Trend and composition of brazilian household wealth in the post-crisis period (2007-2014): a brief analysis from the income tax data

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Abstract

The aim of this short paper is to analyze the recent trend and composition of household wealth in Brazil, specifically in the post-Global Financial Crisis period (2008-2013) and to draw some parallels with the Brazilian macroeconomic framework of this period. The research was carried out with tax data provided by the Brazilian Federal Revenue Office (RFB). Although the data aggregation level is still high and the data cover a relatively short period (2007-2014), it is possible to draw some conclusions and establish more refined hypothesis about the evolution and composition of brazilian household wealth based on the data provided. In general, there is a high share of fixed assets in the composition of household wealth, particularly real estate, which was reinforced by the recent credit cycle. With regard to financial assets, the high interest rate policy has been manifested in the greater proportion of fixed income assets compared to equity assets, especially shares. In addition, household wealth has shown a high concentration in the higher income levels.

Keywords: household wealth; Global Financial Crisis; Brazil; macroeconomic environment

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Introduction

The use of tax data for the analysis of income and wealth distribution has gained huge prominence in the international literature with Piketty's *Capital in the twenty-first century* (2014). Indeed, several studies, e.g. Saez and Zucman (2016), Wolff (2014), and others, have shown the relevance of using this database.

However, Brazil remain on the sidelines of this kind of research due to a lack of an adequate tax data basis for research. Only in 2012, the Brazilian Federal Revenue Office (RFB) began to publish annual data on Personal Income Tax (IRPF) and currently provides a base which covers the period from 2007 to 2014. Although the level of aggregation is still high and the data cover a relatively short period, it is possible to draw some conclusions and establish more refined hypothesis about the evolution and composition of brazilian household wealth based on the data provided.

In this sense, the objective of this paper is to analyze the evolution of household wealth in the post Global Financial Crisis period, specifically between 2007 and 2014, and to carry out some possible comparisons with the Brazilian macroeconomic framework in this period.

Despite the low frequency of the data, which prevents further analysis, the information provided by the RFB and IBGE can reveal some effects of the domestic macroeconomic policies and the financial crisis. For example, the increase in the stock of real estate assets greater than that of GDP may indicate an effect of the increase in housing loans via public banks. In the assets side, the change in the stock of bank savings and fixed income investments is directly related to the variation of the short-term interest rate and, therefore, to the monetary policy of the Central Bank (Afonso, 2014). On the liabilities side, the changes in the bank loans and other short-term loans stock also respond to changes in the monetary and credit policies and to the variations in the economic activity level.

The work is divided in two sections beyond this brief introduction. The first presents the data provided by the RFB and IBGE, with focus on the first and on items related to the households wealth. The second section describes briefly the Brazilian macroeconomic post-crisis scenario and establishes some connections between the evolution and composition of household wealth and the and the policies adopted to prevent the contagion effect of the Global Financial Crisis. Finally, a brief conclusion with suggestions for future work.

1. Trends in wealth in Brazil in the post-crisis period: an outline from the data

The analysis of household and individual wealth in Brazil is still limited, mainly due to the scarcity and the quality of data on the subject. Currently, it is possible to list three data sources for analysis of household and individual wealth in Brazil. The first is the financial assets matrix built by Macedo and Silva (2016), based on the IBGE and Central Bank partnership on financial data. The second database was developed by Credit Suisse (2015) and is not only focused on the compilation of data on wealth of several countries, but also in the estimation of individual wealth in countries that do not disclose all the relevant data on this topic. Finally, the IRS has recently disclosed the data of Personal Income Tax with some disaggregation. Although insufficient for deeper analysis, this kind of data allows some conclusions about trends in wealth and comparisons with other available databases.

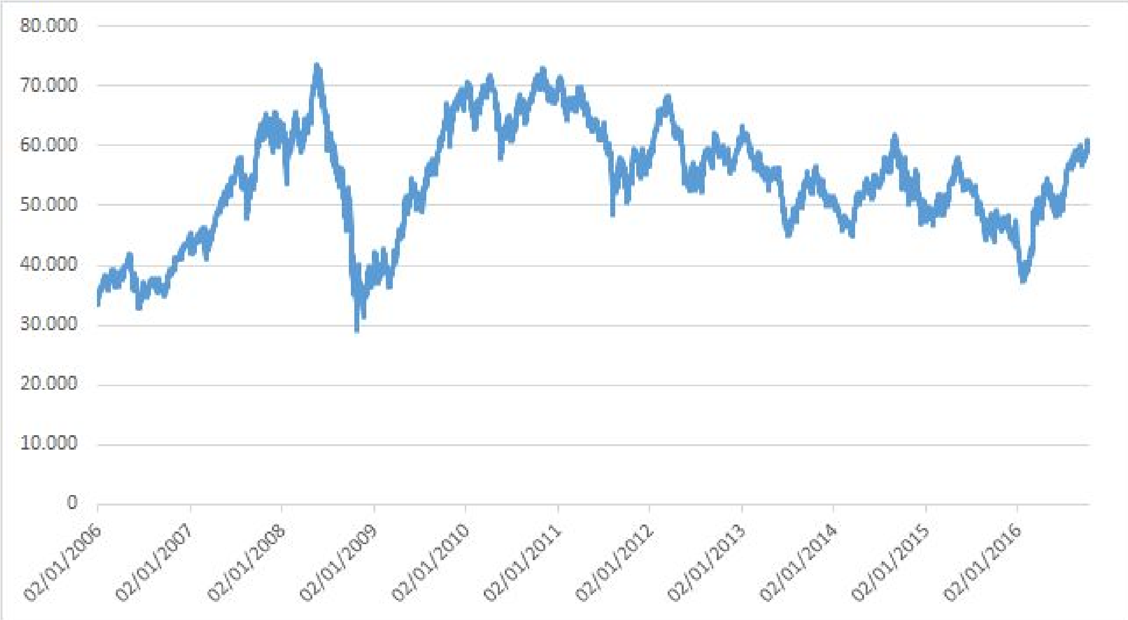
Based on the first data source, Macedo e Silva (2016) analyzes the financial wealth of households, which are aggregated in this case with private non-profit institutions. Due to the data aggregation, the results reveal very little about the behavior of household wealth, limited to a few items of financial assets. However, one of the strengths of financial assets matrix is its equivalence to the Stock Flow Consistent models (SFC), which allow the visualization of complex financial relations between different sectors. In general, and only for the year 2009, household liabilities the focus on bank financing, while on the asset side prevails shares and other equities, primarily investments in non-financial corporations.

Data from the Personal Income Tax, published by the Internal Revenue Service beginning in 2012, provide important information not only on the taxation of different income ranges, but also on the evolution of capital gains with respect to income and on the evolution of wealth of the declarants. However, it is noteworthy that such a database has an important limitation: while the property is generally recorded at purchase price (i.e., it is not necessarily fixed as their market value), financial assets are marked to market.

Briefly, Afonso (2014), Gobetti & Orair (2016) and Medeiros & Castro (2016) suggest an increase in the share of capital gains and income linked to profits and dividends relative to labor income. In the range of the richest 10% to 1%, the share of capital gains and profits and dividends is gradually higher. According to Medeiros & Castro (2016, p. 16, our translation) this change becomes clear when looking only the range of the richest 1%, in which "income strictly related to return on capital, as financial investments and capital gains, reached together about 15% of the total in recent years". The growth of these types of income, most of them exempt from taxation, unlike labor income, negatively impact the taxable income, which corresponded in 2010 only 47% of the total declared income and the effective rate of Personal Income Tax (PIT), representing only 8% of taxable income (Afonso, 2014). This scenario further deepen the regressivity of the Brazilian tax system, thus contributing to the concentration of income and wealth.

In respect of assets and rights declared in the PIT, it is noteworthy, in general, that the gross wealth growth is faster than GDP growth in the period, resulting from 2011, an increasing wealth to GDP ratio (Table 1). The reorganization of assets on certain items also provides interesting results. Between 2007 and 2014, the group of fixed assets and financial investments show similar trends, growing about 6% of GDP. Among the fixed assets, it is worth noting the growth of real estate assets, especially apartments (which jumped from 13% of GDP in 2007 to 17% in 2014). Among financial assets, the growth was concentrated mainly in fixed-income assets such as bonds indexed to the interbank deposit rate (CDI) and treasury bonds (Table 1 and 2). The variable-income assets, in turn, grew by only 1% in the period, with a decline in the investment in shares to GDP. In part, this phenomenon results from the tendency to fall observed in the Brazilian stock market from 2010 (Figure 1).

Figure 1: Ibovespa (2006-2016)



Source: Central Bank.

It should be noted, however, the item of capital ratio, which, although no significant growth in the period, has a significant value as a percentage of GDP (around 10%). his account refers, in theory, to the participation in individual companies or participation in small businesses. However, its high amount reflects one side of the transfiguration phenomenon of labor in capital, recorded on tax data from the Internal Revenue Service and evidenced by Afonso (2014). That is, in order to alleviate the financial burdens related to work contracting, the employer opts for hiring outsourcees. At the same time, this process stimulates the workers themselves, who also want to alleviate the marginal rates of the PIT, to provide services as individual firms.

The growth of wealth in the post-crisis period was distributed by income level, as shown in Table 3. The data show that significant increases in wealth to GDP is concentrated on groups who earn more than ten times the minimum wage, which had about 74% of total household wealth (about 75% of GDP). Thus, the data suggest that the post-crisis period was marked by an increase in inequality in the distribution of wealth as a percentage of GDP. In this context, as will be seen below, there is the failure of the recent economic and social policies to reverse this process of wealth concentration in the analyzed period.

Table 1: Assets and Rights 2007 – 2014, % GDP

	2007	2008	2009	2010	2011	2012	2013	2014
Apartament	13,4%	12,8%	13,5%	13,6%	14,3%	15,1%	16,1%	17,0%
House	12,8%	13,0%	13,0%	12,5%	12,6%	13,1%	13,4%	13,8%
Land	5,4%	4,8%	4,9%	4,8%	5,0%	5,2%	5,3%	5,5%
Residential building	1,2%	1,2%	1,2%	1,2%	1,2%	1,3%	1,3%	1,4%
Building	1,2%	1,2%	1,2%	1,2%	1,2%	1,3%	1,3%	1,3%
Commercial building	0,8%	0,9%	0,9%	0,9%	0,9%	1,0%	0,9%	1,0%
Offices	0,7%	1,0%	0,9%	0,9%	0,9%	0,9%	0,9%	1,0%
= Urban property	35,5%	34,8%	35,7%	35,0%	36,1%	37,9%	39,3%	41,1%
Ground automotive vehicle	8,8%	8,8%	9,1%	8,7%	8,6%	8,6%	8,4%	8,5%
Bare Land	3,8%	4,4%	4,4%	4,0%	4,0%	4,0%	3,7%	4,1%
=Fixed Assets	48,1%	48,0%	49,2%	47,7%	48,7%	50,5%	51,5%	53,6%
Capital ratios	10,1%	9,8%	9,8%	9,4%	9,4%	9,8%	9,8%	10,2%
Equities	4,9%	5,9%	5,7%	5,7%	5,5%	5,0%	5,3%	5,2%
Other corporate interest	0,5%	0,7%	0,7%	n.a	0,7%	0,7%	0,8%	0,9%
Equities and Mutual Funds	1,1%	0,8%	1,0%	1,1%	1,2%	1,3%	1,3%	1,2%
= Shareholding	16,6%	17,2%	17,3%	16,9%	16,8%	16,9%	17,1%	17,4%
Savings account	4,7%	3,8%	4,4%	4,4%	4,3%	4,7%	5,3%	5,5%
Fixed income	5,6%	7,1%	7,2%	7,1%	7,9%	7,3%	6,7%	7,0%
Other fixed income investiments	1,7%	1,4%	1,5%	1,6%	1,9%	2,3%	2,6%	3,3%
Credit bonds resulting from loan	3,3%	2,1%	2,3%	2,3%	2,6%	2,8%	3,0%	3,3%
VGBL	1,5%	n.a	1,0%	1,4%	1,7%	2,2%	2,4%	2,9%
Long Term Funds	4,3%	3,5%	3,8%	3,7%	3,8%	4,0%	3,9%	3,7%
Short Tem Funds	1,2%	n.a	2,7%	2,3%	2,1%	1,9%	1,7%	1,6%
Other funds	0,9%	0,5%	0,8%	0,7%	0,8%	1,0%	1,0%	1,2%
=Fixed Income Investiments	18,6%	17,0%	19,3%	19,0%	20,8%	21,5%	21,2%	23,1%
=Financial Investiments	39,8%	38,0%	40,9%	40,4%	41,8%	43,0%	43,6%	46,0%
Domestic bank deposits	0,9%	1,0%	1,1%	1,1%	1,0%	1,0%	1,1%	1,1%
Cash	3,6%	3,3%	3,4%	3,3%	3,3%	3,4%	3,5%	3,5%
= Availabilities	4,6%	4,3%	4,5%	4,3%	4,3%	4,5%	4,5%	4,6%
Other Assets and Rights	3,5%	3,7%	4,0%	4,0%	4,6%	5,4%	7,2%	5,1%
Total	95,9%	94,0%	98,7%	96,4%	99,5%	103,3%	106,8%	109,3%

Source: Internal Revenue Service of Brazil. Classification based on Afonso (2014).

Table 2: Assets and Rights 2007 – 2014, % Total Wealth

	2007	2008	2009	2010	2011	2012	2013	2014
Apartament	13,7%	13,2%	13,4%	13,8%	14,0%	14,3%	14,7%	15,1%
House	13,1%	13,3%	13,0%	12,7%	12,4%	12,4%	12,2%	12,2%
Land	5,5%	4,9%	4,9%	4,8%	4,9%	5,0%	4,9%	4,9%
Residential building	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%
Building	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%	1,2%
Commercial building	0,8%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
Offices	0,8%	1,0%	0,9%	0,9%	0,9%	0,9%	0,9%	0,9%
= Urban property	36,3%	35,7%	35,5%	35,6%	35,6%	35,8%	35,9%	36,4%
Ground automotive vehicle	8,9%	9,1%	9,1%	8,7%	8,5%	8,1%	7,7%	7,5%
Bare Land	3,9%	4,5%	4,4%	4,1%	3,9%	3,8%	3,4%	3,6%
=Fixed Assets	49,1%	49,3%	49,0%	48,3%	47,9%	47,7%	47,0%	47,5%
Capital ratios	10,4%	10,1%	9,8%	9,6%	9,3%	9,3%	8,9%	9,0%
Equities	5,0%	6,0%	5,7%	5,8%	5,4%	4,8%	4,8%	4,6%
Other corporate interest	0,5%	0,8%	0,7%	n.a	0,7%	0,7%	0,7%	0,8%
Equities and Mutual Funds	1,1%	0,8%	1,0%	1,2%	1,2%	1,2%	1,1%	1,0%
= Shareholding	17,0%	17,7%	17,2%	16,6%	16,5%	15,9%	15,6%	15,4%
Savings account	4,8%	3,9%	4,3%	4,5%	4,2%	4,4%	4,8%	4,8%
Fixed income	5,7%	7,3%	7,2%	7,2%	7,7%	6,9%	6,1%	6,2%
Other fixed income investiments	1,8%	1,5%	1,5%	1,6%	1,9%	2,2%	2,3%	2,9%
Credit bonds resulting from loan	3,4%	2,1%	2,3%	2,4%	2,6%	2,7%	2,8%	2,9%
VGBL	1,5%	n.a	1,0%	1,4%	1,7%	2,1%	2,1%	2,6%
Long Term Funds	4,4%	3,6%	3,7%	3,7%	3,7%	3,8%	3,6%	3,3%
Short Tem Funds	1,2%	n.a	2,7%	2,3%	2,0%	1,8%	1,5%	1,4%
Other funds	0,9%	0,5%	0,8%	0,8%	0,8%	0,9%	0,9%	1,1%
=Fixed Income Investiments	19,0%	15,0%	19,2%	19,4%	20,4%	20,3%	19,4%	20,4%
=Financial Investiments	40,7%	36,7%	40,7%	40,4%	41,1%	40,7%	39,8%	40,7%
Domestic bank deposits	1,0%	1,0%	1,1%	1,1%	1,0%	1,0%	1,0%	0,9%
Cash	3,7%	3,4%	3,4%	3,3%	3,3%	3,2%	3,2%	3,1%
= Availabilities	4,7%	4,4%	4,4%	4,4%	4,2%	4,2%	4,1%	4,1%
Other Assets and Rights	5,5%	5,7%	5,9%	6,0%	6,7%	7,4%	9,1%	7,7%
Total	100,0%	96,1%	100,0%	99,2%	100,0%	100,0%	100,0%	100,0%

Source: Internal Revenue Service of Brazil. Classification based on Afonso (2014).

Table 3: Net Worth per income groups 2007-2013 - % GDP

Total income groups	2007	2008	2009	2010	2011	2012	2013
Until 1/2 MW	1,9%	1,8%	1,6%	1,3%	1,6%	1,5%	1,6%
1/2 a 1 MW	0,5%	0,5%	0,4%	0,4%	0,4%	0,4%	0,5%
1 a 2 MW	1,1%	1,0%	1,0%	0,9%	0,9%	1,0%	1,1%
2 a 3 MW	1,8%	1,8%	1,8%	1,9%	1,9%	2,3%	2,2%
3 a 5 MW	8,3%	8,1%	7,7%	4,5%	5,5%	8,0%	8,2%
5 a 10 MW	11,9%	11,5%	12,1%	10,0%	9,9%	12,0%	12,6%
10 a 20 MW	12,7%	12,7%	12,1%	12,8%	12,8%	13,8%	14,5%
20 a 40 MW	13,4%	13,1%	13,8%	13,5%	13,6%	14,5%	16,3%
40 a 80 MW	11,4%	11,4%	11,9%	11,5%	11,8%	11,7%	12,4%
80 a 160 MW	7,3%	7,2%	7,4%	7,1%	7,5%	7,4%	8,0%
> 160 MW	20,7%	21,3%	21,3%	21,8%	23,5%	23,5%	22,7%
Total	90,9%	90,5%	91,0%	85,8%	89,3%	96,2%	100,0%

Source: Internal Revenue Service of Brazil.
MW: minimum-wage

Moreover, the share of financial wealth, non-financial debts and the total wealth in Brazil can be compared to the participation of other countries and regions. Through the database built by Credit Suisse, the share of financial wealth in total wealth of adults in Brazil is slightly above the Latin American average, which, in turn, is below the world average. However, the values disclosured on this basis are estimated and divided by the number of adults. In this context, the composition of wealth is different from the values found from the IRS data (Table 5), suggesting an even lower share of financial wealth in total wealth compared with Credit Suisse (2015).

Table 4: Components of Wealth as percentage of gross wealth

		2007	2008	2009	2010	2011	2012	2013
Brazil	**Financial wealth**	43,5%	37,8%	37,9%	37,9%	37,9%	37,9%	37,9%
	Non-financial wealth	56,5%	62,2%	62,1%	62,1%	62,1%	62,1%	62,1%
	Debts	18,1%	18,9%	18,8%	18,8%	18,8%	18,8%	18,8%
Latin America	**Financial wealth**	38,1%	33,7%	36,0%	37,1%	36,6%	36,9%	36,6%
	Non-financial wealth	61,9%	66,3%	64,0%	62,9%	63,4%	63,1%	63,4%
	Debts	9,8%	10,0%	11,1%	12,8%	13,8%	14,1%	14,4%
World	**Financial wealth**	51,2%	49,1%	51,2%	51,5%	52,2%	52,8%	54,3%
	Non-financial wealth	48,8%	50,9%	48,8%	48,5%	47,8%	47,2%	45,7%
	Debts	15,0%	16,5%	16,0%	15,4%	15,5%	15,0%	14,3%

Source: Credit Suisse (2015)

Table 5: Components of Wealth as percentage of gross wealth - Brazil

		2007	2008	2009	2010	2011	2012	2013
Brazil	Financial wealth	30,2%	30,0%	31,6%	32,1%	32,1%	31,3%	30,6%
	Non-financial wealth	69,8%	70,0%	68,4%	67,9%	67,9%	68,7%	69,4%
	Debts	7,1%	7,0%	9,5%	12,8%	12,1%	9,0%	8,7%

Source: Internal Revenue Service of Brazil.

2. The household wealth and the post-crisis macroeconomic environment

Among the various factors driving the increase in household asset stock, mainly real estate (houses and apartments), the countercyclical policies adopted after the collapse of Lehman Brothers in 2008 had a significant impact. The Brazilian government responded to the contagion effect of systemic crisis through various countercyclical actions, which aimed to mitigate its negative impacts on the financial system and economic activity (Cunha et. al., 2011). According to ECLAC (2009), among all Latin American countries, Brazil was one of those who used the widest range of measures to tackle the contagion effect of the crisis.

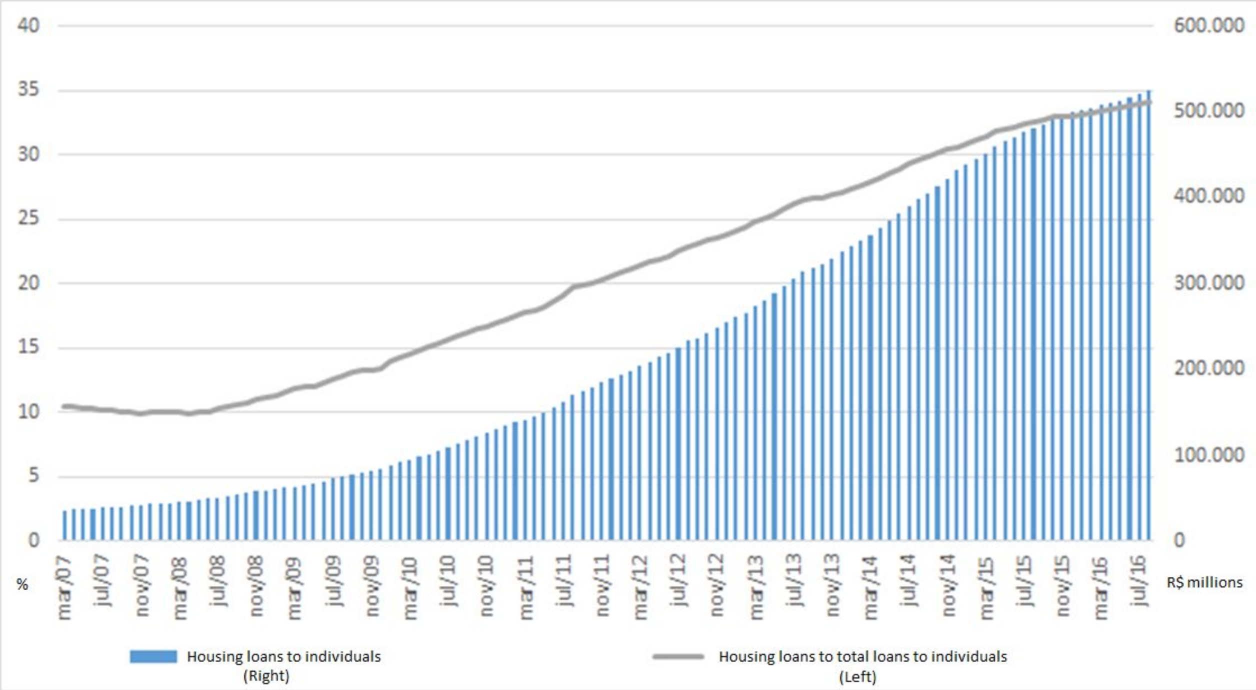
In the context of monetary policy, the sudden stop of international financial markets in September 2008 demanded quick answers. The main measures were macroprudential character and aimed to restore liquidity in the financial and interbank markets, restore the credit system and combat systemic risk. It should be noted the following actions taken:

1) Postponement of the deadline to implement the increase in the percentage of reserve requirements of leasing companies for January 2009;
2) Between September and December 2008, the Central Bank reduced the percentage of reserve requirements on demand deposits and time deposits, increasing the amount available for loans by banks;
3) In October 2008, the Central Bank allowed banks to deduct to 70% of the time deposit reserve requirements for smaller financial institutions loan portfolio purchases (net amount of R$ 2.5 billion);
4) In October 2008, public banks - the Banco do Brasil (BB) and Caixa Econômica Federal (CEF) - were "authorized to acquire, directly or indirectly, corporate participation in public and private institutions in Brazil, including insurance companies, institutions social security, capitalization companies, with or without the acquisition of ownership control" (Prates, 2010, p. 38);
5) The Central Bank also created a line of financial support, through which the Central Bank was able to acquire loan portfolios of financial institutions, in order to help those small and medium-sized facing liquidity shortage.

The actions, however, were not limited to the provision of liquidity and other measures through the Central Bank. The mobilization of public banks was crucial to prevent a huge credit crunch and soften the sharp decline in private banks credit supply (Freitas, 2009; Prates, 2010; Paula et.al., 2013). The measures mainly involved the National Bank for Economic and Social Development (BNDES), the Banco do Brasil (BB) and Caixa Econômica Federal (CEF) and represented a government policy decision against the contagion effect of the crisis.

In this context are part of the policies to stimulate the real estate market, particularly through the mobilization of directed credit and formulating programs for low-income people, such as the Minha Casa Minha Vida (PMCMV). This movement can be clearly seen by the growing balance of housing loans to individuals, which now occupy about 35% of total loans to individuals in 2016, proving to be the main category of credit in the period (Figure 2).

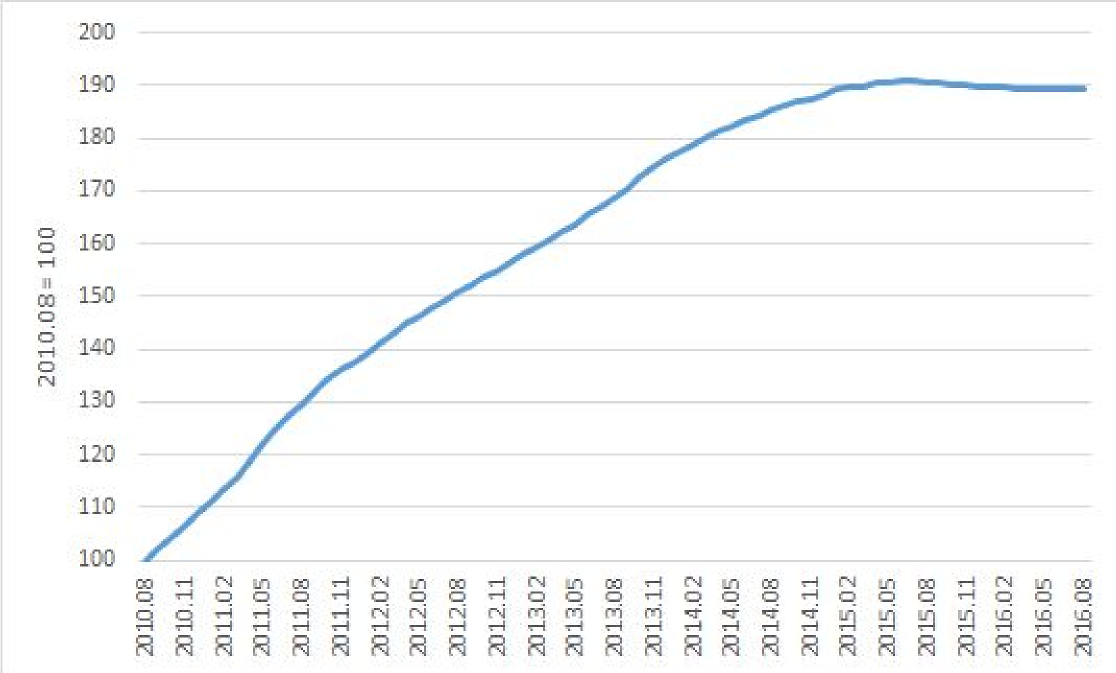
Figure 2: Housing loans and total loans to individuals (2007-2016)



Source: Central Bank.

Following this process, it can be argued that Brazil experienced a real estate boom, largely responsible by the increasing fraction of this asset in the composition of total household wealth (Table 2). As can be seen in Figure 3, real estate sales prices in Brazil between 2010 and early 2015, driven by the directed credit to the sector, has grown substantially; even at much higher rate than the average level of prices in the same period.

Figure 3: Real estate sales prices (2010-2016)

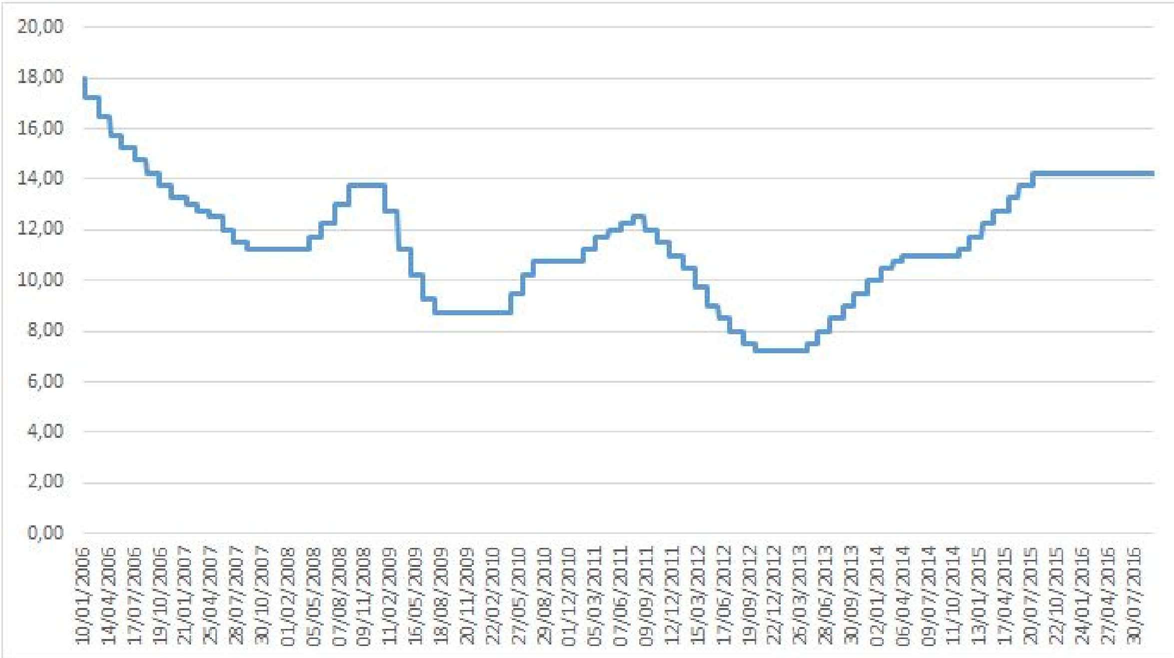


Source: Ipeadata.

Regarding interest rate policy (Figure 4), unlike other advanced and emerging countries, the Central Bank showed a conservative position, keeping the Selic rate[3] at 13.75% between September and December 2008, on the grounds that inflation risks resulting from the depreciation of the real were very high (Freitas, 2009; Prates, 2010). However, in an environment of high risk aversion and liquidity "puddle", maintaining the basic interest rate at a high level further deteriorated credit conditions. Only in January 2009 the basic interest rate assumed a downward trend - from 13.75% in December 2008 to 8.75% in September 2009 - coming at the time, to its lowest level in 20 years.

[3] Selic is the brazilian denomination for the overnight interbank lending rate, set by the Central Bank.

Figure 4: Short-term interest rate (Selic, 2006-2016)



Source: Central Bank.

Nevertheless, the change in the Central Bank position became concrete - or more evident - only in the second half of 2011, when interest rates began their downward trend (which lasted until October 2012, reaching 7.5 %). In addition, the Central Bank signaled that interest rates would remain at that level in the medium and long term. Therefore, despite this significant reduction in interest rates have been conditioned ultimately by the expansionary monetary policies of advanced countries, it is undeniable the importance of a new management of monetary policy in the behavior of interest rates in 2011 and 2012 (De Conti, 2013).

In addition, the government not only reduced the basic interest rate, but also promoted greater competitiveness in the domestic financial system via public banks in order to force the lowering of bank spreads. BB and CEF reduced the spreads of its main credit lines by about 4 percentage points (p.p.) during the second and third quarter of 2012. Following the actions of the public banks, Itaú Unibanco and Bradesco also reduced their spreads relating to credit to individuals, between 8 and 2.5 p.p. respectively (Paula et.al., 2013). It is noteworthy that the anti-cyclical approach of public banks since the beginning of the systemic crisis boosted the participation of these institutions in the total banking system assets to almost 50% in January 2013, pressing, therefore, private banks (Paula et. al., 2013).

In the context of reduction of interest rate, monetary authorities have made a significant change in savings remuneration rules also in 2012. In order to avoid that investors migrate, *en masse*, of government bonds to savings, it was established that, from 2012, the profitability of savings pass of 6.17% per annum plus the Referential Rate (TR) - a readjustment indicator - officially guaranteed since 1991, to 70% of Selic rate plus TR. The rule is applied to situations in which the Selic rate is equal to or less than 8.5%, making room for monetary authorities to reduce interest rates without, at the same time, pressing investments in savings.

From the point of view of the composition of household wealth, this process did not mean a substantive change toward fixed assets or equity. Indeed, as seen in Table 1 and 2, the proportion of other types of fixed-income assets has expanded, which suggests a reorganization among the possible applications within the fixed-income asset class. In this regard, as pointed Torres Filho and Costa (2013, p. 32), we highlight the top three real estate securities – Letras de Crédito Imobiliário (LCIs), Certificados de Crédito Imobiliário (CCIs), and Certificados de Recebíveis Imobiliários (CRIs) – and the Letra de Crédito Agrícola (LCA). As to savings, it is important to note that the income of LCIs, CRIs and LCAs applications are exempt from income tax. Moreover, since the application in these assets requires a non-negligible minimum volume of investment, the reorganization process ends up reinforcing the unequal trace of the household wealth distribution in Brazil. Actually, in a context of declining interest rates, the relatively higher returns on these assets is concentrated among those who already have greater financial resources.

However, the expansionary monetary policy could not overcome the deterioration of agents' expectations (firms, banks and households). The significant reduction in global economic activity, because of the euro crisis, combined with the exhaustion of the credit boom and the slowdown in household consumption, limited the ability of monetary policy to boost economic activity (Paula et. al., 2013). Combined with accelerating inflation, this context has made the Central Bank to reverse the trajectory of monetary policy by mid-2013. The continued high interest rates policy allows us to understand the relatively little significant participation of equity assets, especially shares, in the composition of household wealth. Simultaneously, it is the same course of monetary policy that makes the weight of fixed income assets more relevant among the financial investments.

Concluding remarks

This short paper tries to give an overview of the evolution and composition of household wealth in Brazil in the post-crisis period. By using data from IRS, we analyzed, at first, the richness of composition (fixed and financial) and its evolution in relation to GDP between 2007 and 2014. In the second part of the paper, we evaluate what economic policies adopted after the outbreak of the financial crisis may be related to changes in the composition of wealth, analyzed in the first section.

Data on the wealth provided by the IRS, reveal, in general, that fixed and financial assets grew similarly in proportion to GDP. It was noticed that here is a high share of fixed assets in the composition of household wealth, particularly real estate, which was reinforced by the recent credit cycle. In fact, the rapid directed credit growth in the form of housing loans to individuals was accompanied by a huge growth of real estate prices. This process is the basis of the growing share of houses and apartments in total household wealth.

With regard to financial assets, the high interest rate policy has been manifested in the greater proportion of fixed income assets compared to equity assets, especially shares. The decline in interest rates from 2009, especially between 2011 and 2012, contributed only to a reallocation of financial wealth, in order to preserve the income arising from the ownership of such assets.

In addition, household wealth has shown a high concentration in the higher income levels, especially between the ranges of 10 and 40 minimum wages. Thus, despite the focus of some policies in lower income groups, such measures have failed to reverse the wealth inequality environment.

Finally, the shortcomings of the Brazilian tax system, highlighted by Afonso (2014) and Gobetti & Orair (2016), are reflected in the evolution of financial wealth over the analysis period. That is because the growth of fixed-income assets, that is focused on securities (eg.: LCI and LCA) that are exempt from income tax, thus contributing to the low tax base and low average tax rate that characterize the tax Brazilian system.

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