SUBPRIME CRISIS IN THE UNITED STATES: PUBLIC SECTOR'S REACTION AND THE IMPACT ON THE EMPLOYMENT RATE

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ABSTRACT

This paper analyzes the impacts of the subprime crisis on the American economy following two paths: *i)* the first studies critically the measures implemented by the American state to confront the crisis; and *ii)* the second shows its impacts on the labor market. With respect to the first point we attempted to distinguish traditional fiscal expenditure from outlays under credit and asset purchases programs. This analysis showed that the huge amounts of resources allocated to these operations in the end did not have a real impact on Treasury's expenditures. We show also a strong asymmetry between Federal and Local governments fiscal policies. While the Federal government implemented strong countercyclical policies, in most quarters studied in this paper the local governments did the opposite. On the second part of the study we show that the above mentioned asymmetry had also distinct impacts on public employment, particularly a negative one on the local level. In terms of private sector employment the hardest hit activities were industries, construction and to a lesser extent financial services. It is highlighted that in spite of the important countercyclical policies implemented by the Federal Government the unemployment rate remained persistently high, which is a source of future policy concern once the stimulus bills wane by the end of 2011.

Keywords: subprime mortgage crisis; employment; United States; fiscal policy.

RESUMO

Este artigo tem como objetivo analisar os impactos da crise das hipotecas *subprime* na economia americana sob dois aspectos: *i*) fazer uma avaliação crítica das medidas tomadas pelo Estado americano para enfrentar a crise; e *ii*) avaliar o impacto desta sobre o mercado de trabalho. Em relação ao primeiro ponto, procurou-se separar os gastos efetivamente fiscais dos dispêndios com compra de ativos e operações de crédito realizadas principalmente pelo Tesouro e pelo Federal Reserve (FED). Tal procedimento revelou que os vultosos recursos comprometidos com estas operações não representaram de fato uma pressão sobre as contas do Tesouro. Demonstra-se também uma forte assimetria entre o governo federal e os governos subnacionais. Enquanto o governo federal realizou importante política contracíclica, nos trimestres analisados, os governos locais e estaduais, limitados por restrições legais, tiveram um comportamento pró-cíclico. Em relação ao segundo ponto, destaca-se que a aludida assimetria revelou um impacto diferenciado sobre o mercado de trabalho do setor público, afetando prioritariamente o emprego no âmbito local e também, em menor proporção, no âmbito estadual. No que se refere ao setor privado, as atividades mais atingidas foram a indústria e a construção civil, ficando em terceiro lugar o setor financeiro. Observou-se que, a despeito da importância das políticas públicas anticíclicas, o desemprego não teve uma redução expressiva, o que gera preocupação com o futuro do mercado de trabalho, sabendo-se que as políticas de estímulo se encerram em 2011.

Palavras-chave: crise das hipotecas; *subprime*; emprego; Estados Unidos; política fiscal.

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1 INTRODUCTION

The crisis that began in the subprime real estate market in the third quarter of 2008 reached its most critical point and made history as the worst recession since 1948. It exceeded by 0.7 percentage point the fall in gross domestic product (GDP) recorded in the 1982 recession, caused by Paul Volker's policy of high interests. Despite the severity of the recession observed in the last two quarters of 2008 and the first two of 2009, which ensured this unfortunate historic mark for the subprime mortgage crisis, many predicted even more severe consequences, given the severity of their impacts on the American financial market. However, a massive intervention of the U.S. government, including the Federal Reserve (Fed), was able to contain the crisis and greatly reduce its impact in terms of output and employment.

The great irony of the sociopolitical scenario after the crisis in the United States is the ability that the most conservative sectors of the society had in order to create a historical reinterpretation in which the State stops being a virtuous and central power by trying to reverse the effects of the crisis. This fact, however, is not only based in the important role played by the State in overcoming the crisis, but also in the records obtained in recent surveys on U.S. citizens, which shows that the biggest concern of the population is the serious issue of unemployment and not the fiscal balance.

We do not aim at deeply discussing the sociopolitical aspects of this conservative strategy. We will only highlight the extent of the state intervention in the financial system and some of its main aspects that provoked, in some cases, misunderstandings and situations that opened the flank to attack the conservative discourse. As we intend to argue in this paper, despite the fact of saving the economy from a crisis of unimaginable and uncertain proportions, but very likely catastrophic ones, the State interference did not prevent the change in the level of the unemployment rate into historically high numbers.[1] Certainly, the political context after 2010 shows in a clear way the opposite of what would be the scenario of adopting expansionary fiscal policies. This political option, to some extent, is already reflected in the growth perspective for the coming years, which is not comparable to the vigorous resumption of the Reagan era, which included an expansionary fiscal policy with an emphasis on war spending. Thus, the outlook for drop on the unemployment rate is quite modest. In the Fed's latest projections, it was estimated that in 2011 the annual unemployment rate should be

1. Before the official beginning of the recession, as defined by the National Bureau of Economic Research (NBER) in December 2007, the official unemployment rate (U3) of the United States was at 5%. Throughout 2008, it jumped to 7.2% – value reached in December 2008. In 2009, the unemployment rate rose to 9.9% and remained around this level throughout 2010 (even though the official recession had already ended) with evidence on some economic recovery indicators. In the second part of this article, the indicators of the labor market will be discussed in more detail.

between 8.8% and 9%, falling to a range between 7.6% and 8.1% in 2012 and between 6.8% to 7.2% in 2013 – that is, even four years after the recession.[2] It is foreseen that the unemployment rate will be still be above of those 5% previous to the recession.[3]

As it will be shown throughout the text, the unemployment rate fell slightly in January 2011, reaching a value of 9%. However, this fall it is still weak, which to a large extent is explained by a significant reduction in the rate of the workforce participation. The trajectories of the unemployment rates measured by broader criteria were less auspicious, indicating the persistence of a wide portion of precarious activities (part time jobs, among other weaknesses) of insertion in the employment universe of the labor market in the United States. Besides that, an increasing portion of the labor force for this market is giving up not because they do not need a job, but for assuming that they will not find any on the short run.

This paper is divided into two parts, other than this introduction. The first part analyses some aspects of the U.S. government response to the crisis (comprising the steps taken by Presidents George W. Bush and Barack Obama). In this evaluation, it will be posible to observe the different reactions in the government spheres, and their impact on aggregated public spending. This raises a debate about the future path of the economy as the emergency programs are extinct. This analysis will embrace various aspects, highlighting the purchase programs of actives/property securities, the family subsidy credit programs, mainly in the housing sector, and other programs relating to taxes, this is to say, public spending and tax breaks. Moreover, given the very different behavior regarding the possibility of spending/taxation of various administrative levels of the American State (i.e., the various levels of the government), we must examine them separately, in order to put into perspective the supposed fiscal crisis of the Federation and local governments – one of the main topics for discussion in early 2011.

The second part of this paper aims to study the effects of the crisis on key indicators of the labor market – trying to go beyond a mere analysis of the standard unemployment rate (U3) behavior. It also assess the recent evolution of unemployment rates that capture circumstances related to precarious forms of insertion in the labor market (as the realization by broad segments of the population of part time work precisely because of the lack of economic dynamism in some sectors) or those factors related to momentary outputs of the work force for the market, because of discouragement that has reached segments of workers in crisis times. The indicators analyzed in the second part aims to stresses on the private and public sector activities, which recorded the worst effects in terms of

2. Officially ended in December 2009.

3. Officially, The National Bureau of Economic Research (NBER) states that the recession began in December 2007.

job losses. In the analysis of changes in employment levels it is implied that there are different logics for determining employment in the private and public sector. In the case of the private sector, we want to expose the sectors that suffered the most direct impacts,[4] on their level of employment, arising from the crisis that has affected the U.S. economy since the middle of 2007. The data revealed that these sectors were construction and manufacturing activities, given the nature of the recent crisis. Regarding to the public sector, the logic for determining the level of employment is different because it is based on the provision of public services rather than production aimed at profits. What we intend to clarify is that the recent development of public employment, in some ways, reverses the course that had been drawn in the last decades. More importantly, however, it is to stress how the employment levels have evolved since the outbreak of the crisis, according to public governmental spheres (federal, state and local ones).We try to do it by assessing how fiscal constraints and ideological restrictions guide the macroeconomic policy since, at least, the outbreak of the crisis, have affected the behavior of these indicators. In this way, we can also qualify the nature of the crisis and fiscal measures adopted by the last two governments (George W. Bush and Barack Obama), which are described in the first part of this study.

2 OVERVIEW OF THE PUBLIC INTERVENTION POLICY AFTER THE CRISIS

The government's reaction to the U.S. subprime mortgage crisis was proportional to its severity. This reaction was initiated in the Bush administration, despite its conservative fiscal rhetoric, and continued under Obama, whose speech, incidentally, never stated in clear opposition – with regard to this aspect – to that of his predecessor. Although a significant number of specific actions by both the Treasury and the Fed, the public intervention in the period was marked by three major initiatives: Two in the Bush administration, the House Recovery Act (HERA) and the Troubled Asset Relief Program (TARP), and also the American Recovery and Reinvestment Act (ARRA), launched in the first year of the Obama administration in 2009.

There is, globally, a division of three different origins for these anti-crisis actions launched by the federal government. Initially, we can characterize the financial actions, i.e., the purchase by the Treasury/Fed of shareholdings in mostly financial companies, but not exclusively, in order to save them from insolvency via capital injection. As mentioned, this type of intervention was essential to preserve the financial system and therefore to avoid a collapse of the U.S. economy,

4. Clearly, there are also indirect effects, difficult to measure and those should be addressed in a separate study. With indirect factors we mean the effects on other activities – including in the manufacturing sector – the consequences of the fall in demand from the construction activities. These effects are only mentioned superficially, based on recent literature, especially some publications in the journal Monthly Labor Review.

which certainly would also have disastrous consequences for the world economy. However, the purchase of assets or the nationalization of goods was also fundamental to the survival of the U.S. auto industry, as we shall see.

Another very important type of intervention directly linked to the financial sector was the loans made directly by the Fed, which in some cases also had shareholding in the Treasury. These operations served to unlock the credit market, and reduce the spread of interest rates. If the credit market had not been reactivated, such a situation would have led to a complete stoppage of the economic activity in the United States.

Regarding the financial markets, it is also important to highlight the specific intervention in the housing market through the "re-nationalization" of the government-sponsored Fannie Mae and Freddie Mac agencies. These agencies played a central role both in the security as the securitization of mortgage bonds (the mortgage-backed security – MSB) and their breakdown would represent a fairly dramatic impact on a crucial market in the development of the subprime crisis. If there had been a total collapse of this market, the rising number of foreclosures[5] would have kept (or driven) the deflationary trend in the housing market, with negative impacts on assets that include mortgages on such properties, and so on liquidity and profitability conditions of the financial sector as a whole, also with effects on other sectors of economic activity. In addition to preventing a deflationary spiral hit on the already battered financial markets, government intervention in the housing market was important, by stabilizing it, to avoid an even greater impact on job losses in the sector.

Finally, there were also measures of more clearly fiscal nature, i.e., implementation of programs to increase spending/tax waiver, as well as transfers to individuals. These measures were established, mainly, as components of the ARRA and had a very different behavior with respect to the different governmental spheres.

Besides the obvious fact that these types of intervention reach different segments of the economy and, therefore, also have different macroeconomic impacts, the separated (disaggregated) analysis enables the measurement of these interventionist measures more clearly its real fiscal dimension. The scope of public intervention (particularly the one of 2008) and the large amounts involved in it created a false impression of very high public spending. This interpretation is not only unrealistic as eventually generated a misperception in sectors of the American society that the U.S. public sector was entering into a stage of complete fiscal chaos.

5. It is the process of evicting the owners of mortgaged properties that are in default. These residents basically leave mortgaged residential units, which return to holders of mortgages while, in personal terms, this situation results in an immediate limitation in the access to the credit market.

In fact, most of the funds allocated to the TARP had, as effective fiscal cost, a very small portion of the original disbursement. The table 1 summarizes the main accounts of this program, which specifies the involved values, the effectively disbursed, those paid and the resulting income from acquired assets by the Treasury (Data updated on December 31, 2010).

TABLE 1
Main components of the Troubled Asset Relief Program – TARP (2010)
(In US$ billions)

	Involved	Disbursement	Payment	Income
Capital Purchase Program	204,89	204,89	180,56	25,32
Targeted Investment Program	40,0	40,0	40,0	4,43
Asset Guarantee Program	5	0	-	3,04
Consumer and Business Lending Initiative	5,24	0,67	-	-
Legacy Securities Public-Private Investment Program	22,41	15,56	0,59	0,43
American International Group – AIG[1]	69,84	67,84	12,82	0,32
Automotive Industry Financing Program	81,76	79,69	34,65	4,96
Treasury Housing Program	45,63	1,96	-	-
Total	**475,0**	**410,61**	**268,62**	**35,46**

Source: TARP Monthly 105(a) Report (United States, 2011a) and Daily TARP Update (United States, 2011b).
Note: [1] It is an American insurance company.

As expected, the greatest of all the programs listed in Table 1 is precisely the bail-out to financial institutions, which already had a re-payment rate above 80%, yielding nearly US$ 25 billion on assets that were purchased by the Treasury. When added to the income, the total expenditures are nearly all covered, and the US Treasury's expectative is to generate profits together with other support programs to the financial sector[6] of about US$ 16 billion[7] That is, ultimately, the public program that saved the American financial system will bring profit to the Treasury rather than deficit.

In addition to the asset purchase program, the TARP encompassed credit programs that are not traditional tax programs, i.e., the size of the gain or loss for the Treasury is only computed as the loans mature and are (or not) paid as well as when the interest rate charged on such loans and the basic rate for government funding are related.

6. The Targeted Investment Program incurred on such expenses, on which the Citigroup and the Bank of America were specifically addressed, with US$ 20 billion for each institution, today these expenditures are fully paid and still generating revenues of over US$ 4 billion. The other program was also designed for the same banks, the Asset Guarantee Program, did not even generate any expenditure: the mere announcement of the Treasury attempting to absorb part of the losses of these banks' assets pledged the support of the values of such assets. To face the fact of not carrying out operations and the non-payment of a fee for closure of the operation and dividends by banks, the American Treasury reported a positive net income.
7. View the Office of Financial Stability report – OFS (United States, 2010) for more detailed data.

The Loan Initiative to Consumers and Companies encompasses three specific programs to support the credit expansion. The first one relates to the Community Development Capital Initiative, which supports institutions and communities in need of financial intermediaries with capital contributions to a lower cost for the other programs, such as the Capital Purchase Programs (CPP). In the case of aid to communities, the interest rate charged was 2% vs. values of the 5% of the CPP.

The second one is the program Term Asset Backed Security Lending Facility, which was intended to provide loans for the purchase of AAA-rated securitized assets, including consumer loans, student loans, loans for small businesses and commercial real estate loans. If the takers of such resources entered in default, the Treasury would create a fund for the purchase of securitized assets. This was a joint program of the Federal Reserve Bank of New York (FDRNY) and the Treasury. The duty of the FDRNY would be to provide the loans and the Treasury's one, the funds for the purchase of side assets for the defaulted loans. Initially, the FDRNY involved US$ 200 billion for loans, and the Treasury, 10% of this value. When finished, in June 2010, the FDRNY had completed a total of loans of US$ 4.3 billion worth, with the Treasury keeping its promise of allocating funds corresponding the 10% of the loans. According to the report of the Office of Financial Stability – SFO (UNITED STATES, 2010a), until September 2010, there were no losses on loans and the FDRNY expectation was that the interest earned on the loans would be more than sufficient to cover any cost incurred from losses with the side assets purchased by the Treasury. In a recent report (UNITED STATES, 2010d), the Treasury estimates that, in the long term, as a matter of fact, it will obtain a net gain from these transactions exceeding the amount of US$ 300 million.

The third one is an assistance program for financing small businesses, the Small Business Administration Guaranteed Loan Program.[8] Until September 2010, the program had conducted 31 transactions totaling US$ 357 million, with operations being closed. Property losses related to these assets are not provided.

The Treasury also launched the Legacy Securities Public Private Investment Program – PPIP in order to purchase problematic "legacy securities" (residential insurance assets) originated from asset having as collateral residential and commercial loans. The basic idea, again, was that the inflow of governmental funds in the asset purchase would interrupt the deflation process, helping in the recovery of the financial health of the institutions that hold these assets, thereby helping to unlock the credit market. The program was operated with the creation of eight public-private investment funds, created by institutions of private

8. The program would aim to assist both primary and secondary markets. The assistance to the primary market was beyond the scope of the TARP being part of the Recovery Act.

management, aiming to buy eligible assets of institutions under the Economic Stimulus Act – ESA. The constitution of the funds ended by the end of 2009, and contributed to the recovery in the prices of financial assets covered by the program (UNITED STATES, 2010). The Treasury allocated an amount of resources equal to the private sector (US$ 7.4 billion), and undertook also to provide US$ 14.7 in debt. Until September 30th, 2010, the return rates reported by the funds were located in a range between 20% and 50%, and had been paid approximately US$ 215 million, including interest and dividends to the Treasury. Given the long-term maturity of the funds, there is no precise number of equity gain expected by the Treasury, but in a recent newsletter (UNITED STATES, 2011b), this value was estimated to be somewhere around $ 200 million.

Also in the specific financial field, one of the great and, undoubtedly, the most complex operations was the one involving the American International Group (AIG) insurer. From the beginning, the rescue of the AIG was not conventional, after all, involved the Fed, which has no institutionally responsibility on the insurance sector. However, the threat of the systemic risks involved by the hardships of the world's largest insurer, the Fed used its constitutional prerogative[9] to provide liquidity to the financial system in times of crisis in order to rescue the AIG. In fact, the emergency operation for rescuing the AIG, of US$ 85 billion worth, was held in September 2008, so, before the establishment of ESA and the creation of the TARP by FRBNY. This intervention was counteracted with about 80% of the shares with voting rights, which were deposited in a trust fund, the AIG Credit Facility Trust, for the benefit of the Treasury, resulting in a virtual nationalization of AIG. Thereafter, a number of interventions were performed by both FRBNY and the Treasury, until that, by the end of 2010, the AIG entered into a Master Agreement with the Treasury that complements and implements an initial agreement signed on September 30th, 2010. It is expected that by 2011, the loan would be paid to the FRBNY, with no loss for this, and the preferred shares will be converted into common shares, which will be sold to the public. According to the report of the SFO (UNITED STATES, 2010), the current value of the shares to be received by the Treasury is US$ 64 billion, and the amount to be invested for this is estimated at US$ 47.5 billion. That is, there is a good prospect that the final result of the operation would be profitable for the Treasury.

Another major operation, but outside of the strict financial scope (which happens to be the epicenter of the 2008 crisis), was the Automotive Industry Financing Program.[10] Thanks to this program, General Motors (GM) and

9. The FDRNY made loans to the AIG in the frame of Section 13, Article 3, of the Federal Reserve Act.

10. There was also an assistant program for the auto part industry, which supplies automobile manufacturers. This program is already and fully paid off and, according to the SFO report (United States, 2010), represented no prejudice for the Treasury.

Chrysler were able to restructure, presenting in early 2011, satisfactory operating results.[11]

As it can be seen in Table 1, in total, it was injected about US$ 80 billion in the automotive sector, in the form of loans and purchase of shares that resulted in the creation of "new" companies with strong involvement of the American state and, to a lesser proportion, of the Canadian State. In the case of the New GM, the former has an ownership of 60.8%, and the latter, 11.7%. While in New Chrysler, the numbers drop to 9.9% and 2.5%, respectively. The U.S. Treasury also intervened in the financial arms of GM and Chrysler, GMAC and Chrysler Financial. The latter, in January 2009, took a loan of US$ 1.5 billion, which was fully paid in June. While GMAC became Ally Financial, in which the Treasury ownership is the 74% of the Common Equities and over US$ 8.5 billion in other forms of shareholding.

Regarding the loans, while GM paid in full the US$ 6.7 billion taken from the Treasury, Chrysler honored only about one-half of the loans of US$ 4 billions. A long-term perspective indicates that as the nationalized company's shares are sold, the Treasury will obtain profits on their investments.

In short, loans and temporary nationalization of companies, despite of the huge sums involved, did not represent any significant tax burden on the Treasury, nor can be identified as responsible for a structural deterioration of the fiscal deficit.

In fiscal terms, a diverse scenario occurred with credit operations, the purchase of assets and subventions to the housing sector. In this case, most of the measures taken will, to some degree, have negative impacts on the Treasury. An operation for which there is still no accurate assessment of potential losses for the Treasury is the purchase of US$ 1.4 trillion on Mortgage-backed securities (MBS) from the Fannie Mae and Freddie Mac agencies. Assuming that the market can recover in the medium term, it is possible that this purchase of asset can be reversed without losses to the Treasury. And to a greater extend because the proposal by the Treasury Secretary (UNITED STATES, 2011c) is gradually to reduce the role of government-sponsored Federal agencies and sell these securitized securities progressively. In relation to the actions of the agencies, this process is even more complex. In 2009, the Treasury contributed to the two agencies about US$ 90 billion in exchange for preferred shares either to increase the reserves of these institutions as well as for covering losses that, only in the first quarter of 2009, reached a total of about US$ 30 billion (UNITED STATES, 2009, p. 3).

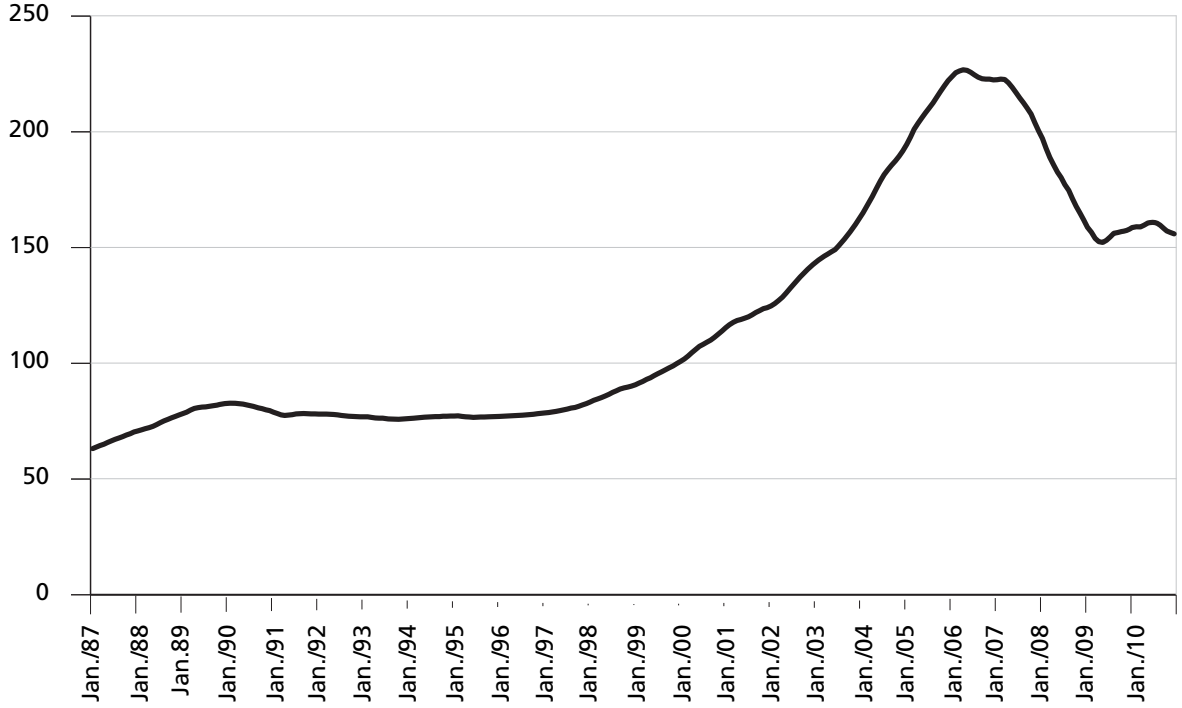
11. One proof of this fact is that after years of frozen wages, GM will in 2011 pay bonuses to their workers from the profits in 2010. Since 2007, GM did not record a single quarter with operating income (see Vlasic and Bunkley, 2011).

Another fiscal expenditure related to the housing market were the credit subsidies to first home buyers imposed by HERA, granted even in 2008 and extended by President Obama's ARRA until the first half of 2010. Also in the category of expenditure in this area are the real estate refinancing programs that began in HERA and were reinforced by the Home Affordable Modification Program – HAMP (UNITED STATES, 2010b). All these plans seek to subsidize the mortgage holders, allowing the restructuring of the mortgages with the central goal of preventing the abandonment of houses, which generates negative effects not only on the value of their own about their own mortgages as well as on the real estate market as a whole.

These government efforts have not had very satisfactory outcome. While it is true that some may present relevant data in terms of renegotiation of contracts and avoid some foreclosures,[12] they have not been able, yet, to achieve its ultimate objective of stabilizing home prices. As shown in chart 1, the price of homes dropped sharply in

2010 and, at most, it can be argued that oscillates around a still extremely devalued level. In any event, the scenario is, not even close, positive for a market of great importance in the recovery of the production in other activities related to it, and especially in the generation of employment in the United States.

CHART 1
Seasonally adjusted house price index



Source: S&P/Case-Shiller Home Price Indices (Standard & Poors, 2011).
Elaborated by the authors.

12. It is understood as foreclosure a situation where the borrower is forced to leave the residence by assessing that he or she cannot honor the contract signed.

Finally, we will briefly list the main usual measures for spending/taxation, which in general were presented during the legal mandate under the ARRA, passed by Congress in February 2009. This program covered a wide range of items on taxation and spending divided into two major blocks. Section A, or appropriation divisions, included 16 spending securities, covering areas such as agriculture, defense, environment, energy, transportation and housing, among others. Section B had their focus on tax and transfers to persons and sub-national units, though not exclusively. The expenditures approved by ARRA were carried out primarily between 2009 and 2010, i.e., whatever have been their effects, which will be briefly discussed next, this period ends in 2011.

Table 2 summarizes the total spending of ARRA in 2009 and 2010, also showing the percentage of total expenditures for selected items by the Bureau of Economic Activity (BEA).

TABLE 2
Impact of the American Recovery and Reinvestment Act (ARRA) on federal public finances

	2009		2010	
	Value (US$ bi)	Total participation on the item	Value (US$ bi)	Participação no Total participation on the item
Tax waiver	342,7	3,9	473,6	5,0
Current expense	620,5	4,5	765,4	5,1
Consumer spending	26,3	0,7	70,4	1,7
Transfers to persons	303,7	4,7	283,4	4,1
Transfers to local governments and rest of the world	283,6	13,2	402,7	17,2
Subsidies	7,0	-	8,9	3,9
Gross investment	3,7	-	19	2,8
Need for funding	-1.034,0	-	-1.398,6	23,1

Source: Council of Economic Advisers – CEA (United States, 2010c).
Elaborated by the authors.

As it can be seen, the total impact is about US$ 1 trillion in 2009, and US$ 1.25 in 2010, representing about 7% and 8.5% of the GDP, respectively. In terms of the federal budget itself, these increases in spending explain a reasonable percentage of fiscal deficits, although in terms of individual installment, this participation is much less significant. Only one of these items has high value and presents a peculiarity of the U.S. fiscal situation: the severe limitations imposed on governmental spending of such sub-national units. It is noticed that, in relative terms, the most significant expansion of federal spending was precisely in transfers to states and counties, i.e., the federal government was eventually responsible for expenses in sub-national units. If such transfers had not been available for those units, they would have had to cut their spending.

This behavior can be better assessed by examining public spending, or rather the rate of change against the previous period, incorporating the expenditures of local governments.

TABLE 3
Public spending growth rate in the United States (2008-2010 – Quarterly)

	2008 IV	2009 I	2009 II	2009 III	2009 IV	2010 I	2010 II	2010 III	2010 IV
Consumption and investment	1.5	-3.0	6.1	1.6	-1.4	-1.6	3.9	3.9	-1.5
Federal	8.1	-5.0	14.9	5.7	0.0	1.8	9.1	8.8	-0.2
Military	5.2	-8.4	16.8	9.0	-2.5	0.4	7.4	8.5	-2.1
Civil	14.8	2.6	10.9	-0.9	5.6	5.0	12.8	9.5	3.7
States and local governments	-2.4	-1.7	1.0	-1.0	-2.3	-3.8	0.6	0.7	-2.4

Source: Bureau of Economic Activity – BEA (United States, [s.d.]c).
Elaborated by the authors.

As Table 3 shows, the spending effort of the U.S. government, despite the adoption of a package as the ARRA, was, in several quarters, very modest. In two quarters of 2009, the total spending was reduced, and in the year, the growth was only 1.6%.

When we look at the disaggregated data, we can realize that state and local governments were the main responsible for the fact that U.S. tax policy had been less countercyclical. Of the nine quarters studied, there was contraction of spending six and even in quarters where spending grew, this fact occurred at very low rates.

Moreover, as previously mentioned, this behavior of the states occurred despite the increase in federal transfers to sub-national units through the ARRA. As the impacts of this law is strongly attenuate since 2011, it is expected that the states, limited in their ability to operate with fiscal deficits by legal restrictions, start to cut even more the spending, representing a counterforce to the moderate recovery observed since 2010.

Even when the American countercyclical fiscal policy has had the limitations mentioned earlier, the macroeconomic impact analyzes point to the key role in overcoming this economic crisis. In a recent publication, the Council of Economic Advisers (UNITED STATES, 2010c) published a summary table showing a comparison between various estimates of the impact on the product, particularly, the ARRA (table 4).

TABLE 4
Estimated effect of the American Recovery and Reinvestment Act (ARRA) at the level of U.S. GDP
(In %)

	2009:Q2	2009:Q3	2009:Q4	2010:Q1	2010:Q2	2010:Q3
CEA: Model Approach	+0.8	+1.7	+2.1	+2.5	+2.7	+2.7
CEA: Projection Approach	+0.7	+1.1	+2.1	+2.7	+2.7	+2.7
CBO: Low	+0.8	+1.2	+1.4	+1.7	+1.7	+1.5
CBO: High	+1.3	+2.4	+3.3	+4.1	+4.5	+4.2
Goldman Sachs	+0.5	+1.4	+1.9	+2.3	+2.6	+2.4
IHS/Global Insight	+0.5	+1.2	+1.7	+2.0	+2.2	+2.3
James Glassman, J.P. Morgan Case	+1.3	+1.8	+2.6	+3.2	+3.7	+3.5
Macroeconomic Advisers	+0.5	+1.0	+1.4	+1.7	+2.1	+2.1
Mark Zandi; Moody's Economy.com	+0.8	+1.6	+2.2	+2.5	+2.7	+2.7

Source: Council of Economic Advisers – CEA (United States, 2010c, p. 16).
Note: To elaborate the table, CEA's report states that the consulted sources were: CEA itself, the Congressional Budget Office (CBO), Council of Economic Advisers and the private institutions of Goldman Sachs, IHS / Global Insight, JP Morgan, Macroeconomic Advisers and Moody's.

As we can observe in table 4 from very limited values since the beginning of the ARRA implementation, the contribution of fiscal measures supported by this law to encourage the growth of the product level was increasing during this period. In mid-2010, this contribution, according to the institutions listed, exceeded the 2.5 percentage points (p.p.), i.e., many of those institutions estimated that without ARRA, the level of output in 2010 would have been 2.5% lower than what was actually recorded.

In terms of employment, we can observe a similar estimate. The average number of jobs generated directly and indirectly by the ARRA in 2009 was equal to something around 1 million. The strongest impact was observed in the fourth quarter of this year. In 2010, the estimated impact on employment rose to about 2 million new jobs.

Another estimate of impact, calculated by Blinder and Zandi (2010), incorporates, besides the spending, an estimate of the financial impact through the effect of government intervention in emergency aid, mainly in the TARP program described above. In this case, the data is quite significant. If there had been no intervention after the crisis, the unemployment rate in 2010 would be at more than 5 (p.p.) above a simulation observed. That same year, a simulation of Blinder and Zandi confronts two scenarios, one without any intervention and another with it, pointing to a difference of more than 6 (p.p.).

From the previous analysis, it is clearly the severity of the economic crisis that began in 2008 and the central role of the state to, initially, contain and eventually overcome the crisis. In spite of the use of a wide range of intervention tools, many of them highly unusual and heterodox, in the first half of 2011, the unemploy-

ment rate was still at a very high level for historical standards of the United States, justifying a more accurate and disaggregated study about the recent trajectory.

Another factor that denotes that severity relates to the very strong drop in tax revenue that, by generating endogenously quite significant deficits, ended up enforcing a strong fiscal bias from the American political forces. In 2008, total revenues decreased by more than 10%, and this fact occurred in a year when the economy was stagnant. From 2009, the drop in tax collections began to reflect also the tax waver measures contained in the stimulus policies of the federal government, but still, the drop in 2009 is very high – over 20% compared to the previous year and more than 30% compared to 2007. Despite the moderate economic recovery in 2010, tax revenue that year is still less than the amounts for 2008 and 2007, indicating that the reduction in tax revenue was much more severe than the actual decline in aggregate output.

It should finally be emphasized that the most important volume of planned expenditure in countercyclical policies occurred until the year 2010. Even in this period, as shown above, the contribution of the federal government was far more important to the sub-national units. The 2011 prospect is troubling because, despite the high unemployment rate that will be discussed below, no new programs for expanding expenditures are expected as well as, by contrast, there is a strong political pressure to cut public spending.

3 SUBPRIME MORTGAGES' AND FISCAL POLICIES RESTRICTIONS' CRISIS EFFECTS ON THE AMERICAN LABOR MARKET

In this second part, the objective is to report the effects arising from the subprime mortgages and its developments over the American labor market, highlighting how the fiscal restrictions (including the legal and ideological restraints to perform countercyclical policies) affected the unemployment indicators and the employment rates in several activities both from private and public sectors.

Table 5 shows us the official evolution rate (U3) of the unemployment in the U.S. since December 07', when the National Bureau of Economics Research (NBER) indicates as official the beginning of this most recent recession, which ended in the third trimester 2009,[13] according to the NBER. Data show that, even after the end of the recession, unemployment rate endured on a high level, only declining some months later and, even then, modestly.[14]

13. Official data from the U.S. revealed that the GDP variation showed negative values since the first trimester 2008 (0.7% decrease), with a modest growth in the second quarter (0.6%) and, thereafter, lessens in the following four quarters, respectively -4%, -6.8%, -4.9% and 0.7%. From the third quarter 2009, American GDP showed an increase of 1.6%, reaching 5% in the last one. In 2010, GDP grew 3.7% in the first quarter, 1.7% in the second and 2.6% in the last one.

14. Unemployment rate in December 2009 was of 9.9%, one of the highest in the entire series published by the Bureau of Labor Statistics (BLS) since 1948.

TABLE 5
Workforce, total number of unemployed and unemployment rate[1] – United States (2007-2010)

Labor market indicators	Dec./07	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10	Jan./11
Total of civil workforce	153.80	153.84	154.90	154.32	154.47	154.48	154.59	154.06	153.72	153.95	153.84	154.24	153.90	153.186
Number of unemployed	7.664	7.815	8.499	9.477	11.108	13.161	14.721	15.142	15.212	14.943	14.593	14.746	14.485	13.863
Unemployment Rate	5,0	5,1	5,5	6,1	7,2	8,5	9,5	9,8	9,9	9,7	9,5	9,6	9,4	9,0

Source: Bureau of Labor Statistics – BLS (United States, 2011d).
Elaborated by the authors.
Note: [1] Data in millions of people and unemployment rates are a percentage of total labor force (U-3 rate from the Bureau of Labor Statistics Classification).

One of the crisis' effects on the labor market was manifested in the participation rate reduction on this market.[15] In 2007, on average annual, according to official data published by the Bureau of Labor Statistics Department of Labor from the BLS, the total members of the work force was of 66% of the population, the same average amount from 2008. However, in 2009, this rate reduced to 65.4%, and in 2010, to 64.7%. The most recent data, from January 2011, also reveals a decline in the participation rate compared with the previous month, December 2010.[16] Therefore, can be inferred that if it were not for the recent participation rate reduction,[17] the official unemployment rate could have decreased more slowly, as can be observed from the official unemployment rate (U3) throughout 2010, as well as from the recent lessen between December 2010 and January 2011.

These labor market input and output streams happened concurrently with movements of different levels of insertion within the American labor market, which is, incidentally, already known for its precarious insertion of an expressive share of its workers in the labor market. In order to measure this phenomenon the Department of Labor calculates six different unemployment rates, looking to describe the labor market's precariousness degree, as well as its members' shares fluctuations within different situations of labor market insertion (whether by a stable and formal employment, whether by an uncertain occupation) and situations of inactivity, involving the labor market withdrawn and the abandonment of the search for employment.

15. Participation rate means the population portion within the active age which is incorporated to the labor market as employed or unemployed. A decrease in the participation rate means a decrease of the employment-population ratio (EMRATIO) compared to the total amount of people within the age to work.

16. Participation rate correspond to 64.2% in January 2011, compared to a rate of 64.3% on December 2010, while the participation rate in January 2010 was of 64.8%.

17. The participation rate occurred concurrent to another important reduction to the relation job/population. Hipple (2010) says that the job/population relation's decrease in 2009 was the biggest one within a single year since the employment and unemployment series from the BLS started to be published in 1948. In the first trimester 2009, the average relation job/population was equal to 54.5%; in the last trimester 2009, relation was, in average, 52.1%. See United States (2011d).

The precarious occupations manifest by jobs with partial workdays oblivious to the worker's will and/or activities ruled by a fixed term contract, or even simply by freelance jobs, characterized by uncertain payment, poor working conditions and, fundamentally, by demotivating professional perspectives. There are also some situations in which the worker give up looking for a job, disregard the need, judging that, on this moment, there will appear more difficulties to find a job (which is conventionally called, in Brazil, unemployment by discourage).

Official unemployment rate, especially in a labor marker flexible like the American, therefore tends to underestimate the dimension of the workforce unemployment phenomenon. The methodology of the official unemployment rate estimates as equally employed both workers with complete workday and stable contractual relationship[18] and those which entered the labor market using survival strategies (freelance or part time jobs). Likewise, the official rate tends to exclude from the unemployed number those who gave up the search for a job demotivated by discourage, although the necessity.

The rates U1 to U7, calculated by the Department of Labor, measure a progressive work force underutilization. The analysis of other indicators beyond the official unemployment rate represents an important investigative element of the labor market situation and also justifies itself, especially within the current macroeconomic scenario, in which the recover from a deep crisis is still recent and shy, in a country whose labor market is extremely flexible and whose precarious activities within this market have, traditionally, a significant weight. The official rate is denominated by the Annals of the Bureau of Labor Statistics as U3.[19] Adding, successively, different situations of work force underutilization are obtained the U4, U5 and U6 rates. The U4 rate adds to the unemployed of the U3 the so-called discouraged workers.[20] U5 includes among its members, besides those already included on U4, all the other workers who marginally entered on the work force, e.g. those who in the 4 weeks preceding the survey did not look

18. American labor Market is extremely flexible (it is easy to dismiss, whether by not restrictive legislation concerning demission, whether because discharges do not imply high costs to the employers; furthermore, the labor rights in the U.S. are little comprehensive regarding contractual relationships, if notoriously compared with European developed countries) and therefore, this statement must be made with care. Strictly speaking, then, the U.S. work relations are not stable, but there are situations of grater precariousness than average, e.g., part time jobs and/or temporary employees. In any case, when speaking of stable contractual relationship, we are referring to the standard employment relationship, not the exceptions. For a comparison between the American institutional labor market and those in other western developed countries, see Mattos (2009).

19. The rate U1 is narrower than the official one, for it considers the unemployed for 15 weeks or more in relation to the total work force; the U2 rate counts only the job losers (ones who lost their jobs) and the ones who ceased their activities in temporary jobs. The U3 one (the official rate) considers not only the job losers but also those who left their jobs and those who are looking for another, as well as the new entrants, who are looking for an occupation, besides those who had left the work force but returned (that is, who returned to search for a job after ceasing looking for a period of time).

20. The discouraged unemployed are those who gave up looking actively for a job in the last 4 weeks preceding the home survey, and did so by realizing that there would be difficulties to find a work position, whether by evaluating that there woill not be any available jobs at that moment (due to the economy slowdown, for example) whether because they consider there will not be any jobs for workers with their professional or educational background; or even for fear of any other kind of difficulty or some kind of discrimination.

actively for a job due to familiar or school problems, due to temporary illness, due to transport issues or any other cause which prevented them from taking an effective action to find a job. Finally, the U6 rate adds to the unemployed from U5 those who had involuntarily took a part time job due to economic reasons,[21] that is to say the work day is partial because of demand issues regarding the employer's goods and services, or because of financial issues which the employer is facing.[22]

TABLE 6
U.S. unemployment rates, according to various criteria[1]

Period	Seasonally adjusted			
	U3	U4	U5	U6
Dec./07	5.0	5.2	5.8	8.8
Dec./08	7.2	7.6	8.3	13.5
Dec./09	10.0	10.5	11.4	17.3
Dec./10	9.4	10.2	10.9	16.7
Jan./11	9.0	9.6	10.7	16.1
	Rates variation[2]			
	U3	U4	U5	U6
Dec./10 to Jan./11	-4.3	-5.9	-1.8	-3.6
Dec./09 to Dec./10	-6.0	-2.9	-4.4	-3.5
Dec./08 to Dec./09	38.9	38.2	37.3	28.1
Dec./07 to Dec./08	44.0	46.2	43.1	53.4

Source: BLS (United States, [n.d.]a).
Elaborated by the authors.
Notes:[1] See the text for details.
[2] Percentage variation in the unemployment rate in each period.

Table 6 shows the evolution, since December 2007, of the different unemployment rate measurement, from the official rate U3 to the U6. Data indicates, for example, that during the most marked period of unemployment ascension, in 2008, the U6 rate grew way more than the official rate; similarly, in the recent unemployment retraction period, in 2010, the U6 rate gave in way less than the U3,[23] revealing the precariousness of the recent created job positions.

The current reduction of the unemployment official rate, therefore, must be carefully interpreted, for the broader unemployment rates reveal a way more modest reduction of the workforce underutilization degree. Thus, we should evaluate how the American labor market employment indicators, private and public, have evolved, highlighting its most important sector aspects.

21. Defined, according to the official compendia from the BLS, as *part time for economic reasons* or *involuntary part time*, which shows, according with the Department of Labor's methodological notes, the same entrance situation (precarious) to the American labor market.

22. In a recent and shy economic situation, after an unprecedented crisis like the one triggered by the American housing finance system mechanisms breakdown, the aforementioned situation of part time jobs due to economic reasons became even more common than usual. It is precisely why we must be careful when analyzing the American labor market growth only by the official measure (the U3 unemployment rate).

23. U6 rate showed a decrease of 3.5% between December 09' and December 10' (therefore a decrease of 0,7, starting from a level equal to 17,3%); within the same period, the U3 rate retraction was of 6%, as a result of a 10% to 9.4% reduction.

TABLE 7
Employment evolution by sector of activity (seasonally adjusted) in thousands of work positions[1]

Employment by sector of activity	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10
Total of non-agricultural activities	-240	-172	-934	-1.658	-2.121	-1.218	-617	-1.530	162	720	-159	401
Total of private sector activities	-283	-292	-973	-1.655	-2.130	-1.234	-508	-1.563	147	446	363	390
Mineral and vegetal extraction	11	17	27	-5	-34	-30	-20	-29	23	26	23	20
Construction	-129	-139	-66	-290	-383	-234	-181	-347	-104	-10	38	-17
Manufacturing industry	-130	-106	-214	-420	-601	-432	-129	-206	45	91	6	-6
Commerce, transportation, residential services (water, sanitation, electricity, telephone, etc.)	-98	-124	-179	-414	-372	-208	-173	-437	47	44	62	74
Information	-5	-17	-10	-46	-36	-64	-12	-80	-22	-11	1	-5
Financial activities	-25	-14	-98	-105	-155	-100	-52	-46	-58	-15	-8	9
Professional services to support business activities	-102	-86	-268	-319	-457	-249	-8	-154	74	147	40	105
Education and health	140	167	82	123	68	104	96	2	92	77	102	151
Leisure and housing	42	9	-258	-124	-110	-17	-1	-185	50	73	60	57
Other services	13	1	11	-55	-50	-4	-28	-81	0	24	39	2
Public sector – total	43	87	72	-2	8	16	-109	-30	78	211	-459	11
Federal	-8	17	27	6	29	13	8	15	69	260	-327	8
Federal except postal services	14	27	21	22	26	29	25	23	88	269	-321	13
United States Postal Service	-22	-10	6	-16	3	-17	-17	-26	0	-9	-6	-5
State governments	7	19	13	1	-3	-14	-3	5	-12	-22	20	20
State public education	3	19	19	14	-5	-1	-5	8	5	-11	33	20
State governments except education	4	0	-6	-5	-7	-12	1	-3	-22	-6	-13	1
Local governments	44	51	32	-9	-18	17	-114	31	-60	-27	-152	-17
Local public education	21	16	22	-8	5	13	-97	51	-35	2	-118	10
Local governments except education	24	35	10	-1	-23	4	-17	-20	-25	-65	2	-27

Source: BLS (United States, [n.d.]a).
Elaborated by the authors.
Notes: [1] Absolute variation over the last month of the previous quarter.

The peak loss of job positions occurred in the end of the first trimester 2009[24] (Table 6), remaining at an elevated level of job termination during the rest of the year. In the previous year, all quarters registered decreases in the number of non-agricultural jobs, but it should be noted that the rhythm of job decline began to accelerate in the last trimester, precisely after the Lehman Brothers crack. During this entire period of job retraction, which began in December 2007, the decline was proportionally bigger in the private sector than in the public.

In the private sector, the job decline concentrated mainly on the activities of construction (as expected, since the crisis was triggered precisely by a problem regarding the housing funding system)[25] and of manufacturing, which was also expected as during moments of retracting consumption the demand for industry cools down, as well as the investments draw back during periods of deteriorating expectations. The magnitude of job retraction in both mentioned activities can be measured by the fact that, of about 7.2 million jobs terminated in the private sector between December 2007 and December 2010, approximately 1.86 million were from construction and about 2.10 million from manufacturing,[26] that is to say, both sectors together accounted for nearly 54% of the total closed jobs in the private sector during that period (Table A.1, Appendix A), although, in the beginning of it, both activities together accounted for only 15.4% of all non-agricultural jobs and about 18.4% of jobs from private sector[27] (Table A.2, Appendix A). Also worth mentioning the job decline among financial activities during the three years listed in table 7, especially 2008 and 2009.

24. The highest official (U3) unemployment rate (10.1%), occurred in October 2009, which, moreover, was one of the highest monthly rates on record since the beginning of the BLS historical data series, in 1948. It was only between October 1982 and April 1983 there were rates higher than 10.1% in a month. Concerning the wider underutilization rate (U6), the October 09' rate (17.4%) was the highest since the beginning of this historical data series publication, in January 1994.

25. Byun (2010) highligths that the construction sector comprehend both the building sector, regarding real estate residential and non-residential, and segments of manufacturing industry related to the first, plus the production of cement, wood, architecture products, decoration and gardening goods and even the machinery involved on construction. Furthermore, also relates to the activities of contractors which hire the personnel and site, people connected to the financial activities (e.g. insurances) of houses and other buildings, not to mention the services concerning real state companies, etc. In general commerce there are also activities related, e.g. furniture stores, gardening equipment, décor objects and so on. The author reminds that during the crisis and the boom the activities related to residential construction are the ones who oscillate more. Nevertheless, marks that many of the activities listed before are also highly affected by the construction business cycle. The author shows that the real estate market retraction has an effect over the labor market in the United States way bigger than the one revealed by mere observation of what the compendia called construction sector and which are often not apprehended by most papers (as is the case with this article, which explore the data from the Bureau of Labor Statistic such as they are disclosed).

26. In December 2009, employment rate within manufacturing activities reached the level of 11.534 million jobs (Table A.1, Appendix A). According to the historical data series of employment within manufacturing activities, disclosed by the BLS, this employment rate was not so low since March 1941. As for the employment in construction, although, it kept downward continually until 2010, until January 2011, when it reached 5.455 million jobs, which, by the historical series from the BLS, is the lowest level since April 1996.

27. The relative participation of the construction sector in the U.S. non-agricultural job set fell from 5.4% in December 2007, to only 4.3% in December 2010, while during the same period the participation of manufacturing activities fell from 10.0% to 8.9%. In both cases there was a relative continuous decrease trajectory during those 3 years.

Table 8 reveals more condensed data from the decline of jobs occurred in 2008 and 2009 and also from the shy employment recover occurred during 2010. The decline was more intense within the first three months of 2009, keeping up during the whole year, but in a decreasing manner. The job decline was more intense in activities of producing goods, but not negligible within the private sector producing activities. Also, the moments in which public services jobs declined can be clearly observed: December 2008, September and December 2009 and September 2010.

TABLE 8
Employment evolution by sector of activity (seasonally adjusted)[1]
(In thousands)

Employment by sector of activity	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10
Total of non-agricultural activities	-240	-172	-934	-1.658	-2.121	-1.218	-617	-1.530	162	720	-159	401
Total of private sector activities	-283	-292	-973	-1.655	-2.130	-1.234	-508	-1.563	147	446	363	390
Production of goods	-248	-228	-253	-715	-1.018	-696	-330	-582	-36	107	67	-3
Services	8	23	-648	-942	-1.104	-522	-287	-1.011	261	550	-163	404
Private services	-35	-64	-720	-940	-1.112	-538	-178	-981	183	339	296	393

Source: BLS (United States, [n.d.]a).
Elaborated by the authors.
Notes: [1] Absolute variation over the last month of the previous quarter.

Table 9 synthesizes the same aforementioned data, now grouping them by year. It becomes clear, firstly that there was a job decline regarding the American labor market, in the years of 2008 and 2009, and a recovery in 2010. However, this recovery was far from replenishes the lost jobs in the previous two years. Data from table 7 have already showed that important sectors as construction and financial activities, precisely two of the most affected by the crisis, were still suffering job losses throughout 2010, surfacing the fragility of the economic recovery in progress.

Data from table 9 also reveal that the effects over the job level were very significant within the 36 months analyzed, both in goods production as in the service production. In the case of goods production, can be inferred that its performance was even worse, not only because it eliminated, in absolute terms, a highest quantity of jobs than service production has (3.9 million versus 3.4 million), but also for weighting less, within the U.S. labor market set, than the service production.[28]

28. Tables from Appendix A show that the relative participation of employment dedicated to good producing, within this period, fell from 15.9% of the total labor market occupations in December 2007, to only 13.8% of this total in December 2010.

TABLE 9
Employment evolution by sector of activity (seasonally adjusted)
(In thousands)

Employment by sector of activity	Dec./08	Dec./09	Dec./10	Variation Dec./08-Dec./10[1]
Total of non-agricultural activities	-3.004	-5.486	1.124	-7.366
Total of private sector activities	-3.203	-5.435	1.346	-7.292
Production of goods	-1.444	-2.626	135	-3.935
Services	-1.559	-2.924	1.052	-3.431
Private services	-1.759	-2.809	1.211	-3.357

Source: BLS (United States, [n.d.]a).
Elaborated by the authors.
Notes: [1] Absolute variation over the last month of the previous year.

Table 9's data also calls attention to the fact that between the services activities, the public sector's behavior had an important role, by eliminating about 115.000 jobs during the sharpest crisis boom (2009) and continued to eliminate jobs in 2010, despite the recovery of the labor market group. In 2010, the American public sector eliminated another 159.000 jobs, making it even more difficult a better recovery of the average job level within the U.S. labor market grouping.

Given this, it is important to examine the negative performance of the public sector labor market in the light of causes related to the tax collection, to the current rules for executing the fiscal policy in all governmental spheres and, finally, to the Obama administration attitude, as well as his predecessor's, regarding economic and social policies which affect the public employment within each government sphere – as stated in the first part of this article.

Public employment data separated by government sphere and some activities are described in table 10, in which can be verified that the cuts were more expressive in the local public sector sphere, primarily, and in the state sphere.[29] As for the local employment, must be noted that: throughout 3 years, 222.000 jobs were lost, with significant cuts especially in 2010.[30]

Some considerations, thus, must be done here, both related to the recent crisis' situational and institutional aspects, and to the historical/structural aspects of the public employment evolution, by governmental level and by the activities outlined in this article's tables (postal service and educational).[31]

29. Data from table A.6 in Appendix A show that most significant cuts in the number of employed occurred late in the third quarter of each year, which is when it ends the fiscal year in the U.S.

30. Several studies, including the one by Hatch (2004) remind of a disparity between the economic cycle and the tax collection. This is one of the reasons why the elimination of jobs in the public sector was more dramatic in 2010 than it was in 2009; while in 2008 the public jobs stock had showed no decline yet. The severity of the recession and the rigid rules of fiscal balance in the states and localities ended up promoting the reduction of jobs (and duties) in the local public sector, as shall be seen below. Furthermore, it must be reminded that: i) in 2008, recession only effectively settled by the second semester; and ii) also in 2008, federal government was still doing transfers to states and municipalities cope with the crisis.

31. The Bureau of Labor Statistics (BLS) publishes regularly a disaggregation of data from federal sphere public jobs, in order to bring to light the jobs in postal activities, within state and local levels. Data from education usually come disaggregated, due to its importance in these subnational government levels.

TABLE 10
Public employment evolution by government level and selected activities (seasonally adjusted)
(In thousands of work positions)

Public employment by government level	Dec./08	Dec./09	Dec./10	Variation Dec./08-Dec./10[1]
Total of public service activities	200	-34	-240	-74
Federal Government	42	65	10	117
Federal except postal service	84	104	49	237
United States Postal Service	-42	-57	-20	-119
State governments	40	-15	6	31
Government public education	56	-4	47	99
State governments except education	-7	-20	-41	-68
Local governments	118	-84	-256	-222
Local public education	52	-28	-140	-116
Local governments except education	67	-57	-115	-104

Source: BLS (United States, [n.d.]a).
Elaborated by the authors.
Notes: [1] Absolute variation over the last month of the previous year.

Publishing, made by BLS, of public employment statistics keep separated data from postal activities because of the importance those have in the United States' public sector activities. The postal activities are, in the U.S., historically linked to the public sector nationally. The sector employs an expressive number of people and has represented, by the end of the 90s, about 30% of all public employees at the federal level.[32] In absolute terms, the highest level was reached by 1999, when there were 876.5 thousand workers in the United States Postal Service; since that year, the number of workers in these activities decreased almost every year, continually, until it reached the current level of 664.000 employees, from December 2010 on. Therefore it can be inferred that this decrease, in such recent period, derives from factors unrelated to the recent recession.[33]

Data from table 10 reveal that the other occupations in the federal public sector grew during that period, clearly contrasting with the effect on local level, where the job retraction was widespread: occurred both in education related activities[34] as in others.

32. Regarding the U.S. entire population, postal workers already represented, by the end of the 60s, a proportion of 3.6 employees for every group of thousand inhabitants and maintaining, until the end of the 80s, in the range of 3 for every thousand people and declining until the actual level of about 2 postal workers for every group of one thousand Americans.

33. Obviously, changes in the population habits, concerning the ever wider and more disseminated access to new technologies of information and communication, now incorporated in everyday life, explain this decline continuous (and significant) of jobs in postal activities in the U.S.. Therefore, even if the recession plays also a role in the reduction of these activities, it cannot be attributed to circumstantial factors to this loss, of about 119.000 jobs between December 2007 and December 2010 (Table 10).

34. Just like the postal service, at federal level, education activities have a special emphasis at state and local level.

The job loss at state level happened only in 2009 and, even then, was much less pronounced than the one observed on the local level (Table 10). Moreover, it is noteworthy that, unlike local level job loss in educational activities was not that decisive for this government level job performance. There were the other state level public activities which felt the decline, in each year analyzed, certainly as a result of the impacts from the fiscal adjustment executed by the states when the crisis began. Institutional factors and also the education workers' union organizations statewide (with significant weight from the U.S. universities, which are almost all linked to states) should explain this development, and leave to other state activities the higher costs, concerning job elimination, of the fiscal "adjustment" promoted by the governors.

The job reduction of educational local activities, throughout the three analyzed years, reverts an unambiguous path of its participation growth within the employment set which was recorded during the period from 1960-2008 (Table 11). It was especially because of the education activities that the relative weight of local level public employment (and, to a lesser extent, also state level) did grow within the U.S. public employment set. By evaluating the number of education activities jobs in relation to the amount of inhabitants,[35] it can be noticed the expansion of education activities within the last decades. Peters (2008) recognized this phenomenon, highlighting that public education in the U.S. always had a strong tradition of union association and exerted a great influence at local level. So, these unions historically managed to expand hiring in education sector, promoting an increase in the number of teachers superior than that which would normally happen due to only demographic reasons.[36]

The final result of all these different changes in public employment level (according to government spheres and singled out activities) manifested by the decrease of the local level jobs' relative participation, from 64.7% compared to the public employment set in December 2007, to 63.9% in December 2010. At the same time, relative participation of state level job remained virtually motionless (Table A.5, Appendix A).

This recent path of public employment distribution by government level clearly contrast with this same profile evolution during the last decades (Table 11) – which reveals the severity of the fiscal adjustment which states and, particularly,

35. This analysis can be done by taking the data evolution of public employment in education (summing local and state level) and of population. Thus, it is recorded a continuous evolution until 2008: 16.2 education employees for each group of thousand Americans in 1960; 24.2 in 1968; 30.2 in 1980; 31.5 in 1992; 34.6 in 2000; 35.7 in 2004 and 36.2 in 2008.

36. Peters (2008) also evaluated that, within local and state levels, civil service historically remains immune to the anti-government discourse and the neoliberal practices of management or budget control, even in the boom of neoliberal ideological hegemony, during the 90s. In fact, not even during the pinnacle of neoliberalism, had the education activities suffered the impact they coped with during the three years analyzed in this article.

localities had to undertake,[37] given the magnitude of recent recession and the legal and ideological issues involved in public spending, as described in the first section of this article.[38]

TABLE 11
Public employment distribution by government level in the U.S.
(In %)

	2008	2004	2000	1996	1992	1988	1984	1980	1976	1972	1968	1964	1960
Total of public employment	**22.561**	**21.693**	**20.804**	**19.571**	**18.878**	**17.736**	**16.282**	**16.373**	**15.075**	**13.684**	**12.145**	**9.897**	**8.597**
Federal	12,3	12,6	13,2	14,5	16,4	17,8	18,2	18,1	18,9	20,5	23,5	24,9	28,0
Federal[1]	9,1	9,0	9,0	10,1	12,2	13,0	13,8	14,0	14,5	15,6	17,6	19,0	20,5
State	23,0	23,0	23,1	23,4	23,5	23,2	23,2	22,2	22,2	21,3	20,6	19,3	18,3
State – education	10,5	10,3	9,8	9,7	9,6	9,2	9,3	8,6	9,3	8,8	8,2	6,4	5,3
Local	64,7	64,4	63,7	62,1	60,0	59,0	58,6	59,7	58,8	58,2	56,0	55,8	53,8
Local – education		36,0	35,4	34,1	32,5	31,9	31,4	31,3	31,8	31,9	30,7	29,6	27,4

Source: BLS (United States, [n.d.]a).
Elaborated by the authors.
Notes: [1] Federal except U.S. Postal Service.

4 FINAL CONSIDERATIONS

Subprime mortgages' crisis had a devastating effect on American economy. It was breed in the core of a capitalist economy – its financial system – and, if it had been allowed to follow its natural course, could it have had even graver consequences. The resolute and broad acting of the American government was directly responsible for such picture not materializing. As showed in this text, state intervention did not limit to the usual countercyclical fiscal policies, including also more extreme measures as *de facto* nationalizations of important financial institutions (even from the productive sector). It should be noticed also, that the Federal Reserve System (Fed) had a decisive acting as a real commercial bank, directly discounting non-financial private sector bonds.

Two significant elements stand out in this broader framework. The first one concerns the fiscal impact itself which came from those interventions. As most of the measures related to the financial system consisted of emergency assets purchases, the huge amount of initial spending did not turn into direct public spending, once almost all of those were repurchased by the private sector. Therefore, the quantitative dimension of government intervention was smaller than that

37. Notedly in 2009 and 2010, although in 2010 economy was emitting signals of recovery.

38. Only to record a contrast between previous recessions, in 2002, one year after the last one, government activities (except postal service) were the fastest growing ones, representing an important element in the American labor market recovery at that moment, as reminds Hatch (2004).

perceived by public opinion at first. The other important point to highlight was de asymmetry between federal intervention and that from subnational unities, being the former way more effective than the latter.

Data discussed in the second part of this article confirm such asymmetry: the effects on public employment at subnational level were way smaller than the effects on the same variable nationally, producing a significant reduction in the ratio between subnational and federal employment. This result contrasts with the historically evolution of the public employment profile by government level, as demonstrated on the second section of this study. Thus, public employment did not show an ability to avoid the expressive increase of unemployment during the crisis.

Analyzing the labor market in its entirety, data show an increase in the unemployment rate path, both in the official one (U3) and in the broader ones, specially the U6, which includes as unemployed the number of workers in part time jobs due to reasons beyond their will.

The speed with which the rate grew, from mere 5.0% in December 2007 to more than 10% in mid-2009, and yet getting around 9.4% by the end of 2010, reveals the nefarious effects that a flexible labor market can have on the workers' lives.[39]

This disappointing trajectory of the unemployment rate was due to the huge downfall of jobs in the private sector, especially those activities more affected by the subprime mortgage crisis' characteristics. The total amount of unemployed just has not reached a worst level because, given the depth and extension of the crisis within time, many people gave up looking for a job and stopped pushing the labor market.[40] The cooling of the pressure on the unemployment rate, however, should not be seen as a good symptom of the labor market behavior, given the motives and conditions which explain the reduction of the workforce participation rate. It is even worse to note, as did the study disclosed by the Economic Policy Institute[41] that, unlike what happened on previous recessions the

39. It is ironic to think that the entire speech of the rumored *eurosclerosis*, so present and hegemonic during the 80s and especially the 90s, comparing the alleged excellency of the American labor market institutionalism with the regulated European labor market's *sclerosis*, has served as an alibi (with disappointing results in the Old Continent) for the adoption of several liberalizing reforms in labor markets of many Western Europe countries. This reforms were based on the grounds that, in those countries, the unemployment rates (equivalent to the American U3) were much higher than in the U.S.. Nowadays, the unemployment rate in the U.S. is at a very similar level to that in the Eurozone, and even higher than the rate in many of those countries. For a more methodological evaluation of the different unemployment rates, as well as of the liberal *eurosclerosis* speech and the results of the European labor market easing measures, see Mattos (2009).

40. In one report, Shierholz (2010) highlights that, from December 2007 to December 2010, given the Civilian Employment-Population Ratio growth, the workforce should have grown by approx. 4.1 million people, but instead, grew into only 138.000 people. Therefore, about 4 million workers thickened the lines of discourage unemployment or fell into inactivity (depending on the criteria of unemployment used; the official rate considers them simply inactive, that is, take them out the unemployment account). The report draws attention to the fact that if half of this workers were effectively into the workforce and suddenly became unemployed, the (official) unemployment rate, in November 2010, would be at least in 11.0%, instead of the already significant level of 9.8% of the current workforce.

41. See Shierholz (2010).

unemployment rate, besides reaching a level not seen for about 30 years, in 2009 and 2010, neither giving any signal of recovering with same speed from previous recessive periods; although the economy, in 2010, already emitted signals of expansion from the productive activities in some sectors. As shown in this study's first part, certainly, the effects on the product and the labor market would have been way worse if was not for the massive government intervention in economy.

Crisis also affected the labor market in the public sector, and it prevailed throughout 2010, although the job level in the private sector has partially recovered during the year. The recession severity caused by the housing financial systems failure triggered crisis, along the legal restrictions placed so that the local and state executive's mandatories would execute countercyclical policies, which could, in a further movement, recover the economy and promote an expectation change in the American society economic agents. Such restrictions had at public employment level by local and state spheres, some of its most nefarious and pronounced effects.

Public employment's provision decline in the years of 2009 and 2010 and also the change within its internal composition according to government spheres and certain activities (especially education), represented such significant movements that promoted changes in the trajectory of some American civil service's characteristics that had been showing since, at least, mid-60s. The reversal in the educational activities employment represented the most conspicuous characteristic out of these more recent years' exceptionality.

The limited effects of the measures adopted by the George W. Bush administration (in its agony) and after that by the Obama administration since its beginning, as well as the restrictions imposed by the current legislation of tax matters to the sub federal levels of the government spheres, and not to mention the ideological hindrances self-imposed by the responsible for the fiscal policies' execution themselves, ended by affecting the public employment in those spheres in a much more intense way than, for example, during the 2001 recession. In 2008 civil service grew very little but, in 2009 and 2010, declined, making it not possible to work as a countercyclical factors or an automatic stabilizer, in case it has, at least, stable concerning its provision. As shown in the first section of this study, until 2009 the federal administration still transferred resources to states and localities, but starting from 2010, those resources were drastically reduced, under the aegis of the American Recovery and Reinvestment Act (ARRA). With such decision, public sector started to dismiss employees, especially locally – affecting even the education activities, which historically in the U.S., even during recession and fiscal austerity moments, were frequently immune to cuts in employed numbers. It must be registered that, during the most recent recession, local public funding could not count on a very important budget reinforcement which marked the 2001 recession: during that time, the optimistic real estate

market contributed, a little before the recession, and also right after it – especially – to increase the localities revenues. This time, however, the crisis epicenter was precisely the housing market and the activities moved by it, as construction and construction demanded activities. Therefore, local federative entities could not count on those fonder resources, that is, taxes over real estate properties. Nevertheless, it must be registered that the contractionary effects of state and local policies would have been even more severe if it was not for the significant increase of transfers from the federal government to the subnational unities.

The comparison with the 2001 recession reveals that, in the most recent case, the loss of public jobs, unlike what happened on the latter, ended by further deteriorating the unemployment situation within the American labor market.

It can be inferred that, in the set of U.S. labor market, even considering that the civil service is not that significant (around 15%), it could have had an important role to mitigate the severity of the past two years' unemployment – if its behavior had been similar to that verified in the 2001 recession.[42]

To illustrate, we remember that the unemployment rate from December 2010 reached 9.4% of workforce, standing on a level only a little bit smaller than the peak, obtained by the end of the previous year. After eliminating about 115.000 jobs in 2009, civil service continued to retract throughout 2010 (eliminating 159.000 other jobs), although the labor market already showed a modest recovery. For the unemployment rate to reach, in December 2010, at least the same value as the end of the first quarter 2009 (that is, 8.7%), when economic activity was at its most depressed level since the crisis deflagration, American public sector, besides not having eliminate 275.000 jobs in the biennium 2009-2010, should have created more 800.000 jobs during the same period,[43] a very unlikely situation within the fiscal and ideological scenario experienced by the states and local governments.

Finally, it is very necessary to register that the crisis' effects on the U.S. employment reveals, above all, the detrimental situation presented by the labor market flexibilization (so rumored by neoliberals), which has a pronounced procyclical behavior. Furthermore, it becomes evident how the balanced budget dogma – consolidated by draconian laws to states and localities execute their budgets – combined with the gradual closing of the ARRA effects, will probably affect the job generation and also have a negative impact on the modest economy recovery which begun in 2010.

42. Throughout 2001, for example, there were created about 531.000 jobs in the U.S. public sector, of which 366.000 locally and 179.000 statewide.

43. In order to reach this number, it is assumed that all the dismissed from civil service in the past years would have remained on the labor market (that is, wouldn't have quit from the EMRATIO). Thus, there will come to a notional amount of about 13.411 million unemployed in December 2010, with the same workforce magnitude from that month, i.e. 153.690 million people. Nevertheless, in this simulation it wasn't evaluated, over the economic activity, the *multiplier effect* of the hypothetical public employment expansion.

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APPENDIX A

TABLE A.1
Employment evolution by sector of activity since the subprime crisis[1]
(In thousands)

Employment by sector of activity	Dec./07	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10
Non-agricultural total	138.078	137.838	137.666	136.732	135.074	132.953	131.735	131.118	129.588	129.750	130.470	130.311	130.712
Private total	115.745	115.462	115.170	114.197	112.542	110.412	109.178	108.670	107.107	107.254	107.700	108.063	108.453
Mining and logging	739	750	767	794	789	755	725	705	676	699	725	748	768
Construction	7.465	7.336	7.197	7.131	6.841	6.458	6.224	6.043	5.696	5.592	5.582	5.620	5.603
Manufacturing industry	13.772	13.642	13.536	13.322	12.902	12.301	11.869	11.740	11.534	11.579	11.670	11.676	11.670
Commerce, transportations and public services	26.658	26.560	26.436	26.257	25.843	25.471	25.263	25.090	24.653	24.700	24.744	24.806	24.880
Information	3.018	3.013	2.996	2.986	2.940	2.904	2.840	2.828	2.748	2.726	2.715	2.716	2.711
Financial activities	8.252	8.227	8.213	8.115	8.010	7.855	7.755	7.703	7.657	7.599	7.584	7.576	7.585
Professional and business services	18.131	18.029	17.943	17.675	17.356	16.899	16.650	16.642	16.488	16.562	16.709	16.749	16.854
Education and health services	18.568	18.708	18.875	18.957	19.080	19.148	19.252	19.348	19.350	19.442	19.519	19.621	19.772
Leisure and entertainment	13.635	13.677	13.686	13.428	13.304	13.194	13.177	13.176	12.991	13.041	13.114	13.174	13.231
Other services	5.507	5.520	5.521	5.532	5.477	5.427	5.423	5.395	5.314	5.314	5.338	5.377	5.379
Government – Total	22.333	22.376	22.463	22.535	22.533	22.541	22.557	22.448	22.418	22.496	22.707	22.248	22.259
Federal	2.735	2.727	2.744	2.771	2.777	2.806	2.819	2.827	2.842	2.911	3.171	2.844	2.852
Federal except U.S. Postal Service	1.972	1.986	2.013	2.034	2.056	2.083	2.112	2.137	2.160	2.248	2.517	2.196	2.209
U.S. Postal Service	763	741	731	737	721	724	707	690	664	663	654	648	644
State Government	5.153	5.160	5.179	5.192	5.193	5.190	5.176	5.173	5.178	5.166	5.144	5.164	5.184
Government public education	2.332	2.335	2.354	2.373	2.388	2.383	2.381	2.376	2.384	2.389	2.378	2.411	2.431
State government except education	2.821	2.825	2.825	2.819	2.814	2.808	2.796	2.797	2.795	2.772	2.766	2.753	2.753
Local government	14.445	14.489	14.540	14.572	14.563	14.545	14.562	14.448	14.479	14.419	14.392	14.240	14.223
Local public education	8.016	8.037	8.053	8.075	8.068	8.072	8.086	7.989	8.040	8.005	8.007	7.889	7.900
Local government except education	6.428	6.452	6.487	6.496	6.495	6.473	6.476	6.459	6.439	6.414	6.349	6.350	6.324

Source: Bureau of Labor Statistics (BLS).
Elaborated by the authors.
Notes: [1] Seasonally adjusted.

TABLE A.2
Employment evolution by sector of activity since the subprime crisis[1]
(In percentage of total jobs)

Employment by sector of activity	Dec./07	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10
Non-agricultural total	100	100	100	100	100	100	100	100	100	100	100	100	100
Private total	83.8	83.8	83.7	83.5	83.3	83.0	82.9	82.9	82.7	82.7	82.5	82.9	83.0
Mining and logging	0.5	0.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.6	0.6	0.6
Construction	5.4	5.3	5.2	5.2	5.1	4.9	4.7	4.6	4.4	4.3	4.3	4.3	4.3
Manufacturing industry	10.0	9.9	9.8	9.7	9.6	9.3	9.0	9.0	8.9	8.9	8.9	9.0	8.9
Commerce. transportations and public services	19.3	19.3	19.2	19.2	19.1	19.2	19.2	19.1	19.0	19.0	19.0	19.0	19.0
Information	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.1	2.1	2.1
Financial activities	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.8	5.8	5.8
Professional and business services	13.1	13.1	13.0	12.9	12.8	12.7	12.6	12.7	12.7	12.8	12.8	12.9	12.9
Education and health services	13.4	13.6	13.7	13.9	14.1	14.4	14.6	14.8	14.9	15.0	15.0	15.1	15.1
Leisure and entertainment	9.9	9.9	9.9	9.8	9.8	9.9	10.0	10.0	10.0	10.1	10.1	10.1	10.1
Other services	4.0	4.0	4.0	4.0	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1	4.1
Government – Total	16.2	16.2	16.3	16.5	16.7	17.0	17.1	17.1	17.3	17.3	17.4	17.1	17.0
Federal	12.2	12.2	12.2	12.3	12.3	12.4	12.5	12.6	12.7	12.9	14.0	12.8	12.8
Federal except U.S. Postal Service	8.8	8.9	9.0	9.0	9.1	9.2	9.4	9.5	9.6	10.0	11.1	9.9	9.9
U.S. Postal Service	3.4	3.3	3.3	3.3	3.2	3.2	3.1	3.1	3.0	2.9	2.9	2.9	2.9
State Government	23.1	23.1	23.1	23.0	23.0	23.0	22.9	23.0	23.1	23.0	22.7	23.2	23.3
Government public education	10.4	10.4	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.5	10.8	10.9
State government except education	12.6	12.6	12.6	12.5	12.5	12.5	12.4	12.5	12.5	12.3	12.2	12.4	12.4
Local government	64.7	64.8	64.7	64.7	64.6	64.5	64.6	64.4	64.6	64.1	63.4	64.0	63.9
Local public education	35.9	35.9	35.9	35.8	35.8	35.8	35.8	35.6	35.9	35.6	35.3	35.5	35.5
Local government except education	28.8	28.8	28.9	28.8	28.8	28.7	28.7	28.8	28.7	28.5	28.0	28.5	28.4

Source: Bureau of Labor Statistics (BLS).
Elaborated by the authors.
Notes: [1] Seasonally adjusted.

TABLE A.3
Employment evolution by sector of activity since the subprime crisis[1]
(In thousands)

Employment by sector of activity	Dec./07	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10
Non-agricultural total	138.078	137.838	137.666	136.732	135.074	132.953	131.735	131.118	129.588	129.750	130.470	130.311	130.712
Private total	115.745	115.462	115.170	114.197	112.542	110.412	109.178	108.670	107.107	107.254	107.700	108.063	108.453
Production of goods	21.976	21.728	21.500	21.247	20.532	19.514	18.818	18.488	17.906	17.870	17.977	18.044	18.041
Services	116.102	116.110	116.133	115.485	114.543	113.439	112.917	112.630	111.619	111.880	112.430	112.267	112.671
Private services	93.769	93.734	93.670	92.950	92.010	90.898	90.360	90.182	89.201	89.384	89.723	90.019	90.412

Source: BLS.
Elaborated by the authors.
Notes: [1] Seasonally adjusted.

TABLE A.4
Public employment evolution by government level and selected activities since the subprime crisis[1]
(In thousands of work positions)

Public employment by government levels	Dez./07	Mar./08	Jun./08	Set./08	Dez./08	Mar./09	Jun./09	Set./09	Dez./09	Mar./10	Jun./10	Set./10	Dez./10
Government – Total	**22.333**	**22.376**	**22.463**	**22.535**	**22.533**	**22.541**	**22.557**	**22.448**	**22.418**	**22.496**	**22.707**	**22.248**	**22.259**
Federal	2.735	2.727	2.744	2.771	2.777	2.806	2.819	2.827	2.842	2.911	3.171	2.844	2.852
Federal except U.S. Postal Service	1.972	1.986	2.013	2.034	2.056	2.083	2.112	2.137	2.160	2.248	2.517	2.196	2.209
U.S. Postal Service	763	741	731	737	721	724	707	690	664	663	654	648	644
State government	5.153	5.160	5.179	5.192	5.193	5.190	5.176	5.173	5.178	5.166	5.144	5.164	5.184
Government public education	2.332	2.335	2.354	2.373	2.388	2.383	2.381	2.376	2.384	2.389	2.378	2.411	2.431
State government except education	2.821	2.825	2.825	2.819	2.814	2.808	2.796	2.797	2.795	2.777	2.766	2.753	2.753
Local government	14.445	14.489	14.540	14.572	14.563	14.545	14.562	14.448	14.479	14.419	14.392	14.240	14.223
Local public education	8.016	8.037	8.053	8.075	8.068	8.072	8.086	7.989	8.040	8.005	8.007	7.889	7.900
Local government except education	6.428	6.452	6.487	6.496	6.495	6.473	6.476	6.459	6.439	6.414	6.349	6.350	6.324

Source: BLS.
Elaborated by the authors.
Notes: [1] Seasonally adjusted.

TABLE A.5
Public employment percentual distribution by government level and selected activities since the subprime crisis[1]

Public employment by government level	Dec./07	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10
Government – Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Federal	12.2	12.2	12.2	12.3	12.3	12.4	12.5	12.6	12.7	12.9	14.0	12.8	12.8
Federal except U.S. Postal Service	8.8	8.9	9.0	9.0	9.1	9.2	9.4	9.5	9.6	10.0	11.1	9.9	9.9
U.S. Postal Service	3.4	3.3	3.3	3.3	3.2	3.2	3.1	3.1	3.0	2.9	2.9	2.9	2.9
State government	23.1	23.1	23.1	23.0	23.0	23.0	22.9	23.0	23.1	23.0	22.7	23.2	23.3
Government public education	10.4	10.4	10.5	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.5	10.8	10.9
State government except education	12.6	12.6	12.6	12.5	12.5	12.5	12.4	12.5	12.5	12.3	12.2	12.4	12.4
Local government	64.7	64.8	64.7	64.7	64.6	64.5	64.6	64.4	64.6	64.1	63.4	64.0	63.9
Local public education	35.9	35.9	35.9	35.8	35.8	35.8	35.8	35.6	35.9	35.6	35.3	35.5	35.5
Local government except education	28.8	28.8	28.9	28.8	28.8	28.7	28.7	28.8	28.7	28.5	28.0	28.5	28.4

Source: BLS.
Elaborated by the authors.
Notes: [1] Seasonally adjusted.

TABLE A.6

Public employment evolution[1] by government level and selected activities since the subprime crisis[2]

(In thousands of work positions)

Public employment by government level	Mar./08	Jun./08	Sep./08	Dec./08	Mar./09	Jun./09	Sep./09	Dec./09	Mar./10	Jun./10	Sep./10	Dec./10
Government – Total	43	87	72	-2	8	16	-109	-30	78	211	-459	11
Federal	-8	17	27	6	29	13	8	15	69	260	-327	8
Federal except U.S. Postal Service	14	27	21	22	26	29	25	23	88	269	-321	13
U.S. Postal Service	-22	-10	6	-16	3	-17	-17	-26	0	-9	-6	-5
State government	7	19	13	1	-3	-14	-3	5	-12	-22	20	20
Government public government	3	19	19	14	-5	-1	-5	8	5	-11	33	20
State government except education	4	0	-6	-5	-7	-12	1	-3	-17	-11	-13	1
Local government	44	51	32	-9	-18	17	-114	31	-60	-27	-152	-17
Local public education	21	16	22	-8	5	13	-97	51	-35	2	-118	10
Local government except education	24	35	10	-1	-23	4	-17	-20	-25	-65	2	-27

Source: BLS.

Elaborated by the authors.

Notes: [1] Absolute variation over the last month of the previous quarter.

[2] Seasonally adjusted.

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Composed in Adobe Garamond 11/13.2 (text)
Frutiger 67 Bold Condensed (headings, graphs and tables)
Printed on offset 80g/m^2
Card stock 250g/m^2 (cover)
Brasília – DF – Brazil

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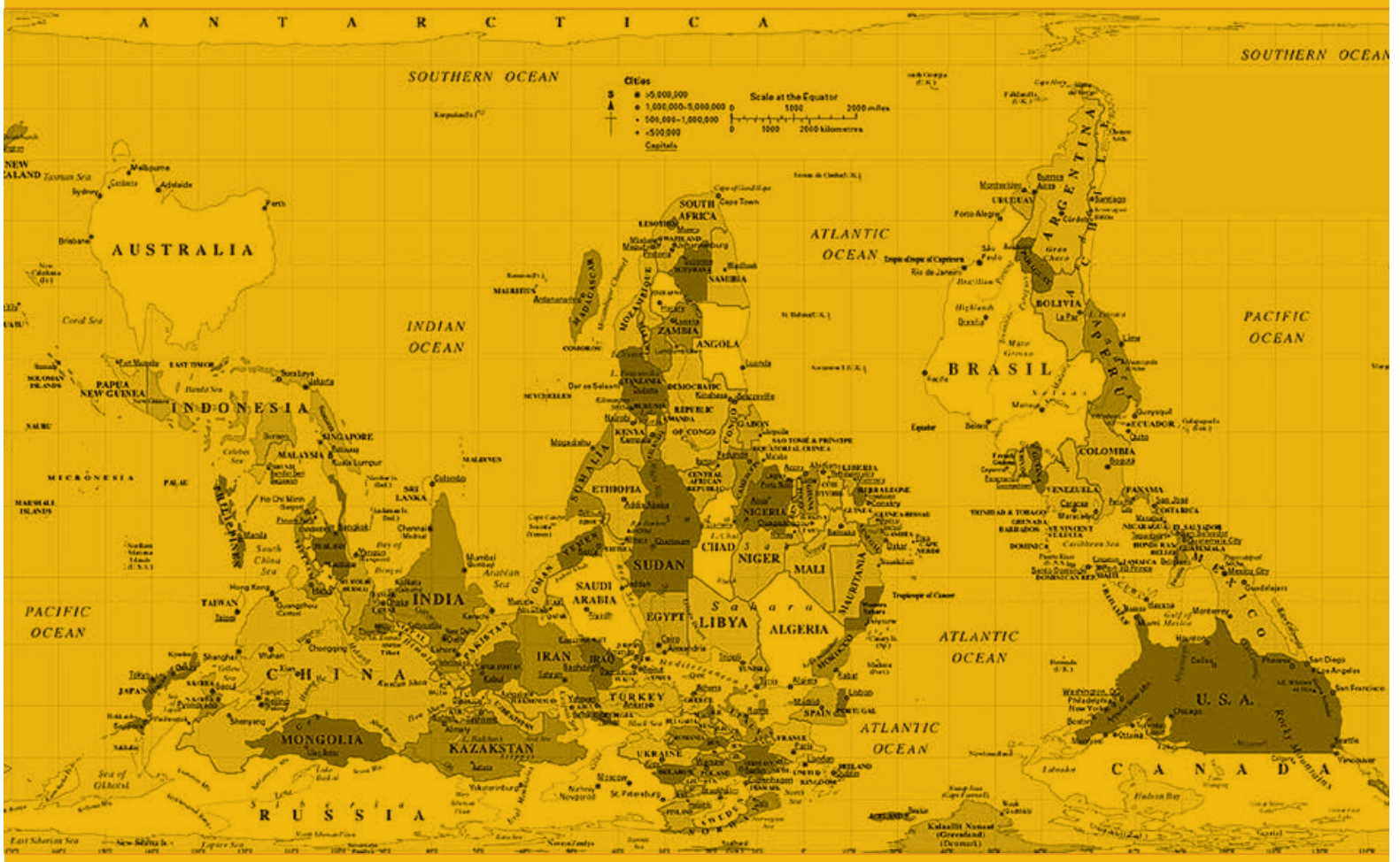

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ISSN 2177-0255

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