

### Highlights

- With a budget cut of R\$ 38.9 billion, the fiscal policy would be contractionary in 2017
- The minimum age of 65 years would reduce RGPS (General Social Welfare Policy) spending by 1.4% of GDP in 2041
- Supplementary Law Bill No 343/2017 contributes to federative rebalancing
- Even with alternative accounting, deficit of the social security is high and increasing

### Summary

- The so-called **structural** primary result makes it possible to calculate the fiscal impulse in a more realistic way, since it takes into account the effects of the economic cycle. In the IFI accounts, the first version of the fiscal impulse calculation points to an important effect of the new fiscal policy on the 2017 result, as long as a relevant budget cut is announced and implemented.
- The **social welfare reform** (PEC 287) will result in important short, medium and long-term fiscal effects. Expenditure will increase less, providing more room for continued social security financing and other public policies. The essential rule to be preserved, even if Parliament modifies certain points of the PEC, is the setting of a minimum age.
- By 2060, the **proportion of the elderly in the working population will be multiplied by 3.8 times**, increasing pressure on the social welfare funding. Under current rules, the public budget would have to allocate 70% of resources as early as 2030 to fund the social welfare alone. Sustainability will only be guaranteed through major changes in the benefit granting rules.
- The **federative fiscal crisis** must be analyzed in depth. The source of the issues related to states' debt lies in the mismatches between revenues and expenses, especially in the strong increase of personnel expenses, partially hidden due to accounting problems.
- The proposed renegotiation via **Supplementary Law Bill No. 343/2017** will provide the states an important relief, but it is essential that the counterparts be observed, especially the control of current expenditure growth based on the inflation rule. Our simulations point out that the implementation of this rule will help to extend the primary results in a relevant and gradual way.

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## Introduction

The Fiscal Follow-Up Report - [Portuguese acronym RAF - Relatório de Acompanhamento Fiscal] for March provides assessments on important aspects for monitoring fiscal policy. We highlight the fiscal effects of the enactment of the social welfare reform, discuss the expected results of the enactment of the bill concerning the renegotiation of state debts, and present the calculation of the structural primary result.

Setting the minimum age for retirement at 65 years is the crucial aspect of the bill. By 2060, the number of the elderly in regard to Brazil's economically active population will grow exponentially, which will generate increasing pressures on social welfare accounts. Ignoring this fact will deeply compromise the fiscal balance in a long-term perspective.

In the sphere of the states, the fiscal crisis is a cause for concern. The good news is that the Supplementary Law Bill No 343/2017 will help restore a practice in line with the fiscal responsibility spirit. This will depend on the preservation of the counterparts provided for in the statute, mainly the rule regarding the increase of current expenditure.

This second edition of the Fiscal Follow-up Report (RAF) also proposes a first study on the evolution of the central government's structural primary result. Following the IMF methodology, we calculate the fiscal result considering adjustments caused by the variation of the cycle of economic activity. This calculation allows the assessment of the so-called fiscal impulse, that is, to verify whether the fiscal policy is being expansionist or contractionary and to what degree. In 2017, for instance, if the government announces and implements a R\$38.9 billion budget cut, we will have a moderate fiscal contraction.

Finally, the present paper compares the official methodology for calculating the social security and social security deficit and an alternative methodology, which has been widely disseminated in order to deny the existence of a deficit. We show that, even from an unofficial calculation point of view, social security would have ended 2016 with a R\$ 97.1 billion deficit.

**Felipe Scudeler Salto**

Executive Director

## Macroeconomic context

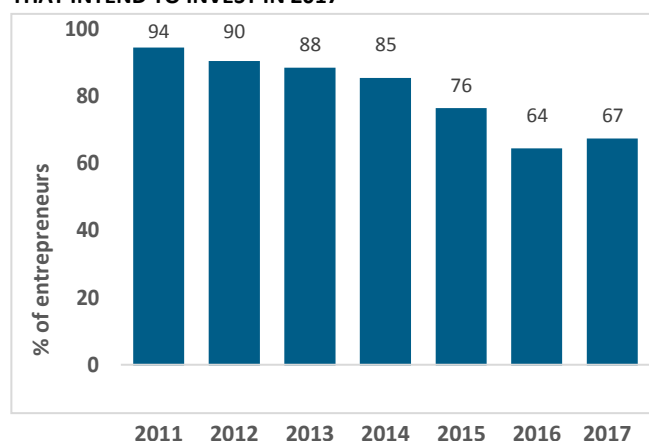
### Activity

The Brazilian economy is showing subtle signs of recovery. If on the one hand the confidence indexes are improving, according to several surveys, on the other, the materialization of this trust in economic activity and investments has not materialized.

For instance, the Industry Confidence Index (ICI) calculated by the Getulio Vargas Foundation (FGV) - a variable that measures how trustworthy the industrial sector believed the economy to be - went up 3.1 points in 2017, reaching 87.8 points in February in comparison with 76 points in February 2016. Meanwhile, the Business Confidence Index (BCI) calculated by CNI the Confederação Nacional da Indústria - [National Industry Confederation - NIC] reached 53.1 in February, entering the optimist range (below 50) and moving towards the historical average (54.1).

In its survey on industry investments, CNI (National Confederation of Industry) also reveals that for 88% of entrepreneurs the current installed capacity is satisfactory or more than satisfactory for their output needs. This result indicates that the level of investments may be constrained in 2017, as can be seen in the Graph 1. Although the value predicted for 2017 (67%) is higher than that of 2016 (64%), it is still quite lower than those observed in recent years.

**GRAPH 1 - INVESTMENT INTENTIONS: % OF ENTREPRENEURS THAT INTEND TO INVEST IN 2017**



Source: CNI.

Expectations for GDP growth, according to the Focus survey by the Central Bank of Brazil, also reflect the feeling that current conditions are not good, but prospects are favorable.

The median of GDP growth forecasts for 2017 dropped from 0.50% to 0.48% between January 02 and February 17, 2017, whereas GDP growth forecasts for 2018 were raised from 2.2% to 2.3%.

This dual situation between less favorable conditions in the present and more promising conditions in the future is linked to a series of factors. First of all, to a higher credibility of the government's economic policy. Economic agents believe that, if the reforms that are taking place succeed, the economy will react in the medium run.

Nonetheless, in the short term, a number of obstacles hinder growth. The use of the industrial installed capacity is still low, which refrains the investment of the companies. In December of last year, for example, there was an additional decline compared to November, 76.0% against 76.4%. In 2016 there was a 1.7% decline.

Moreover, the strong recession experienced in the 2015/16 biennium has led to large corporate defaults. According to the Central Bank, the default rate of legal entities grew 0.73%, reaching 3.46%. A new addition made it end January at 3.50%.

The situation of household debt is still worrying and makes it much more difficult to resume consumption. However, the level of indebtedness itself is not unprecedented, as it can be seen on Graph 2, based on FECOMERCIO/SP [Trade Federation of the State of São Paulo] data. The fluctuation of the percentage of indebted households around 50% is

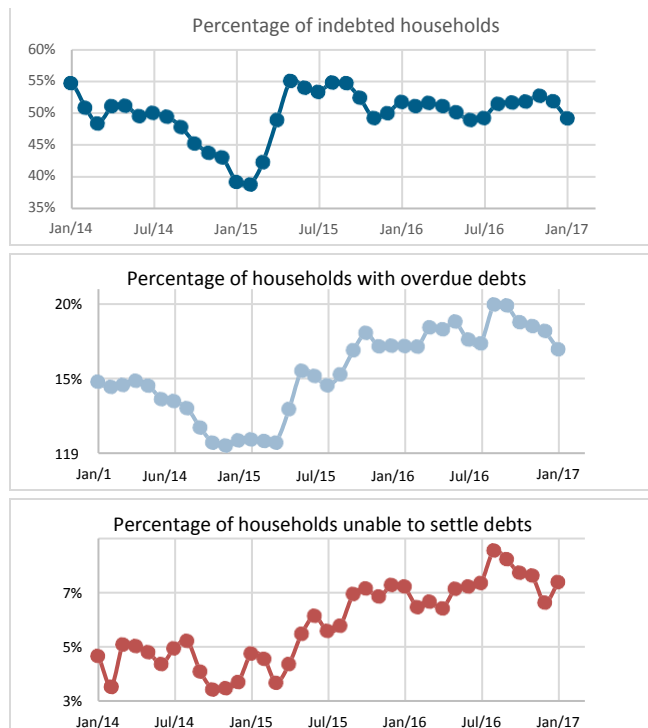
relatively normal in recent years and has been quite higher in past decades.

The negative news is the percentage of families with debts in arrears and of families that claim to have no payment capacity. The average percentage of households with debts in arrears in 2016, 18.32%, was the highest since 2007 and the average number of families unable to pay off their debts in 2017, 7.26%, the highest since 2004.

Even though a reduction in household default rates has been observed in recent months, according to the Central Bank, FECOMERCIO/SP figures suggest that the situation is not yet balanced. It is hard to imagine a consistent demand recovery before cleaning up the "balance sheet" of households and companies." Nevertheless, this restructuring will take some time to consolidate and will be further hampered by the absence

of government's ability to promote fiscal stimuli.

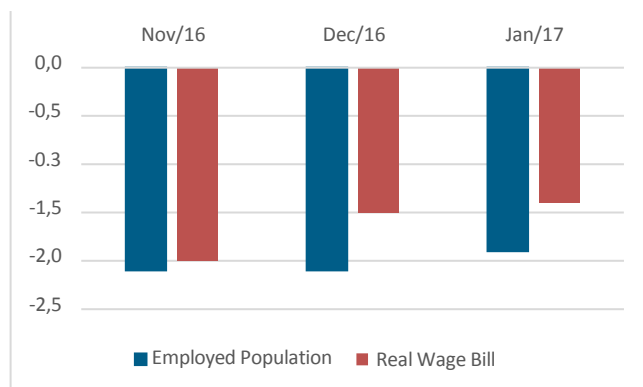
**GRAPH 2 - PERCENTAGE OF INDEBTED HOUSEHOLDS, WITH DEBTS IN ARREARS AND UNABLE TO PAY THEIR BILLS IN THE CITY OF SÃO PAULO**



Source: FECOMERCIO/SP (Trade Federation of the State of São Paulo)  
Prepared by: IFI - Brazilian Independent Fiscal Institution

On the other hand, the variation rate of the employed population has maintained an annual drop trend virtually unchanged between November 2016 (2.1%) and January 2017 (1.9%). The declining trend in real wage bill slowed down from 2.0% to 1.4% in the period, but these figures indicate a domestic consumption prospect that is still weak to foster a consistent recovery in the short term. Graph 3 seems to suggest a recovery that is still in an early stage.

**GRAPH 3 - VARIATION IN 12 MONTHS OF EMPLOYED POPULATION AND REAL WAGE BILL IN PERCENTAGES**

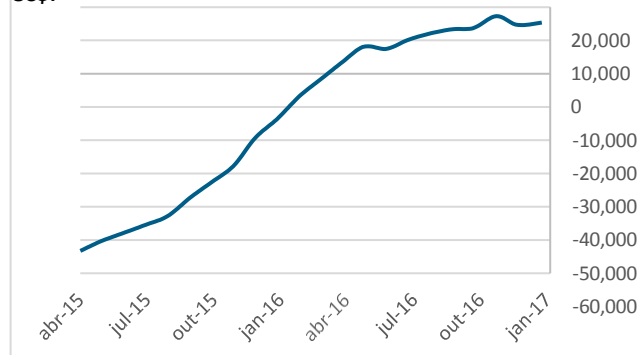


Source: Brazilian Institute of Geography and Statistics  
Prepared by: IFI - Brazilian Independent Fiscal Institution

Considering indexes such as the physical industrial output, which decreased 11.1% in total in 2016, and turnover in wholesale which presented a 6.2% decline, forecasts for GDP growth in 2017 remain modest.

The external sector could boost activity, but after a strong recovery in mid-2015 the balance of trade seems to have become stable with an accumulated surplus in 12 months of around 10 and 20 billion dollars (see Graph 4). With the recent fall of the dollar, it will not be easy for the impulse of net exports to materialize as a factor of consistent recovery of economic growth.

**GRAPH 4 - BALANCE OF TRADE AND SERVICES - SURPLUS ACCUMULATED IN 12 MONTHS IN MILLION US\$.**



Source: Secretaria de Comércio Exterior (Secex) [Foreign Trade Secretariat]. Prepared by: IFI - Brazilian Independent Fiscal Institution

After these considerations on the most recent economic indexes, the IFI maintains the forecast of 0.46% for GDP growth in 2017.

## Inflation

The inflation rates progression has been the best of news for the economy. The relatively low rates computed by several research institutes stem from a rise in monetary policy credibility, but also a weak domestic demand performance.

The sudden inflation decline has affected market expectancy. Data from the Focus survey, conducted by the Central Bank of Brazil, reveal significant decreases in market forecasts for several indexes.

**TABLE 1 - EVOLUTION OF THE EXPECTATION OF ECONOMIC AGENTS FOR INFLATION ACCORDING TO FOCUS SUMMARY**

FOCUS SUMMARY	FORECAST Jan 1,	FORECAST Feb 17,	VARIATION N %
IPCA	4.86	4.43	0.43
MARKET GENERAL	5.07	4.95	0.12
CONSUMER PRICE	5,19	4.70	0.49

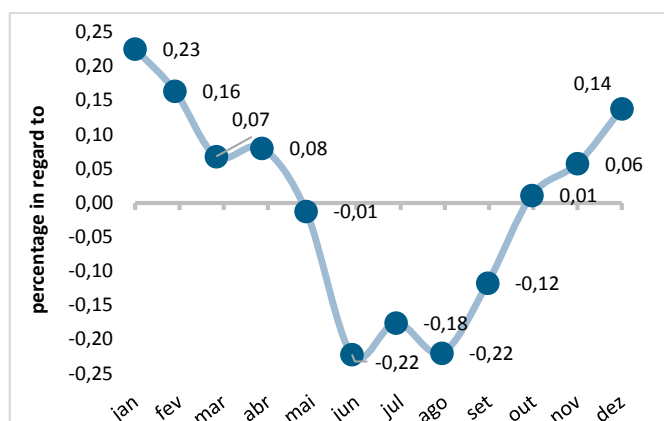
Source: Focus Report/ Central Bank of Brazil

Prepared by: IFI - Brazilian Independent Fiscal Institution

The downward trend in expectations is higher in consumer price indices, but these data do not yet capture the February 17 IGP-M disclosure of only 0.08% (compared to 0.64% in January).

When a downward trend is associated with seasonality, an even slower inflation rate evolution can be expected, at least until the middle of the year. That happens because seasonality reveals naturally lower rates during this time of year, as it is shown in Graph 5.

**GRAPH 5 - CONSUMER PRICE INDEX SEASONALITY IN % COMPARED TO THE AVERAGE**



Prepared by:

IFI - Brazilian Independent Fiscal Institution

This seasonal pattern was recognized through a thorough analysis of the monthly IPCA series between January 2004 and January 2017 (including), and indicates there is a downturn trend of this index in the first half of the year.

Therefore, a stronger inflation decrease is even more likely to take place by July or August. Repercussions of these developments are felt in the monetary policy (see section about interest), and consequently on the public debt dynamics, and also on fiscal policy, through the spending cap.

As inflation in the second semester of 2016 was exceptionally low and as it is expected to continue to decline throughout the first semester of 2017, the total value in 12 months, between July 2016 and June 2017, is about 4%. Since this figure readjusts the Federal Government's primary spending threshold, any new inflation peak that takes place in the second semester, even if it follows the seasonal pattern, will lead to a real expenditure cap decrease for 2018, since Constitutional Amendment 95 (EC 95) provides that the readjustment of the public spending limit be made taking into account the inflation of the twelve months ending in July of the previous year.

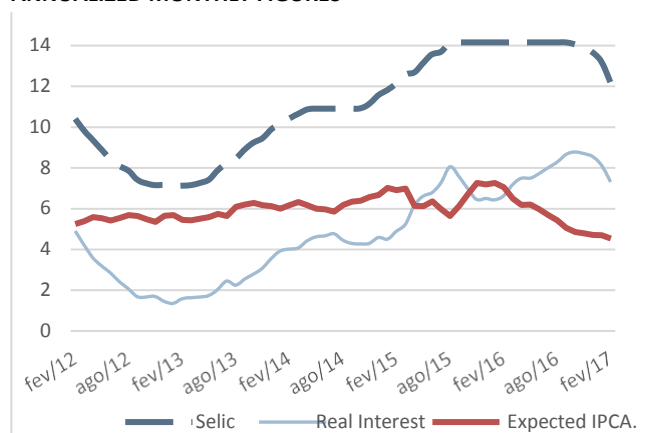
## Interest rate

In a decision taken on February 22, the Monetary Policy Committee - Copom reduced the Selic target by 0.75 pp, which led to a rate of 12.25% pa. - second reduction of the year, thus setting a new pace of decline.

The reduction of Selic has offset the decrease in the inflation forecast (Extended Consumer Price Index), fostering the start of real interest reduction. Graph 6 describes the trends for the Selic rate, the IPCA variation forecasts for the next 12 months and the real interest rate obtained from this difference from month by month since January 2012. The expected real rate derived this way corresponds to that of a pre-fixed 12-month security.

It is important to note the different pattern established from January 2016. Previously, there were peaks of real interest rates caused by increases in the Selic rate, followed by a gradual deterioration of its value brought about by the increase of the inflation rate. When this trend led to very low real rates, an increase in the Selic rate caused a new peak in real interest rates and the cycle began again.

**GRAPH 6 - EFFECTIVE SELIC AND EXPECTED REAL INTEREST.  
ANNUALIZED MONTHLY FIGURES**



Sources: IBGE (Brazilian Institute of Geography and Statistics) and Central Bank of Brazil

Prepared by: IFI - Brazilian Independent Fiscal Institution

In January 2016, the real rate reached 6.42% per year, the lowest level since April 2015.

This took place after a period where real interest increased, until October 2016, when it reached 8.78% per year. From then on, the real rate began to decline, not by the upsurge in inflation, as in previous cycles, but by the continued reductions in the Selic rate.

At IFI, we have forecast 9% per year for the Selic rate target by the end of 2017. Thus, the real interest rate should continue in a downward trend, but accompanied by a persistent and important discrepancy in relation to international standards.

*The Budget Guidelines Law (LDO) numbers in a market expectation context.*

As it is well known, the Central Bank's Market Expectations Focus System collects forecasts from consultancies and economic departments of several institutions, consolidates them and publishes several statistics on the parameters surveyed. Among these statistics are the medians and standard deviations of these forecasts.

With these parameters, it is possible to estimate the probability distributions for forecasts based on market perception. Then we can deduce the probabilities indicated by the market for

each value, of each variable, in each year of the universe of forecasts.

These distributions can be used principally to estimate probabilities related to macroeconomic parameters of official forecasts.

Table 2 shows the medians and standard deviations of macroeconomic parameters that influence decisively Government's fiscal and budgetary forecasts<sup>1</sup>.

**TABLE 2 - MEDIAN AND STANDARD DEVIATIONS, ACCORDING TO FOCUS FOR SELECTED MACROECONOMIC VARIABLES - 2017**

VARIABLE	UNIT	MEDIAN	STANDARD
<b>IPCA</b>	accum. IPCA variation %	4,44	0,33
<b>GDP</b>	Growth real % per	0.48	0,35
<b>EXCHANGE RATE<sup>1</sup></b>	R\$/US\$	3.30	0.19
<b>SELIC<sup>1</sup></b>	Annual Rate	9,50	0.48

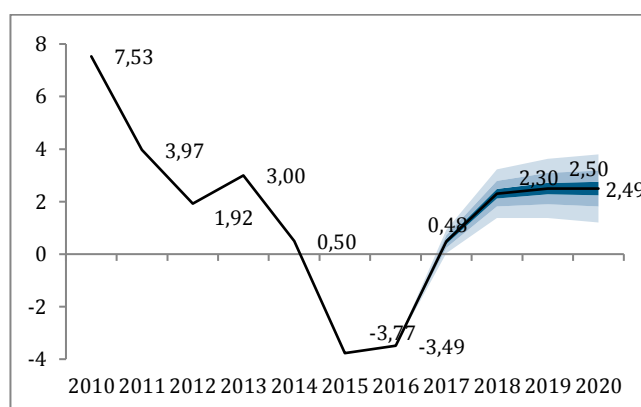
1- End of period

Source: Focus Report/ Central Bank of Brazil

Prepared by: IFI - Brazilian Independent Fiscal Institution

Using these values, as well as those of the following periods, *fan charts* (Charts with multiple scenarios plotted) were constructed that express the probability distributions for the parameters. Graph 7 shows this distribution for GDP.

**GRAPH 7 - PROBABILITY DISTRIBUTIONS FOR GDP VARIATION ACCORDING TO MARKET EXPECTATIONS**



Source: Focus Report/ Central Bank of Brazil

Prepared by: IFI - Brazilian Independent Fiscal Institution

<sup>1</sup> Data on Table 2 were collected on February 24, 2017 from the Central Bank website and refer to the position of February 17, 2017.



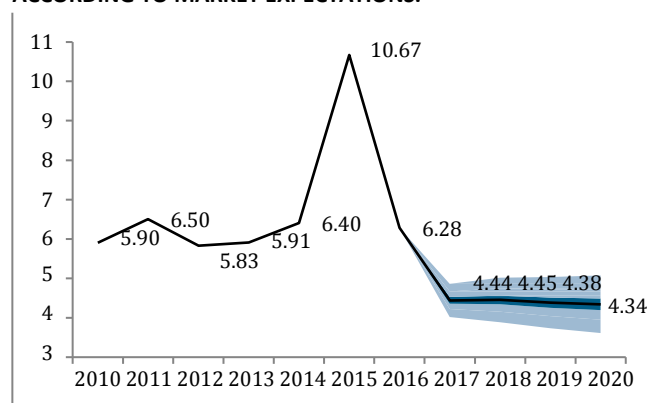
The 1.2%<sup>2</sup> GDP variation in 2017 that is found in the Budget Guidelines Law (LDO) is within the 98<sup>o</sup> percentile in the distribution derived from the market expectations. This means that, under this perspective, there is a 2% probability that GDP growth will reach or exceed 1.2% in 2017.

Even the assumption of a growth equal to or higher than 1% for this year is unlikely to occur according to market expectations: 7%. To be clear, this analysis reveals how realistic the official figures are in regard to the market scenario considered in the Focus Report, and not to the prospective IFI scenario.

For 2018, market expectations suggest a 39% probability that the GDP actual variation is higher than or equal to 2.5% (Budget Guidelines Law). For 2019, this probability is 50%.

On forecasts for the IPCA, there is much more consensus, as it can be seen on Graph 8. For instance, the probability that IPCA variation in 2017 will be lower than that estimated in the Budget Guidelines Law (4.8%) is 86%. For 2018 and 2019, the Budget Guidelines Law estimates IPCA variations of 4.5%. Market expectations indicate a 54% and 59% probability that the figure will be lower than that one in both years, respectively.

**GRAPH 8 - PROBABILITY DISTRIBUTIONS FOR IPCA VARIATIONS ACCORDING TO MARKET EXPECTATIONS.**



Source: Focus Report/ Central Bank of Brazil

Prepared by: IFI - Brazilian Independent Fiscal Institution

For Selic tax and the exchange rate, Budget Guidelines Law's values are clearly out of step (11.25% per year and 3.81%, respectively). As they are over 2 standard deviations away from the market expectations median,

they have, under this perspective, zero probability of taking place.

## Simulations for federal collection on a quarterly basis

This section proposes a model for analyzing the quarterly evolution of revenues. The goal is to evaluate, with higher frequency data, trends for this variable, which is key to elaborate prospective fiscal scenarios.

### Explanatory variables for revenues

The following revenue predictions are based on quarterly data in current values published by the Federal Revenue Service for the gross federal revenue. Data usually differ in around 2% to 3% from the total revenue published by the National Treasury. The assortment of tributary modalities were aggregated according to factors that affect revenue. All these aggregates are explained on Table 1.

<sup>2</sup> The most recent Annual Budgetary Law's figure is 1.6%. However, economic news already suggest that the government is working towards a 1.0% prediction.



**BOX 1 - TAXES AGGREGATES FOR FORECASTS**

Type	Taxes and duties	Explanatory
Taxation on capital revenue	<ul style="list-style-type: none"> <li>Income Tax Withheld at Source (IRRF) - Capital Income</li> <li>IRRF - Residents Living</li> </ul>	Selic rate
Taxation on financial operations	<ul style="list-style-type: none"> <li>Taxes on Financial Operations (IOF)</li> </ul>	Credit concessions
Taxation on earned income	<ul style="list-style-type: none"> <li>Individual Income Tax (IRPF)</li> <li>IRRF - Labour Income</li> </ul>	Wage bill
Social Welfare Levies	<ul style="list-style-type: none"> <li>Social Welfare Levies, including public employees</li> </ul>	Wage bill
Taxation on earnings	<ul style="list-style-type: none"> <li>Social Integration Program (PIS)</li> <li>Social Security Financing Contribution</li> </ul>	Retail Sales
Taxation on output	<ul style="list-style-type: none"> <li>Tax on Manufactured Products (IPI), except the ones applied to imports.</li> </ul>	Physical Production Monthly
Taxation on imports	<ul style="list-style-type: none"> <li>IPI applied to imports</li> <li>Customs duty (II)</li> </ul>	Imports
Taxation on rentability	<ul style="list-style-type: none"> <li>Corporate Income Tax (IRPJ)</li> <li>Social Contribution on Net Profit (CSLL)</li> </ul>	GDP

Source: IFI - Brazilian Independent Fiscal Institution

The predictions for explanatory variables were carried out through the application of time series forecasting algorithms. These forecasts were used to estimate revenue adjustment models and their respective forecasts.

Total revenue is obtained by adding revenues by type. It is worth noting that non-tax revenues, such as privatizations, capital openings (IPOs) or concessions, are not included in this calculation.

Table 3 shows variations of explanatory variables in real and nominal terms predicted for 2017.

**TABLE 3 - NOMINAL AND REAL VARIATIONS OF EXPLANATORY VARIABLES OF THE SEVERAL REVENUE TYPES ESTIMATED FOR 2017**

VARIABLE	NOMINAL VARIATION	REAL VARIATION
Annually accrued quarterly GDP	4.98%	0.46%
Effective Selic rate per year in a year	-4.65%	-3.95%
Annually accrued quarterly extensions of credit	-2.22%	-6.43%
Annually accrued quarterly wage bill	0.47%	-3.85
Annually accrued quarterly extended retail turnover	-1.67%	-5.90%
Annually accrued monthly industrial physical output	-2.06%	-5.82%
Imports in US\$	2.1 %	0.5%

Source: IFI - Brazilian Independent Fiscal Institution

Table 3 shows weak revenue forecasts. Although GDP presents signs of a recovery from this negative trend, a strong rebound is not to be expected.

For the other variables, there is still a real downwards trend, not including imports, which has a negative impact on the tax collection.

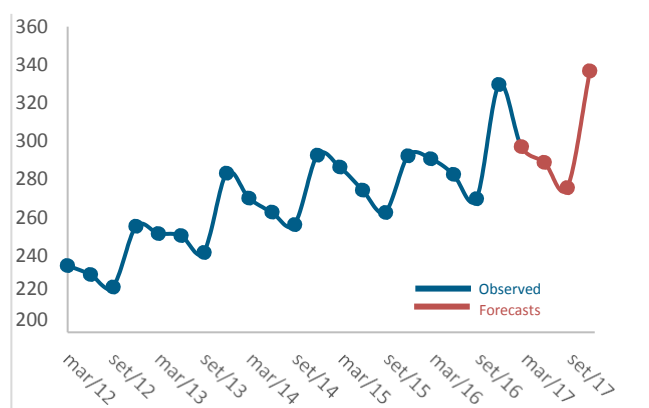
### Forecasts per modalities

The total tax revenue growth for 2017 is estimated at 2.16%, which implies a real decrease, since the expected inflation for the current year is 4.5%. This decline can be explained by several causes, like the weak economic recovery, estimated at 0.46% for 2017, and an unusual collection in 2016, the so-called repatriation, among others. If the repatriation resources were withdrawn from the comparison base for 2016, the growth would be 6.38%.

If the funds raised in the repatriation round to be held in 2017 reach R\$ 10 billion, gross revenue nominal growth will reach 3.0%, according to our forecasts.

It is also worth noting the decline in total gross revenue in comparison to the fourth quarter of 2016, even though this decline was already expected due to the seasonal pattern.

**GRAPH 9 - QUARTERLY FEDERAL COLLECTION\* - IN R\$ BILLION**

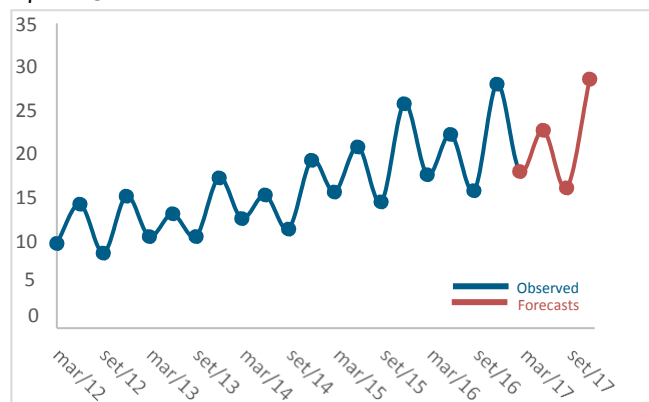


\*Except extraordinary

Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

Taxation on income from financial capital shows a 2.15% increase in the accrued amount predicted for 2017. This is happening because the Selic rate is receding and, thus, generating a downward trend for capital profitability. The result is a real decrease in the collected amount. Once again, the seasonal pattern is quite significant.

**GRAPH 10 - TAXATION ON QUARTERLY CAPITAL INCOME - IN R\$ BILLION**



Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

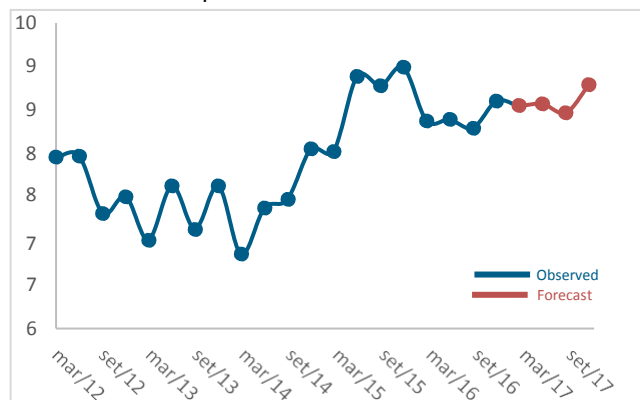
For financial operations taxation, the predicted growth is 2.11%. This relatively modest nominal improvement can also be explained by the weak credit improvement.

The instability in household's balances and the high rates of idle capacity in the industry (see Macroeconomic section) suggest a slow recovery in credit influx.

This effect combined with delayed recovery in activity and work force, end up

deteriorating the prospect of a faster recovery of credit and, therefore, of IOF (Tax on Financial Operations) collection.

**GRAPH 11 - QUARTERLY TAXATION ON FINANCIAL OPERATIONS - IN R\$ BILLION**



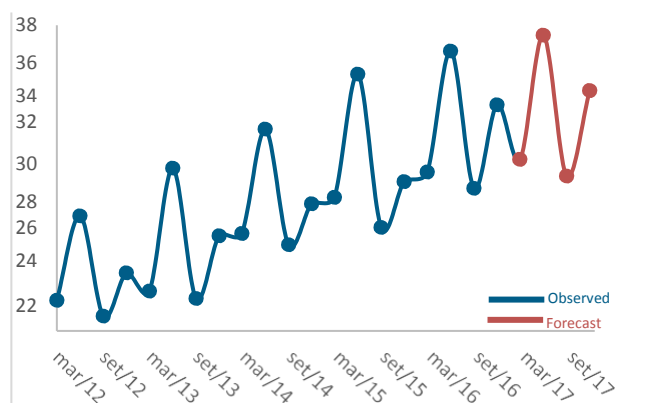
Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

Graph 12 describes the recent evolution of labour income taxation, as well as the evolution expected for 2017. The estimated growth for the accrued nominal value in 2017 in comparison to 2016 is 2.23%. The fact that this growth is below the estimated inflation for the period implies a real decrease in the collection of this type of revenue, which is in line with the real decrease in the wage bill predicted for 2017.

It should be noted that in this type of revenue there is a strong seasonal pattern in the second quarter, because of the income tax adjustment payment, especially in April.

The same pattern can be seen in social welfare contributions, which will present a nominal growth of 2.17% in 2017, according to our forecasts. This relatively weak growth is due to - as well as the growth predicted for labour income taxation - the slow recovery expected for the economy this year, which directly impacts the wage bill.

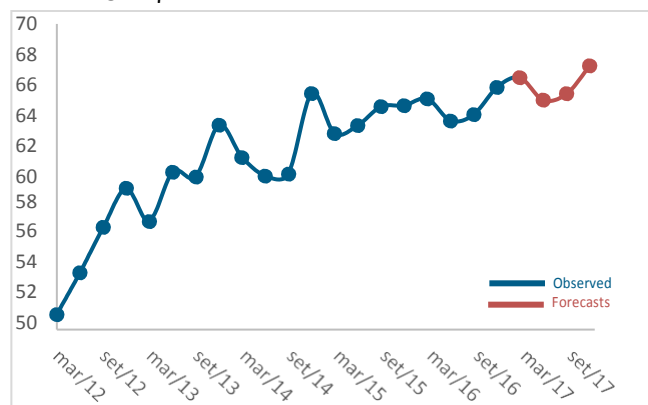
**GRAPH 12 - QUARTERLY LABOUR INCOME TAXATION- IN BILLION R\$**



Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

This slow recovery also has an implication on sales, which in turn affects the turnover of companies and the category of taxes associated with it. Taxation on income is expected to grow 2.12% in 2017 compared to 2016.

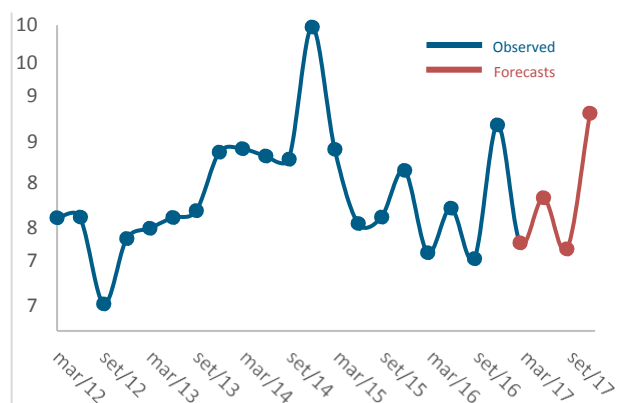
**GRAPH 13 - TAXATION ON QUARTERLY TURNOVER – IN BILLION R\$**



Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

Taxes with national output as tax base are predicted to present an aggregate growth of 1.49%, the worst evolution prospect among the types of taxes analyzed here.

**GRAPH 14 - TAXATION ON QUARTERLY PRODUCTION - IN R\$ BILLION**

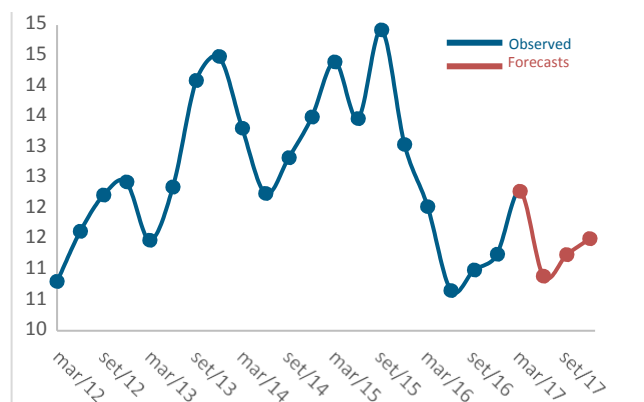


Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

At any rate, output taxation is a small fraction of federal collection, adding up to 4%, on average. Therefore, even if a recovery on industrial output takes place, collection will not be greatly affected.

After the sharp decline experienced in mid-2016, the imports volume has been recovering. Repercussions of this recovery can be seen in collection of imports taxes.

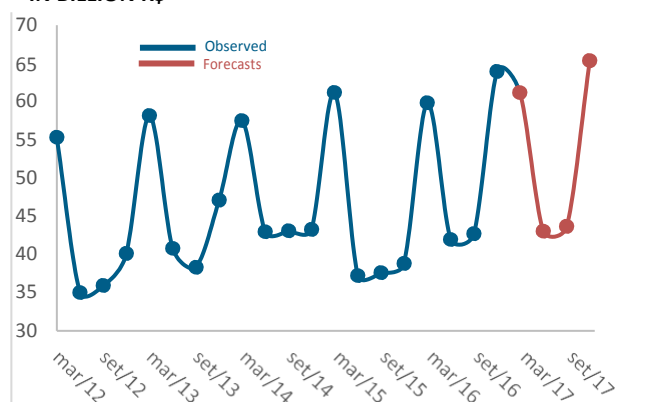
**GRAPH 15 - QUARTERLY TAXATION ON IMPORTS - IN BILLION R\$**



Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

Taxation associated with corporate profitability is expected to grow 2.27% in 2017 over 2016. There will also be negative real growth in line with the still gradual recovery of the economy.

**GRAPH 16 - TAXATION ON QUARTERLY RENTABILITY  
– IN BILLION R\$**



Source: Brazilian Institute of Geography and Statistics, Federal Internal Revenue and Central Bank of Brazil  
Prepared by: IFI - Brazilian Independent Fiscal Institution

## Monthly Fiscal Results

### Primary Result

The consolidated public sector's primary result, as it was published by the Central Bank of Brazil, came as a positive surprise in January as it showed a high superavit of R\$ 36.7 billion. The good result is a mix of statistical and seasonal effects, with marginally positive signs on the side of spending.

Despite the favorable seasonality in the month, there was a surprise due to the good results of both states (R\$ 8.9 billion), and municipalities (R\$ 1.9 billion). As for the central government, it recorded a R\$ 26.9 billion superavit, higher than the result above the line of R\$ 19 billion determined by the National Treasury.

Among the reasons for the difference between the results obtained by the Treasury and by the Central Bank, we highlight the statistical discrepancy in the calculation form of the results (especially in January and July)<sup>3</sup>, which was more pronounced (R\$ 7.3 billion) than that verified in the same period of the previous year (R\$ 6.1 billion).

Central government collection in January (R\$ 137.4 billion) was in line with what we had expected (R\$ 138.1, 0.6% error). Furthermore, the R\$14.5 billion deviation from the primary result when compared to our expectation is mainly explained by lower

transfers to states and municipalities (R\$6.1 billion) and reduced spending (R\$9.1 billion), in particular on subsidies and allowances (R\$2.1 billion) and discretionary expenditures.

Data reading indicates that the improvement in revenue compared to the same period of the previous year was concentrated in financial companies, probably reflecting the payments as annual income tax adjustment (IRPJ, Corporate Income Tax). As this is a traditional upwards movement, it is still early to assess whether the recovery momentum will persist in the upcoming months.

Regarding the composition of revenues according to economic nature, there are few reasons for optimism, since the actual variation in taxation of the main revenue bases remains weak, such as payroll (-5.8% per year), production (-14, 3%), credit (-12.9%) and imports (-(-12.9%) and imports (-25.7%).

Despite a fallback of 7.7% and 9.1% per year in gross and net revenue, part of the Central Government's best primary result has taken place due to the even sharper decline in expenditure, of 13.2% per year. Primary expenditure

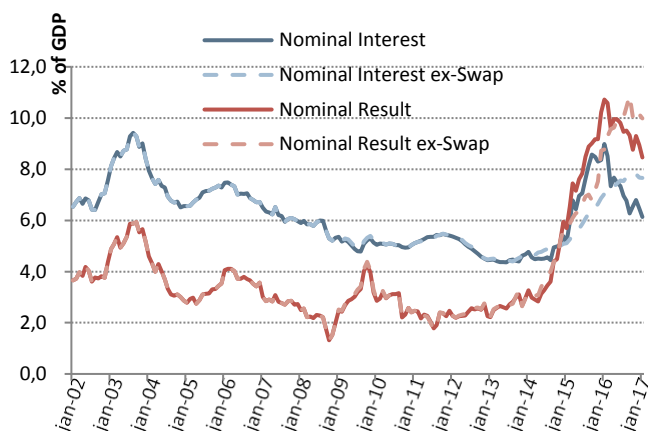
Among the expenditure reduction highlights (above inflation), it is worth noting lower discretionary spending (-50.4% per year or -R\$12.3 billion), in particular with the Growth Acceleration Program, PAC, (-80% or -R\$3.2 billion), as well as with allowances and grants (-26.4% or -R\$3.2 billion). Data suggest that settlement of liabilities in the previous year has helped restrain expenditure in the beginning of the current year.

### Nominal Result and Public Debt

Due to a R\$ 36.7 billion primary superavit and net spending with interest of R\$ 36.4, there was a small nominal superavit of R\$ 0.3 billion in January. The result contributed to avoid further increases in debt indicators, which rose to 69.7% (compared to 69.6% in December / 16) and 46.4% (vs. 46%) of GDP for gross and net debt respectively.

<sup>3</sup> This topic will be addressed in more detail in the next issue of the RAF.

**GRAPH 17: NOMINAL DEFICIT AND INTEREST WITH AND WITHOUT THE IMPACT OF FOREIGN EXCHANGE SWAP OPERATIONS (% OF GDP ACCRUED IN 12 MONTHS)**

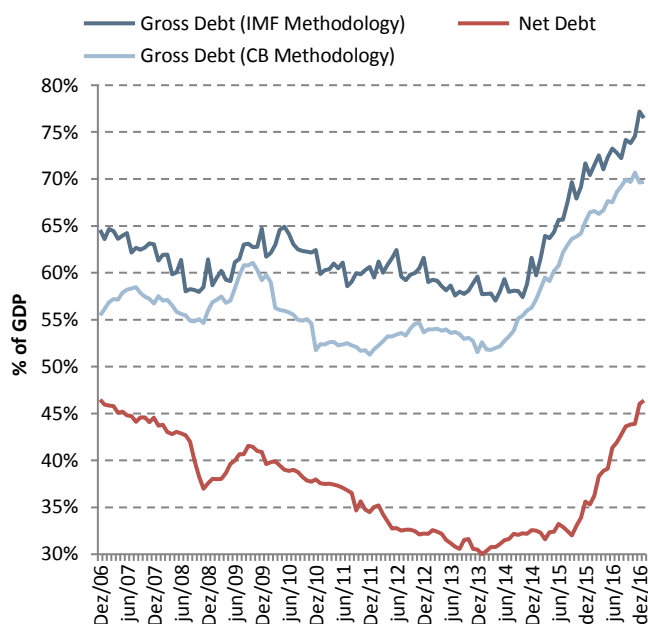


Source: Central Bank of Brazil

Prepared by: IFI - Brazilian Independent Fiscal Institution

Despite the fact that the nominal deficit accrued over 12 months has decreased to 8.5% of GDP (in comparison to 9% in December/16), the nominal deficit increases to 10% of GDP (in comparison to 10.2%), if we do not consider currency swaps. These swaps led to earnings worth R\$5.1 and R\$97.5 billion in the last month and in what was accrued over Feb/16 to Jan/17.

**GRAPH 18: EVOLUTION OF DIFFERENT PUBLIC DEBT MEASURES (% OF GDP ACCRUED OVER 12 MONTHS)**



Source: Central Bank of Brazil Prepared by: IFI - Brazilian Independent Fiscal Institution

## Forecasts for February

For February 2017, we expect primary revenues of R\$97.4 billion, R\$60.3 being administered revenues and R\$ 8.3 being non-administered revenues. Furthermore, we estimate R\$ 28.4 billion in social welfare revenues. According to our estimates, in February primary expenditure should reach R\$ 86.3 billion, R\$ 74.9 billion being mandatory and R\$ 11.4 billion being discretionary. The estimated revenue and expenditure scenario is expected to generate a R\$ 10.7 billion monthly primary deficit for the central government.

## Social Welfare Reform is Essential

### Diagnosis

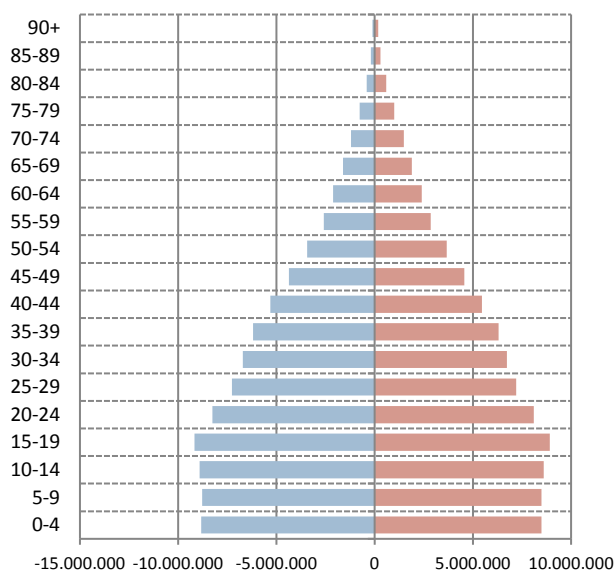
Expenditures with the General Social Welfare Policy (RGPS) consume currently 41% of the central government's budget 20 years ago, in 1997, this percentage was 35%. Without an appropriate social welfare reform now, this spending item alone will consume 63% of the budget in 2027 and will exceed 70% in 2030.

To have an idea of the seriousness of the imbalance that this dynamics will produce in the country, it is enough to see at the current situation of states such as Rio de Janeiro, Rio Grande do Sul and Minas Gerais. In 2015, those states spent 63%, 71% and 78% of their revenue, respectively, solely to pay active and inactive personnel. The pace of budget compromise stems from the process of population aging (graphs 19 to 24).

GRAPHS 19 TO 24: POPULATION FORECASTS

2000

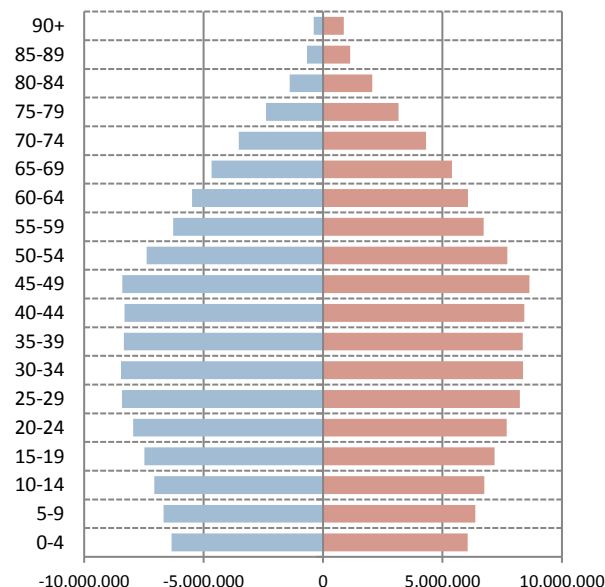
Women Men



Source: Brazilian Institute of Geography and Statistics

2030

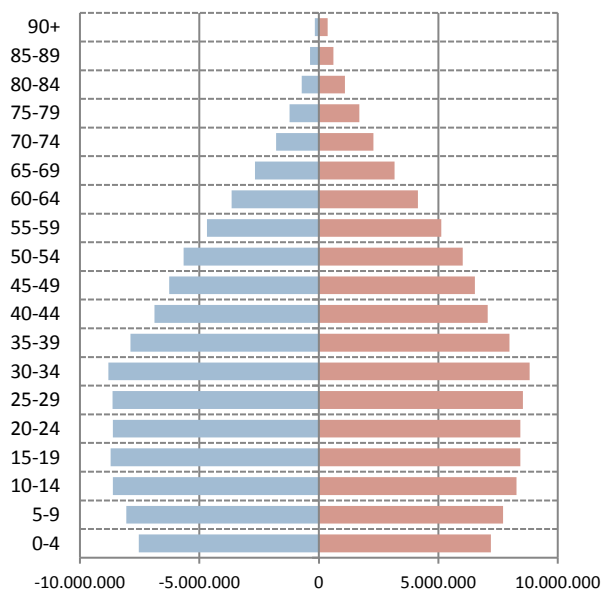
Women Men



Source: Brazilian Institute of Geography and Statistics

2015

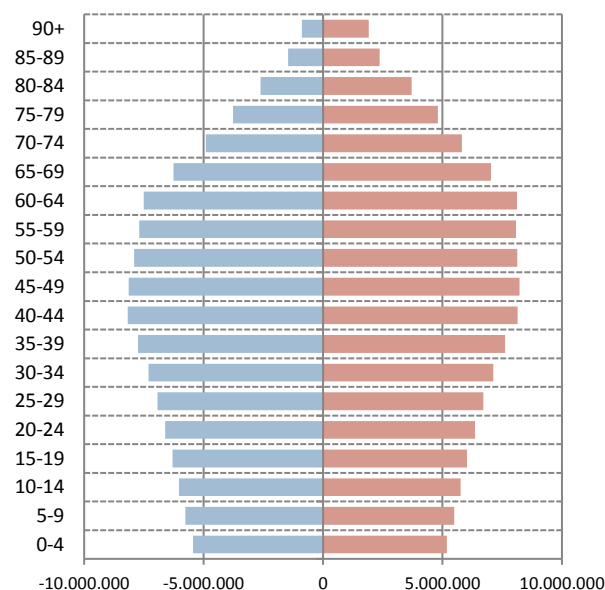
Women Men



Source: Brazilian Institute of Geography and Statistics

2045

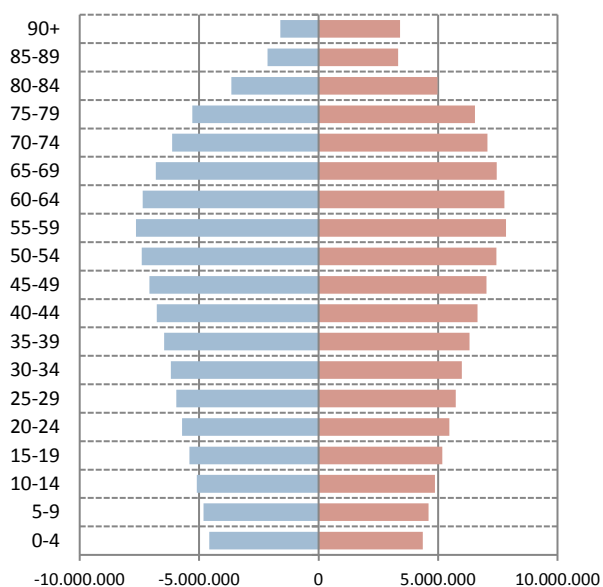
Women Men



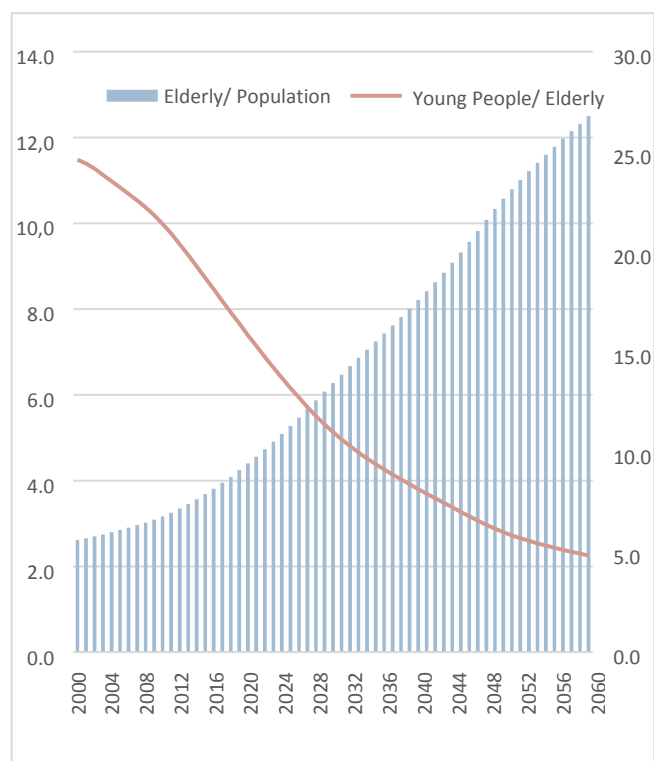
Source: Brazilian Institute of Geography and Statistics

**2060**

Women Men



Source: Brazilian Institute of Geography and Statistics



Source: Brazilian Institute of Geography and Statistics



This scenario shows that it will become increasingly difficult to provide sufficient resources to meet the demands of society for health, education, basic sanitation and security, especially. It also shows a need to reform social welfare, making it converge to the international best practices. In addition, not following this path implies demolishing the most important fiscal measure recently approved by the National Congress, which is Constitutional Amendment 95, of 2016, which establishes the new tax regime within the fiscal and Social Security budgets.

In order to move towards a high-income economy, the country will necessarily have to make mature and highly relevant decisions on the economic reform agenda. The social welfare reform is merely one of them, the first of many others that the country needs to address. There is a vast international literature on different paths economies might take to overcome what the World Bank has named the middle-income trap<sup>4</sup>. Among the necessary factors, the role of the institutions' robustness in the country, as well as the quality of education, the development of the financial market and advanced infrastructure that helps insert the country in the so-called global value chains, are noteworthy.

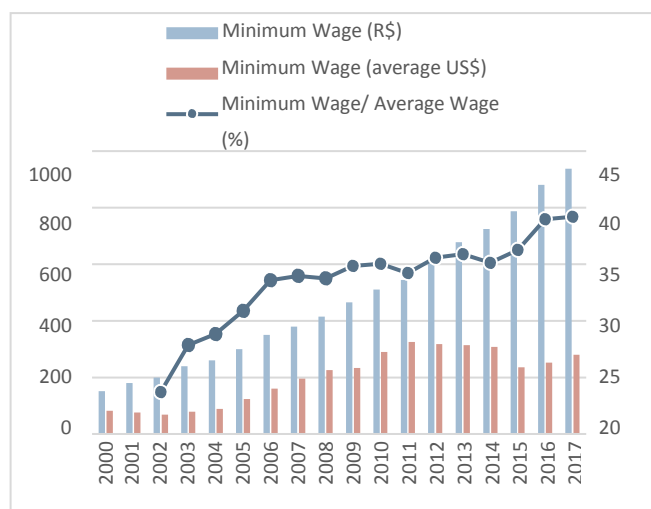
As detailed in Box "The calculation of the social welfare deficit" below, the social welfare managed by the federal government, which included the General Social Welfare Policy (RGPS) and the public employees' Special Social Welfare Policy (RPPS), presented a deficit of 3.7% of GDP in 2016. Added to this is the deficit of states and municipalities of 1.0% of GDP, where the special rules for retirement (of military and teachers in particular) cause more of an impact. Thus, the consolidated social welfare deficit reached 4.7% of GDP in 2016.

Considering only the General Social Welfare Policy (RGPS), in 2016 its share in the central government's R\$ 159.5 billion deficit was 94%. Among the factors that have led to this high deficit, we highlight the growth in social welfare expenditure of approximately 6.5% above inflation over the last 19 years. As well as retirements

(due to age, contribution time and work disability), these expenses include pensions for death, aids (Illness aid, accident aid, and reclusion aid) and maternity salary.

Continuous growth in social security recipients (between 3% and 3.5% per year) - a result of eligibility norms for the benefit's concession - is contributing to a robust expansion in expenditure, but we can also name the price effect caused by the minimum wage appreciation policy as another reason expenditure continues to grow. Since 64% of the number of RGPS benefits are indexed to the minimum wage, a practice that does not exist in the G-20 countries and can only be found in countries such as Venezuela, Bolivia, Paraguay and Colombia, its appreciation policy had a significant influence on the expansion of expenditures. As shown in Graph 25, there was a recovery of the minimum wage up to levels that can be observed in other countries, both in dollars (US \$ 300) and in proportion of the average income (roughly 40%). In brief, the combination of price (minimum wage) and quantity effects explains the significant expansion of 6.5% (on average) in social welfare spending.

**GRAPH 25: MINIMUM WAGE GROWTH DYNAMICS**



Source: Ministry of Labor and Employment Prepared by: IFI - Brazilian Independent Fiscal Institution

In addition to the direct effect of this policy on social welfare spending, transmitted through benefits equal to the minimum wage, there was also an indirect effect that influenced other social expenditure items. As the minimum wage is used as

<sup>4</sup> In simple terms, the "middle income trap" is the point where several economies, after advancing from the low income to the middle income can not sustain progress to reach the same level of countries with higher income. For that to happen, several economic policy measures are needed. For further details see <http://bit.ly/2lbR3XV>.

<sup>5</sup> For further details, see Nery (2016). Available at <http://bit.ly/2k2YLk0>.

reference when granting several social benefits, such as salary allowance and continued payment benefits (BPC), when it exceeded the average wage in the economy, it created a collateral effect. It not only increased benefit values, but also allowed new individuals to be benefited, which strengthened increase of the value of other social benefits.

From a prospective standpoint, since the RGPS functions as a simple distribution, the steadfast populational aging reflects on the economy through a decline in the amount of young people (15 yo < age < 65 yo) who will financially support the elderly (age > 65 yo), the so-called dependency ratio. In practical terms, the dependency ratio shows how many active workers are in the work force to pay for the benefits of retirees and pensioners. This ratio, which was at 10 active workers for each inactive in 2010, will decline systematically in the coming decades: There will be only two active workers for each inactive in 2060.

The reading of the population evolution graphs 19 to 24 shows unequivocally that the aging process of the country's population will be quite intense. The number of older people as a percentage of the total population will increase from 8% in 2016 to 27% in 2060. Otherwise, while the number of older people (aged over 65) will increase by 42 million, there will be a significant reduction in the active population (between 15 and 65 years) by 11 million.

### *The Social Welfare Reform Proposal*

In early December last year, the Federal Government sent to the National Congress the Proposal of Constitutional Amendment (PEC) No. 287/16, concerning the social welfare reform. Among the main measures of this proposal are: (1) an attempt to establish more equity and the reduction of income concentration through dissolution of special regimes, (2) changes in pensions for death and (3) changes in Continued Payment Benefits (BPC).

Regarding the first measure, the proposal evens out retirement norms in the general and particular regime, for men and women alike, and for urban and rural workers alike. As depicted in Table 4, international examples show that implementing a minimum age for retirement is a norm present in several different countries in the world, as well as the same set of requirements for both genders. It is undisputable, therefore, that the social welfare rules proposed by the

Executive Branch are in line with international best practices.

**TABLE 4: MINIMUM AGE IN DIFFERENT COUNTRIES**

<b>G-20</b>	<b>MEN</b>	<b>WOMEN</b>
South Africa	N/A*	N/A
Germany	65-67	65-67
Australia	65	65
Canada	65	65
South Korea	61	61
United states	66	66
France	65	65
India	55	55
Indonesia	55	55
Italy	66	62-66
Japan	65	65
Mexico	65	65
United Kingdom	65	62
Russia	60	55
Turkey	60	58
<b>SOUTH AMERICA</b>	<b>MEN</b>	<b>WOMEN</b>
Argentina	65	60-65
Bolívia	55	50
Chile	65	60
Colombia	62	57
Paraguay	65	65
Peru	60	60
Uruguay	60	55-60
Venezuela	60	55

(\*)N/A: Not Applicable

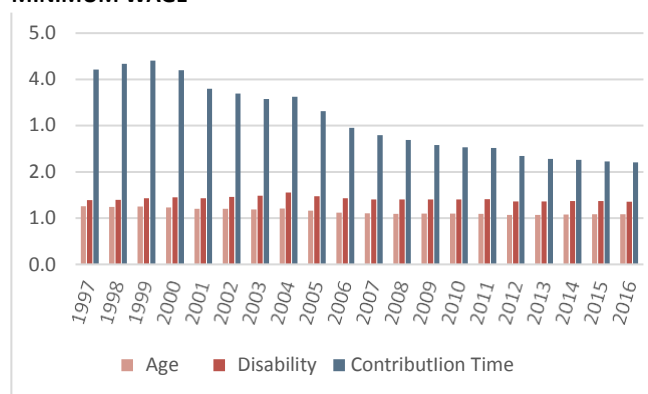
Source: Nery (2016), *Reforma da Previdência: Uma introdução em perguntas e respostas* [Social Welfare Reform: An introduction in questions and answers]

Actually, in Brazil, there is already the institution of retirement due to minimum age. The poorest, with lower educational level and precarious continued access to the formal labour market, retire by the minimum age of 65 and 60, if male and female, respectively. The average benefit for this group of people is similar in value to the minimum wage. However, the age requirement does not apply to everyone.

For another group of people, with a higher education level, easier access to the formal labour market and naturally higher income, there is no minimum age

for retirement. That is the case of the retirements due to contribution time, a policy through which those with a better financial situation retire. Although this group of retirees represents 30% of the emitted amount of benefits, its cost is equivalent to 45% of total retirements paid, reflecting the higher value of the average benefit. While in the retirements due to age the average benefit is 1.1 times the minimum wage, workers who retire due to contribution time, with no minimum age limit, have a benefit equivalent to twice as much (2.2 times the minimum) the first group (Graph 26).

**GRAPH 26: AVERAGE RETIREMENT BENEFIT AS A FRACTION OF MINIMUM WAGE**



Source: Ministry of Social Welfare

Prepared by: IFI - Brazilian Independent Fiscal Institution

According to the yearbooks and monthly bulletins of the Ministry of Social Welfare (now Social Welfare Secretariat), a significant part of the retirement benefits due to contribution time are concentrated in few states, notably the most developed and wealthy ones such as those in the South and Southeast. This diagnosis, coupled with the absence of a minimum age, makes the policy of retirement due to contribution time regressive and a factor of income concentration. As pointed out by Caetano et al (2016)<sup>6</sup>, 63% of those who retired early, i.e., under the age of 60/55 years (men / women), are among the richest 40%

Regarding the second point, concerning the rules of pensions due to death, it should be noted that after approval of the Provisional Measure (MP) 664/15<sup>7</sup>, there was some progress

towards international practices. Before the MP, there was no minimum contribution time, no minimum period of marriage or stable union to receive the benefit, and the pension was lifelong. With the approval of the Provisional Measure (MP), even after changes were made by the National Congress that minimized the effectiveness of the proposal, it became necessary to prove two years of marriage or stable union, as well as a year and a half of contribution. The pension, which used to be for life, now varies according to age.

Pensions due to death are the second most important benefit of the General Social Welfare Policy (RGPS) with regard to the amount issued. Along with retirements (65%), pensions due to death (26%) account for more than 90% of the benefits issued, whose average value of 1.3 times the minimum wage exceeds the average value of 1.1 times of retirements due to age.

Despite the important reforms made in pensions, they have been partial. There are still important points to be adjusted such as: (1) preventing accumulation with retirement benefits and (2) adjusting the replacement rate. According to the explanatory statement (EM) of PEC 287/16<sup>8</sup>, "the percentage of pensioners who accumulate pensions and retirement benefits increased from 9.9% in 1992 to 32.4% in 2014." This represents, also according to the EM, 2.4 million beneficiaries, of whom approximately 71% are among the richest 30%. In other words, just as in retirements due to contribution time, pensions due to death also contribute to reducing the progressiveness of social welfare.

Finally, the last point of PEC 287/16 deals with Continued Payment Benefits (BPC), which allocates one minimum wage to elderly or disabled people whose per capita income is less than 25% of the minimum wage. As highlighted by Giambiagi<sup>9</sup>, even though the current minimum age required for BPC granting is 65 years, the age was 70 years when Law 8,742 / 93, that established the program, was approved.

It is also worth noting two interesting facts: The first one is that there is no age discrimination by gender for the granting of social assistance benefits and the second one, according to IBGE data, is that there has been a four-year increase in

<sup>6</sup> Discussion Paper 2230 by IPEA (Economic Applied Research Institute). Available at: <http://bit.ly/2lXvYzi>.

<sup>7</sup> Converted into Law 13.135 / 15. Available at <http://bit.ly/2g2xNEP>.

<sup>8</sup> PEC 287/16 full text available at <http://bit.ly/2lXR119>.

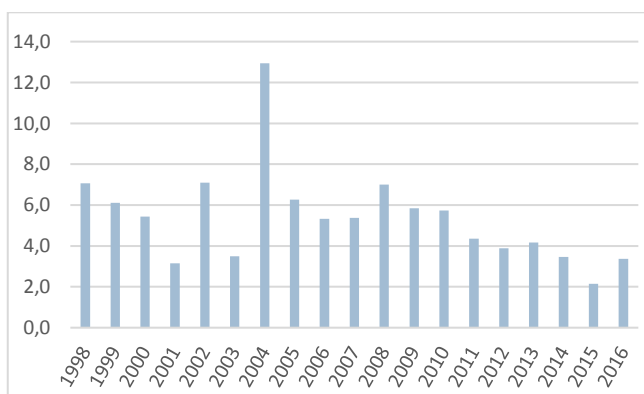
<sup>9</sup> Article in the daily newspaper Valor, with the title "Agenda Infraconstitucional" [Infra-constitutional Agenda]. Available at <http://bit.ly/2mdszwQ>.

life expectancy of people aged 65 between 1998 and 2013. Therefore, it is noteworthy that the proposal to raise the minimum age over the next 10 years (an increase of 1 year every 2 years) does nothing but adjust it to the life expectancy.

Besides the demographic side effect, the need for changes in the continued payment benefit is also justified by a need to curb incorrect incentives that damage the fiscal and social welfare balance. Since the minimum age for granting the BPC is, for men, equal to the minimum age for retirement, not reforming the assistance benefit should generate a disincentive to contribution.

Besides, it is worth reviewing the indirect effect of the minimum wage appreciation policy, already stressed by us in the previous paragraphs. The transfer of this effect to public accounts can be particularly captured by the high growth rate in the number of BPC beneficiaries, which increased (on average) 5.4% per year in the last 19 years (since 1998) (Graph 27). This effect, coupled with the minimum wage appreciation policy, index of benefits, explains the robust increase of expenses to 0.8% of GDP in 2016 (compared to 0.26% in 2003).

**GRAPH 27: GROWTH RATE OF THE NUMBER OF BPC BENEFICIARIES**



Source: Social Welfare Statistical Report (Beps).

Prepared by: IFI - Brazilian Independent Fiscal Institution

According to a study by the Inter-American Development Bank (IDB)<sup>10</sup>, the poverty rate of people over 60 (4.2%) and 65 (3.5%) years in the country is substantially lower than that of 18 other economies, where the rate is 18.8% and 19.3%, respectively, for 2010.

2010. Thus, as it turns out, there is not enough evidence to fear a possible increase in poverty in old age due to the necessary changes in the BPC policy.

### *The fiscal effects of social welfare reform*

Two new rules have been proposed: the first is a new permanent rule concerning benefit access, which sets the minimum age of 65 years (the same for both genders and all kinds of employment); the second one is a transitional rule for men and women above 50 and 45 years, respectively. Whereas the permanent rule takes into account the establishment of a minimum contribution period of 25 years and a minimum age adjustable according to the life expectancy at 65 years, the transition rule proposes an additional 50% of the time that would elapse for the individual to retire according to the rule (retirement due to contribution time).

The reform proposed abolishes the social welfare factor (introduced at the end of 1999 as an alternative to the defeat of the 1998 reform) and the 85/95 rule (set forth at the end of 2015 and equivalent to the sum of age and contribution time), in addition to completeness and parity for public employees hired until 2003 who were under the age set forth in the transition rule (50/45 for men / women).

Concerning the transition rule, it is important to note that it is appropriate, since it includes men and women who started to contribute still very young, between the age of young apprentice (over 14 years) and minor (over 16 and under 18 years).. This is because, since the requirement for retirement due to contribution time is 35/30 years for men/women, given the ages used as cut line for the transition rule (50/45), it implies that the contribution time began at the age of 15. As one can see, this diagnosis dispels criticism commonly made that the reform would harm people who started working very young.

Starting from the current average age of retirement due to contribution time for men/women, of 56/53 years, we can see that the beginning of contributory life

<sup>10</sup> "Melhores Aposentadorias, Melhores Salários" ["Better Pensions, Better Wages"], available at <http://bit.ly/2IDD60Y>.

occurs (on average) at 21/23 years, later than the age considered by the government in the proposed transition rule (15 years). Por conseguinte, é claro que, ao definir uma idade mínima mais baixa, o governo procurou incluir em sua proposta grupos que, de outra forma, poderiam ter sido excluídos. This fact only reinforces the perspective that this proposal is reasonable and well-balanced.

The "toll" of 50% of the time it would take to retire implies a moderate increase in average working time, of 3/4 years for men/women. In other terms, considering the current average age of 56/53 years and the minimum age for the transition rule of 50/45 years for men/women, the new retirement age, after "paying the toll" would be 59/57 years.

As remarked by Tafner (2017), setting a minimum age is the measure that contributes the most to the fiscal rebalancing of social welfare, equivalent to about 28% of the gain. The deindexation of benefits from the minimum wage, as well as terminating the possibility of benefit accumulation are also very significant for decreasing RGPS spending (Table 5)

**TABLE 5: FISCAL GAIN OBTAINED FROM DIFFERENT SOCIAL WELFARE REFORM MEASURES**

Year	Current Rule	Minimum Age	85/95 Rule	Deindex. Minimum	Accum. Benef.	Retir. Profs.
2016	7.7%	7.7%	7.7%	7.7%	7.7%	7.7%
2020	10.1%	13.9%	9.8%	9.7%	8.9%	9.3%
2025	13.2%	11.6%	12.6%	12.3%	11.6%	12.4%
2030	14.8%	12.7%	13.9%	13.6%	13.0%	13.9%
2035	16.8%	14.1%	15.7%	15.7%	14.7%	15.8%
2040	18.0%	14.25	16.6%	16.0%	15.8%	16.9%
2045	19.0%	14.7%	17.4%	16.6%	16.7%	17.8%
2050	19.2%	14.5%	17.4%	16.6%	16.9%	18.0%
2055	19.2%	14.2%	17.2%	16.4%	16.8%	18.0%
2060	18.8%	13.5%	16.7%	16.8%	17.3%	17.6%
<b>IMPACT ESTIMATED</b>		<b>-27.9%</b>	<b>-11.3%</b>	<b>-10.6%</b>	<b>-8.1%</b>	<b>-6.1%</b>

Source: Paulo Tafner (2017)

Despite the unequivocal contribution of setting a minimum age, Caetano *et al* (2016)<sup>11</sup> emphasize the relevance of both the transition rule and a progressive minimum age. According to

the authors' forecasts, which are close to those presented by Tafner, long-term expenditure (in 2060) may reach 16% or 14.6% of GDP, depending on the rule chosen. They represent currently 8.1% of GDP.

The authors simulate four different rules: The first one, in the base scenario, assumes the maintenance of the social welfare factor; The second one sets forth a minimum age of 55/60 years for women/men that would be adopted after five years; The third one, with a progressive minimum age of 55/60 that would reach 60/65 for women/men in 2041; And the fourth one, the 85/95 formula which foresees progression up to 2026 to 90/100.

Simulations demonstrate that a fixed minimum age of 55/60 for men/women, despite reducing expenditures in near and long term, is little effective for a long term expenditure control. The long-term power loss is explained because the rule does not capture the advances in the population's life expectancy. In the absence of such a mechanism, the fixed minimum age rule produces a level of expenditure of 0.4% of GDP, above that estimated by the application of the 85/95 formula (15.7% of GDP). In view of the baseline scenario, the fixed minimum age produces a RGPS expenditure of 0.7% of GDP in 2060.

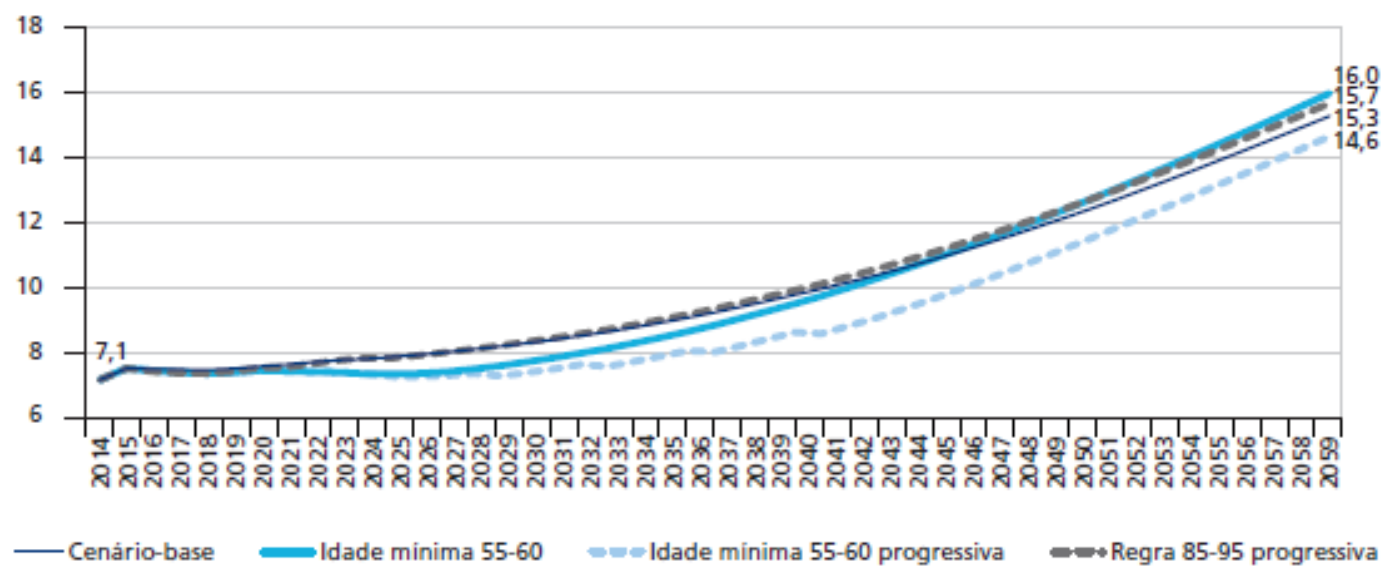
On the other hand, in the case of a progressive minimum age rule (55/60), which would reach 65/60 years, the reduction in spending is 1.4% of GDP. However, as noted by the authors, even under this fiscally more balanced rule, the level of RGPS spending is still very high, which demands additional measures such as the convergence of the minimum age by gender and untying from the minimum wage.

Given the above, figures (see Graph 27) show that alternative proposals to those presented by the government should maintain the essence of the reform, namely: (1) definition of a minimum age with balanced adjustment based on life expectancy, (2) convergence of rules, minimizing the establishment of special policies, as well as (3) the impossibility of accumulating benefits.

<sup>11</sup> Discussion Paper 2230 by IPEA. [Institute for Applied Economic Research] Available at: <http://bit.ly/2lXvYzi>.



GRAPH 27: RGPS REFORM SCENARIOS (% of GDP)



Source: Authors; Prepared by: The Authors

**Box. Evolution and characteristics of the social welfare deficit**

Brazilian Social Welfare and Social Security systems have shown recurrent deficits. If the current trend is already worrying, the long-term prospects resulting from the demographic evolution are even more alarming.

Brazilian social welfare is complex, has several policies, with specific rules for contributions and benefits. Considering the **federal public welfare** from a broad perspective, it is possible to divide it into two major subsystems: The General Social Welfare Policy - RGPS, subdivided into Urban and Rural, administered by the INSS (National Social Security Institute); and the Special Social Welfare Policy - RPPS, for public employees, divided in civilian and military personnel.

There are basically three ways of organizing social welfare systems: The distribution regime, the capitalization and the mixed regimes, which consist of combinations of the first two.

According to Giambiagi and Além (2011)<sup>12</sup> "essentially, in the distribution system the retirement pensions of retirees are, at each moment of time, funded by the contemporary active workers, who are in turn subject, when they retire, to have their retirements funded by the active workers of the next generation".

The second form of social welfare organization corresponds to the capitalization system in which, according to Rezende (2001)<sup>13</sup>, "each worker must receive a benefit that reflects exactly the amount of his contribution throughout his active life. There is a specific account in which contributions are capitalized at a certain interest rate".

The third way is a merger between the two previous regimes. According to Rezende, the "mixed social welfare model is composed of a universal basic public plan with a cap for benefits and a private supplement, in which each individual forms a savings fund that will guarantee their supplemental income when they retire."

The reforms carried out in the Brazilian social welfare system in recent decades<sup>14</sup> have aimed to bring it closer to a mixed system. Therefore, it is important to refer to Article 202 of the 1988 Federal Constitution - CF / 88.:

*"The private social welfare system, of a complementary nature and organized on an autonomous basis as regards the general social welfare policy, shall be optional, based on the formation of reserves which guarantee the contracted benefit, and regulated by a supplementary law".*

(Text amended by Constitutional Amendment No 20, 1998).

In the same direction, Law No. 12,618 of 2012, which introduced the complementary welfare policy for federal public employees, led the subsystem of federal public employees to a similar situation:

*Article 1 Under the terms of this Law, the **complementary welfare policy** referred to in §§ 14, 15 and 16 of Article 40 in the Federal Constitution, is hereby established and valid for public employees who hold an effective position in the Union, its agencies and institutions, including for members in the Judicial Branch, in the Office of the Prosecutors for the Public Interest and the Courts of Accounts. (Emphasis ours)*

For the operation of the aforementioned legal provision, the Federal Public Employee Complementary Social Welfare Foundation of the Executive (Funpresp-Exe)<sup>15</sup>, and Judiciary (Funpresp-Jud)<sup>16</sup> branches were created. Starting from this design, the Brazilian social welfare system will have for each of its federal public subsystems (general and public employees) a universal basic plan of public character, organized as a simple distribution, with a benefit cap, and an optional private supplementary plan, in the form of capitalization.

<sup>12</sup> Finanças Públicas no Brasil - Teoria e Prática. 4a ed. [Public Finances in Brazil - Theory and Practice. 4th ed.] Campus, 2011.

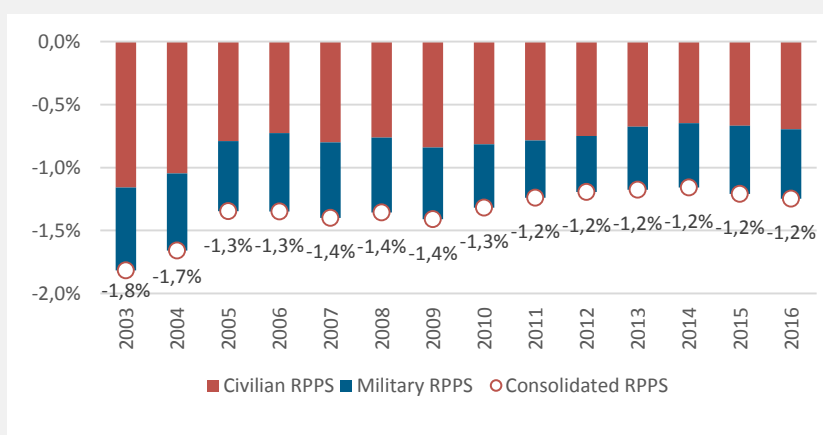


The reforms have also imposed a new financial and actuarial concept of social welfare in the country. Among their objectives, we highlight the readjustment of its financing sources, in order to make it financially and actuarially balanced. This new vision is crystallized in the wording given to art. 201 of the Federal Constitution of 1988:

*Article 201. The social welfare system shall be organized as a general system, of a contributory basis and mandatory affiliation, **with due regard for criteria that preserve financial and actuarial balance (...)***"

(Wording given by Constitutional Amendment No 20, 1998, bolded emphasis added)

Despite the clear guideline towards achieving financial and actuarial balance<sup>17</sup>, the social welfare policies in Brazil are far from achieving the desired sustainability. Regarding the Special Social Welfare Policy (RPPS), the graph shows the evolution of its two subsystems (civilian and military) in the last 14 years: Both have presented recurrent deficits.



Source: National Treasury - Relatório Resumido de Execução Orçamentária [Summary Report on Budget Execution] Prepared by: IFI - Brazilian Independent Fiscal Institution

The RGPS, on the other hand, also presents a strongly deficient aggregate result, but with heterogeneous dynamics between its two subsystems. As the following graph illustrates, the rural social welfare shows deficit throughout the whole period analyzed. The urban regime presents a more cyclical pattern, changing between periods of deficit and surplus.

As social welfare expenditures in the urban segment are more linear - determined both by the combination of eligibility rules and the demographic dynamics itself - part of the evolution of the social welfare result is attributed to cyclical revenue variations. As far as most of these revenues are added to payroll, whose main determinant are the variables of income and occupation on the labour market, their dynamics responds in a delayed way to the cycle of economic growth. That is why the result of the urban system presents a more extensive cyclical effect.

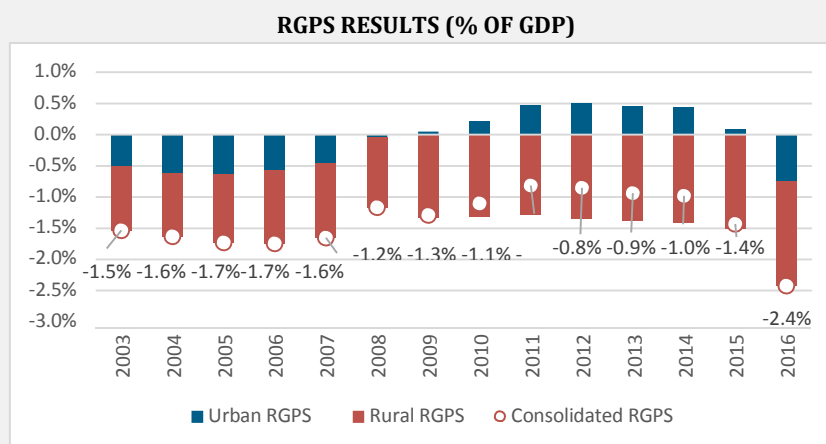
<sup>13</sup> Finanças Públicas. 2a ed. [Public Finances] Atlas, 2001.

<sup>14</sup> Constitutional Amendments No 03/93, No 20/98 and No 41/2003 and their respective infra-constitutional regulations.

<sup>15</sup> Decree No 7.808/2012. Funpresp-Exe also manages the complementary social welfare for the Legislative Branch.

<sup>16</sup> Federal Supreme Court Decision No 496/2012.

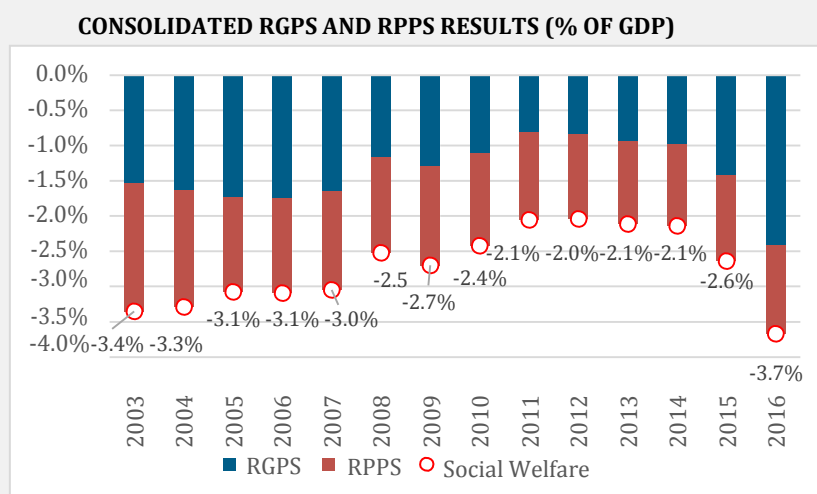
<sup>17</sup> According to the Ordinance of the Ministry of Social Welfare No. 403/08, art. 203/08, it is considered that: I - Financial Balance: Guarantee of equivalence between revenues earned and RPPS obligations in each financial year; II - Actuarial Balance: Guarantee of equivalence, at present value, between the flow of estimated revenues and actuarially projected long-term liabilities".



Source: Social Welfare - Social Welfare Statistical Report - BEPS. Prepared by: IFI - Brazilian Independent Fiscal Institution

In summary, since the rural regime deficit is always sharp and growing, the cooling down periods in the RGPS deficit trend are explained by the cyclical component of economic growth, with positive and lagged side effects on the labour market. Considering the urban and rural segments, the RGPS recorded a deficit of R \$ 149.7 billion or 2.4% of GDP in 2016.

The combination of these factors with the systematic RPPS deficit has led the social welfare to the point of greatest deficit in the last 14 years: 3.7% of GDP (about R\$ 227 billion), as shown in the graph.



Source: Social Welfare - Social Welfare Statistical Report - BEPS. Prepared by: IFI - Brazilian Independent Fiscal Institution

Another point to be highlighted regarding the Brazilian social welfare is the relative financial inequality between the two systems, especially when taking into account the number of beneficiaries. The table presents data on revenue, expenditure and results and correlates them with the number of beneficiaries in each system.

**DISTRIBUTION OF SOCIAL WELFARE RESULTS**

<b>SOCIAL WELFARE (RGPS + RPPS)</b>	Amounts	30,164,257	391,763	618,649	-226,885
	Monthly per capita	-	1.082	1.709	-627
<b>CONSOLIDATED RGPS</b>	Amounts	29,183,383	358,137	507,871	-149,734
	Monthly per capita	-	1.023	1.450	-428
<b>URBAN RGPS</b>	Amounts	19,763,646	350,217	396,561	-46,344
	Monthly per capita	-	1.477	1.672	-195
<b>RURAL RGPS</b>	Amounts	9,419,737	7,920	111,310	-103,390
	Monthly per capita	-	70	985	-915
<b>CONSOLIDATED RPPS (*)</b>	Amounts	980,874	33,626	110,777	-77,152
	Monthly per capita	-	2.857	9.411	-6,555
<b>CIVILIAN RPPS (*)</b>	Amounts	682,333	30,696	73,779	-43,082
	Monthly per capita	-	3.749	9.011	-5.262
<b>MILITARY RPPS (*)</b>	Amounts	298,541	2,930	36,999	-34,069
	Monthly per capita	-	818	10,328	-9,510

**(\*) POSITION IN OCTOBER 2016.**

Source: Ministry of Planning - Boletim Estatístico de Pessoal e Informações Organizacionais [Statistical Report on Personnel and Organizational Information]; Social Welfare - Boletim Estatístico da Previdência Social [Social Welfare Statistical Report] - BEPS. Prepared by: IFI - Brazilian Independent Fiscal Institution

As one can see, the federal public social welfare assisted about 30.2 million beneficiaries in 2016, 29.2 million of them in the RGPS and close to one million in the RPPS. This difference of magnitude in the number of beneficiaries, however, is not proportionally accompanied by the financial data: While approximately 30 million RGPS beneficiaries generated a deficit of R\$ 149.7 billion in 2016, just under 1 million RPPS beneficiaries (30 times less than the RGPS) generated a deficit of R \$ 77.2 billion, more than half of the first.

Behind this disparity are not only higher average monthly expenditures in the RPPS - R\$ 9.4 thousand reais per month per capita, R\$ 10.3 thousand for military personnel and R\$ 9 thousand for civilians, against R\$ 1.2 thousand on average for general regime workers - but also the need to supplement the collection of each regime by the Union: while each RGPS worker needs the Treasury to complement his/her contributions with R\$ 370, in the RPPS the average complement is R\$ 6,600.

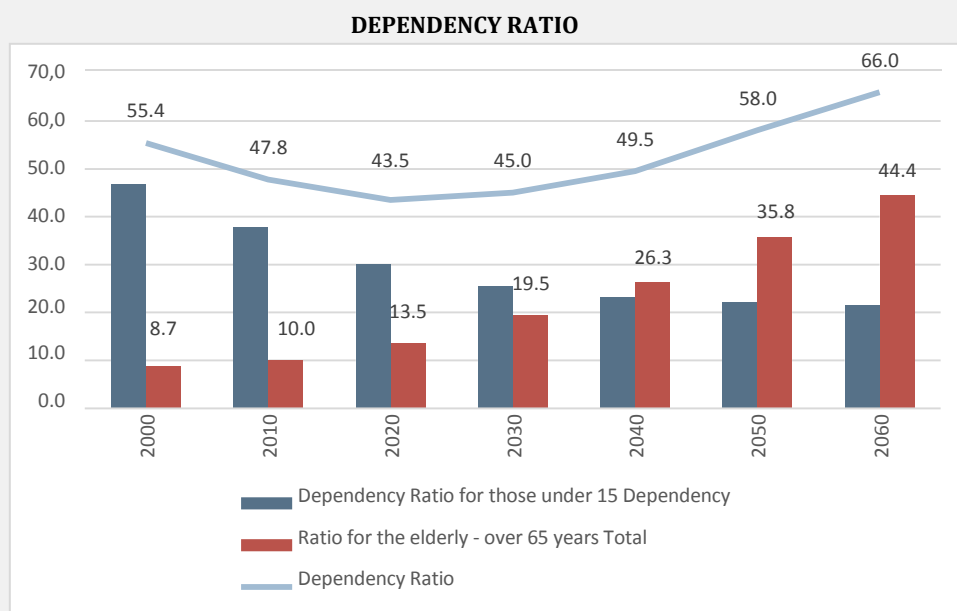
The recent trend of deficits alone does not reveal the full gravity of the issue: The long-term trend is to get worse, and a lot This happens for a simple reason: The predominance of distribution systems in the public sector of our Social Welfare, since RGPS and RPPS are basically simple distribution systems.

In this type of system, the social welfare costs are paid by means of a pact between generations. This necessarily implies that demography is a key variable for the sustainability of the system.

Brazil is experiencing the end of the so-called demographic bonus. This phase is characterized by the decrease of fertility and mortality rates of the population. In the first stage (bonus phase), the working population (that is, in working age) is much larger than that of inactive people (children and the elderly). During this window of demographic opportunity, in principle, it would be easier to grow economically and fund a social welfare based on a simple distribution system.

Soon, however, the country will go through a rapid process of population aging, also a result of the dynamics described above. This will happen from the moment the large active population of the present day goes into inactivity, without the counterpart of replacement, at the same rate, of the population in working age (due to the prior decrease in the fertility rate).

This argument can be summed up in the evolution of the so-called "dependency ratio", which is nothing more, according to the IBGE, than the burden of the population considered inactive (0 to 14 years and 65 years and over) on the potentially active population (15-64 years of age). The following graph illustrates the recent evolution experienced by the country, as well as the forecast for this variable up to the year 2060, decomposing the total dependency ratio between that relative to children and that referring to the elderly.



Source: Brazilian Institute of Geography and Statistics Prepared by: IFI - Brazilian Independent Fiscal Institution

As one can see, Brazil's total dependency ratio has been falling. In 2000, it was around 55.4. This means that there were 55.4 children and the elderly for each group of 100 people in working age. Due to the already mentioned demographic bonus, this variable will reach its lowest point in 2020. From then on it will begin to grow and shall reach 66 by 2060. But there is an important change in the composition of the rate in the analyzed period, that is crucial to understanding our future social welfare problem: The dependency ratio of the elderly - target public, by definition, to receive retirement pensions - will have gone from 8.7 in 2000 to 44.4 in 2060, while that of children will have declined from 46.7 to 21.6. This means that the number of the elderly in respect of the working age population will have been multiplied by 5 (average growth of 2.8% per year) in 60 years).

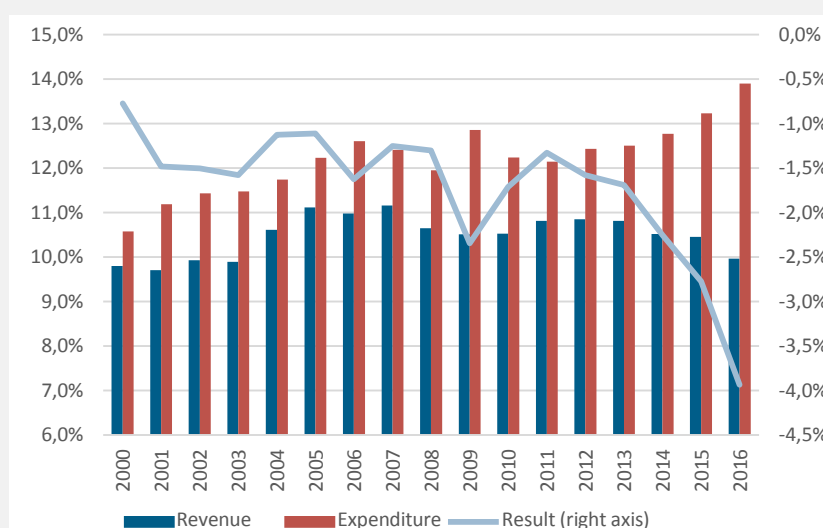
Between 2020 and 2060, the proportion of the elderly over the active population will have more than tripled and its annual evolution will have reached 3% per year. In other words, the number of the elderly will grow at a proportionally much higher rate, and in 2060 there will be about 3.3 times more seniors to be funded by each worker than in 2020.

As we can see, the burden of retirement pensions per worker will increase a lot. If we already have problems today, this evolution will necessarily burden future generations of workers, which will be shown in small numbers to pay the social security benefits of the then high retired population in a distribution system. This will put at stake the already unusually fragile situation of our social security.

In Brazil, social welfare is included in the wider umbrella of the so-called Social Security, which encompasses, in addition to social welfare, healthcare and social assistance. Similarly to what happens with social welfare, according to official data from the Ministry of Planning, Development and Management<sup>18</sup>, Social Security as a whole also presents recurrent and growing deficits. In nominal terms, the deficit has gone up from R\$ 9.3 billion in 2000 to 243.2 billion in 2016.

As shown in the graph below, the deficit rose, as a percentage of GDP, from 0.8% in 2000 to 3.9% in 2016. It is worth remembering that the dynamics of security is, to a large extent, determined by the evolution of social security, by far the largest budget among the three components.

#### REVENUES, EXPENDITURES AND RESULT OF THE SOCIAL SECURITY (% OF GDP)



Source: Federal Budget Secretariat - SOF / Ministry of Planning, Development and Management.  
Prepared by: IFI - Brazilian Independent Fiscal Institution

Despite the previous dramatic findings, there are currently in Brazil groups that dispute the existence of a deficit in Social Security and question this element as an indicator of the need to reform our social welfare system. To do so, they resort to the supposed existence of surpluses in Social Security, as if this would eliminate the problems to come for both.

To come to the conclusion that there would be a surplus in Social Security, several elements need to be changed in revenues and expenses in relation to the official statement. In alternative, unofficial calculations, the constitutionally approved decoupling effect, called Union Unbundling (DRU), is reversed and added to the revenue with contributions. Additionally, there is the inclusion of revenues from the Workers Support Fund (FAT in the Portuguese acronym), both financial and those transferred to the BNDES (National Bank for Economic and Social Development) in accordance with constitutional provisions, in addition to alleged social welfare compensations not transferred and revenue counterparts for the Union's social welfare charges (EPU in the Portuguese acronym). In expenditures, the main resource adopted is the non-inclusion of expenses related to the RPPS<sup>19</sup>. The main differences are clarified in the following table.

<sup>18</sup> Available at <<http://www.orcamentofederal.gov.br/clientes/portalsof/portalsof/informacoes-orcamentarias/pasta-estatisticas-fiscais/02.- resultado-primario-da-seguridade-social>>. Accessed on March 1st, 2017. Data for 2016 were obtained from <http://www.planejamento.gov.br/apresentacoes/2016/2016-12 seguridade-social-vers-final-mf.pdf>. Accessed on March 1st, 2017.

<sup>19</sup> This exclusion is also reflected in the respective revenues. Given that the system is largely in deficit, as already demonstrated, the purge of RPPS substantially improves the alternative security result.

COMPARISON OF SOCIAL SECURITY RESULTS (IN MILLION R\$)				
DESCRIPTION	2015			JUSTIFICATION
	Alternative	Official	Difference	
<b>REALIZED REVENUES</b>	<b>694,231</b>	<b>627,198</b>	<b>67,033</b>	-
1. Revenues from social contributions	671,471	618,026	53,445	-
<i>Social welfare revenues</i>	352,553	350,272	2,281	Alternative calculation includes "Non transferred compensations," unidentified
<i>Social Security Financing Contribution</i>	200,926	160,758	40,168	Alternative calculation includes DRU
<i>Social Contribution on Net Profit (CSLL)</i>	59,665	47,792	11,873	Alternative calculation includes DRU
<i>Social Integration Program</i>	52,904	25,560	27,344	Alternative calculation includes DRU and constitutional on-lending to the National
<i>Public Employee Contribution</i>	0	29,499	-29,499	Alternative calculation does not include the Special Social Welfare Policy (RPPS)
<i>Other contributions</i>	5,423	4,144	1,279	Unidentified
2. Own Revenues + Taxes, Fines and Interest	20,534	9,172	11,362	-
<i>FAT own funds</i>	14,160	0	14,160	Official calculation does not include financial
<i>Other Institutions</i>	6,374	9,172	-2,798	Unidentified
3. Fiscal Budget Counterpart for EPU	2,226	0	2,226	Equal to the same expenditure value
<b>REALIZED EXPENDITURES</b>	<b>683,061</b>	<b>793,705</b>	<b>-110,644</b>	-
1. Social Welfare Benefits (includes EPU)	438,316	440,085	-1,769	Unidentified
2. Assistance Benefits	41,798	42,678	-880	Unidentified
3. Bolsa Família (family allowance) and other transfers	26,921	26,916	5	Unidentified
5. FAT Benefits	48,180	48,180	0	-
6. Payments to Union's inactive public employees	0	104,123	-104,123	Alternative calculation does not include the Special Social Welfare Policy (RPPS)
7. Operating expenses	127,846	131,723	-3,877	Unidentified
<b>SOCIAL SECURITY RESULT</b>	<b>11,170</b>	<b>-166,507</b>	<b>177,677</b>	-

Source: (1) Official Data: Ministry of Planning, available at <http://www.orcamentofederal.gov.br/clientes/portalsof/portalsof/informacoes-orcamentarias/pasta-estatisticas-fiscais/02.-resultado-primario-da-seguridade-social>. Accessed on March 1st, 2017.

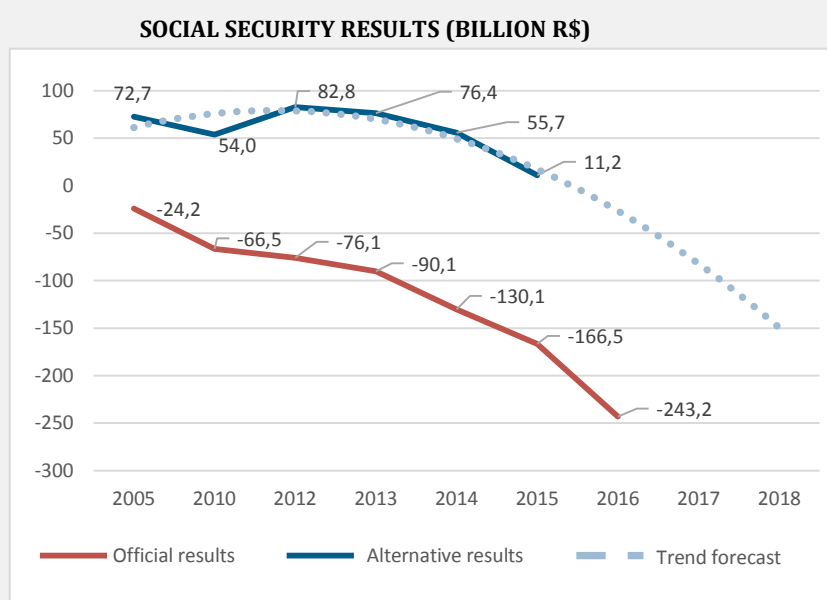
(2) Alternative calculation data: National Association of Tax Auditors of the Brazilian Federal Revenue Service – ANFIP, available at [http://www.anfip.org.br/doc/publicacoes/Documentos\\_01\\_02\\_2017\\_08\\_39\\_19.pdf](http://www.anfip.org.br/doc/publicacoes/Documentos_01_02_2017_08_39_19.pdf). Accessed on March 1st, 2017.

There are many reasons to question the procedures used in this alternative calculation. For example, DRU funds (CF/88 [Federal Constitution of 1988], article 76 of the Transitional Constitutional Provisions Act, wording given by Constitutional Amendment No. 93/2016) allegedly "withdrawn" from Social Security, as well as transfers to BNDES (CF/88, article 239, §1), are as constitutional as the sources of funds assigned to Social Security (CF/88, article 195). There is no reason to choose one device of the Constitution over another. Similarly, with regard to the exclusion of the Special Social Welfare Policy (RPPS) from the calculation, the constitutional text does not provide for its exclusion from the calculation, as illustrated in art. 195, §2:

*§ 2 The proposal for the Social Security budget shall be drawn up jointly by the agencies responsible for health, social welfare and social assistance, in accordance with the goals and priorities established in the law of budgetary directives, ensuring each area of the management of its funds.*

In spite of the multiple interpretations, both from the fiscal-economic and legal point of view for the case of the Brazilian social welfare, the long-term trend is more important than the current situation. The burden of social welfare expenditure will increase quickly, regardless of questionable alternatives to calculate the result. The end of the demographic dividend process will bring acute difficulties not only for the Social Welfare per se, but for the country's whole set of public expenditures.

The graph below shows a comparison between the official figures and the alternative measure presented for the result of social security. Both trends speak for themselves, regardless of the supposedly positive result, in the alternative view, presented until 2015.



*Source: Federal Budget Secretariat - SOF (in the Portuguese acronym)/ Ministry of Planning, Development, and Management and the National Association of Tax Auditors of the Brazilian Federal Revenue Service - ANFIP (in the Portuguese acronym). Prepared by: IFI - Brazilian Independent Fiscal Institution*

The trend for the Social Security result pointed by the Ministry of Planning is already very in deficit. In addition to this there is the deficit perspective, forecast for 2016 onwards, based on polynomial trend extrapolation of the alternative calculation. This scenario reveals that it would be interesting if the alternative calculation for 2016 were released, since the primary data are already available. In the absence of this calculation to date, we have decided to make a simulation of this result, maintaining the same logic of the calculation presented in the previous table. The calculation is shown in the table below.



**ESTIMATE OF ALTERNATIVE RESULT FOR SOCIAL SECURITY IN 2016**

DESCRIPTION	2016 SIMULATION
<b>REALIZED REVENUES</b>	<b>677,198</b>
1. Revenues from social contributions	649,407
<i>Social welfare revenues</i>	360,562
<i>Social Security Financing Contribution</i>	177,486
<i>Social Contribution on Net Profit (CSLL)</i>	59,000
<i>Social Integration Program</i>	46,596
<i>Public Employee Contribution</i>	0
<i>Other contributions</i>	5.764
2. Own Revenues + Taxes, Fines and Interest	25,425
<i>FAT own funds</i>	19,286
<i>Other Agencies</i>	6,139
3. Fiscal Budget Counterpart for EPU	2.366
<b>REALIZED EXPENDITURES</b>	<b>774,310</b>
1. Social Welfare Benefits (includes EPU)	508,209
2. Assistance Benefits	48,068
3. Bolsa Família (family allowance) and other transfers	27,497
5. FAT Benefits	55,704
6. Payments to Union's inactive public employees	0
7. Operating expenses	134,832
<b>SOCIAL SECURITY RESULT</b>	<b>-97,112</b>

Source: Primary data: Siga Brasil. Own elaboration based on the differences indicated in the Table "Comparative of the Social Security result". Unidentified amounts were restated by the Extended National Consumer Price Index (IPCA) of 2016 (6.29%) and incorporated in the calculation.

The result of the exercise is quite eloquent: Even in the alternative measure, there is a sharp Social Security deficit of R\$ 97.1 billion in 2016. The estimates made here are certainly subject to adjustments, since we do not know exactly all the details about the procedures adopted. However, we highlight the fact that the absence of said details does not in any way reduce our trust on the estimate of high deficit not only for 2016, but also for the following years.

It is worth reminding that, in the case of the Social Welfare, not even those who defend alternative calculations support the idea of the lack of a deficit. The table below, created based on the alternative calculation for Social Security results, shows that the social welfare result presents a growing deficit, just like the official government sources defend.

**ALTERNATIVE CALCULATION: REVENUES, EXPENDITURES AND RESULTS OF SOCIAL WELFARE AND SOCIAL SECURITY- 2005 TO 2016 (MILLION R\$)**

Description	2005	2010	2012	2013	2014	2015
Revenue	289,801	458,144	595,788	651,099	687,829	694,231
Expenditure	217,110	404,191	512,952	574,653	632,092	683,061
<b>Results (R\$)</b>	<b>72,691</b>	<b>53,953</b>	<b>82,836</b>	<b>76,446</b>	<b>55,737</b>	<b>11,170</b>
<b>Consolidated RGPS</b>						
Revenue	108,434	211,968	278,160	307,147	337,503	350,272
Expenditure	146,010	254,859	315,089	355,007	392,244	434,337
<b>Results (R\$)</b>	<b>-37,576</b>	<b>-42,891</b>	<b>-36,929</b>	<b>-47,860</b>	<b>-54,741</b>	<b>-84,065</b>
<b>Urban RGPS</b>						
Revenue	105,086	207,154	272,397	300,991	330,833	343,191
Expenditure	118,626	198,061	243,954	274,652	303,541	336,296
<b>Results (R\$)</b>	<b>-13,540</b>	<b>9,093</b>	<b>28,443</b>	<b>26,339</b>	<b>27,292</b>	<b>6,895</b>
<b>Rural RGPS</b>						
Revenue	3,348	4,814	5,763	6,156	6,670	7,081
Expenditure	27,384	56,798	71,135	80,355	88,703	98,041
<b>Results (R\$)</b>	<b>-24,036</b>	<b>-51,984</b>	<b>-65,372</b>	<b>-74,199</b>	<b>-82,033</b>	<b>-90,960</b>

Source: National Association of Tax Auditors of the Brazilian Federal Revenue Service - ANFIP Available at [http://www.anfip.org.br/doc/publicacoes/Documentos\\_01\\_02\\_2017\\_08\\_39\\_19.pdf](http://www.anfip.org.br/doc/publicacoes/Documentos_01_02_2017_08_39_19.pdf). Accessed on March 1st, 2017. Prepared by IFI - Brazilian Independent Fiscal Institution.

## Structural primary result

The deterioration of public accounts has been profound in recent years. The consolidated average primary surplus of the public sector, which was 3.4% of GDP between 2002 and 2008, increased to 1.3% of GDP between 2009 and 2015. In 2016, the deficit worsened, reaching 2.5% of GDP. However, there is an alternative - more accurate - way to assess the degree of fiscal expansion or contraction that takes into account the effects of the economic activity cycle on the fiscal effort. It is the calculation of the primary structural result and its variation, the so-called fiscal impulse.

In 2011, the Central Bank resumed this debate in Brazil by proposing<sup>20</sup> the calculation and assessment of the structural primary result to have a more suitable measure of fiscal policy behavior, a threshold issue for

decision-making in monetary policy. As of this issue of the Fiscal Follow-up Report, we will monitor the same variable, calculated according to the International Monetary Fund's (IMF) methodology<sup>21</sup>.

This methodology is based on three steps:

- 1) calculation of the recurrent primary result, that is, the primary result free from atypical events on the side of revenues and expenditures;
- 2) calculation of the structural primary series from the setting of a base year for adjustments by the economic cycle in which the output gap, that is, the difference between observed GDP and potential GDP is close to zero, in our case, 2001;
- 3) calculation of the fiscal impulse through the variation of the series obtained in 2.

<sup>20</sup> See the special box of the Central Bank's inflation report for the second quarter of 2011. Available at <http://bit.ly/2mHf0aP>

<sup>21</sup> Our calculations are done on a monthly basis and then consolidated every twelve months. IMF's methodology is defined as:  $(\Delta G - \frac{G_0}{Y_0} \Delta Y)$  - considering: "G" is government expenditure, "T" are the revenues, while Y is the real and potential GDP, The subscript "o" represents the tax base-year.

Regarding step 2, it is worth noting that the adjustments through the cycle are made based on the calculation of potential GDP<sup>22</sup>. The general idea is that a high fiscal deficit should be relativized if the economy is operating at a time of recession, since it is natural to expect depressed revenues and results resulting from the recessive cycle itself. On the other hand, a strong fiscal surplus must also be weighed considering the economic environment, since it is relatively easy to produce tax results in the presence of a booming GDP, given the existing relation between revenues and GDP.

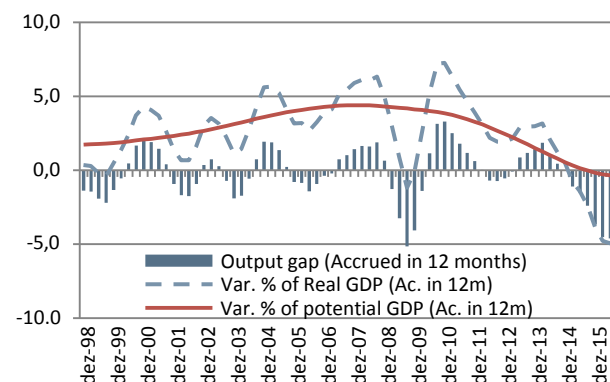
Graph 28 below shows the calculations made by IFI for potential GDP and for the output gap. Note that the Brazilian economy is currently working, with an output gap of around -4.1%.

(position in September 2016) This means that economic activity is operating way below its potential level.

In other words, it means that the growth crisis is deep and it will take a long time to be fully reversed. In spite of the important and healthy discussion about the new growth potential of the Brazilian economy, it seems consensus among different economists that there has been a structural retreat. Moving to a higher level is possible, but it will require an ambitious agenda of economic reforms. The fact is that, even with this growth potential downturn, the recession of the last couple of

years has been so intense that the gap, represented by the blue bar in the graph below, increased significantly

**GRAPH 28: GDP, POTENTIAL GDP, AND OUTPUT GAP**



Source: Brazilian Institute of Geography and Statistics and IFI.  
Prepared by: IFI - Brazilian Independent Fiscal Institution

After measuring the output gap size, the next step to building the structural fiscal result is to remove any atypical non-recurring revenues and expenses from the fiscal result. In this regard, Table 6 below shows the calculation of the recurring primary result, with details of discounts made both on the revenue and the expenditure side. As the measurement is calculated *ex ante*, that is, before the official and non-recurrent results are effectively known, it is subject to changes. For 2017, *a priori*, there is no consideration for extraordinary expenses, such as financial aid to the state of Rio de Janeiro (of R\$ 2.9 billion).

<sup>22</sup> Currently, we are using the HP-filter method. In the near future, we will have new gap measurements, derived from the building of potential GDP by other methods, such as the (i) kalman filter,

(ii) production function, (iii) Blanchard and Quah decomposition, that operate with a Structural VAR.

TABLE 6: RECURRING RESULT CALCULATION FOR 2016 (HEADINGS IN % OF GDP)

	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
<b>Recurring Primary Result</b>	<b>2,0</b>	<b>2.5</b>	<b>0,7</b>	<b>0,8</b>	<b>1.3</b>	<b>0.9</b>	<b>0.3</b>	<b>-1.0</b>	<b>-1.5</b>	<b>-3.5</b>
<b>Official Primary Result</b>	<b>2.1</b>	<b>2.3</b>	<b>1.2</b>	<b>2.0</b>	<b>2.1</b>	<b>1.8</b>	<b>1.4</b>	<b>-0.3</b>	<b>-1.9</b>	<b>-2.5</b>
<b>Adjustments</b>	<b>0.1</b>	<b>-0.2</b>	<b>0.5</b>	<b>1.3</b>	<b>0.8</b>	<b>1.0</b>	<b>1.2</b>	<b>0.7</b>	<b>-0.4</b>	<b>1.0</b>
<b>Revenue</b>	0.1	0.3	0.6	2.4	0.8	0.7	1.3	0.8	0.6	1.1
Concessions and Grants	0.1	0.2	0.1	0.0	0.1	0.0	0.4	0.1	0.1	0.3
Refis (including the Tax Adjustment Program)	0.0	0.0	0.1	0.2	0.5	0.3	0.7	0.7	0.4	0.3
Anticipation of Dividend	0.0	0.1	0.0	0.1	0.1	0.3	0.1	0.0	0.0	0.0
Repatriation (Net)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4
Onerous Transfer	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0
Other	0.0	0.0	0.3	0.1	0.1	0.0	0.1	0.0	0.1	0.1
<b>Expenditure</b>	0.0	-0.5	-0.1	-1.1	0.0	0.3	-0.1	-0.2	-0.9	-0.1
Petrobras Capitalization	0.0	0.0	0.0	-1.1	0.0	0.0	0.0	0.0	0.0	0.0
Sovereign Wealth Fund	0.0	-0.5	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0
Aid to the Center for Business Development	0.0	0.0	0.0	0.0	0.0	0.0	-0.1	-0.2	0.0	0.0
FND (Development National Fund)	0.0	0.0	-0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fiscal (Un)Pedaling	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-0.9	-0.1
Other	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Source: National Treasury. Development and forecasts by: IFI  
- Brazilian Independent Fiscal Institution

From the recurring primary result series and using the IMF calculation methodology, we have applied adjustments according to the revenue cycle, obtaining the structural primary result series for the central government. Note that, in addition to the potential output, the tax-base year (2001, in this case, which had a growth of around 1.5%) used to measure the structural result level is also important. Thus, alternative base years should change the level, but not the variation (i.e., the impulse) of the fiscal result.

As it can be seen, the result of 2016, for example, continues to show a structural deficit of 1.9% of GDP, in contrast to the official result of 2.5% of GDP.

However, it is most intriguing to observe the development of the structural primary result series, that is, the year per year variations. Between 2014 and 2015, when there was a significant - albeit temporary - change in the conduct of fiscal policy, while the official primary result went from -0.3% to -1.9% of GDP, that is, equivalent to a fiscal expansion of 1,6 pp of GDP, the structural result ranged from 0.5% to -0.1% of GDP: a

much lower fiscal impulse of 0.6 pp, what shows the important effort made at the time to put the accounts back in order.

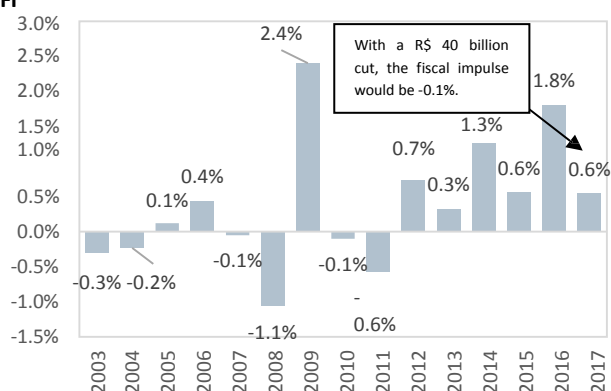
Graph 29 contains the impulse calculation and allows us to identify, in each period, the degree of fiscal expansion or contraction. In a clear and objective way, we have that whenever the graph is below zero, it is a period of fiscal contraction (negative impulse), while in times when it is above this level, it means that there was fiscal expansion (positive impulse).

Between 2003 and 2008, the fiscal policy pattern was contractionary. Only two years, 2005 and 2006, had positive impulse (fiscal expansion).

After the 2008 crisis, there was a strong fiscal expansion. The year of 2009 presented the highest fiscal impulse in the series calculated by IFI, of 2.4% of GDP. As it is well known, that period was marked by policies to expand public credit, with the assumption of important costs in the subsidy account, as well as the beginning of extraordinary tax exemption programs.

Between 2010 and 2011, there was significant fiscal contraction, with significant recovery of revenues and some primary spending containment. The budget cutback announced for 2011 was relevant (R\$ 50.1 billion). From 2012 onwards, our estimate reveals a systematic generation of positive fiscal impulses, that is, the consolidation of a clearly expansionist fiscal policy.

**GRAPH 29: FISCAL IMPULSE CALCULATION BY IFI**



Source, Development and forecasts by: IFI - Brazilian Independent Fiscal Institution

Two important additional remarks:

- 1) between 2015 and 2016, there was a meaningful fiscal expansion, of 1.8% of GDP, since the structural result went up from -0.1% to -1.9% of GDP;
- 2) IFI predicts there will be a much more contained fiscal expansion in 2017, around 0.5% to 0.6%, with an estimated structural deficit of 2.4% of GDP.

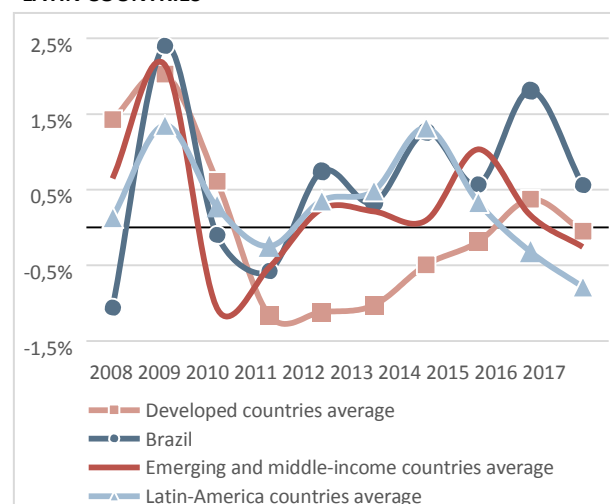
Regarding 2017, it should be noted that if the government announces a contingency of around R\$ 40 billion, as indicated in the first issue of the RAF23, the primary result would be in line with the target set in the Budget Guidelines Law (LDO ) for the central government (-R\$ 139 billion) and the structural result would total -1.8% of GDP. Under this scenario, as we can see, there would already be a modest and not insignificant fiscal contraction in 2017, of around 0.1 percentage point of GDP.

Besides monitoring the evolution of the fiscal impulse in the domestic economy, it is quite valid and advisable

to compare the results with what takes place in the rest of the world. In this respect, international comparisons help contextualize the Brazilian fiscal policy pattern, when we analyze the situation in countries with a similar or more advanced development stage. Using data from the Fiscal Monitor of the International Monetary Fund (IMF), it can be seen that the fiscal impulse series for Brazil goes hand-in-hand both with the average in Latin American countries and the average of emerging and middle-income countries. For the most recent period, starting in 2016, comparisons are less obvious, since the IMF should review its calculations of potential GDP and structural primary result by the month of April when a new version of the Fiscal Monitor will be released.

We should mention that the Fund publishes this information twice a year. Another point to note is that our calculations (green series in Graph 30) take into account the so-called central government, while the IMF series are based on the general government, which includes subnational governments.

**GRAPH 30: FISCAL IMPULSE COMPARISON - BRAZIL, DEVELOPED, EMERGING AND AMERICAN LATIN COUNTRIES\***



\*IMF data collected from the Fiscal Monitor of October 2016, including estimates, for the general government variable. The series for Brazil is calculated by IFI and uses the central government as reference.

Source: IMF and IFI. Development and forecasts by: IMF and IFI.

In summary, the results reinforce our conclusion that the government should seek a

<sup>23</sup> Further details in the February issue of RAF. Available at: <http://www12.senado.leg.br/ifi/public>

significant contingency this year to ensure full compliance with the target set in the LDO, under the following assumptions: Economic growth of 0.46%, real progress of total revenues of around 0.2% and real increase in central government net revenues of 1.3% between 2016 and 2017.

The re-establishment of a more balanced fiscal framework is under way, but depends not only on the compliance with the so-called ceiling rule (Constitutional Amendment No. 95), but also on the adoption of more effective expenditure control in the near term.

### The fiscal crisis in the states and the new agreement with the Union

According to IFI simulations that will be presented below, the new agreement between the Federal Government and the states will produce effective results in the rebalance of subnational accounts. There is no miraculous and immediate solution to fiscal problems, be it at national or local level. Recovery will be gradual and costly. Following the diagnosis of the fiscal problems that afflict the states, notably Rio de Janeiro, Rio Grande do Sul and Minas Gerais, the new agreement and its possible consequences for the states' fiscal balance are discussed.

#### *Diagnosis of the current fiscal situation of the States*

The federal fiscal crisis stems from economic factors that must be considered in any government finance analysis. The depression experienced by the country affects not only the federal government's accounts - with a direct and profound impact on tax revenues and contributions - but also the revenue flow of states and municipalities. Own revenues and transfers from the federal government are rapidly declining and, in the presence of excessively rigid budgets, fiscal results deteriorate rapidly.

In addition to this situation, there has been a growth in the influx of new internal and external loans

in recent years. This has exposed the states to a higher risk of financing liabilities. It should also be noted that a considerable share of these loans was approved on an exceptional basis by the Ministry of Finance, contrary to the diagnosis evidenced in the credit assessments carried out by the National Treasury. Table 7 below shows the significant increase in resources obtained by the states through indebtedness, especially in the 2012-13 biennium.

**TABLE 7: DISBURSEMENTS WITH CREDIT TRANSACTIONS TO THE STATES (IN BILLION R\$)**

Year	Internal	External	Total
<b>2011</b>	5.7	3.5	9.2
<b>2012</b>	14.0	16.2	30.2
<b>2013</b>	23.0	16.4	39.4
<b>2014</b>	24.7	8.8	33.5
<b>TOTAL</b>	67.5	45.0	112.5

*Source: Ministry of Economy and Finance Prepared by: IFI - Brazilian Independent Fiscal Institution*

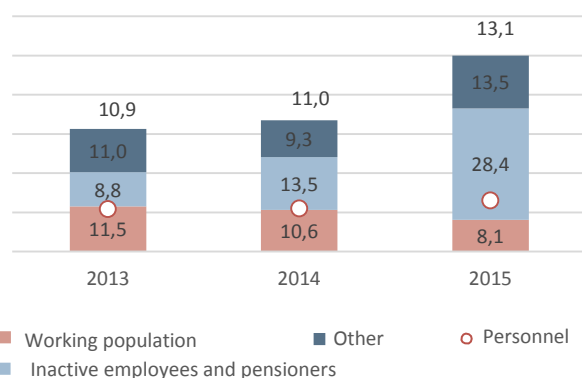
The process of increasing the debt ratio of the states, whose operations were largely guaranteed by the Union, occurred simultaneously with the program to support investments by the states and the Federal District, better known as Pro-Investe. With an authorized amount of R\$ 20 billion in 2012, the program was part of the economic policy actions to revive growth. In addition to the BNDES, source of funds for the program, there was also participation of the National Monetary Council (CMN) through the reduction of interest rates applied, and the reopening of maturities.

Despite the initial conception for credit operations to fully extend the level of investment in the states, there was also a significant increase in personnel expenses, both active and inactive. As shown in graphs 31 and 32, while the advance of investments was more concentrated in 2013 (compared to 2012), completely canceled by the 2015 decline, spending on the payroll in the states followed a steady year-on-year trajectory, especially with inactive and pensioners.

<sup>24</sup> Decisions 4.156/12 e 4.291/13, available at <http://bit.ly/2kX8dID> and <http://bit.ly/2lGTOgH>, respectively.

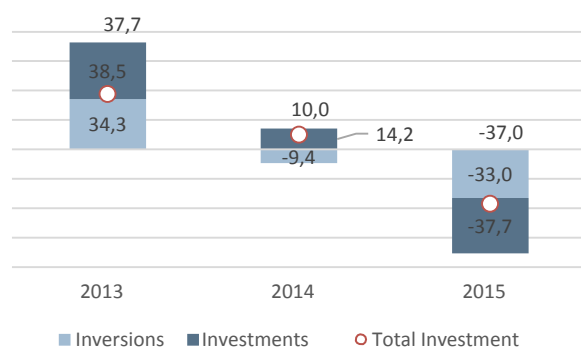


**GRAPH 31: PERSONNEL EXPENDITURE GROWTH RATE**



Source: National Treasury. Prepared by: IFI - Brazilian Independent Fiscal Institution

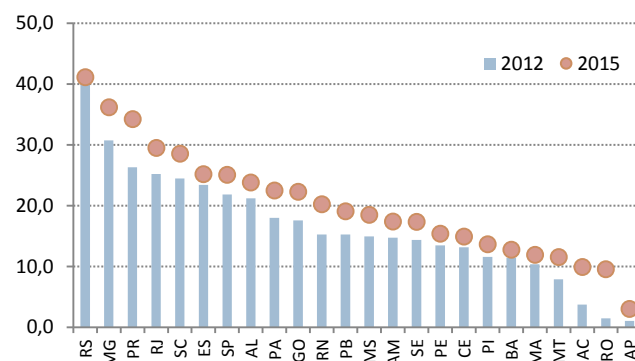
**GRAPH 32: INVESTMENT SPENDING GROWTH RATE**



Source: National Treasury. Prepared by: IFI - Brazilian Independent Fiscal Institution

Among the factors conditioning the continued pressure of personnel expenses on the state budget, we have the salary adjustment granting policy and new personnel hirings. Furthermore, since an important share of expenditures with inactive employees and pensioners in the states refer to teachers and military personnel, professional categories that have special retirement rules and still benefit from integrality (full benefit) or parity (readjustments equal to those granted to the active personnel) in the public service, there is additional pressure of expenditures on social welfare..

**GRAPH 33: BURDEN OF INACTIVE EMPLOYEES AND PENSIONERS IN PERSONNEL EXPENDITURE**



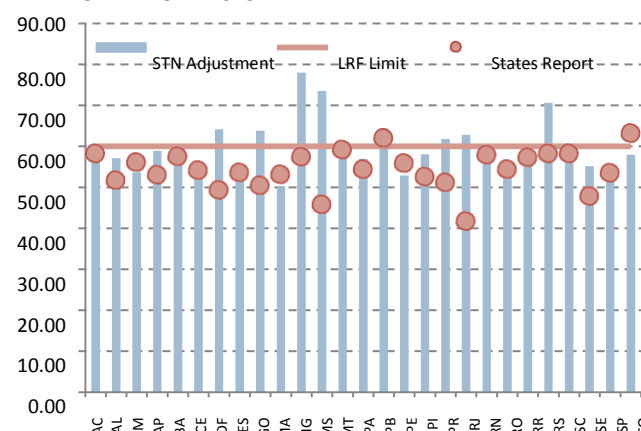
Source: National Treasury. Prepared by: IFI - Brazilian Independent Fiscal Institution

In summary, there are two distinct imbalances that affect the states: The first one, related to the high debt ratio, concentrated in few states; And the second one, more widespread,

related to the high personnel expenditure. While the first one is concentrated in the southeastern states, the second one, more widespread among the federative units, indicates that the fiscal imbalance in the states is not limited to debt.

Graph 33 reveals that if correcting the information reported by the states in the Fiscal Management Report (RGF in the Portuguese abbreviation), it is clear the budget rigidity and the heavy onus caused by the pay roll is, on average, higher than what is informed by the states in the report pursuant to the Fiscal Accountability Act.

**GRAPH 34: PERSONNEL EXPENDITURE AS NET CURRENT REVENUE RATIO IN 2015**



Source: National Treasury. Prepared by: IFI - Brazilian Independent Fiscal Institution

While only two states reported to be above the legal



cap for personnel expenditures (60% of the Net Current Revenue - RCL in the Portuguese acronym), the adjusted calculation points out a total of eight states. Regarding the prudential cap, of 57% of the RCL, equal to 95% of the maximum legal cap, there are ten states experiencing imbalance. Also noteworthy is the significant understatement of the commitment reported by the states themselves in the RGF.

Faced with the critical situation of states that commit more than 70% of their budget to pay only the payroll, with timid advances in the internal fiscal restructuring agenda, there was a race for Federal Government assistance. The renegotiation process tends to discourage more austere behavior, since the states that have kept their accounts in order are not the most benefited. Despite that, this was the solution found to address subnational fiscal imbalances, for reasons we will describe below.

The possibility of interrupting payments for debt servicing with the Union for three years is important and necessary, but not sufficient for fiscal rebalancing. Therefore, the required counterparts must be strictly observed and, accordingly, there are risks. The distortion carried out in the financial statements by several states concealed part of the fiscal problem. If this dysfunctionality is not corrected, confidence in fiscal responsibility could be even more seriously compromised.

### *The agreement between the Federal Government and the states*

Faced with this financial background and the recurring social stress in the states, the Federal Executive Branch has intervened and sent the Supplementary Law Bill (PLP) No. 343, of 2017 to the National Congress on February 23, establishing the Fiscal Recovery Regime of the States and the Federal District (RRF). In order not to block the reform agenda underway in the country, since paragraph 1, item III, Art.60 of the Federal Constitution (CF) of 1988 prohibits amendments to the CF during federal intervention in states, the measures to be taken will be different.

Among the RRF adherence conditions, the bill establishes that states must have, cumulatively, a higher debt than revenue and personnel expenditures added to interests and accumulated depreciation of, at least 70% revenue, both pertaining to the end of the tax-based year before their admission to the RRF. In conclusion, the last adherence conditions is that

obligations are higher than the state's Treasury account, after the carrying out of legal designations. The list of the required counterparts for states to maintain access to the benefit of postponing payments of debt service for three years, renewable for an equal period, can be seen in Table 2 below. It is worth noting the restriction so that mandatory expenditure of states (ie, excluding among other items capital investments or expenditures) to grow at a rate equivalent to inflation or to the variation in net current revenue (whichever is lower). Another point of the agreement that deserves highlighting is the creation of the supervisory board, composed of two technicians appointed by the Ministry of Finance and an indication by the Office of the Federal Controller-General (CGU) to monitor on-site compliance with the fiscal adjustment program.

#### **BOX 2: COMPENSATORY MEASURES ESTABLISHED IN THE STATE FISCAL RECOVERY PROGRAM (PLP No 343, of 2017)**

1. Increase in the social welfare contribution rate of public employees from 11% to 14%. An extraordinary and temporary higher rate may be imposed.
2. Limitation during the RRF for the growth of mandatory expenses, the limit being determined by inflation or variation rate of net current revenues (whichever is lower).
3. Ban on salary adjustments and hiring of public employees during the accession to the RRF.
4. States' commitment regarding the sale of assets, such as state-owned companies in the financial, energy and sanitation sectors.
5. Adoption of the special social welfare policy and creation, for the states that do not yet have it, of the complementary social welfare policy.
6. Authorization to carry out payment auctions by criterion of highest discount, with the purpose of reducing the stock of outstanding liabilities.
7. Reduction of tax incentives (with tax break) of at least 20% per year.

*Source: Law Bill No 343/2017. Prepared by: IFI - Brazilian Independent Fiscal Institution*

In view of the RRF measures, this section proposes long-term simulations for the primary results of the states, assuming full application of the PLC spending rule and revenue growth at the same pace of GDP. If these hypotheses are satisfied, the effects on the primary result will be significant, since revenues, in line with economic activity, will grow more than expenses. In any case, the states which are in a more critical situation will take a considerable amount of time to reestablish balance between revenues and expenditures.

Out of the 27 states, 10 have ended 2016 with a primary deficit. The joint deficit of these 10 States amounted to R\$ 13.7 billion. Including the other states, which presented a positive result, the joint deficit was R\$ 4.1 billion.

The aforementioned data were gathered from the Sistema de Informações Contábeis e Fiscais do Setor Público Brasileiro (Siconfi) [Accounting and Fiscal Information System for the Brazilian Public Sector]. Their source is the Relatório Resumido de Execução Orçamentária (RREO) [Summarized Report on Budget Execution], a publication foreseen on

§ 3 in article 165 in Federal Constitution of 1988 and standardized in article 52 of

LRF. It should be noted that the data reported in the RREO are different, for methodological reasons, both from those used by the National Treasury in the Restructuring and Fiscal Adjustment Programs (PAF) and those disclosed by the Central Bank. This matter will be further explored in the next issues of the Fiscal Follow-up Report (RAF) by IFI.

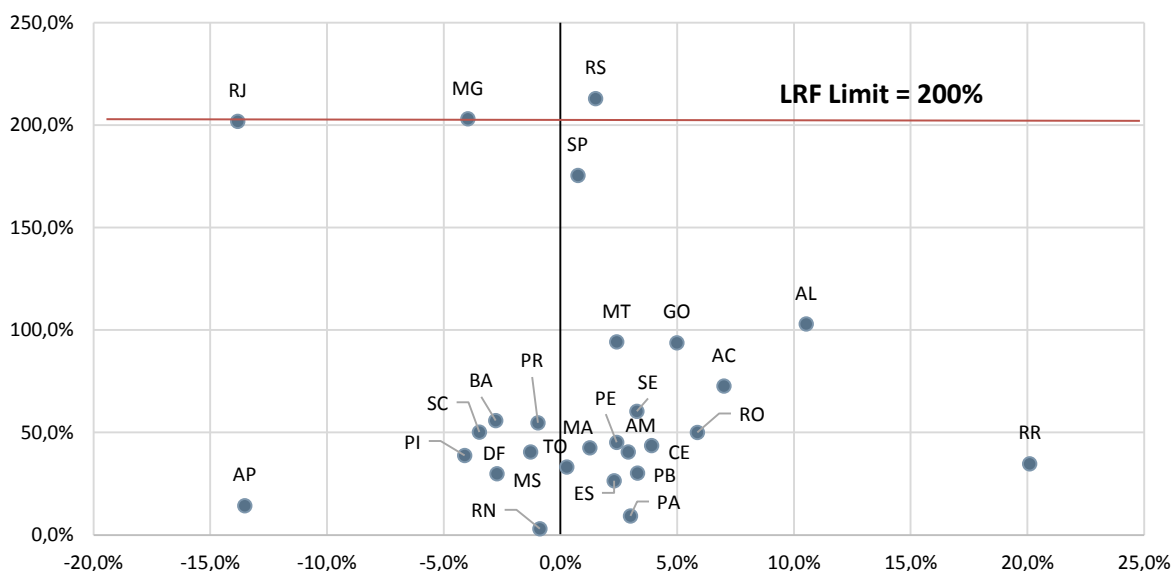
Among the different evaluation perspectives of the current situation in the states, it is particularly interesting to compare the fiscal effort (primary deficit/primary superavit) to the debt ratio, both in revenue percentage. Table 8 and Chart 35 show this data in an systematic way. In the chart, the states with a high debt ratio and an equally concerning deficit are in the fourth quadrant (Rio de

Janeiro and Minas Gerais). The vast majority of states appear in the second and third quadrant, that is, they have surpluses or medium deficits and intermediate debt ratio. There is also the first quadrant, in which Rio Grande do Sul is isolated, a state with high debt and small surplus.

Graph 35 is useful, as one can see, to understand the scale of the fiscal crisis installed in the most critical states, but also to assess the risk of other state governments migrating to a problematic framework. States that produce primary deficits (third quadrant), but still have median debt, if they persist on a little stringent policy, are natural candidates to have their debt level rapidly widened.

It is in this context that the fiscal recovery program proposed by the federal government is inserted. Without recovering the flows (revenues minus expenses), which depends on a strong control of spending growth, since revenues are limited by a (still) fragile economic performance, there will be no solution to the crisis.

**GRAPH 35: PRIMARY DEFICIT IN % OF NET REVENUE (RL) AND NET CONSOLIDATED DEBT (DCL) IN % OF THE NET CONSOLIDATED REVENUE (RCL) - 2016**



Source: National Treasury. Prepared by: IFI - Brazilian Independent Fiscal Institution

**TABLE 8: DCL/RCL AND FISCAL RESULT IN MILLION R\$ AND % OF RL - 2016**

	DCL in % of RCL	Deficit/Sup. in Million R\$	Deficit/Sup. in % of NR
RS	212.9%	855	1.5%
MG	203.1%	-3.249	-4.0%
RJ	201.9%	-6.325	-13.8%
SP	175.5%	1.564	0.7%
AL	102.9%	1.127	10.5%
MT	94.2%	378	2.4%
GO	93.8%	1.040	5.7%
AC	72.7%	374	7.0%
SE	60.4%	250	3.3%
BA	55.8%	-1.118	-2.8%
PR	54.8%	-481	-1.0%
SC	50.2%	-770	-3.5%
RO	50.1%	393	5.9%
PE	45.2%	712	2.4%
CE	43.6%	890	3.9%
MA	42.5%	190	1.3%
AM	40.5%	425	2.9%
MS	40.5%	-148	-1.3%
PI	38.8%	-356	-4.1%
RR	34.8%	777	20.1%
TO	33.2%	22	0.3%
PB	30.2%	322	3.3%
DF	29.9%	-686	-2.7%
ES	26.4%	317	2.3%
AP	14.4%	-444	13.5%
PA	9.3%	648	3.0%
RN	3.1%	-85	-0.9%

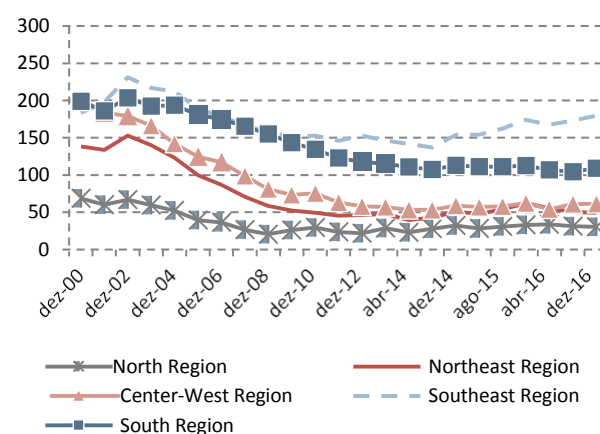
Source: Summary Report on Budget Execution of the states (RREO). Prepared by: IFI - Brazilian Independent Fiscal Institution

The aggregate data of the Net Consolidated Debt (DCL) as a ratio of the RCL, by region, presented in Graph 36 below, show a worrying performance for the Southeastern states. We can see a growing indebtedness since the end of 2014, reflecting rises observed in all states of the region. As for the other regions, despite the relative debt stability, the recent deterioration in primary results of many states anticipates the future deterioration of indebtedness indicators, as we argued previously.

Rio de Janeiro and Minas Gerais, in addition to debt issues, have high primary deficits.

**These two states and Rio Grande do Sul form the group of states with the most complex situations.**

**GRAPH 36: DCL IN % OF RCL – 2016**



Source: Fiscal Management Reports of the states (RGF). Prepared by: IFI - Brazilian Independent Fiscal Institution

IFI simulation exercise covers the 27 states and considers that all expenditure, including capital expenditure, will only increase by the annual Extended National Consumer Price Index (IPCA) variation. This hypothesis considers that the fiscal slack created by the non-payment of debt servicing (a benefit granted to states that adhere to the RRF) shall be used to expand the fiscal effort. The only possibility of not increasing the primary result is if the new fiscal space generated by non payment of interest and installments of the debt with the Union flow through the investment account. In this aspect, the norm is lenient. It would be important to ensure that investments only grew in real terms when the fiscal situation were rebalanced.

We will show below the simulation results by geographical region. We assume the level of 10% of revenues for the primary result as the appropriate level to be sought by the states to recover complete fiscal balance. This was the level observed in the best years of the historical series, in 2007, and would be a sufficient primary effort for states to regain their ability to securely expand investments, without compromising fiscal balance.

**TABLE 9: STATES PRIMARY RESULT - SIMULATION UNDER THE CEILING RULE (GROWTH ACCORDING TO INFLATION)**

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
<b>NORTH REGION</b>											
Billion R\$	2.2	1.5	2.9	4.8	6.4	8.5	10.4	12.8	15.0	17.7	20.7
% of Revenue	3.5%	2.2%	4.1%	6.3%	7.9%	9.9%	11.4%	13.3%	14.8%	16.6%	18.4%
<b>NORTHEAST REGION</b>											
Billion R\$	2.3	0.2	3.7	8.5	12.5	17.8	22.5	28.7	34.2	41.2	48.8
% of Revenue	1.8%	0.2%	2.7%	5.7%	7.8%	10.5%	12.6%	15.1%	17.1%	19.6%	22.0%
<b>CENTER-WEST REGION</b>											
Billion R\$	0.6	-0.3	1.2	3.3	5.0	7.4	9.4	12.2	14.6	17.7	21.0
% of Revenue	0.8%	-0.4%	1.5%	3.8%	5.4%	7.4%	9.0%	11.0%	12.5%	14.4%	16.2%
<b>SOUTHEAST REGION</b>											
Billion R\$	-7.7	-12.7	-5.8	3.5	10.9	21.4	30.4	42.7	53.3	67.3	82.4
% of Revenue	-2.2%	-3.4%	-1.5%	0.8%	2.4%	4.5%	6.0%	8.0%	9.5%	11.4%	13.3%
<b>SOUTH REGION</b>											
Billion R\$	-0.4	-2.1	0.5	4.1	7.1	11.1	14.7	19.4	23.5	28.9	34.6
% of Revenue	-0.3%	-1.6%	0.4%	2.7%	4.3%	6.4%	8.0%	10.0%	11.5%	13.4%	15.3%

*Development and forecasts.*

*By: IFI - Brazilian Independent Fiscal Institution*

It is interesting to note that the Southeast Region would only reach the level of 10% of RCL between 2024 and 2025. The best region in this respect is the Northeast, which between 2020 and 2021 could reach the level considered adequate to restore minimum solvency conditions. When we open the data by state, some cases prove more alarming. Rio de Janeiro, for instance, would only be able to zero its primary deficit between 2024 and 2025. The level of reference primary result, 10% of revenue, would only be achieved in 2029.

Of course, measures that seek to accelerate the fiscal adjustment in the states through, for example, the sale of assets and the viability of other non-recurring revenues, should anticipate the turning point and fiscal rebalancing. On the other hand, special fiscal rules for the expenditure ceiling, such as the application of a revenue percentage, would be less austere than the restriction according to inflation, so that the recovery of public accounts would be more time consuming. The ideal solution, therefore, is to preserve the original wording of the bill.

The provision established on Supplementary Draft Bill No 343, 2017, demands a commitment to expenditure growth control based on inflation only in the period in which the debt non-payment agreement is in force. That is, for a state that remains for the initial period (three

years) and renews the agreement for a further three years, the rule would be in force for a total period of six years, that is, until 2023. Assuming the application of this rule to all regions, according to our simulations, the states (on average) will have reached an adequate level of primary effort after this period, except for the Southeast Region due to the situation of Minas Gerais and Rio de Janeiro.

The results reinforce the idea that the bill needs to be preserved throughout its legislative path in the National Congress, without changes that modify the essence of each one of the seven points in the table above. The fiscal challenge of the states is significant and will require a very deep adjustment. The PLP is an important start to help balance the accounts of subnational governments. However, it does not exclude the need for a broader discussion about the bases of fiscal federalism in Brazil.

TABLE 10: ANNUAL EVALUATION - REALIZED VALUES, FORECASTS AND VARIATION RATES (IN MILLION R\$)

\*IFI - Brazilian Independent Fiscal Institution

Breakdown	2016		2017		IFI*		Actual variations			
	Amounts	% GDP	LOA		Amounts	% GDP	IFI-LOA		2017/2016 (%)	
			Amounts	% GDP			Amounts	Dif. %	LOA	IFI*
<b>I. TOTAL REVENUE</b>	<b>1.314.952,9</b>	<b>21,3</b>	<b>1.422.815,6</b>	<b>22,9</b>	<b>1.376.808,4</b>	<b>22,2</b>	<b>-46.007,2</b>	<b>-3,2</b>	<b>3,5</b>	<b>0,2</b>
<i>I.1 - Revenue Administered by RFB</i>	819.751,9	13,3	881.587,5	14,2	842.571,2	13,6	-39.016,3	-4,4	2,9	-1,6
<i>I.2 Net Revenues for the RGPS (General Social Welfare Policy)</i>	358.137,3	5,8	381.109,5	6,1	379.412,1	6,1	-1.697,4	-0,4	1,8	1,4
<i>I.3 - Revenues not administered by RFB</i>	137.226,9	2,2	160.118,5	2,6	154.825,1	2,5	-5.293,4	-3,3	11,7	8,0
I.3.1 Concessions and grants	21.907,8	0,4	23.963,2	0,4	24.000,0	0,4	36,8	0,2	4,7	4,8
I.3.2 Dividends and profit participations	2.847,8	0,0	7.708,0	0,1	4.942,0	0,1	-2.766,0	-35,9	159,0	66,1
I.3.3 Asset Transactions	771,0	0,0	5.880,7	0,1	3.500,0	0,1	-2.380,7	-40,5	629,9	334,4
I.3.5 Other Revenues	111.700,3	1,8	122.566,7	2,0	122.383,1	2,0	-183,6	-0,1	5,0	4,8
<b>II. TRANSFERS THROUGH REVENUE ALLOCATION</b>	<b>226.835,3</b>	<b>3,7</b>	<b>235.357,6</b>	<b>3,8</b>	<b>224.702,4</b>	<b>3,6</b>	<b>-10.655,3</b>	<b>-4,5</b>	<b>-0,7</b>	<b>-5,2</b>
<b>III. NET REVENUE (I-II)</b>	<b>1.088.117,6</b>	<b>17,6</b>	<b>1.187.457,9</b>	<b>19,1</b>	<b>1.152.106,0</b>	<b>18,6</b>	<b>-35.351,9</b>	<b>-3,0</b>	<b>4,4</b>	<b>1,3</b>
<b>IV. TOTAL EXPENDITURE</b>	<b>1.242.372,9</b>	<b>20,1</b>	<b>1.326.450,1</b>	<b>21,4</b>	<b>1.330.040,5</b>	<b>21,4</b>	<b>3.590,4</b>	<b>0,3</b>	<b>2,2</b>	<b>2,4</b>
<i>IV.1 Mandatory Expenditure</i>	958.672,5	15,5	1.036.279,4	16,7	1.039.069,8	16,7	2.790,4	0,3	3,4	3,7
IV.1.1 Social Welfare Benefits	507.871,3	8,2	562.369,4	9,1	566.527,2	9,1	4.157,8	0,7	6,0	6,7
IV.1.2 Personnel and Employer Contributions	257.871,8	4,2	284.058,2	4,6	284.000,0	4,6	-58,2	0,0	5,4	5,4
IV.1.3 Bonus and Unemployment Compensation	56.013,8	0,9	57.440,7	0,9	55.868,4	0,9	-1.572,3	-2,7	-1,9	-4,6
IV.1.4 Continued Payment Benefits of the LOAS/RMV	48.990,1	0,8	50.948,8	0,8	53.479,5	0,9	2.530,8	5,0	-0,5	4,5
IV.1.5 FGTS complement (LC No. 110/01)	5.624,3	0,1	5.596,1	0,1	5.933,4	0,1	337,4	6,0	-4,8	1,0
IV.1.6 Compensation to the General Social Welfare Policy for Payroll Exemptions	17.593,3	0,3	16.002,9	0,3	16.002,9	0,3	0,0	0,0	-13,0	-13,0
IV.1.7 FUNDEB (complementation by the Union)	13.674,8	0,2	13.969,8	0,2	13.236,2	0,2	-733,6	-5,3	-2,2	-7,4
IV.1.8 Federal District Constitutional Fund	1.174,2	0,0	2.313,7	0,0	2.313,7	0,0	0,0	-	88,6	88,6
IV.1.9 Kandir Act (LC No. 87/96 and 102/00)	5.857,8	0,1	3.860,4	0,1	3.900,0	0,1	39,6	1,0	-36,9	-36,3
IV.1.10 Court Decisions and Precatory Letters - OCC	10.163,4	0,2	11.315,3	0,2	11.315,3	0,2	0,0	0,0	6,5	6,5
IV.1.11 Subsidies, Grants and Proagro (Farm Activity Guarantee Program)	23.327,6	0,4	23.419,1	0,4	23.179,0	0,4	-240,1	-1,0	-3,9	-4,9
IV.3.12 Other Mandatory Expenses	10.510,1	0,2	4.985,0	0,1	3.314,1	0,1	-1.670,9	-33,5	-54,6	-69,8
<i>IV.2 Discretionary Spending - All Branches</i>	283.700,4	4,6	290.170,7	4,7	290.970,7	4,7	800,0	0,3	-2,1	-1,9
IV.2.1 Bolsa Família (Family Allowance)	28.506,2	0,5	29.825,1	0,5	29.700,0	0,5	-125,1	-0,4	0,1	-0,3
IV.2.2 Growth Acceleration Program (Ex: Minha Casa Minha Vida Program)	34.077,5	0,6	30.286,9	0,5	29.300,0	0,5	-986,9	-3,3	-15,0	-17,7
IV.2.3 Minha Casa Minha Vida Program	7.965,3	0,1	6.908,8	0,1	6.500,0	0,1	-408,8	-5,9	-17,0	-21,9
IV.2.4 LEJU/MPU	13.004,2	0,2	13.954,2	0,2	14.754,2	0,2	800,0	5,7	2,7	8,6
IV.2.4 Other Discretionary Spendings	228.653,5	3,7	209.195,6	3,4	210.716,4	3,4	1.520,8	0,7	-12,4	-11,8
<b>V. BRAZIL'S SOVEREIGN WEALTH FUND</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>0,0</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>VI. PRIMARY RESULT CENTRAL GOVERNMENT</b>	<b>-154.255,4</b>	<b>-2,5</b>	<b>-138.992,2</b>	<b>-2,2</b>	<b>-177.934,5</b>	<b>-2,9</b>	<b>-38.942,3</b>	<b>28,0</b>	<b>-13,8</b>	<b>10,4</b>

**TABLE 11: MONTHLY EVALUATION - REALIZED VALUES, VARIATION RATES AND FORECAST FOR THE FOLLOWING MONTH (IN MILLION R\$)**

\*IFI - Brazilian Independent Fiscal Institution

Breakdown	Dec/16	Jan/17	Actual variation in jan-17		IFI*
			In one year (t/t-12)	Accum. in the year Accum 12m/ Accum 12m t-12)	Feb/17
I. TOTAL REVENUE	128,655	137,363	-7.7%	-4.1%	97,415
I.1 - Revenue Administered by RFB	70,554	96,736	1.1%	-1.0%	60,270
I.2 Net Revenues for the RGPS (General Social Welfare Policy)	46,810	26,898	-5.8%	-5.9%	28,852
I.3 - Revenues not administered by RFB	11,445	13,730	-44.0%	-16.8%	8,293
I.3.1 Concessions and grants	271	352	-97.1%	-39.0%	300
I.3.2 Dividends and profit participations	1,082	60	3727.7%	-77.6%	0
I.3.3 Asset Transactions	105	99	-	-	0
I.3.5 Other Revenues	16,656	23,418	10.0%	-7.9%	7,993
II TRANSFERS THROUGH REVENUE ALLOCATION	34,738	18,583	2.7%	4.2%	21,863
III. NET REVENUE (I-II)	93,918	118,780	-9.1%	-5.7%	75,552
IV TOTAL EXPENDITURE	154,042	99,812	-13.2%	-2.7%	86,274
IV.1 Mandatory Expenditure	106,065	87,696	-3.2%	-3.6%	74,893
IV.1.1 Social Welfare Benefits	53,681	40,270	7.5%	7.6%	42,593
IV.1.2 Personnel and Employer Contributions	28,488	24,214	5.8%	0.3%	21,123
IV.1.3 Bonus and Unemployment Compensation	3,521	5,693	-19.2%	3.3%	3,129
IV.1.4 Continued Payment Benefits of the LOAS/RMV	4,030	4,287	4.8%	6.1%	4,087
IV.1.5 FGTS complement (LC No. 110/01)	792	0	-	-71.3%	472
IV.1.6 Compensation to the General Social Welfare Policy for Payroll Exemptions	1,113	1,069	-49.5%	-40.0%	1,069
IV.1.7 FUNDEB (complementation by the Union)	2,057	2,615	-0.4%	-1.1%	800
IV.1.8 Federal District Constitutional Fund	126	95	9.2%	-83.0%	120
IV.1.9 Kandir Act (LC No. 87/96 and 102/00)	2,113	163	-9.4%	33.8%	163
IV.1.10 Court Decisions and Precatory Letters - OCC	8,037	102	-36.0%	-2.8%	61
IV.1.11 Subsidies, Grants and Proagro (Farm Activity Guarantee Program)	344	8,981	-26.4%	-69.8%	300
IV.1.12 Other Mandatory Expenses	1,763	208	-83.2%	-13.9%	977
IV.2 Discretionary Spending - All Branches	47,976	12,116	-50.4%	0.8%	11,381
IV.2.1 Bolsa Família (Family Allowance)	2,458	0	-	-12.0%	2,395
IV.2.2 Growth Acceleration Program (Ex: Minha Casa Minha Vida Program)	8,015	708	-78.7%	9.2%	1,215
IV.2.3 (Minha Casa Minha Vida Program)	2,110	78	-87.3%	-64.2%	271
IV.2.4 LEJU/MPU	1,913	532	-31.8%	-0.2%	600
IV.2.4 Other Discretionary Spendings	35,938	10,798	-50.0%	6.2%	6,900
V. BRAZIL'S SOVEREIGN WEALTH FUND	0	0	-	-	0
VI. PRIMARY RESULT CENTRAL GOVERNMENT	-60,124	18,968	21.4%	27.6%	-10,722



## IFI Forecasts

	2014	2015	2016	Forecasts				
				2017	2018	2019	2020	2021
GDP - real growth (% per year)	0.50	-3.77	-3.49	0.46	1.93	2.38	2.21	2.21
IPCA - acum (% in the year)	6.41	10.67	6.29	4.50	4.50	4.50	4.00	4.00
Selic rate - end-of-period (% per year)	11.75	14.25	13.75	9.00	8.50	8.50	8.00	7.50
Real interest rates (% per year)	6.67	7.18	4.70	4.31	3.83	3.83	3.85	3.37
Public Sector Consolidated Primary Result (% of GDP)	-0.56	-1.85	-2.47	-2.81	-2.41	-1.94	-1.60	-1.18
d/q Central Government	-0.35	-1.94	-2.53	-2.74	-2.35	-1.89	-1.55	-1.14
Net Nominal Interest Rates (% of GDP)	-5.39	-8.36	-6.46	-6.04	-5.35	-5.33	-5.25	-5.15
Nominal Result (% of GDP)	-5.95	-10.22	-8.93	-8.84	-7.76	-7.27	-6.85	-6.33
Government General Gross Debt (% of GDP)	56.28	65.45	69.49	76.94	80.16	82.39	82.84	84.33





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Translated by Luísa Pacheco Ramos and revised by Miguel Araujo de Matos  
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