instalments*, subsidized instalments and equivalent financial subsidy, Bracket 1, 2009 to 2013

States and Regions	Number of beneficiaries	Financial instalments* (R$ per month)	Subsidized instalments (R$ per month)	Equivalent financial subsidy	
				R$ per month	Per cent of monthly income
North	47,189	407.39	30.93	376.47	61.2
Northeast	189,319	410.34	27.30	383.04	71.5
Southeast	129,067	473.30	36.92	436.38	60.8
South	89,339	377.44	38.66	338.79	45.5
Centre-West	43,388	431.93	38.96	392.98	53.4
Brazil	**498,302**	**422.35**	**33.18**	**389.17**	**60.3**

Source: Caixa Econômica Federal. (*) Calculated by Price Amortization System.

is equivalent to an asset transfer of this amount. The perpetuity value of the real estate asset is estimated at R$ 100.11, considering an interest rate of 5 per cent per year. This means that, in addition to income transfers equivalent to 60.3 per cent of families' monthly income until year 10, there is a permanent income transfer of 15.5 per cent of these families' monthly income beginning at the end of 10 years – see Table 10.4.

Table 10.4

Beneficiaries, unitary cost and residual values of dwellings and perpetuity transfers, Bracket 1, 2009 to 2013

States and Regions	Number of beneficiaries	Unitary cost of dwellings (R$)	Residual value of dwellings (R$)	Perpetuity	
				R$ per month	Per cent of monthly income
North	47,189	38,607.02	23,701.36	96.56	15.7
Northeast	189,319	38,885.84	23,872.53	97.26	18.2
Southeast	129,067	44,852.55	27,535.58	112.18	15.6
South	89,339	35,768.79	21,958.94	89.46	12.0
Centre-West	43,388	40,932.41	25,128.95	102.38	13.9
Brazil	**498,302**	**40,024.25**	**24,571.42**	**100.11**	**15.5**

Source: Caixa Econômica Federal.

Table 10.5 shows the number of beneficiaries who have bought new dwellings with credits and subsidies of PMCMV Brackets 2 and 3. The table also presents the values of dwellings acquired and their components: credit, subsidy and previous savings. The subsidized portion of dwellings is significantly lower than in the PMCMV Bracket 1. For the 1.265 million dwellings, the subsidy accounts for approximately 30 per cent of property value, on average. Previous savings accounted for approximately 10 per cent and credit accounted for 60 per cent of property value.

Table 10.6 shows family income per month and the values of installments calculated based on the Price Amortization System, which enables an assessment of installments as a share of family income over the loan period. On average, installments corresponded to 19.8 per cent of family income, which can be considered a relatively low payment.

If the subsidy portion, assigned at property acquisition, were added to the loan amount, the resulting installments would be much higher. On average, installments would increase from R$ 391.21 per month to R$ 584.18 per month – an increase of 49.3 per cent. The gap between these two values corresponds to the monthly equivalent financial subsidy, which was R$ 192.97, and which is received on a monthly basis over the loan period. This value is equivalent to 33 per cent of the non-subsidized installments. In relative terms, the monthly equivalent subsidy corresponded to 11.6 per cent of families' monthly income. This percentage is lower than the relative monthly transfer calculated for PMCMV Bracket 1 beneficiaries, which was 60.3 per cent of family income, as pointed out in Table 10.3, but still represents a large transfer to middle-income families.

Table 10.5

Beneficiaries, unitary cost of dwellings and its components, Brackets 2 and 3, 2009 to 2013

States and Regions	Number of beneficiaries	Unitary cost of dwellings (R$)	Components, R$		
			Credit	Subsidy	Previous savings
North	32,050	108,027.70	67,060.26	31,353.14	9,614.30
Northeast	239,502	102,800.67	60,115.64	35,329.18	7,355.85
Southeast	496,688	117,653.59	70,873.32	32,582.30	14,197.98
South	330,178	110,561.99	67,013.29	33,027.00	10,521.70
Centre-West	166,584	113,191.41	69,593.52	34,251.71	9,346.18
Brazil	**1,265,002**	**112,159.03**	**67,563.93**	**33,407.13**	**11,187.97**

Source: Caixa Econômica Federal.

Table 10.6

Family income, instalments and of subsidy, Brackets 2 and 3, 2009 to 2013

States and Regions	Monthly family income (R$)	Subsidized instalment (R$)	Non-subsidized instalment (R$)	Equivalent financial subsidy	
				R$	per cent of income monthly family
North	2,095.41	390.55	571.18	180.62	10.8
Northeast	1,796.65	348.88	552.34	203.45	13.4
Southeast	2,087.80	410.73	599.57	188.84	10.9
South	1,923.05	387.87	578.87	191.00	11.5
Centre-West	1,963.20	400.61	597.11	196.50	11.5
Brazil	**1,973.46**	**391.21**	**584.18**	**192.97**	**11.6**

Source: Caixa Econômica Federal.

As in the case of the PMCMV Bracket 1 beneficiaries, when the installment payment period is over, there is a monthly financial transfer equivalent to the residual value of the subsidy granted at property acquisition. These calculations are shown in Table 10.7. Assuming the same depreciation rate as before, and again disregarding any real estate appreciation, the residual value of subsidies would be R$ 9,741.56 at current prices, which corresponds to 29.2 per cent of the average value of subsidies granted in Brackets 2 and 3. The perpetuity value of this fraction of real estate assets is estimated at R$39.69, on average. This means that, in addition to equivalent income transfers over the loan period (in the form of a reduced installment), there is a permanent income transfer corresponding to 2.4 per cent of the household monthly income. Again, this transfer is lower than the 15.5 per cent of household income which is permanently transferred to families in the PMCMV Bracket 1, but still represents a considerable transfer for middle-income families.

Table 10.7

Beneficiaries, unitary subsidy* and residual values of dwellings and perpetuity transfers, Brackets 2 and 3, 2009 to 2013

States and Regions	Number of beneficiaries	Unitary subsidy of dwellings (R$)*	Residual value of dwellings (R$)	Perpetuity	
				R$ per month	Per cent of monthly income
North	32,050	31,353.14	9,089.01	37.03	2.2
Northeast	239,502	35,329.18	10,223.49	41.65	2.7
Southeast	496,688	32,582.30	9,571.06	38.99	2.3
South	330,178	33,027.00	9,655.82	39.34	2.4
Centre-West	166,584	34,251.71	9,852.50	40.14	2.4
Brazil	**1,265,002**	**33,407.13**	**9,741.56**	**39.69**	**2.4**

Source: Caixa Econômica Federal. (*) at current values.

10.2 Credit burden on households' disposable income

Despite heavy subsidies to reduce the value of dwellings financed by PMCMV, the resulting installments and payments still take up a relatively high share of households' income. Table 10.8 provides the number of beneficiary families in PMCMV and average debt as a share of families' disposable income, considering household income at the execution of the contract and average installment over the loan period. It is worth noting that the 1.763 million dwellings bought led to housing expenses amounting to 15.7 per cent of the PMCMV beneficiary household income – 5.1 per cent in Bracket 1 and 19.8 per cent in Brackets 2 and 3.

These data are compared with the ratio of installment payment over disposable income found in the national household survey of 2009 and 2013 (PNAD). According to this database, the total of families paying installment grew from 2.322 million in 2009 to 3.041 million in 2013, pointing to an increase of almost 720 thousand families with a loan contract.[4] In the average for the period, installments were of 17.1 per cent of disposable income as reported by Brazilian households.

According to PNAD data, installments as a percentage of disposable income vary greatly among the regions: in Amazonas and Roraima, debt ac-

Table 10.8.

Number of beneficiaries and average instalment as a percentage of disposable income, 2009 to 2013

States and Regions	Number of beneficiaries			Instalments as a share of disposable income (per cent)		
	Bracket 1	Brackets 2 and 3	Total	Bracket 1	Brackets 2 and 3	Average
North	47,189	32,050	79,239	5.0	18.6	10.5
Northeast	189,319	239,502	428,821	5.1	19.4	13.1
Southeast	129,067	496,688	625,755	5.1	19.7	16.7
South	89,339	330,178	419,517	5.2	20.2	17.0
Centre-West	43,388	166,584	209,972	5.3	20.4	17.3
Brazil	**498,302**	**1,265,002**	**1,763,304**	**5.1**	**19.8**	**15.7**

Source: Caixa Econômica Federal.

Table 10.9

Instalment as a percentage of disposable income*, Brazil, 2009 and 2013

States and Regions	Number of households			Instalments as a share of disposable income (per cent)		
	2009	2013	Difference	2009	2013	Average
North	58,719	104,854	46,135	15.5	13.7	14.3
Northeast	293,073	375,831	82,758	16.4	19.0	17.8
Southeast	1,236,682	1,630,035	393,353	16.8	16.6	16.7
South	567,258	707,507	140,249	18.5	17.2	17.8
Centre-West	166,253	223,092	56,839	17.9	17.3	17.5
Brazil	**2,321,985**	**3,041,319**	**719,334**	**17.2**	**17.0**	**17.1**

Source: PNAD, IBGE. (*) Includes loans for the acquisition of homes, plots of land and construction materials, as well as for home improvement.

4 - This number corresponds to only 41 per cent of the number of units financed by PMCMV in the period. Even considering that a part of the households that were paying installments in 2009 had paid their debt by 2013, this small variation between the periods suggests issues related to recording households with installments outstanding in the PNAD survey. However, since the objective here is to address installments and their weight on household income, this level-related problem is less relevant.

counted for less than 10 per cent of households' monthly income. It is possible that this number already reflects the great weight of PMCMV in the number of total mortgages granted in these states. The increase in the number of families paying installments in these areas from 2009 to 2013 was 18,189, while the number of units financed by PMCMV reached 15,267. In areas where real estate loans were more consolidated, or where Bracket 1 properties had a lower weight, debt as a percentage of disposable income was higher.

An average debt as a share of disposable income of 17.1 per cent is 1.4 percentage point higher than the average debt as a percentage of disposable income of the PMCMV beneficiaries (15.7 per cent). Differences vary greatly among regions.

Thus, these data suggest a reduction in the average installment as a share of disposable income due to PMCMV. On the other hand, if one compares installment as a percentage of disposable income in PMCMV with the percentage of disposable income spent to pay rents, the benefit is shown to be even greater. Table 10.10 brings information on percentages of family income spent on rent in Brazil. On average, in 2009 and 2013, Brazilian households committed 26 per cent of their income to pay for home rent, and this percentage grew by around 2.3 percentage points in the period.

Table 10.10

Rent as a percentage of disposable income*, Brazil, 2009 and 2013

States and Regions	Number of households			Rent as a share of disposable income (per cent)		
	2009	2013	Difference	2009	2013	Average
North	428,058	639,662	211,604	24.0	25.5	24.9
Northeast	1,671,690	2,524,332	852,642	22.1	26.0	24.5
Southeast	2,563,583	5,071,045	2,507,462	24.2	28.6	27.1
South	3,352,087	1,493,293	-1,858,794	25.5	26.0	25.7
Centre-West	1,107,935	1,129,840	21,905	28.0	24.8	26.4
Brazil	**9,123,353**	**10,858,172**	**1,734,819**	**24.7**	**27.0**	**26.0**

Source: PNAD, IBGE. (*) Including families sharing a dwelling with other families.

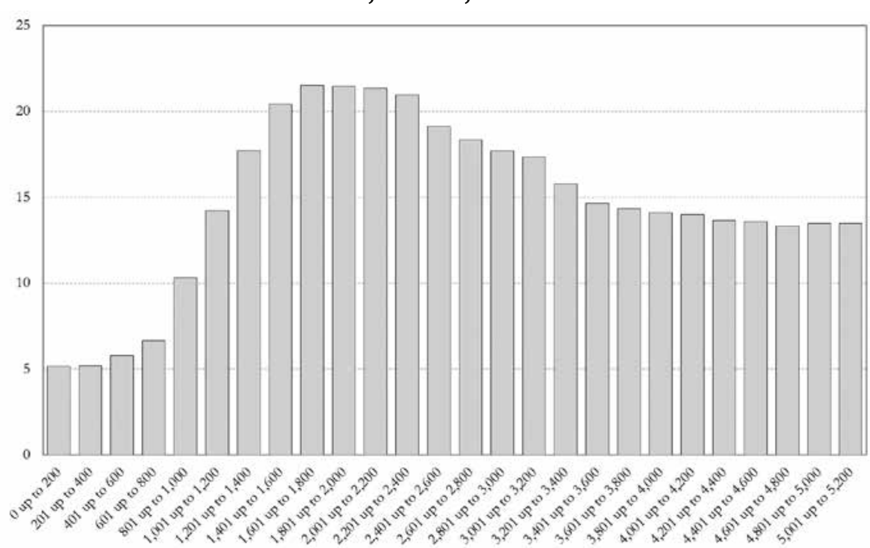
Rent as a share of disposable income also varies greatly among the regions. In Mato Grosso do Sul, rent accounted for 31.7 per cent of household income, while in Piauí, it accounted for only 20.6 per cent. The most important aspect to observe is that for all regions and units of the Federation, the PMCMV installments take up a lower share of the household budget than rent: on average, the difference is 10.3 percentage points – 15.7 per cent spent on installments and 26.0 per cent spent on rent. In the North and Northeast, these differences are more pronounced. This suggests that more mortgage lending, with part of dwelling cost being subsidized, as well as longer payment periods, led to an increase in the potential consumption of other goods and services during the loan payment period.

Graph 10.1 shows estimates of installment payment as a percentage of disposable income in PMCMV by monthly income. These are weighted averages of contracts signed in Brackets 1, 2 and 3, according to information provided by Caixa Econômica Federal. It is to be noted that, as household income grows, installment payment as a percentage of household income also increases. The peak reaches 22 per cent for families with monthly earnings from R$ 1,601.00 to R$ 1,800.00. After that range, debt as a percentage of household income drops, and flattens at around 13 per cent for higher-income families.

Given the rationale of an operation with subsidies, this system differs from the standard household debt as a share of disposable income in the Brazilian real estate market. Data on Graphs 10.2 and 10.3 show standard installment and rent payments as a percentage of disposable income. In the

Graph 10.1

Instalment as a percentage of disposable income, Brackets 1,2 and 3, 2009 and 2013



Source: Caixa Econômica Federal.

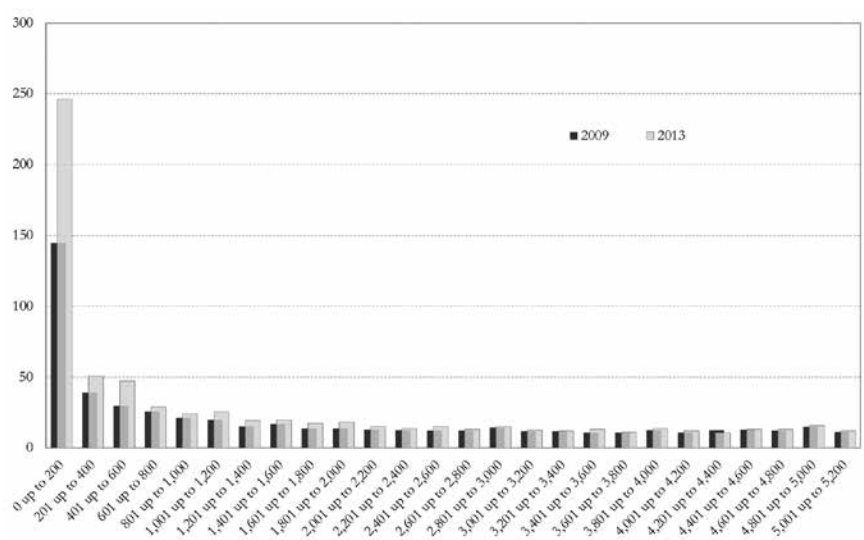
first income brackets, debt as a share of disposable income is extremely high. This occurs because these income brackets have households with extremely low income families or households with two or more families sharing a dwelling – for example, a home shared with parents is quite common in low-income households.

Using 2013 PNAD data as a reference, one can say that the mean PMCMV installment as a percentage of household income matches the national average in income brackets earning more than R$1,600.00 per month. Up to this cut-off level, the PMCMV installment as a percentage of household income is lower than rent as a percentage of household income. These facts indicate that the previously identified differences in favor of PMCMV result primarily from greater subsidies granted to lower-income families. This means that the ability to increase the potential consumption of other goods and services during the loan payment period is concentrated on families with lower purchasing power, having a less pronounced effect on other social groups, which further enhances the distributional bias of the housing policy in Brazil.

One last comment regarding housing spending is worth highlight.

Graph 10.2

Instalment as a percentage of disposable income*, Brazil, 2009 and 2013

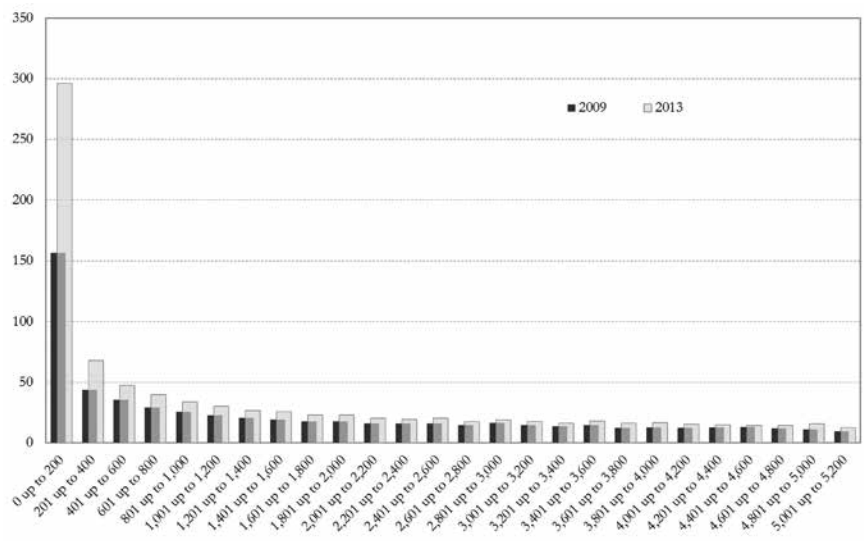


Source: PNAD, IBGE. (*) Includes loans for the acquisition of homes, plots of land and construction materials, as well as for home improvement.

Beneficiaries of the PMCMV Bracket 1 often times come from local government social programs, which prioritize, following the program's rules, families living in risk areas, households headed by women and families with a disabled member. A significant part of this group used to live in shared homes or in precarious settlements, bearing no rent cost and with relatively low spending with utilities, such as water, electricity and gas. When transferred to a PMCMV dwelling, these households started to have housing related expenses which could be higher than they had before. In the case of dwellings in apartment buildings, in addition to utility bills, there is also a condominium fee to be paid, an extra expense for families that used to live in precarious settlements.

Graph 10.3

Rent as a percentage of disposable income*, Brazil, 2009 and 2013



Source: PNAD, IBGE. (*) Including families sharing a dwelling with other families.

The survey conducted by the Ministry of Cities and IPEA – Ministry of Cities (2015) –, previously mentioned in Chapter 9, shows that condominium fees plus water and electricity bills took up 11.3 per cent of the monthly earnings of Bracket 1 beneficiary families in mid-2013 (Table 10.11). Added to installment payment, of 5.1 per cent on average, one can conclude that housing related expenses accounted for 16.4 per cent of households' monthly income. Overall, this is a relatively low household expense as a share of disposable in-

Table 10.11

Water and electricity bills, condominium fee, and household income, R$ per month, 2013

State and Region	Type of dwelling		Average	Household monthly (B) income	Weight of expenses, per cent (A/B)
	Apartment	House			
North	98.09	79.23	81.30	821.07	9.9
Northeast	91.80	64.28	72.45	801.61	9.0
Southeast	143.69	101.23	119.73	966.15	12.4
South	195.69	104.79	158.40	1.115.84	14.2
Centre-West	117.38	110.39	111.45	885.71	12.6
Brazil	**134.87**	**85.27**	**102.76**	**907.57**	**11.3**

Source: Ministry of Cities (2015).

come, but for families who used to live in precarious settlements, with no such spending, this change might mean an increase in the cost of living.

In the case of households that used to pay rent, on the other hand, a big reduction in the cost of living and improved welfare were immediately felt. Some cases reported in the survey revealed that this type of household had a strong increase in the consumption of other goods and services soon after the move, also investing in home improvement. In addition, results presented in Chapter 8 of Ministry of Cities (2015) indicate that the perception of improved welfare by these households is directly related to their perception of reduced costs of living and housing.

10.3 Effects on income distribution

The potential effects of PMCMV on wealth distribution in Brazil comes from the fact that subsidies may reduce housing costs, thus increasing the consumption potential, or may increase the affordability of a real estate asset, which in turn has an effect on savings and the accumulation of wealth by families. Either way, subsidies may be seen as income transfers to families, as analyzed in the previous sections. As income transfers are relatively higher for lower income households in this housing program, the subsidies are expected to have an effective impact on income distribution. This impact, albeit indirect, is similar to the effects observed with income transfer policies, such as *Programa Bolsa Família* (PBF). It is also very similar to the effect stemming from the provision of education and healthcare made by public schools and hospitals, which transfer the consumption of services directly to families, without any monetary transfers.

The analysis developed in this section is based on a simulation of the effects on income distribution if subsidies were granted monthly. Monthly subsidies calculated for every contract in the database of Caixa Econômica Federal are references to simulate income after transfers and the resulting impacts of income redistribution on inequality indexes. This simulation combines information on household income distribution in the country, which is obtained from the national household survey, with estimates of the monthly transfers resulting from subsidies paid by the program.

Since inequality indexes are sensitive to the income ordering of the families that receive these transfers, it was necessary to detail at length the value of monthly subsidies transferred in each region and in each income bracket. There were 675 groups defined considering the unit of the Federation and the monthly household income bracket – considering monthly household income ranges of R$ 200.00 from no income families up to families earning R$ 5,000.00 per month. Thus, based on Caixa Econômica Federal data, mean values were calculated for financial subsidies in PMCMV for each group.

The monthly subsidies were computed on households' monthly income for a share of the families in the 2013 PNAD database. This share of families receiving transfers is defined by the ratio between the number of the PMCMV beneficiaries and the total number of households in each group. The choice of families that received the income transfers in each group was random, respecting the total number of households receiving subsidies in the program until the end of 2013.

Then, inequality indexes were calculated for the original family income distribution and for that resulting from financial subsidies added to families' original income. These calculations were made for every unit of the Federation, given that the proportion of dwellings in the PMCMV Brackets 1, 2 and 3 varied considerably, and for the whole of Brazil. Since this is an impact simulation, as it is not known which households received subsidies, a sensitivity analysis was conducted for one unit of the Federation – São Paulo – to assess changes in inequality indexes measured in different random distributions of transfers among the households in each group.

The inequality indexes considered were: (I) relative mean deviation; (II) Gini; (III) Theil's entropy index (Theil T); and (IV) Theil's mean log devi- ation measure (Theil L). For more information on these indexes, please see Cowell

Table 10.12

Inequality indicators of household income distribution, 2013

State and Region	Inequality indicators			
	Mean deviation	Gini	Theil T	Theil L
North	0.35680	0.49421	0.47654	0.36186
Northeast	0.37232	0.51741	0.57579	0.42713
Southeast	0.35999	0.49817	0.48983	0.35565
South	0.33089	0.46140	0.41363	0.32843
Centre-West	0.38853	0.52839	0.55717	0.41227
Brazil	**0.37143**	**0.51234**	**0.52217**	**0.40136**

Source: PNAD, IBGE.

(2009). Table 10.12 brings inequality measures of household income distribution by Brazilian region, according to 2013 PNAD. Firstly, one notices that household income was rather concentrated in the country, especially in the Northeast and Centre-West, where Gini coefficients, for instance, were higher than 0.5.

With income transfers, all inequality indexes dropped. In Brazil, the inequality index decreased to 0.51085 from 0.51234, a reduction of 0.00148 (See Table 10.13). The Centre-West, Northeast and South had the most pronounced reductions, because of the higher shares of subsidies granted in Bracket 1 of PMCMV.

Despite being seemingly small, these changes in inequality indexes are significant, as indicated in the comparison with impacts resulting from other income transfer policies. Magnabosco (2007) analyzed the effects of educational grants on household income distribution in Brazil. Data are provided by the 2003 Brazilian survey of household budget *(Pesquisa de Orçamento Familiar)*. According to the author, federal educational programs – such as *Bolsa Escola,*

Table 10.13

Impacts of transfers on inequality indexes of household income distribution, 2013

State and Region	Expected change in inequality indicators			
	Mean deviation	Gini	Theil T	Theil L
North	-0.00101	-0.00153	-0.00258	-0.00390
Northeast	-0.00142	-0.00190	-0.00393	-0.00493
Southeast	-0.00105	-0.00114	-0.00196	-0.00229
South	-0.00167	-0.00190	-0.00294	-0.00367
Centre-West	-0.00188	-0.00205	-0.00382	-0.00440
Brazil	**-0.00139**	**-0.00148**	**-0.00277**	**-0.00359**

Source: Simulation.

Bolsa-Estudo and grants of *Programa de Erradicação do Trabalho Infantil* – reduced by 0.00055 the Gini coefficient of household income distribution. The units of the Federation with the biggest impact were, coincidentally, those located in the Centre-West and Northeast regions.

Indirect income transfers based on the supply of places in public schools (without charges) had a similar effect in magnitude to that found in PMCMV. For the country's average, considering the effect of public expenses with education by student on household income of families with children in public schools, the result was a reduction of -0.00204 in the household income inequality index in 2003.

Thus, the simulation made in this Chapter leads us to conclude that the subsidy policy does have a relatively high effect on household income distribution inequality in Brazil. This is added to the positive effect on consumption and savings by lower income families, which were strongly supported by PMCMV in recent years.

In order to evaluate the effect of randomness on the impact on inequality indexes, 30 simulations were performed for São Paulo state. This state was chosen for the simulation because it received relatively few subsidies in lower income brackets, but a high volume overall, which resulted in a minor change in Gini coefficient. In every simulation, subsidies were distributed to different households chosen randomly in each family income bracket. As illustrated in Table 10.14, the Gini coefficient variation of family income and distribution ranged from -0.00080 to -0.00116 with a mean of -0.00103. The standard deviation of estimates was 7.7 per cent of the mean, suggesting that the effect of randomness was relatively small. However, the key take-away is that impacts were negative in all samples and follow the statistical distribution characteristics of the each inequality index.

Table 10
Evaluation of the effects of 30 random transfers on inequality indexes of household income distribution in São Paulo, 2013

Index	Observations	Mean	Standard deviation	Minimum	Maximum
Mean deviation	30	-0.00093	0.00006	-0.00100	-0.00079
Gini	30	-0.00103	0.00008	-0.00116	-0.00080
Theil T	30	-0.00173	0.00012	-0.00193	-0.00138
Theil L	30	-0.00208	0.00023	-0.00260	-0.00156

Source: Simulation.

IV.

THE EUROPEAN UNION AND BRAZIL DIALOGUE

11. KEY AREAS FOR DIALOGUE BETWEEN BRAZIL AND THE EUROPEAN UNION[1]

Christine Whitehead and Melissa Fernandez

It is obvious from the European experience that increasing prosperity does not of itself remove the need for government intervention to ensure adequate housing for all. Effective allocation of land is an area of particular difficulty, in part because of the tensions between equity and efficiency. On the other hand well operating housing finance markets do make it easier to recycle housing assets and perhaps to address many of the emerging issues that arise from aging populations. Owner-occupation is perceived as the tenure of choice in almost all European societies but at the same time there is increasing emphasis being placed on developing more flexible tenures, not just in the form of private renting but also through shared equity arrangements in both the owner-occupied and social rented markets.

In Europe there is much concern about the capacity of the public sector to manage and allocate housing in a way which is best for both consumers and providers. As a result a wide range of partnership approaches are being tried. These aim to generate greater flexibility for the individual as well as to provide greater incentives for efficiency and to recycle public assets, while still addressing fundamental objectives of a decent home for everyone at a price they can afford. Another emergent issue across urban centres in Europe is how to develop effective regeneration tools, especially in the context of individual ownership of land and housing. This is an area of activity where Europe has tended to concentrate on easier options in areas where land ownership is concentrated, notably in the public sector.

The global financial crisis has generated two major problems:

(I) investment in all types of housing has been heavily cutback in most European countries, resulting in increasing shortages in higher demand areas with resultant increases in rents and prices and a grow-

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1 - This section draws not only on the study-team visit to Brazil and the London seminar but also on the papers and presentations provided by the European participants in before and after that seminar. These materials are available on the LSE website (http://www.lse.ac.uk/geographyAndEnvironment/research/london/events/Brazil-EU-Sector-Dialogue.aspx) ing understanding that more has to be done to help those on lower incomes to obtain adequate affordable housing;

(II) local and national governments are facing growing pressures to cut public expenditure and to use more innovative financial in struments to lever in private finance and support remaining housing programmes.

What is perhaps most concerning is the evidence of increasing concentrations of wealth and productive activity – and the associated problems of social exclusion and growing regional disparities which can be observed across most industrial and post industrial nations. At the present time it could be argued that housing is often helping to exacerbate these trends. It is a major challenge to reverse this situation and in so doing to use housing policy more effectively to improve distributional outcomes.

In comparing experience in the European Union and Brazil it can be argued that Brazil is still at the first stage of government housing intervention. There are overwhelming physical shortages of housing which are helping to be filled by a very large scale national building programme to provide at least minimum standard housing to a range of households across the country. In addition there are programmes to upgrade favelas and reduce densities in some cases rehousing households in the newly provided accommodation, which can be compared to the very large slum clearance programmes of the 1950s and 1960s in many European countries. Finally there are favela upgrading programmes which have some comparability with the European area regeneration programmes of the 1960s.

The means of achieving the new build programme are in some ways similar to those chosen in post-war Europe but also differ in important ways.

Looking first at the similarities:

First, it is a national programme – with the implicit assumption that there are needs to be met everywhere in the country – so additional housing anywhere is desirable and the quicker housing can be provided the better. This was true in Europe until the late 1960s in almost all European countries. However thereafter most Western European countries had achieved a balance between households and dwellings at the national level and there was increasing emphasis on building where regional and local shortages remained as people moved to areas with greater opportunities.

Second, the physical standards being provided are considerably higher than those available to the majority of the population within the existing stock. Demand is therefore generally greater than supply, while satisfaction among those who are able to choose where they live is also likely to be high. The position was very similar in Europe where the new stock was provided at better standards and amenities than generally available in the early post- war period, although, as in Brazil now, there were often concerns about the location of the new housing, especially if people were being re-housed as a result of slum clearance.

Third, the implementation process involves central government providing subsidy and local authorities ensuring land is available through the planning system, which can be owned and allocated by that authority and developed mainly by private developers. This is comparable to the general approach of the 1950s and 1960s in Europe when central government determined priorities, but local government often provided the land and acted as the planning authority (in some countries the local authorities were also the developers). The politics of this type of approach has been found to be complex both in Europe and Brazil – there tends to be more policy coherence where the local and national government are of the same political complexion.

Fourth, the scale of the programme in some regions has meant that mainly large developers are involved in building standardised units and site specific services. This in principle leads to scale economies. In Europe much of the social housing built in the 1950s and 1960s tended to be in the form of apartment blocks – either relatively low rise with no lifts or high rise often with inadequate lift provision. Both types required competent management and maintenance and were often difficult to upgrade as acceptable standards rose with economic growth. This appears also to be the case in much of the PMCMV Bracket 1 element of the Brazilian programme.

Fifth, the housing being provided by the programme is available quite a long way up the income scale, as it was in Europe. In both cases this reflects the shortages of reasonable quality housing that extended across most markets. Over time in Europe, as incomes and opportunities rose, in most countries the demand for social housing among middle income households declined. This possibility is only just beginning to emerge in some areas of Brazil and is in part addressed by allowing considerable freedom of choice for those buying under the PMCMV Brackets 2 and 3.

Finally, most of the building programme in Europe was provided on green field or in some cases cleared sites. New build estates tended to be at the periphery of urban areas with good housing, relatively few community amenities and distance away from employment centres. This has also been the case for the vast majority of the PMCMV initiatives in Brazil, in part because of land availability and in part because of the relative simplicity of this type of approach.

Turning to the differences between the European historic experience and the current Brazilian programme:

First, the Brazilian programme is almost entirely for owner-occupation with the implication that those in the lower income scales obtaining the PMCMV Bracket 1 housing, who cannot obtain and fund a mortgage, make interest payments (in many ways equivalent to a rent) for ten years. Thereafter they own the property outright. This generates very different costs, benefits and opportunities as compared to rental units where there is a social landlord with responsibilities for management and maintenance and a continuing revenue stream, but often also the need for continuing subsidies.

Second, one benefit of this approach is that the developer facilitates the provision of infrastructure and, in some cases, provides site management and so play the role of housing associations or municipal owners in the European context. On the other hand developers are profit oriented and managing costs into the longer term may be difficult. In the European context municipalities, Housing Associations and other non-profit providers have been a valuable resource, not just in terms of managing and allocating the social rented housing stock but also in terms of neighbourhood management and the provision of residence based services. In the Eastern European context in particular the privatisation of housing has led to major problems in ensuring adequate affordable management, maintenance and improvement. Equally financial constraints have sometimes made it difficult for municipalities and non-profits to undertake the required on-going investment. There are thus costs and benefits to either approach and the appropriate choice depends both on built form and on financial and management regimes.

One type of development where these issues are of particular relevance is the renovation of older housing in central urban areas where there is an established community. In this context there is the potential for co-operatives to own and manage property as has been successfully achieved in a number of European countries. Although this approach is part of the Brazilian programme it has proved politically difficult to progress and replicate such schemes.

Third, to a greater extent than in most European examples, the developments also include on-site services and utilities which have to be paid for in addition to the interest payments. Households are also sometimes offered access to debt finance for the purchase of white goods, furniture, etc. These increased opportunities together with higher service standards may of themselves generate affordability problems especially for those on the lower incomes.

Fourth, Brazil's programme is taking place at a time when information technology and data are far more available than they were in the 1950s and 1960 and in the context of a highly sophisticated, well organised and progressive national welfare system, which enables the housing allocation rules to be based on detailed information about the individual household, resulting in less deadweight loss than was possible in Europe.

Fifth, continuing on the same theme, in Europe people were either in or out of the social rented sector and, if in, received the same level of rental subsidy for a given property type in a particular location whatever their household circumstances. In Brazil the programme allows for three levels of support with access rules based on income and family circumstances resulting in a progressive system where the greatest help goes to those at the bottom end of the market.

Finally, and perhaps most importantly, because the programme is based on national costs, these are relatively generous in some areas and extremely difficult to make work in other areas. This is one reason why the programme is not being fully delivered in high cost areas. The use of national income bands generates even more extreme outcomes where, in some regions, high proportions of households are eligible for PMCMV Bracket 1 and the vast majority are eligible for some form of assistance, while in higher income areas – notably the major Southern cities – relatively few households are eligible especially for PMCMV Bracket 1, even though the housing needs are very great. The most obvious way to address this problem is to regionalise both costs and incomes. However this type of solution may both be more expensive and undermine political feelings of spatial equity. In Europe many different mixes of subsidy have been utilised in different countries and over time. Nowadays income-related subsidies based on actual or area costs are the most usual solution. Even so, it is still often easier to build in lower cost regions than to address the needs of those in the highest demand areas.

These similarities and differences help to clarify some of the lessons that might be drawn from European experience and form the basis of the European Union-Brazil Dialogue. Here we identify nine main areas for discussion.

1. The building programme

As we have already noted, the very large investment programme being undertaken in Brazil has much in common with many of the Government sponsored investment programmes undertaken in Europe in the 1950s and 1960s. Under these programmes governments provided public money and often land, normally to develop large estates of dwellings with higher standards than generally available, usually in the form of apartment blocks and often at the periphery of cities.

These investment programmes were based on large scale supply side subsidies and depended wholly on public finance. Rents were generally based on historic costs. The programmes usually accommodated a range of lower and middle income groups often in stable and reasonably well paid employment as finance for owner-occupation was not readily available and standards in the private rented sector were often low. The dwellings provided were much in demand and there were long waiting lists in many countries.

There were identified problems in many countries arising from the relatively small numbers of developers able to contract on large sites, difficulties in negotiating cost effective contracts, the delivery of lower standards of workmanship and materials than contracted and at the limit elements of corruption. Perhaps these were inherent in trying to complete very large scale programmes in relatively short time periods in a post-war environment. However the vast majority of homes proved entirely adequate.

However over time – as on the one hand, incomes and opportunities increased and on the other standards of provision fell behind to that available in the market – a range of problems became increasingly important (although their extent differed greatly between countries depending on the forms of subsidy available and many other factors). These included:

(I) Access to jobs was sometimes limited by poor quality transport links;

(II) Services and retail provision were often quite limited;

(III) As better off households were able to move to other neighbourhoods and to become owner-occupiers the mix of households changed and concentrations of poverty and segregation emerged;

(IV) Historic costs often did not allow for effective programmes of repairs, maintenance and improvement – necessary not just as general standards rose but also because the quality of the fabric was not always long lasting;

(V) As households in the sector became relatively poorer and more vulnerable more services were needed in addition to income support; and

(VI) As concentrations of poverty became more widespread neigh bourhoods also often ran down and began to require major in vestment to maintain and improve the localities

Some of these problems were the outcome of success as the economies became richer, housing standards rose and there was a wider range of opportunities for households. However the costs of maintaining these invest- ments fell mainly on the government and have in many cases resulted in large scale demolition and regeneration programmes. The European experience does not negate the value of these large programmes – they housed people in relatively good conditions at relatively low costs for many years. However some of the experience helps point to issues that can perhaps be avoided in the future, notably:

(I) the need for transparency in contracting and pricing;

(II) recognising that a new building programme is only the starting point of the process of ensuring higher quality housing for all and for the whole lifetime of the housing; and

(III) that developing very large numbers of units over a short space of time tends to result in similar patterns of deterioration and need for investment in the existing stock.

2. Tenure specific policy: concentrating on owner-occupation

Most of the European experience has been in the form of public sector rented housing rather than of owner-occupation, especially when accommodating those in the lowest income categories. In part this was because in the 1950s and 1960s renting was the majority tenure. Another reason was that mortgage markets were highly regulated so there were inadequate private finance markets to support owner-occupation and little interest in expanding that market until the 1970s and 1980s. In the post war period the emphasis was therefore much more on providing social housing for the working poor and lower middle classes who were seen as the constituency for socialist governments across Europe.

The most important benefit of rental accommodation from the point of view of government is that the subsidies are not simply transferred to the purchaser but remain in place for generations to come. This asset base has underpinned self-supporting social rented housing sectors in a number of major European countries in part because of general inflation but also because of house price rises. The second major benefit – which has often not been fully realised – is that repairs, maintenance and improvement can be more effectively organised and regulated as compared to the more choice-based owner-occupied sector where households may not have either the incentive or the capacity to undertake the necessary investment in the property. In particular there are important lessons to be learned from Eastern Europe where the privatisation of housing has resulted in the prevalence of owner-occupation in flatted accommodation but without either the framework or the resources to ensure adequate maintenance and improvement.

Owner-occupation for a wide range of income groups has, on the other hand, been the norm in some more rural systems and in Southern Europe. Greece, Spain and Italy have systems that were originally family based which worked well when there was additional government support to raise standards but are currently under considerable strain – especially as household structures and labour mobility patterns change. Norway with strong government income-related subsidies does provide owner-occupation fully down the income scale as the appropriate tenure for settled households. Ireland has traditionally favoured owner-occupation but is now putting more emphasis on rented housing to provide for younger, more mobile households.

One benefit of owner-occupation is seen to lie in developing a 'property owning democracy' and integrating lower income households more into society. This was one important political argument behind the UK Right to Buy scheme and it has clearly been of importance in determining policy in Italy and Norway. Today, arguments centre more on the positive role of owner-occupation in limiting the need for government support for older households by ensuring that households can pay for their own accommodation as they get older and have paid off their mortgages and overall living costs are therefore lower.

The Brazilian position is very different – except perhaps with respect to rural areas, especially in Southern Europe. Large proportions of households live in self–build units for which they are responsible. The experience and expectation is therefore more in terms of owner-occupation. In addition, in many emerging economies, there are no systems in place which could ensure rent collectability – a very practical reason for using owner-occupation rather than renting.

The biggest problem for government however is that, where owner-occupation requires large subsidies to make it viable, these are not readily recoverable. However further up the income distribution, where households can be expected to raise their own mortgages, owner-occupation clearly has the benefit of releasing funds to recycle into further investment. This is one reason for the development of shared equity schemes in a number of European countries (where part of the property is funded by a loan which is repaid at the market price at the time of sale) as these allow the state to share risks and also a proportion of any capital appreciation. The Brazilian model of PMCMV Bracket 1 as currently specified has no potential to recycle the large scale subsidy so it is justified as a one-off payment to increase the supply of affordable housing and to accommodate low-income households into the long term future. The extent to which this will prove effective will depend significantly on the capacity of households to maintain and improve their units from their own resources.

3. Built form

There must be concern about the built form being employed especially for the PMCMV Bracket 1 in terms of longer term viability. In Europe there are many examples of similar approaches which had the benefit of realising economies of scale and speed. However as incomes rise there will in many places be increasing demand to improve comfort levels including in particular retrofitting air conditioning – an expensive approach with significant costs to the environment. Secondly the built form is inflexible – in Europe it has proved difficult to meet households' expectations as the demand for space and quality rises. Many such blocks were demolished within twenty or thirty years of their construction, partly because of the high costs of maintenance but also because they did not meet aspirations. Third, further investment in the existing stock is always more complex in apartment blocks than in houses – and some forms of community involvement, such as co-operatives and community management, have proved more effective than either top-down administrative decisions or individual decisions. Fourth, many households may find the costs of services associated with the built form to be as much of a burden as the interest payments. In addition there are issues around the longer term value of services provided in the blocks such as community rooms – which have tended to go out of use in European countries as incomes rise.

The participants in the seminars noted that Brazil is a very large country and it is difficult for a European to understand how regional and local requirements can be expressed in the prevalent approach. In Europe these issues, however, mainly came to the fore after at least two decades – implying that large numbers of people benefit significantly from higher standards given the current stage of economic development.

Further up the system in Brackets 2 and 3 of PMCMV there are greater opportunities for different built forms and higher expenditures on managing and maintaining the immediate neighbourhood. At these levels households have the right, if they can pay, to purchase larger units than would be the normal administrative allocation. This has real resource costs to government but may result in more stable communities.

4. Housing regeneration

At the present time the programme appears to have been relatively unsuccessful in achieving investment in older, usually central, urban areas. In the older cities of Brazil there are large areas of low density, underutilised commercial and manufacturing properties often in individual ownership. In principle, it would be possible to redevelop these areas to provide mixed use, modern, efficient properties, enabling regeneration of these areas as well as providing large quantities of affordable and market housing in well located areas accessible to amenities. Equally in some cities, notably Rio and Salvador, there are large numbers of empty colonial buildings that could be renovated and brought into use attracting other investment into these areas. These opportunities are particularly important in the major Southern cities where the opportunity cost of the current usage is very low as compared to effectively regenerating the areas – although of course these uses are highly valued by their owners and occupiers.

The European experience of regeneration (as opposed to clearance) did not start until the 1980s and1990s and many lessons had to be learned about how to put together the legal powers, the financing capacity, the management experience and the capacity to develop partnerships with the community and other stakeholders to make the process work effectively. Diverse ownership and the need for local authority commitment to the use of compulsory purchase powers have proved to be particularly problematic together with the very long lead times involved. Brazil has had some successful experiences but these have generally not involved providing housing across the income scale. There are many lessons to be learned from the European experience both about what not to do and what appears to work well. However these lessons cannot be readily transferred into a different legal, administrative and cultural context without extreme care. In particular, in the housing context, the distributional impacts can be particularly regressive unless directly and transparently addressed in the development of policy. However the potential gains in terms of economic growth as well as improved housing conditions are potentially enormous.

5. The role of local authorities and non-profit housing providers

In almost all European countries local authorities play an important part in social housing provision – as suppliers of land and infrastructure; as regulators of quality and sometimes allocation; at times as direct providers; and as providers of local oversight about what is provided, where and for whom. One of the benefits of the Brazilian programme is that in principle at least it provides the potential to build local authority capacity so that authorities can take on this longer-term role. However in some European countries there have been important political and governance tensions around both provision and allocation of land and housing. One of the costs, which mirrors European experience, is that local authorities vary in their commitment to government initiatives and in capacity so outcomes can vary greatly between localities with apparently similar opportunities. In this context it is often seen as the easy option to allocate even more powers to the centre. However housing is a continuing commitment, at the local level so ensuring local authority buy-in has long term benefits.

In the European context the role of non-profit organisations as neighbourhood and housing managers as well as developers has been increasingly important. They have local knowledge and experience, commitment to ensuring high quality housing and well operating neighbourhoods, the capacity to borrow against the growing value of their assets, clear mission statements and freedom from day-to-day political involvement. As such they can often do a better job than either the local authorities with their much wider responsibilities or central government with inadequate local knowledge. These organisations have taken decades to mature and to take on wider responsibilities than just providing a decent home. Germany provides some of the best examples as reflected in the contribution from the German expert at the European seminar. In part because of the emphasis on owner-occupation there are relatively few examples of this type of model in Brazil, although both employment and housing based co-operatives provide some exemplification. Again what is sensible is not to replicate but to examine how similar benefits can be achieved in different ways. At the present time this role is, at least in some developments being provided by longer term contracts with the developers who provide services and manage the local environment. However with- out a direct involvement in terms of asset base it is difficult to ensure their commitment to both efficient provision and consumer orientation that goes with the better examples of housing associations and urban (re)development organisations.

6. Funding and subsidy regimes

As the Dutch presentation and the French example in particular make clear, how housing is funded depends both on the institutional and the fiscal frameworks available in each country as well as on political commitment to housing. Nowadays France is atypical in maintaining many different forms of tax advantage and subsidy as well as a special circuit of housing finance to meet a wide range of needs across income groups. Other countries have tended to emphasise subsidy arrangements for rented housing but tax breaks for owner-occupiers. Some have also concentrated assistance on particular tenures while others look to a more tenure neutral approach. Developers have also gained from tax breaks on new development in many European countries.

The Netherlands and Sweden are seen by many other European countries as the 'holy grail' because, in both countries, social housing makes a positive contribution to the Exchequer due to their capacity to recycle earlier subsidies and to use the benefits of house price inflation to maintain and expand the housing stock. This is not a feasible option where the main form of social housing is owner-occupation unless the government is prepared to constrain private benefits by, for example, requiring the repayment of subsidy on subsequent sale – or a tax regime which has similar attributes.

European experience has pointed to a number of approaches for levering in private finance to replace the government's initial commitment. In the context of owner-occupation this normally involves either household equity or household debt. The UK Right to Buy and similar schemes in other countries have replaced social ownership and funding with a mix of equity and debt allowing authorities to realise at least part of the increasing value of the asset to recycle sometimes into housing, sometimes to reduce government debt or meet other objectives.

The German experience of substituting private equity finance for public within a regulated environment, which is being replicated in some other European countries, is the most extreme version of this approach – but depends on there being assets to transfer – either in the form of housing or land. At the current time this is not an option in Brazil.

Most importantly it has not yet proved possible in the Brazilian context to provide mortgages without some form of guarantee. As the economy grows and the capacity of purchasers to manage their debt increases there should be a market for the privatisation not just of new mortgages but of the existing stock as has been seen in a number of countries with respect to shared ownership as well as social rented housing. However the benefits of this approach depend on market valuations of risk and may not be achievable in the shorter term.

7. Supply versus demand subsidies

In most European countries governments provide income-related, demand side housing subsidies which either substitute for or complement more traditional supply side and land subsidies. Depending in their form these can be seen as more general income support or as an incentive for lower income households to choose to consume more housing and thus achieve basic housing standards. Two of the reasons why demand side subsidies have become relatively more important in Europe is that they are universal (while supply subsidies are limited by the scale of provision) and targeted, in that, if household circumstances improve, that household will no longer be eligible for assistance. The biggest cost is that there is no direct impact on total supply – which may be the dominant requirement in countries where incomes and aspirations are growing rapidly and there are national shortages of supply.

Many emerging economies do not have the Information Technology systems or the data collection capacity, let alone the delivery systems, in place that would allow a greater emphasis on demand side subsidies even if they were seen to be more appropriate. Brazil clearly does already have that capacity in the context of *Programa Bolsa Familia* but currently places the emphasis more on the need for investment.

Better understanding of the extent to which housing poverty (as opposed to housing standards) remains a widespread factor in household well-being for those not in receipt of government subsidised housing after the effects of *Programa Bolsa Familia* is taken into account would provide a stronger basis for clarifying where government housing subsidy might be better directed into the longer term. The European experience is that demand side subsides can be much more flexible to individual circumstances and help far larger numbers of households than even the largest of government supply programmes. However the emphasis did not generally move towards income related demand side subsidies until national numerical shortages had been overcome.

Within the programme, participants noted the very much more sophisticated approach in the Brazilian programmes to ensuring that support was progressive with respect to incomes than had been the European experience. As a result the poorest undoubtedly gain most from the programme while those further up the income scale are helped more through access to mortgage funding. This has been one of most well regarded attributes of the programme by international organisations such as the World Bank. Even so, supply based subsidies cannot address the broader distributional issue that there are large numbers of households within similar circumstances who have no access to the housing programme.

8. Spatial variations in demand, need and cost

One of the most important issues raised by the London seminar participants in the Brazilian context related to the problems of a subsidy regime based on national average incomes and prices. Such systems tend to make it easy to incentivise developers to provide housing in lower demand or lower priced areas while making it extremely difficult for suppliers to meet requirements in higher cost areas where needs are likely to be greater. This is reflected in the evidence on the regional distribution of housing output in the programme and particularly in the difficulties experienced in achieving targets in the major Southern cities.

On the consumer side, constant income limits mean that very high proportions of households in low income areas – which are often also low priced areas where incomes go further in meeting the necessities of life – are eligible for subsidised housing even at the PMCMV Bracket 1 level. However households with similar purchasing power in more expensive areas will have higher incomes and may well be ineligible for assistance.

As has been seen in many European countries, this type of approach tends to make it easier to meet targets because of the interest in increasing economic activity in lower demand areas but skews both investment and consumption away from the higher demand higher cost areas where both housing need and economic opportunity may be greater.

Into the medium term it appears clear to the outside observer that, even though there are important political and administrative reasons for the current simple approach, into the longer term there will have to be some rebalancing of investment and subsidy across the country if housing standards overall are to be improved and economic growth is not to be hindered by inadequate accommodation in major urban areas.

9. Incentives, subsidies and standards

A final issue is a traditional one, raised in relation to almost all housing programmes in emerging economies: that the deeper the subsidy and the lower the incomes of households obtaining the housing, the greater the incentive for such households to realise some of the benefits to enable them to purchase other necessities of life. Potential examples of this could include:

- additional family members living in the home to overcrowding levels (and at the same time in some cases, incentives to split the formal household at the time of application in order to obtain more than one unit);
- subletting in order to gain cash to buy other goods and services – either while remaining in the home or the owner going back to live with other family members; and
- selling the property on to other less needy households or even to investors who will let out the property.

The larger the subsidy, the higher the standards and the lower the income, the greater incentive to reduce the amount of housing the household consumes and to turn the rest into money which can help achieve a higher overall standard of living. A related issue is that more vulnerable households taking up the housing may be subject to pressures to take on additional purchases and debt that they cannot easily afford.

Many economists would argue strongly that choices to consume less than the allocated housing standards and to realise some of the value through sale, letting or bringing in additional family members are desirable approaches as everyone involved is gaining. However these adjustments raise major issues for governments which have specific housing objectives and in particular can be politically extremely difficult as it shows clearly the extent to which a sub-group are benefitting by breaking the rules while others have no access to subsidy. In addition there are often considerable administrative costs involved in monitoring and enforcing regulations.

If these options are excluded, the main way that households can reduce their consumption and increase their capacity to purchase other goods and services is by running down the property and not using scarce funding to undertake repairs and maintenance. This has major long term implications both for maintaining standards and for collecting service charge revenues.

Overall the European experience supports the concept of large scale government sponsored investment programmes at the current stage of development, but also points to a number of issues which have generated problems in the European context, some of which with careful planning could well be avoided in the Brazilian context.

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V.

ANNEX

Table A.1.1
Number of beneficiaries of PMCMV
by region and gender, Income Bracket 1, 2009 to 2013

States and Regions	Male	Female	Total	Male (per cent)	Female (per cent)
North	**4,844**	**42,345**	**47,189**	**10.3**	**89.7**
Rondônia	883	5,686	6,569	13.4	86.6
Acre	233	2,465	2,698	8.6	91.4
Amazonas	702	6,211	6,913	10.2	89.8
Roraima	222	2,047	2,269	9.8	90.2
Pará	2,442	22,255	24,697	9.9	90.1
Amapá	99	471	570	17.4	82.6
Tocantins	263	3,210	3,473	7.6	92.4
Northeast	**25,027**	**164,285**	**189,312**	**13.2**	**86.8**
Maranhão	7,554	31,174	38,728	19.5	80.5
Piauí	2,484	15,908	18,392	13.5	86.5
Ceará	394	9,440	9,834	4.0	96.0
Rio Grande do Norte	1,063	8,572	9,635	11.0	89.0
Paraíba	729	6,289	7,018	10.4	89.6
Pernambuco	2,570	16,935	19,505	13.2	86.8
Alagoas	2,059	15,045	17,104	12.0	88.0
Sergipe	2,000	5,965	7,965	25.1	74.9
Bahia	6,174	54,957	61,131	10.1	89.9
Southeast	**16,198**	**112,859**	**129,057**	**12.6**	**87.4**
Minas Gerais	6,221	46,928	53,149	11.7	88.3
Espírito Santo	626	3,716	4,342	14.4	85.6
Rio de Janeiro	4,385	17,723	22,108	19.8	80.2
São Paulo	4,966	44,492	49,458	10.0	90.0
South	**12,717**	**76,640**	**89,357**	**14.2**	**85.8**
Paraná	2,924	28,834	31,758	9.2	90.8
Santa Catarina	2,926	16,570	19,496	15.0	85.0
Rio Grande do Sul	6,867	31,236	38,103	18.0	82.0
Centre-West	**5,385**	**38,000**	**43,385**	**12.4**	**87.6**
Mato Grosso do Sul	695	5,576	6,271	11.1	88.9
Mato Grosso	1,741	12,592	14,333	12.1	87.9
Goiás	2,937	19,811	22,748	12.9	87.1
Distrito Federal	12	21	33	36.4	63.6
Brazil	**64,171**	**434,129**	**498,300**	**12.9**	**87.1**

Source: Caixa Econômica Federal.

Table A.1.2
Average age of beneficiaries* of PMCMV
by region and gender, income Bracket 1, 2009 to 2013

States and Regions	Male	Female	Total
North	**39.2**	**35.8**	**36.1**
Rondônia	35.1	40.3	39.6
Acre	38.6	35.9	36.1
Amazonas	42.2	36.9	37.5
Roraima	39.0	34.8	35.2
Pará	39.2	34.6	35.0
Amapá	39.0	35.5	36.1
Tocantins	46.1	34.5	35.4
Northeast	**39.0**	**37.6**	**37.7**
Maranhão	37.5	37.4	37.5
Piauí	37.0	36.2	36.3
Ceará	41.8	37.9	38.0
Rio Grande do Norte	37.3	36.3	36.4
Paraíba	39.2	38.2	38.3
Pernambuco	41.1	39.4	39.6
Alagoas	41.4	38.1	38.5
Sergipe	35.4	38.2	37.5
Bahia	41.1	37.3	37.7
Southeast	**39.4**	**38.7**	**38.8**
Minas Gerais	38.7	38.3	38.4
Espírito Santo	34.0	39.8	39.0
Rio de Janeiro	40.0	40.8	40.6
São Paulo	40.3	38.3	38.5
South	**39.1**	**41.6**	**41.3**
Paraná	42.6	40.5	40.7
Santa Catarina	37.0	42.7	41.9
Rio Grande do Sul	38.4	42.1	41.5
Centre-West	**41.8**	**37.3**	**37.9**
Mato Grosso do Sul	42.5	37.0	37.6
Mato Grosso	41.9	36.0	36.7
Goiás	41.5	38.3	38.7
Distrito Federal	47.6	48.6	48.2
Brazil	**39.3**	**38.4**	**38.5**

Source: Caixa Econômica Federal. (*) Age of beneficiaries on the date of contract execution.

Table A.1.3
Average family income of beneficiaries of PMCMV by region and gender, income Bracket 1, 2009 to 2013, R$ per month

States and Regions	Male	Female	Total
North	**566.23**	**620.28**	**614.73**
Rondônia	450.05	551.84	538.16
Acre	586.90	654.82	648.95
Amazonas	625.54	663.59	659.73
Roraima	713.28	766.64	761.42
Pará	552.82	578.32	575.80
Amapá	723.09	866.21	841.35
Tocantins	721.08	792.69	787.27
Northeast	**549.26**	**533.46**	**535.55**
Maranhão	585.74	559.00	564.22
Piauí	468.69	464.85	465.37
Ceará	593.89	642.24	640.30
Rio Grande do Norte	518.22	569.07	563.46
Paraíba	564.48	551.99	553.29
Pernambuco	483.59	466.99	469.18
Alagoas	561.85	514.68	520.36
Sergipe	416.86	426.75	424.27
Bahia	603.78	549.69	555.15
Southeast	**714.47**	**717.90**	**717.47**
Minas Gerais	592.82	710.02	696.30
Espírito Santo	581.66	683.01	668.40
Rio de Janeiro	793.26	648.36	677.10
São Paulo	814.03	756.83	762.57
South	**704.34**	**751.76**	**745.01**
Paraná	715.08	738.85	736.66
Santa Catarina	760.53	836.06	824.72
Rio Grande do Sul	675.82	718.95	711.18
Centre-West	**752.45**	**733.46**	**735.82**
Mato Grosso do Sul	740.80	799.25	792.77
Mato Grosso	734.25	746.42	744.94
Goiás	764.68	706.66	714.15
Distrito Federal	1.076.04	779.93	887.61
Brazil	**640.03**	**645.92**	**645.16**

Source: Caixa Econômica Federal.

Table A.1.4
Average family income of beneficiaries of PMCMV by region and year of contract execution, income Bracket 1, 2009 to 2013, R$ per month

States and Regions	2009	2010	2011	2012	2013	Total
North	**796.99**	**342.68**	**672.98**	**639.32**	**570.24**	**614.82**
Rondônia		330.72	473.77	558.81	592.82	538.10
Acre			703.93	689.43	563.76	649.34
Amazonas			466.95	766.35	482.64	660.16
Roraima			842.21	681.17	699.65	761.36
Pará	796.99		681.21	596.47	535.54	575.79
Amapá				666.66	855.68	842.75
Tocantins		582.73	774.08	726.63	826.80	787.31
Northeast		**439.88**	**535.76**	**535.51**	**540.80**	**535.52**
Maranhão		369.00	614.74	544.22	572.73	564.09
Piauí		388.53	486.17	471.67	446.18	465.29
Ceará			493.09	639.60	661.04	640.08
Rio Grande do Norte			606.95	588.01	434.80	563.51
Paraíba		620.57	469.63	540.84	567.47	553.29
Pernambuco		200.00	409.19	459.54	490.91	469.39
Alagoas		628.91	507.52	496.29	536.08	520.36
Sergipe			543.05	403.56	421.82	424.37
Bahia		479.55	532.75	572.15	560.49	555.10
Southeast	**755.35**	**532.71**	**694.46**	**725.26**	**748.17**	**717.71**
Minas Gerais	401.80	464.64	705.50	706.68	696.48	696.19
Espírito Santo		397.56	584.16	742.88	718.67	668.90
Rio de Janeiro		587.34	590.99	688.59	700.97	677.87
São Paulo	810.59	606.88	700.48	765.72	853.01	762.93
South	**516.79**	**567.52**	**719.95**	**760.93**	**777.61**	**744.74**
Paraná	808.18	573.63	689.72	759.21	765.99	736.15
Santa Catarina		606.46	843.86	858.46	789.99	824.58
Rio Grande do Sul	481.01	559.46	680.81	716.48	782.39	711.06
Centre-West		**646.50**	**700.22**	**738.29**	**795.80**	**735.70**
Mato Grosso do Sul		610.92	772.33	864.07	788.30	792.77
Mato Grosso			686.57	717.31	827.32	744.50
Goiás		655.72	697.72	718.61	763.78	714.19
Distrito Federal				872.33	898.26	890.40
Brazil	**690.46**	**532.58**	**651.16**	**652.59**	**644.04**	**645.17**

Source: Caixa Econômica Federal.

Table A.1.5
Heads of household earning up to R$1,600.00, by region and gender, 2013

States and Regions	Male	Female	Total	Male (per cent)	Female (per cent)
North	**1,816,025**	**1,188,904**	**3,004,929**	**60.4**	**39.6**
Rondônia	195,967	99,555	295,522	66.3	33.7
Acre	74,912	61,836	136,748	54.8	45.2
Amazonas	327,947	254,248	582,195	56.3	43.7
Roraima	52,903	42,423	95,326	55.5	44.5
Pará	929,094	572,986	1,502,080	61.9	38.1
Amapá	61,141	43,491	104,632	58.4	41.6
Tocantins	174,061	114,365	288,426	60.3	39.7
Northeast	**7,054,047**	**4,989,165**	**12,043,212**	**58.6**	**41.4**
Maranhão	766,748	552,507	1,319,255	58.1	41.9
Piauí	417,707	263,852	681,559	61.3	38.7
Ceará	1,183,962	752,321	1,936,283	61.1	38.9
Rio Grande do Norte	393,762	284,980	678,742	58.0	42.0
Paraíba	516,232	345,208	861,440	59.9	40.1
Pernambuco	1,137,978	858,134	1,996,112	57.0	43.0
Alagoas	421,958	303,879	725,837	58.1	41.9
Sergipe	306,978	189,104	496,082	61.9	38.1
Bahia	1,908,722	1,439,180	3,347,902	57.0	43.0
Southeast	**6,112,456**	**5,242,798**	**11,355,254**	**53.8**	**46.2**
Minas Gerais	1,908,089	1,302,812	3,210,901	59.4	40.6
Espírito Santo	354,767	270,798	625,565	56.7	43.3
Rio de Janeiro	1,222,108	1,264,469	2,486,577	49.1	50.9
São Paulo	2,627,492	2,404,719	5,032,211	52.2	47.8
South	**2,015,395**	**1,596,310**	**3,611,705**	**55.8**	**44.2**
Paraná	788,972	588,189	1,377,161	57.3	42.7
Santa Catarina	422,909	296,949	719,858	58.7	41.3
Rio Grande do Sul	803,514	711,172	1,514,686	53.0	47.0
Centre-West	**1,191,998**	**911,626**	**2,103,624**	**56.7**	**43.3**
Mato Grosso do Sul	210,836	159,566	370,402	56.9	43.1
Mato Grosso	296,888	193,800	490,688	60.5	39.5
Goiás	554,131	401,203	955,334	58.0	42.0
Distrito Federal	130,143	157,057	287,200	45.3	54.7
Brazil	**18,189,921**	**13,928,803**	**32,118,724**	**56.6**	**43.4**

Source: PNAD 2013.

Table A.1.6
Average age of heads of household earning up to R$ 1,600.00 by region and gender, 2013

States and Regions	Male	Female	Total
North	**44.0**	**43.6**	**43.8**
Rondônia	45.0	44.0	44.7
Acre	41.0	42.0	41.5
Amazonas	43.0	41.0	42.1
Roraima	45.0	40.0	42.8
Pará	44.0	45.0	44.4
Amapá	41.0	43.0	41.8
Tocantins	47.0	44.0	45.8
Northeast	**45.6**	**47.3**	**46.3**
Maranhão	45.0	45.0	45.0
Piauí	47.0	45.0	46.2
Ceará	46.0	48.0	46.8
Rio Grande do Norte	45.0	47.0	45.8
Paraíba	45.0	49.0	46.6
Pernambuco	46.0	49.0	47.3
Alagoas	44.0	47.0	45.3
Sergipe	44.0	46.0	44.8
Bahia	46.0	47.0	46.4
Southeast	**47.9**	**49.9**	**48.8**
Minas Gerais	48.0	50.0	48.8
Espírito Santo	46.0	48.0	46.9
Rio de Janeiro	48.0	50.0	49.0
São Paulo	48.0	50.0	49.0
South	**49.2**	**51.6**	**50.3**
Paraná	48.0	51.0	49.3
Santa Catarina	50.0	52.0	50.8
Rio Grande do Sul	50.0	52.0	50.9
Centre-West	**46.5**	**46.9**	**46.7**
Mato Grosso do Sul	47.0	47.0	47.0
Mato Grosso	47.0	45.0	46.2
Goiás	47.0	49.0	47.8
Distrito Federal	42.0	44.0	43.1
Brazil	**46.7**	**48.4**	**47.4**

Source: PNAD 2013.

Table A.1.7
Average family income of households earning up to R$ 1,600.00 by region and gender, 2013, R$ per month

States and Regions	Male	Female	Total
North	**906.57**	**857.18**	**887.03**
Rondônia	989.43	893.69	957.18
Acre	888.55	840.66	866.89
Amazonas	891.43	893.85	892.49
Roraima	918.97	900.32	910.67
Pará	884.43	834.44	865.36
Amapá	908.63	824.36	873.60
Tocantins	963.25	863.18	923.57
Northeast	**859.73**	**841.44**	**852.16**
Maranhão	785.73	844.38	810.29
Piauí	896.31	910.65	901.86
Ceará	871.46	839.72	859.13
Rio Grande do Norte	888.68	857.95	875.78
Paraíba	877.98	871.14	875.24
Pernambuco	881.33	849.36	867.59
Alagoas	844.68	829.10	838.16
Sergipe	904.63	817.30	871.34
Bahia	846.51	819.20	834.77
Southeast	**969.08**	**924.38**	**948.44**
Minas Gerais	991.18	960.07	978.56
Espírito Santo	946.56	866.89	912.07
Rio de Janeiro	938.31	884.24	910.81
São Paulo	970.38	932.63	952.34
South	**1.023.05**	**970.26**	**999.71**
Paraná	1.017.36	957.99	992.00
Santa Catarina	1.044.66	968.96	1.013.43
Rio Grande do Sul	1.017.26	980.94	1.000.21
Centre-West	**994.57**	**909.32**	**957.62**
Mato Grosso do Sul	1.027.47	917.52	980.10
Mato Grosso	914.21	889.81	904.57
Goiás	1.038.52	922.57	989.83
Distrito Federal	937.42	891.19	912.14
Brazil	**928.08**	**893.21**	**912.96**

Source: PNAD 2013.

Table A.1.8
Number of beneficiaries of PMCMV
by region and gender, income Bracket 2, 2009 to 2013

States and Regions	Male	Female	Total	Male (per cent)	Female (per cent)
North	**17,661**	**14,381**	**32,042**	**55.1**	**44.9**
Rondônia	3,989	2,511	6,500	61.4	38.6
Acre	415	437	852	48.7	51.3
Amazonas	2,857	2,622	5,479	52.1	47.9
Roraima	284	322	606	46.9	53.1
Pará	8,223	7,030	15,253	53.9	46.1
Amapá	45	58	103	43.7	56.3
Tocantins	1,848	1,401	3,249	56.9	43.1
Northeast	**133,046**	**106,425**	**239,471**	**55.6**	**44.4**
Maranhão	8,697	9,416	18,113	48.0	52.0
Piauí	6,989	6,033	13,022	53.7	46.3
Ceará	12,967	10,564	23,531	55.1	44.9
Rio Grande do Norte	18,019	12,922	30,941	58.2	41.8
Paraíba	18,181	14,053	32,234	56.4	43.6
Pernambuco	18,372	13,723	32,095	57.2	42.8
Alagoas	18,107	15,551	33,658	53.8	46.2
Sergipe	7,620	6,665	14,285	53.3	46.7
Bahia	24,094	17,498	41,592	57.9	42.1
Southeast	**321,458**	**175,227**	**496,685**	**64.7**	**35.3**
Minas Gerais	105,054	51,650	156,704	67.0	33.0
Espírito Santo	9,947	5,477	15,424	64.5	35.5
Rio de Janeiro	29,712	19,971	49,683	59.8	40.2
São Paulo	176,745	98,129	274,874	64.3	35.7
South	**215,626**	**114,544**	**330,170**	**65.3**	**34.7**
Paraná	88,457	43,136	131,593	67.2	32.8
Santa Catarina	47,495	25,420	72,915	65.1	34.9
Rio Grande do Sul	79,674	45,988	125,662	63.4	36.6
Centre-West	**105,759**	**60,802**	**166,561**	**63.5**	**36.5**
Mato Grosso do Sul	14,994	8,423	23,417	64.0	36.0
Mato Grosso	17,114	10,030	27,144	63.0	37.0
Goiás	68,508	38,423	106,931	64.1	35.9
Distrito Federal	5,143	3,926	9,069	56.7	43.3
Brazil	**793,550**	**471,379**	**1,264,929**	**62.7**	**37.3**

Source: Caixa Econômica Federal.

Table A.1.9
Average age of beneficiaries* of PMCMV
by region and gender, income Bracket 2, 2009 to 2013

States and Regions	Male	Female	Total
North	**32.2**	**33.3**	**33.2**
Rondônia	31.6	32.5	32.4
Acre	30.5	33.4	33.1
Amazonas	32.4	32.9	32.9
Roraima	31.0	31.8	31.7
Pará	32.8	34.0	33.8
Amapá	36.1	35.5	35.6
Tocantins	31.2	32.2	32.1
Northeast	**32.4**	**33.9**	**33.7**
Maranhão	32.0	33.3	33.0
Piauí	32.3	34.4	34.1
Ceará	32.7	33.8	33.7
Rio Grande do Norte	32.1	33.5	33.3
Paraíba	32.4	33.7	33.5
Pernambuco	32.8	34.6	34.4
Alagoas	32.0	33.5	33.3
Sergipe	31.4	33.2	32.7
Bahia	32.8	34.5	34.3
Southeast	**32.1**	**33.1**	**33.0**
Minas Gerais	32.3	33.6	33.4
Espírito Santo	31.9	33.2	33.0
Rio de Janeiro	33.6	34.8	34.5
São Paulo	31.8	32.5	32.4
South	**32.0**	**32.9**	**32.8**
Paraná	32.5	33.3	33.2
Santa Catarina	31.1	31.9	31.7
Rio Grande do Sul	31.9	33.2	32.9
Centre-West	**32.2**	**32.8**	**32.7**
Mato Grosso do Sul	31.6	32.1	32.0
Mato Grosso	31.8	32.1	32.0
Goiás	32.4	33.1	33.0
Distrito Federal	33.2	33.7	33.5
Brazil	**32.1**	**33.2**	**33.0**

Source: Caixa Econômica Federal. (*) Age of beneficiaries on the date of contract execution.

Table A.1.10
Average family income of beneficiaries of PMCMV by region and gender, income Bracket 2, 2009 to 2013, R$ per month

States and Regions	Male	Female	Total
North	**2,096.91**	**2,093.85**	**2,089.01**
Rondônia	1,983.37	1,978.08	1,978.79
Acre	2,138.75	2,192.11	2,187.50
Amazonas	2,356.65	2,338.94	2,340.74
Roraima	2,171.16	2,117.47	2,122.72
Pará	2,047.43	2,012.07	2,015.57
Amapá	3,226.77	3,558.58	3,500.95
Tocantins	2,112.32	2,156.25	2,152.92
Northeast	**1,816.90**	**1,771.38**	**1,776.54**
Maranhão	1,991.28	1,935.82	1,946.64
Piauí	1,552.98	1,560.59	1,559.56
Ceará	2,034.54	1,952.08	1,955.38
Rio Grande do Norte	1,735.56	1,714.64	1,716.95
Paraíba	1,775.50	1,757.90	1,759.73
Pernambuco	1,781.76	1,746.21	1,750.89
Alagoas	1,562.22	1,539.38	1,542.13
Sergipe	1,832.07	1,794.27	1,803.76
Bahia	2,018.87	1,916.38	1,926.73
Southeast	**2,109.09**	**2,048.76**	**2,050.38**
Minas Gerais	1,918.59	1,850.80	1,858.73
Espírito Santo	2,121.15	2,043.84	2,054.99
Rio de Janeiro	2,265.50	2,194.73	2,208.77
São Paulo	2,195.34	2,123.53	2,130.74
South	1,509.62	1,423.15	1,453.56
Paraná	2,065.72	1,971.79	1,980.44
Santa Catarina	1,872.61	1,766.11	1,782.09
Rio Grande do Sul	675.82	718.95	711.18
Centre-West	**1,969.02**	**1,953.17**	**1,950.87**
Mato Grosso do Sul	1,953.56	1,953.94	1,953.90
Mato Grosso	1,879.78	1,858.84	1,861.38
Goiás	1,953.73	1,921.82	1,925.94
Distrito Federal	2,514.67	2,499.27	2,504.87
Brazil	**1,878.27**	**1,823.16**	**1,830.63**

Source: Caixa Econômica Federal.

Table A.1.11.
Average family income of beneficiaries of PMCMV by region and year of contract execution, income Bracket 2, 2009 to 2013, R$ per month

States and Regions	2009	2010	2011	2012	2013	Total
North	**2,012.24**	**1,892.75**	**2,033.44**	**2,178.21**	**2,230.69**	**2,195.74**
Rondônia	1,679.73	1,762.86	1,954.85	2,066.28	2,124.45	2,043.90
Acre	2,056.44	1,975.94	2,291.47	2,617.42	2,502.78	2,492.22
Amazonas	2,501.08	2,028.37	2,156.70	2,452.93	2,740.42	2,537.89
Roraima	1,987.64	2,001.71	2,049.91	2,487.50	2,663.91	2,339.11
Pará	2,131.72	1,808.27	1,962.67	2,114.04	2,106.76	2,099.02
Amapá	3,234.13	3,440.77	2,770.56	3,593.47	3,928.95	3,906.00
Tocantins	1,933.96	1,983.90	2,195.20	2,189.33	2,265.62	2,218.12
Northeast	**1,610.68**	**1,609.07**	**1,730.80**	**1,900.34**	**1,961.34**	**1,898.17**
Maranhão	1,916.73	1,748.22	1,946.60	2,105.26	2,090.55	2,065.48
Piauí	1,246.82	1,445.61	1,430.77	1,656.84	1,699.04	1,584.50
Ceará	1,714.97	1,754.03	1,913.55	2,080.15	2,157.42	2,104.65
Rio Grande do Norte	1,521.95	1,626.18	1,687.95	1,783.66	1,779.18	1,746.09
Paraíba	1,501.35	1,535.09	1,703.42	1,907.05	1,892.81	1,878.67
Pernambuco	1,367.26	1,542.75	1,759.24	1,849.07	2,028.28	1,929.97
Alagoas	1,468.80	1,427.50	1,505.77	1,637.37	1,750.29	1,692.50
Sergipe	1,700.07	1,662.08	1,767.01	1,894.42	2,023.73	1,951.61
Bahia	1,885.54	1,794.45	1,846.28	2,100.74	2,185.84	2,058.48
Southeast	**1,843.61**	**1,871.51**	**2,026.16**	**2,182.02**	**2,329.21**	**2,172.96**
Minas Gerais	1,645.51	1,661.85	1,813.40	1,988.78	2,139.25	1,991.82
Espírito Santo	2,018.04	1,895.80	2,103.48	2,148.78	2,248.37	2,124.29
Rio de Janeiro	1,864.60	2,026.74	2,174.52	2,351.53	2,470.60	2,353.12
São Paulo	1,953.70	1,949.48	2,108.51	2,262.25	2,432.22	2,246.39
South	**1,657.33**	**1,708.81**	**1,866.25**	**2,020.01**	**2,156.84**	**2,002.62**
Paraná	1,745.13	1,760.58	1,881.01	1,996.65	2,160.54	2,013.46
Santa Catarina	1,740.98	1,798.95	1,960.16	2,119.65	2,236.69	2,105.11
Rio Grande do Sul	1,583.36	1,623.75	1,797.22	1,983.69	2,089.97	1,931.81
Centre-West	**1,640.07**	**1,745.19**	**1,902.96**	**2,065.17**	**2,136.11**	**2,021.28**
Mato Grosso do Sul	1,834.29	1,847.40	1,918.28	2,004.70	2,047.06	1,989.25
Mato Grosso	1,672.74	1,716.50	1,748.65	1,924.56	2,077.61	1,913.91
Goiás	1,558.54	1,701.63	1,910.48	2,070.38	2,093.28	1,984.93
Distrito Federal	1,977.67	2,041.74	2,328.10	2,870.83	2,846.86	2,854.12
Brazil	**1,734.32**	**1,763.65**	**1,911.40**	**2,074.02**	**2,180.58**	**2,057.08**

Source: Caixa Econômica Federal.

Table A.1.12.
Heads of household earning from R$ 1,000.01 to R$5,000.00, by region and gender, 2013

States and Regions	Male	Female	Total	Male (per cent)	Female (per cent)
North	**1,839,104**	**1,106,982**	**2,946,086**	**62.4**	**37.6**
Rondônia	255,836	111,478	367,314	69.7	30.3
Acre	69,334	53,491	122,825	56.4	43.6
Amazonas	351,156	281,244	632,400	55.5	44.5
Roraima	50,602	41,912	92,514	54.7	45.3
Pará	860,298	475,996	1,336,294	64.4	35.6
Amapá	71,634	45,027	116,661	61.4	38.6
Tocantins	180,244	97,834	278,078	64.8	35.2
Northeast	**5,681,664**	**3,664,721**	**9,346,385**	**60.8**	**39.2**
Maranhão	590,660	426,319	1,016,979	58.1	41.9
Piauí	348,758	211,414	560,172	62.3	37.7
Ceará	946,083	525,043	1,471,126	64.3	35.7
Rio Grande do Norte	365,068	232,924	597,992	61.0	39.0
Paraíba	414,239	253,991	668,230	62.0	38.0
Pernambuco	968,277	635,294	1,603,571	60.4	39.6
Alagoas	301,457	195,511	496,968	60.7	39.3
Sergipe	249,481	130,879	380,360	65.6	34.4
Bahia	1,497,641	1,053,346	2,550,987	58.7	41.3
Southeast	**11,886,441**	**7,093,779**	**18,980,220**	**62.6**	**37.4**
Minas Gerais	3,067,591	1,614,623	4,682,214	65.5	34.5
Espírito Santo	540,450	301,649	842,099	64.2	35.8
Rio de Janeiro	2,057,709	1,530,510	3,588,219	57.3	42.7
São Paulo	6,220,691	3,646,997	9,867,688	63.0	37.0
South	4,467,444	2,559,347	7,026,791	63.6	36.4
Paraná	1,663,384	894,384	2,557,768	65.0	35.0
Santa Catarina	1,088,248	562,952	1,651,200	65.9	34.1
Rio Grande do Sul	1,715,812	1,102,011	2,817,823	60.9	39.1
Centre-West	**2,054,353**	**1,191,139**	**3,245,492**	**63.3**	**36.7**
Mato Grosso do Sul	390,100	204,684	594,784	65.6	34.4
Mato Grosso	427,287	257,626	684,913	62.4	37.6
Goiás	972,448	506,224	1,478,672	65.8	34.2
Distrito Federal	264,518	222,605	487,123	54.3	45.7
Brazil	**25,929,006**	**15,615,968**	**41,544,974**	**62.4**	**37.6**

Source: PNAD 2013.

Table A.1.13
Average age of heads of household earning from R$ 1,000.01 to R$5,000.00 by region and gender, 2013

States and Regions	Male	Female	Total
North	**45.4**	**45.1**	**45.3**
Rondônia	46.0	44.0	45.3
Acre	43.0	46.0	44.4
Amazonas	44.0	44.0	44.0
Roraima	43.0	42.0	42.6
Pará	46.0	46.0	46.0
Amapá	43.0	44.0	43.4
Tocantins	47.0	46.0	46.6
Northeast	**49.1**	**50.5**	**49.7**
Maranhão	50.0	48.0	49.2
Piauí	51.0	48.0	49.8
Ceará	50.0	53.0	51.2
Rio Grande do Norte	49.0	49.0	49.0
Paraíba	48.0	52.0	49.6
Pernambuco	49.0	52.0	50.3
Alagoas	47.0	50.0	48.3
Sergipe	47.0	49.0	47.8
Bahia	49.0	50.0	49.4
Southeast	**47.4**	**50.4**	**48.8**
Minas Gerais	48.0	50.0	48.8
Espírito Santo	47.0	50.0	48.3
Rio de Janeiro	48.0	52.0	50.0
São Paulo	47.0	50.0	48.4
South	**47.4**	**49.5**	**48.3**
Paraná	46.0	48.0	46.9
Santa Catarina	47.0	49.0	47.8
Rio Grande do Sul	49.0	51.0	49.9
Centre-West	**44.5**	**46.2**	**45.3**
Mato Grosso do Sul	45.0	46.0	45.4
Mato Grosso	44.0	44.0	44.0
Goiás	45.0	48.0	46.3
Distrito Federal	43.0	45.0	44.1
Brazil	**47.4**	**49.6**	**48.4**

Source: PNAD 2013.

Table A.1.14
Average family income of heads of household earning from R$ 1,000.01 to R$5,000.00 by region and gender, 2013, R$ per month

States and Regions	Male	Female	Total
North	**2,140.14**	**2,141.40**	**2,140.21**
Rondônia	2,215.97	2,227.19	2,219.75
Acre	2,177.39	2,102.12	2,143.35
Amazonas	2,219.59	2,248.17	2,232.07
Roraima	2,134.21	2,133.37	2,133.84
Pará	2,076.35	2,057.21	2,069.05
Amapá	2,302.28	2,435.50	2,357.65
Tocantins	2,105.12	2,035.87	2,077.66
Northeast	**2,021.39**	**1,962.38**	**1,997.12**
Maranhão	2,081.00	1,915.87	2,011.84
Piauí	1,933.25	1,898.42	1,919.77
Ceará	1,969.98	1,932.54	1,955.43
Rio Grande do Norte	2,126.02	2,072.91	2,103.72
Paraíba	2,024.38	1,968.46	2,001.97
Pernambuco	2,064.70	1,957.21	2,018.49
Alagoas	1,953.71	1,969.70	1,960.40
Sergipe	1,987.44	2,003.17	1,993.44
Bahia	2,015.83	1,979.70	2,000.30
Southeast	**2,474.44**	**2,324.78**	**2,404.23**
Minas Gerais	2,344.89	2,216.29	2,292.71
Espírito Santo	2,348.45	2,309.45	2,331.57
Rio de Janeiro	2,411.22	2,304.47	2,356.94
São Paulo	2,570.19	2,382.60	2,480.55
South	**2,522.07**	**2,385.60**	**2,462.23**
Paraná	2,492.23	2,389.76	2,448.46
Santa Catarina	2,618.10	2,468.52	2,556.40
Rio Grande do Sul	2,490.08	2,339.87	2,419.55
Centre-West	**2,388.23**	**2,329.14**	**2,360.97**
Mato Grosso do Sul	2,397.30	2,287.13	2,349.84
Mato Grosso	2,376.67	2,324.94	2,356.24
Goiás	2,326.10	2,252.19	2,295.06
Distrito Federal	2,621.96	2,547.61	2,581.30
Brazil	**2,352.83**	**2,237.03**	**2,300.35**

Source: PNAD 2013.

LIST OF AUTHORS

Ana Lelia Magnabosco
University of São Paulo

Anaclaudia Rossbach
Regional Adviser for Latin America and the Caribbean

Christine Whitehead
Professor of London School of Economics

Fernando Garcia de Freitas
National Confederation of Services (CNS)

Inês Magalhães
National Secretary of Housing, Brazilian Ministry of Cities

Júnia Santa Rosa
Director of the Department of Institutional Development and Technical Cooperation, National Secretary of Housing, Brazilian Ministry of Cities

Melissa Fernandez
London School of Economics

William Cobbett
Cities Alliance Director

Internationally, the Brazilian search for effective and innovative ways of reshaping cities marked by inequalities and the stubborn prevalence of poor housing and living conditions is a major contribution to the global search for sustainable urbanisation processes.

We therefore welcomed the opportunity provided by the National Housing Secretary to support this edition of the Brazil – European Union Sector Dialogues on Housing Finance and Subsidies. We believe this publication will share useful lessons from Minha Casa, Minha Vida through the lenses of renowned experts from a range of European countries.

We also hope that this publication will contribute to a better understanding on the potential – and the limitations – of the role of national housing policy in building more equitable and inclusive cities.

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Cities Alliance

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