

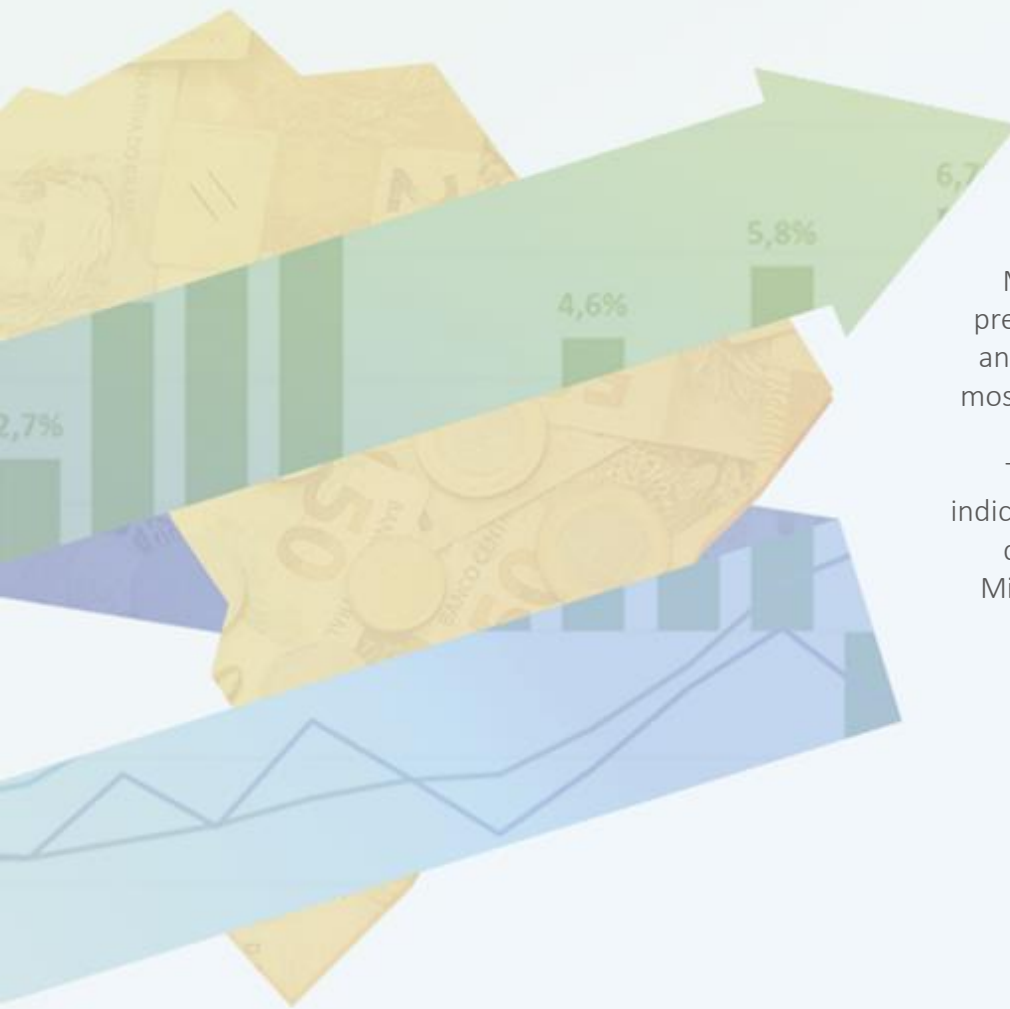


# MACROECONOMIC OUTLOOK

January 2019

MINISTRY OF  
ECONOMY

FEDERAL  
GOVERNMENT



Macroeconomic Outlook is a report prepared by the Secretariat for Planning and Economic Issues (SEPLAN) with the most relevant economic data about Brazil.

This report does not constitute any indication of prospective policy decisions or delimits the operational area of the Ministry of Planning, Development and Management.

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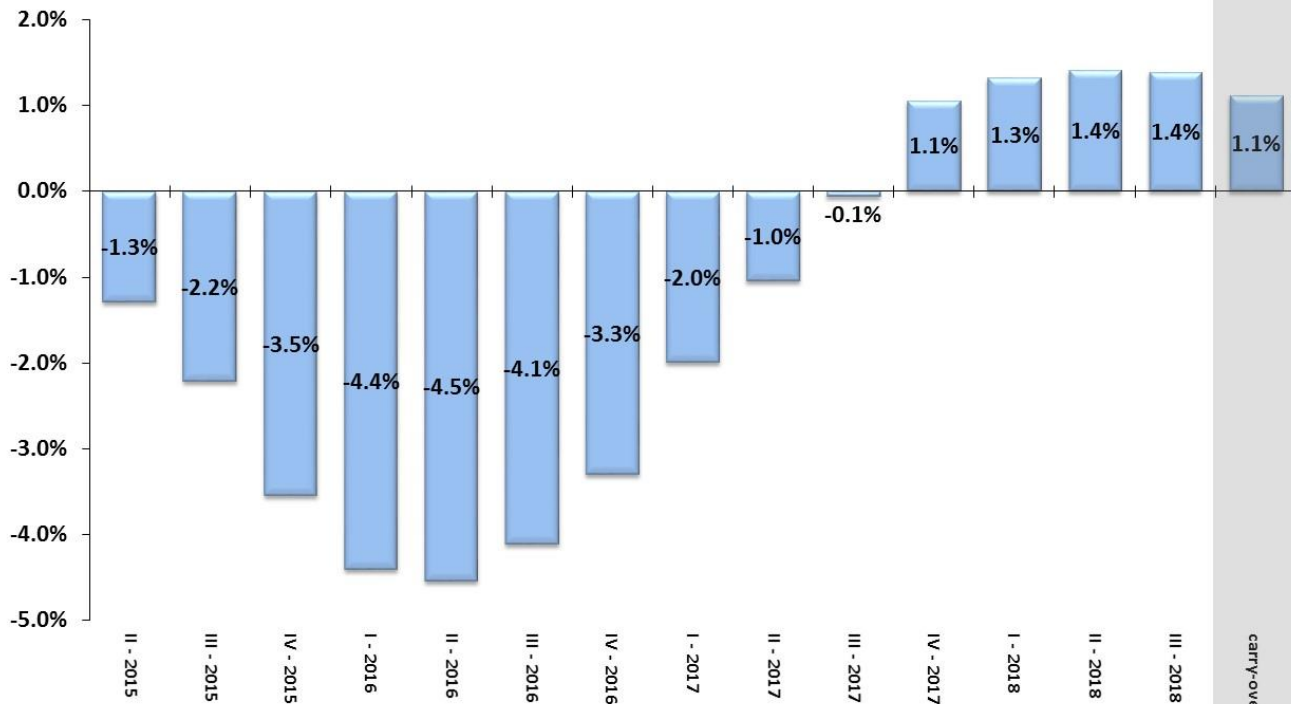
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# Quarterly GDP

Last 4Q / Previous 4Q (%)

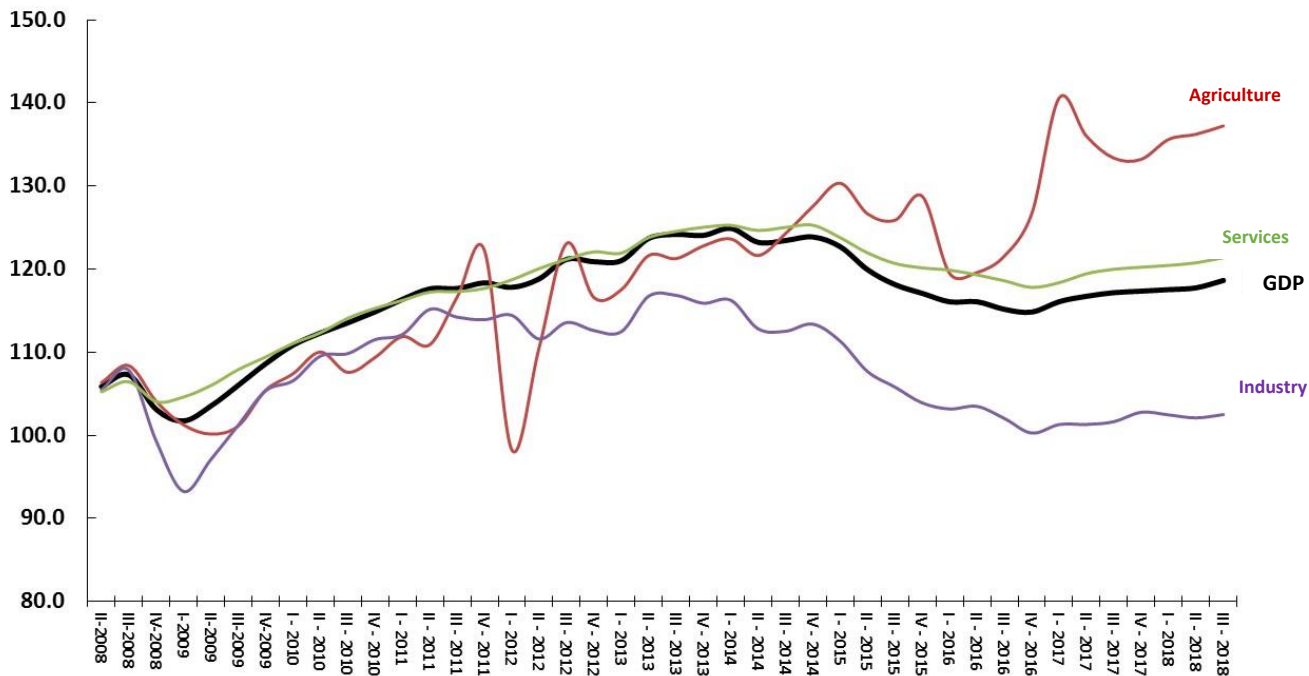


Source: IBGE/MP, Quarterly National Accounts Series.

Note: Carry-over 2018 based on 2018 3<sup>rd</sup> quarter seasonally adjusted level compared to 2017 average.

# Quarterly GDP by Activity Sector

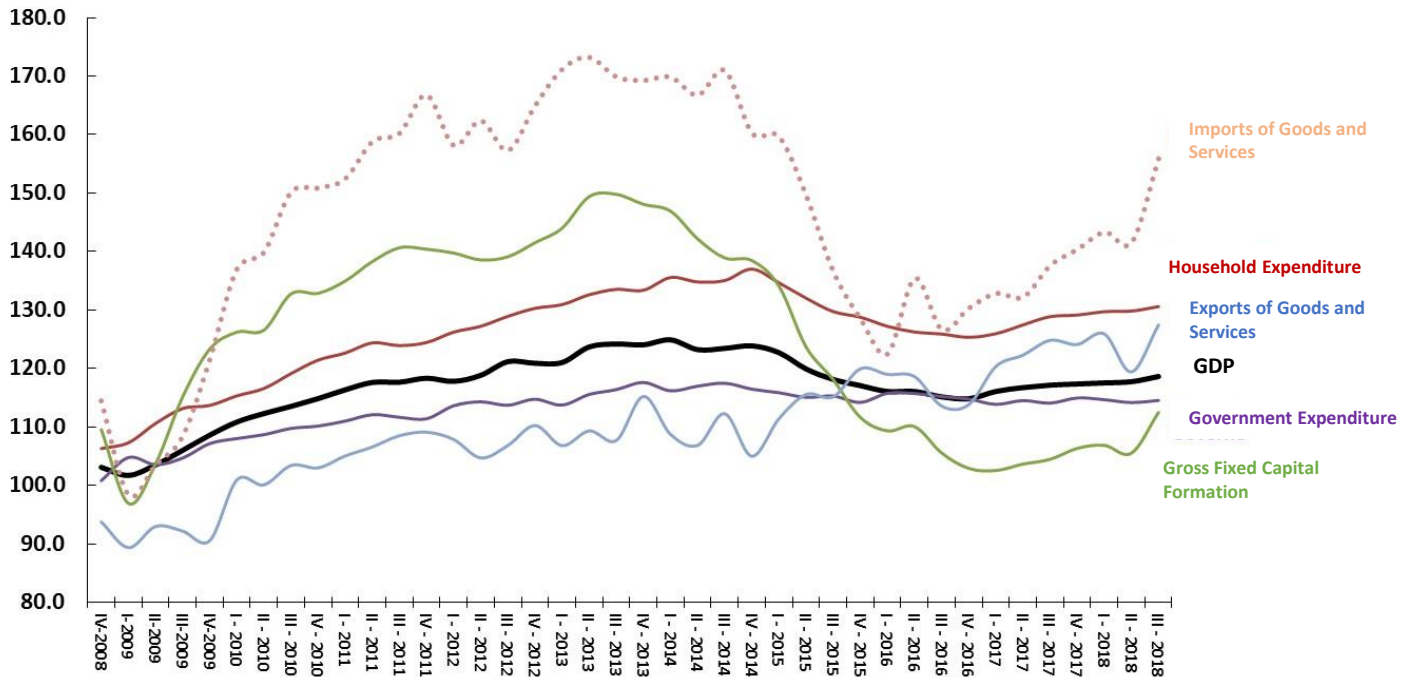
GDP and Economic Sectors Quarterly Volume Indicator  
Chained Series of the Seasonally Adjusted Index: 2007=100



Source: IBGE/MP, Quarterly National Accounts Series.

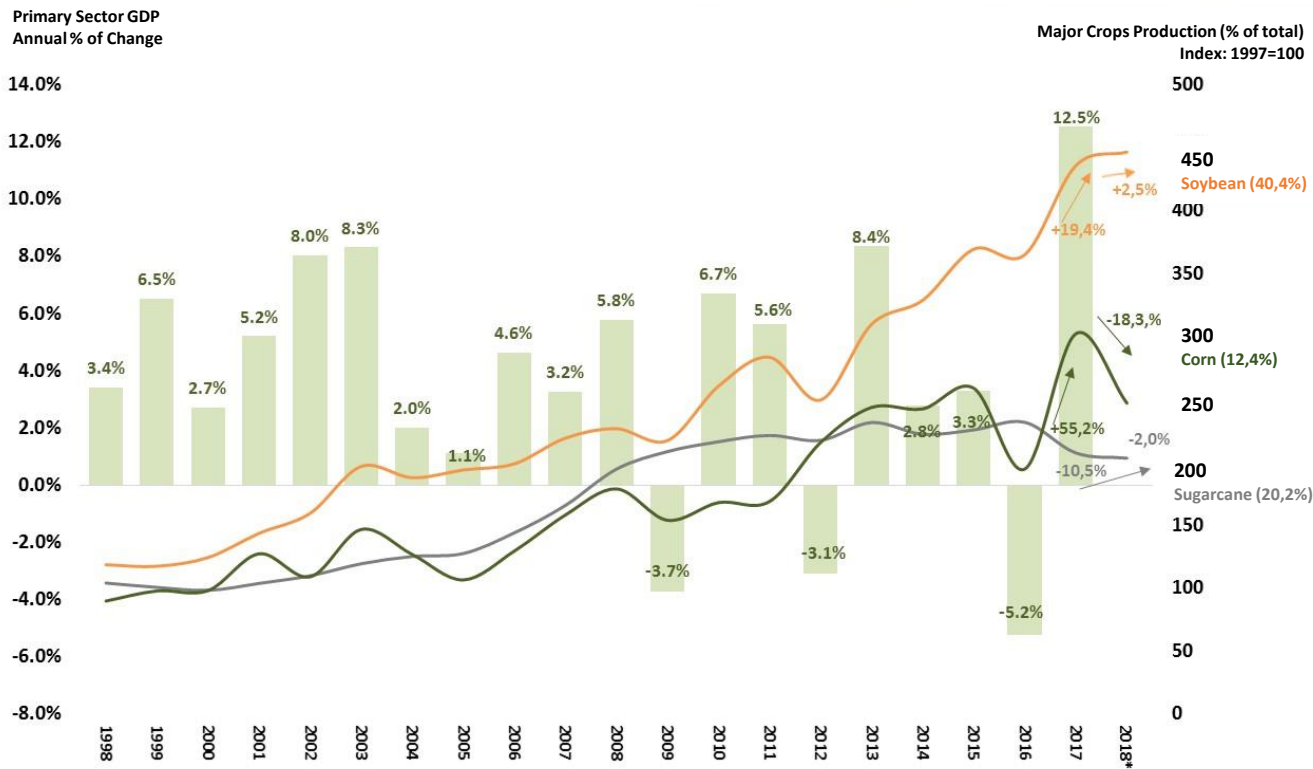
# Quarterly GDP by Expenditure

GDP and Demand Categories Quarterly Volume Indicator  
Chained Series of the Seasonally Adjusted Index: 2007=100



Source: IBGE/MP, Quarterly National Accounts Series.

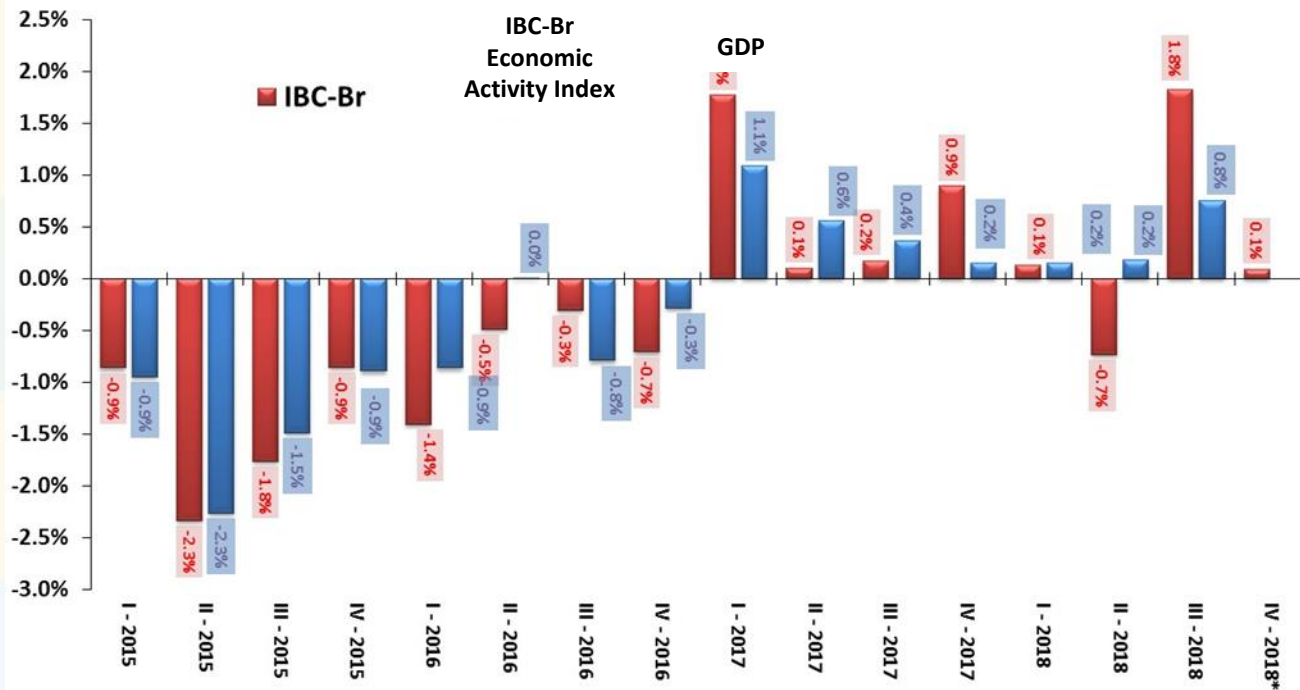
# Primary Sector Performance by Major Crops



Source: IBGE/MP, Systematic Survey of Agricultural Production (LSPA) – November 2018.

# Quarterly GDP Growth and IBC-Br Economic Activity Index

Quarterly % Change - Seasonally Adjusted Series

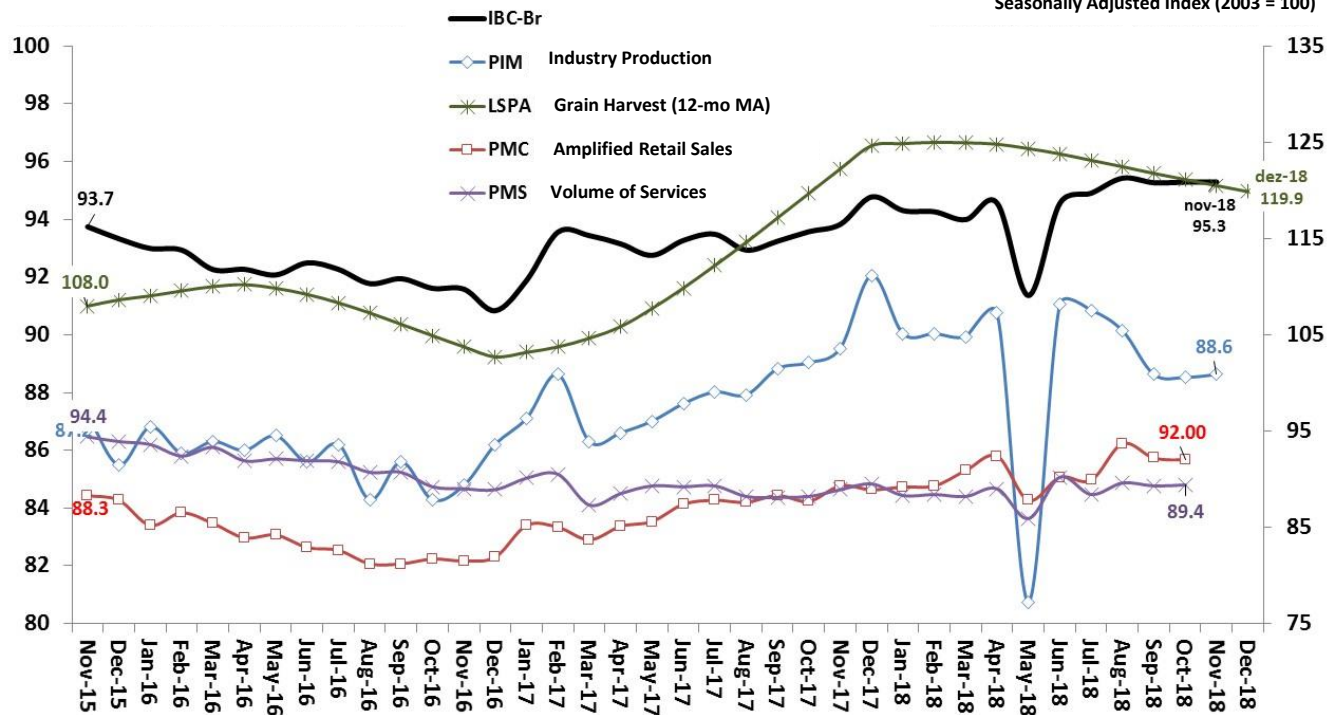


Sources: IBGE/MP and Central Bank of Brazil. \* October/18.

# Major Monthly Economic Activity Indicators

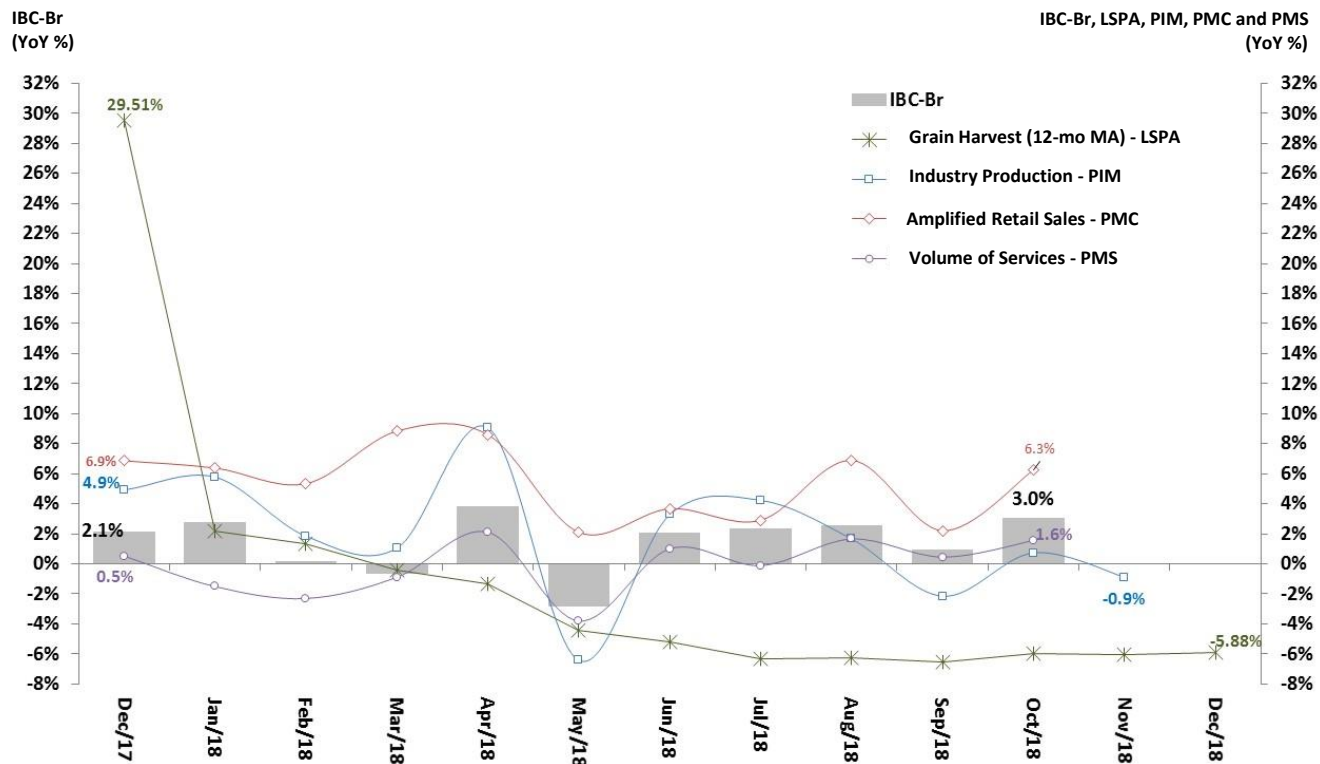
IBC-Br, Grain Harvest (12-mo MA) and Industry Production  
Seasonally Adjusted Index (2003 = 100)

Amplified Retail Sales and Volume of Services  
Seasonally Adjusted Index (2003 = 100)



Sources: Central Bank of Brazil and IBGE/MP: Systematic Survey of Agricultural Production (LSPA), Monthly Survey of Industry (PIM), Monthly Survey of Trade (PMC), and Monthly Survey of Services (PMS).

# Major Monthly Economic Activity Indicators

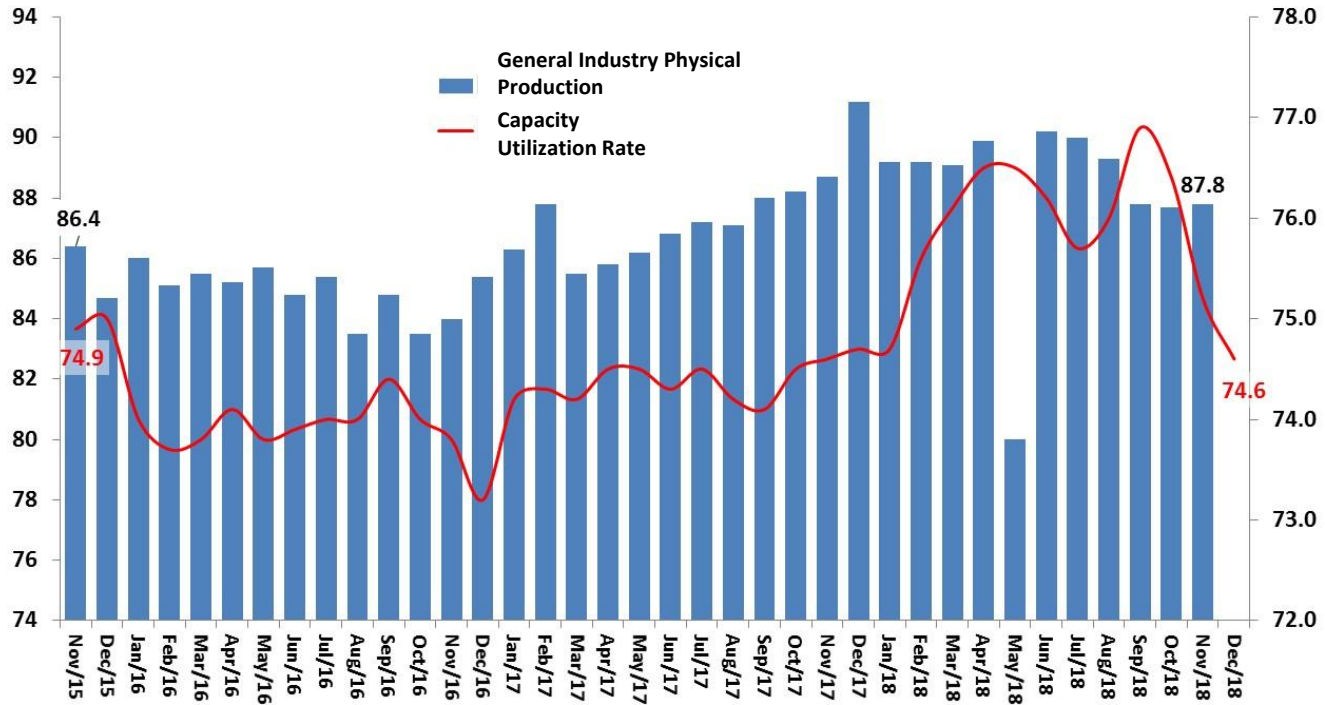


Sources: Central Bank of Brazil and IBGE/MP: Systematic Survey of Agricultural Production (LSPA), Monthly Survey of Industry (PIM), Monthly Survey of Trade (PMC), and Monthly Survey of Services (PMS).

# Industrial Production and Capacity Utilization

Industry Production  
Seasonally Adjusted Index (2003 = 100)

Capacity Utilization  
Seasonally Adjusted - % of Total Capacity

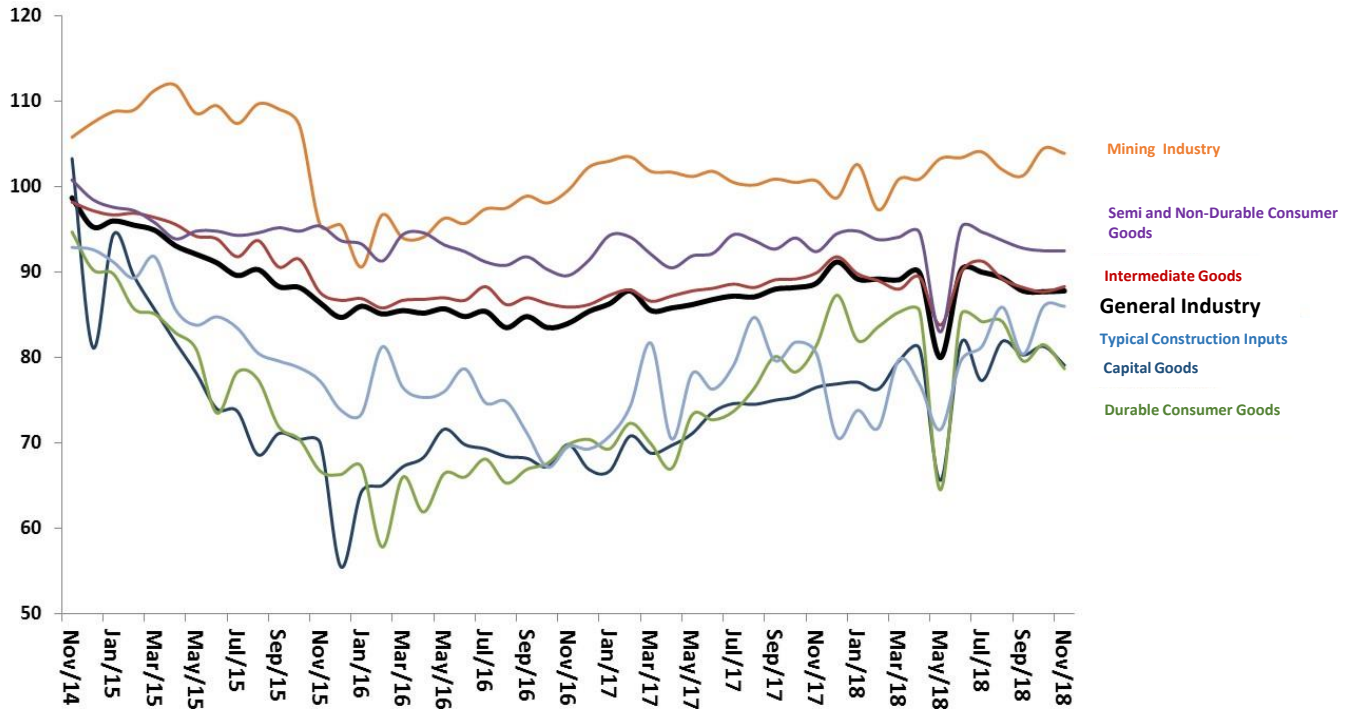


Sources: Central Bank of Brazil and IBGE/MP: Systematic Survey of Agricultural Production (LSPA), Monthly Survey of Industry (PIM), Monthly Survey of Trade (PMC), and Monthly Survey of Services (PMS).



# Total Industrial Production and Economic Categories

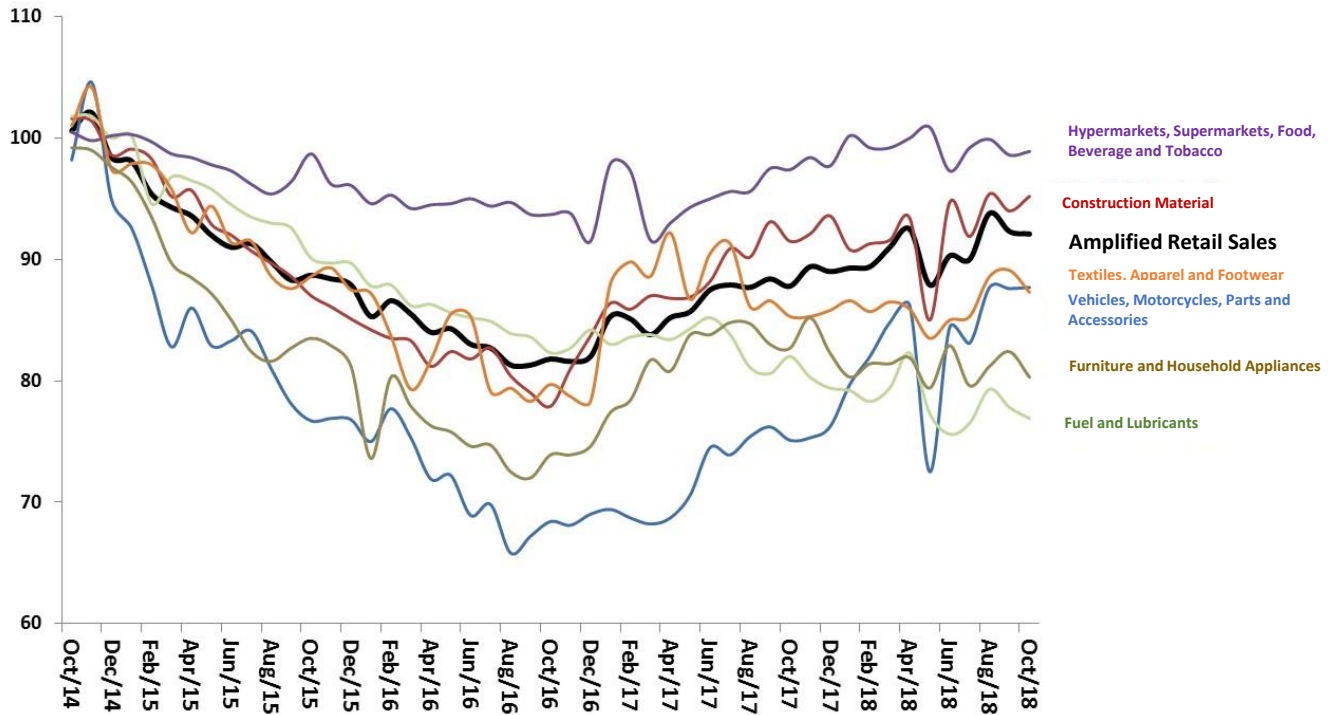
Industry Physical Production by Economic Category  
Seasonally Adjusted Index (2002 = 100)



Source: IBGE/MP, Monthly Survey of Industry (PIM).

# Total Retail Sales and Subsectors

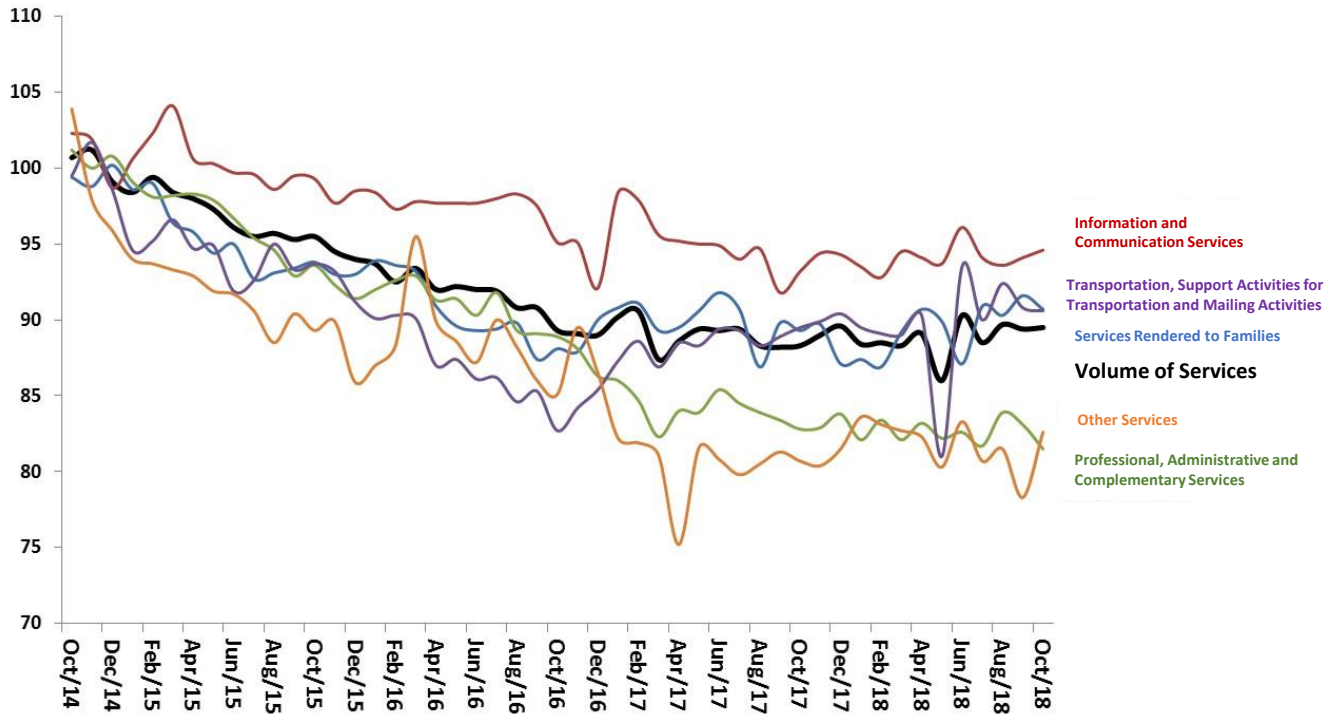
Retail Sales by Subsector  
Seasonally Adjusted Index (2002 = 100)



Source: IBGE/MP, Monthly Survey of Trade (PMC).

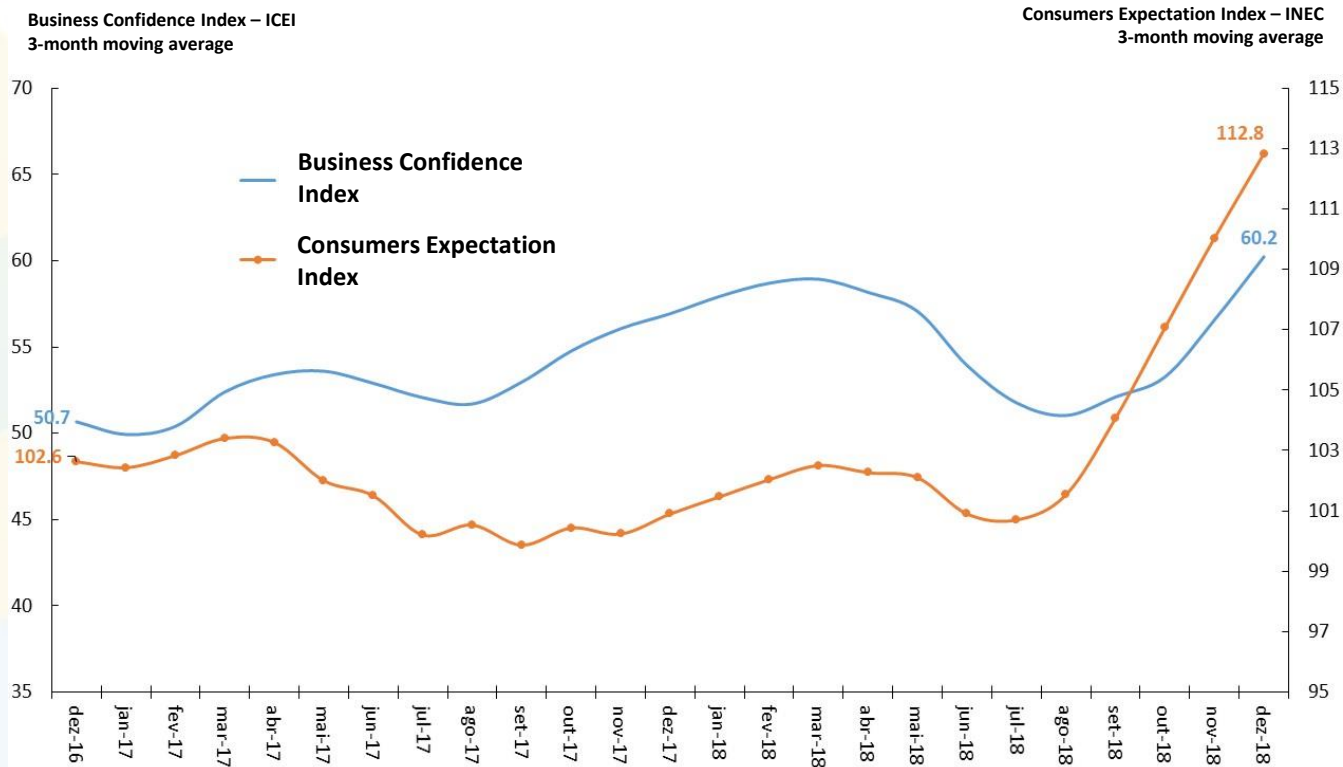
# Total Services and Subsectors

Volume of Services by Subsector  
Seasonally Adjusted Index (2002 = 100)



Source: IBGE, Monthly Survey of Services (PMS).

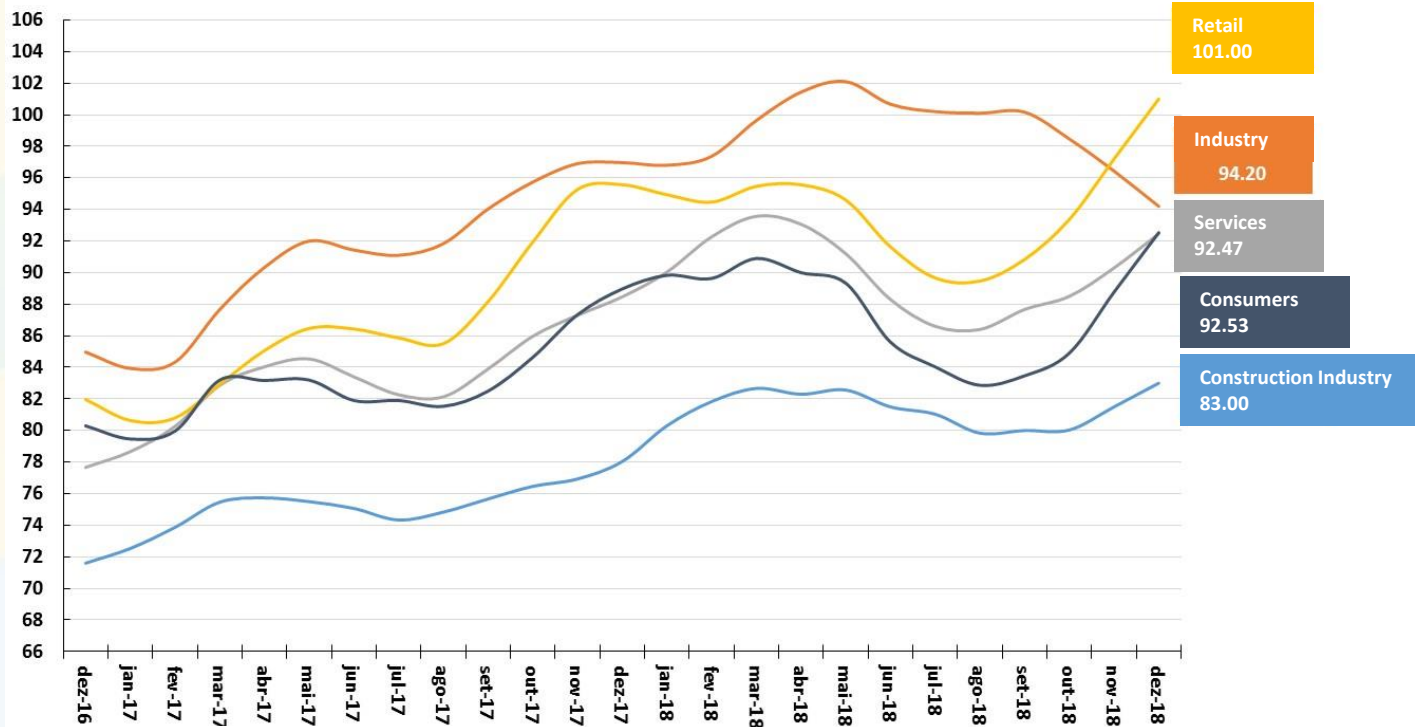
# CNI: Business Confidence and Consumers Expectation Indexes



Source: CNI.

# FGV: Economic Confidence Indicators

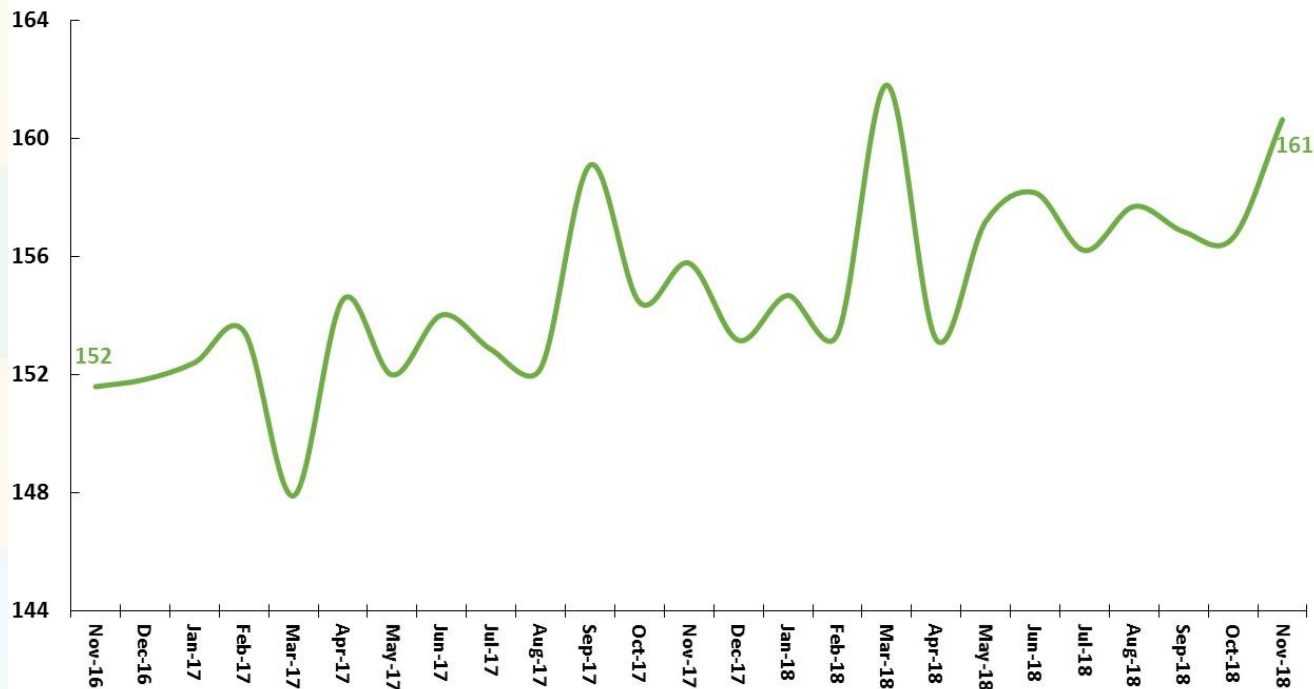
Economic Confidence Indicators  
3-month moving average



Source: IBRE/FGV.

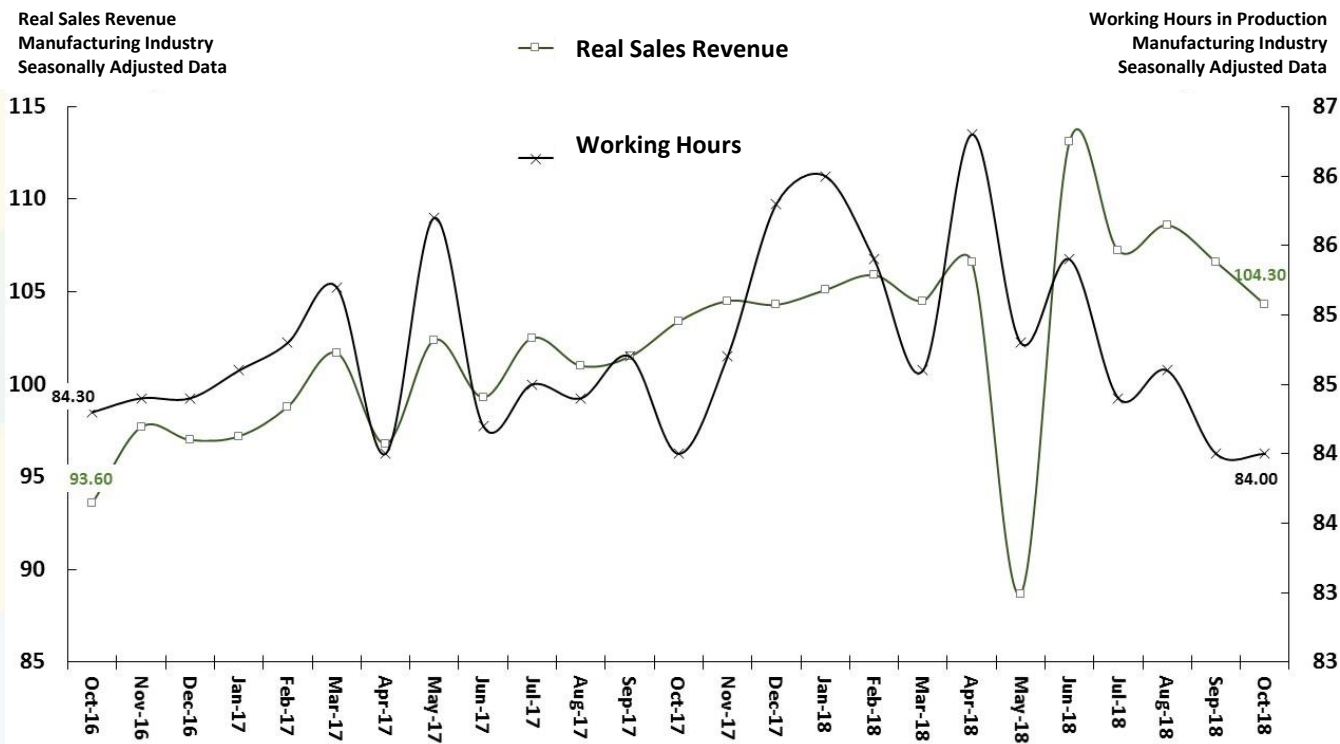
# ABRAS: Supermarket Sector Total Retail Sales

Total Retail Sales  
Seasonally Adjusted Data\*



Source: ABRAS. \* Seasonally adjusted by SEPLAN/MP.

# CNI: Industry Real Sales Revenues and Working Hours

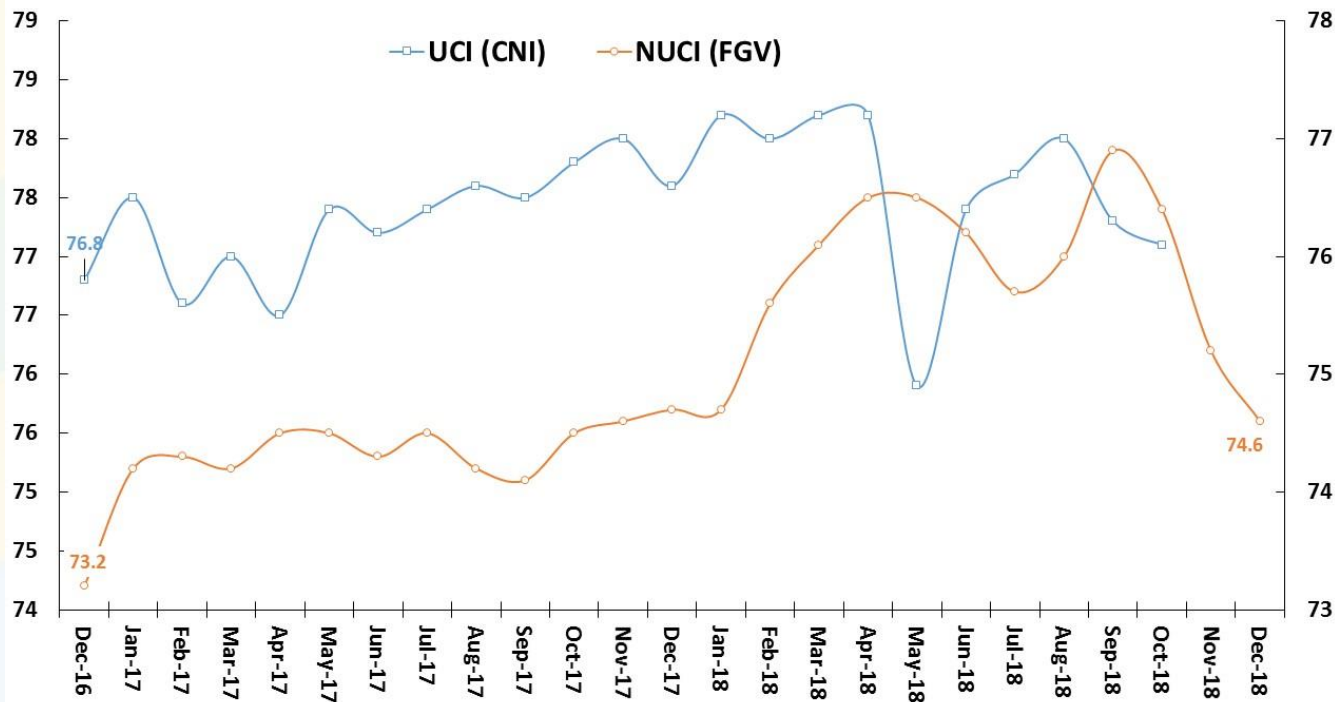


Source: CNI.

# Capacity Utilization Rate

Capacity Utilization Rate - UCI (CNI)  
Seasonally Adjusted Data

Industry Capacity Utilization Rate – NUCI (FGV)  
Seasonally Adjusted Data



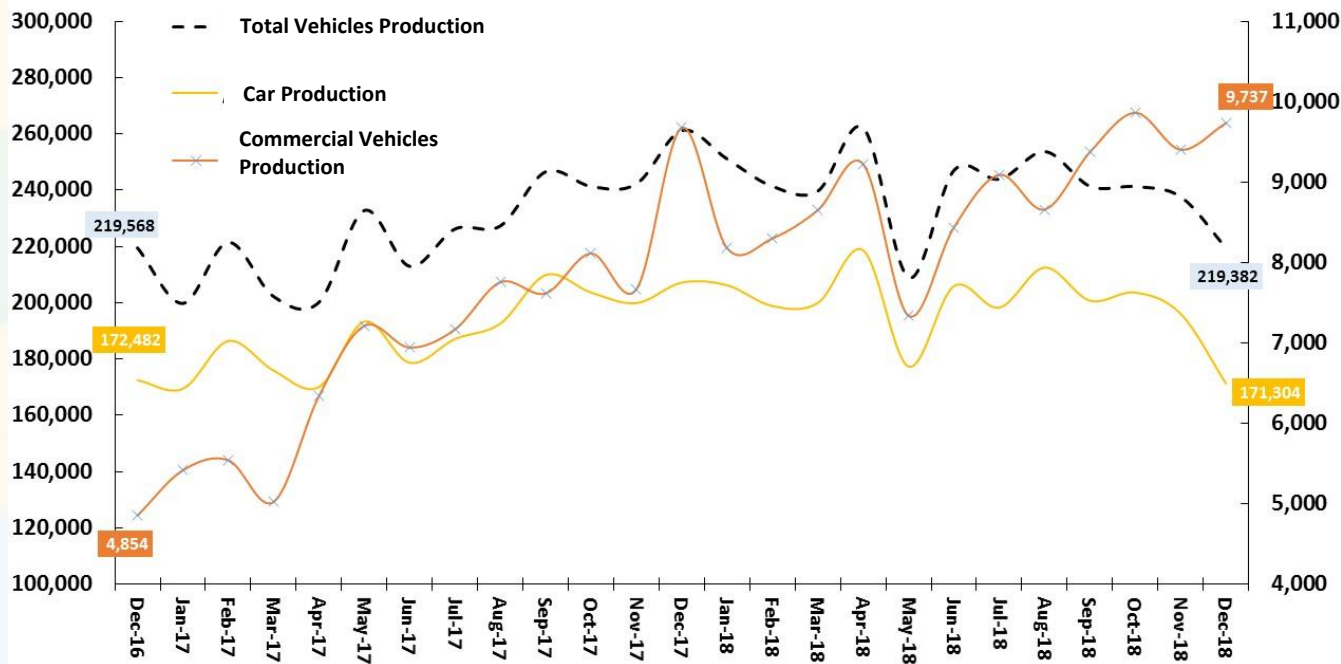
Source: CNI and FGV.



# Anfavea: Automotive Sector Production

Total Vehicles and Car Production  
Daily Average of Vehicles Monthly Manufactured  
Seasonally Adjusted Data\*

Commercial Vehicles Production  
Daily Average of Vehicles Monthly Manufactured  
Seasonally Adjusted Data\*



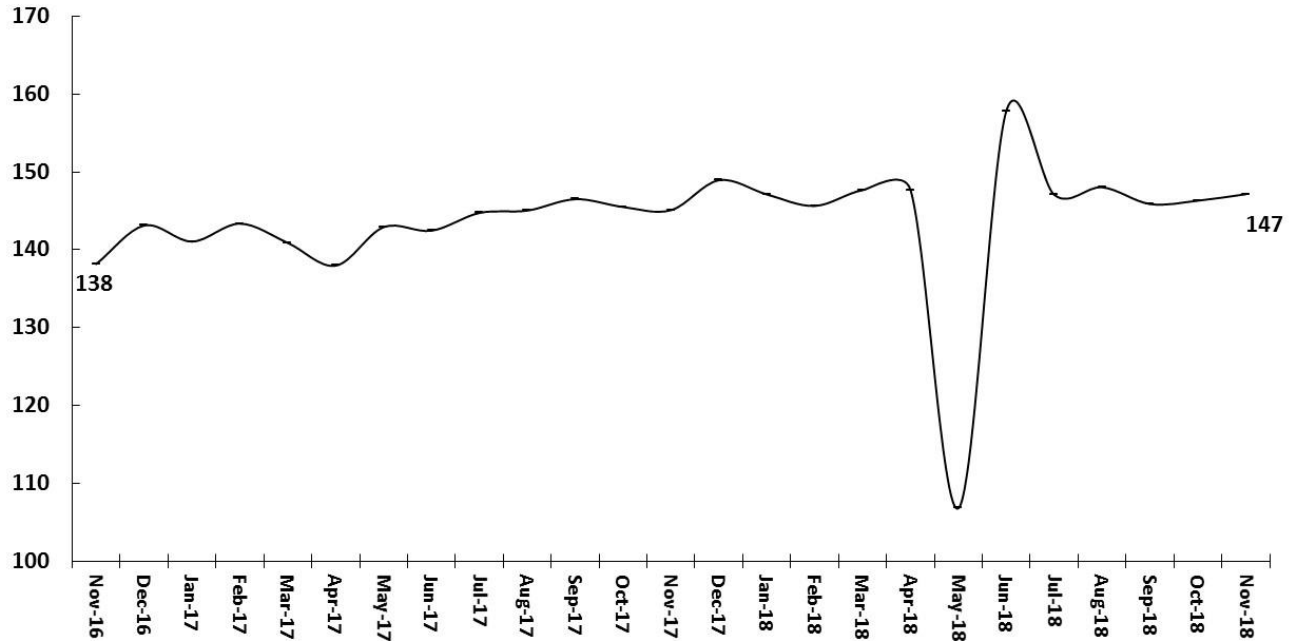
Source: ANFAVEA. \* Seasonally adjusted by SEPLAN/MP.

# ABCR: Heavy Vehicles Road Traffic Index

Heavy Vehicles Road Traffic Index

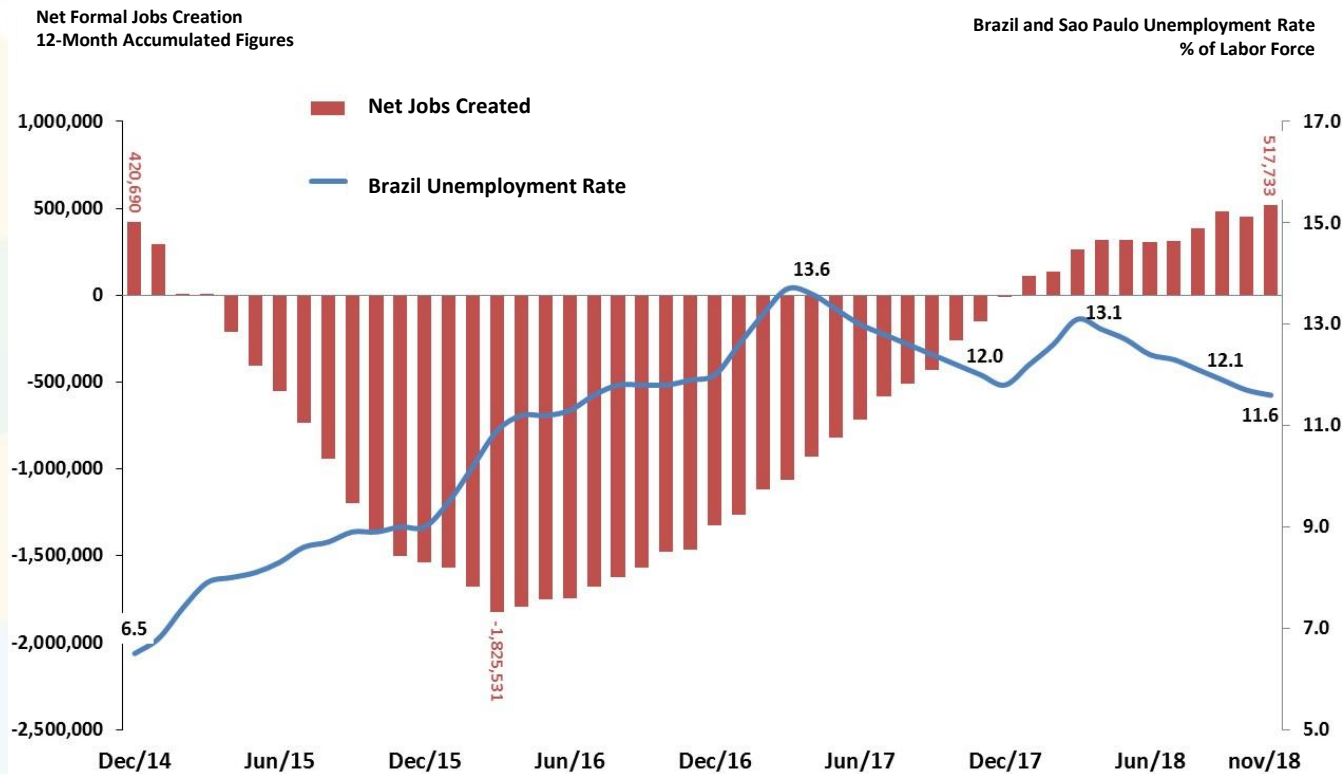
Index: 1999=100

Seasonally Adjusted Data



Source: ABCR.

# Unemployment Rate and Net Formal Job Creation

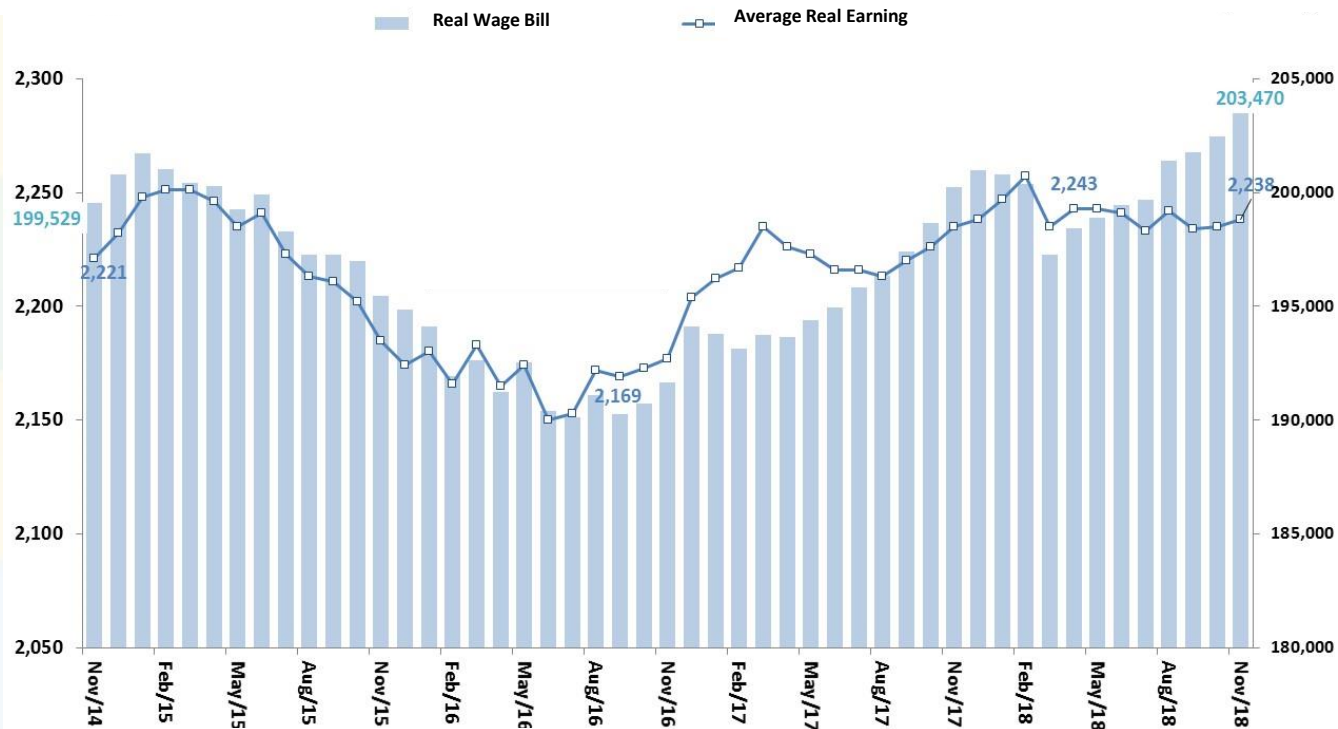


Sources: IBGE/MP - PNADC, SEADE-PED and MTE-CAGED (adjusted data).

# Real Wage Bill and Average Real Earning

Average Real Earning  
R\$ of last month

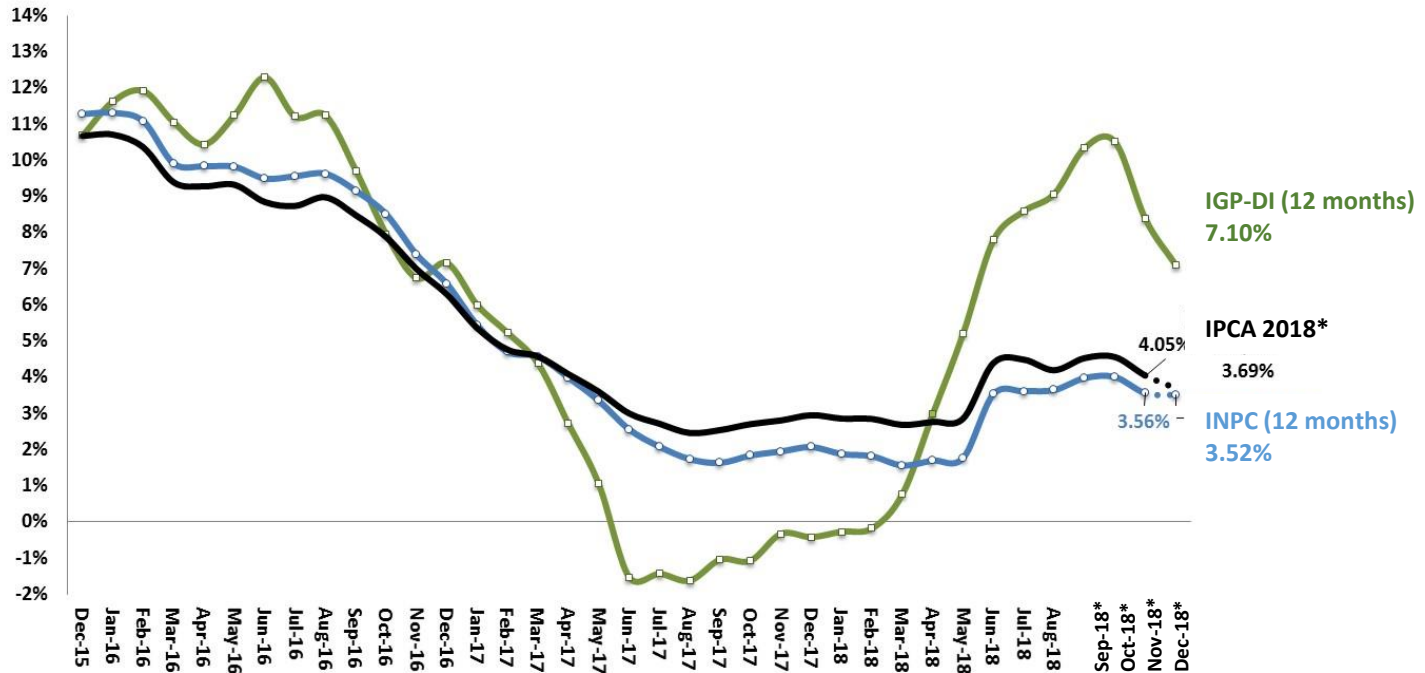
Real Wage Bill  
R\$ millions of last month



Source: IBGE/MP - PNADC.

# Major Inflation Indexes

Major Inflation Indexes  
12-month accumulated rate (%)

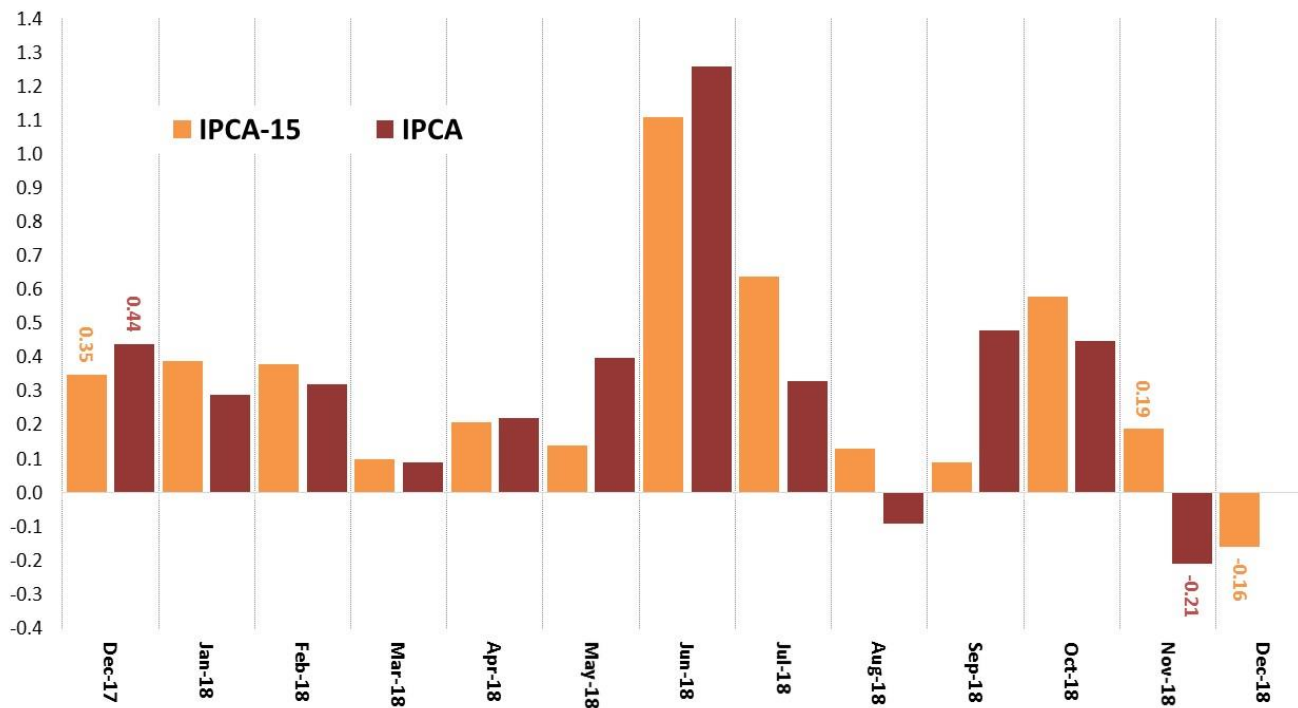


Sources: IBGE/MP and Central Bank of Brazil. \*2018 = BCB-Focus Survey of 01/04/2018, median of market expectations (monthly).

# IBGE: Monthly Consumer Price Indexes

IPCA-15 and IPCA

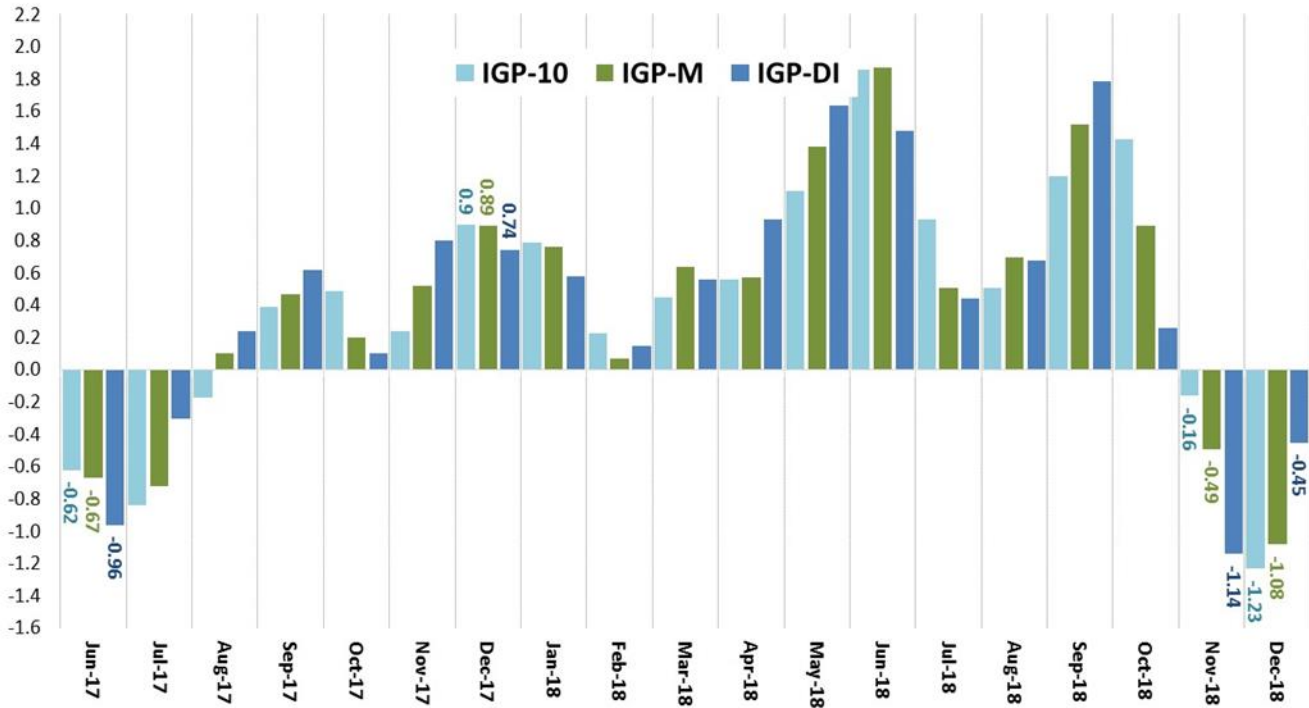
By release order



Source: IBGE.

# FGV: Monthly General Price Indexes

IGP-10, IGP-M and IGP-DI  
By release order

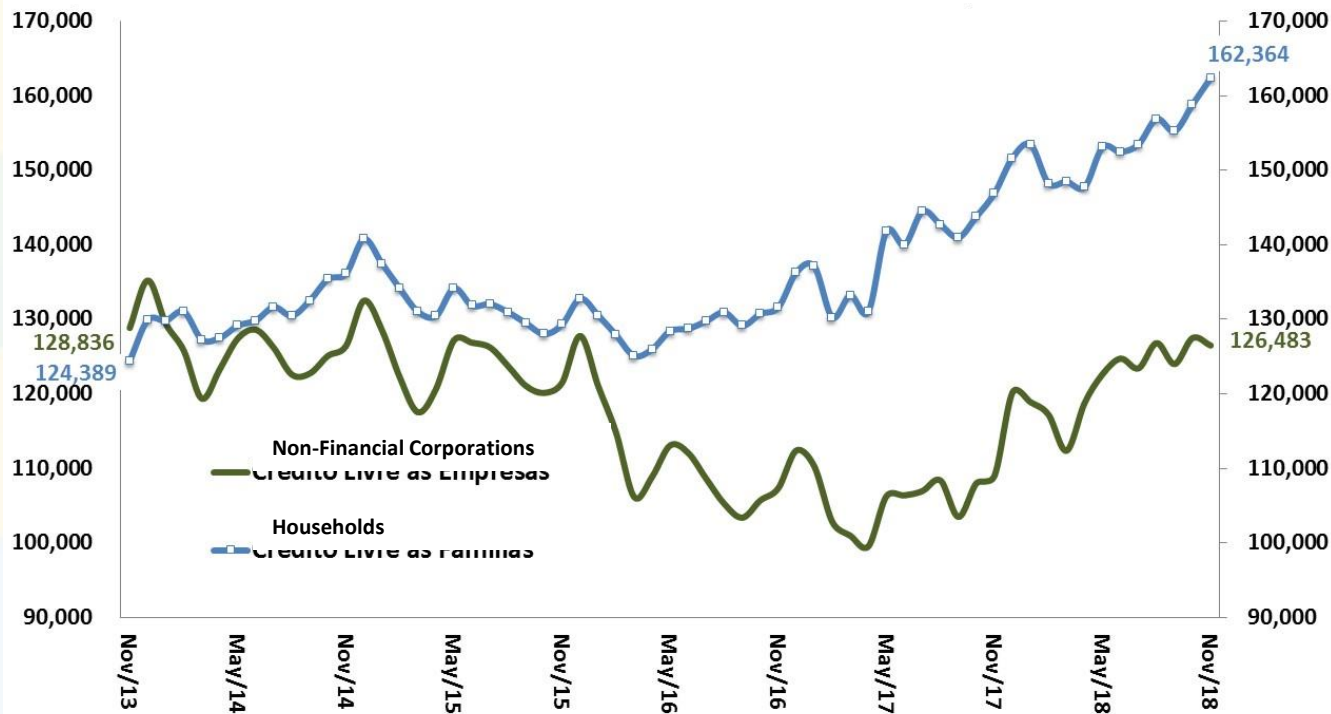


Source: FGV.

# New Loans to Households and Non-Financial Corporations

Daily Average of New Loans to Non-Financial Corporations  
R\$ millions of the last month  
3-Month Moving Average - Seasonally Adjusted\*

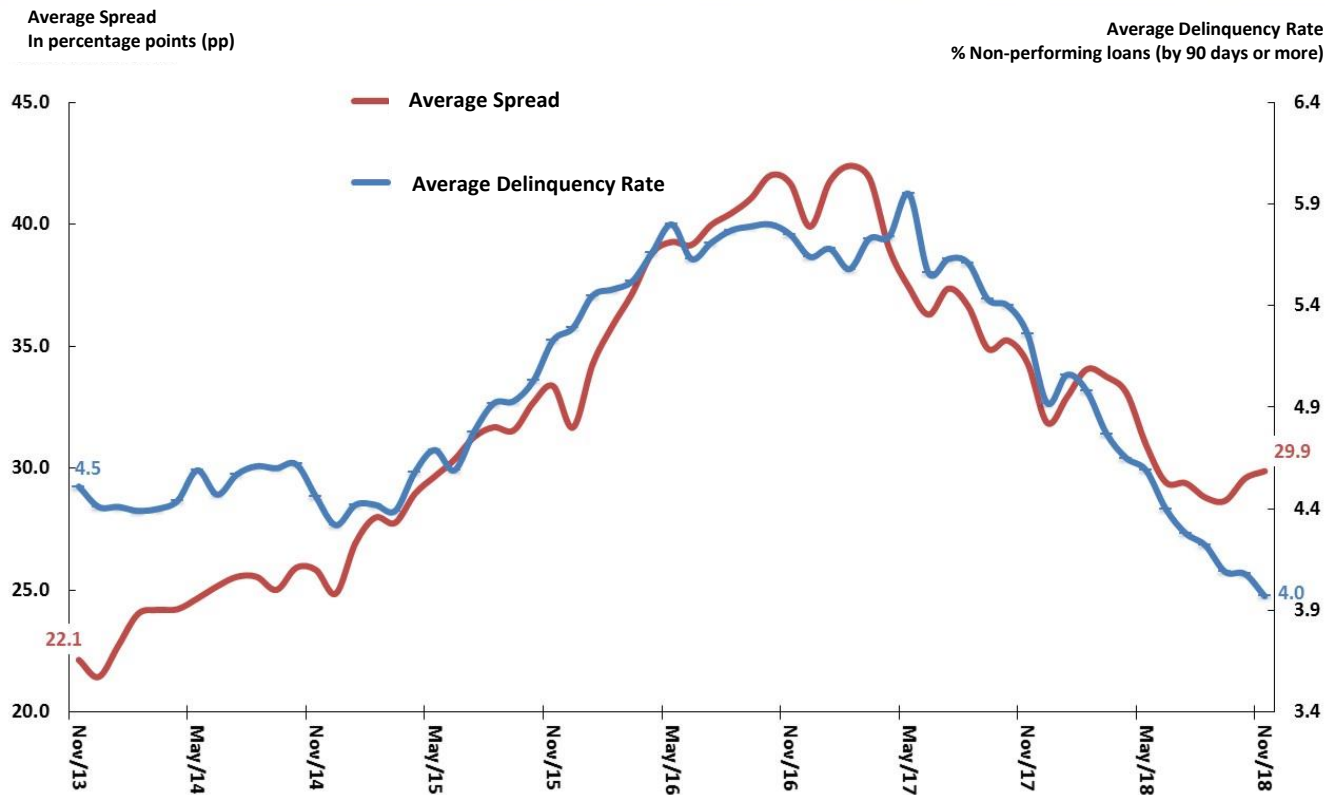
Daily Average of New Loans to Households  
R\$ millions of the last month  
3-Month Moving Average - Seasonally Adjusted\*



Source: Central Bank of Brazil. \* Seasonally adjusted by SEPLAN/MP.



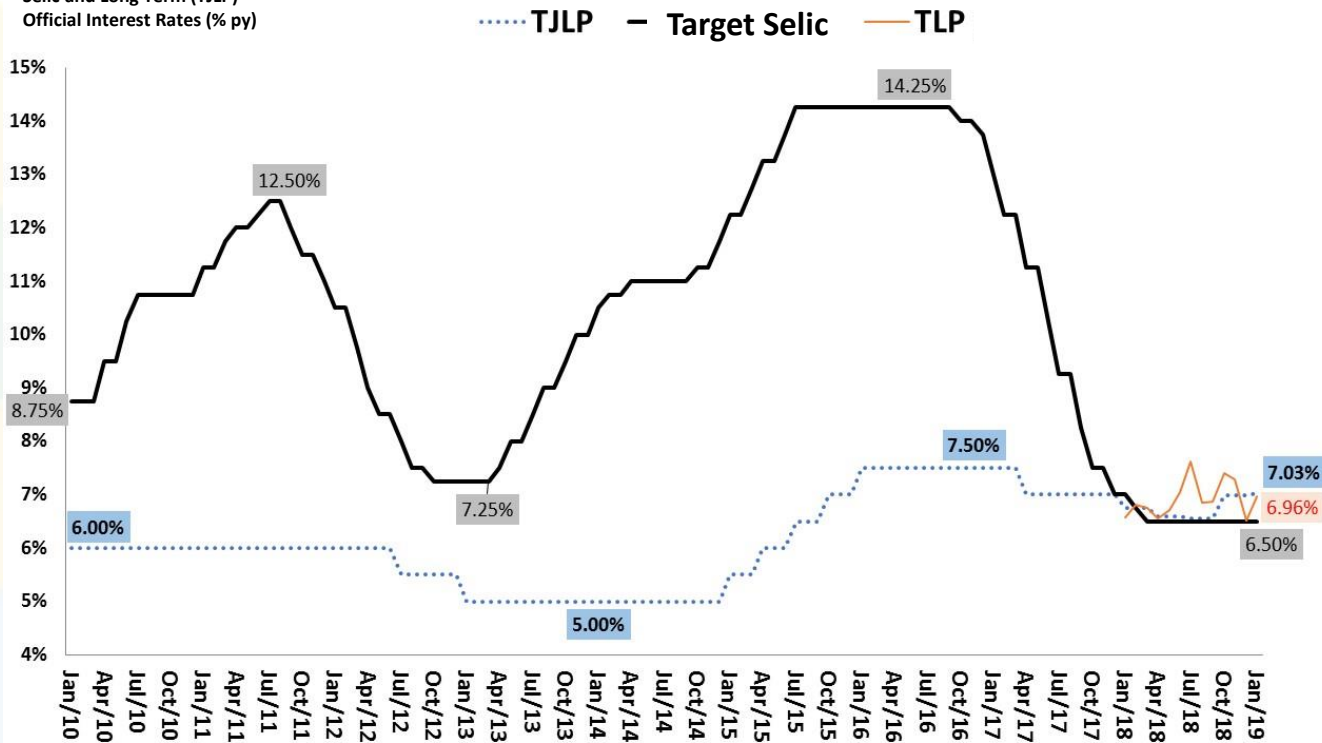
# Non-earmarked Resources: Spread and Delinquency Rates



Source: Central Bank of Brazil.

# Official Interest Rates Evolution (Target Selic and TJLP)

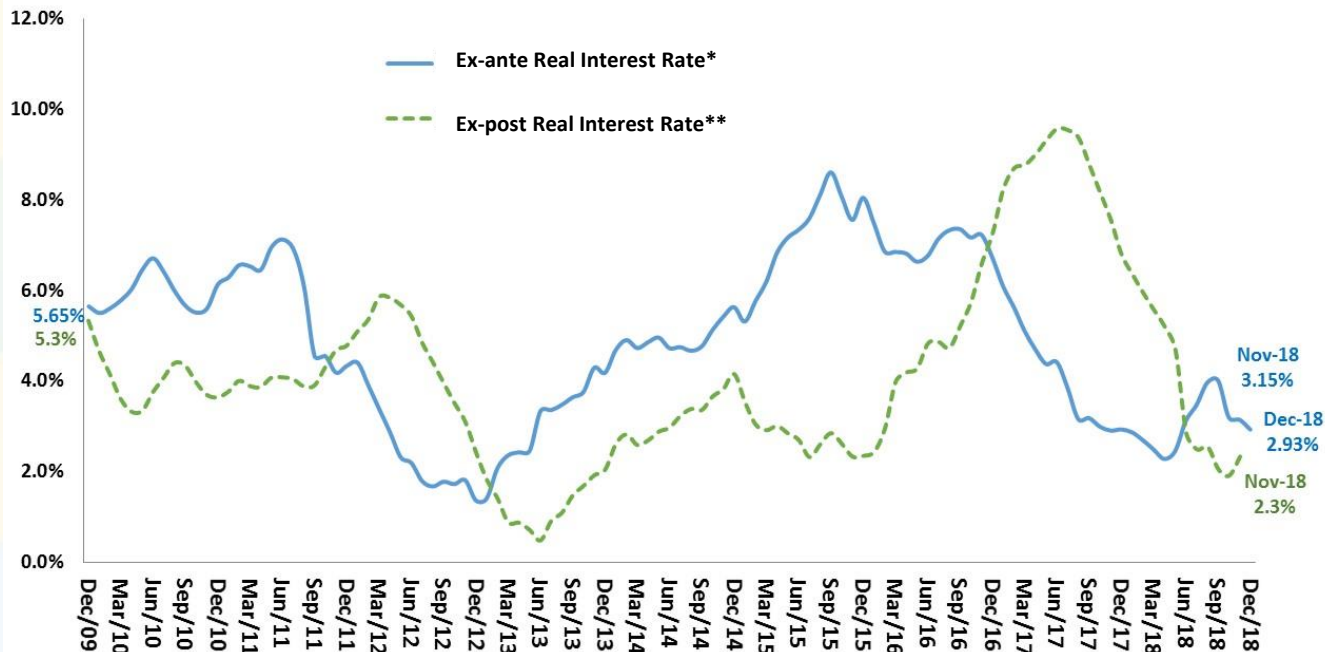
Selic and Long Term (TJLP)  
Official Interest Rates (% py)



Source: Central Bank of Brazil.

# Ex-ante and Ex-post Real Interest Rates

Ex-ante and Ex-post Real (Interbank CDI/IPCA)  
Interest Rates (% py)



Source: Central Bank of Brazil.

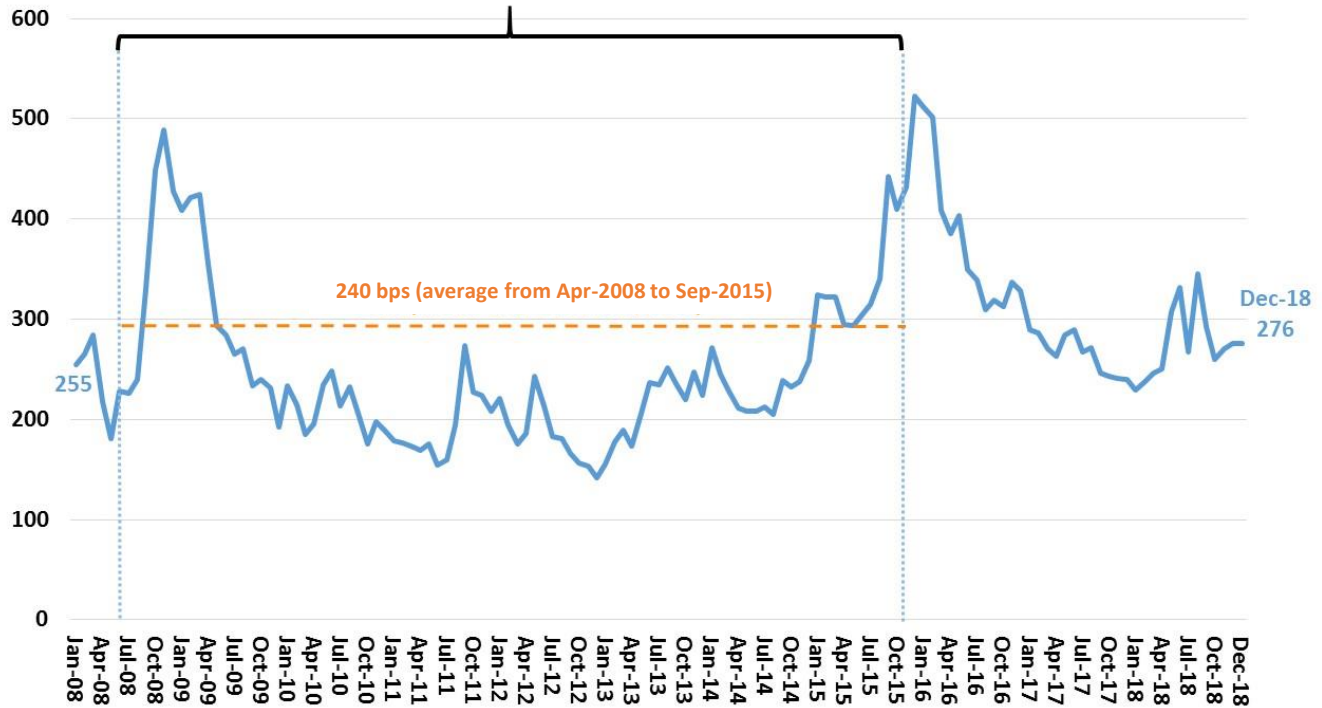
\* Ex-ante Real Interest Rate = Expected Interbank CDI/IPCA ratio, considering 360-days Swap DI-Pre rate and IPCA median of BCB-Focus Survey.

\*\* Ex-post Real Interest Rate = Observed 12-months accumulated CDI/IPCA ratio.

# Sovereign Risk (EMBI+ BR)

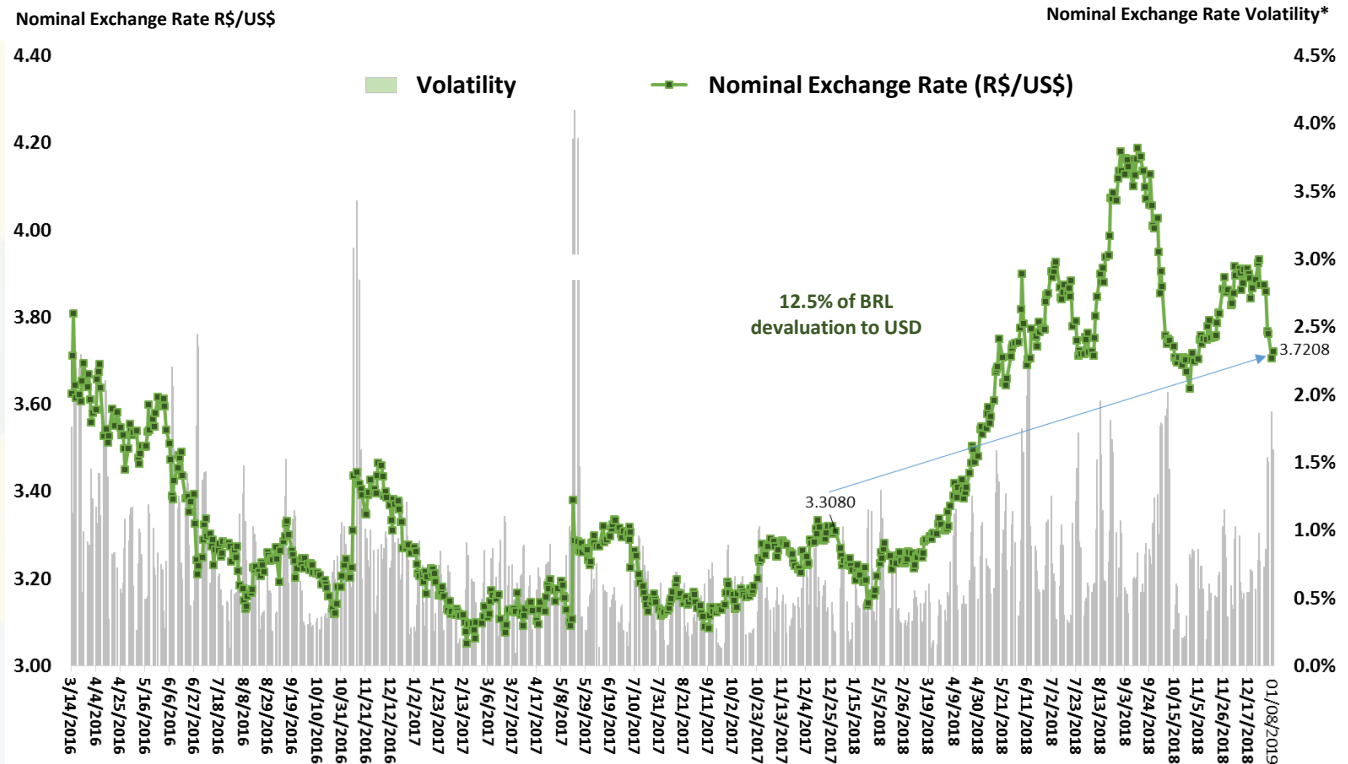
EMBI+ Brazil Spread  
basis points

S&P and Fitch Investment Grade Period



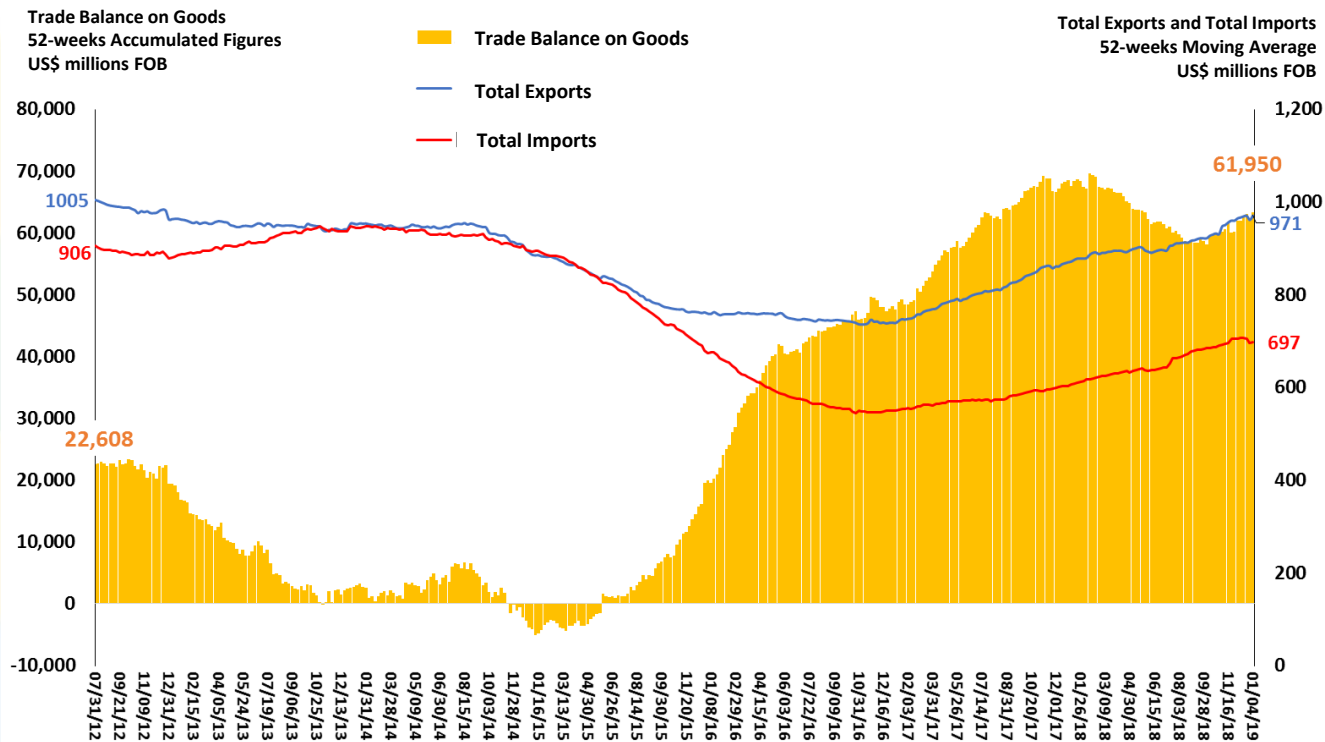
Source: JPMorgan.

# Daily Nominal Exchange Rate R\$/US\$



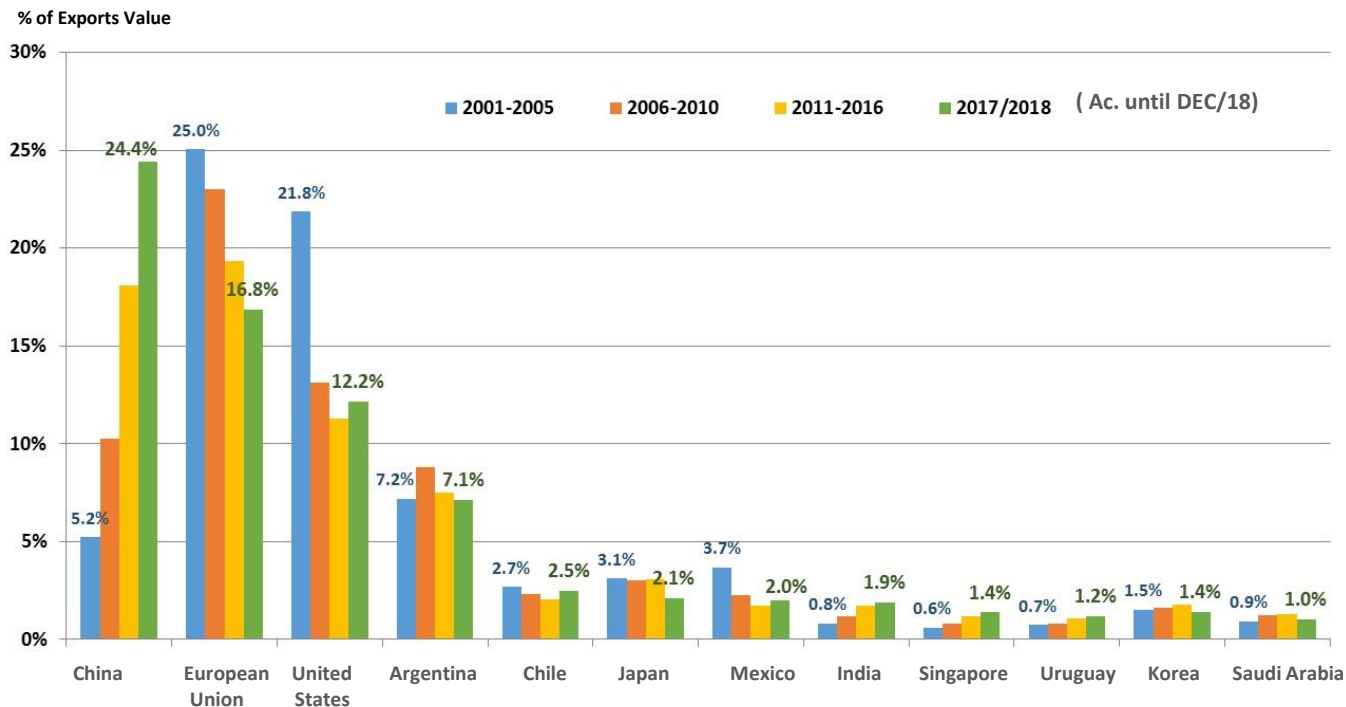
Source: Central Bank of Brazil. \*Volatility = 5-days Moving Coefficient of Variation.

# Trade Balance on Goods (52 weeks daily average)



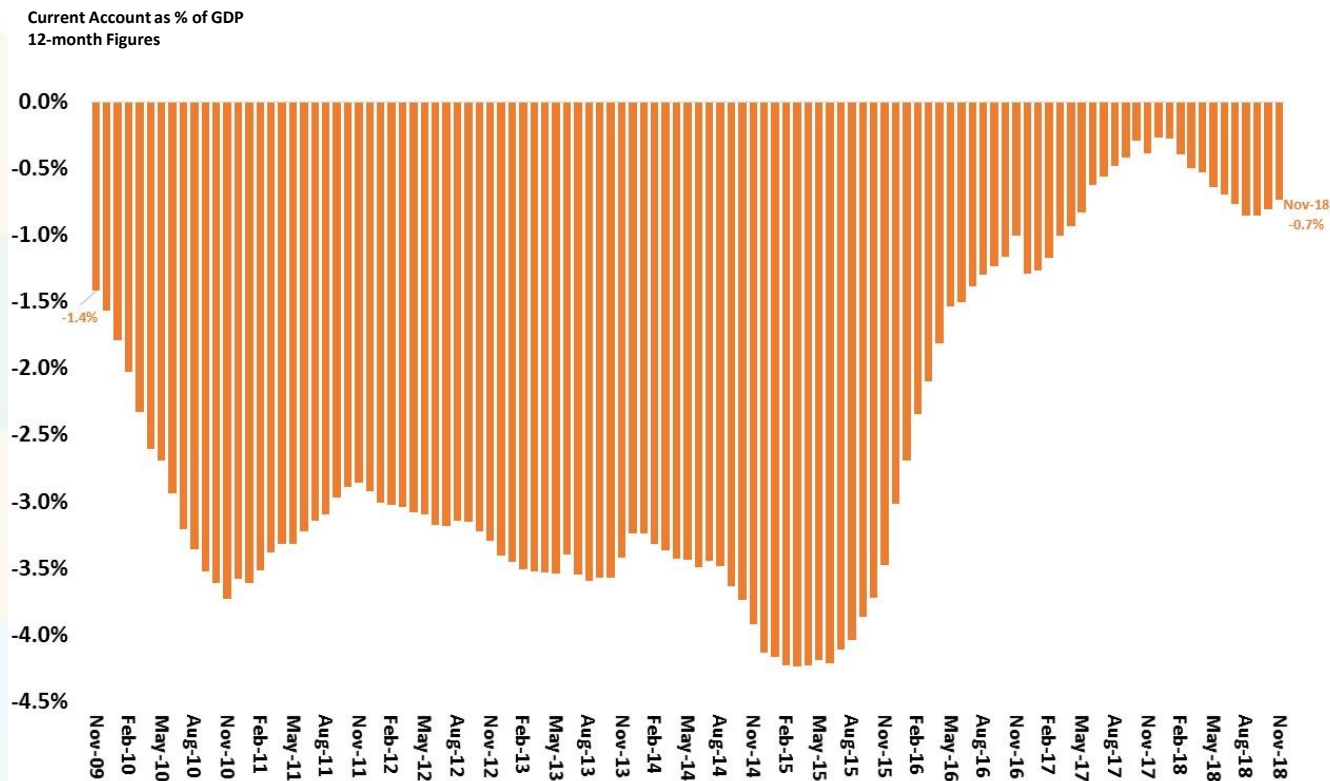
Source: SECEX/MDIC.

# Brazilian Exports Evolution by Country of Destination



Source: MDIC/SECEX

# Current Account Deficit as % of GDP

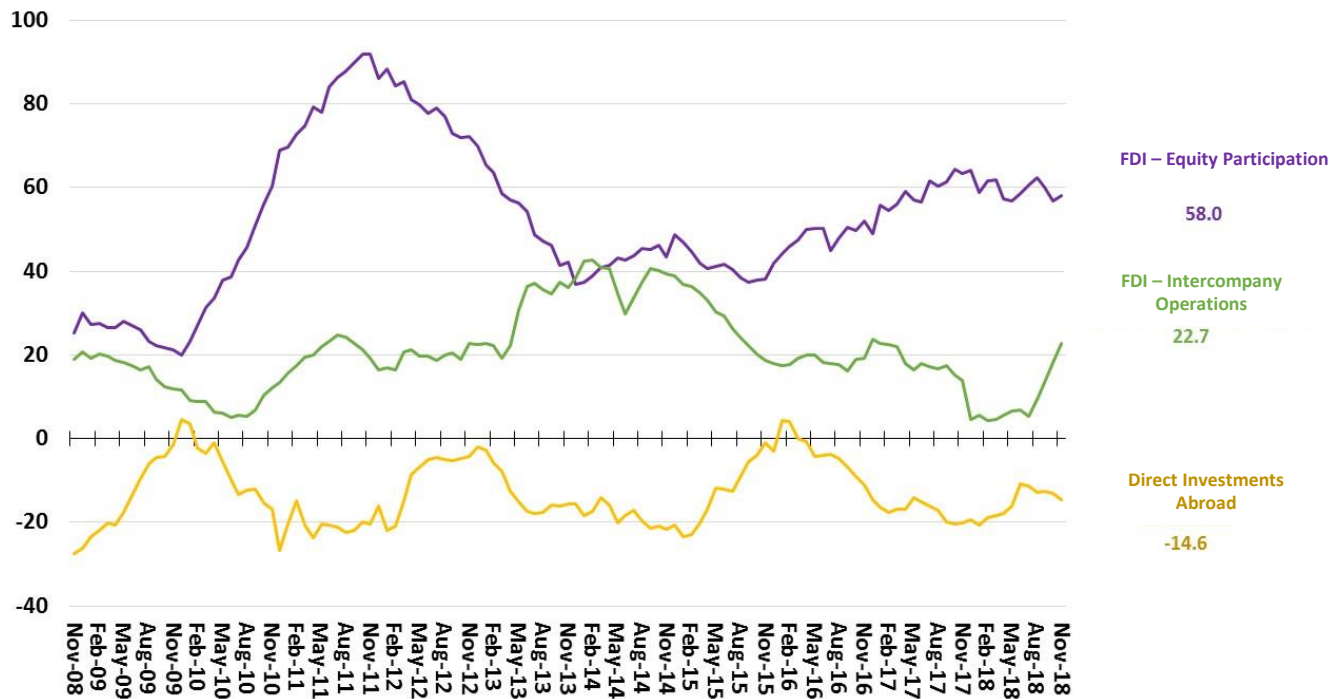


Source: Central Bank of Brazil.



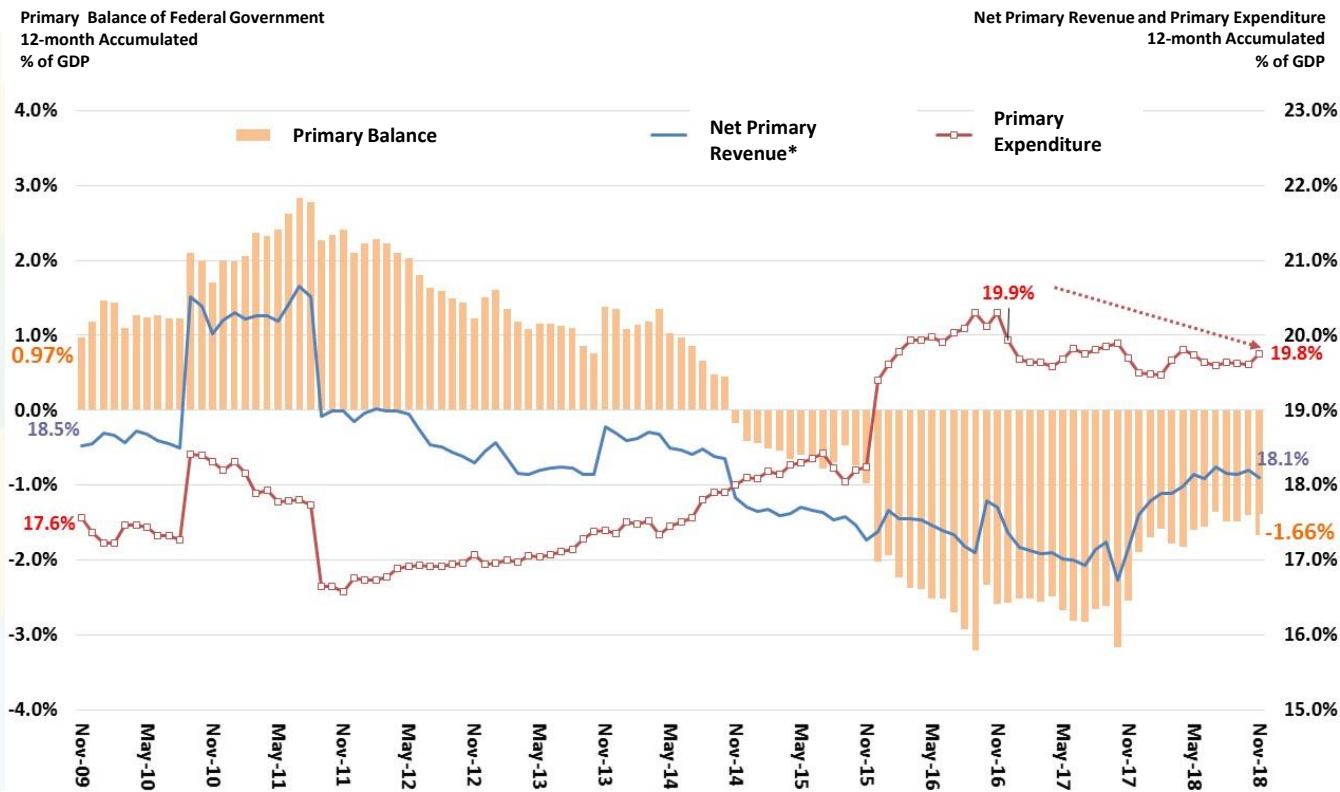
# Direct Investments and Components

Direct Investment Flows  
Net Inflow (+) and Net Outflow (-)  
12-month Accumulated - US\$ billions



Source: Central Bank of Brazil.

# Primary Balance of Federal Government (as % GDP)

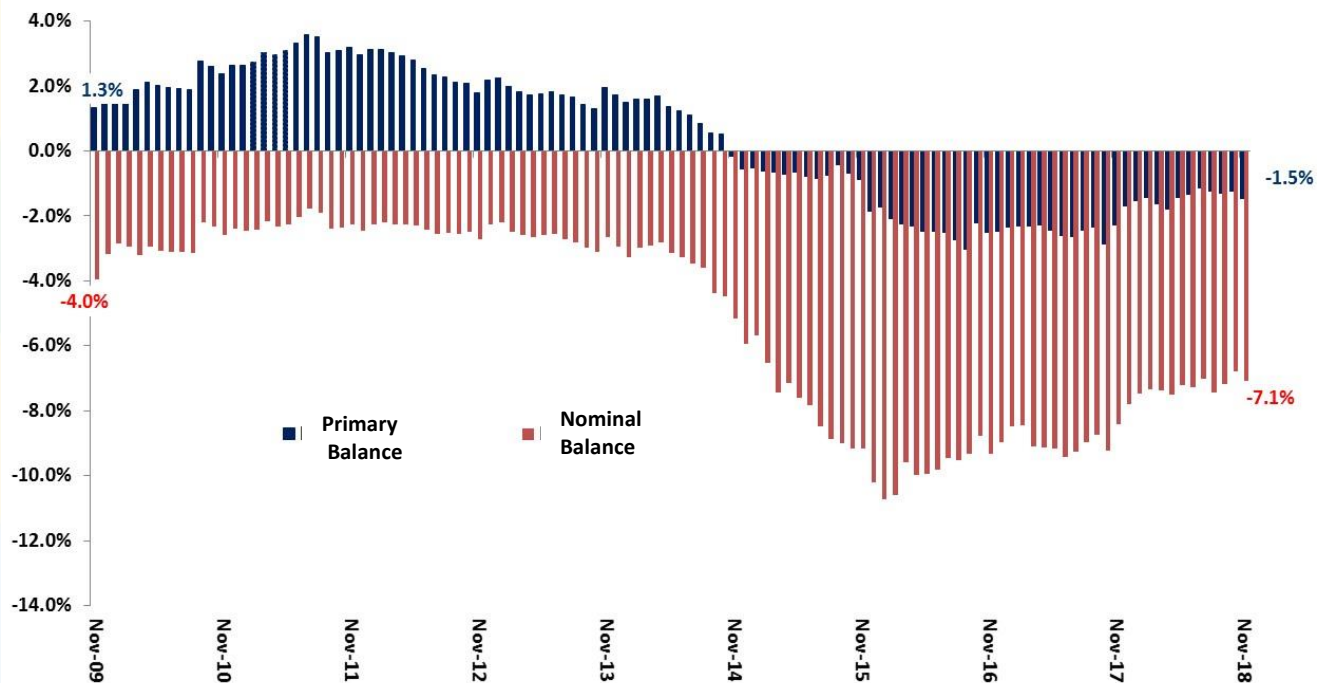


Sources: STN/MF.

\*Excludes compulsory transfers to subnational entities

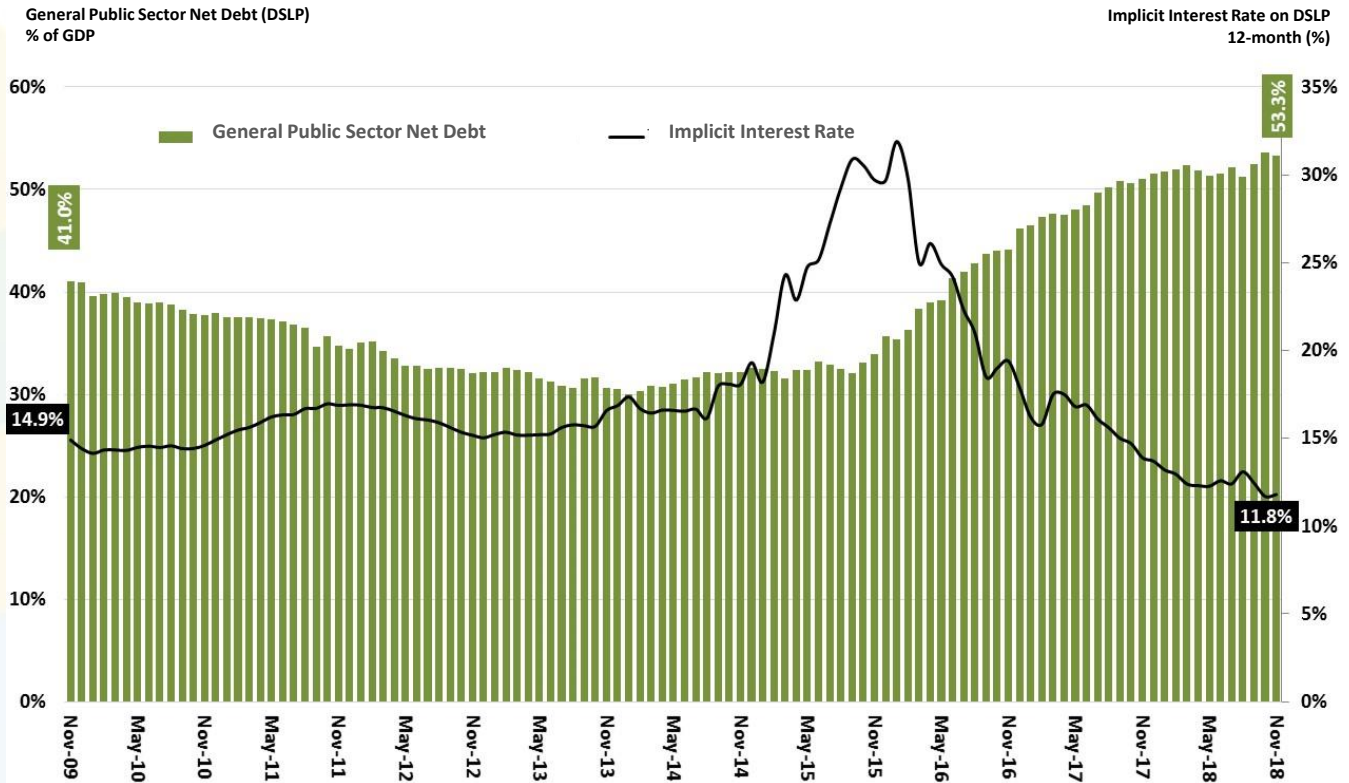
# Public Sector Primary and Nominal Balance

Consolidated Public Sector  
Primary and Nominal Balance  
12-month Accumulated  
% of GDP



Source: Central Bank of Brazil.

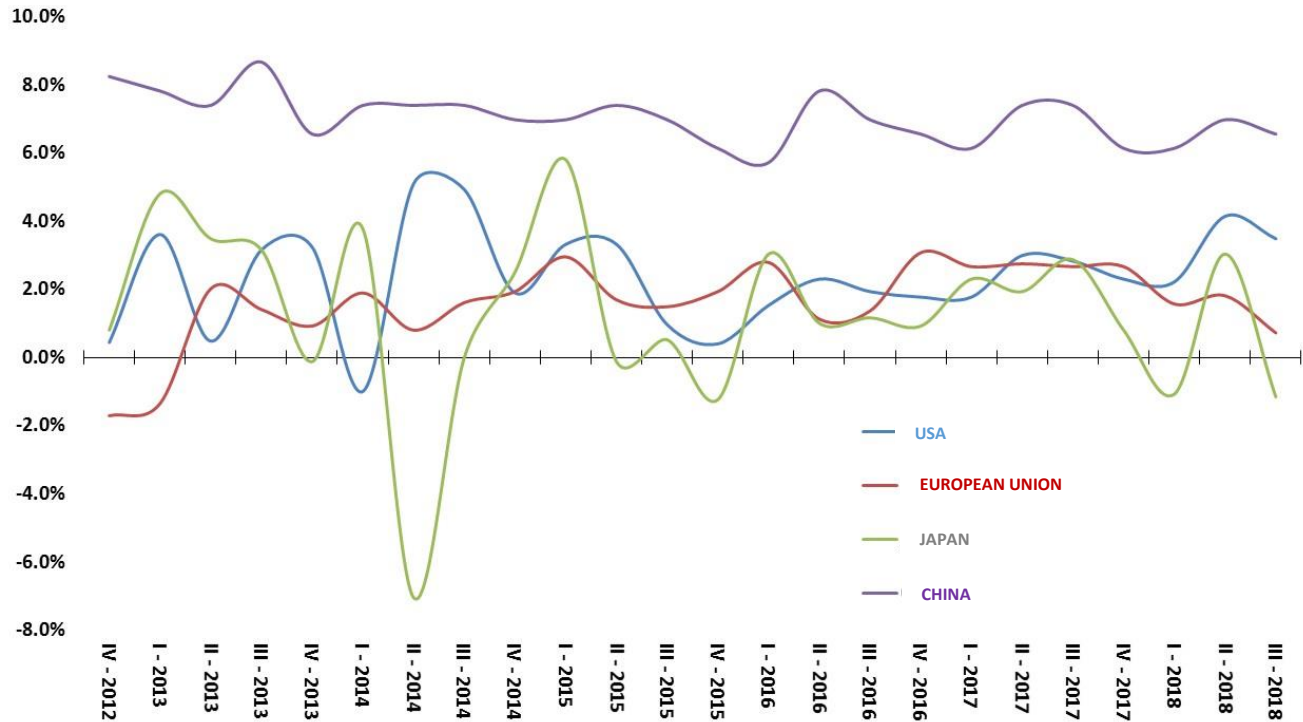
# Public Sector Net Debt (as % GDP)



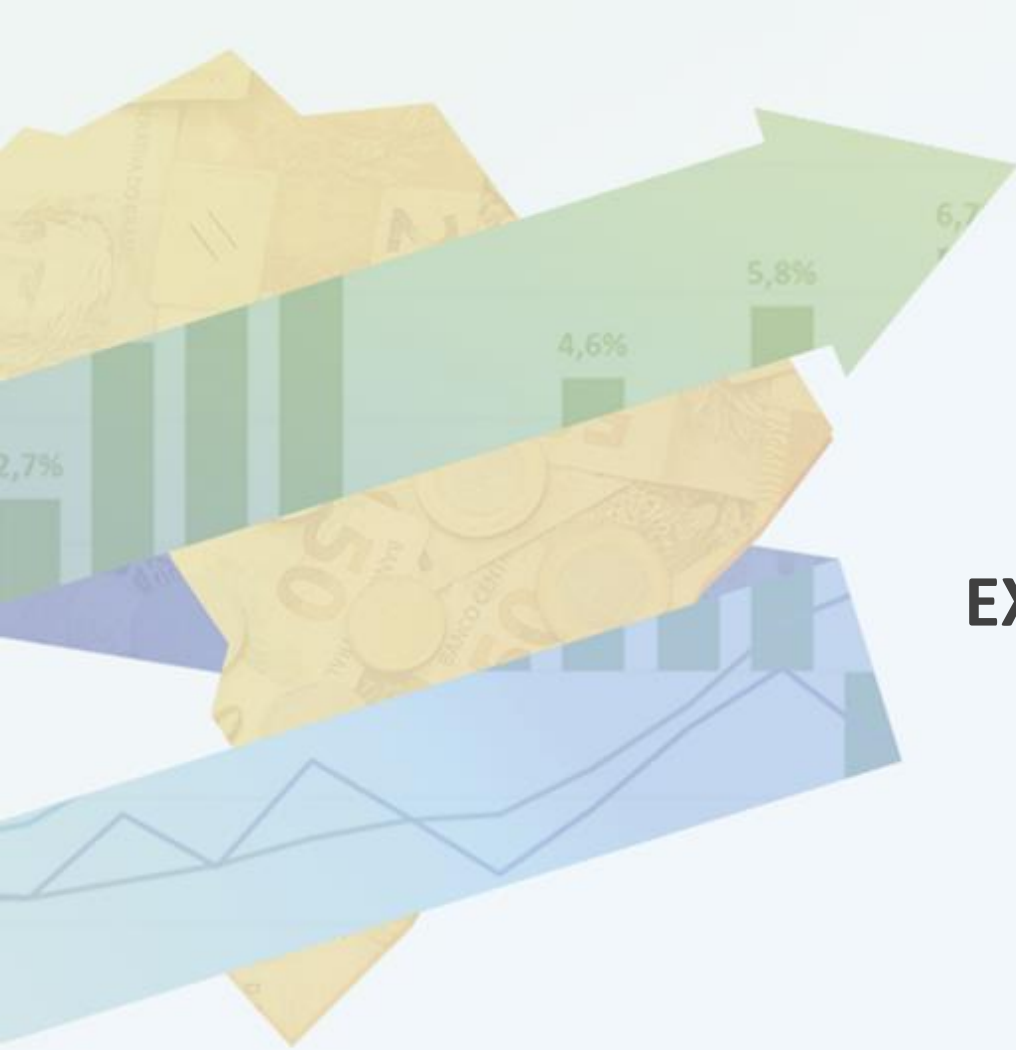
Source: Central Bank of Brazil.

# World Major Economies GDP

GDP - real quarterly % chg. – seasonally adjusted data



Source: OECD.

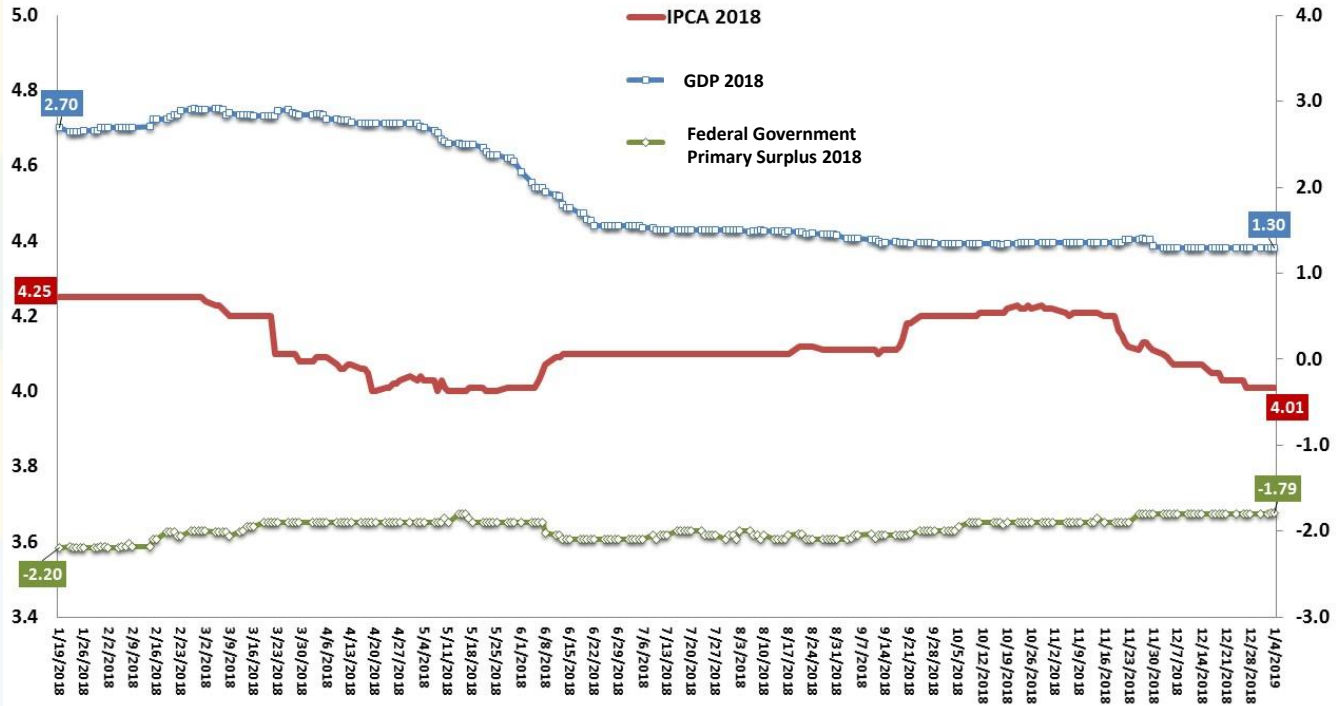


# **MARKET EXPECTATIONS**

# Market Expectations for 2018

Median of Market Expectations for 2018  
Consumer Inflation (IPCA) and GDP  
% p.a.

Median of Market Expectations for 2018  
Federal Government Primary Surplus  
as % GDP

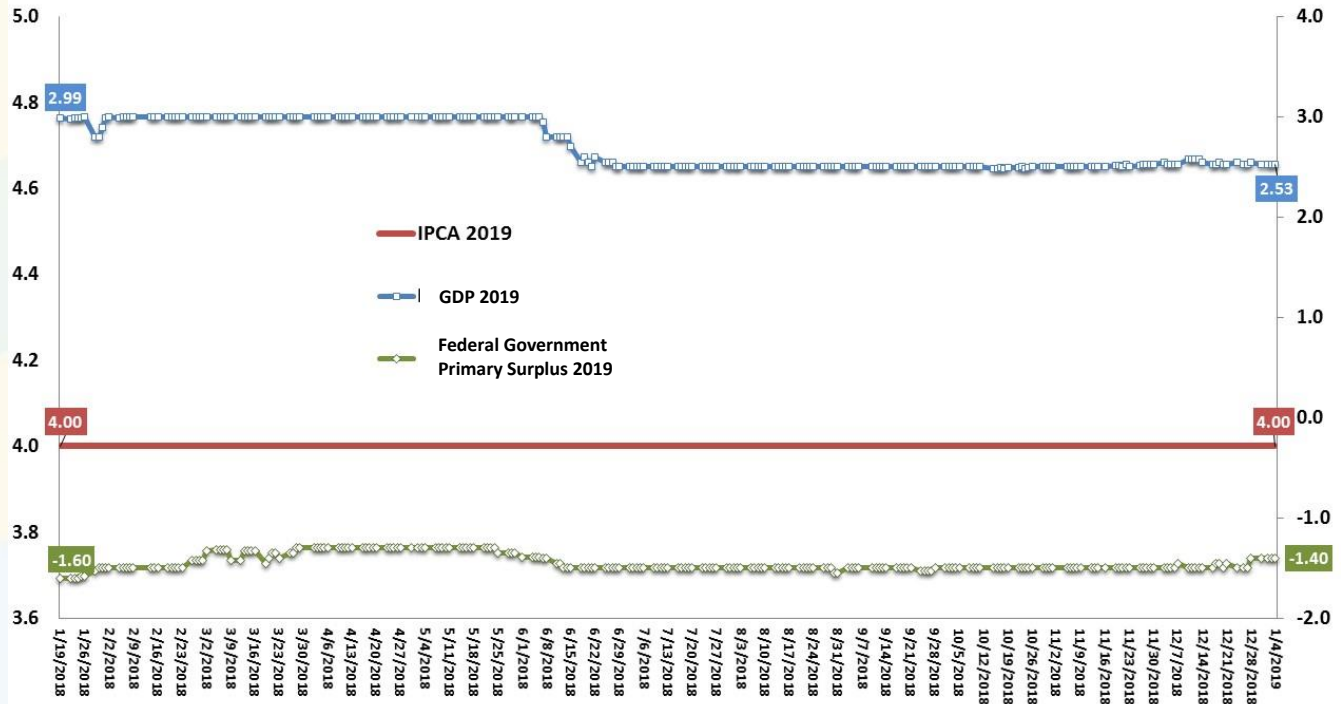


Source: Focus Survey, Central Bank of Brazil.

# Market Expectations for 2019

Median of Market Expectations for 2019  
Consumer Inflation (IPCA) and GDP  
% p.a.

Median of Market Expectations for 2019  
Federal Government Primary Surplus  
as % GDP

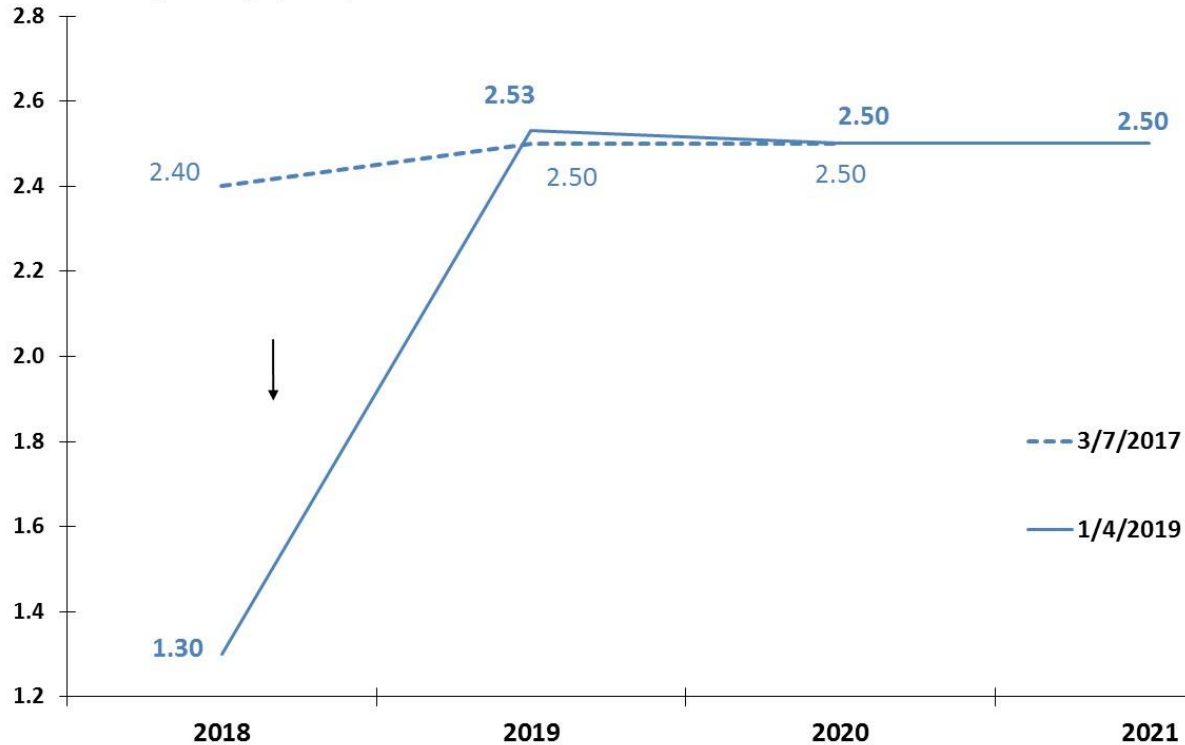


Source: Focus Survey, Central Bank of Brazil.



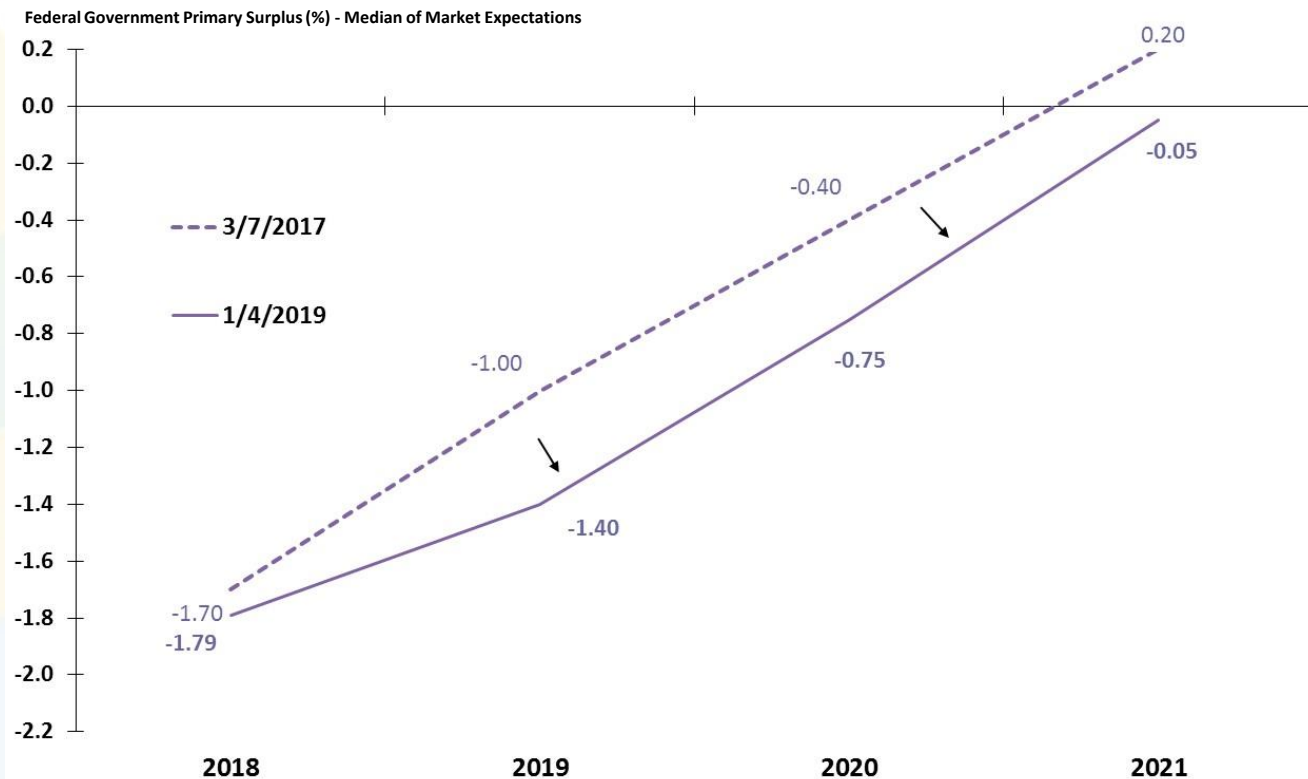
# GDP: Median of Market Expectations

Real GDP chg. (%) - Median of Market Expectations



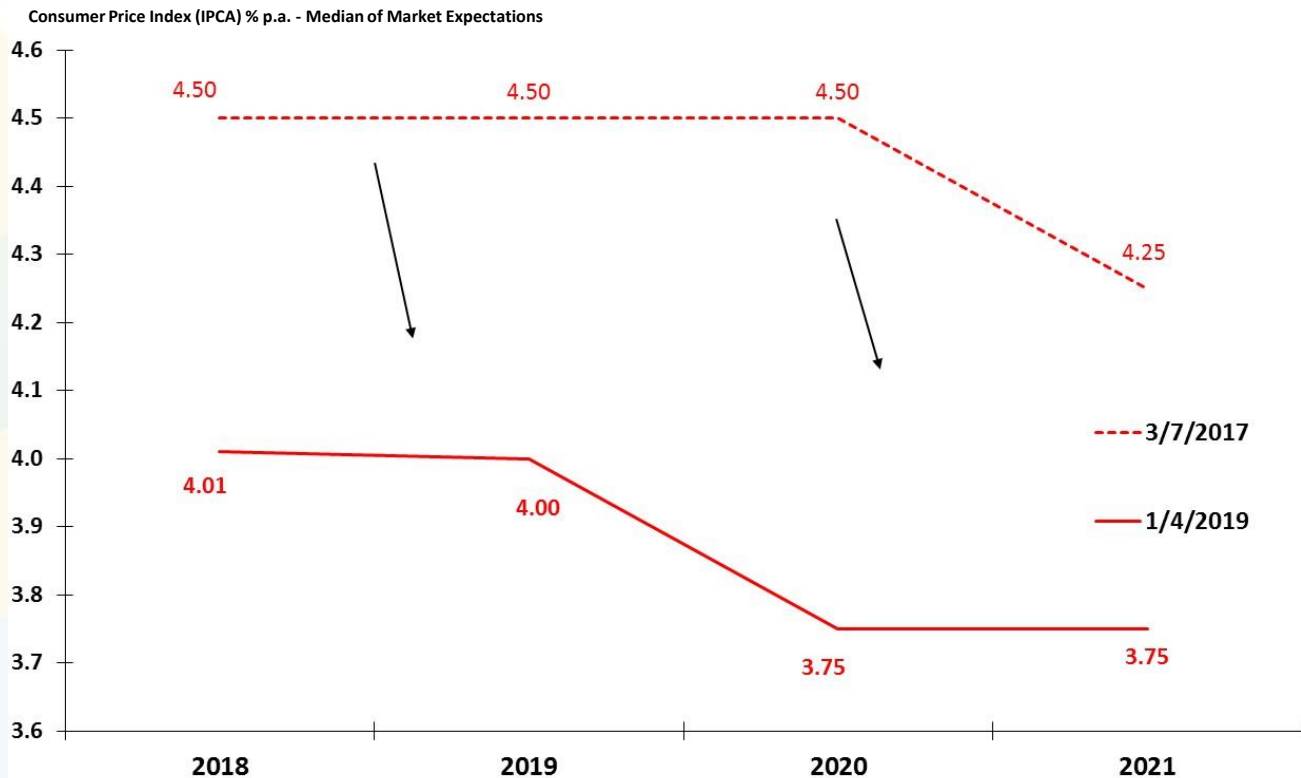
Source: Focus Survey, Central Bank of Brazil.

# Primary Surplus: Median of Market Expectations



Source: Focus Survey, Central Bank of Brazil.

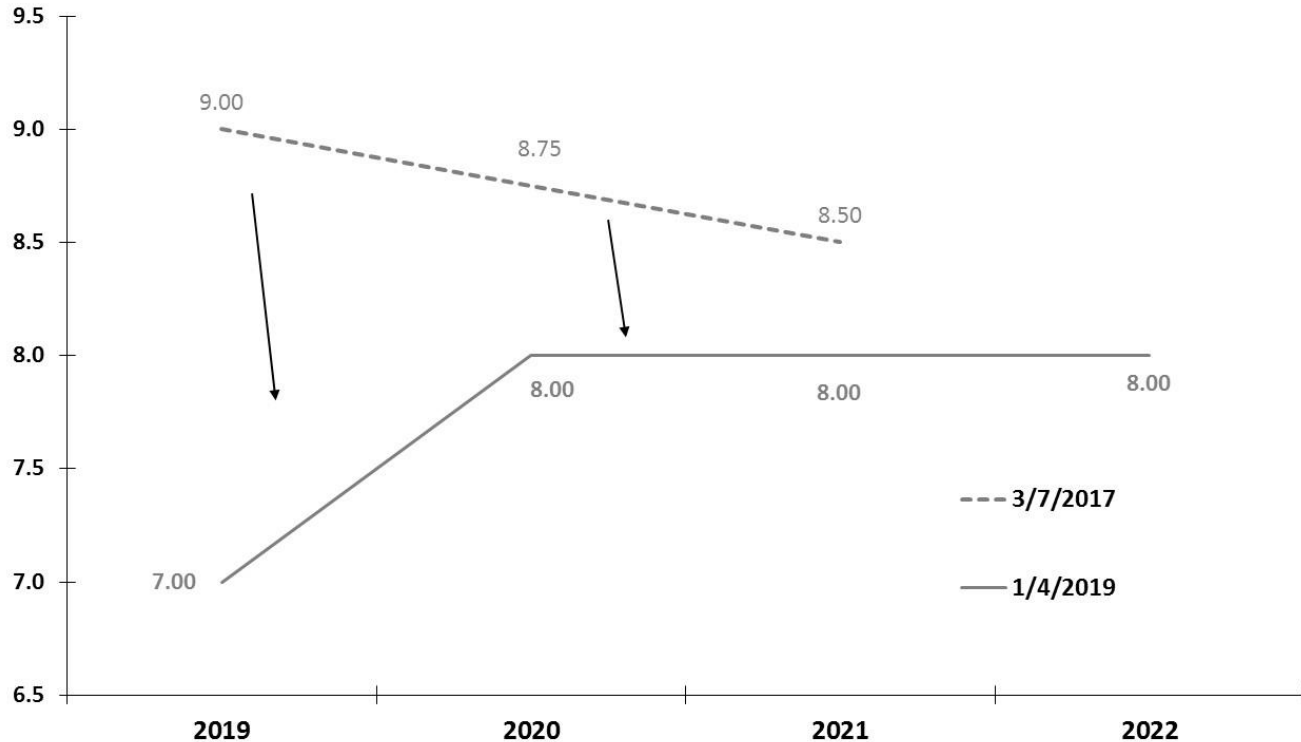
# Consumer Price Index (IPCA): Median of Market Expectations



Source: Focus Survey, Central Bank of Brazil.

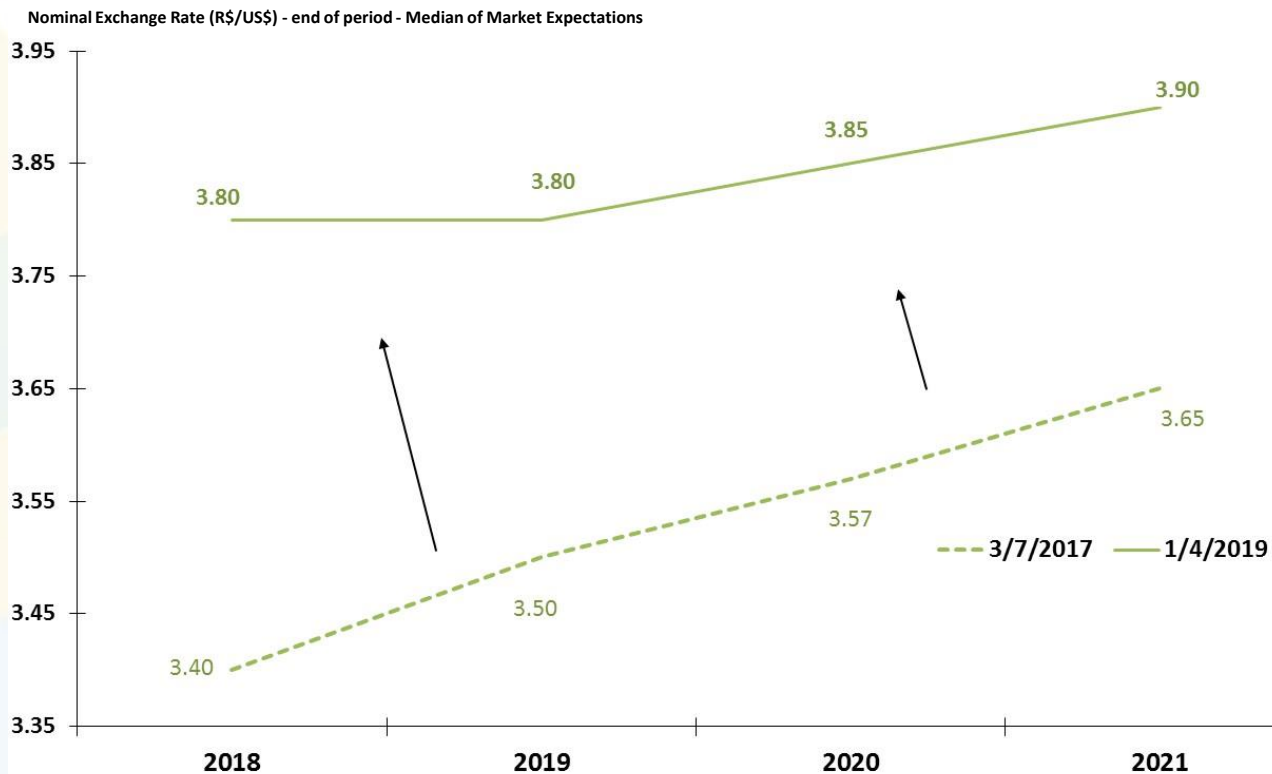
# Main Interest Rate (Selic target): Median of Market Expectations

Main Interest Rate (Selic target) - % p.a. end of period - Median of Market Expectations

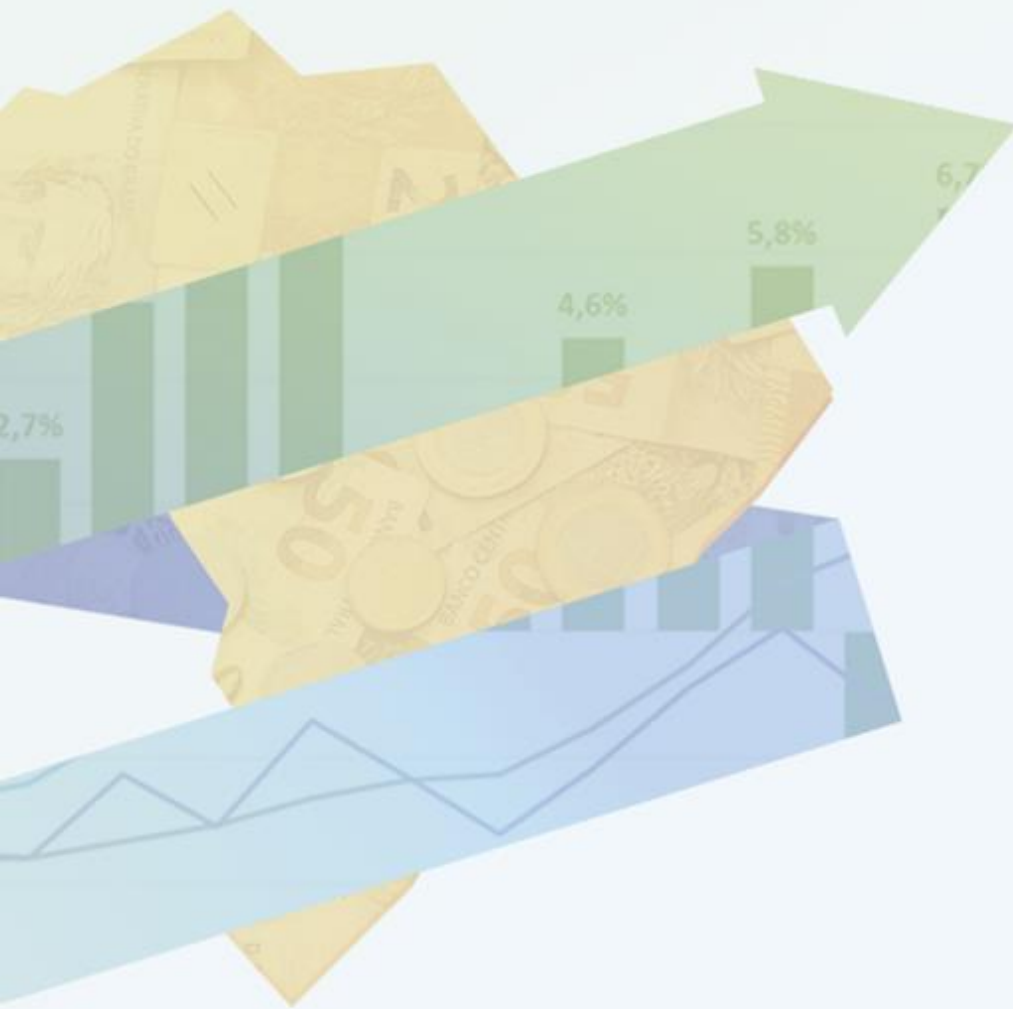


Source: Focus Survey, Central Bank of Brazil.

# Nominal Exchange Rate: Median of Market Expectations



Source: Focus Survey, Central Bank of Brazil.



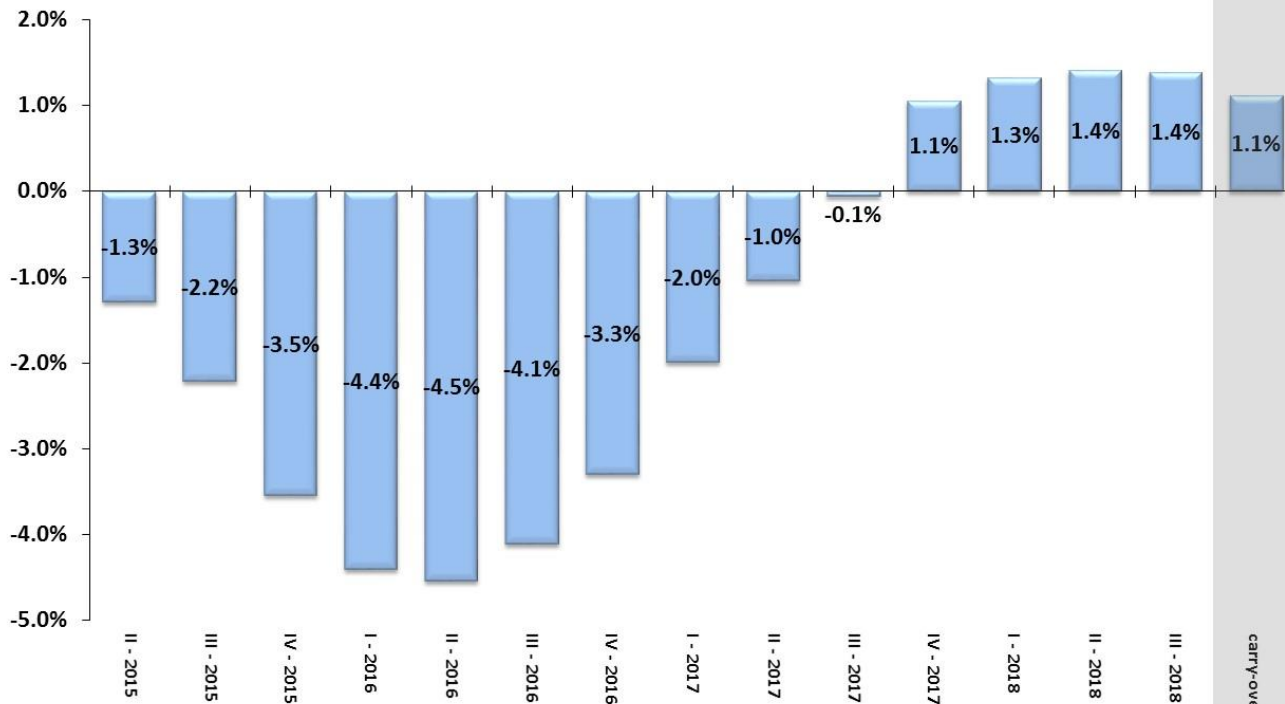
# **ECONOMIC ACTIVITY**

# GDP and Quarterly Economic Activity

										BCB/Focus: 01/04/2019		
Gross Domestic Product (IBGE)	Q3 2018											
	2017	Q2-2018 / Q2-2017	Q3-2018 / Q3-2017	Q2-2018 / Q1-2018 (seasonally adjusted)	Q3-2018 / Q2-2018 (seasonally adjusted)	Year-To-Date	Q2-2018 accum. in 4-quarters	Q3-2018 accum. in 4-quarters	carry-over 2018	2018	2019	2020
% change												
Agriculture	12.5%	0.3%	2.5%	0.5%	0.7%	-0.3%	1.8%	0.4%	0.6%	0.22%	2.57%	3.00%
Industry	-0.5%	0.8%	0.8%	-0.3%	0.4%	0.9%	1.0%	1.3%	0.6%	1.12%	2.80%	3.08%
Services	0.5%	1.1%	1.2%	0.3%	0.5%	1.4%	1.5%	1.5%	1.2%	1.39%	1.39%	1.39%
<b>GDP (market prices)</b>	<b>1.1%</b>	<b>0.9%</b>	<b>1.3%</b>	<b>0.2%</b>	<b>0.8%</b>	<b>1.1%</b>	<b>1.4%</b>	<b>1.4%</b>	<b>1.1%</b>	<b>1.30%</b>	<b>2.53%</b>	<b>2.50%</b>
Household Expenditure	1.4%	1.8%	1.4%	0.1%	0.6%	2.0%	2.6%	2.3%	1.8%			
Government Expenditure	-0.9%	-0.3%	0.3%	-0.4%	0.3%	0.3%	-0.1%	0.2%	0.1%			
Gross Fixed Capital Formation	-2.5%	3.0%	7.8%	-1.3%	6.6%	4.5%	2.0%	4.3%	4.9%			
Exports of Goods and Services	5.2%	-2.9%	2.6%	-5.1%	6.7%	1.5%	4.6%	3.3%	1.8%			
Imports of Goods and Services (-)	5.0%	6.5%	13.5%	-1.2%	10.2%	9.4%	7.0%	9.1%	9.9%			
Economic Activity Indicators (BCB and IBGE)	Q3 2018											
	2017	Q2-2018 / Q2-2017	Q3-2018 / Q3-2017	Q2-2018 / Q1-2018 (seasonally adjusted)	Q3-2018 / Q2-2018 (seasonally adjusted)	Year-To-Date	Q2-2018 accum. in 4-quarters	Q3-2018 accum. in 4-quarters	carry-over 2018			
% change												
<b>IBC-Br Economic Activity Index*</b>	<b>-0.3%</b>	<b>-4.1%</b>	<b>-4.0%</b>	<b>1.1%</b>	<b>1.0%</b>	<b>1.9%</b>	<b>-0.7%</b>	<b>1.8%</b>	<b>1.2%</b>			
LSPA: Grain Harvest	3.7%	8.2%	-12.2%	21.4%	1.0%	-3.7%	-5.7%	0.5%	-5.3%			
PIM: Industrial Production	-3.0%	-8.2%	-6.4%	2.6%	1.7%	1.2%	-2.8%	2.7%	1.9%			
PMC: Amplified Retail Sales	-1.7%	-8.6%	-8.7%	4.0%	4.7%	4.0%	0.4%	2.0%	5.2%			
PMS: Volume of Services	2.6%	-3.6%	-5.0%	-2.8%	-3.0%	0.7%	0.3%	0.6%	-1.3%			

# Quarterly GDP

Last 4Q / Previous 4Q (%)



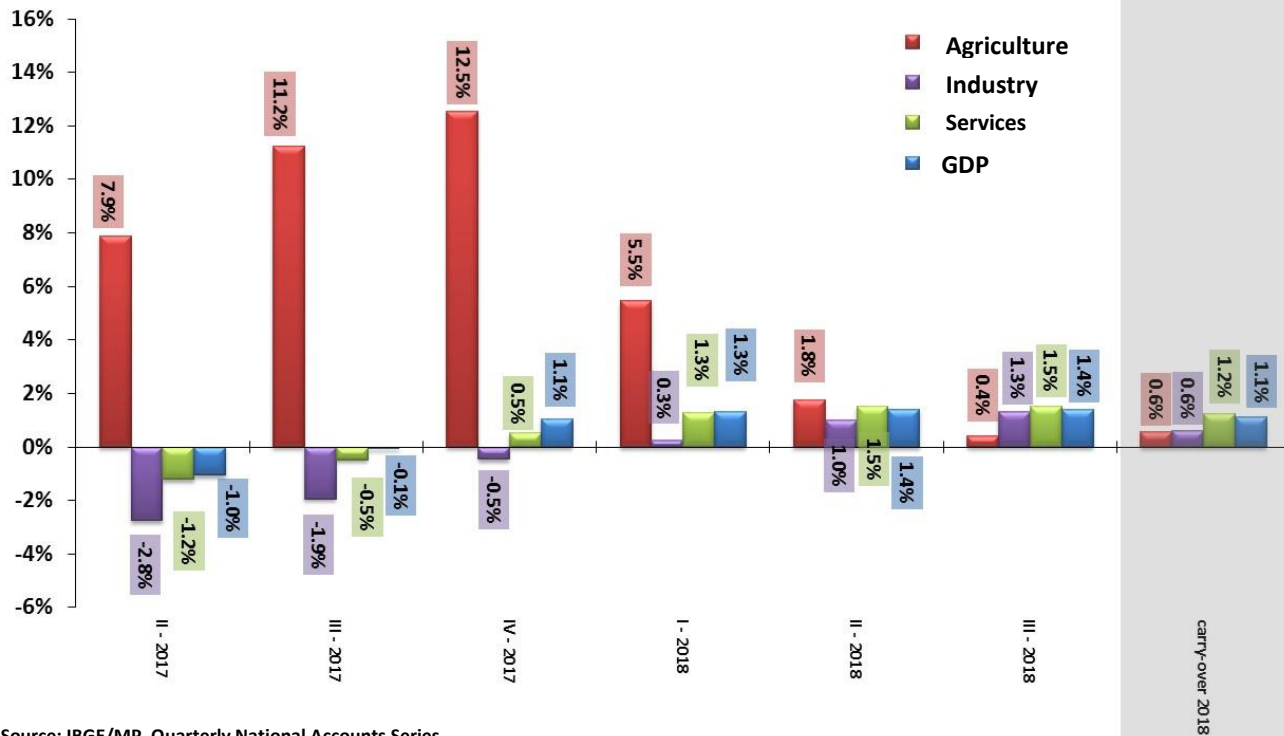
Source: IBGE/MP, Quarterly National Accounts Series.

Note: Carry-over 2018 based on 2018 3<sup>rd</sup> quarter seasonally adjusted level compared to 2017 average.



# Quarterly GDP by Activity Sector

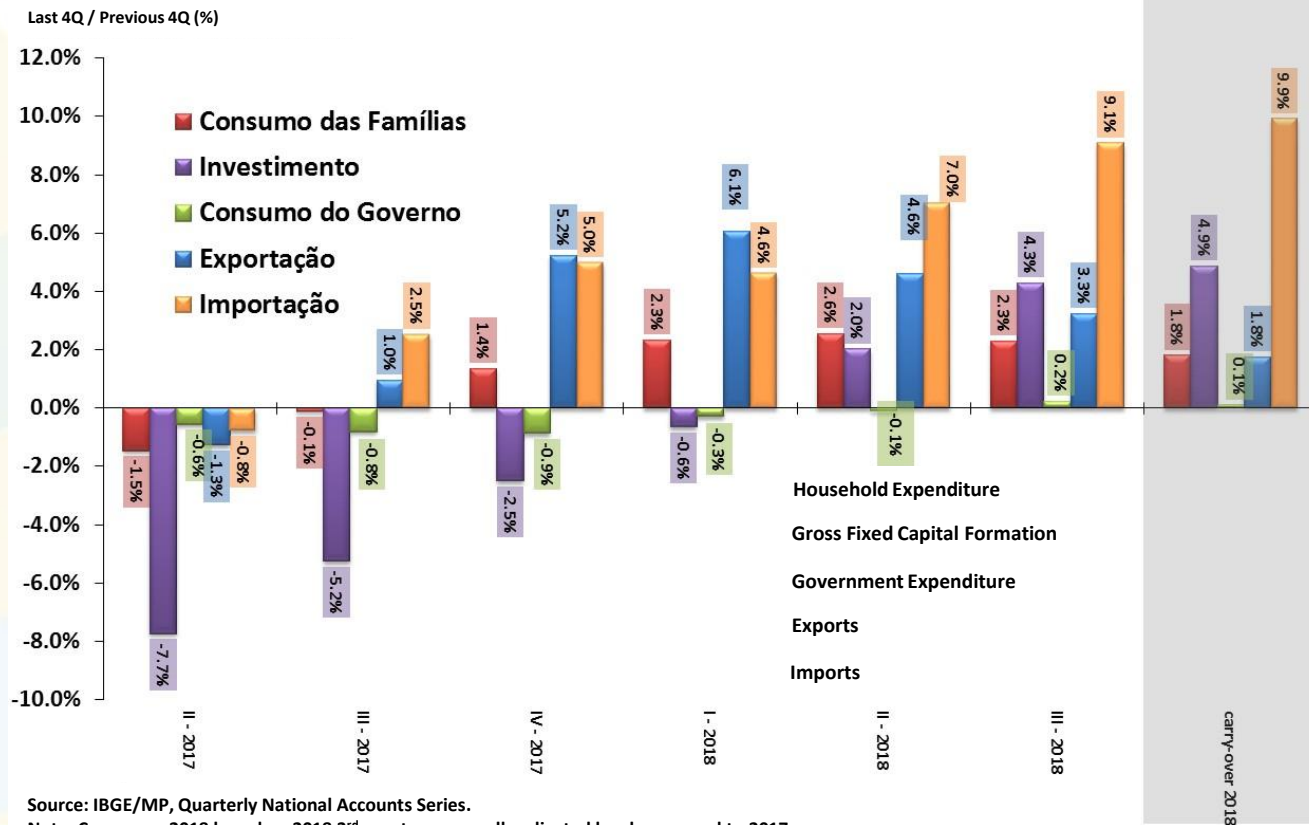
Last 4Q / Previous 4Q (%)



Source: IBGE/MP, Quarterly National Accounts Series.

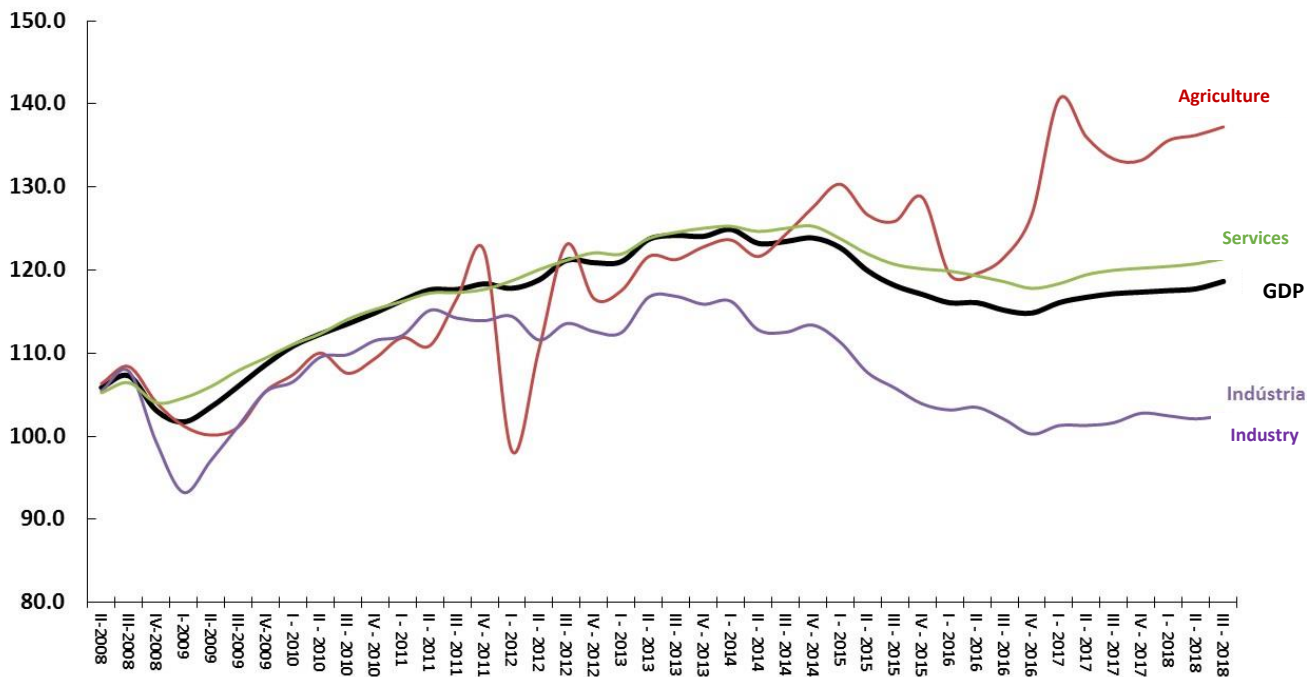
Note: Carry-over 2018 based on 2018 3<sup>rd</sup> quarter seasonally adjusted level compared to 2017 average.

# Quarterly GDP by Expenditure



# Quarterly GDP by Activity Sector

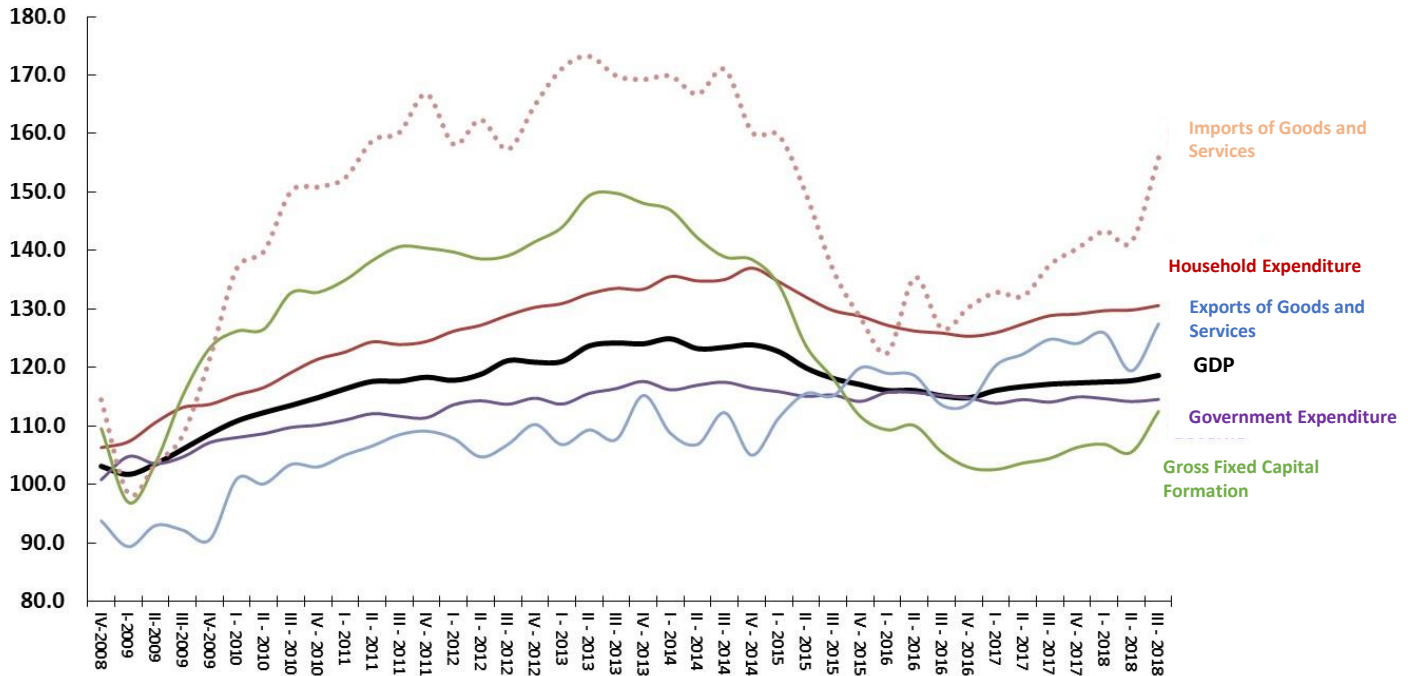
GDP and Economic Sectors Quarterly Volume Indicator  
Chained Series of the Seasonally Adjusted Index: 2007=100



Source: IBGE/MP, Quarterly National Accounts Series.

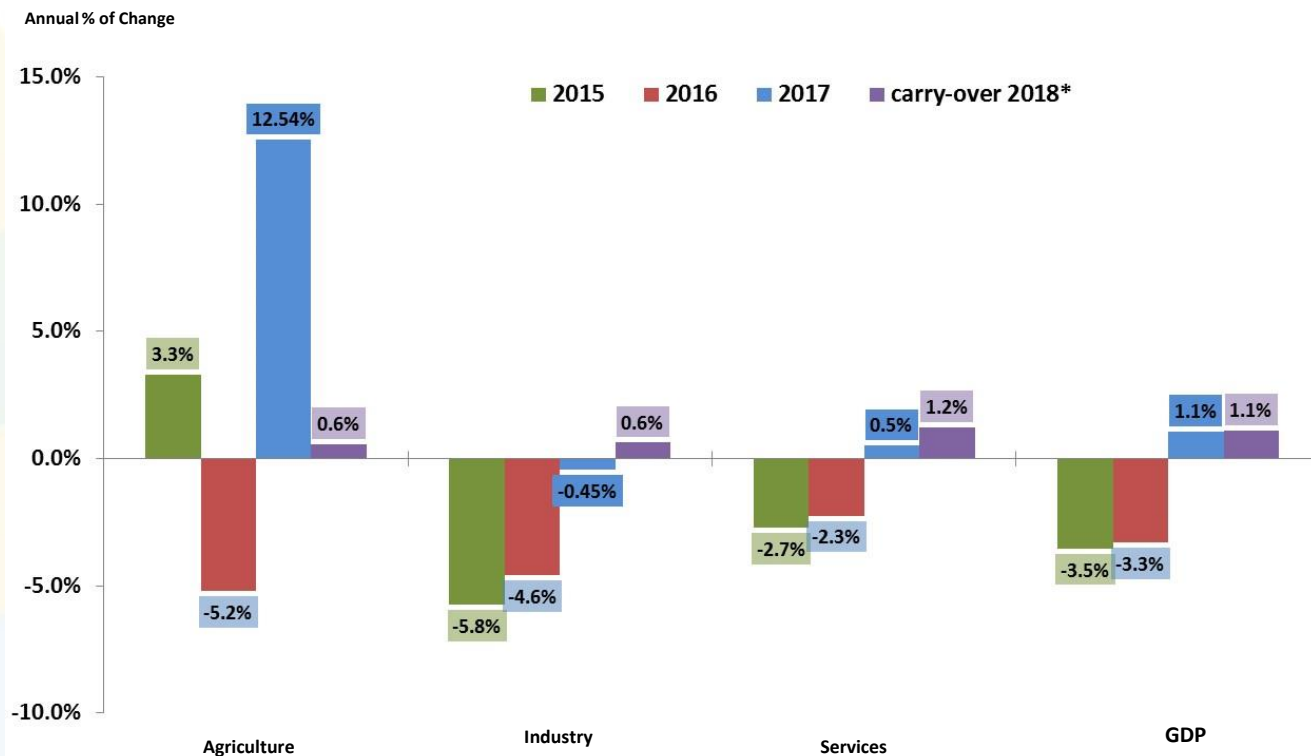
# Quarterly GDP by Expenditure

GDP and Demand Categories Quarterly Volume Indicator  
Chained Series of the Seasonally Adjusted Index: 2007=100



Source: IBGE/MP, Quarterly National Accounts Series.

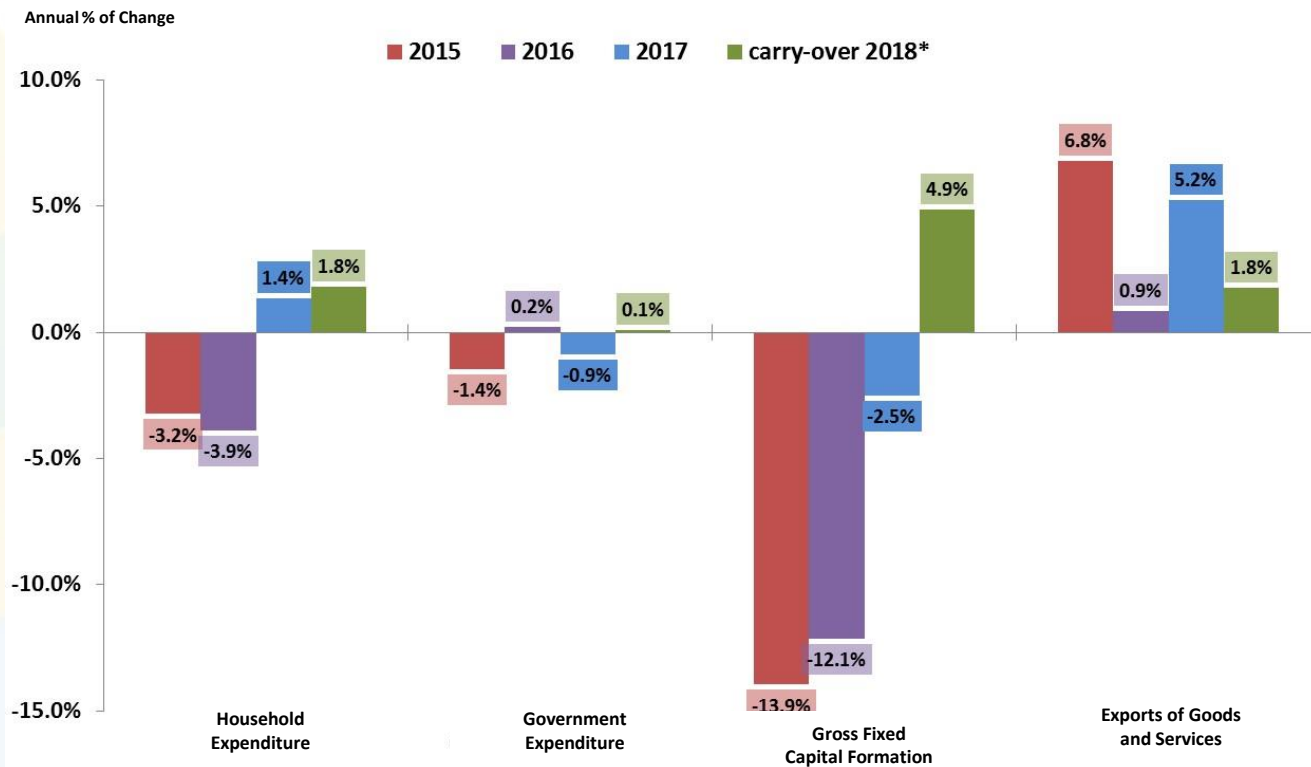
# Annual GDP Real Growth by Activity Sector



Source: IBGE/MP, Quarterly National Accounts Series.

Note: Carry-over 2018 based on 2018 3<sup>rd</sup> quarter seasonally adjusted level compared to 2017 average.

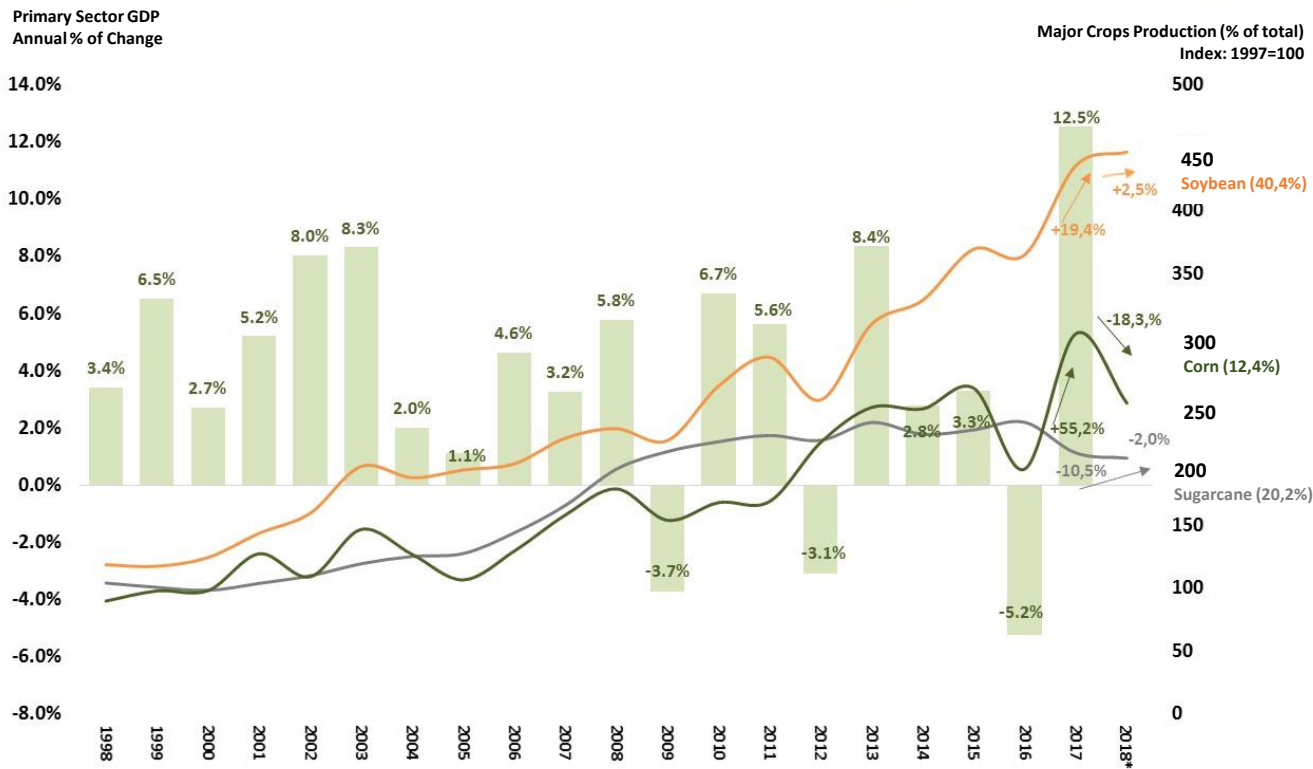
# Annual GDP Real Growth by Expenditure



Source: IBGE/MP, Quarterly National Accounts Series.

Note: Carry-over 2018 based on 2018 3<sup>rd</sup> quarter seasonally adjusted level compared to 2017 average.

# Primary Sector Performance by Major Crops

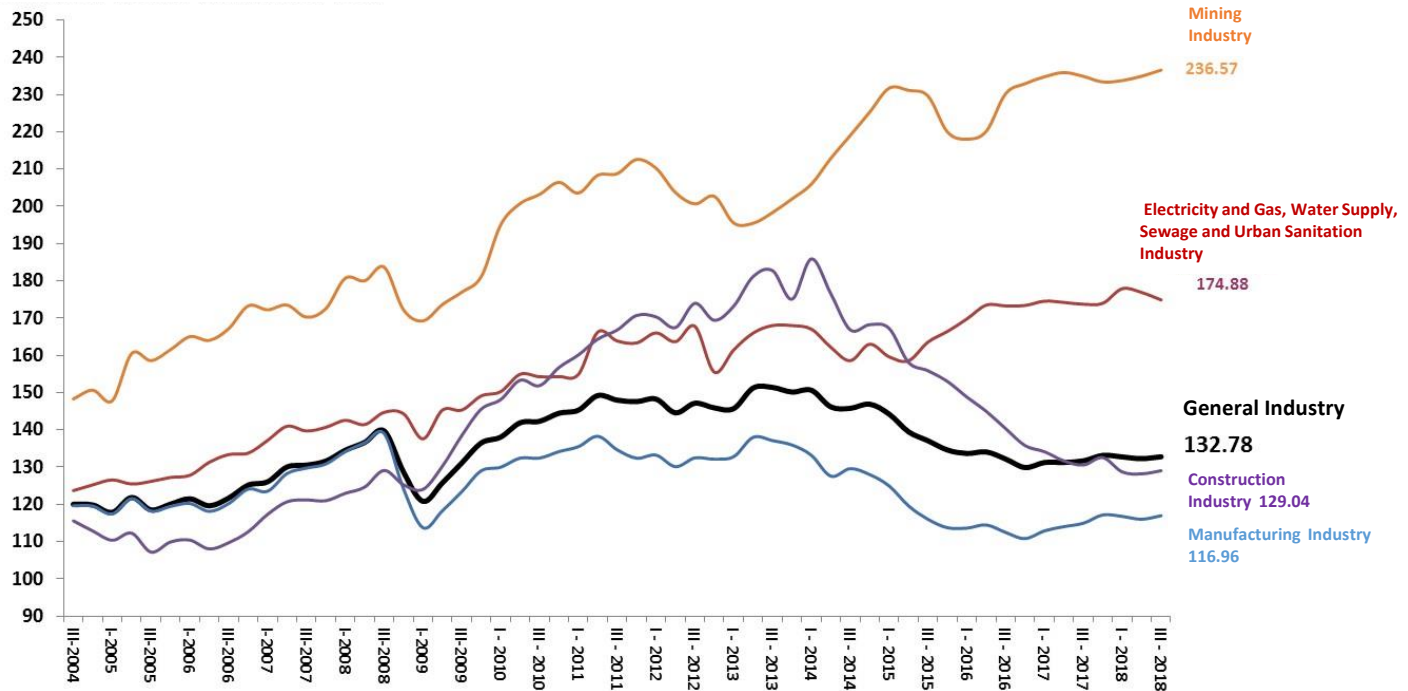


Source: IBGE/MP, Systematic Survey of Agricultural Production (LSPA) – November 2018.

# Industry Performance by Subsectors

## Industrial Production Indicators

Chained Series of the Seasonally Adjusted Index: 1995=100

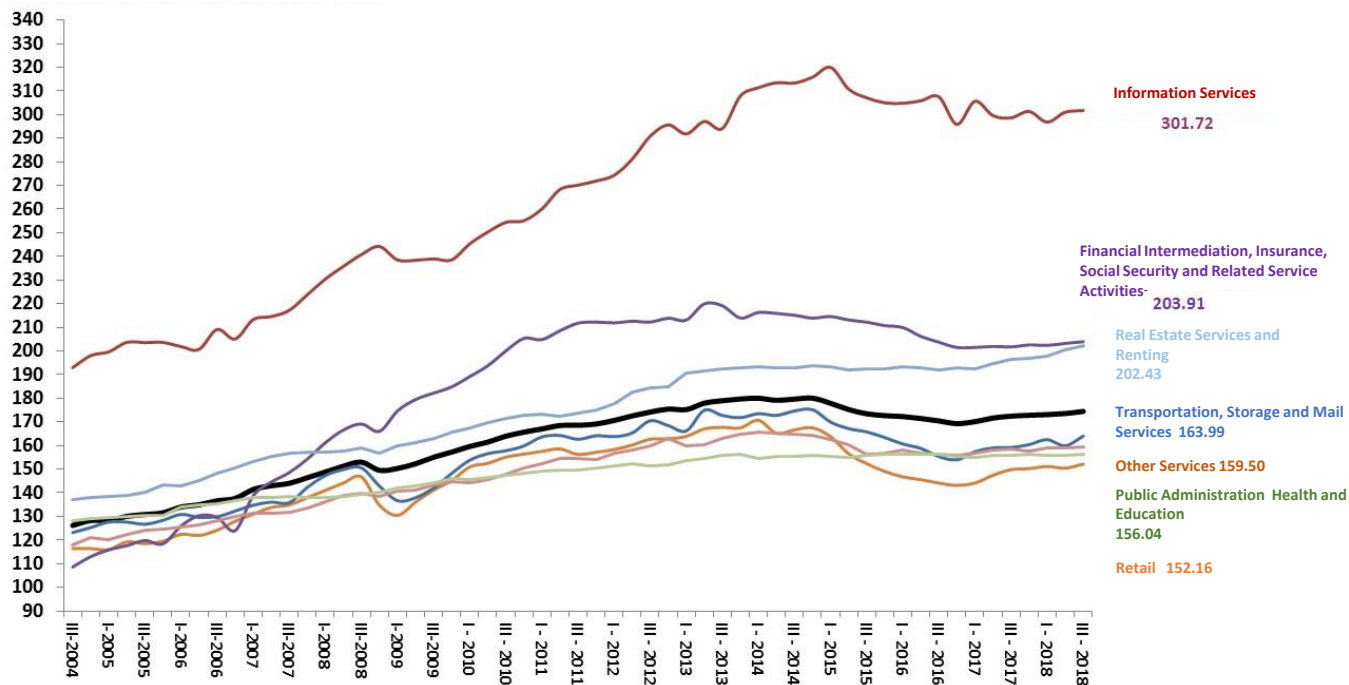


Source: IBGE/MP, Quarterly National Accounts Series.



# Services Performance by Subsectors

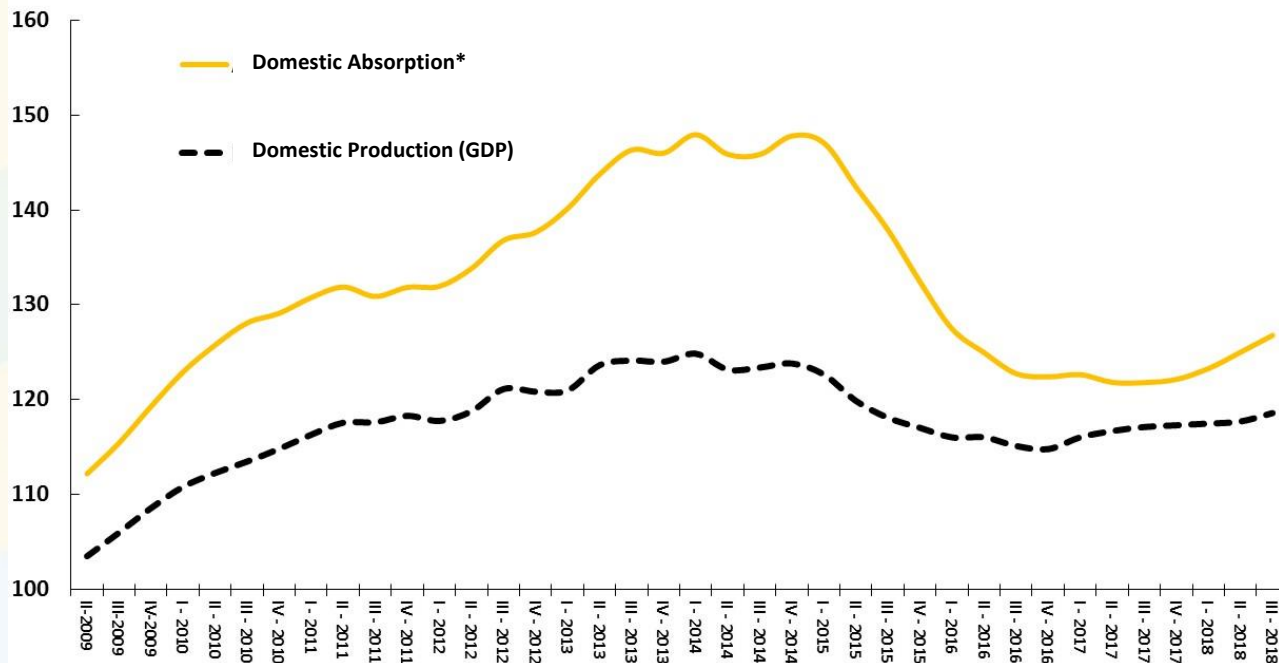
Services Provision Indicators  
Chained Series of the Seasonally Adjusted Index: 1995=100



Source: IBGE/MP, Quarterly National Accounts Series.

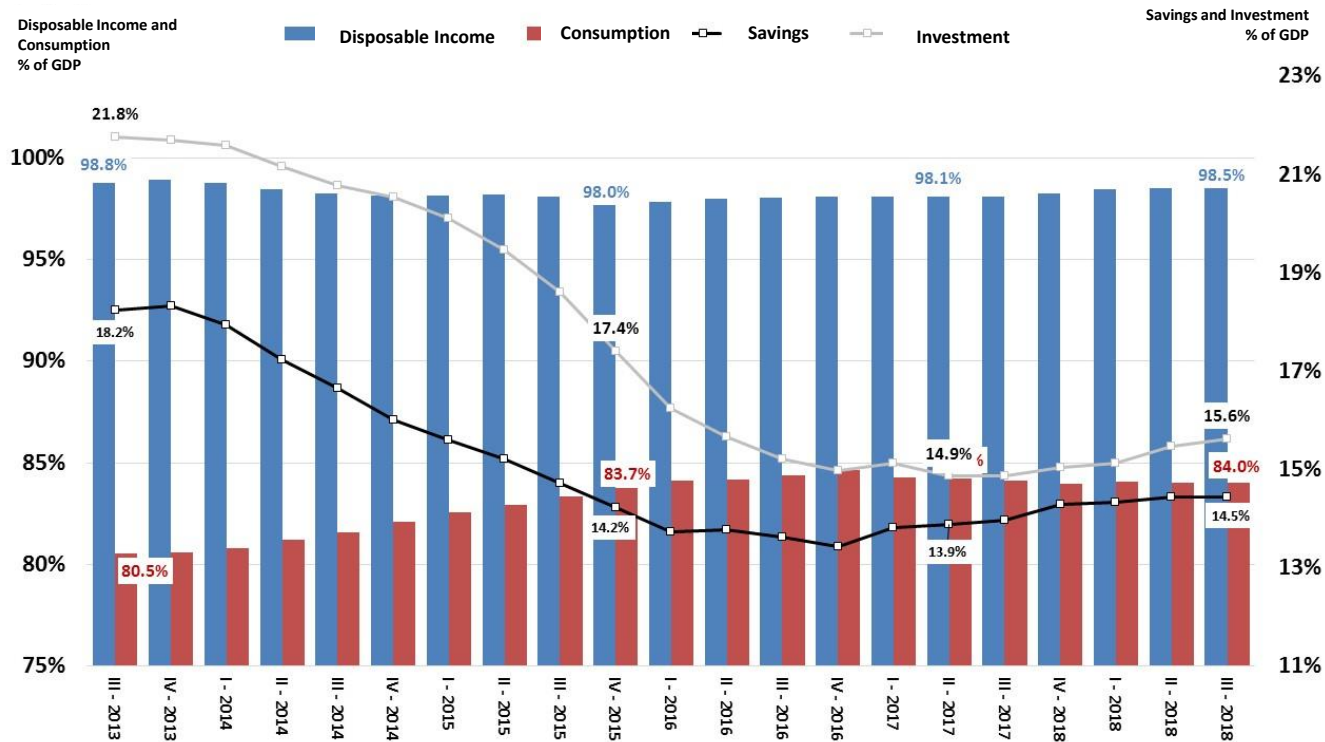
# Domestic Production and Absorption

Domestic Volume and Absorption\* Quarterly Volume Indicator  
Chained Series of the Seasonally Adjusted Index: 2007=100



Source: IBGE/MP, Quarterly National Accounts Series. \* Domestic Absorption = GDP - Exports of Goods and Services + Imports of Goods and Services.

# Disposable Income, Consumption, Savings and Investment

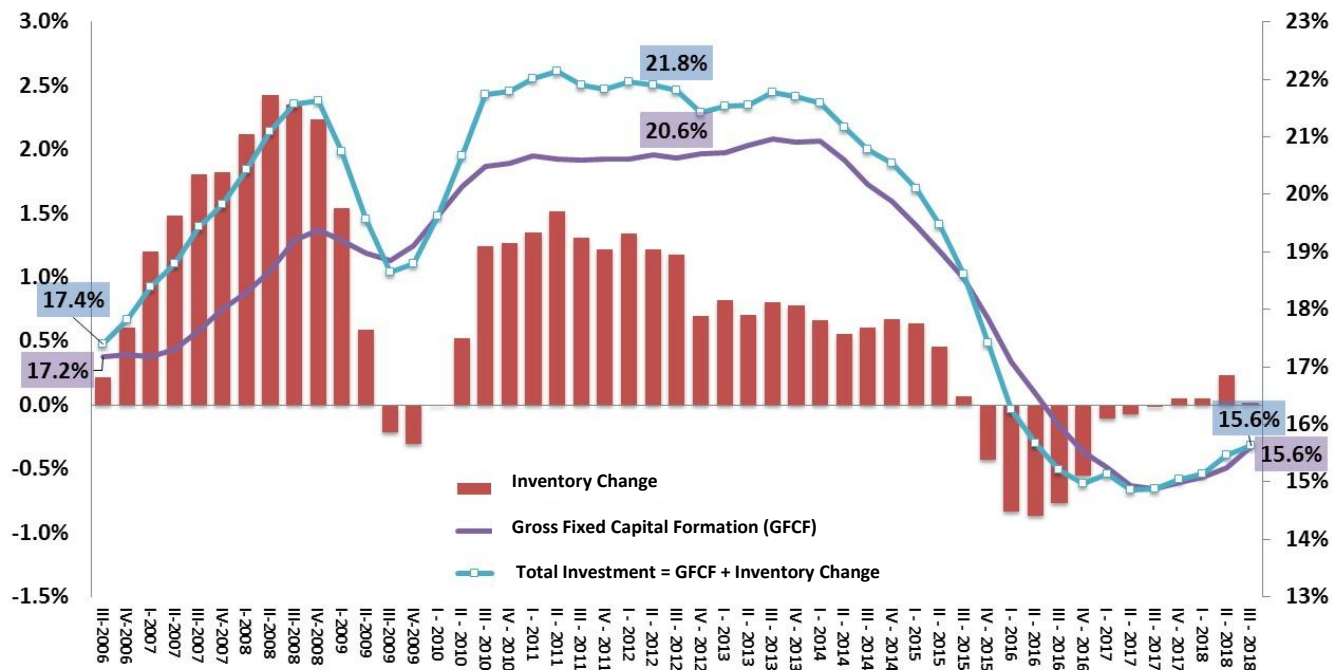


Source: IBGE/MP, Quarterly National Accounts Series.

# Inventory Change and Gross Fixed Capital Formation

Inventory Change (% of GDP)  
Accumulated in 4 quarters

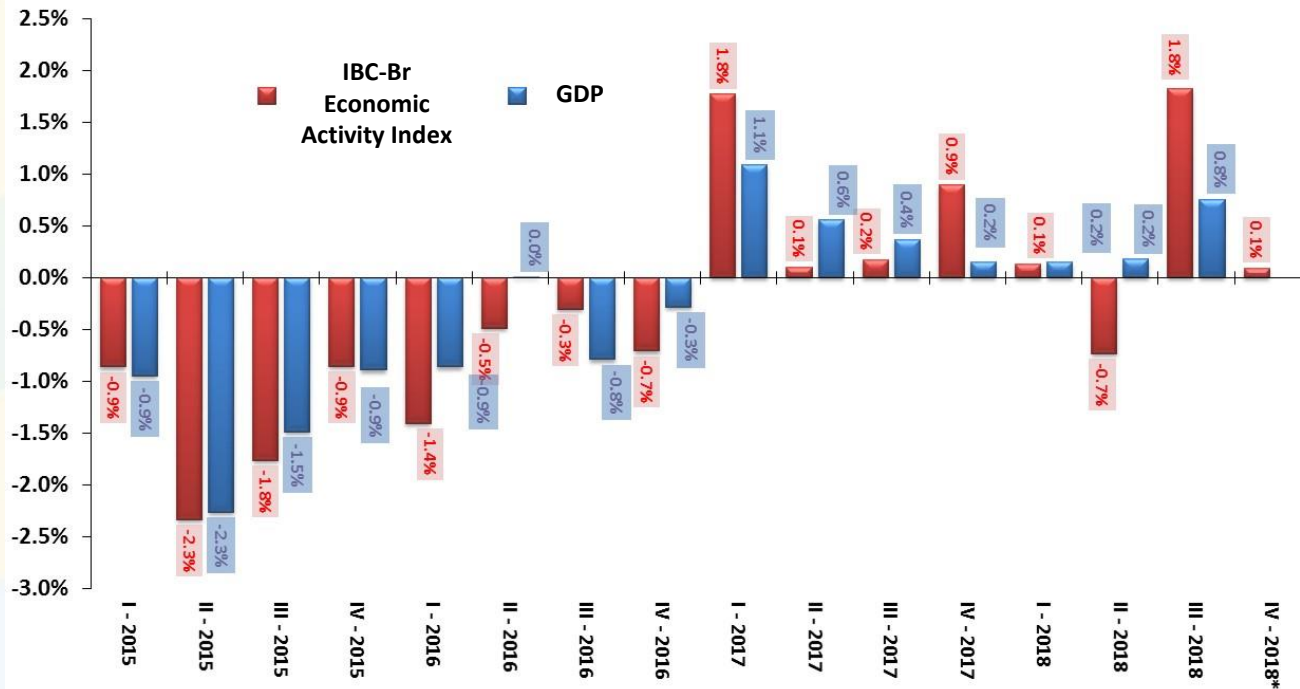
GFCF and Total Investment (% of GDP)  
Accumulated in 4 quarters



Source: IBGE/MP, Quarterly National Accounts Series.

# Quarterly GDP Growth and IBC-Br Economic Activity Index

Quarterly % Change - Seasonally Adjusted Series



Sources: IBGE/MP and Central Bank of Brazil.

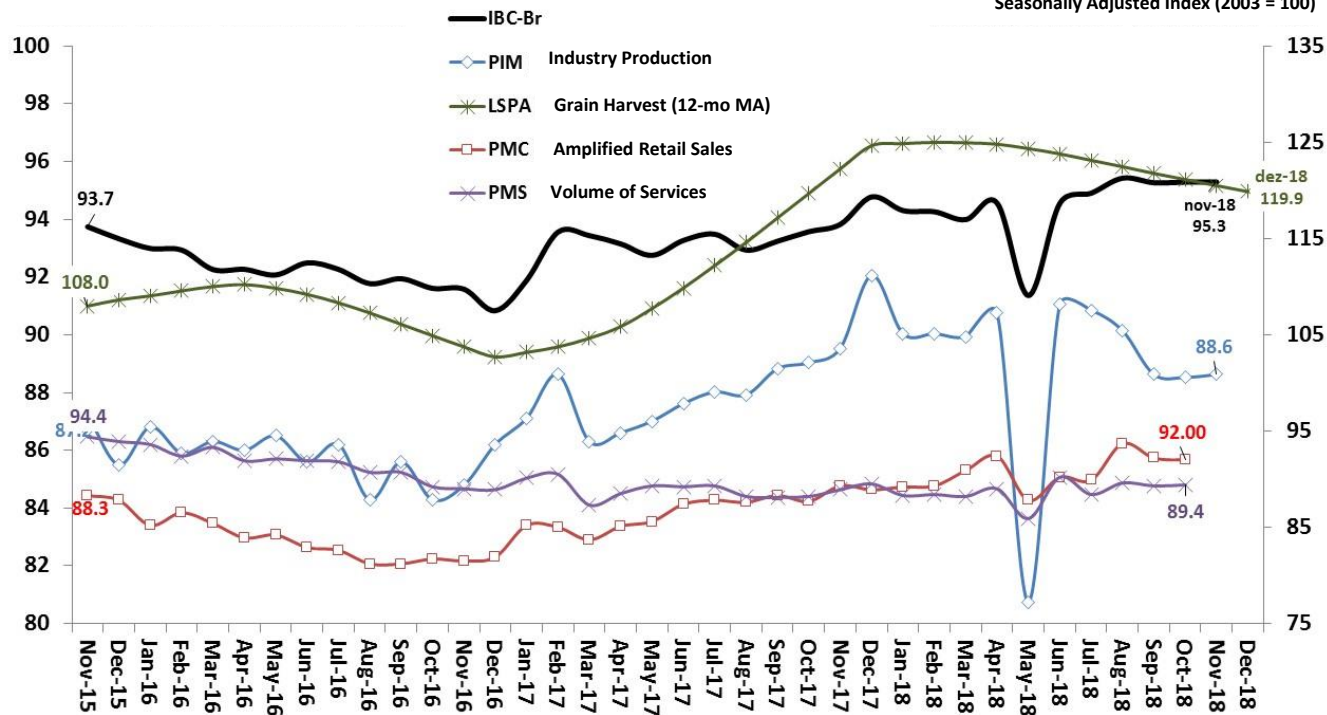
# Monthly Economic Activity

IBC-Br Economic Activity Index	October-18 % change	2016	2017	Sep/18- Sep/17	Oct/18- Oct/17	Sep/18 - Aug/18 (seasonally adjusted)	Oct/18 - Sep/18 (seasonally adjusted)	Year-To-Date	Sep/18 accum. in 12-months	Oct/18 accum. in 12-months	carry-over 2018
<b>IBC-Br Economic Activity Index</b>		<b>-4.0%</b>	<b>1.07%</b>	<b>0.9%</b>	<b>3.0%</b>	<b>-0.2%</b>	<b>0.0%</b>	<b>1.4%</b>	<b>1.5%</b>	<b>1.5%</b>	<b>1.3%</b>
Systematic Survey of Agricultural Production (IBGE)	December-18 % change	2016	2017	Nov/18- Nov/17	Dec/18- Dec/17	Nov/18 - Oct/18 (seasonally adjusted)	Dec/18 - Nov/18 (seasonally adjusted)	Year-To-Date	Nov/18 accum. in 12-months	Dec/18 accum. in 12-months	carry-over 2018
<b>Grain Harvest</b>		<b>-11.3%</b>	<b>21.4%</b>	<b>-6.0%</b>	<b>-5.9%</b>	<b>0.1%</b>	<b>-0.4%</b>	<b>-5.9%</b>	<b>-6.0%</b>	<b>-5.9%</b>	<b>-3.8%</b>
Industry Production (IBGE)	November-18 % change	2016	2017	Oct/18- Oct/17	Nov/18- Nov/17	Oct/18 - Sep/18 (seasonally adjusted)	Nov/18 - Oct/18 (seasonally adjusted)	Year-To-Date	Oct/18 accum. in 12-months	Nov/18 accum. in 12-months	carry-over 2018
<b>General Industry</b>		<b>-6.4%</b>	<b>2.6%</b>	<b>0.7%</b>	<b>-0.9%</b>	<b>-0.1%</b>	<b>0.1%</b>	<b>1.5%</b>	<b>2.2%</b>	<b>1.8%</b>	<b>0.9%</b>
Mining Industry (weight 11,2%)		-9.4%	4.5%	3.9%	3.3%	3.2%	-0.6%	0.9%	0.3%	0.5%	1.1%
Manufacturing Industry (weight 88,8%)		-6.0%	2.3%	0.4%	-1.5%	-0.1%	0.0%	1.6%	2.6%	2.0%	1.1%
Food (weight 13,9%)		0.5%	1.2%	-9.6%	-5.1%	-3.9%	5.9%	-4.7%	-3.5%	-4.1%	-5.3%
Petroleum refinement and alcohol production (weight 10,3%)		-8.5%	-4.2%	-2.6%	-1.9%	-1.7%	0.5%	1.1%	1.3%	1.0%	0.8%
Motor vehicles (weight 10,1%)		-12.1%	17.8%	11.9%	2.2%	2.8%	-4.2%	14.5%	16.8%	15.2%	12.7%
Capital Goods		-10.2%	6.6%	10.8%	3.4%	1.2%	-2.7%	8.2%	8.8%	8.3%	7.6%
Intermediate Goods		-6.5%	1.7%	-0.6%	-1.4%	-0.6%	0.7%	0.6%	1.4%	0.9%	0.1%
Durable Consumer Goods		-14.4%	13.2%	6.7%	-3.4%	2.4%	-3.4%	9.5%	12.0%	10.3%	7.9%
Semi and Non-Durable Consumer Goods		-3.2%	0.9%	-0.1%	-0.2%	-0.3%	0.0%	0.0%	0.3%	0.1%	-0.2%
Typical Construction Inputs		-11.6%	-3.2%	0.9%	5.1%	-6.4%	7.0%	1.4%	2.0%	2.1%	3.3%
Retail Sales (IBGE)	October-18 % change	2016	2017	Sep/18- Sep/17	Oct/18- Oct/17	Sep/18 - Aug/18 (seasonally adjusted)	Oct/18 - Sep/18 (seasonally adjusted)	Year-To-Date	Sep/18 accum. in 12-months	Oct/18 accum. in 12-months	carry-over 2018
<b>Retail Sales</b>		<b>-6.3%</b>	<b>2.1%</b>	<b>0.2%</b>	<b>2.0%</b>	<b>-1.3%</b>	<b>-0.4%</b>	<b>2.3%</b>	<b>2.8%</b>	<b>2.8%</b>	<b>1.8%</b>
<b>Amplified Retail Sales</b>		<b>-8.7%</b>	<b>4.0%</b>	<b>2.2%</b>	<b>6.3%</b>	<b>-1.6%</b>	<b>-0.2%</b>	<b>5.3%</b>	<b>5.8%</b>	<b>5.7%</b>	<b>4.8%</b>
Vehicles, Motorcycles, Parts and Accessories		-14.0%	2.7%	11.1%	20.2%	-0.1%	0.1%	16.2%	14.1%	14.7%	15.9%
Construction Material		-10.7%	9.1%	-1.6%	6.6%	-1.5%	1.3%	4.2%	6.3%	5.4%	3.8%
Fuel and Lubricants		-9.2%	-3.3%	-4.5%	-5.7%	-1.9%	-4.5%	-5.7%	-5.2%	-5.6%	-5.5%
Hypermarkets, Supermarkets, Food, Beverage and Tobacco		-3.1%	1.5%	0.4%	2.2%	-1.3%	-3.9%	4.1%	4.4%	4.4%	3.5%
Textiles, Apparel and Footwear		-10.9%	7.6%	1.2%	4.1%	0.6%	-9.0%	-2.3%	0.0%	0.0%	-1.7%
Furniture and Household Appliances		-12.6%	9.5%	-2.2%	-1.9%	1.5%	-4.9%	-1.1%	2.3%	1.4%	-1.7%
Volume of Services (IBGE)	October-18 % change	2016	2017	Sep/18- Sep/17	Oct/18- Oct/17	Sep/18 - Aug/18 (seasonally adjusted)	Oct/18 - Sep/18 (seasonally adjusted)	Year-To-Date	Sep/18 accum. in 12-months	Oct/18 accum. in 12-months	carry-over 2018
<b>Volume of Services</b>		<b>-5.0%</b>	<b>-2.8%</b>	<b>0.4%</b>	<b>1.6%</b>	<b>-0.3%</b>	<b>0.1%</b>	<b>-0.2%</b>	<b>-0.3%</b>	<b>-0.1%</b>	<b>-0.1%</b>
Services Rendered to Families		-4.4%	-1.1%	0.6%	2.0%	1.4%	-1.0%	-0.5%	-0.7%	-0.6%	0.0%
Information and Communication Services		-3.2%	-2.0%	2.5%	1.4%	0.5%	0.5%	-0.9%	-0.9%	-0.6%	-0.8%
Professional, Administrative and Complementary Services		-5.5%	-7.3%	-2.2%	-0.2%	-1.0%	-1.9%	-1.7%	-2.8%	-2.3%	-1.9%
Transportation, Support Activities for Transportation and Mailing Activities		-7.6%	2.2%	1.1%	2.3%	-1.7%	-0.2%	1.4%	2.6%	2.1%	1.1%
Other Services		-2.8%	-8.9%	-4.0%	2.5%	-3.9%	5.5%	1.6%	-0.8%	-0.1%	1.7%

# Major Monthly Economic Activity Indicators

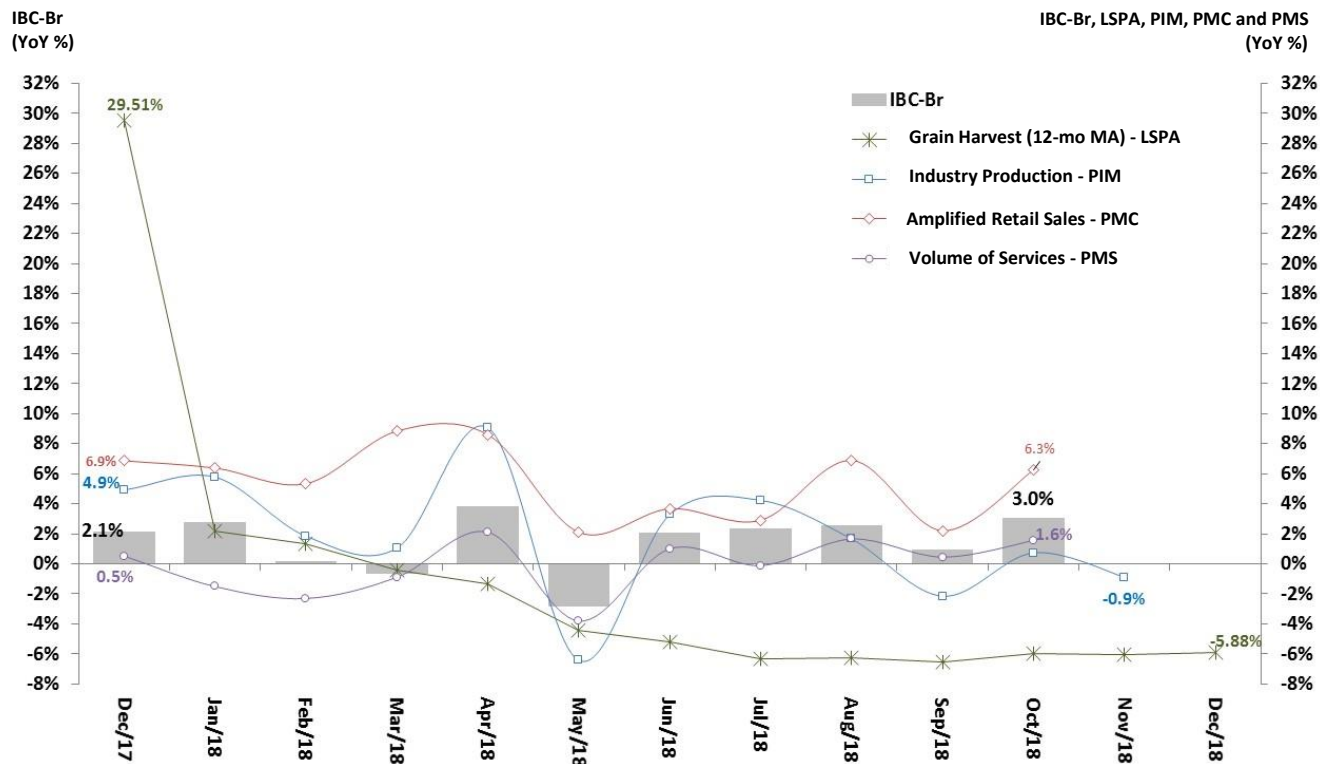
IBC-Br, Grain Harvest (12-mo MA) and Industry Production  
Seasonally Adjusted Index (2003 = 100)

Amplified Retail Sales and Volume of Services  
Seasonally Adjusted Index (2003 = 100)



Sources: Central Bank of Brazil and IBGE/MP: Systematic Survey of Agricultural Production (LSPA), Monthly Survey of Industry (PIM), Monthly Survey of Trade (PMC), and Monthly Survey of Services (PMS).

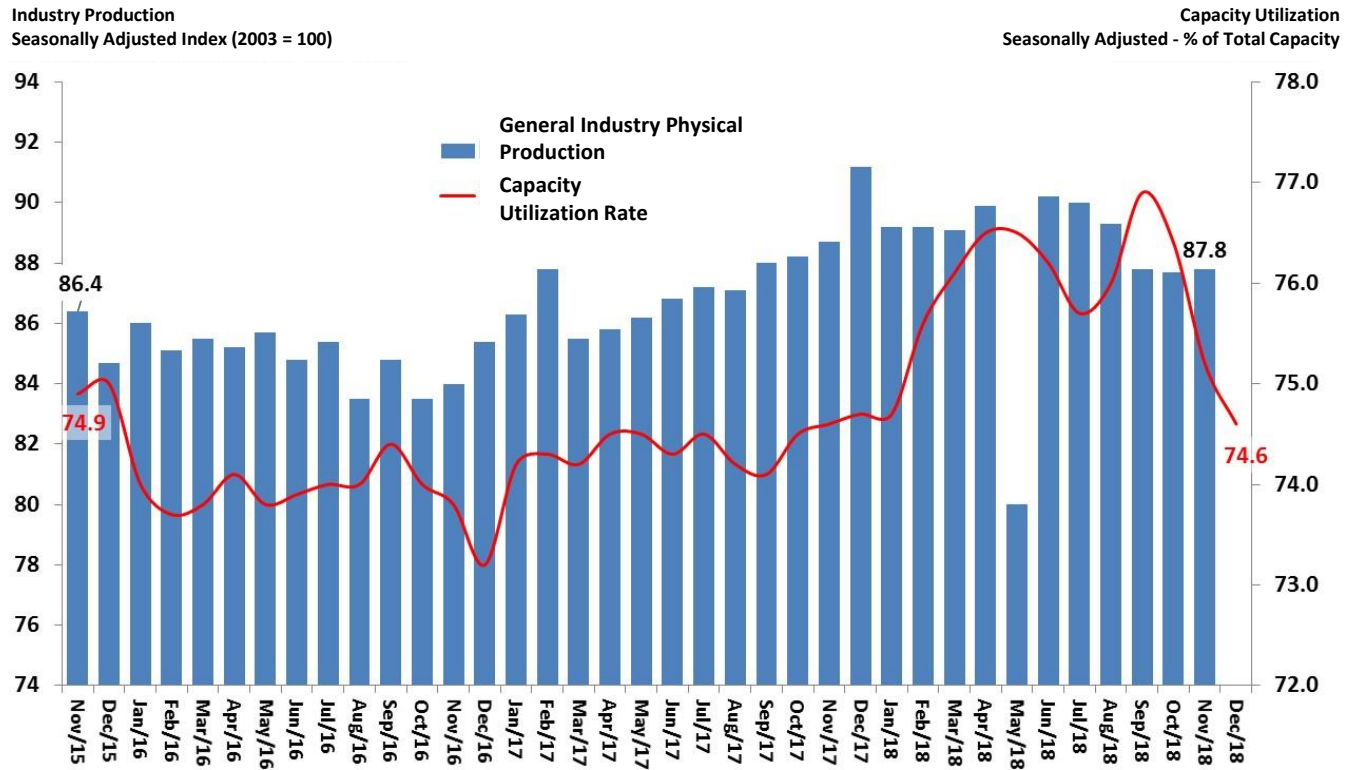
# Major Monthly Economic Activity Indicators



Sources: Central Bank of Brazil and IBGE/MP: Systematic Survey of Agricultural Production (LSPA), Monthly Survey of Industry (PIM), Monthly Survey of Trade (PMC), and Monthly Survey of Services (PMS).

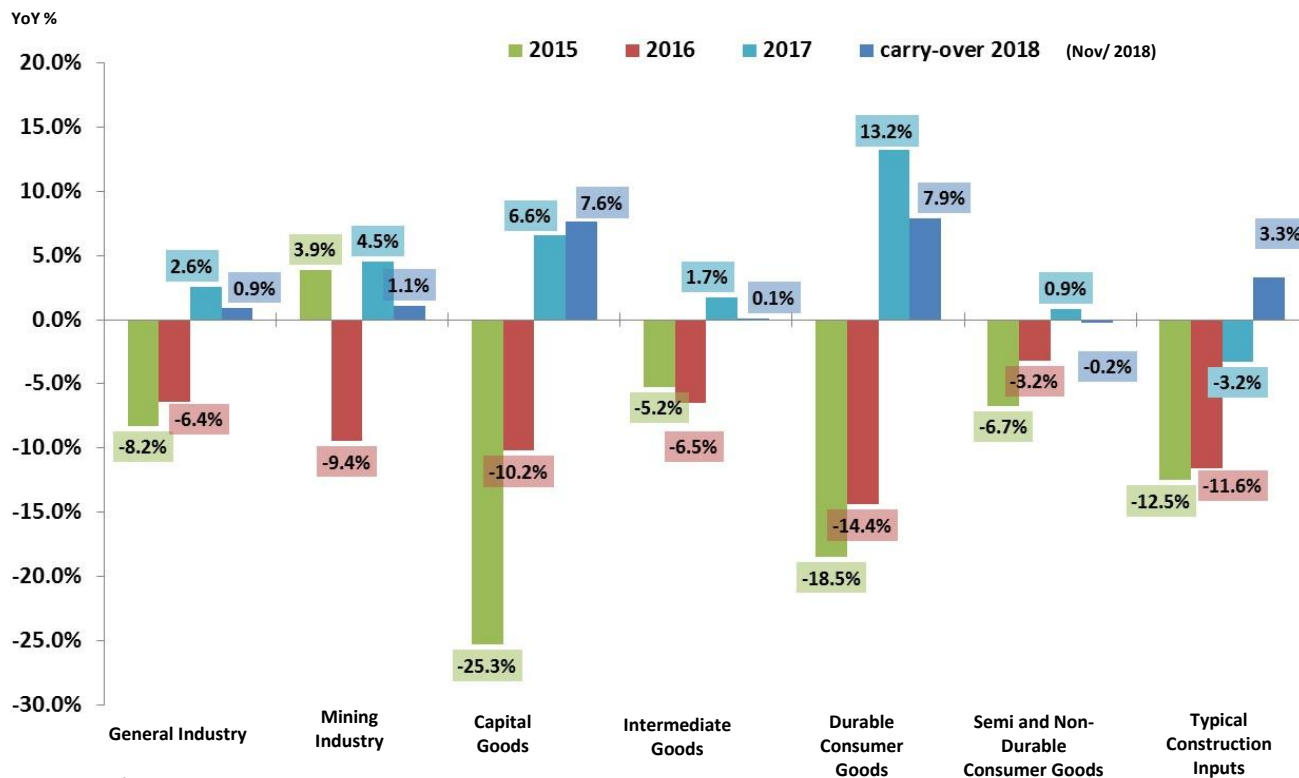


# Industrial Production and Capacity Utilization



Sources: Central Bank of Brazil and IBGE/MP: Systematic Survey of Agricultural Production (LSPA), Monthly Survey of Industry (PIM), Monthly Survey of Trade (PMC), and Monthly Survey of Services (PMS).

# Total Industrial Production and Economic Categories

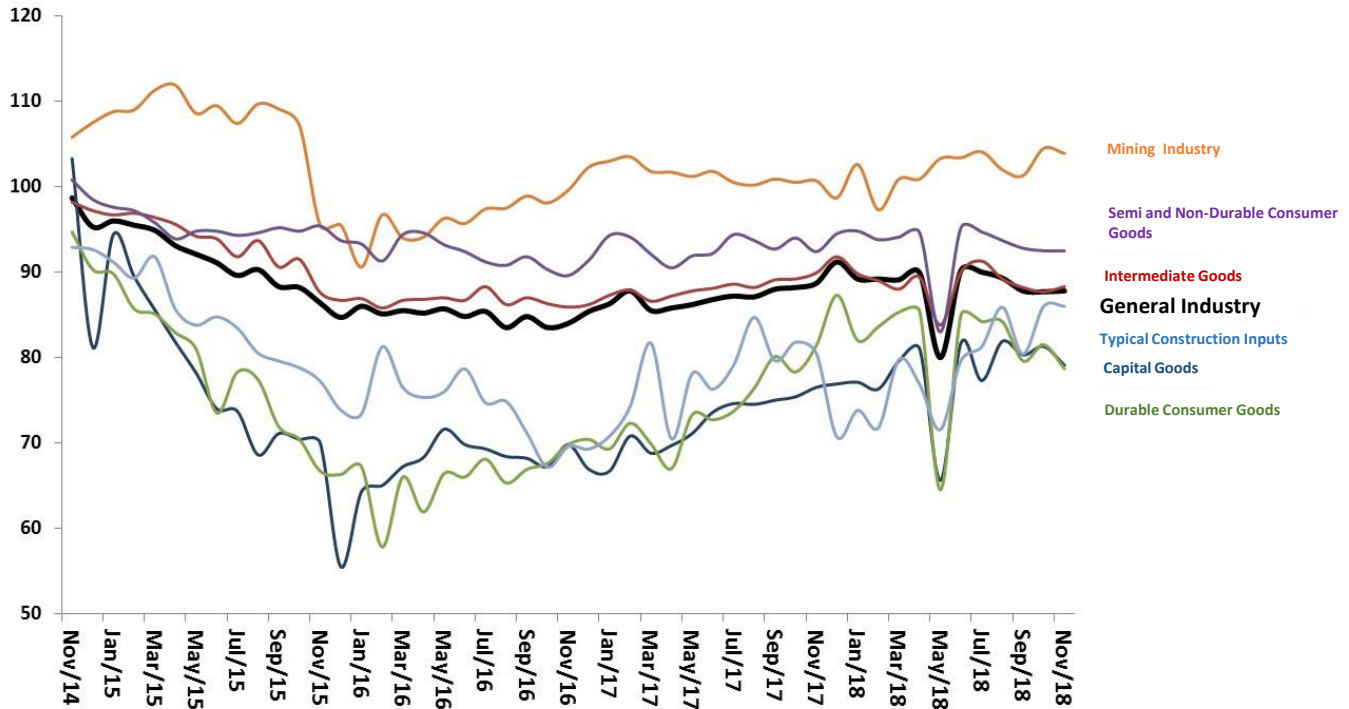


Source: IBGE/MP, Monthly Survey of Industry (PIM).

Note: Carry-over 2018 based on Nov-2018 compared to 2017 average.

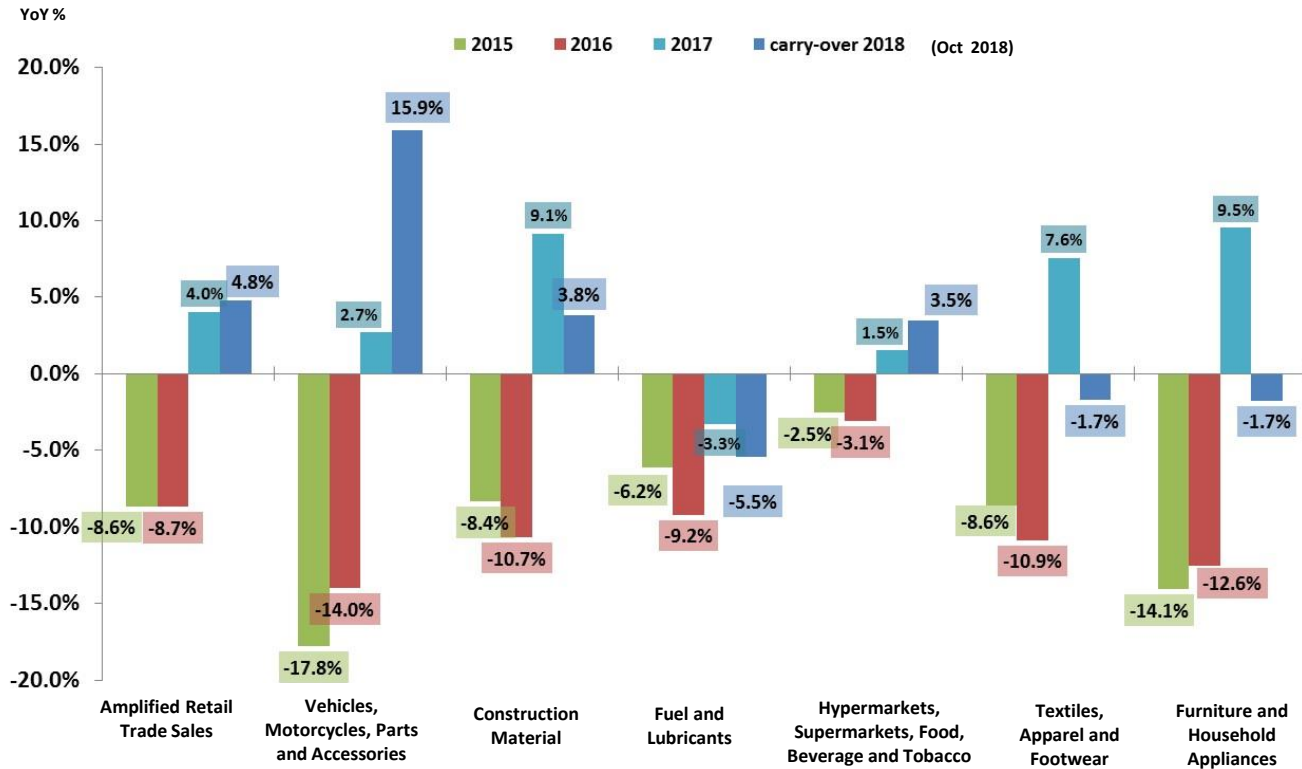
# Total Industrial Production and Economic Categories

Industry Physical Production by Economic Category  
Seasonally Adjusted Index (2002 = 100)



Source: IBGE/MP, Monthly Survey of Industry (PIM).

# Total Retail Sales and Subsectors

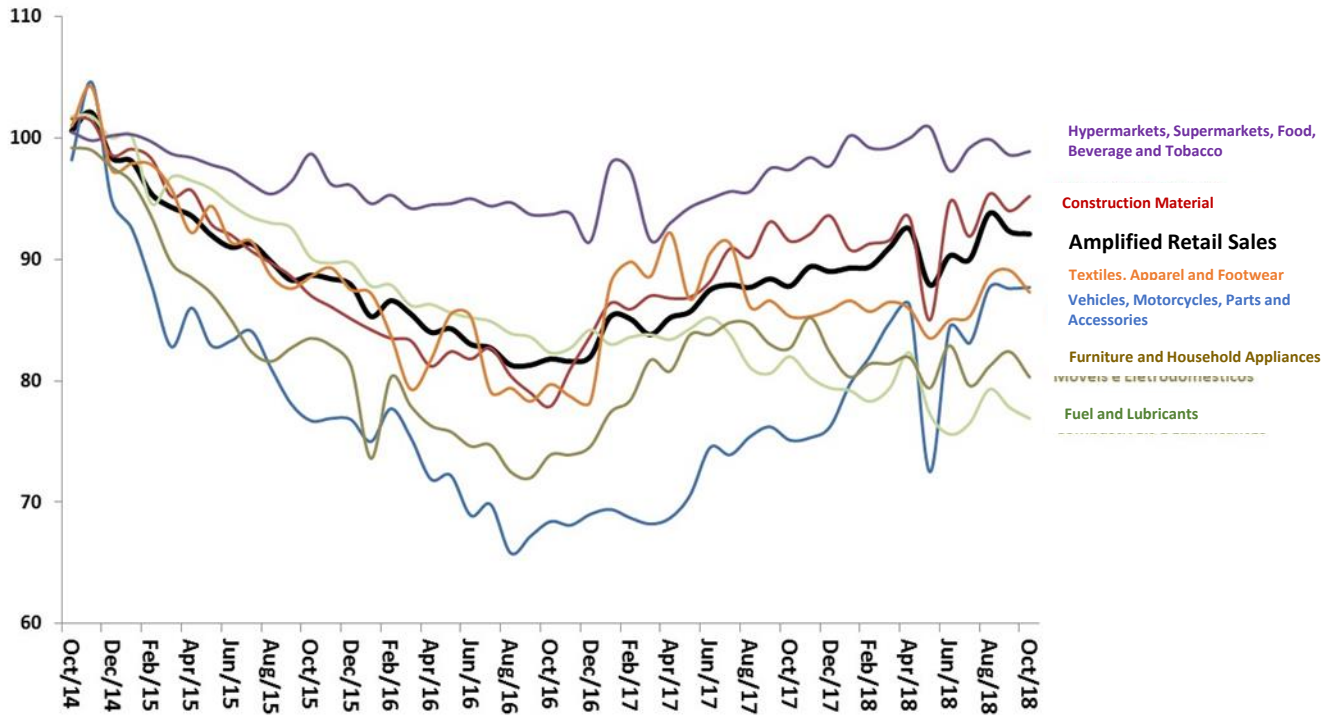


Source: IBGE/MP, Monthly Survey of Trade (PMC).

Note: Carry-over 2017 based on Oct-2018 compared to 2017 average.

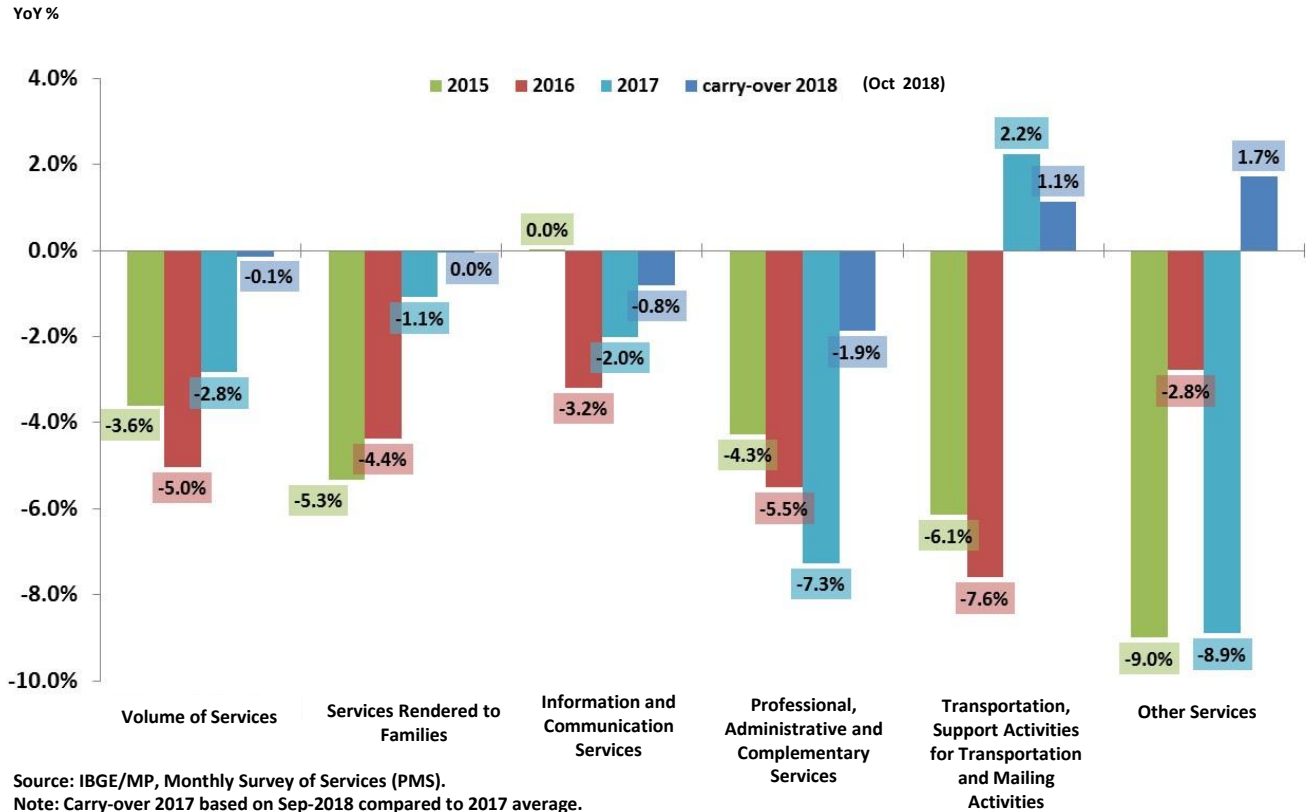
# Total Retail Sales and Subsectors

Retail Sales by Subsector  
Seasonally Adjusted Index (2002 = 100)



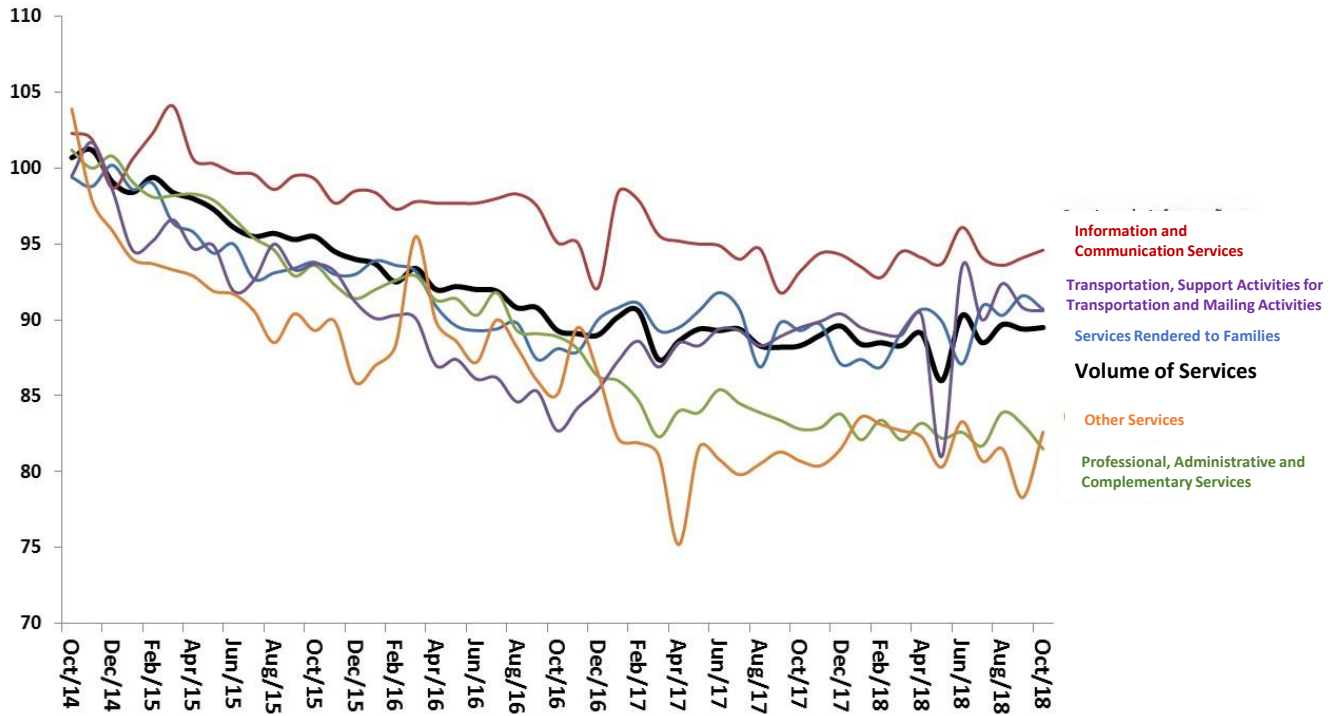
Source: IBGE/MP, Monthly Survey of Trade (PMC).

# Volume of Services and Subsectors



# Total Services and Subsectors

Volume of Services by Subsector  
Seasonally Adjusted Index (2002 = 100)



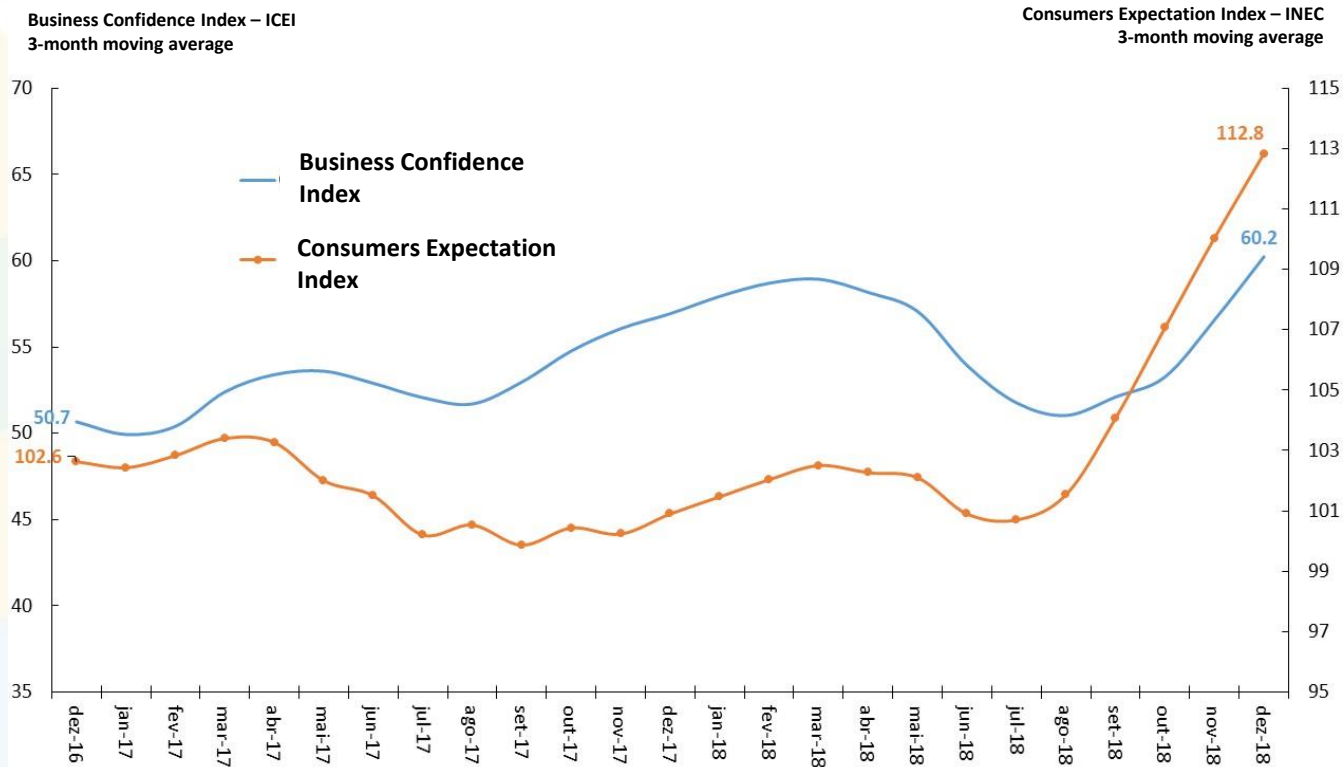
Source: IBGE, Monthly Survey of Services (PMS).

# Other Monthly Economic Activity Indicators

October-18		2017	Sep/18- Sep/17	Oct/18- Oct/17	Sep/18 - Aug/18 (seasonally adjusted)	Oct/18 - Sep/18 (seasonally adjusted)	Year-To-Date	Sep/18 accum. in 12-months	Oct/18 accum. in 12-months	carry-over 2018
% change										
<b>Industry Indicators (CNI)</b>										
Real Sales Revenue		-0.1%	3.0%	2.4%	-1.8%	-2.2%	4.8%	5.6%	4.8%	3.8%
Working Hours in Production		-2.1%	-1.9%	1.1%	-0.7%	0.0%	0.5%	0.4%	0.4%	0.1%
Capacity Utilization - UCI										
effective level: 78.5		0.4%	-0.3%	-0.9%	-0.9%	-0.3%	0.5%	0.9%	0.7%	0.2%
<b>Natural Gas and Oil Production (ANP)</b>		4.4%	-6.7%	-0.8%	-2.2%	5.6%	-1.8%	-1.8%	-1.9%	-1.3%
November-18		2017	Oct/18- Oct/17	Nov/18- Nov/17	Oct/18 - Sep/18 (seasonally adjusted)	Nov/18 - Oct/18 (seasonally adjusted)	Year-To-Date	Oct/18 accum. in 12-months	Nov/18 accum. in 12-months	carry-over 2018
% change										
Industry Inventories (CNI) - Final Goods - planned x realized		effective level: 50.2	1.0%	1.8%	0.8%	-0.6%	1.0%	0.9%	1.0%	1.0%
Supermarket Sector Total Retail Sales (ABRAS)			1.3%	1.6%	3.3%	-0.1%	2.6%	2.3%	2.4%	2.5%
Corrugated Fiberboard Sales (ABPO)			5.1%	4.4%	0.9%	0.6%	-0.6%	2.0%	2.8%	1.9%
Heavy Vehicles Road Traffic (ABCR)			0.8%	1.8%	0.6%	0.3%	0.6%	1.3%	1.0%	0.6%
Electric Energy Consumption - Total (EPE)			1.2%	1.1%	1.3%	0.2%	1.1%	1.3%	1.2%	1.1%
Industry Consumption (EPE)			1.3%	0.8%	1.1%	-0.2%	0.7%	1.9%	1.7%	1.4%
<b>Electric Energy System Supply (ONS)</b>			1.5%	1.5%	2.5%	0.2%	1.0%	1.4%	1.5%	1.4%
December-18		2017	Nov/18- Nov/17	Dec/18- Dec/17	Nov/18 - Oct/18 (seasonally adjusted)	Dec/18 - Nov/18 (seasonally adjusted)	Year-To-Date	Nov/18 accum. in 12-months	Dec/18 accum. in 12-months	carry-over 2018
% change										
Business Confidence - ICEI (CNI)		effective level: 63.8	19.7%	11.9%	9.4%	18.0%	0.3%	4.6%	5.5%	4.7%
Sao Paulo Industry Confidence - ICEI-SP (FIESP)		effective level: 64.3	26.1%	12.1%	7.5%	26.9%	-2.2%	2.9%	4.6%	2.9%
Consumer Expectations - INEC (CNI)		effective level: 114.3	0.3%	12.5%	13.7%	3.0%	1.8%	3.6%	2.5%	3.6%
Industry Capacity Utilization - NUCI (FGV)		effective level: 75.7	0.7%	0.9%	-0.3%	-1.6%	-0.8%	2.0%	2.2%	2.0%
Industry Confidence (FGV)		effective level: 92.0	12.5%	-2.8%	-4.2%	0.2%	0.5%	6.6%	8.5%	6.6%
Consumer Confidence (FGV)		effective level: 84.3	8.5%	8.0%	5.4%	3.5%	0.9%	7.5%	8.2%	7.5%
Services Confidence (FGV)		effective level: 103.6	15.2%	6.8%	10.2%	7.5%	5.7%	7.3%	8.0%	7.3%
Construction Confidence (FGV)		effective level: 94.9	13.1%	6.1%	6.4%	8.2%	0.6%	4.7%	5.6%	4.7%
Retail Confidence (FGV)		effective level: 95.0	14.6%	6.7%	6.1%	5.8%	1.4%	6.9%	7.8%	6.9%
<b>Total Vehicles Production (ANFAVEA)</b>			24.0%	-1.7%	-16.8%	-1.5%	-7.7%	6.7%	8.6%	6.7%
Car Production			26.1%	-1.9%	-18.1%	-3.7%	-12.6%	5.2%	7.3%	5.2%
Commercial Vehicles Production			37.3%	23.0%	-0.8%	-4.7%	3.5%	27.1%	32.5%	27.1%
<b>Total Vehicles Exports (ANFAVEA)</b>			48.3%	-52.9%	-48.1%	-13.6%	-1.7%	-17.9%	-13.8%	-17.9%
<b>Total Vehicles Sales/Licensing (FENABRAVE)</b>			9.2%	13.1%	10.3%	-6.1%	0.7%	14.6%	14.0%	14.6%
Domestic Vehicles Sales/Licensing			12.3%	12.3%	10.3%	-5.8%	1.0%	13.6%	12.5%	13.0%
Imported Vehicles Sales/Licensing			-10.7%	19.8%	10.4%	-6.9%	-0.2%	27.2%	27.2%	28.0%



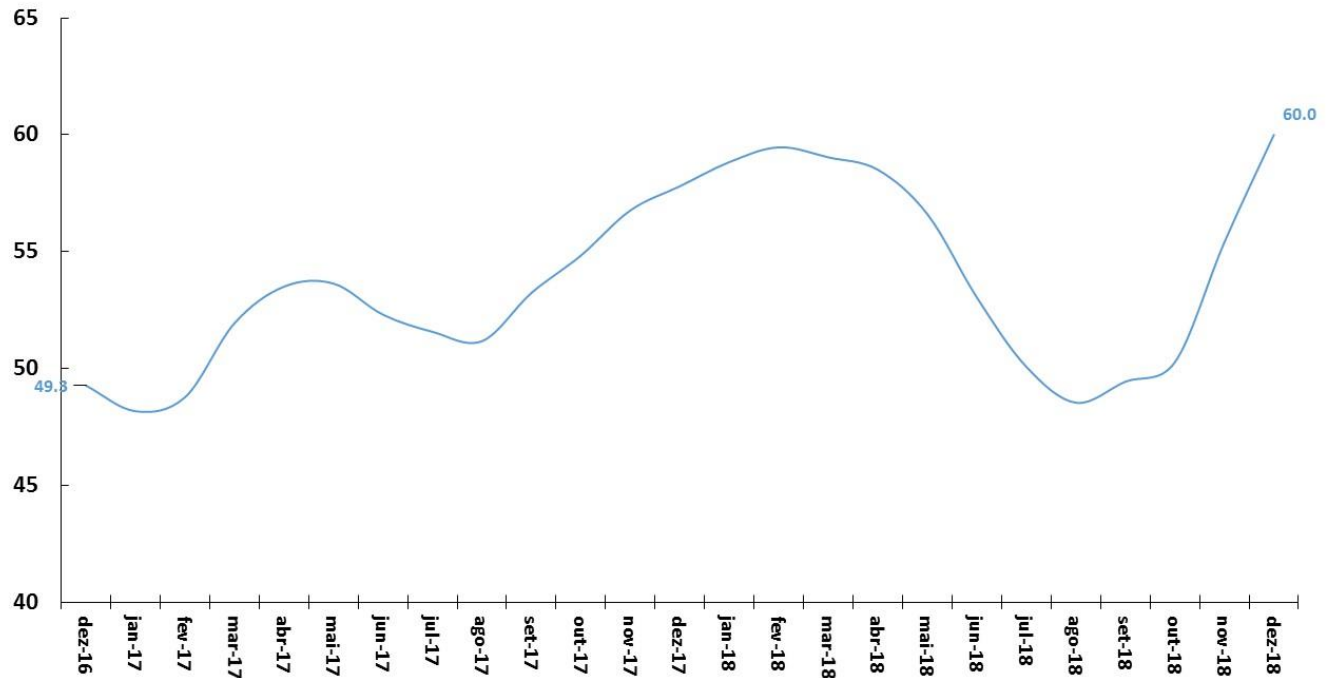
# CNI: Business Confidence and Consumers Expectation Indexes



Source: CNI.

# FIESP: Industry Confidence Index

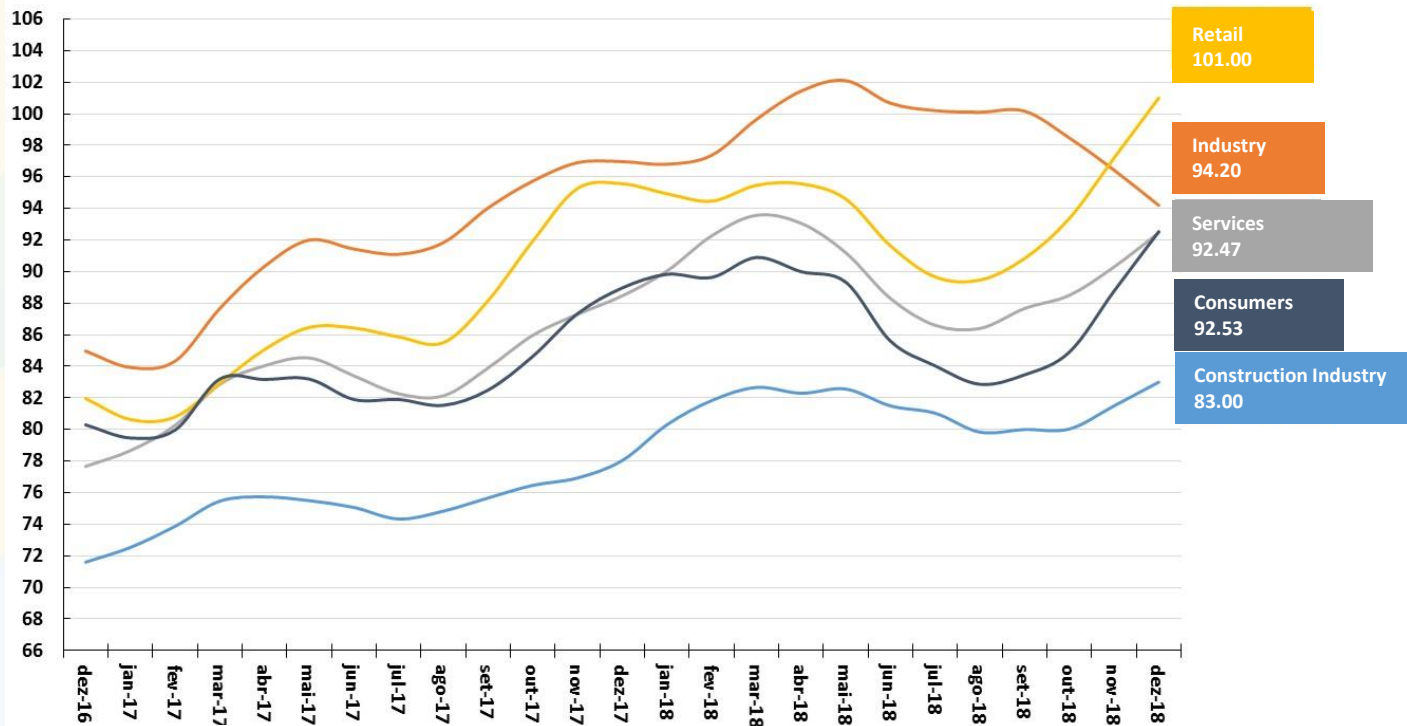
Sao Paulo Industry Confidence - ICEI-SP  
3-month moving average



Source: FIESP.

# FGV: Economic Confidence Indicators

Economic Confidence Indicators  
3-month moving average

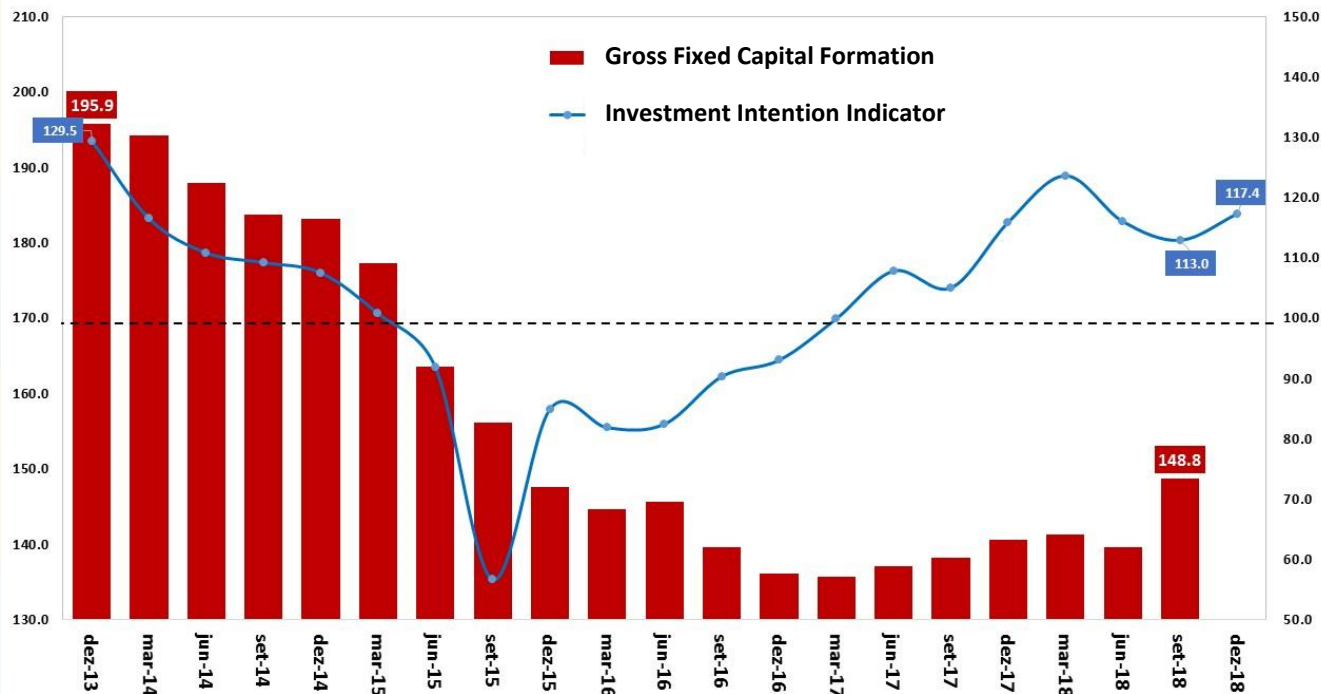


Source: IBRE/FGV.

# Gross Fixed Capital Formation and Investment Intention

Gross Fixed Capital Formation (Quarterly National Accounts)  
Chained Series of the Seasonally Adjusted Index: 1995=100

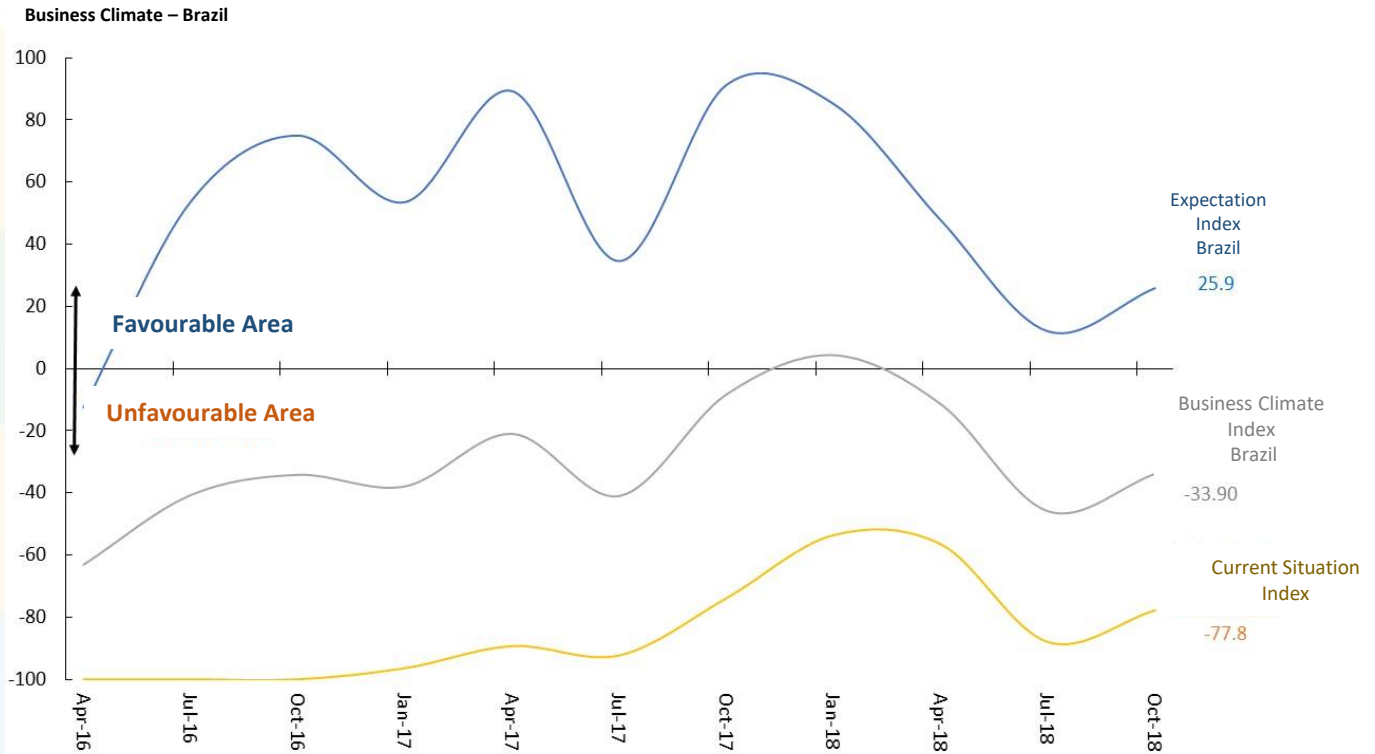
Investment Intention Indicator\*  
IBRE/FGV Investments Survey



Source: IBGE/MP e IBRE/FGV.

\*Note: Measures the difference between positive and negative answers, plus 100.

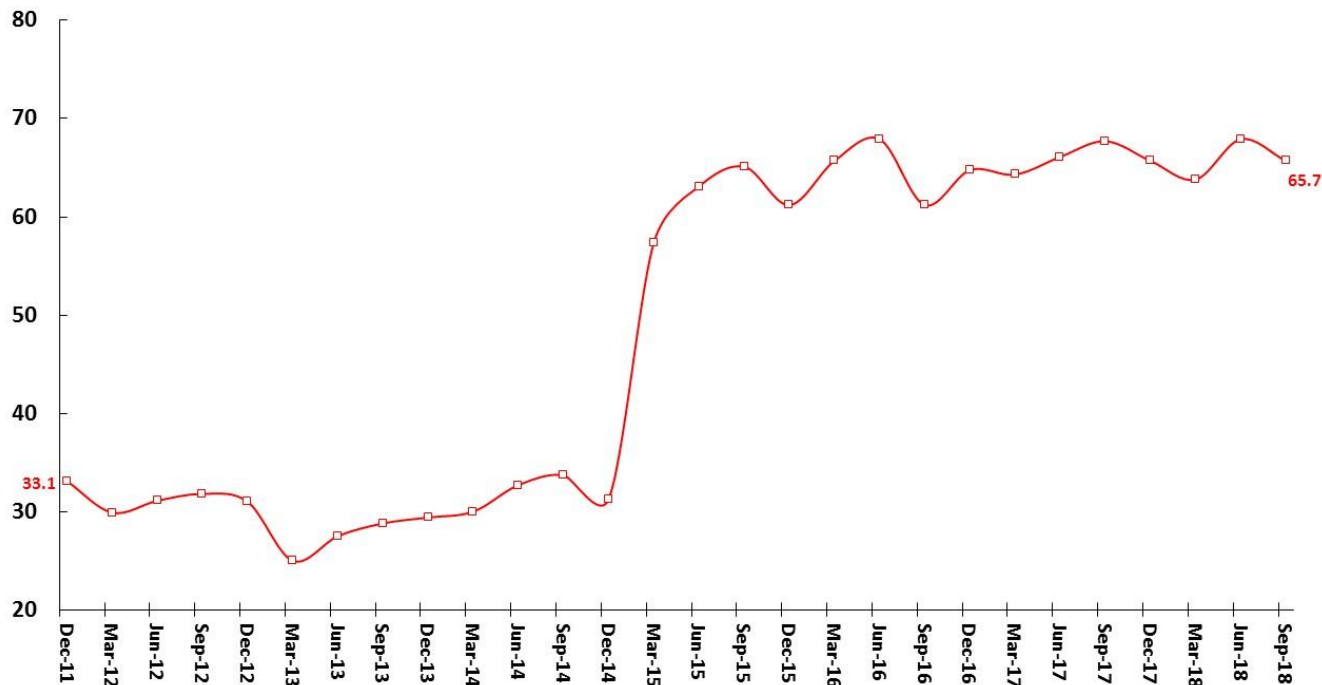
# IFO / FGV: Business Climate Index - Brazil



Source: IFO and FGV.

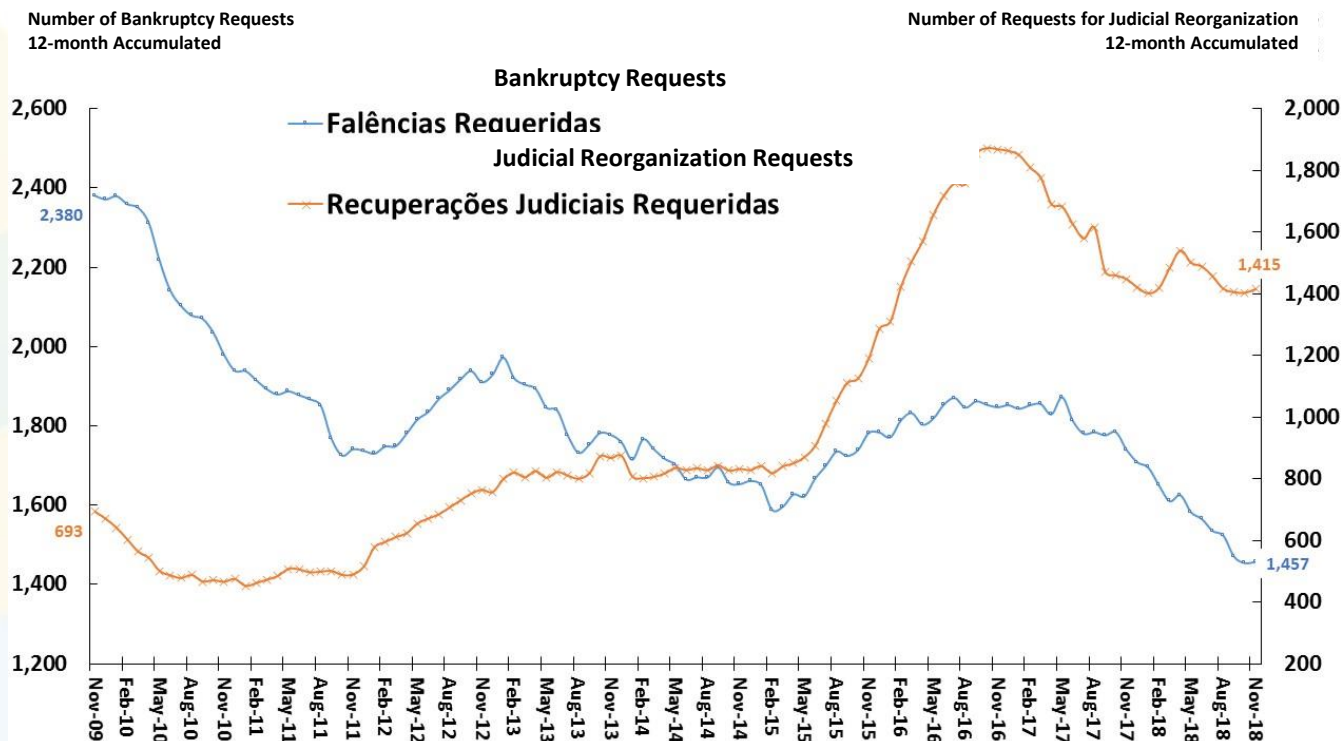
# CNI: Fear of Unemployment Index

Fear of Unemployment and Life Satisfaction (CNI)  
3-month moving average



Source: CNI.

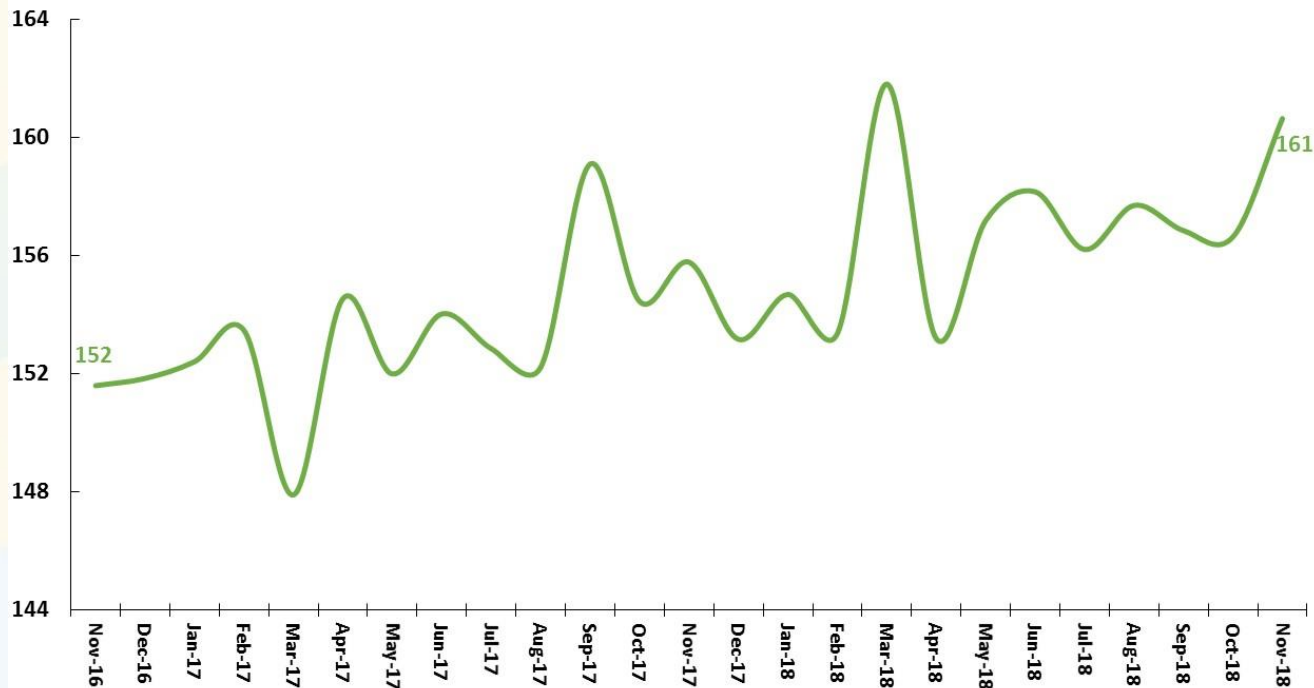
# Bankruptcy and Judicial Reorganization Requests



Source: Serasa-Experian.

# ABRAS: Supermarket Sector Total Retail Sales

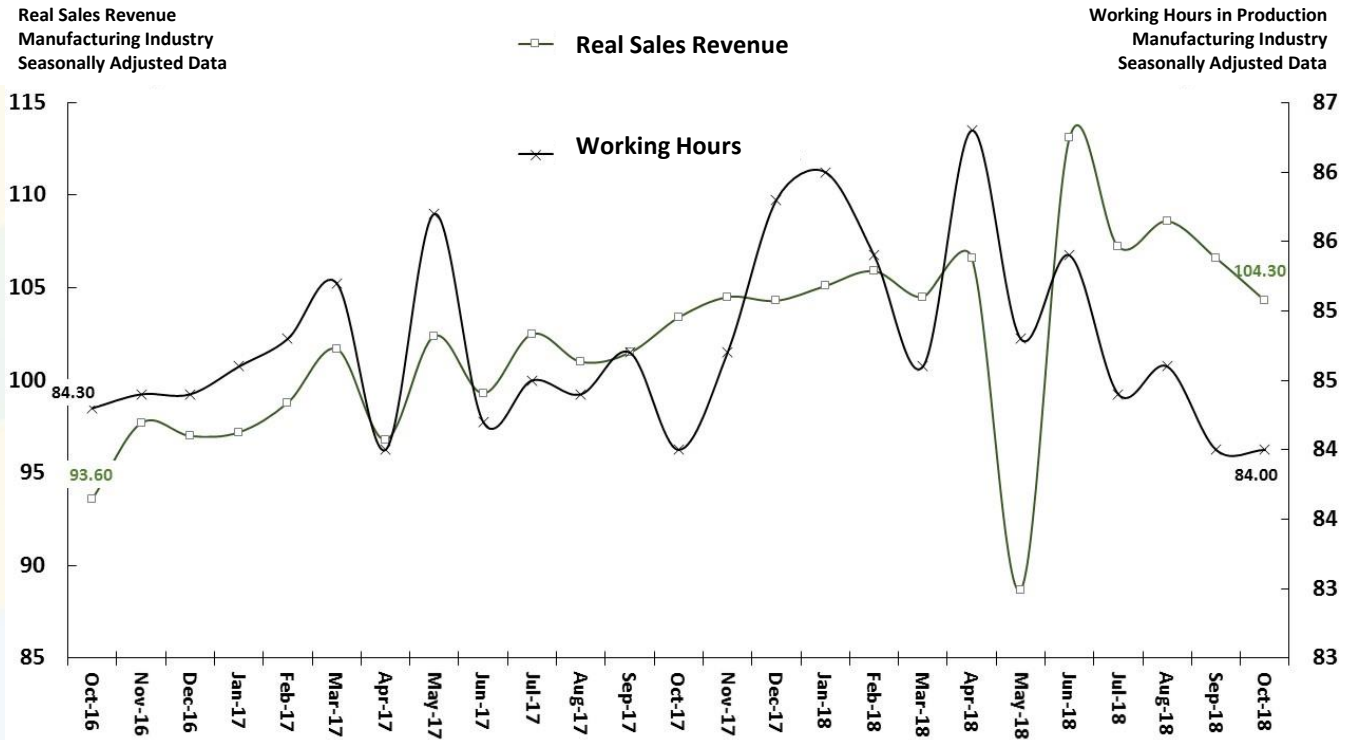
Total Retail Sales  
Seasonally Adjusted Data\*



Source: ABRAS. \* Seasonally adjusted by SEPLAN/MP.



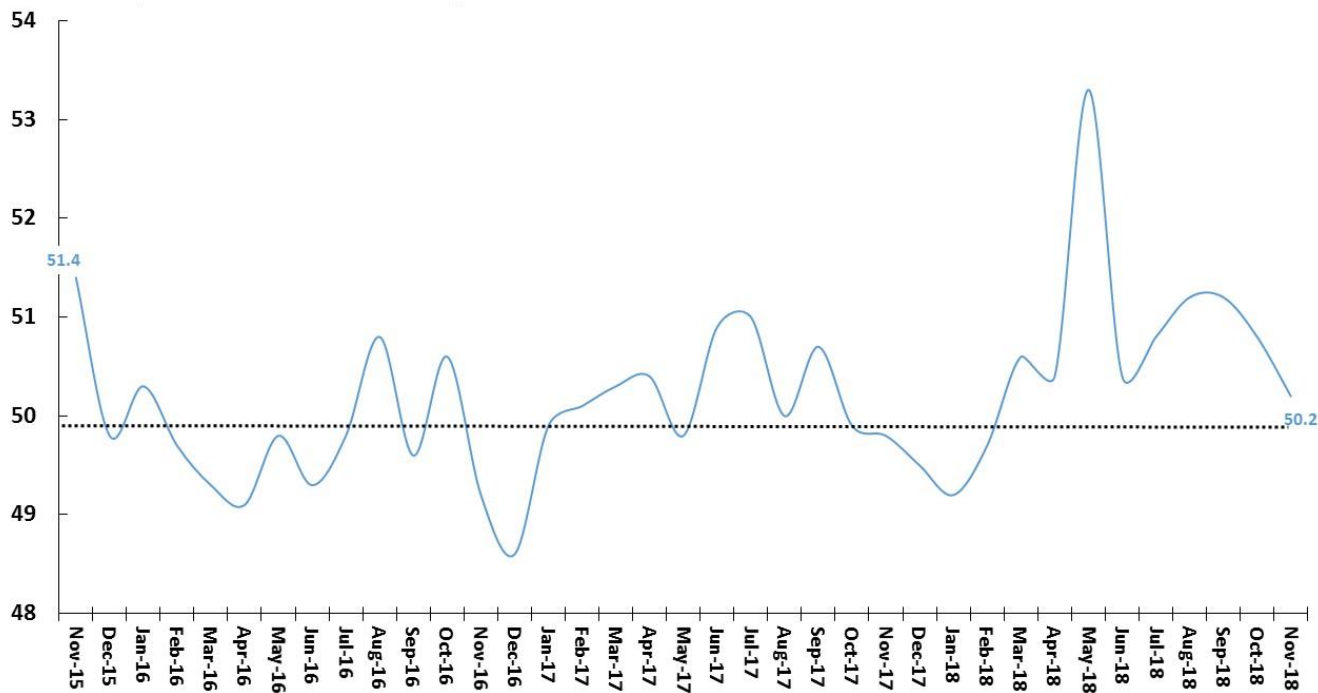
# CNI: Industry Real Sales Revenues and Working Hours



Source: CNI.

# CNI: Industry Inventory

General Industry Inventories Level  
Final Goods - planned x effective

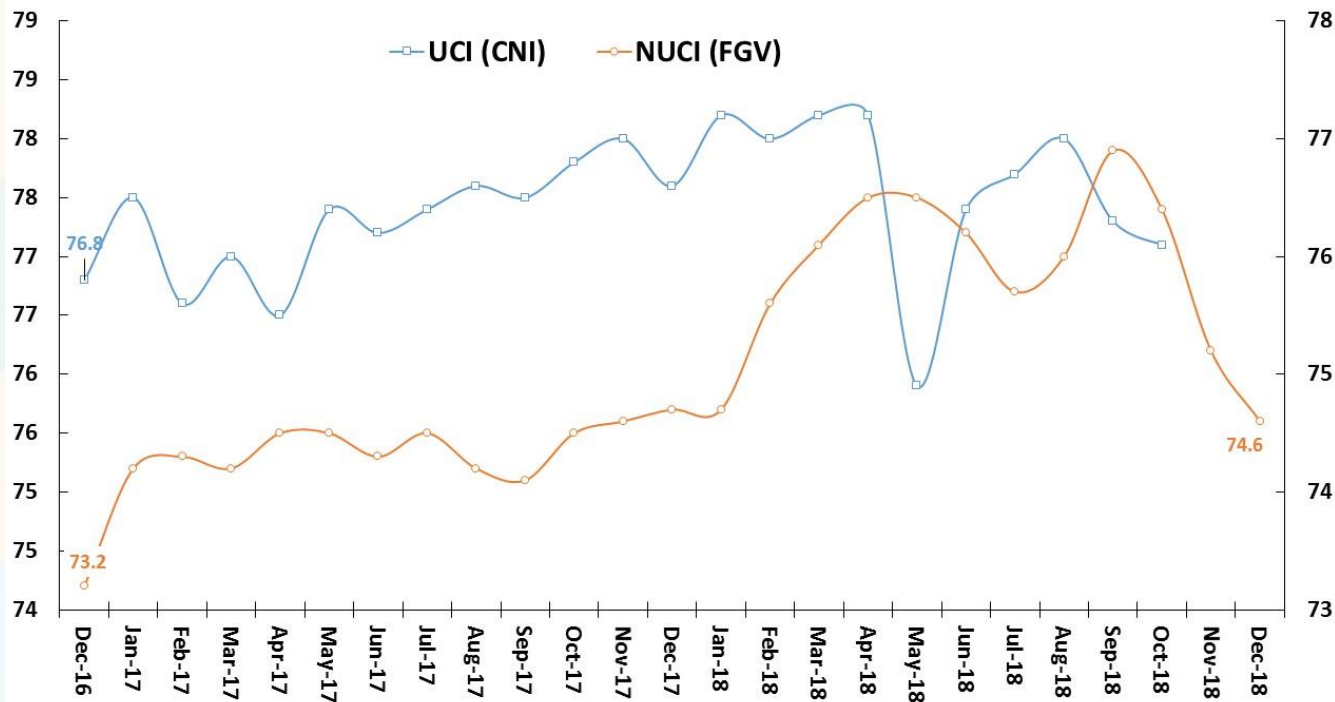


Source: CNI.

# Capacity Utilization Rate

Capacity Utilization Rate - UCI (CNI)  
Seasonally Adjusted Data

Industry Capacity Utilization Rate – NUCI (FGV)  
Seasonally Adjusted Data

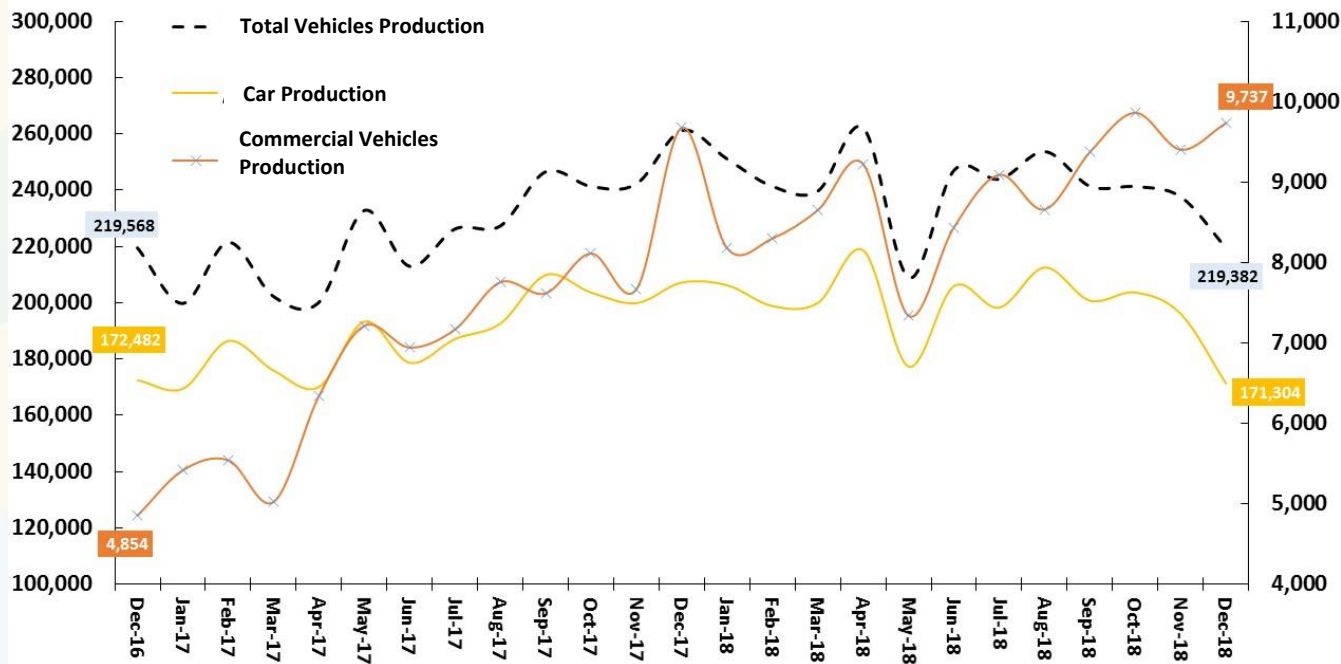


Source: CNI and FGV.

# Anfavea: Automotive Sector Production

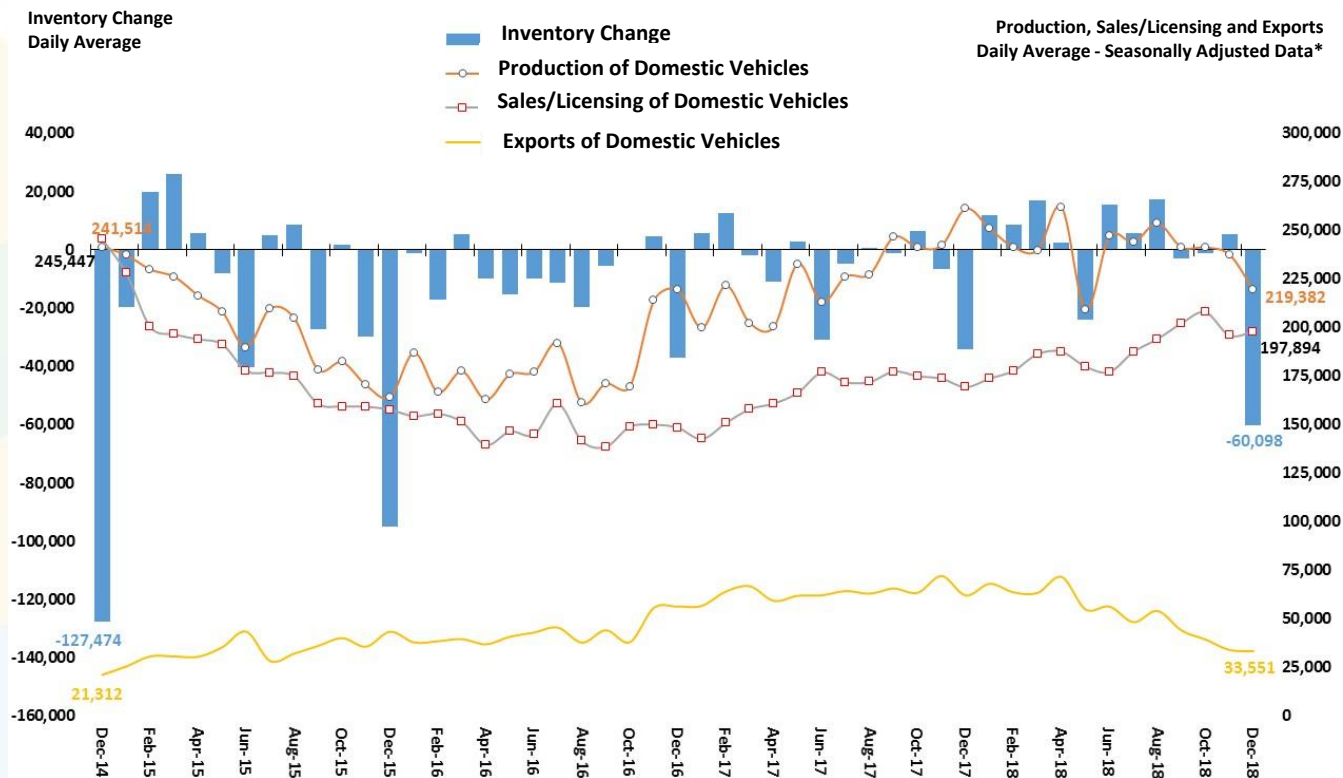
Total Vehicles and Car Production  
Daily Average of Vehicles Monthly Manufactured  
Seasonally Adjusted Data\*

Commercial Vehicles Production  
Daily Average of Vehicles Monthly Manufactured  
Seasonally Adjusted Data\*



Source: ANFAVEA. \* Seasonally adjusted by SEPLAN/MP.

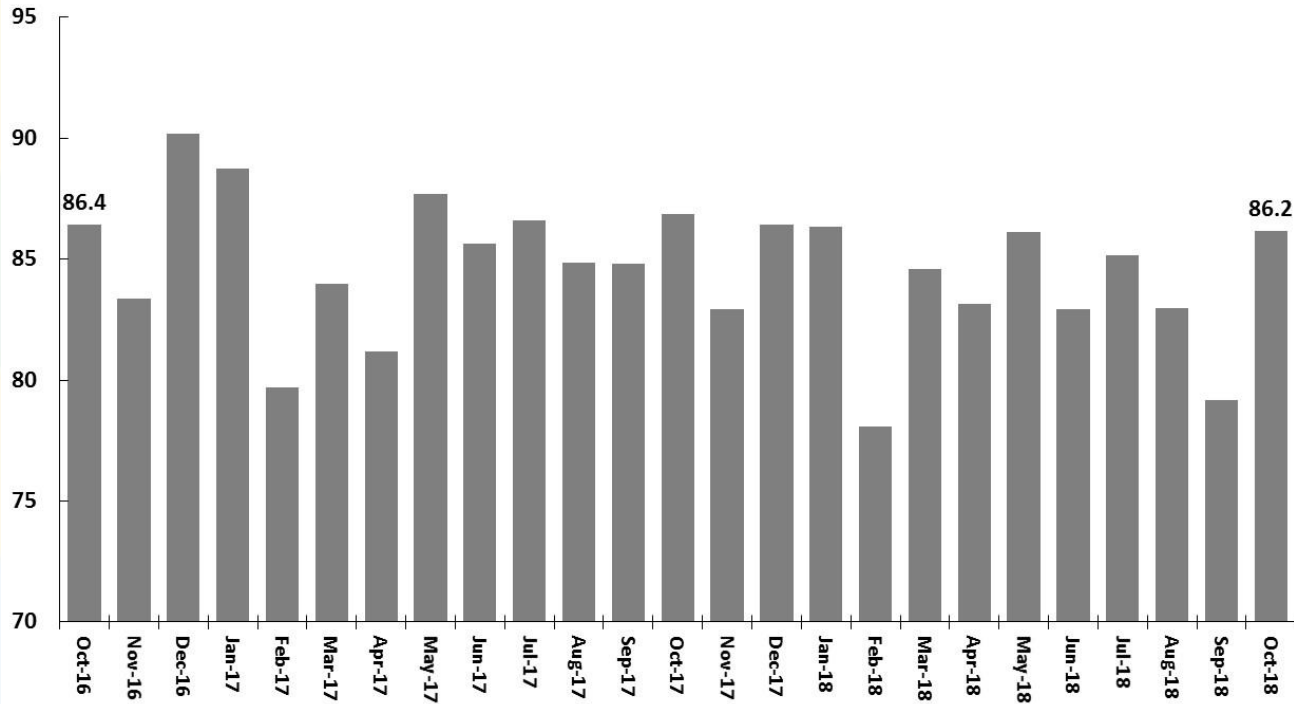
# Automotive Sector Production, Sales and Inventory Change



Source: ANFAVEA and FENABRAVE. \* Seasonally adjusted by SEPLAN/MP.

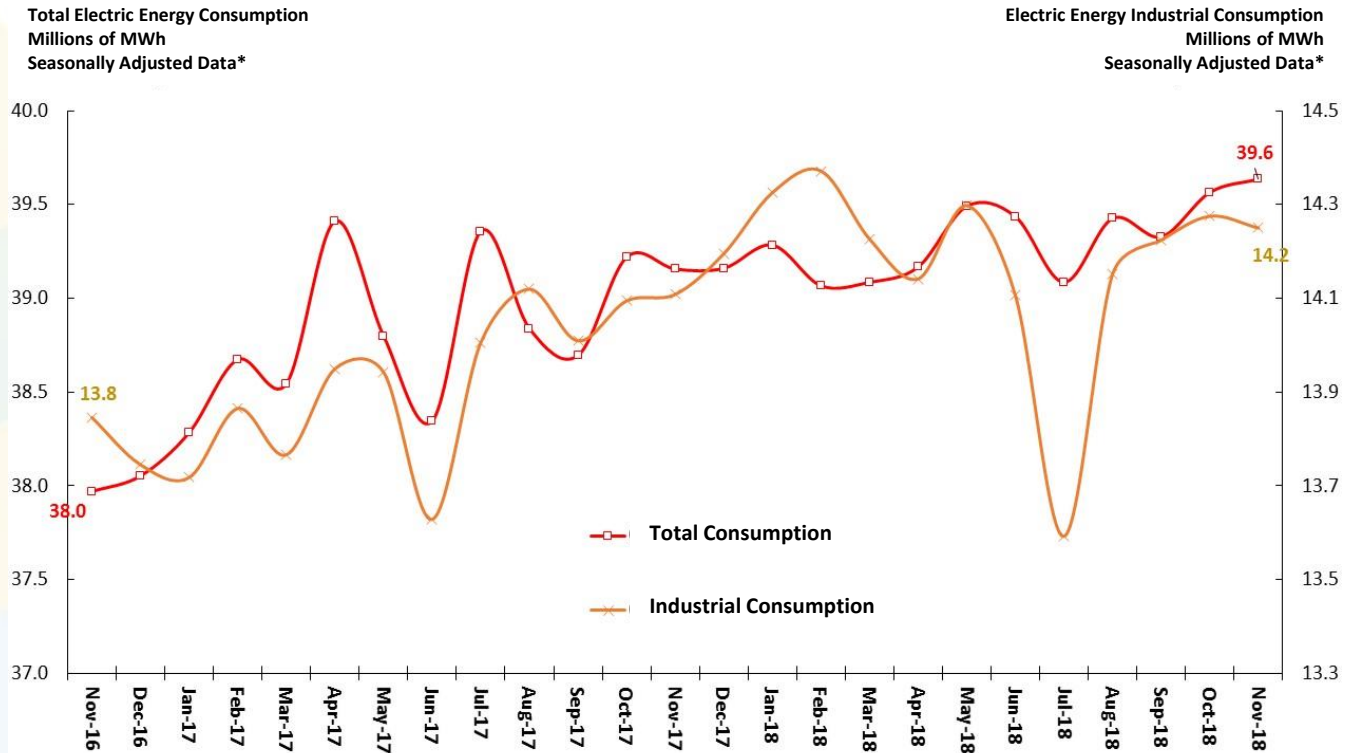
# ANP: Natural Gas and Oil Production

Natural Gas and Oil Production  
Millions of Barrels of Oil Equivalent (BOE) per Month



Source: ANP.

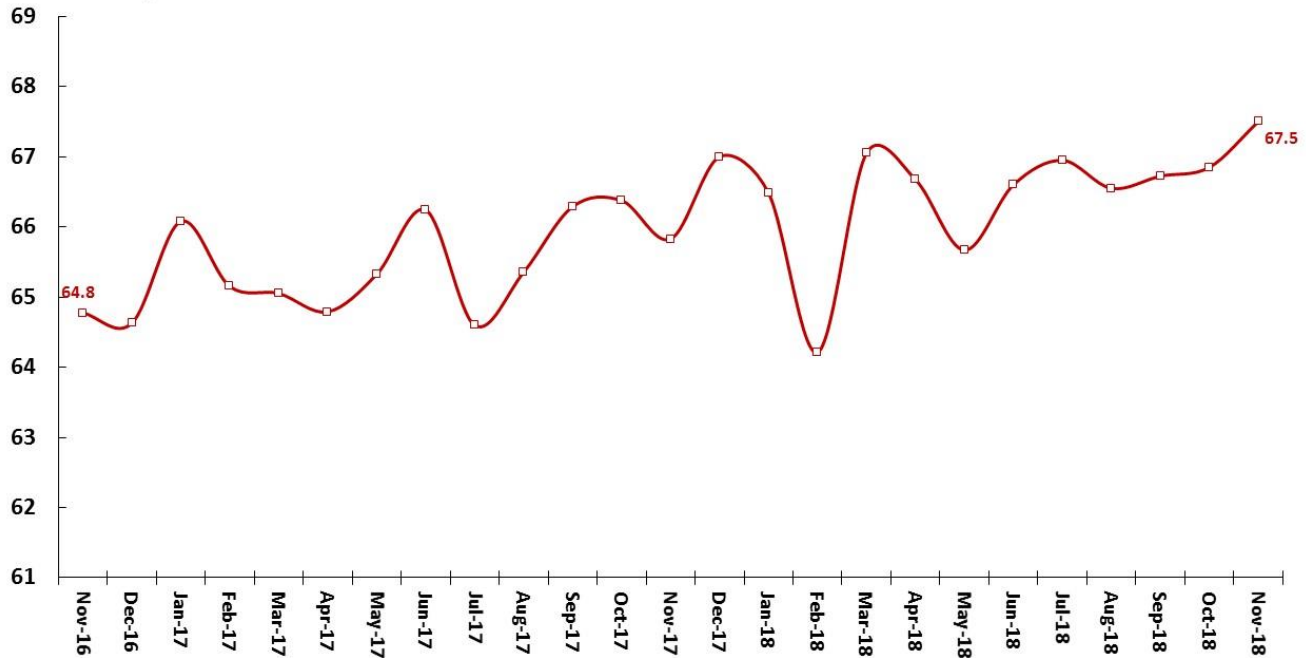
# ANEEL: Electrical Energy Consumption



Source: ANEEL. \* Seasonally adjusted by SEPLAN/MP.

# ONS: Electric Energy System Supply

Electric Energy System Supply  
Millions of MWh  
Seasonally Adjusted Data\*

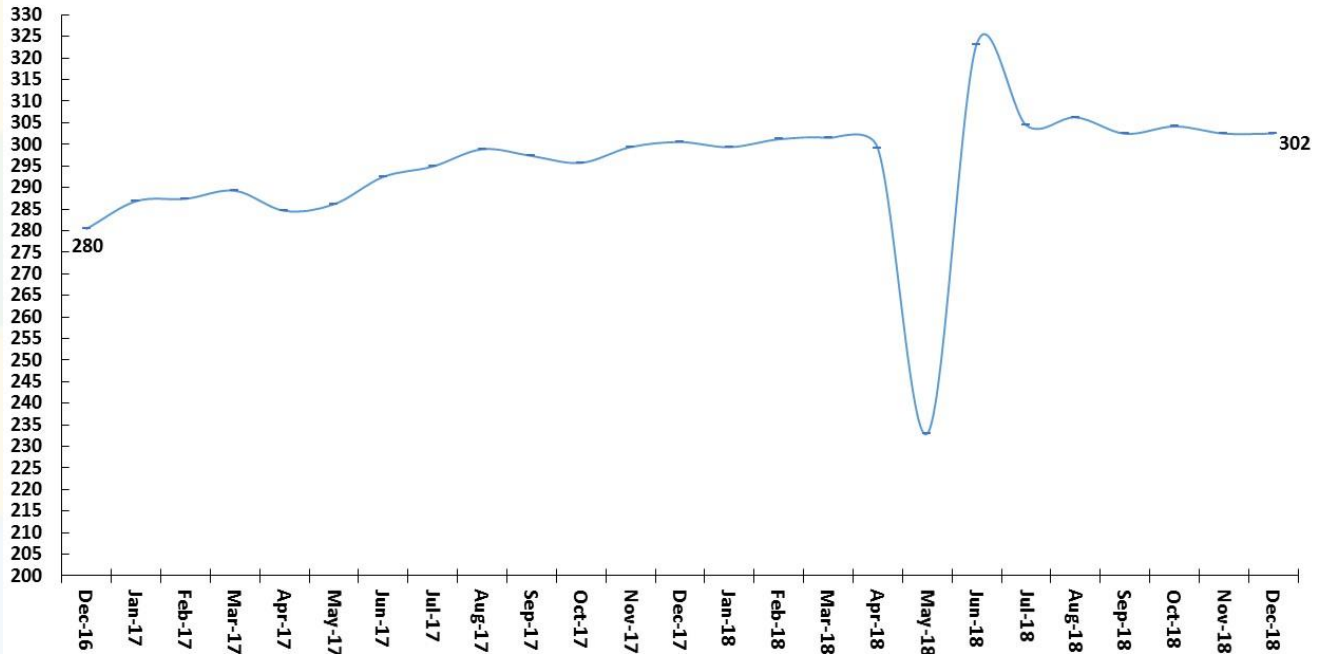


Source: ONS. \* Seasonally adjusted by SEPLAN/MP.



# ABPO: Corrugated Fiberboard Sales

Corrugated Fiberboard Sales  
1.000 of Tons  
Seasonally Adjusted Data\*



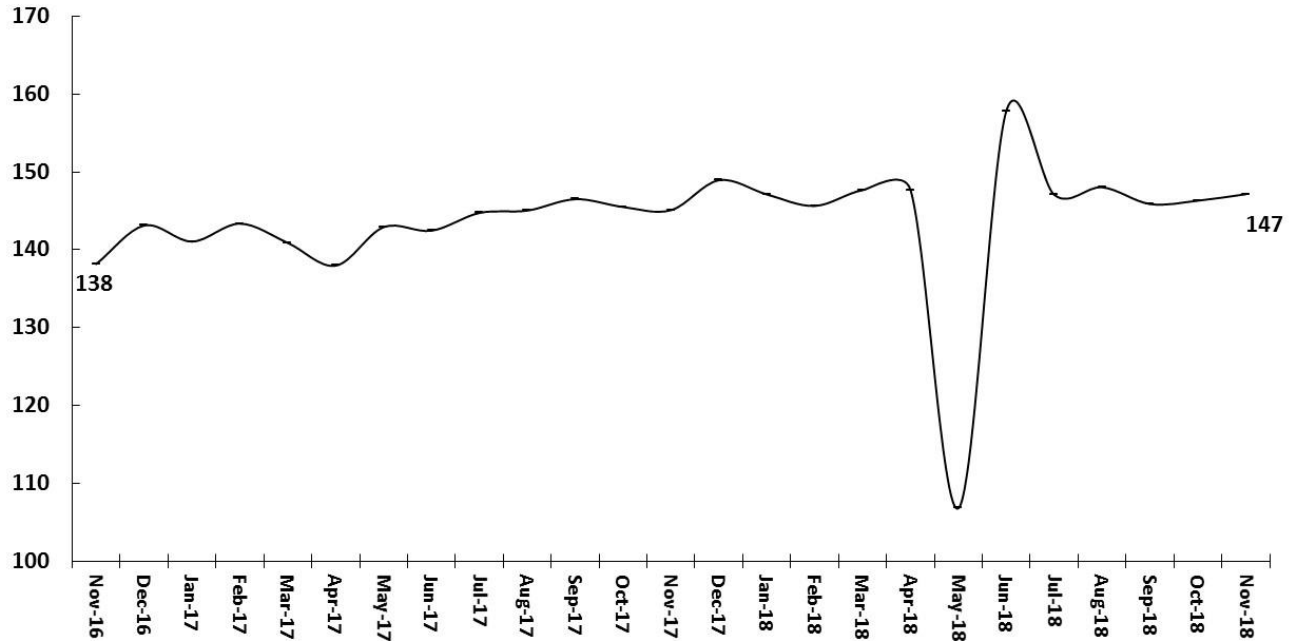
Source ABPO. \* Seasonally adjusted by SEPLAN/MP.

# ABCR: Heavy Vehicles Road Traffic Index

Heavy Vehicles Road Traffic Index

Index: 1999=100

Seasonally Adjusted Data



Source: ABCR.

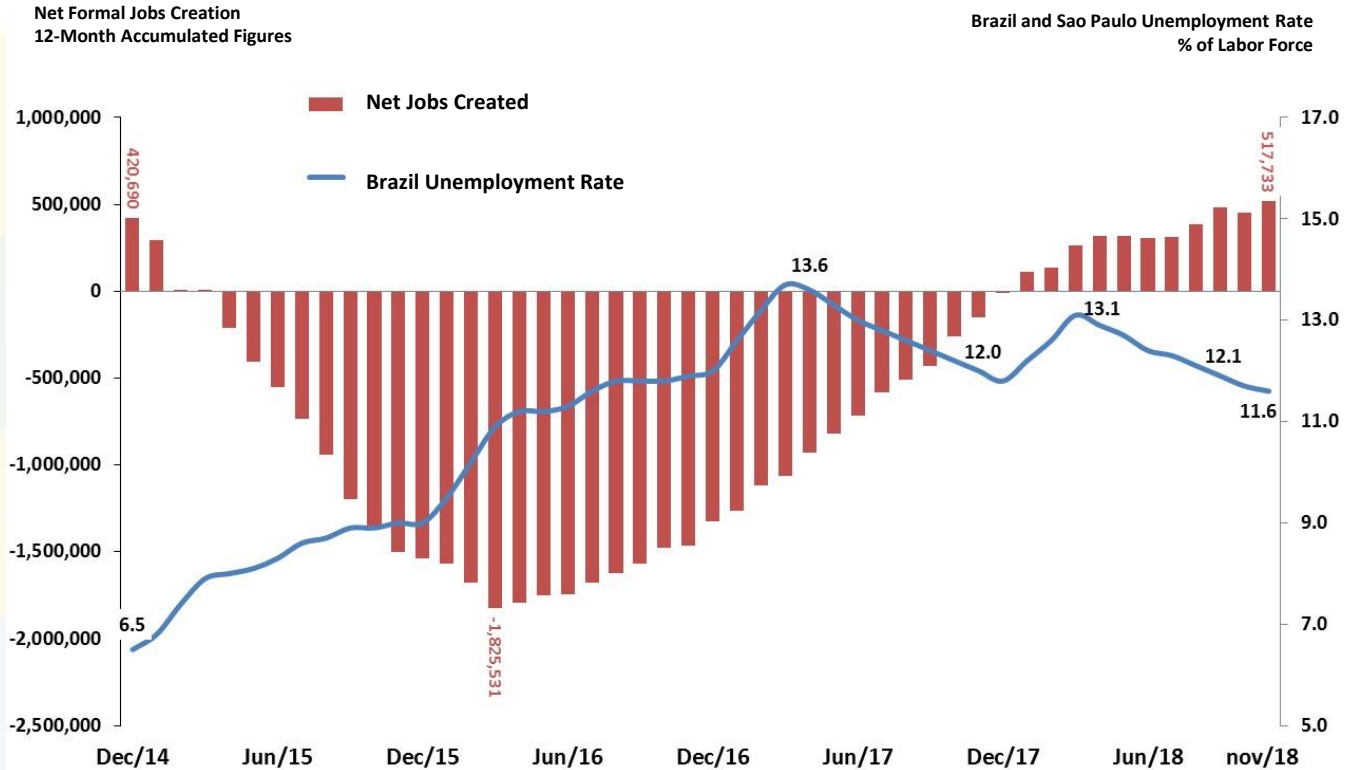


# **LABOR MARKET**

# Labor Market

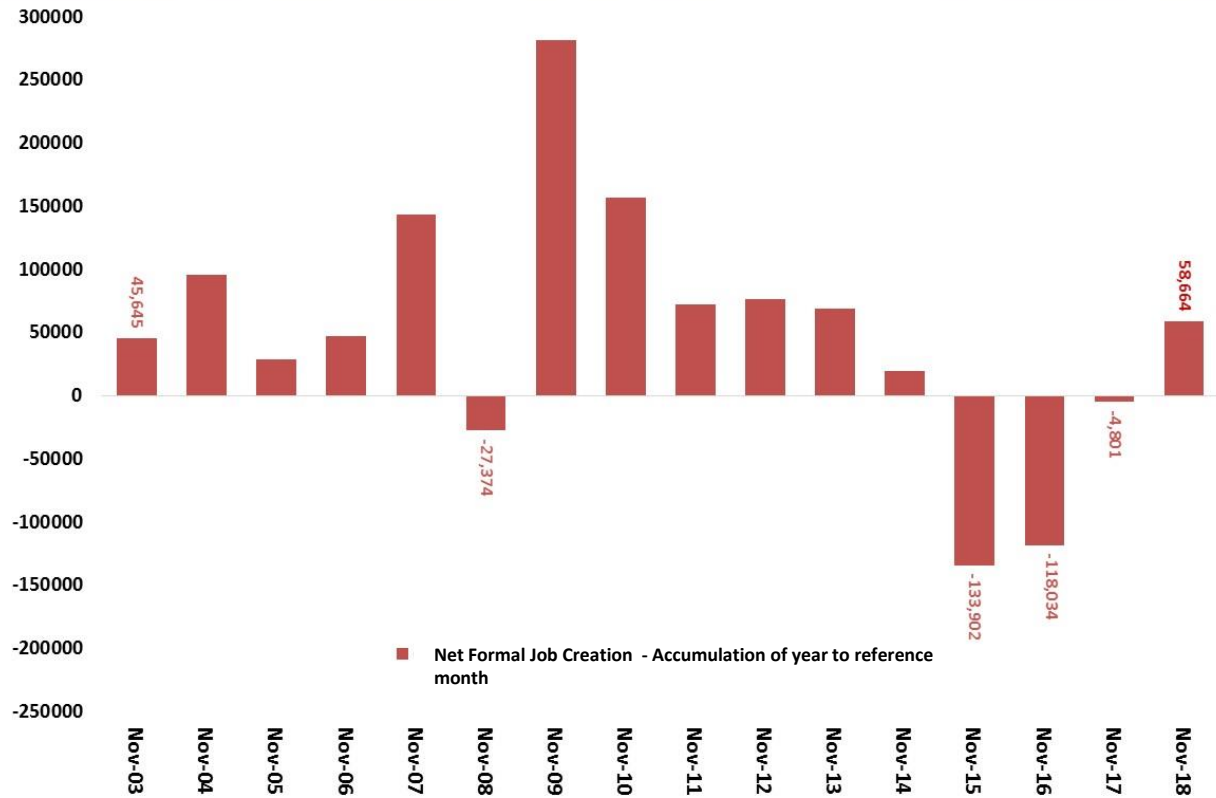
Employment Indicators	November-18		Nov/18 (12-months moving average)	Nov-18	chg.% 2017 / 2016	chg.% Oct/18- Oct/17	chg.% Nov/18- Nov/17	chg.% YTD 2018 / YTD 2017	chg.% Nov/18 - 2017 average
<b>Brasil (PNADC, IBGE)</b>	2016 average	2017 average							
<b>Unemployment Rate % Labor Force</b>	<b>11.3</b>	<b>12.8</b>	<b>12.3</b>	<b>11.6</b>	<b>1.5 pp</b>	<b>-0.5 pp</b>	<b>-0.4 pp</b>	<b>1.5 pp</b>	<b>1.5 pp</b>
Unemployed Population (in thousands)	166,189	168,210	169,712	170,492	1.2%	0.9%	0.9%	1.2%	1.2%
Labor Force (in thousands)	102,033	103,743	104,570	105,395	1.7%	0.9%	0.8%	1.7%	1.7%
Employed Population (in thousands)	90,539	90,495	91,733	93,189	0.0%	1.5%	1.3%	0.0%	0.0%
Working Age Population (in thousands)	11,494	13,248	12,837	12,206	15.3%	-3.1%	-2.9%	15.3%	15.3%
<b>São Paulo Unemployment Rate % (RMSP, PED-Seade)</b>	<b>16.6</b>	<b>18.0</b>	<b>17.4</b>	<b>11.6</b>	<b>1.4 pp</b>	<b>-1.4 pp</b>	<b>-1.6 pp</b>	<b>-1.4 pp</b>	<b>-1.0 pp</b>
<b>Average Real Earnings (PNADC, IBGE)</b>	November-18		Nov/18 (12-months moving average)	Nov-18	chg.% 2017 / 2016	chg.% Oct/18- Oct/17	chg.% Nov/18- Nov/17	chg.% YTD 2018 / YTD 2017	chg.% Nov/18 - 2017 average
real values (in R\$ of last month)	2016 average	2017 average							
<b>Employed Population</b>	<b>2,172</b>	<b>2,223</b>	<b>2,241</b>	<b>2,238</b>	<b>2.3%</b>	<b>0.4%</b>	<b>0.1%</b>	<b>2.3%</b>	<b>2.3%</b>
Formal Contract	2,092	2,135	2,148	2,133	2.0%	-0.4%	-1.5%	2.0%	2.0%
Informal Contract	1,275	1,283	1,301	1,353	0.6%	2.6%	4.9%	0.6%	0.6%
Self-employed	1,639	1,622	1,633	1,634	-1.0%	-0.1%	1.0%	-1.0%	-1.0%
Public Sector	3,410	3,469	3,540	3,552	1.7%	3.0%	2.6%	1.7%	1.7%
<b>Real Wage Bill (in R\$ millions of last months)</b>	<b>191,740</b>	<b>196,097</b>	<b>200,406</b>	<b>203,470</b>	<b>2.3%</b>	<b>1.9%</b>	<b>1.6%</b>	<b>2.3%</b>	<b>2.3%</b>
<b>Percentage of the Minimum Wage to Purchase the Basic Food Basket (Dieese)</b>	<b>46.3%</b>	<b>44.2%</b>	<b>43.2%</b>	<b>42.3%</b>	<b>1.0 pp</b>	<b>0.0 pp</b>	<b>0.0 pp</b>	<b>-0.2%</b>	<b>-3.0%</b>
<b>Formal Jobs (CAGED, MTE)</b>	November-18		Oct/18 accum. in 12- months	Nov/18 accum. in 12-months	Year-To- Date	Nov-18	chg.% 2017 / 2016	chg.% Nov/18 accum.12-m / 2017	chg.% YTD 2018 / YTD 2017
Million people	2016	2017							
<b>Net Formal Jobs Creation</b>	<b>-1,327</b>	<b>-12</b>	<b>454</b>	<b>518</b>	<b>768</b>	<b>59</b>	<b>-13.6%</b>	<b>-139.0%</b>	<b>261.2%</b>
Job Openings	14,847	14,763	15,315	15,338	13,049	1,189	-16.8%	3.3%	104.2%
Job Separations	16,174	14,775	14,861	14,820	12,281	1,131	-16.5%	-8.4%	100.3%

# Unemployment Rate and Net Formal Job Creation



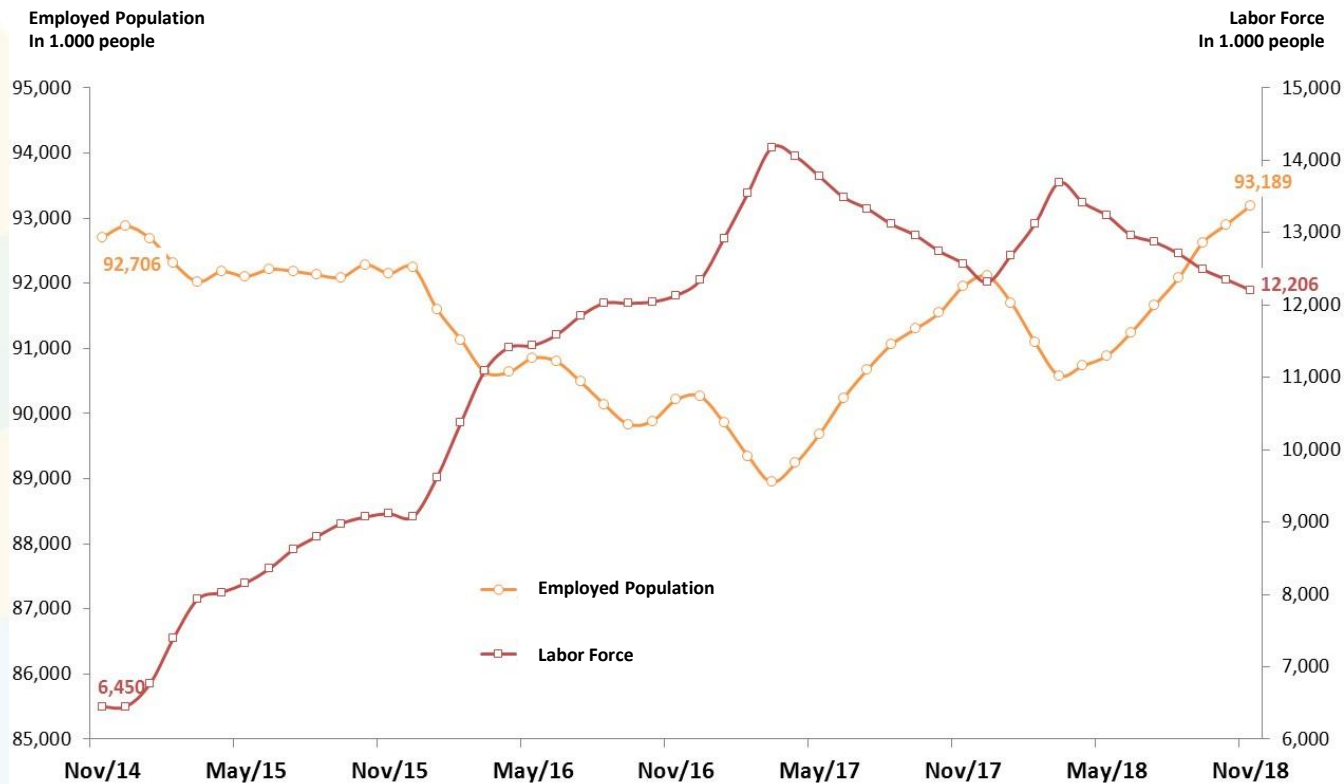
Sources: IBGE/MP - PNADC, SEADE-PED and MTE-CAGED (adjusted data).

# Net Formal Job Creation – Total Accumulation of Year



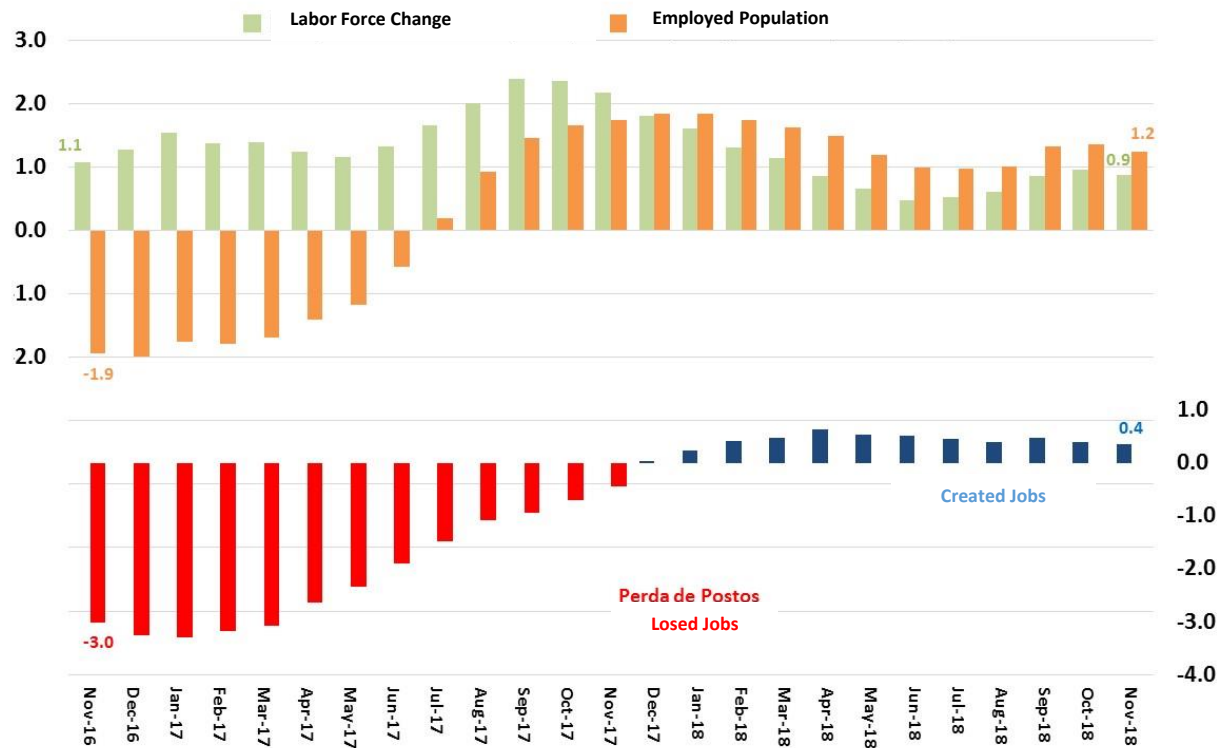
Source: MTE-CAGED (adjusted data).

# Employed Population and Labor Force Evolution



Source: IBGE/MP - PNADC.

# 12-Month Total Unemployment Increase Decomposition



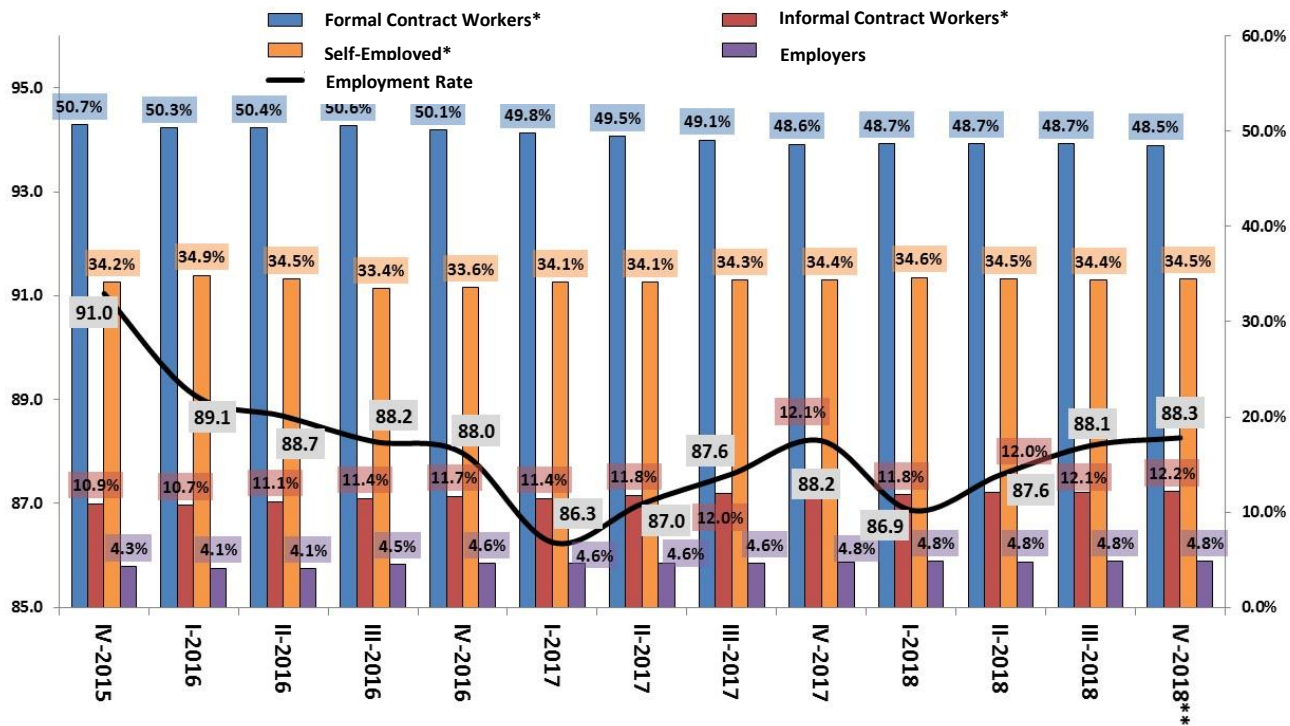
Source: IBGE/MP -- PNADC.



# Labor Market Evolution by Employment Type

Employment Rate  
(Employed Population / Labor Force)

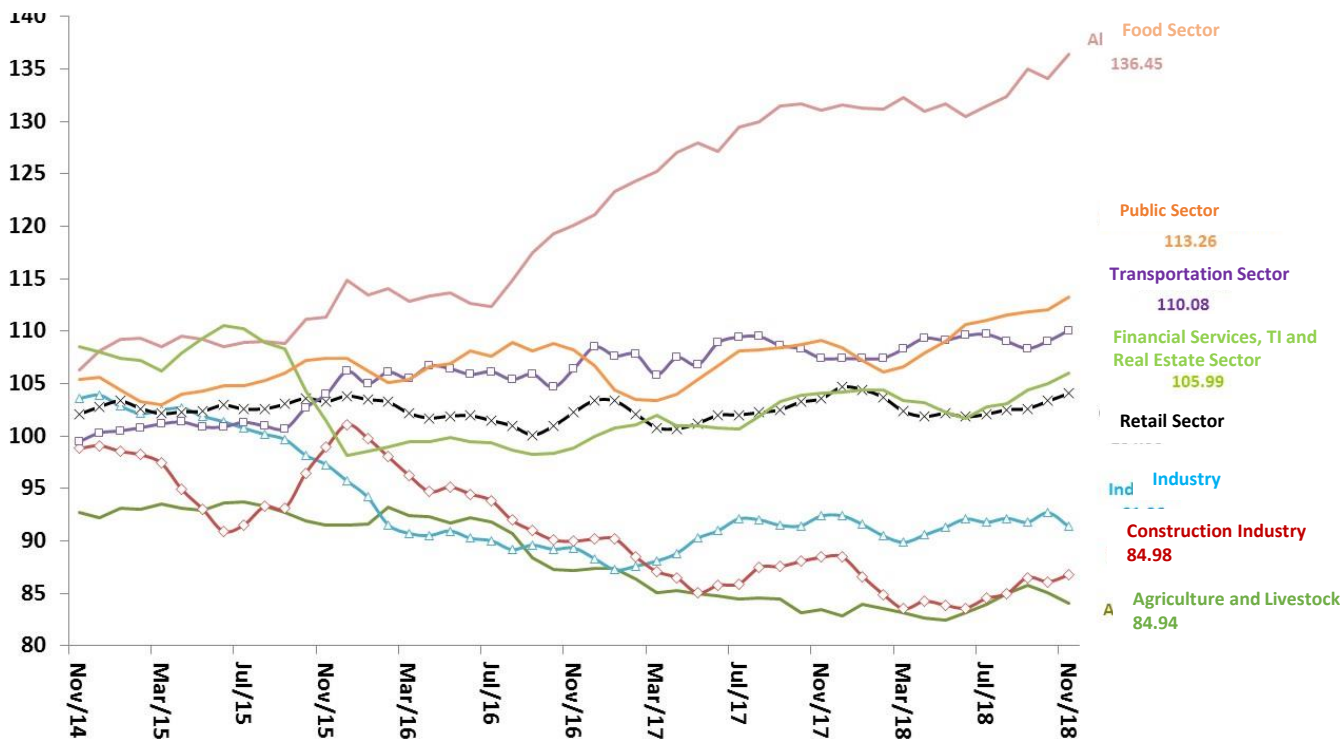
Formal and Informal Contract Workers, Self-Employed and Employers  
% of Employed Population



Source: IBGE/MP - PNADC. Note: \*Formal contract includes both private and public sectors and Self-Employed includes home-workers and family-workers.

# Employment by Sector of Activity

Employed Population by Sectors of Activity  
Index: 2013 = 100

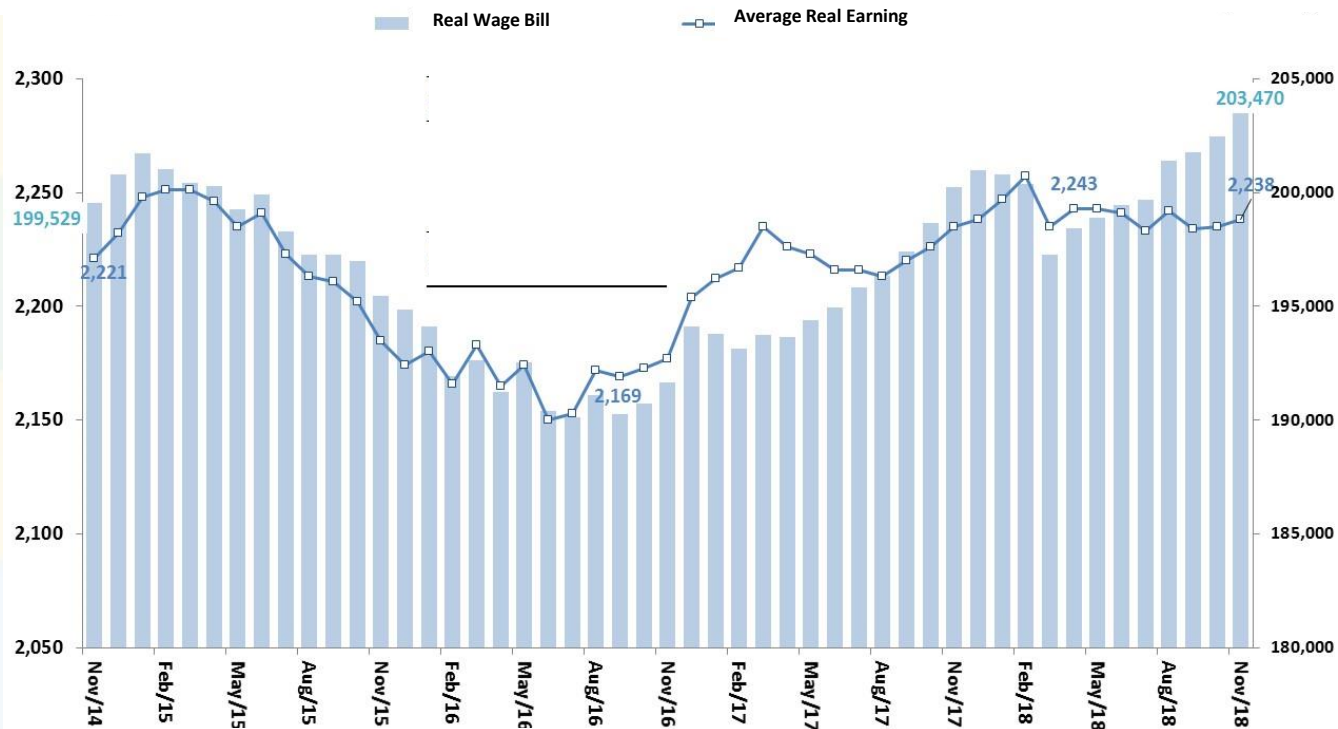


Source: IBGE/MP - PNADC.

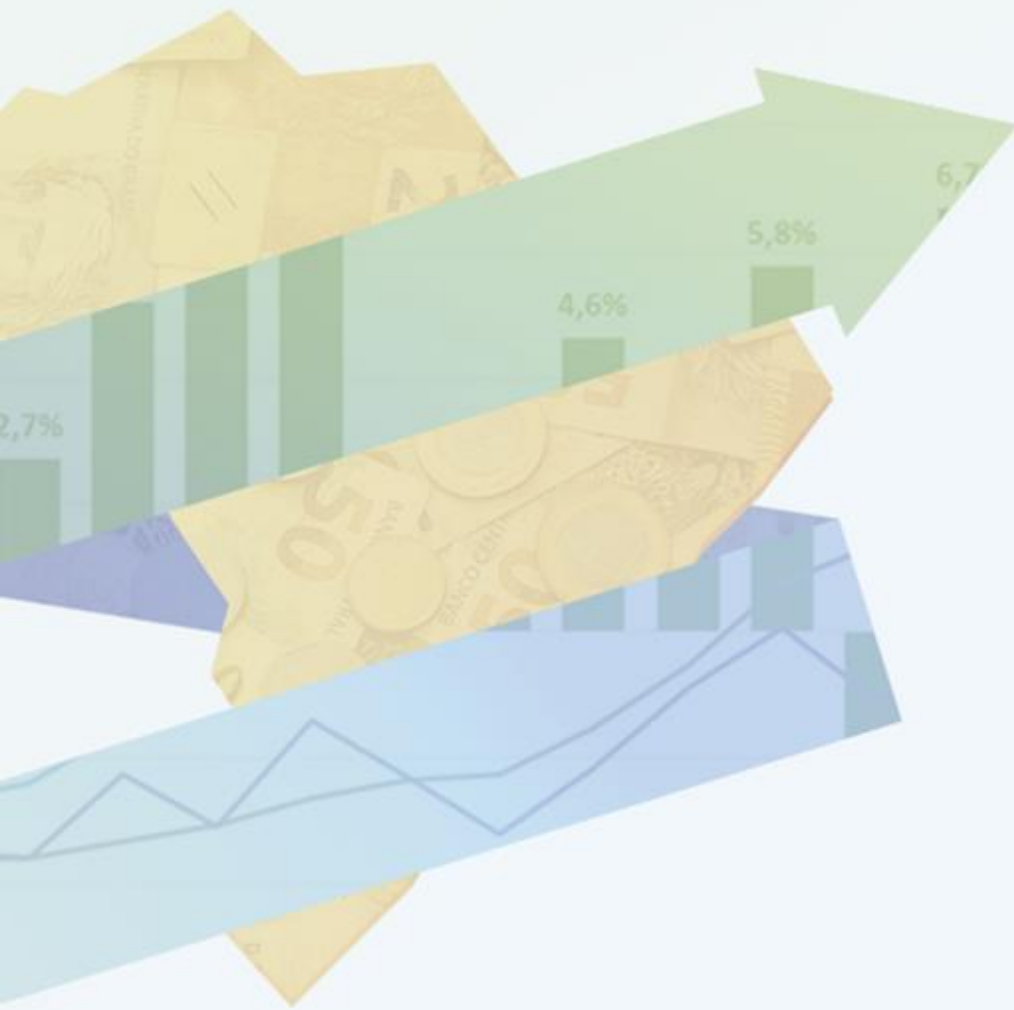
# Real Wage Bill and Average Real Earning

Average Real Earning  
R\$ of last month

Real Wage Bill  
R\$ millions of last month



Source: IBGE/MP - PNADC.

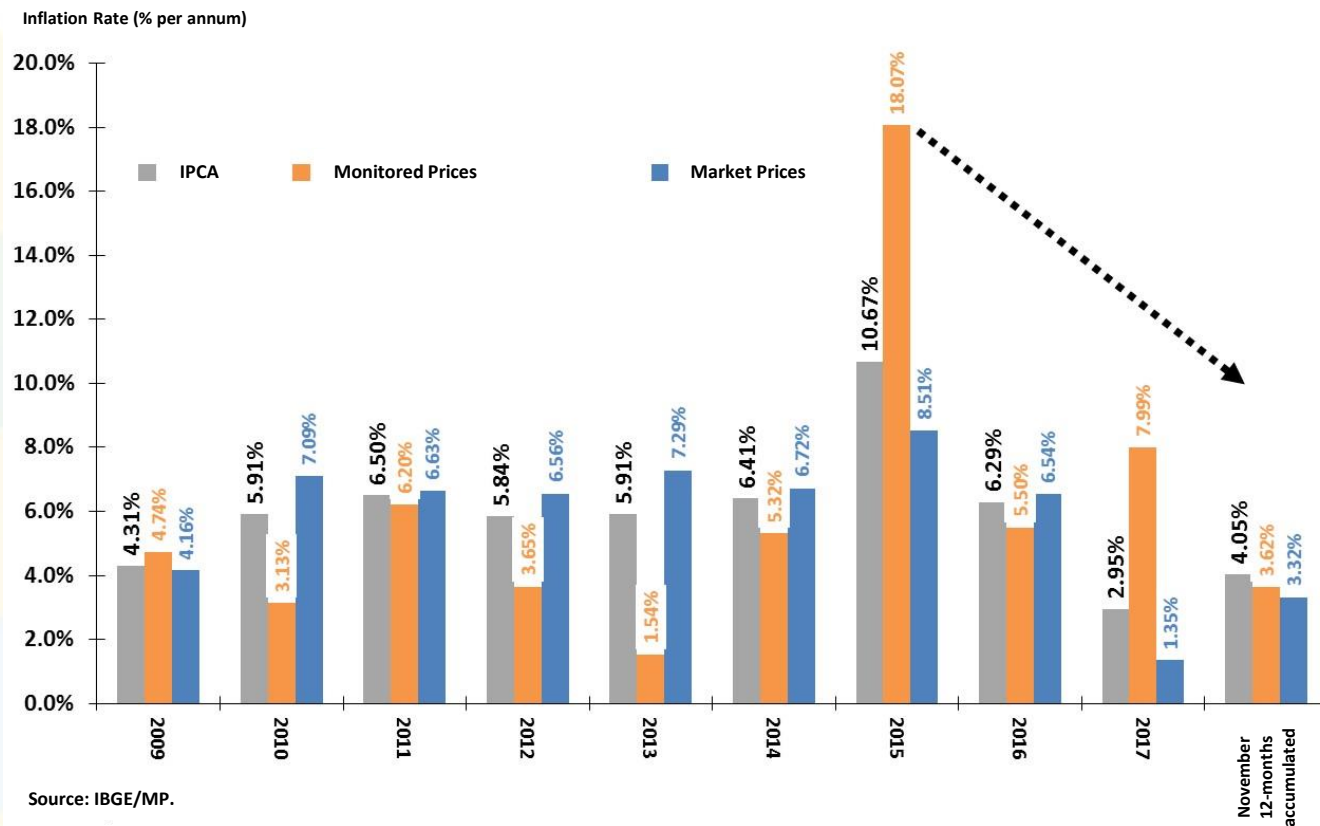


# INFLATION

# Inflation

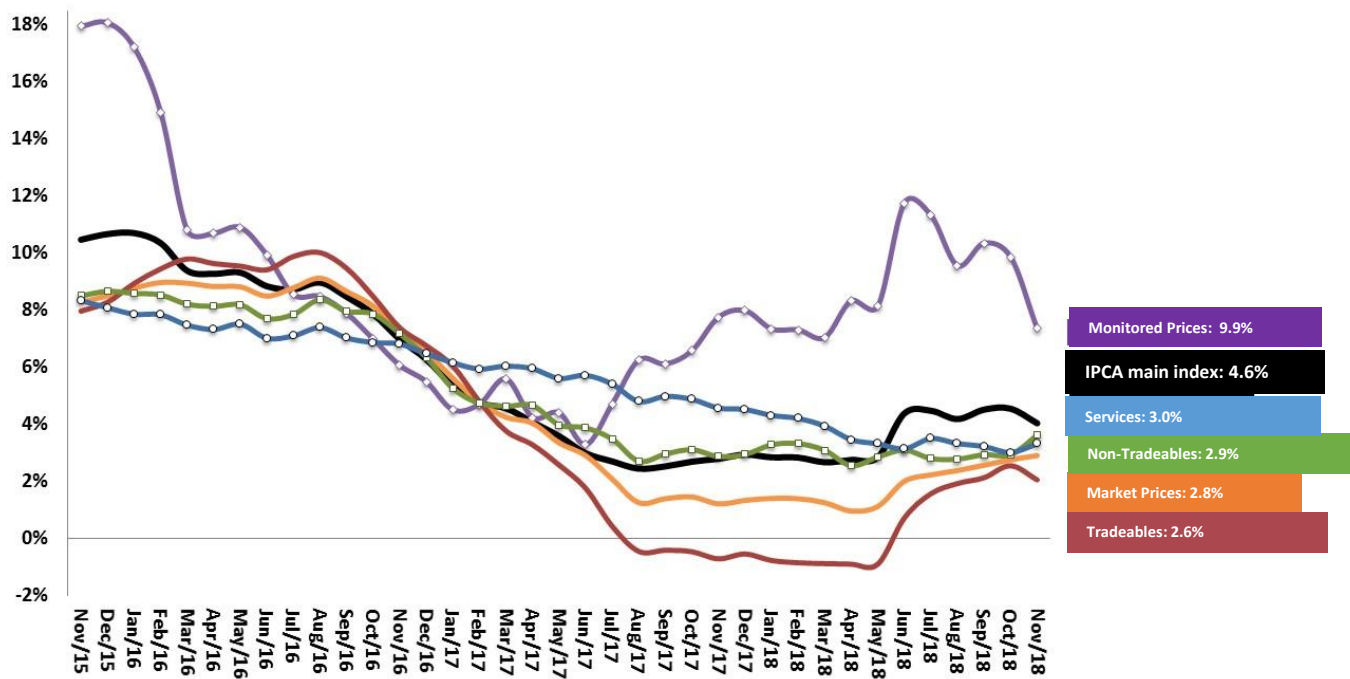
													BCB/Focus: 01/04/2019		
Inflation Index	November-18												2018	2019	2020
		2016	2017	Accum. In 12-months	YTD 2017	YTD 2018	Sep-17	Oct-17	Nov-17	Sep-18	Oct-18	Nov-18			
<b>IPCA Inflation Target (CMN)</b>		<b>4.5%</b>	<b>4.5%</b>	<b>4.5%</b>									<b>4.50%</b>	<b>4.25%</b>	<b>4.00%</b>
<b>Consumer Price Index IPCA (IBGE)</b>		<b>6.29%</b>	<b>2.95%</b>	<b>4.05%</b>	<b>2.50%</b>	<b>3.59%</b>	<b>0.16%</b>	<b>0.42%</b>	<b>0.28%</b>	<b>0.48%</b>	<b>0.45%</b>	<b>-0.21%</b>	<b>4.01%</b>	<b>4.00%</b>	<b>3.75%</b>
IPCA core (By exclusion food and energy - Ex2)		6.2%	3.8%	3.2%	3.5%	2.9%	0.1%	0.4%	0.2%	0.3%	0.2%	-0.1%			
Food and Beverages		8.6%	-1.9%	4.1%	-2.4%	3.6%	-0.4%	-0.1%	-0.4%	0.1%	0.6%	0.4%			
Housing		2.8%	6.3%	4.5%	6.7%	4.9%	-0.1%	1.3%	1.3%	0.4%	0.1%	-0.7%			
Household Articles		3.4%	-1.5%	3.2%	-1.5%	3.2%	0.1%	-0.4%	-0.5%	0.1%	0.8%	0.5%			
Apparel		3.5%	2.9%	0.3%	2.0%	-0.5%	0.3%	0.7%	0.1%	0.0%	0.3%	-0.4%			
Transportation		4.2%	4.1%	6.1%	2.8%	4.8%	0.8%	0.5%	0.5%	1.7%	0.9%	-0.7%			
Health and Personal Care		11.0%	6.5%	4.0%	6.1%	3.6%	0.3%	0.5%	0.3%	0.3%	0.3%	-0.7%			
Personal Expenses		8.0%	4.4%	3.1%	3.9%	2.7%	0.6%	0.3%	0.4%	0.4%	0.3%	0.4%			
Education		8.9%	7.1%	5.2%	6.9%	5.1%	0.0%	0.1%	0.0%	0.2%	0.0%	0.0%			
Communication		1.3%	1.8%	-0.2%	1.9%	-0.1%	0.5%	0.4%	0.2%	-0.1%	0.0%	-0.1%			
<b>Consumer Price Index INPC (IBGE)</b>		<b>6.58%</b>	<b>2.07%</b>	<b>4.00%</b>	<b>1.62%</b>	<b>3.55%</b>	<b>-0.02%</b>	<b>0.37%</b>	<b>0.18%</b>	<b>0.30%</b>	<b>0.40%</b>	<b>-0.25%</b>	<b>4.19%</b>	<b>4.00%</b>	<b>4.00%</b>
<b>São Paulo Cost-of-Living Index ICV SP (DIEESE)</b>		<b>6.15%</b>	<b>2.44%</b>	<b>4.38%</b>	<b>2.16%</b>	<b>4.09%</b>	<b>0.20%</b>	<b>0.88%</b>	<b>0.15%</b>	<b>0.55%</b>	<b>0.58%</b>	<b>0.32%</b>			
Inflation Index	December-18												2018	2019	2020
		2016	2017	Accum. In 12-months	YTD 2017	YTD 2018	Oct-17	Nov-17	Dec-17	Oct-18	Nov-18	Dec-18			
<b>General Price Index IGP-10 (FGV)</b>		<b>6.97%</b>	<b>-0.42%</b>	<b>7.92%</b>	<b>-0.42%</b>	<b>7.92%</b>	<b>0.49%</b>	<b>0.24%</b>	<b>0.90%</b>	<b>1.43%</b>	<b>-0.16%</b>	<b>-1.23%</b>			
<b>Consumer Price Index IPCA - 15 (IBGE)</b>		<b>6.58%</b>	<b>2.94%</b>	<b>3.86%</b>	<b>2.94%</b>	<b>3.86%</b>	<b>0.34%</b>	<b>0.32%</b>	<b>0.35%</b>	<b>0.58%</b>	<b>0.19%</b>	<b>-0.16%</b>	<b>4.00%</b>	<b>4.00%</b>	<b>3.75%</b>
<b>General Price Index IGP-M (FGV)</b>		<b>7.19%</b>	<b>-0.53%</b>	<b>8.73%</b>	<b>-0.53%</b>	<b>8.73%</b>	<b>0.20%</b>	<b>0.52%</b>	<b>0.89%</b>	<b>0.89%</b>	<b>-0.49%</b>	<b>-1.08%</b>	<b>4.30%</b>	<b>4.00%</b>	<b>4.00%</b>
<b>São Paulo Consumer Price Index IPC RMSP (FIPE)</b>		<b>6.55%</b>	<b>2.28%</b>	<b>2.99%</b>	<b>2.28%</b>	<b>2.99%</b>	<b>0.32%</b>	<b>0.29%</b>	<b>0.55%</b>	<b>0.48%</b>	<b>0.15%</b>	<b>0.09%</b>	<b>4.04%</b>	<b>4.00%</b>	<b>4.00%</b>
<b>General Price Index IGP-DI (FGV)</b>		<b>7.15%</b>	<b>-0.42%</b>	<b>7.10%</b>	<b>-0.42%</b>	<b>7.10%</b>	<b>0.10%</b>	<b>0.80%</b>	<b>0.74%</b>	<b>0.26%</b>	<b>-1.14%</b>	<b>-0.45%</b>	<b>4.38%</b>	<b>4.03%</b>	<b>4.00%</b>
Consumer Price Subindex IPC/Br-DI		6.19%	3.22%	4.04%	3.22%	4.04%	0.33%	0.36%	0.21%	0.48%	-0.17%	0.29%			
Construction Cost Subindex INCC-DI		6.10%	4.25%	3.70%	4.25%	3.70%	0.31%	0.31%	0.07%	0.35%	0.13%	0.13%			
Wholesale Price Subindex IPA-DI		7.73%	-2.52%	9.63%	-2.52%	9.63%	-0.03%	1.06%	1.07%	0.17%	-1.70%	-0.82%	<b>4.13%</b>	<b>4.50%</b>	<b>4.50%</b>
IPA-DI Industry		6.71%	1.22%	10.09%	1.22%	10.09%	-0.16%	1.14%	1.15%	0.59%	-1.47%	-0.85%			
IPA-DI Agriculture		9.92%	-12.34%	8.31%	-12.34%	8.31%	0.37%	0.85%	0.81%	-1.08%	-2.41%	-0.73%			

# Relative Prices Convergence in the Consumer Price Index



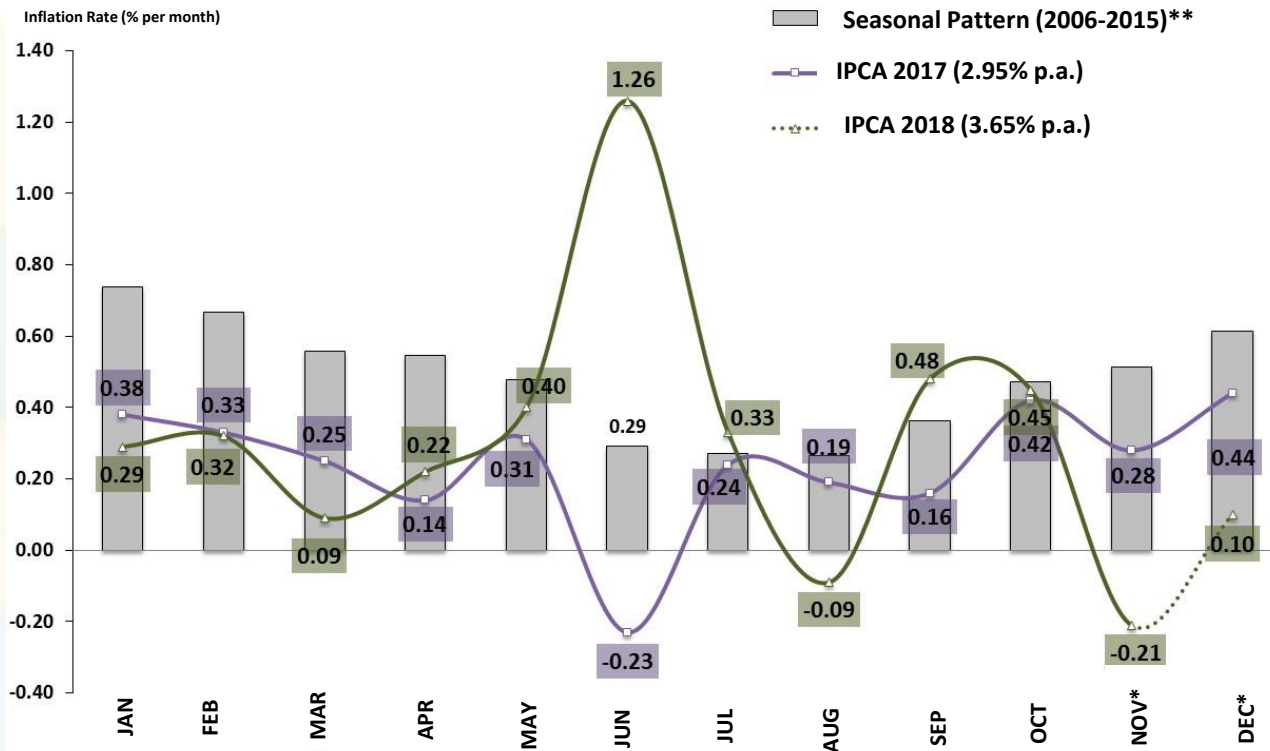
# Consumer Price Index (IPCA) and Subindexes

Consumer Price Index and Subindexes  
12-months accumulated rate (%)



Source: IBGE/MP.

# Consumer Price Index (IPCA) and Seasonal Pattern

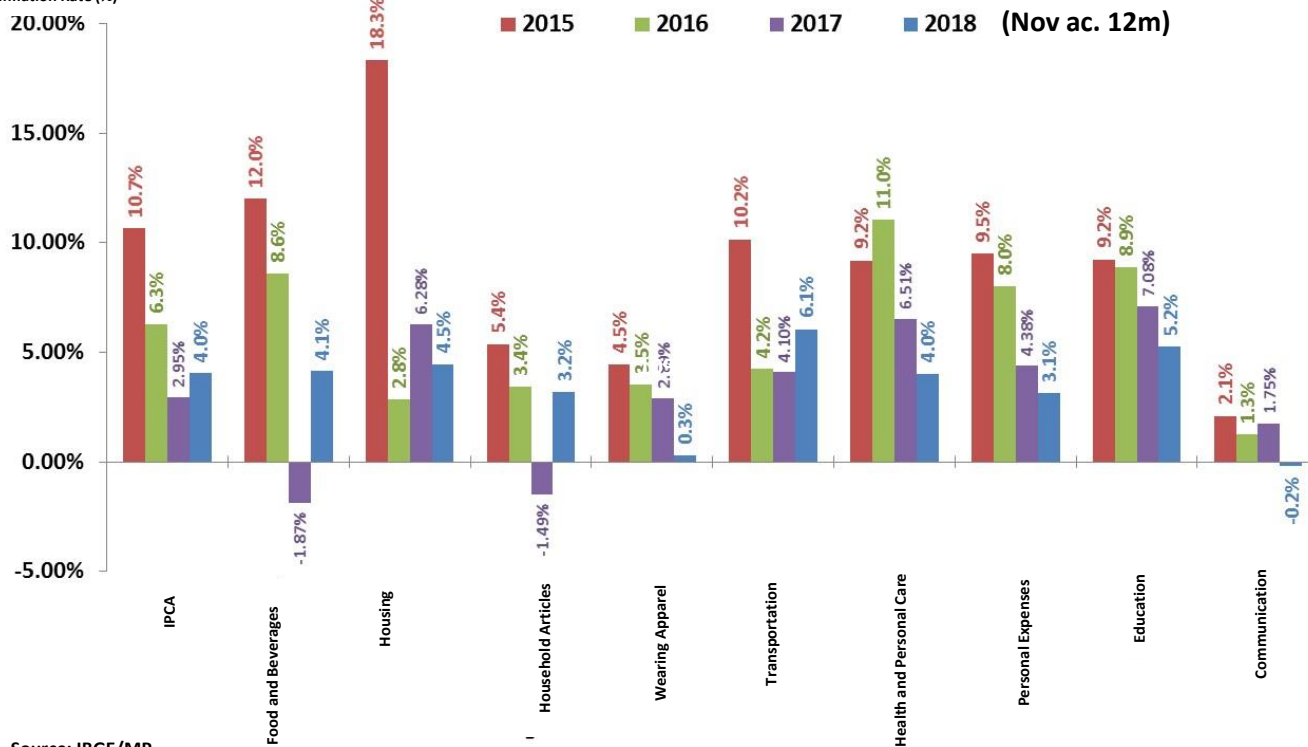


Sources: IBGE/MP and Central Bank of Brazil. \*BCB-Focus Survey of 01/04/2018, median of market expectations. \*\*Seasonal pattern estimated by SEPLAN/MP.



# Consumer Price Index (IPCA) by Groups

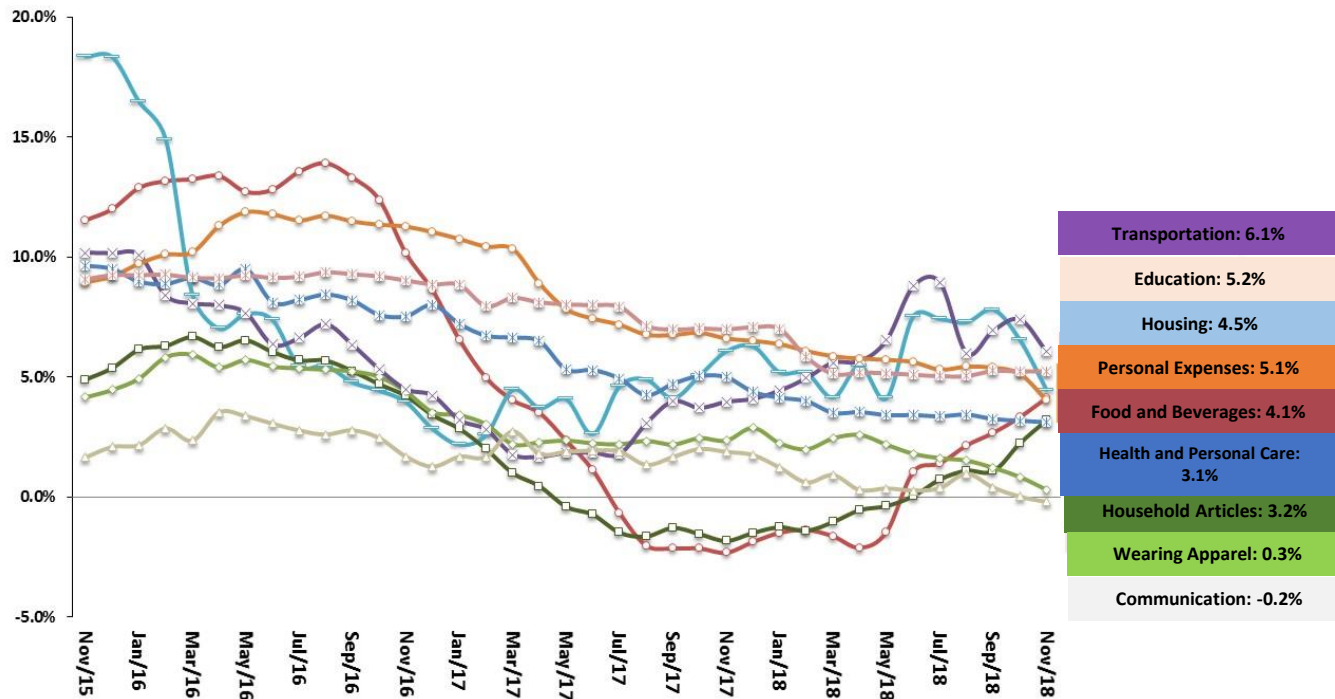
IPCA and components – by Groups  
Inflation Rate (%)



Source: IBGE/MP.

# Consumer Price Index (IPCA) by Groups

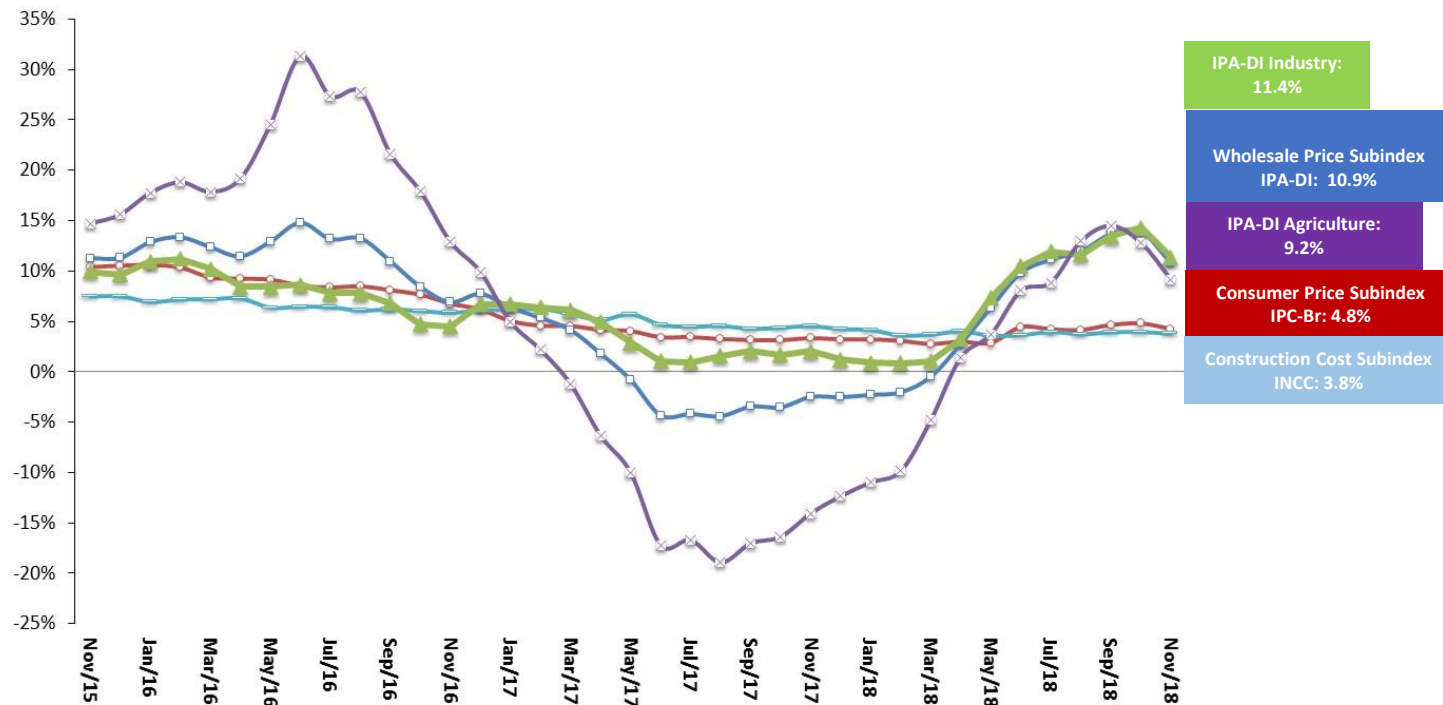
IPCA Groups  
12-months accumulated rate (%)



Source: IBGE.

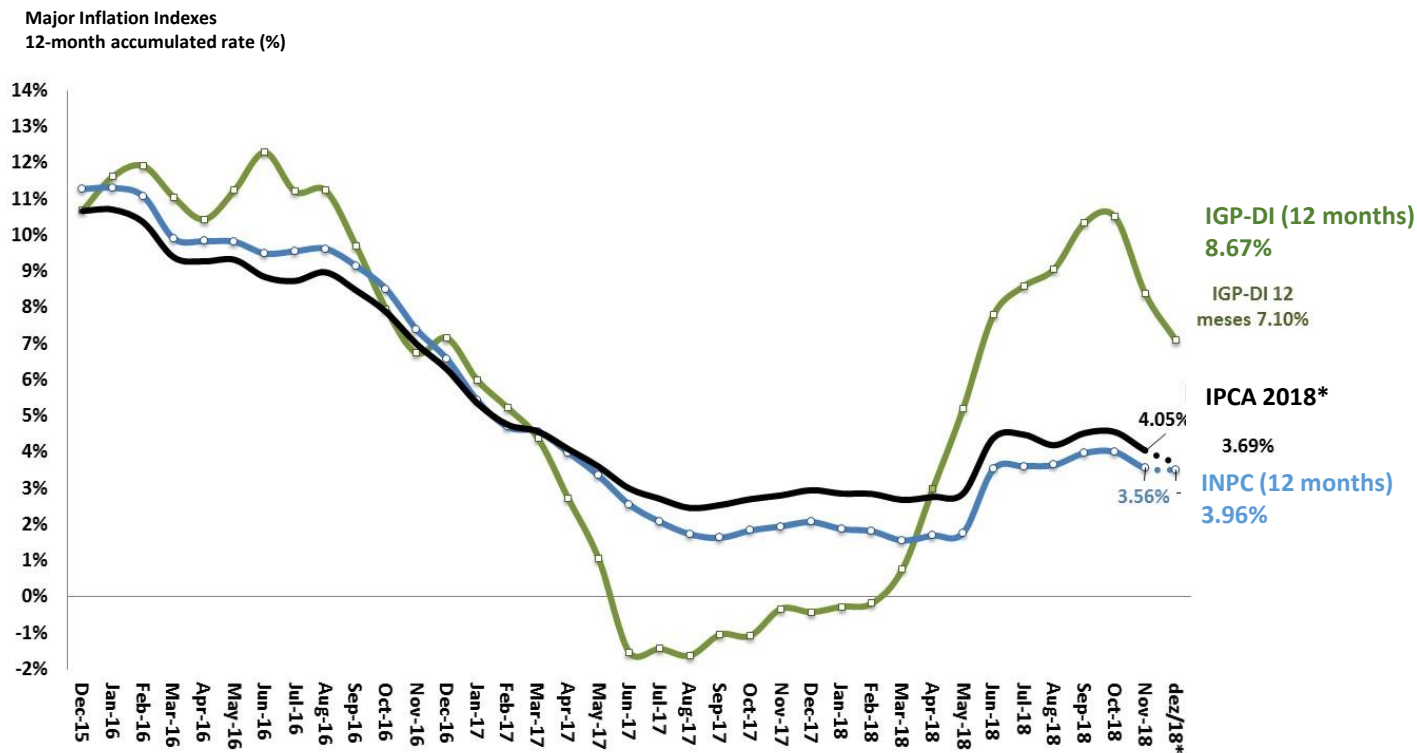
# General Price Index (IGP-DI) by Subindexes

**General Prices Subindexes**  
12-months accumulated rate (%)



Source: FGV.

# Major Inflation Indexes

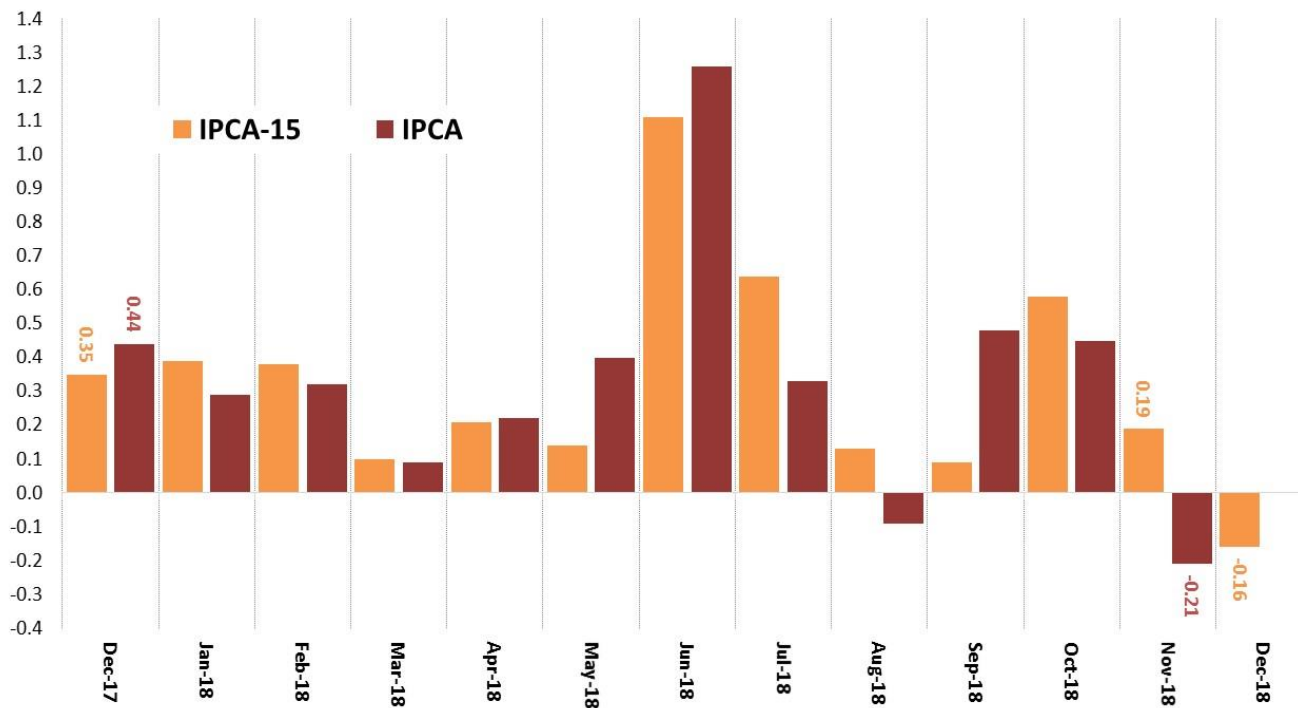


Sources: IBGE/MP and Central Bank of Brazil. \*2018 = BCB-Focus Survey of 01/04/2019, median of market expectations (monthly).

# IBGE: Monthly Consumer Price Indexes

IPCA-15 and IPCA

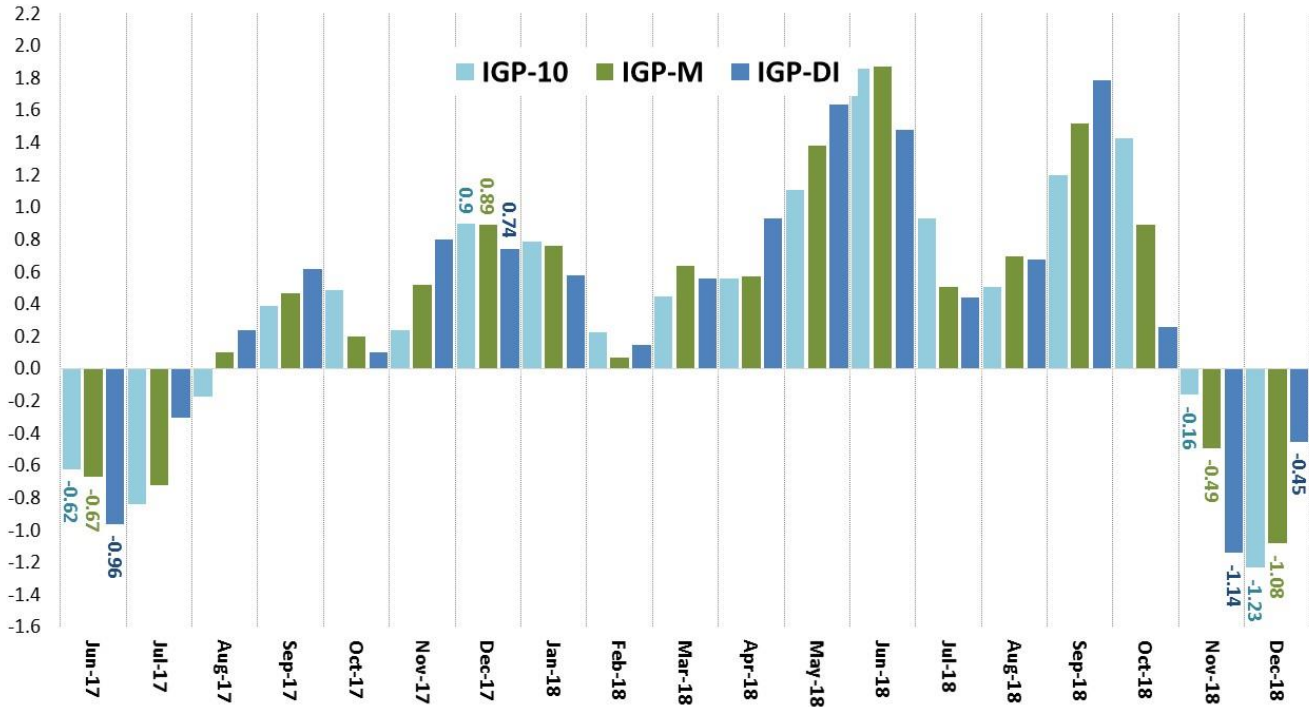
By release order



Source: IBGE.

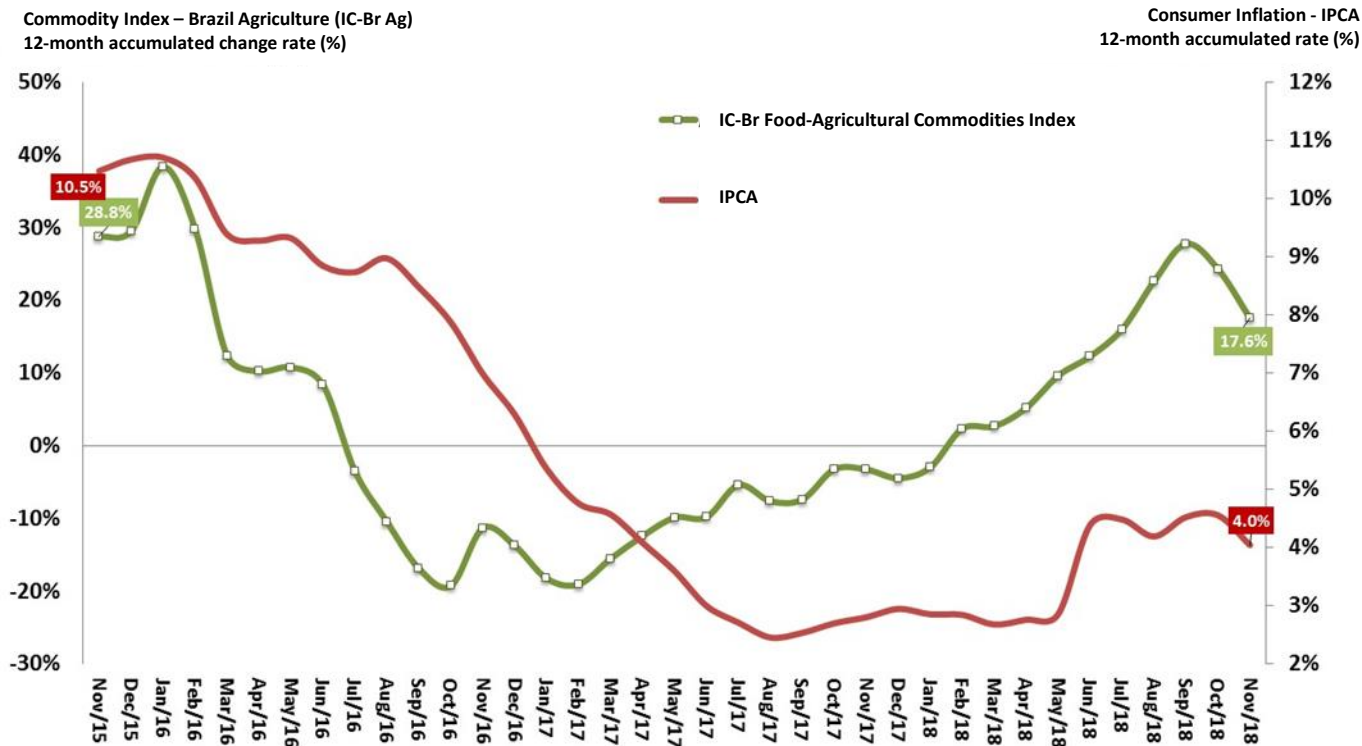
# FGV: Monthly General Price Indexes

IGP-10, IGP-M and IGP-DI  
By release order



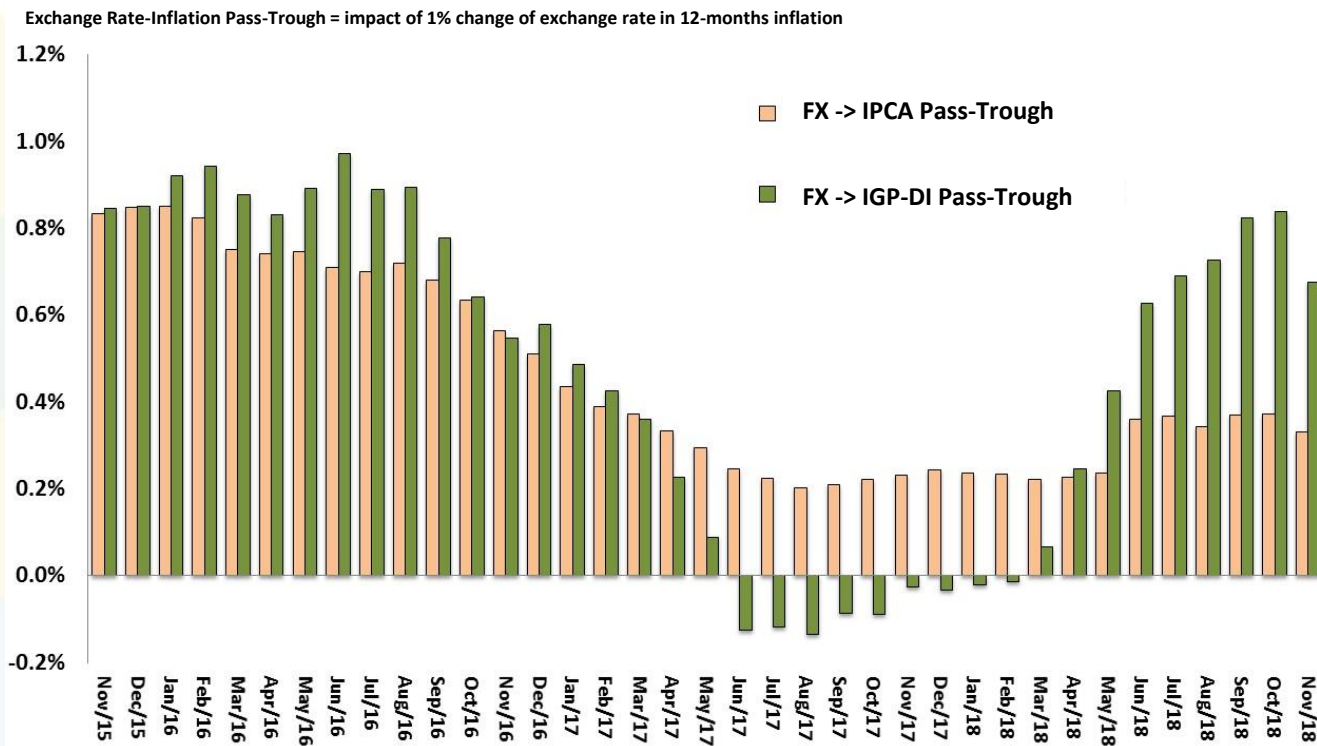
Source: FGV.

# Consumer Price Index and Commodity Index (Brazil Agriculture)



Sources: IBGE/MP and Central Bank of Brazil.

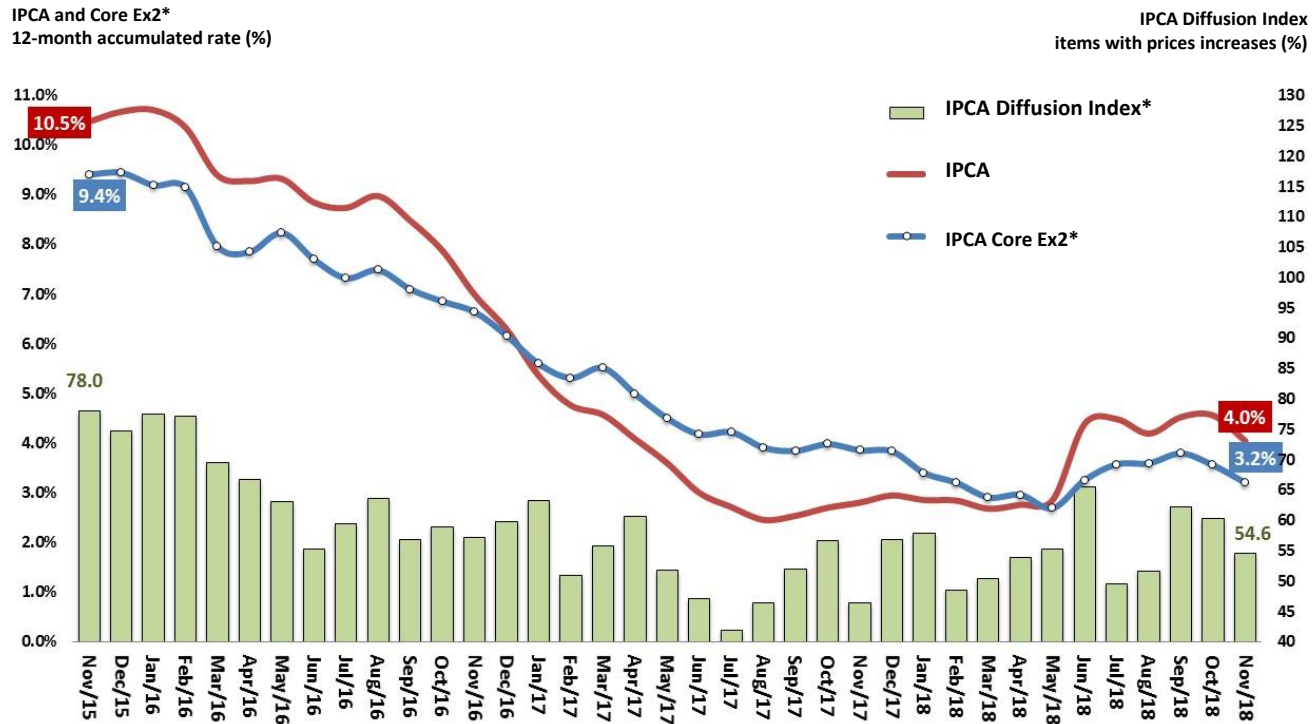
# Exchange Rate Pass-Through in Consumer and General Price Indexes



Sources: IBGE/MP and FGV. Note: Pass-Through series estimated by SEPLAN/MP.



# IPCA, Core Inflation (IPCA Ex2) and Diffusion Index



Source: IBGE/MP.

\* Ex2 = Exclusion from the main index of 12 items, 10 from residence dining and 2 from monitored prices. The excluded items represent, on average, 16% of IPCA main index.

\*\* Diffusion Index = % of items from IPCA with price increase.



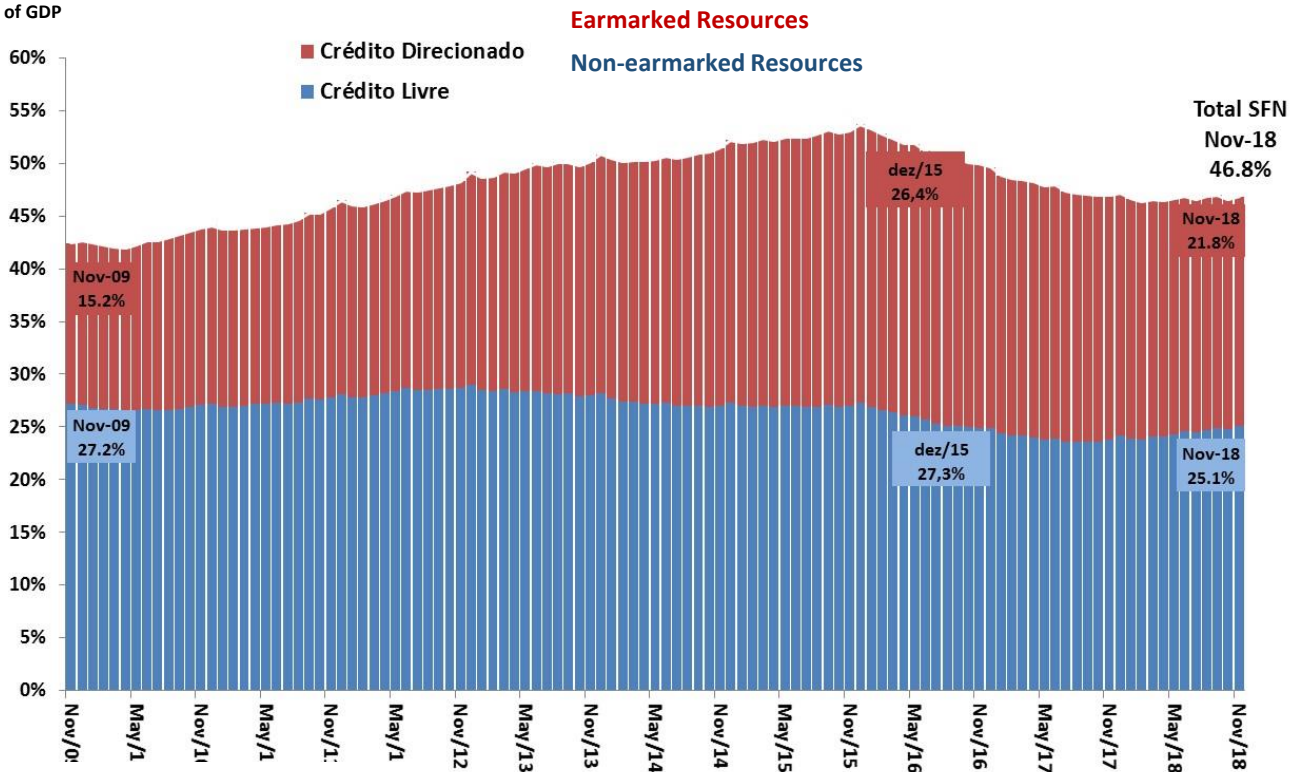
# **CREDIT MARKET**

# Credit Market

Credit Market (BCB)	November-18										
End-of-Period Outstanding Credit (in R\$ billions)	Dec-16	Dec-17	Nov-18	% of Total Credit Dec/16	% of Total Credit Dec/17	% of Total Credit Nov/18	chg.% Dec/17-Dec/16	chg.% Nov/18-Dec/17	% of GDP Dec/16	% of GDP Dec/17	% of GDP Nov/18
<b>Total Credit to the National Financial System (NFS)</b>	<b>3,106.2</b>	<b>3,091.5</b>	<b>3,202.2</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-0.5%</b>	<b>3.6%</b>	<b>49.6%</b>	<b>47.1%</b>	<b>46.8%</b>
<i>by type of borrower</i>											
<b>Public Sector (incl. State-Owned Enterprises)</b>	<b>235.9</b>	<b>221.3</b>	<b>222.6</b>	<b>7.6%</b>	<b>7.2%</b>	<b>7.0%</b>	<b>-6.2%</b>	<b>0.6%</b>	<b>3.8%</b>	<b>3.4%</b>	<b>3.3%</b>
<b>Private Sector</b>	<b>2,870.3</b>	<b>2,870.3</b>	<b>2,979.6</b>	<b>92.4%</b>	<b>92.8%</b>	<b>93.0%</b>	<b>0.0%</b>	<b>3.8%</b>	<b>45.9%</b>	<b>43.8%</b>	<b>43.6%</b>
<b>Non-Financial Corporations</b>	<b>1,545.2</b>	<b>1,442.0</b>	<b>1,430.8</b>	<b>49.7%</b>	<b>46.6%</b>	<b>44.7%</b>	<b>-6.7%</b>	<b>-0.8%</b>	<b>24.7%</b>	<b>22.0%</b>	<b>20.9%</b>
<b>Households</b>	<b>1,560.9</b>	<b>1,649.5</b>	<b>1,771.4</b>	<b>50.3%</b>	<b>53.4%</b>	<b>55.3%</b>	<b>5.7%</b>	<b>7.4%</b>	<b>24.9%</b>	<b>25.1%</b>	<b>25.9%</b>
<i>by type of lender</i>											
<b>Public Financial Institutions</b>	<b>1,729.7</b>	<b>1,672.3</b>	<b>1,654.0</b>	<b>55.7%</b>	<b>54.1%</b>	<b>51.7%</b>	<b>-3.3%</b>	<b>-1.1%</b>	<b>27.6%</b>	<b>25.5%</b>	<b>24.2%</b>
<b>National Private Financial Institutions</b>	<b>976.8</b>	<b>994.8</b>	<b>1,076.2</b>	<b>31.4%</b>	<b>32.2%</b>	<b>33.6%</b>	<b>1.8%</b>	<b>8.2%</b>	<b>15.6%</b>	<b>15.2%</b>	<b>15.7%</b>
<b>Foreign Private Financial Institutions</b>	<b>399.6</b>	<b>424.5</b>	<b>472.0</b>	<b>12.9%</b>	<b>13.7%</b>	<b>14.7%</b>	<b>6.2%</b>	<b>11.2%</b>	<b>6.4%</b>	<b>6.5%</b>	<b>6.9%</b>
<i>by type of credit</i>											
<b>Earmarked Resources</b>	<b>1,549.5</b>	<b>1,506.9</b>	<b>1,487.4</b>	<b>49.9%</b>	<b>48.7%</b>	<b>46.4%</b>	<b>-2.8%</b>	<b>-1.3%</b>	<b>24.8%</b>	<b>23.0%</b>	<b>21.8%</b>
Housing	241.6	245.9	259.3	7.8%	8.0%	8.1%	1.8%	5.4%	3.9%	3.7%	3.8%
Rural	605.7	624.8	637.0	19.5%	20.2%	19.9%	3.2%	1.9%	9.7%	9.5%	9.3%
BNDES Development Bank	601.0	538.6	494.9	19.3%	17.4%	15.5%	-10.4%	-8.1%	9.6%	8.2%	7.2%
Others	101.2	97.5	96.3	3.3%	3.2%	3.0%	-3.7%	-1.2%	1.6%	1.5%	1.4%
<b>Non-Financial Corporations</b>	<b>797.7</b>	<b>708.8</b>	<b>652.1</b>	<b>25.7%</b>	<b>22.9%</b>	<b>20.4%</b>	<b>-11.1%</b>	<b>-8.0%</b>	<b>12.7%</b>	<b>10.8%</b>	<b>9.5%</b>
<b>Households</b>	<b>751.8</b>	<b>798.0</b>	<b>835.3</b>	<b>24.2%</b>	<b>25.8%</b>	<b>26.1%</b>	<b>6.1%</b>	<b>4.7%</b>	<b>12.0%</b>	<b>12.2%</b>	<b>12.2%</b>
<b>Non-earmarked Resources</b>	<b>1,556.6</b>	<b>1,584.7</b>	<b>1,714.8</b>	<b>50.1%</b>	<b>51.3%</b>	<b>53.6%</b>	<b>1.8%</b>	<b>8.2%</b>	<b>24.9%</b>	<b>24.2%</b>	<b>25.1%</b>
<b>Non-Financial Corporations</b>	<b>747.5</b>	<b>733.2</b>	<b>778.7</b>	<b>24.1%</b>	<b>23.7%</b>	<b>24.3%</b>	<b>-1.9%</b>	<b>6.2%</b>	<b>11.9%</b>	<b>11.2%</b>	<b>11.4%</b>
<b>Households</b>	<b>809.1</b>	<b>851.5</b>	<b>936.1</b>	<b>26.0%</b>	<b>27.5%</b>	<b>29.2%</b>	<b>5.2%</b>	<b>9.9%</b>	<b>12.9%</b>	<b>13.0%</b>	<b>13.7%</b>
<b>Non-earmarked Resources (BCB)</b>	November-18										
<i>New Loans, Spread and Delinquency Rates</i>	Dec-16	Dec-17	Nov-18	% of Total Credit Dec/16	% of Total Credit Dec/17	% of Total Credit Nov/18	chg.% Dec/17-Dec/16	chg.% Nov/18-Dec/17	% of GDP Dec/16	% of GDP Dec/17	% of GDP Nov/18
<b>New Loans (12-months accum. in R\$ billions)</b>	<b>2,859.5</b>	<b>2,990.1</b>	<b>3,340.9</b>	<b>100.0%</b>	<b>100.0%</b>	<b>100.0%</b>	<b>4.6%</b>	<b>11.7%</b>	<b>45.7%</b>	<b>45.6%</b>	<b>48.9%</b>
<b>Non-Financial Corporations</b>	<b>1,301.9</b>	<b>1,292.9</b>	<b>1,479.3</b>	<b>45.5%</b>	<b>43.2%</b>	<b>44.3%</b>	<b>-0.7%</b>	<b>14.4%</b>	<b>20.8%</b>	<b>19.7%</b>	<b>21.6%</b>
<b>Households</b>	<b>1,557.6</b>	<b>1,697.2</b>	<b>1,861.6</b>	<b>54.5%</b>	<b>56.8%</b>	<b>55.7%</b>	<b>9.0%</b>	<b>9.7%</b>	<b>24.9%</b>	<b>25.9%</b>	<b>27.2%</b>
<b>Spread (in pp per year)</b>	<b>39.9</b>	<b>31.9</b>	<b>29.9</b>				<b>-8.1 pp</b>	<b>-2.0 pp</b>			
<b>Non-Financial Corporations</b>	<b>16.5</b>	<b>13.7</b>	<b>12.9</b>				<b>-2.8 pp</b>	<b>-0.8 pp</b>			
<b>Households</b>	<b>60.2</b>	<b>46.1</b>	<b>43.1</b>				<b>-14.0 pp</b>	<b>-3.0 pp</b>			
<b>Delinquency (% non-performing loans by 90 days or more)</b>	<b>5.6</b>	<b>4.9</b>	<b>4.0</b>				<b>-0.7 pp</b>	<b>-1.0 pp</b>			
<b>Non-Financial Corporations</b>	<b>5.2</b>	<b>4.5</b>	<b>3.0</b>				<b>0.8 pp</b>	<b>-1.6 pp</b>			
<b>Households</b>	<b>6.1</b>	<b>5.3</b>	<b>4.8</b>				<b>-0.1 pp</b>	<b>-0.5 pp</b>			

# Total Credit: Earmarked and Non-earmarked Resources

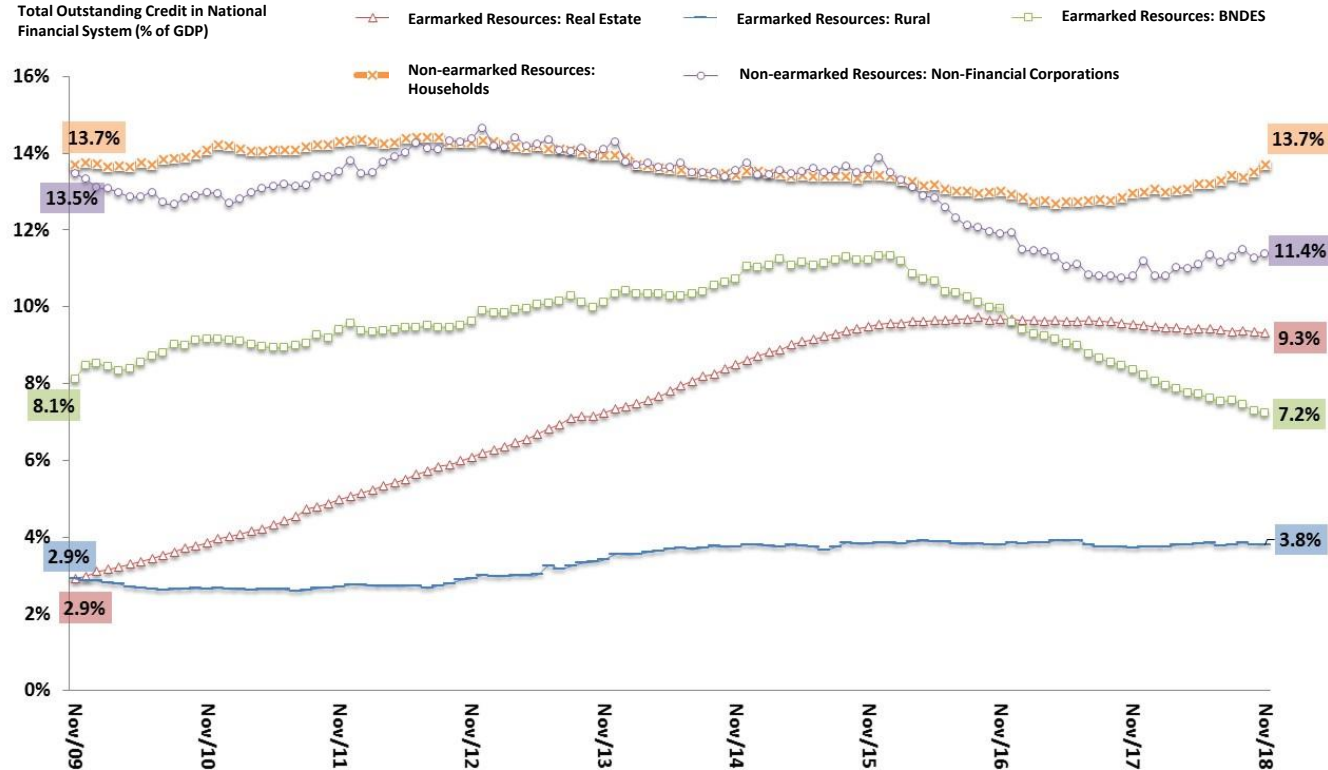
Total Outstanding Credit in National Financial System (SFN)  
% of GDP



Source: Central Bank of Brazil.

# Total Credit Evolution by Major Segments

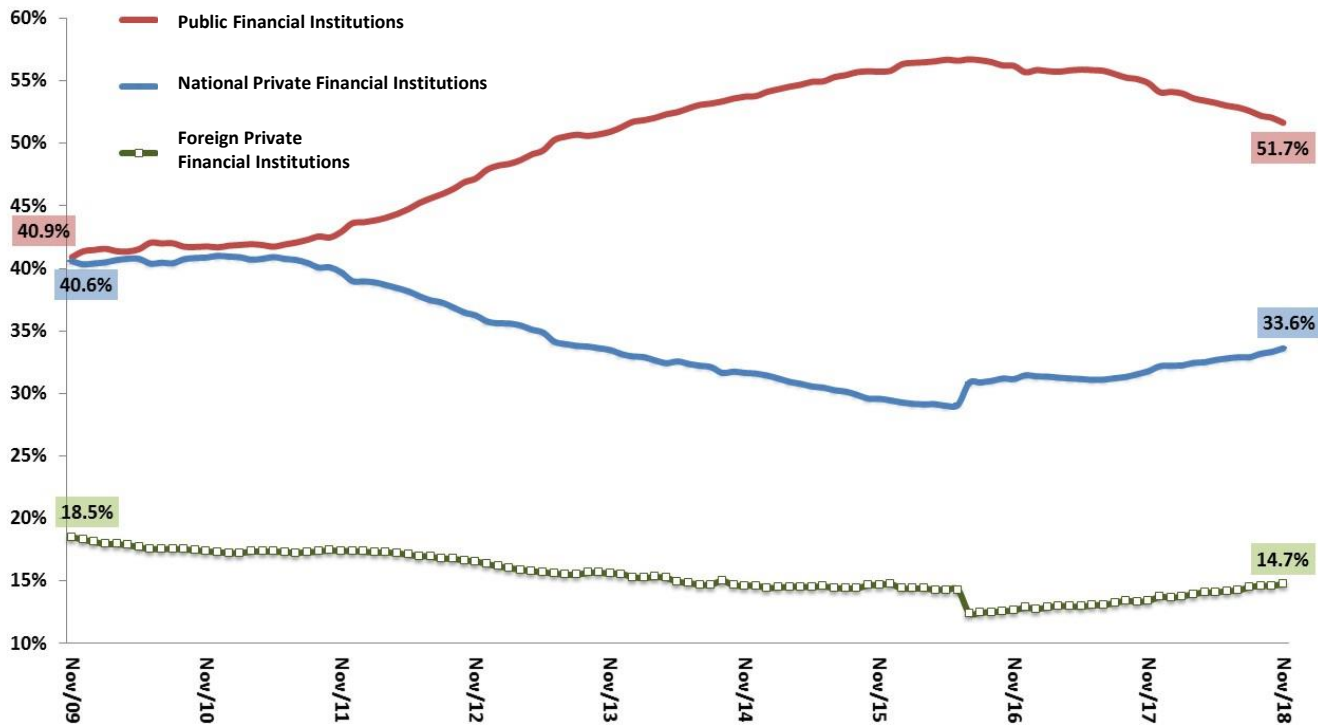
Total Outstanding Credit in National Financial System (% of GDP)



Source: Central Bank of Brazil.

# Total Credit by Types of Financial Institutions

% of Total Outstanding Credit  
to the National Financial System

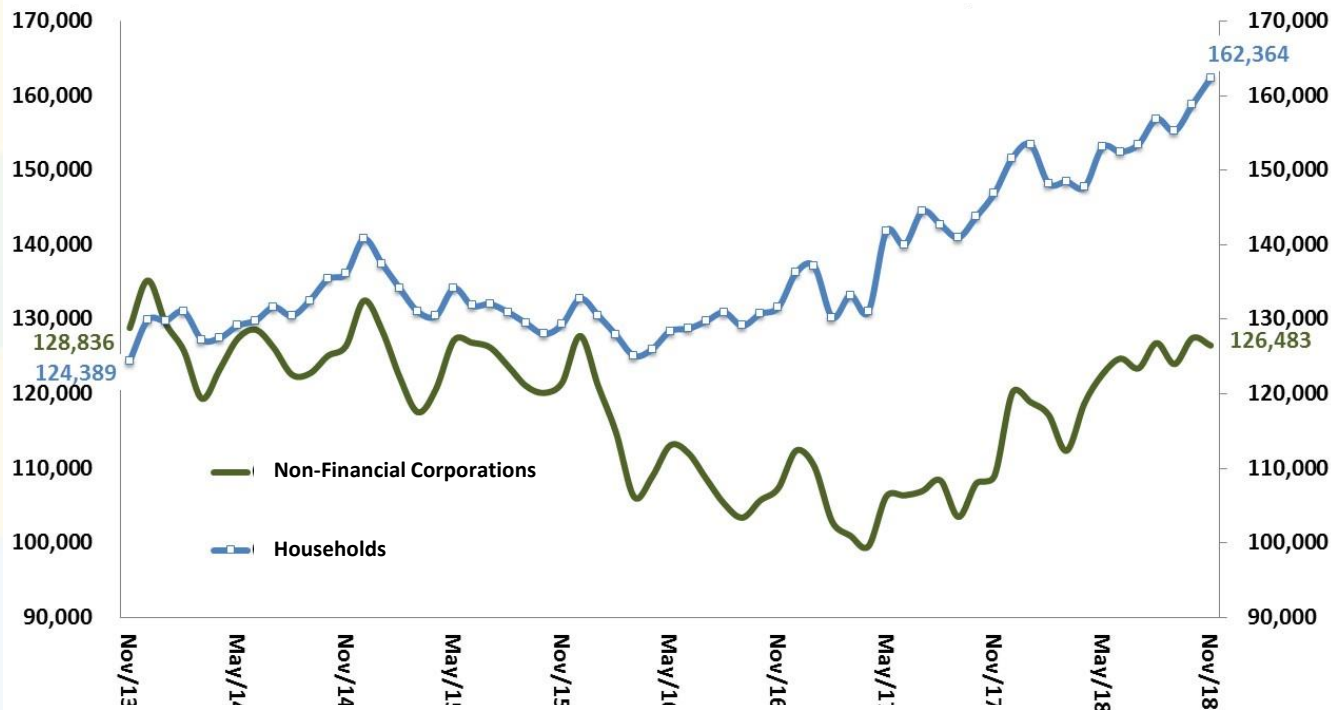


Source: Central Bank of Brazil.

# New Loans to Households and Non-Financial Corporations

Daily Average of New Loans to Non-Financial Corporations  
R\$ millions of the last month  
3-Month Moving Average - Seasonally Adjusted\*

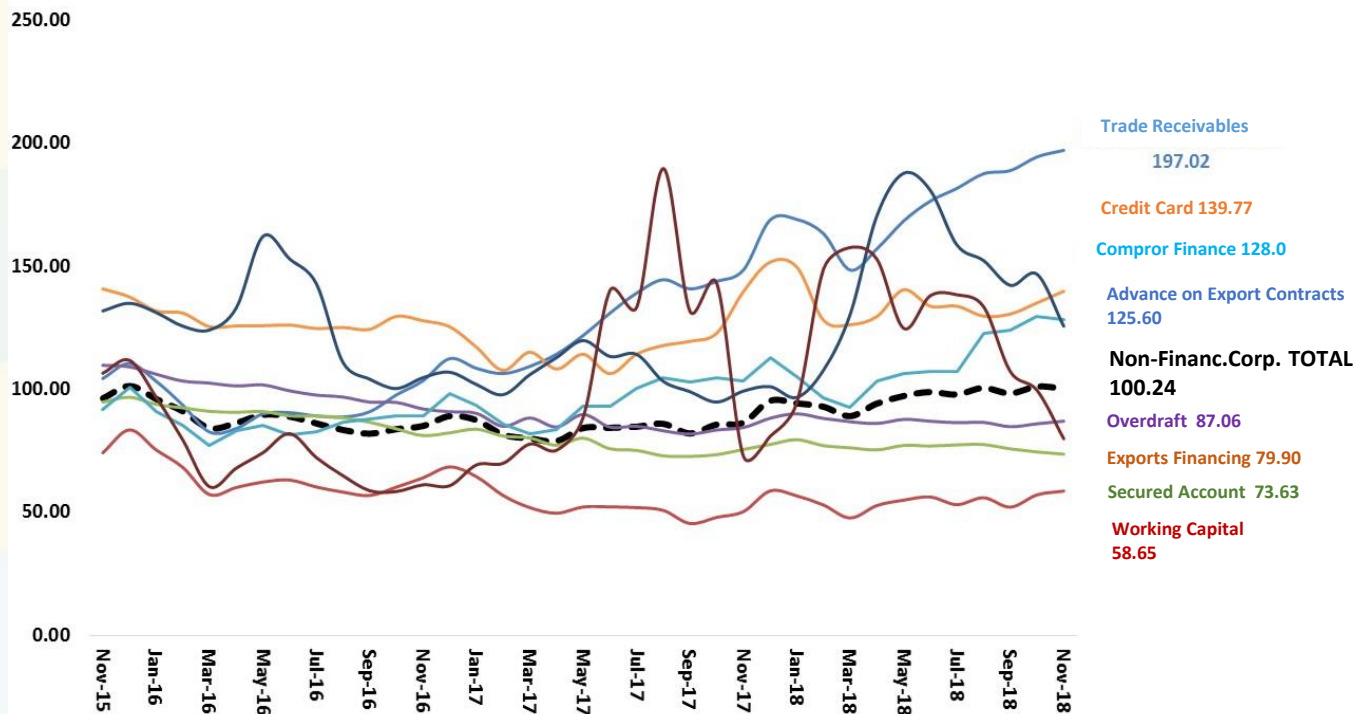
Daily Average of New Loans to Households  
R\$ millions of the last month  
3-Month Moving Average - Seasonally Adjusted\*



Source: Central Bank of Brazil. \* Seasonally adjusted by SEPLAN/MP.

# New Loans to Non-Financial Corp. by Type of Credit Lines

Daily Average of New Loans to Non-Financial Corporations – Last Month Real Values (IPCA)  
3-Month Moving Average - Seasonally Adjusted\* - Index: 2013=100

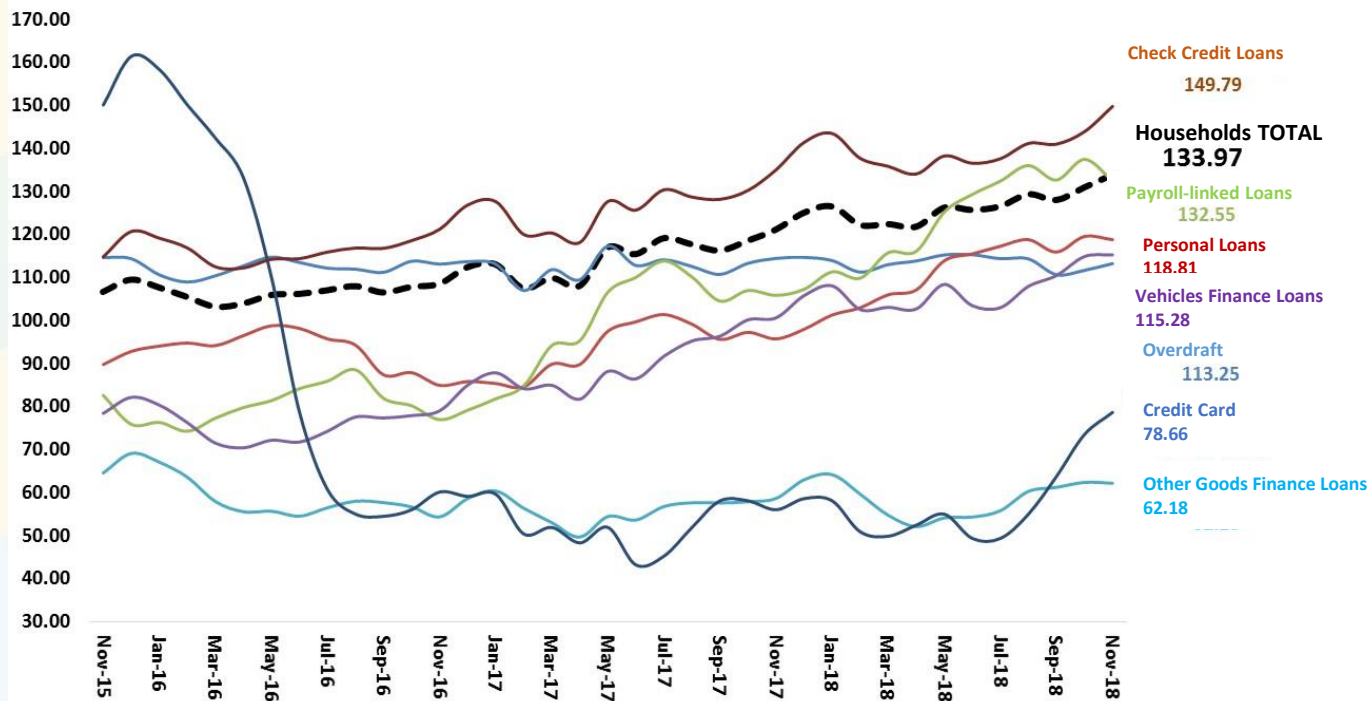


Source: Central Bank of Brazil. \* Seasonally adjusted by SEPLAN/MP.



# New Loans to Households by Type of Credit Lines

Daily Average of New Loans to Households – Real Last Month Values (IPCA)  
3-Months Moving Average - Seasonally Adjusted\* - Index: 2013=100

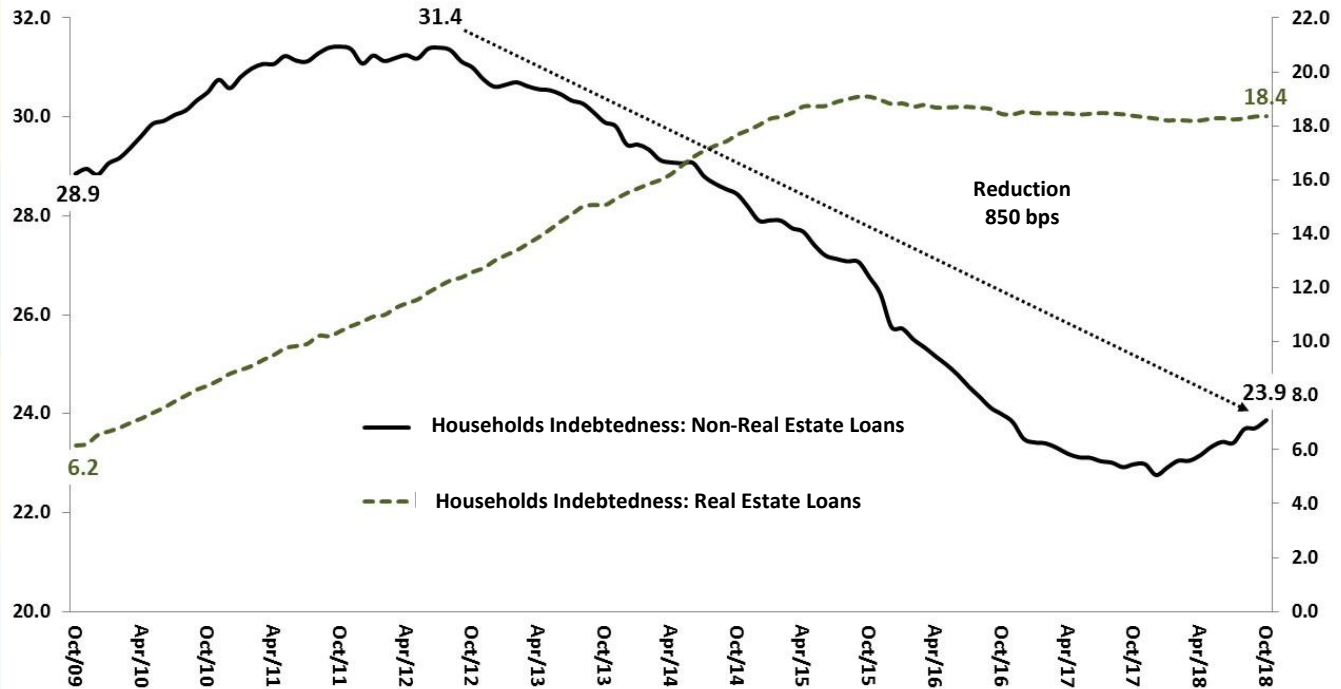


Source: Central Bank of Brazil. \* Seasonally adjusted by SEPLAN/MP using X-13Arima-Seats/X12-Arima.

# Households Indebtedness Rate

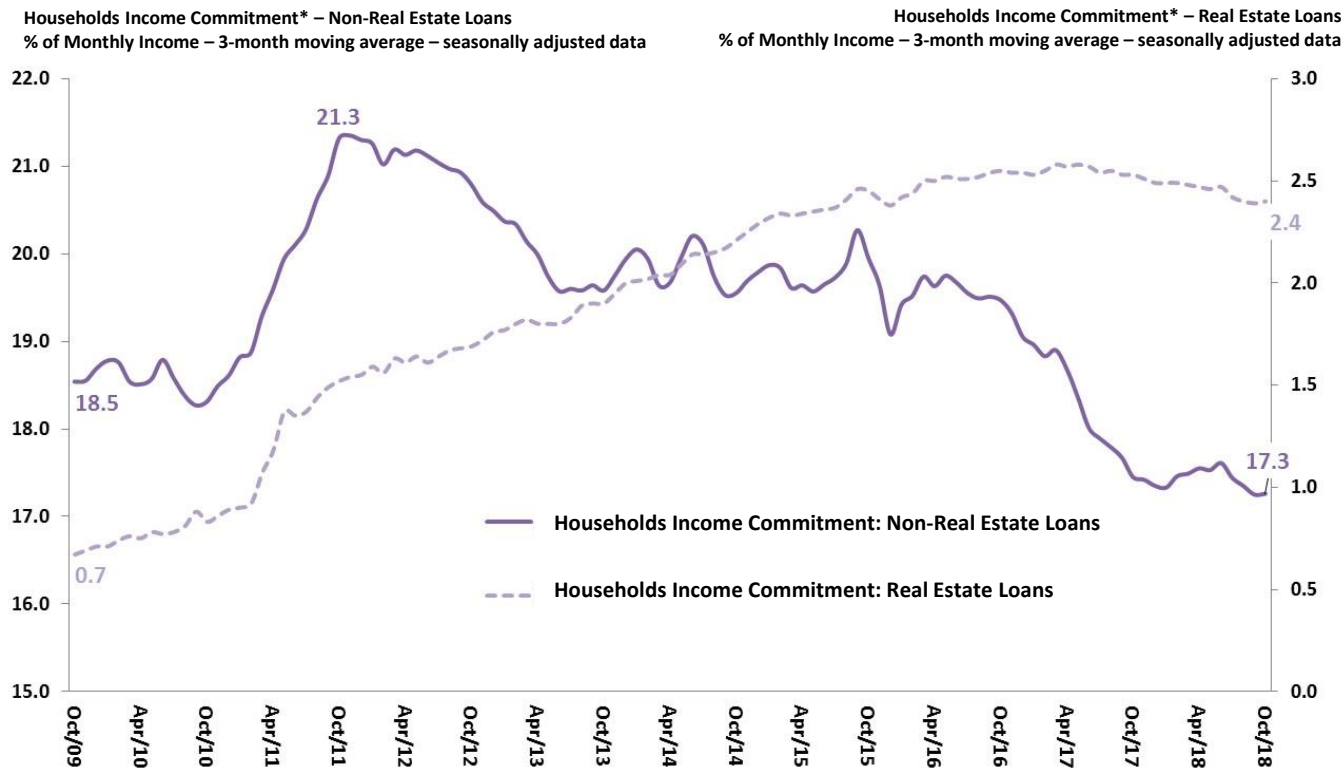
Households Indebtedness Rate\* – Non-Real Estate Loans  
% of 12-month Accumulated Income

Households\* Indebtedness Rate\* – Real Estate Loans  
% of 12-month Accumulated Income



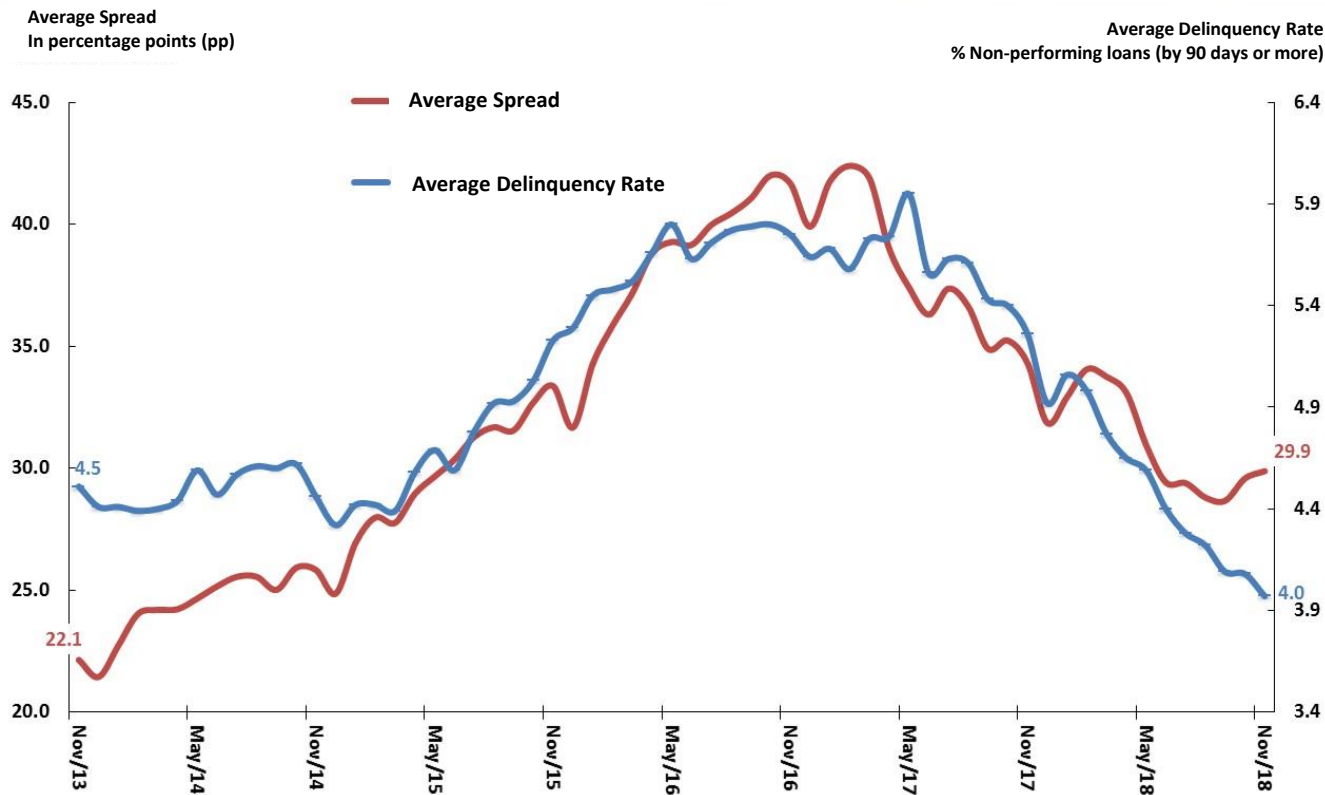
Source: Central Bank of Brazil. \* Indebtedness rate = total outstanding debt / 12-months accumulated income.

# Households Income Commitment



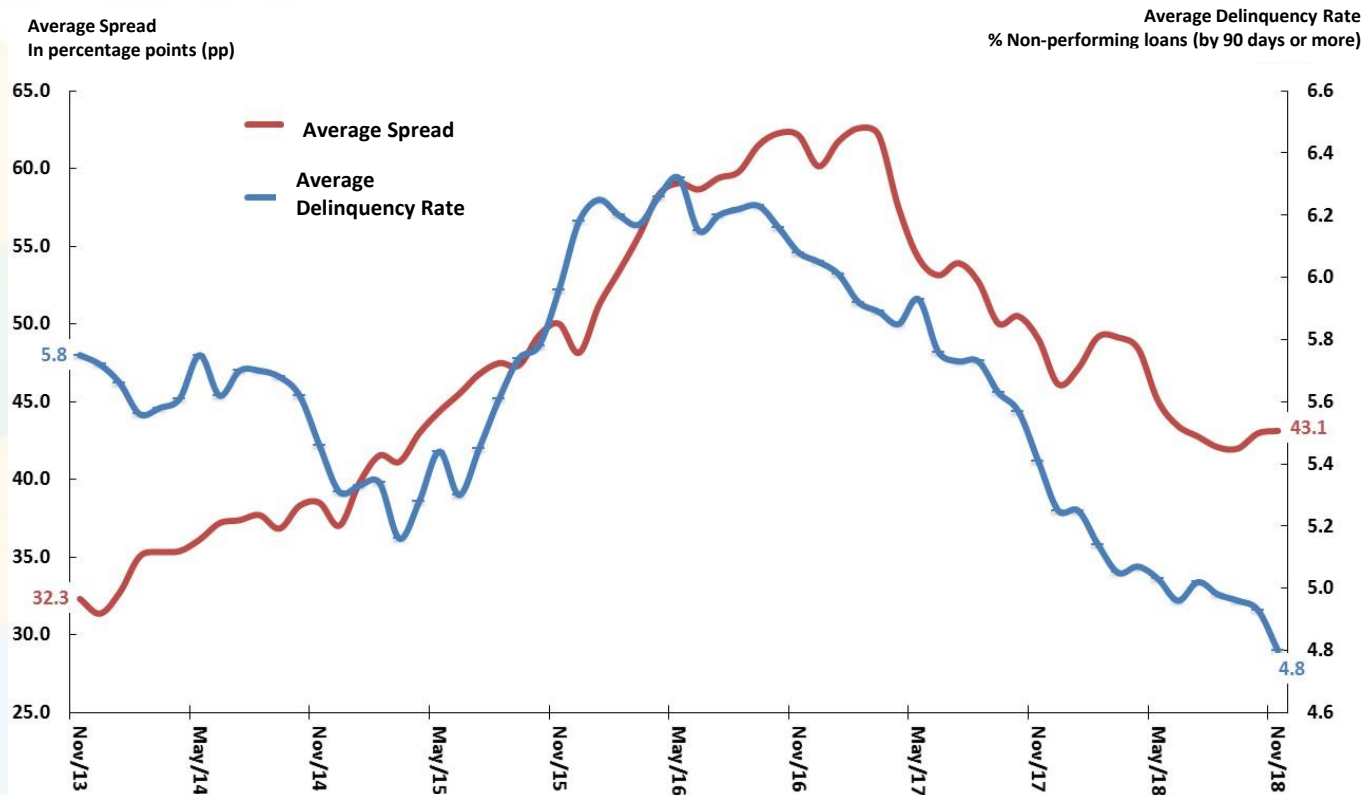
Source: Central Bank of Brazil. \* Households Income Commitment = Loans Service Monthly Expenditure / Monthly Income.

# Non-earmarked Resources: Spread and Delinquency Rates



Source: Central Bank of Brazil.

# Households Loans: Spread and Delinquency Rates

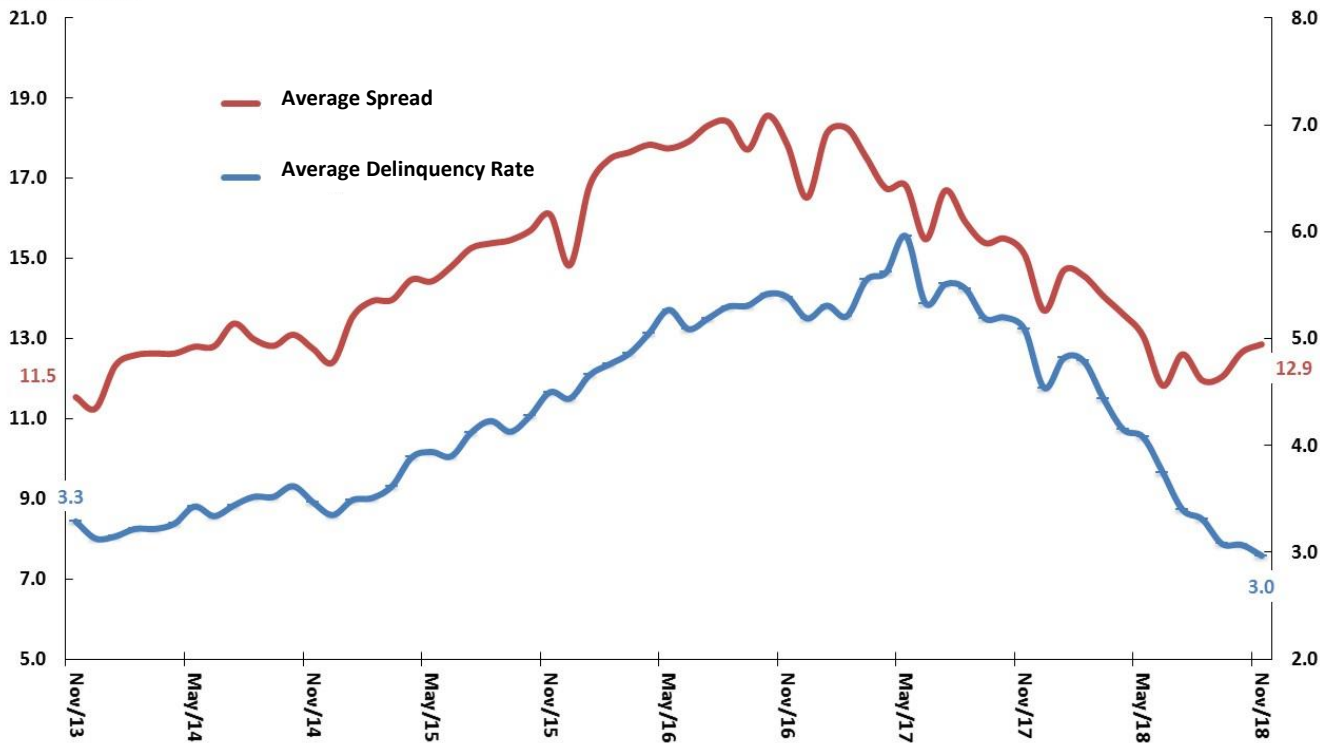


Source: Central Bank of Brazil.

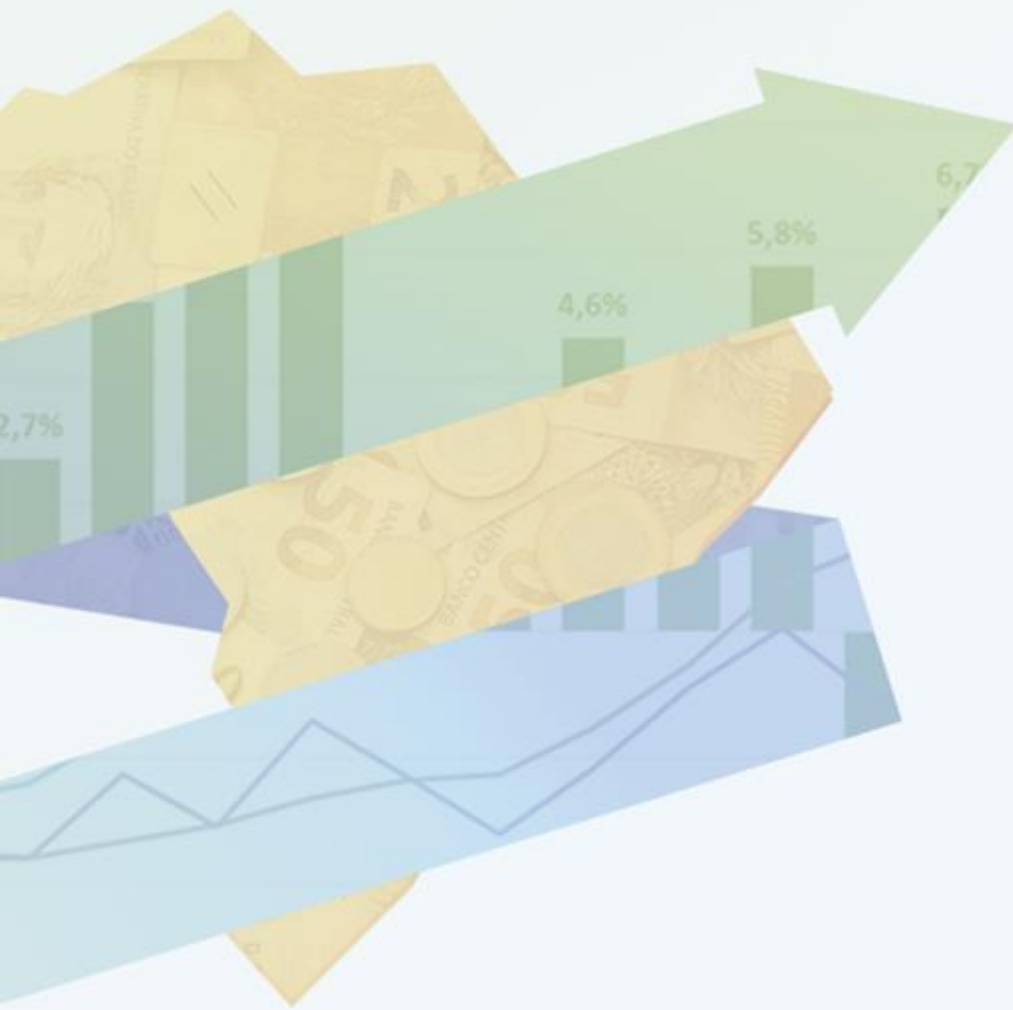
# Non-Financial Corp. Loans: Spread and Delinquency Rates

Average Spread  
In percentage points (pp)

Average Delinquency Rate  
% Non-performing loans (by 90 days or more)



Source: Central Bank of Brazil.



# **FINANCIAL MARKETS**

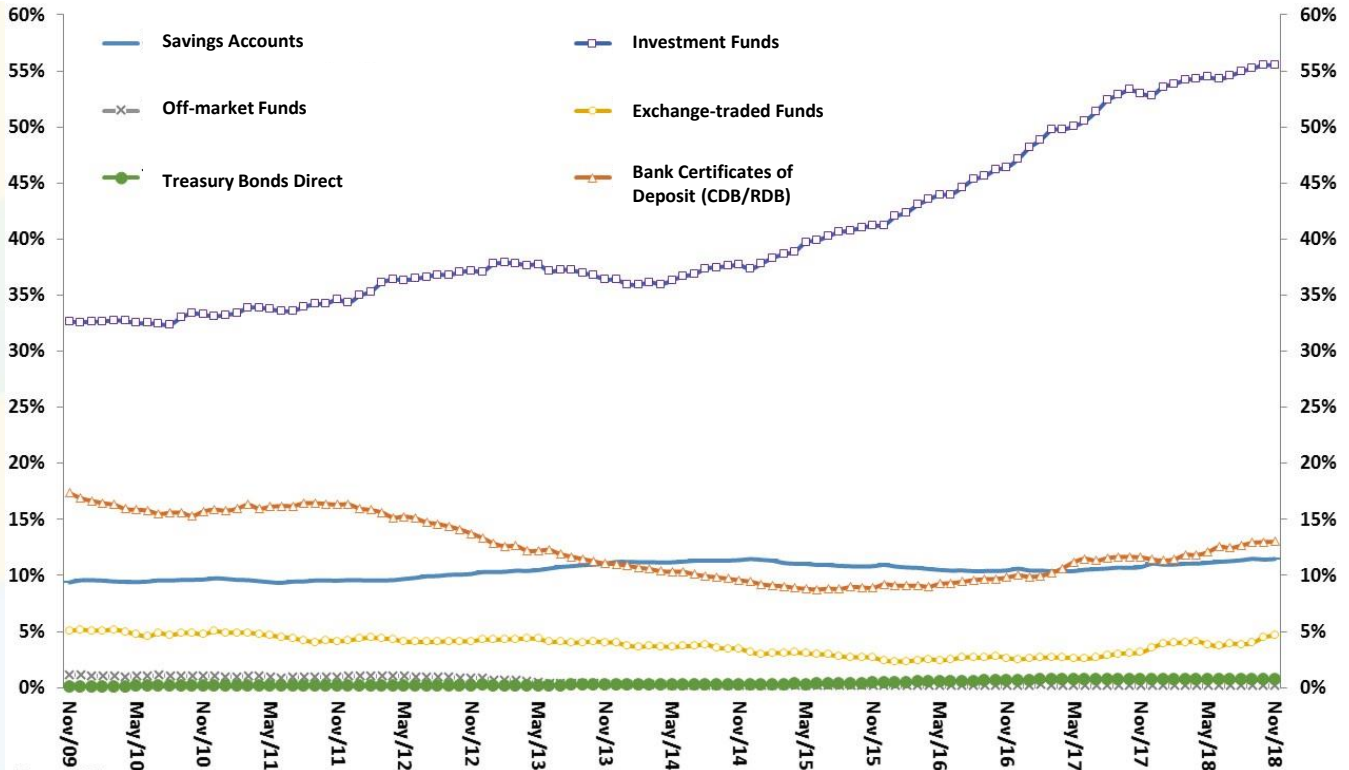
# Financial Markets

										BCB/Focus: 01/04/2019		
<b>Financial Savings (BCB)</b>	<b>November-18</b>											
Outstanding Positions - R\$ billions	Dec-16	Dec-17	Nov-17	Nov-18	chg. % Dec/16 / Dec/15	chg. % Dec/17 / Dec/16	chg. % Nov/18- Dec/17	chg. % Nov/18- Nov/17				
Bank Certificates of Deposit (CDB/RDB)	627.4	749.1	759.2	884.0	13.6%	19.4%	18.0%	16.4%				
Savings Accounts (Cademeta de Poupança)	665.0	724.6	702.3	779.8	1.3%	9.0%	7.6%	11.0%				
Investment Funds	2,953.4	3,462.6	3,460.6	3,773.0	19.4%	17.2%	9.0%	9.0%				
Off-market Funds (Fundos Extramercado)	14.9	13.5	12.9	13.4	25.0%	-9.1%	-1.2%	3.4%				
Exchange-traded Funds	158.1	232.5	204.3	317.0	9.7%	47.0%	36.4%	55.2%				
Treasury Bonds Direct (Tesouro Direto)	41.1	48.5	48.1	47.3	60.5%	18.1%	-2.4%	-1.7%				
BM&F-Bovespa - listed companies value as % of GDP	39.4%	48.2%	45.8%	53.2%	7.47 pp	8.87 pp	5.00 pp	7.44 pp				
<b>Capital Market (CVM)</b>	<b>November-18</b>											
New Public Offering - R\$ billions	Dec-16	Dec-17	Nov-17	Nov-18	chg. % Dec/16 / Dec/15	chg. % Dec/17 / Dec/16	chg. % Nov/18- Dec/17	chg. % Nov/18- Nov/17				
Stocks	0.5	8.4	7.5	3.4	-96.7%	1462.8%	-100.0%	-100%				
Debentures	21.9	6.4	6.4	2.7	5.9%	-70.9%	-	-84.6%				
Housing Credit-backed Securities (CRI)	11.3	12.0	10.5	4.8	191.9%	5.9%	-63.2%	-81.5%				
Investment Funds - new shares	2.1	5.2	4.4	15.0	-63.5%	150.0%	28.8%	119.2%				
<b>Monet Market (BCB)</b>	<b>November-18</b>											
	Dec-16	Dec-17	Nov-17	Nov-18	chg. % Dec/16 / Dec/15	chg. % Dec/17 / Dec/16	chg. % Nov/18- Dec/17	chg. % Nov/18- Nov/17				
<b>Interest Rates</b>												
<b>Selic market rate (% py)</b>	<b>13.65</b>	<b>7.00</b>	<b>7.40</b>	<b>6.40</b>	<b>-0.5 pp</b>	<b>-6.7 pp</b>	<b>-0.6 pp</b>	<b>-1.0 pp</b>				
CDI (% py)	13.63	6.99	7.39	6.40	-0.5 pp	-6.6 pp	-0.6 pp	-1.0 pp				
Swap DI-Pre 180 days (% py)	12.45	6.67	6.84	6.55	-2.7 pp	-5.8 pp	-0.1 pp	-0.3 pp				
Swap DI-Pre 360 days (% py)	11.56	6.86	7.02	6.91	-4.3 pp	-4.7 pp	0.0 pp	-0.1 pp				
<b>Monet Market (BCB)</b>	<b>January-19</b>											
	Dec-16	Dec-17	Jan-18	Jan-19	chg. % Dec/16 / Dec/15	chg. % Dec/17 / Dec/16	chg. % Jan/19- Dec/17	chg. % Jan/19- Jan/18	2018	2019	2020	
<b>Selic target rate (% py)</b>	<b>13.75</b>	<b>7.00</b>	<b>7.00</b>	<b>6.50</b>	<b>-0.5 pp</b>	<b>-6.75 pp</b>	<b>-0.5 pp</b>	<b>-0.5 pp</b>	<b>7.00%</b>	<b>8.00%</b>	<b>8.00%</b>	
TJLP (% py)	7.50	7.00	7.00	6.98	0.5 pp	-0.5 pp	-0.02 pp	-0.02 pp				
<b>Brazil Sovereign Risk (BCB)</b>	<b>December-18</b>											
Monthly Average (in basis points)	Dec-16	Dec-17	Dec-17	Dec-18	chg. pp Dec/16 / Dec/15	chg. pp Dec/17 / Dec/16	chg. % Dec/18- Dec/17	chg. % Dec/18- Dec/17				
EMBI+ (JPMorgan)	328	240	240	276	-195 pp	-88 pp	36 pp	36 pp				
5 years CDS	281	162	162	208	-214 pp	-119 pp	46 pp	46 pp				
10 years CDS	360	259	259	283	-199 pp	-100 pp	24 pp	24 pp				



# Major Financial Savings Instruments

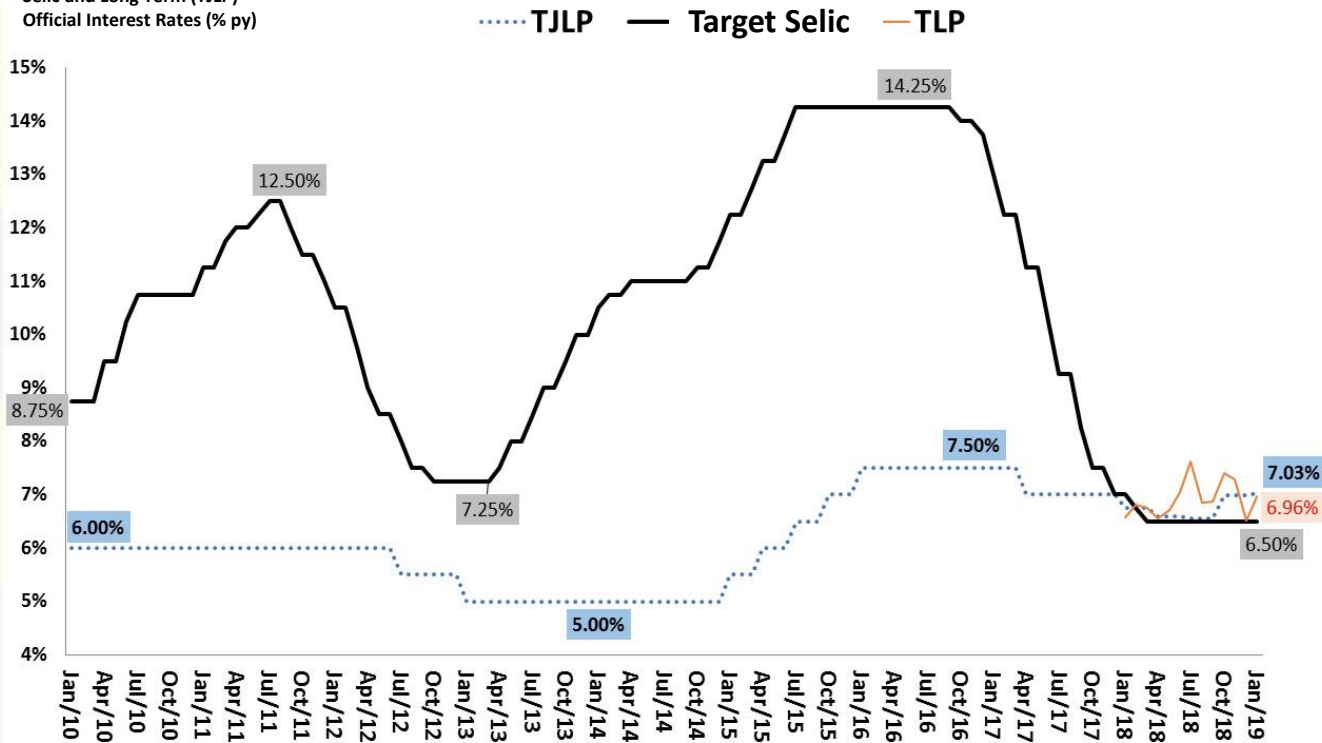
Outstanding Position as % of GDP



Source: Central Bank of Brazil.

# Official Interest Rates Evolution (Target Selic and TJLP)

Selic and Long Term (TJLP)  
Official Interest Rates (% py)

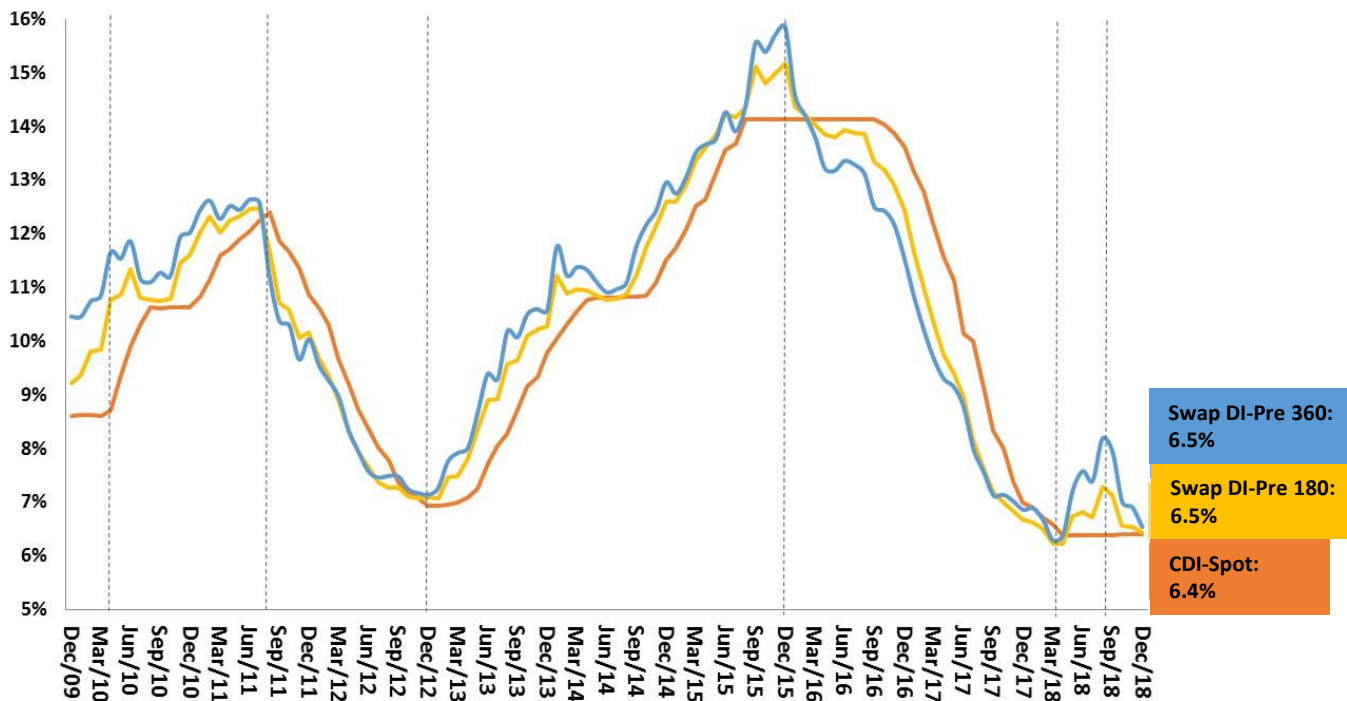


Source: Central Bank of Brazil.

# Term Structure of Interbank Interest Rate

Interbank Spot, 180 and 360-days  
Interest Rate (% p.a.)

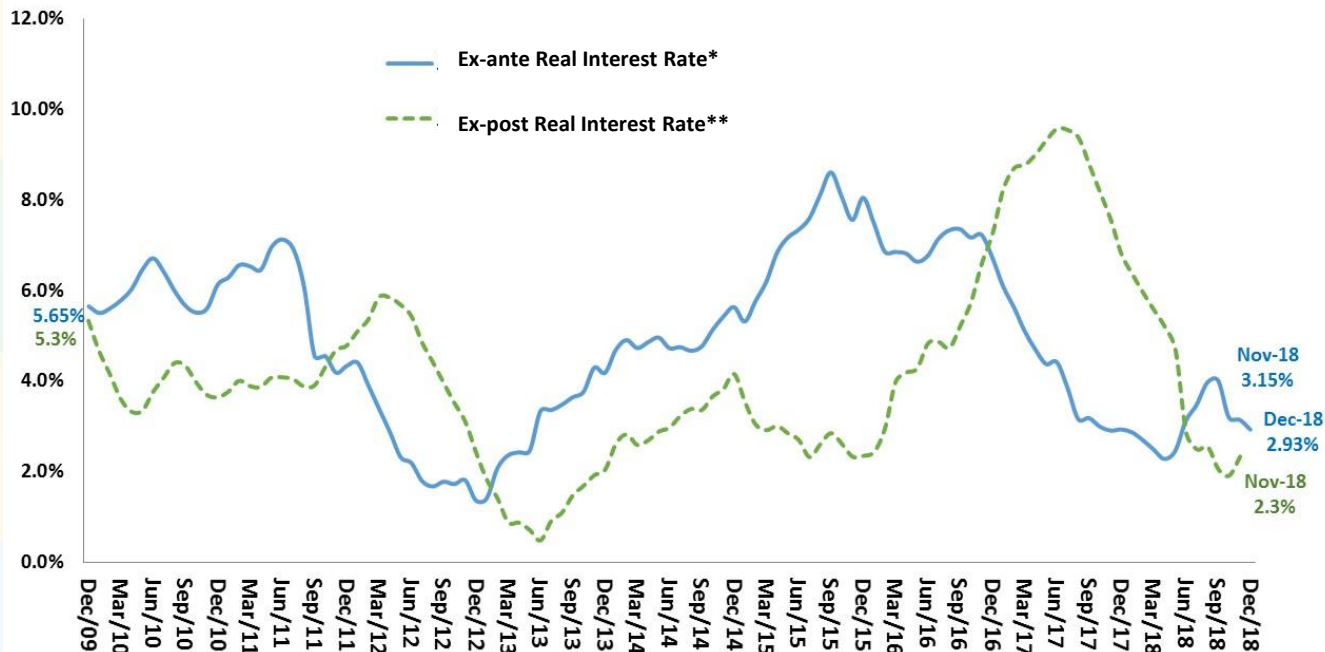
Reverse Points of Yield Curve



Source: Central Bank of Brazil.

# Ex-ante and Ex-post Real Interest Rates

Ex-ante and Ex-post Real (Interbank CDI/IPCA)  
Interest Rates (% py)



Source: Central Bank of Brazil.

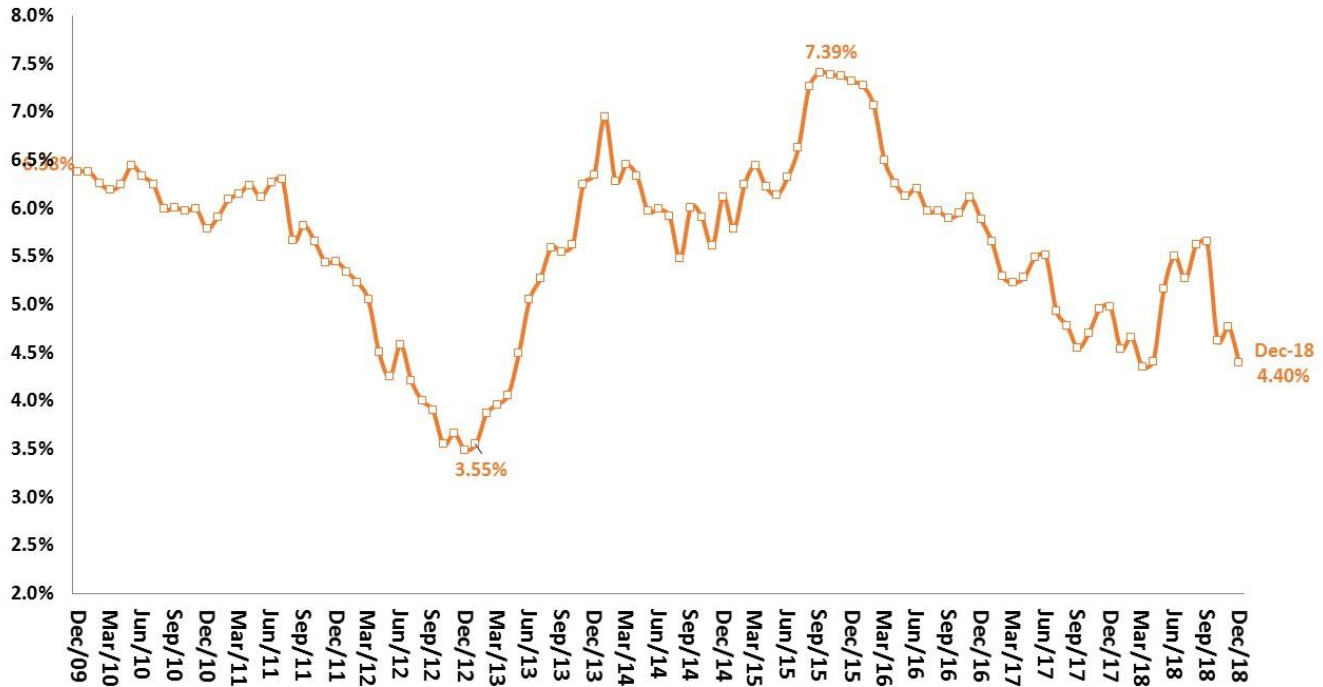
\* Ex-ante Real Interest Rate = Expected Interbank CDI/IPCA ratio, considering 360-days Swap DI-Pre rate and IPCA median of BCB-Focus Survey.

\*\* Ex-post Real Interest Rate = Observed 12-months accumulated CDI/IPCA ratio.

# Domestic Federal Bond (NTN-B): Implicit Real Interest Rate

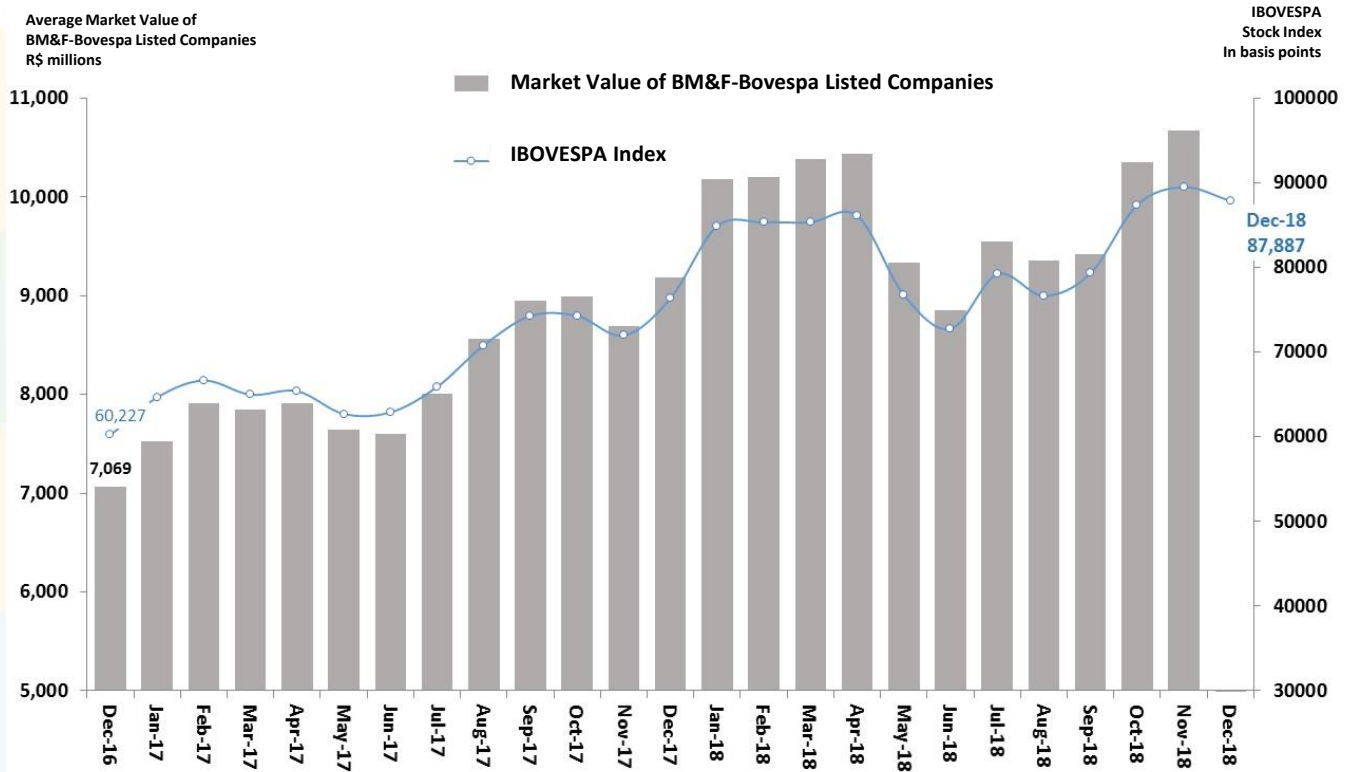
NTN-B 2024\*

Real Interest Rate (% p.a.) – End Of Month



Source: STN/MF. \* Interest rate paid by the NTN-B 2024 besides the IPCA inflation rate.

# Brazilian Stock Market Evolution

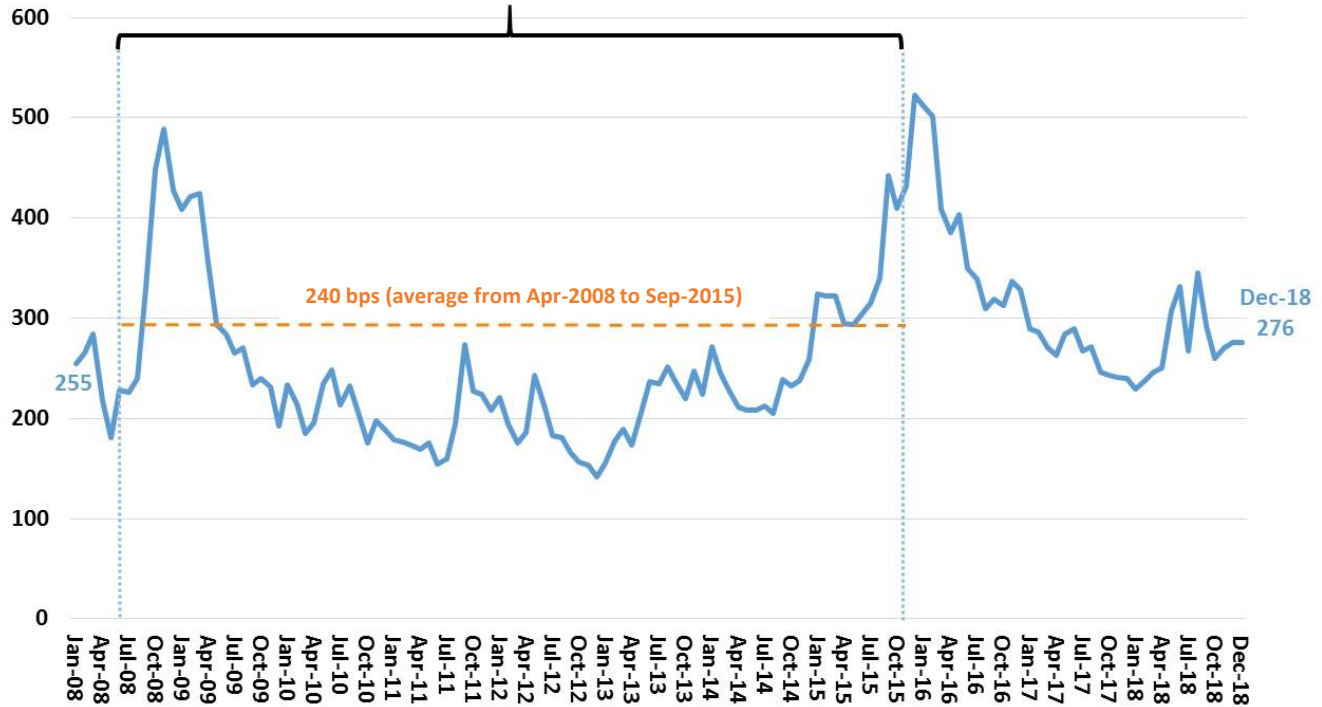


Source: Central Bank of Brazil.

# Sovereign Risk (EMBI+ BR)

EMBI+ Brazil Spread  
basis points

S&P and Fitch Investment Grade Period

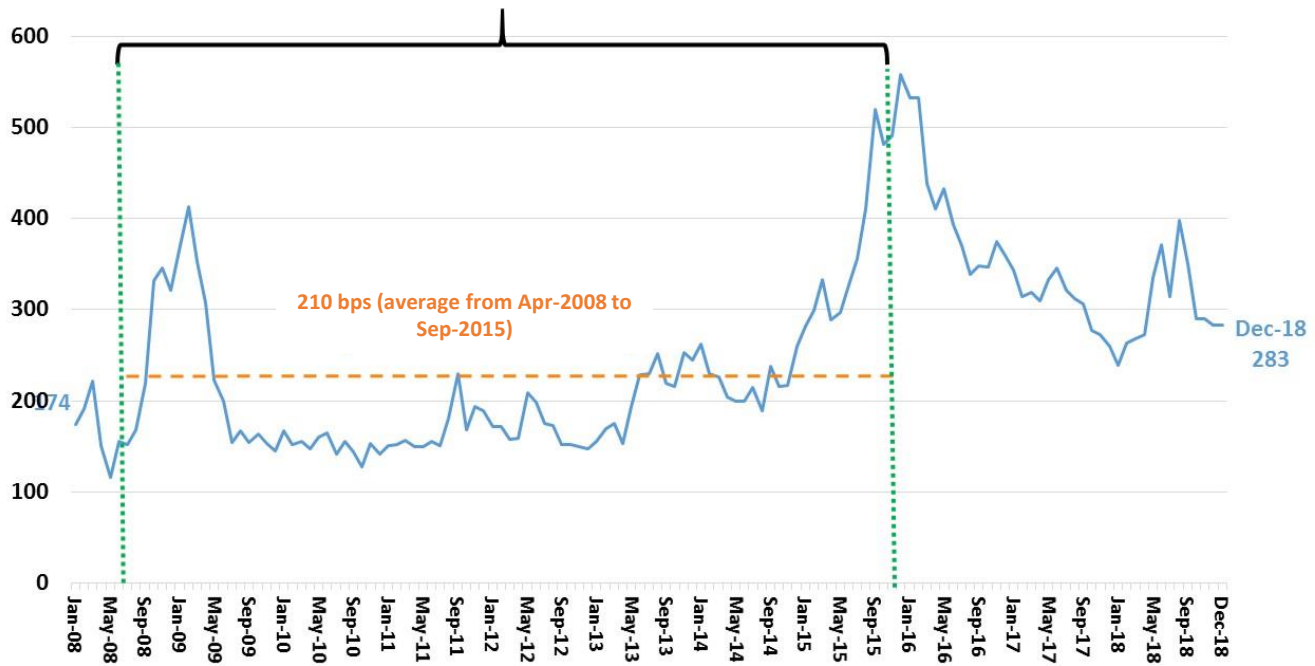


Source: JPMorgan.

# Sovereign Risk (CDS 10Y BR)

CDS 10Y Brazil Spread  
basis points

S&P and Fitch Investment Grade Period



Source: Bloomberg.



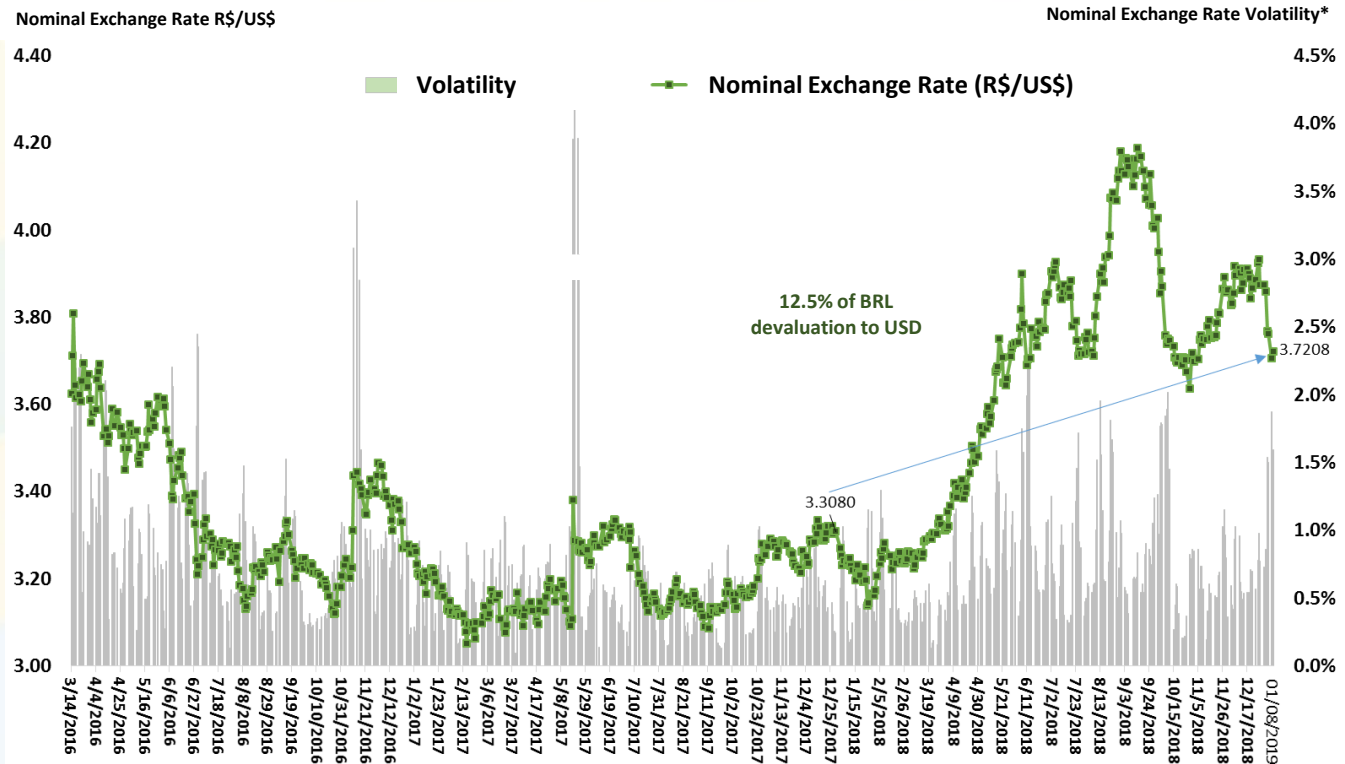


# FOREIGN TRADE

# Foreign Trade

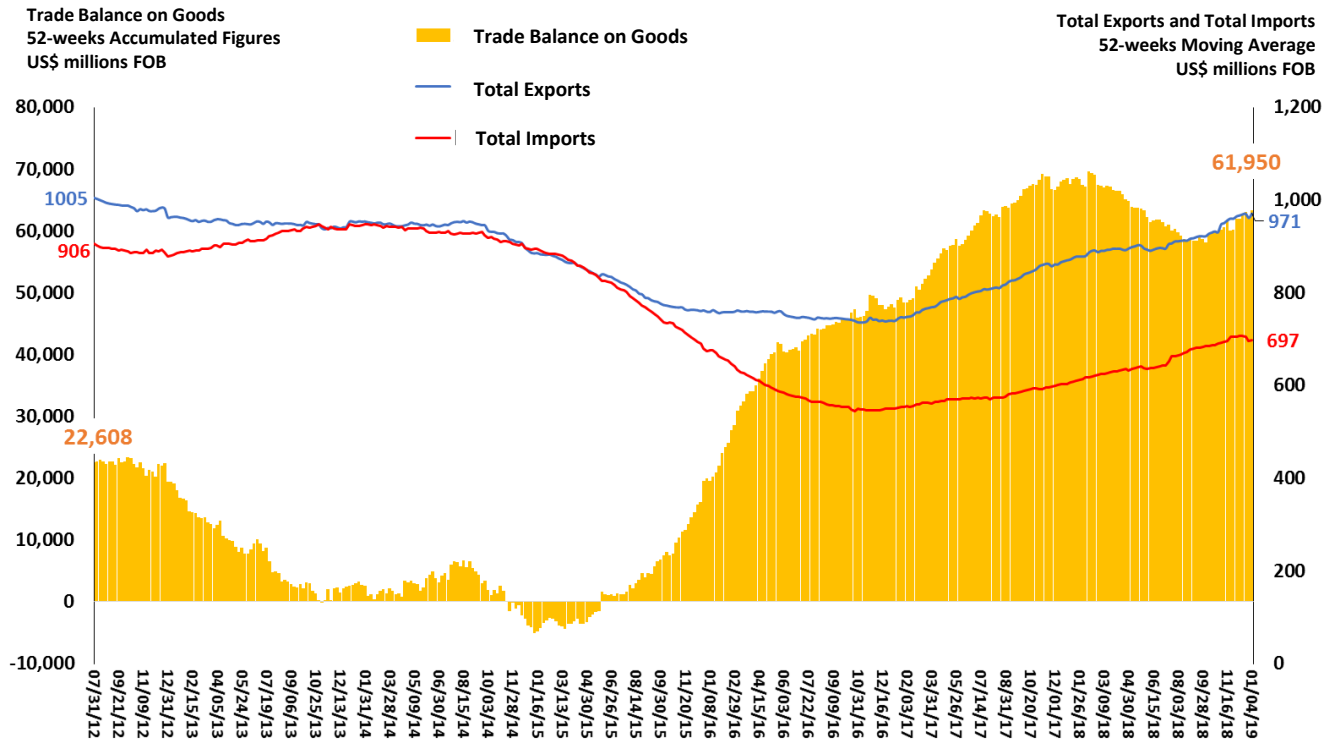
											BCB/Focus: 01/04/2019		
Exchange Rate Indicators (BCB)	December-18	2016	2017	chg.% Oct/18-Oct/17	chg.% Nov/18-Nov/17	chg.% Dec/18-Dec/17	YTD 2017	Oct/18 accum. in 12-months	Nov/18 accum. in 12-months	Dec/18 accum. in 12-months	Average FX Rate 2018	Average FX Rate 2019	Average FX Rate 2020
FX % change rate: appreciation (-) or depreciation (+) of the Real													
Nominal Exchange Rate (R\$/US\$) - sale - end of period; month value:	3.8748	1.8%	-7.2%	13.5%	18.4%	17.1%	14.9%	11.6%	13.5%	14.9%	3.80	3.77	3.81
Exchange Rate Indicators (BCB)	November-18	2016	2017	chg.% Sep/18-Sep/17	chg.% Oct/18-Oct/17	chg.% Nov/18-Nov/17	YTD 2017	Sep/18 accum. in 12-months	Oct/18 accum. in 12-months	Nov/18 accum. in 12-months			
FX % change rate: appreciation (-) or depreciation (+) of the Real													
Real Effective Exchange Rate (IPCA)		-5.3%	-8.8%	19.3%	8.6%	6.9%	12.5%	10.7%	11.3%	11.8%			
Exchange Rate / Wage Ratio adjusted by Labor Productivity		-15.2%	-1.2%	17.6%	6.3%	5.7%	10.9%	11.3%	10.9%	10.7%			
Unitary Labor Cost in US\$		2.5%	7.4%	-20.7%	-15.2%	-13.6%	-12.4%	-9.7%	-10.7%	-11.7%			
Foreign Trade of Goods (FUNCEX)	November-18	2016	2017	chg.% Sep/18-Sep/17	chg.% Oct/18-Oct/17	chg.% Nov/18-Nov/17	YTD 2017	Sep/18 accum. in 12-months	Oct/18 accum. in 12-months	Nov/18 accum. in 12-months			
Average Price and Quantum													
QUANTUM													
Exports (X)		3.3%	6.8%	-1.5%	12.2%	22.6%	2.7%	4.3%	3.3%	4.9%			
Basic Goods		-2.7%	13.2%	6.1%	26.0%	33.0%	5.8%	8.6%	8.3%	9.2%			
Semi-Manufactured		9.9%	0.6%	-1.2%	-3.3%	7.4%	-4.6%	-3.6%	-5.8%	-5.1%			
Manufactured		7.9%	2.7%	-11.7%	4.0%	21.8%	2.1%	2.3%	1.1%	4.0%			
Imports (M)		-11.9%	5.3%	-3.3%	11.5%	21.5%	14.6%	12.9%	12.6%	13.6%			
Intermediate Goods		-7.4%	7.0%	-3.1%	10.7%	10.0%	7.0%	5.0%	5.2%	5.8%			
Capital Goods		-17.0%	-9.1%	-4.7%	18.7%	174.5%	85.5%	67.0%	65.4%	78.5%			
Durable Consumer Goods		-36.0%	8.5%	32.2%	19.8%	-9.9%	29.6%	34.8%	33.9%	30.4%			
Semi and Non-Durable Consumer Goods		-9.2%	8.2%	-8.6%	12.4%	-6.1%	4.3%	6.3%	5.9%	4.1%			
Fuel and Lubricants		-22.1%	9.4%	-10.2%	4.1%	-8.5%	0.5%	10.2%	7.0%	4.2%			
Exports Profitability Index		-8.2%	-1.3%	20.4%	8.1%	6.8%	10.8%	8.6%	8.8%	9.7%			
Quantum Ratio = average quantum X / average quantum M		15.6%	1.4%	1.6%	0.9%	1.5%	-10.0%	-7.3%	-7.9%	-7.3%			
PRICE													
Exports (X)		-6.2%	10.1%	5.0%	3.9%	2.2%	4.9%	4.7%	4.4%	4.6%			
Basic Goods		-6.7%	12.8%	10.9%	4.7%	5.3%	7.1%	6.2%	5.9%	6.1%			
Semi-Manufactured		-3.9%	11.7%	-1.6%	2.3%	-2.9%	1.7%	3.3%	3.1%	2.4%			
Manufactured		-5.9%	5.7%	3.0%	6.8%	2.5%	4.2%	3.5%	3.7%	4.2%			
Imports (M)		-8.9%	4.1%	8.3%	5.6%	5.6%	6.1%	6.2%	6.3%	6.4%			
Intermediate Goods		-7.7%	3.0%	8.0%	5.4%	5.4%	6.1%	6.2%	6.3%	6.4%			
Capital Goods		-5.0%	-3.2%	5.5%	-2.1%	-1.7%	-0.6%	-0.6%	-0.7%	-0.2%			
Durable Consumer Goods		-3.9%	2.0%	-3.8%	-10.6%	-0.2%	0.3%	2.4%	0.7%	0.6%			
Semi and Non-Durable Consumer Goods		-2.8%	-1.8%	-4.5%	1.1%	-1.3%	0.8%	0.6%	1.5%	1.0%			
Fuel and Lubricants		-26.6%	29.5%	31.6%	24.6%	22.9%	20.8%	21.5%	21.9%	21.2%			
Terms of Trade = average price X / average price M		3.1%	5.8%	-3.1%	-1.6%	-3.3%	-1.1%	-1.5%	-1.8%	-1.7%			

# Daily Nominal Exchange Rate R\$/US\$



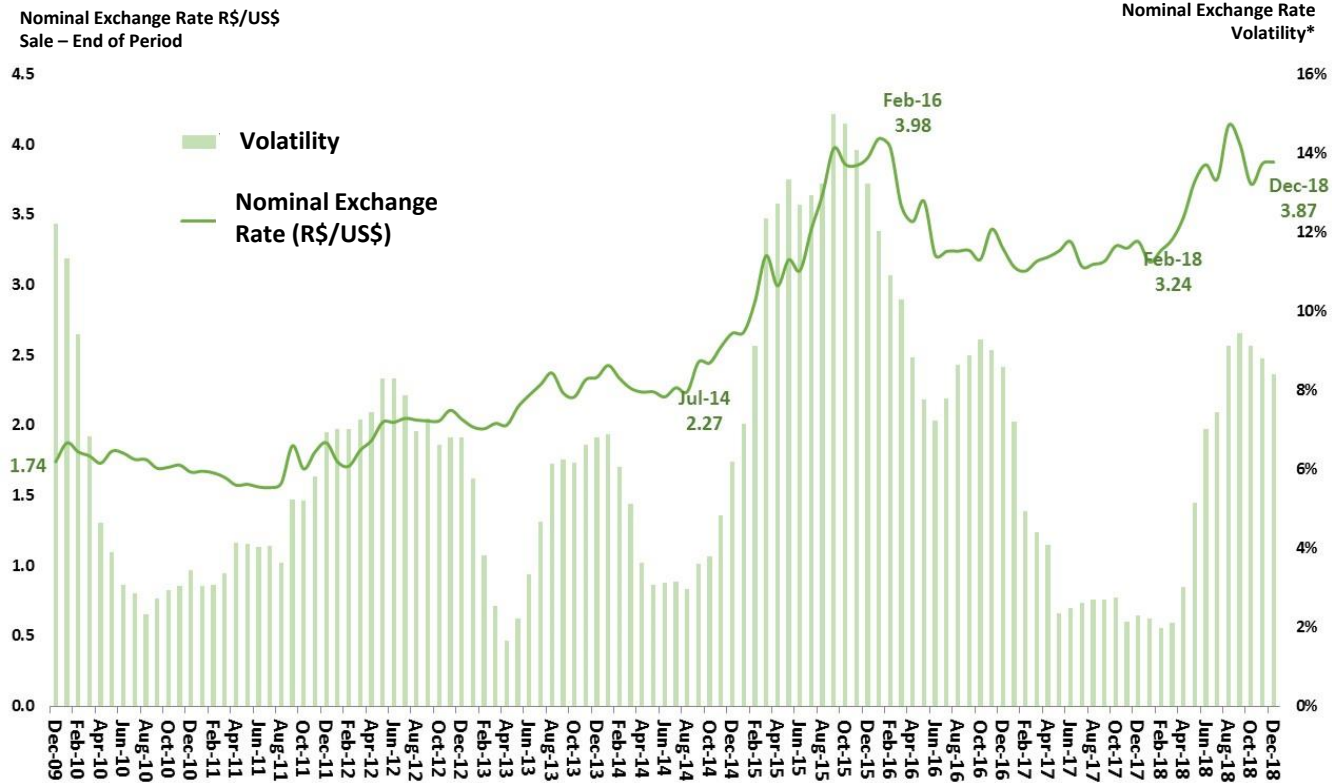
Source: Central Bank of Brazil. \*Volatility = 5-days Moving Coefficient of Variation.

# Trade Balance on Goods (52 weeks daily average)



Source: SECEX/MDIC.

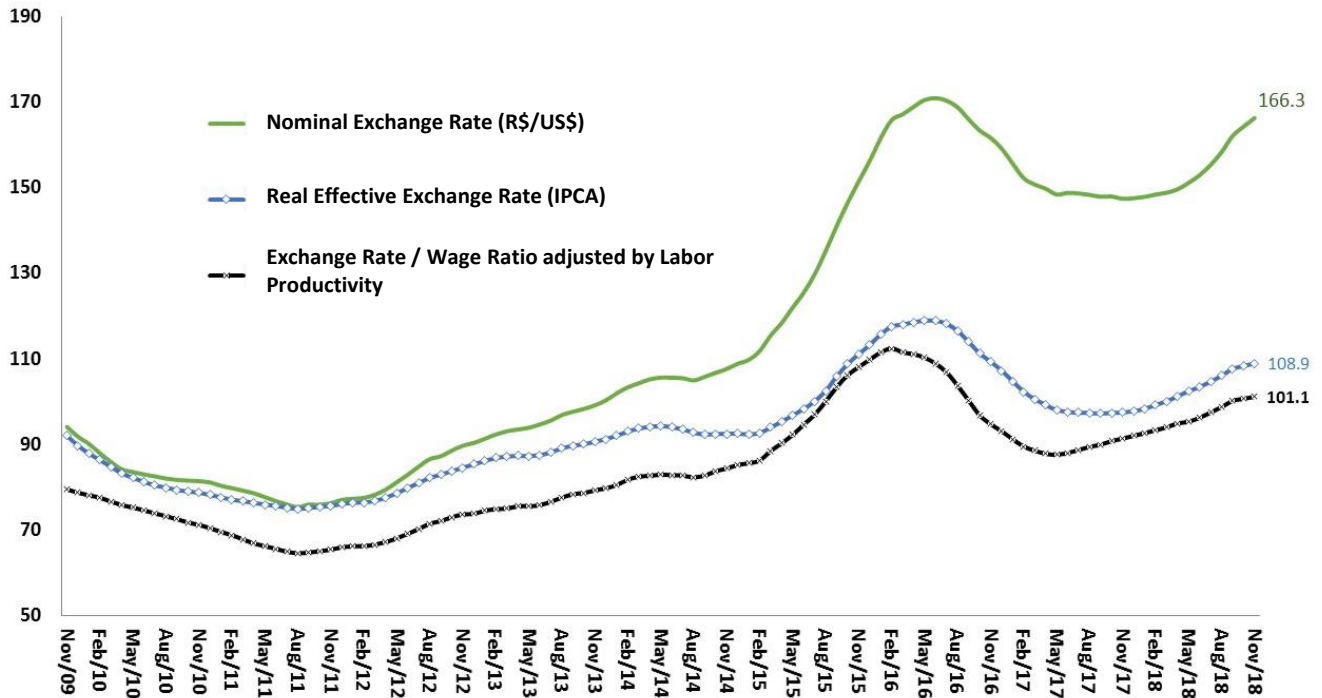
# Nominal Exchange Rate R\$/US\$



Source: Central Bank of Brazil. \*Volatility = 12-months Moving Coefficient of Variation.

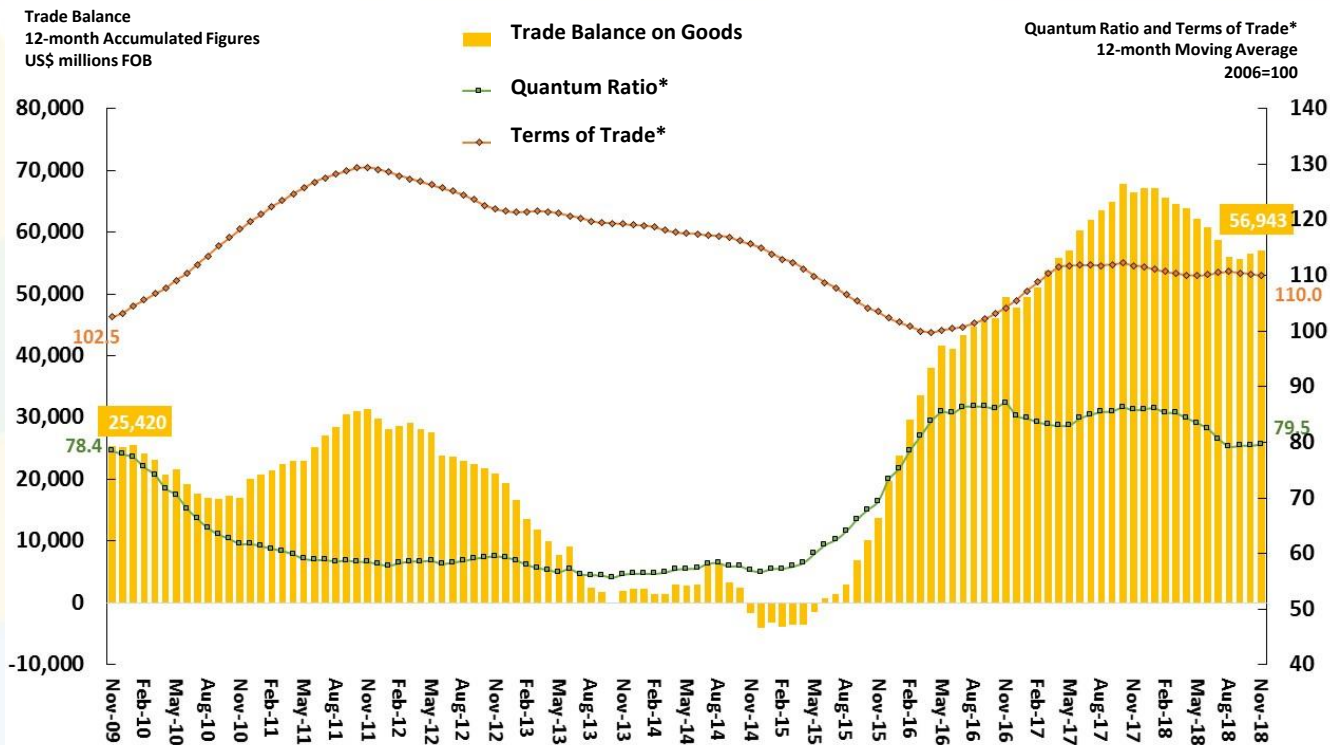
# Exchange Rate Indexes

Exchange Rate Indexes (2006=100)  
12-month Moving Average



Source: Central Bank of Brazil.

# Trade Balance, Quantum and Terms of Trade Ratios



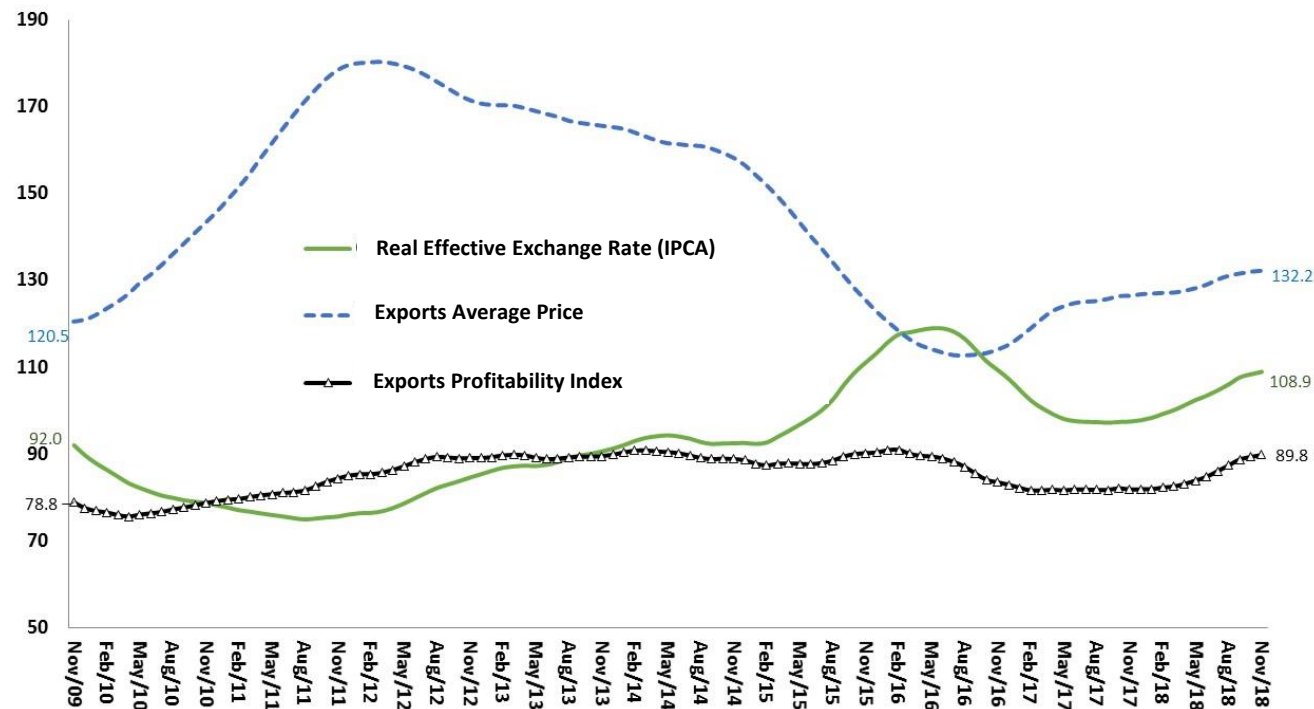
Sources: SECEX/MDIC and FUNCEX.

\* Quantum Ratio = (average quantum Exports / average quantum Imports)

Terms of Trade = (average price Exports / average price Imports)

# Exports: Profitability, Price and Real Exchange Rate

Real Effective Exchange Rate (IPCA), Exports Average Price and Exports Profitability Index  
12-month Moving Average (2006=100)

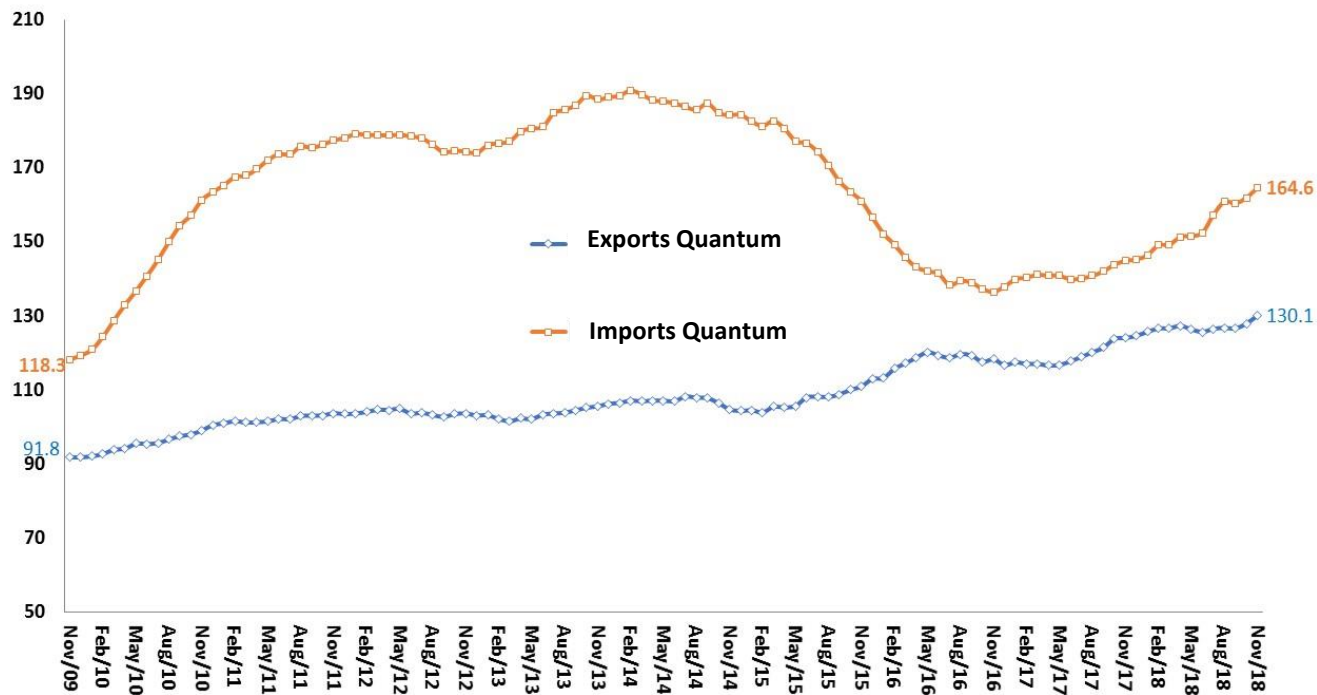


Sources: Central Bank of Brazil and FUNCEX.



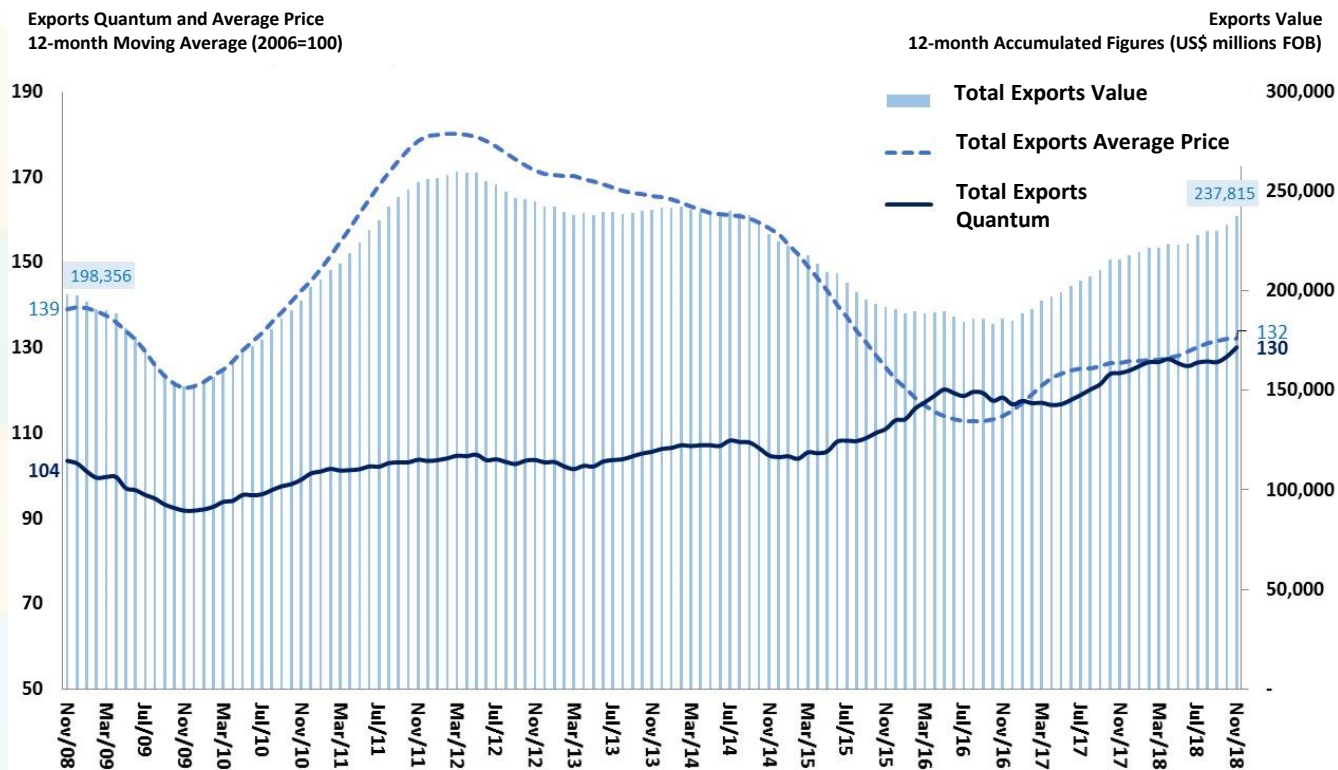
# Quantum of Exports and Imports

Exports and Imports Quantum  
12-month Moving Average (2006=100)



Source: FUNCEX.

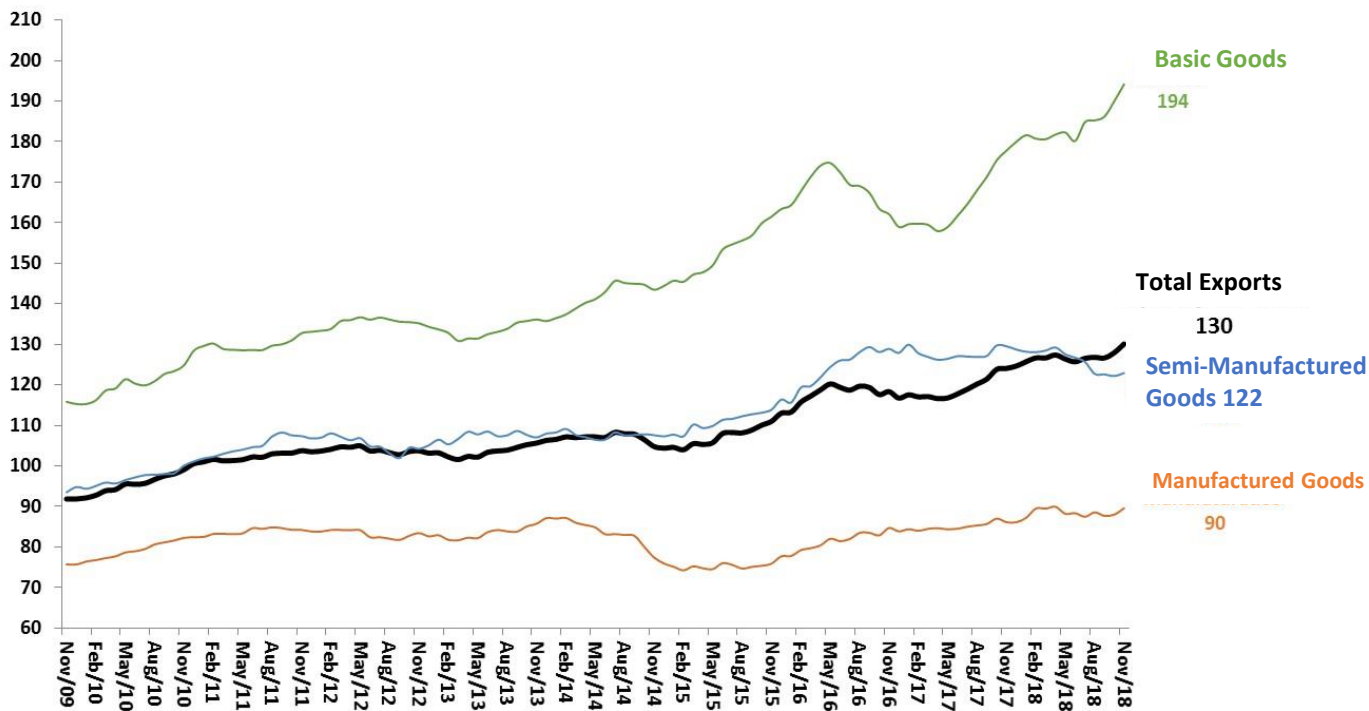
# Total Exports: value, quantum and price



Sources: SECEX/MDIC and FUNCEX.

# Quantum of Total Exports by Class of Products

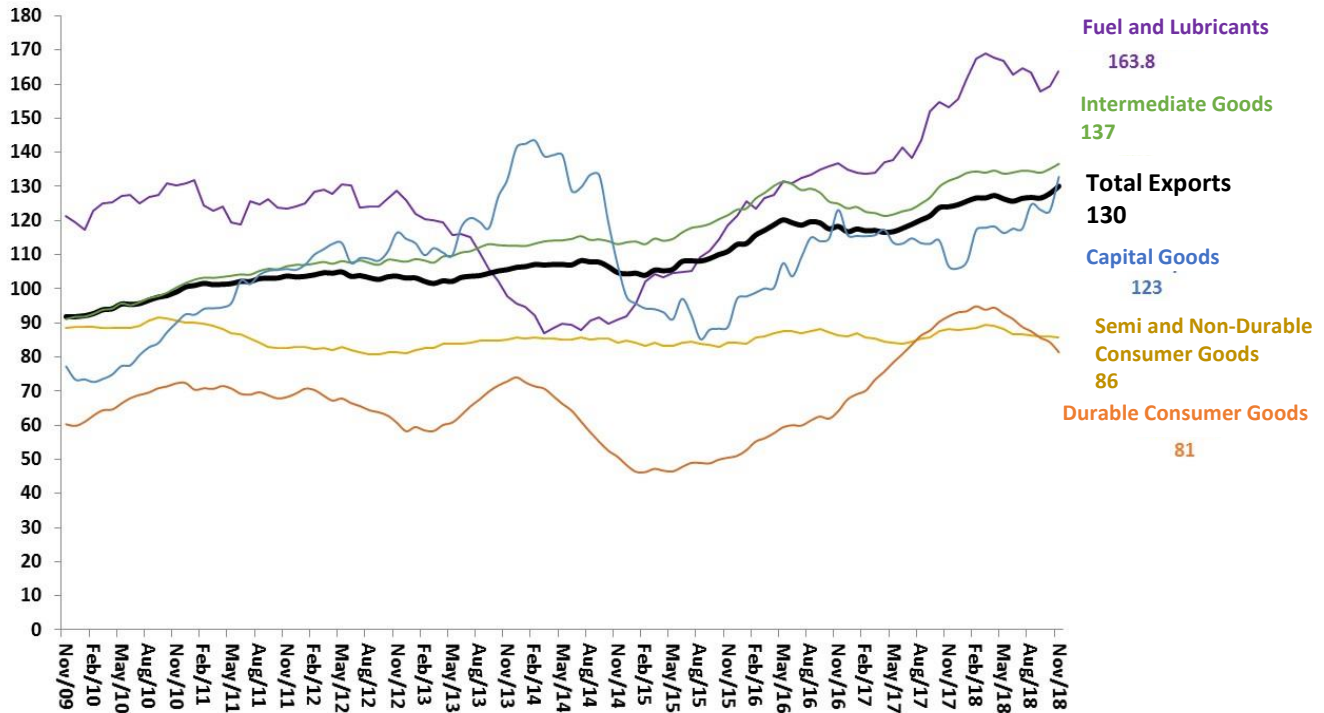
Exports Quantum by Class of Products  
12-months Moving Average (2006=100)



Source: FUNCEX.

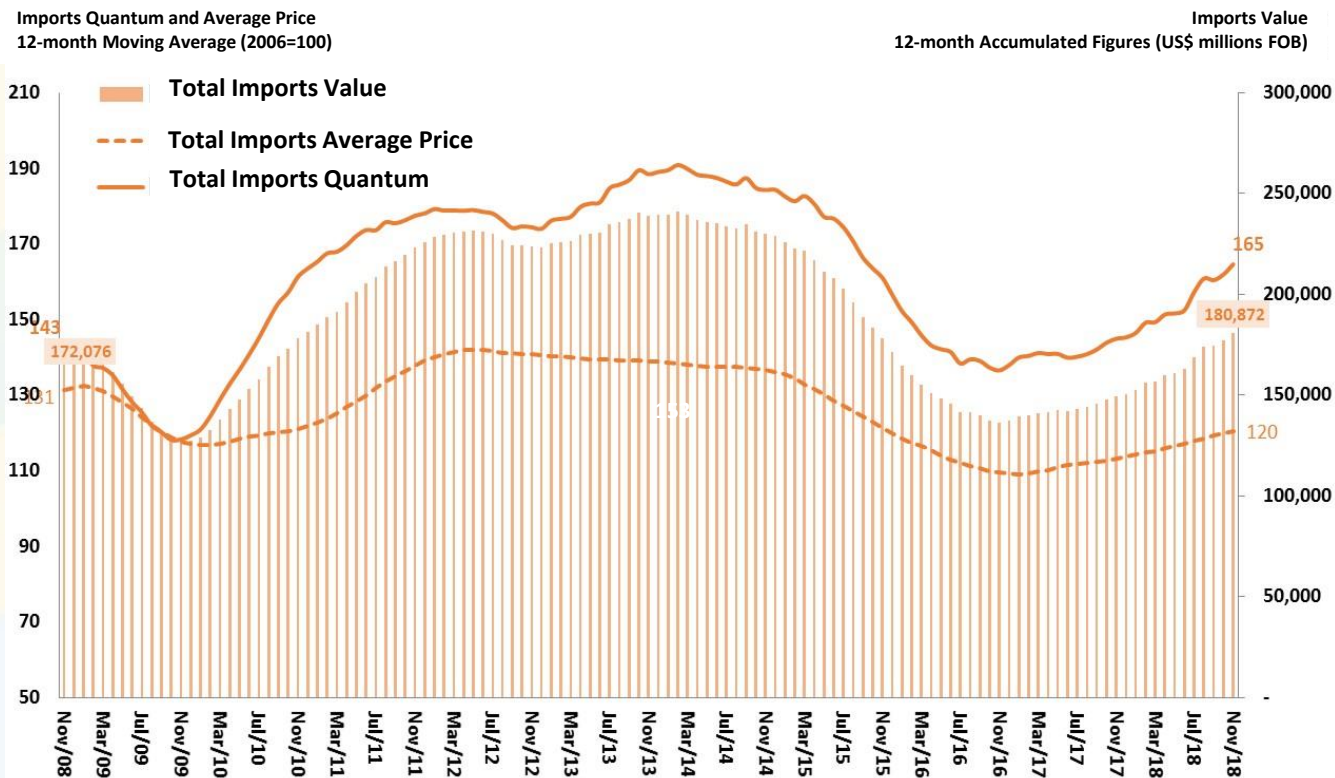
# Quantum of Total Exports by Economic Categories

Exports Quantum by Economic Categories  
12-month Moving Average (2006=100)



Source: FUNCEX.

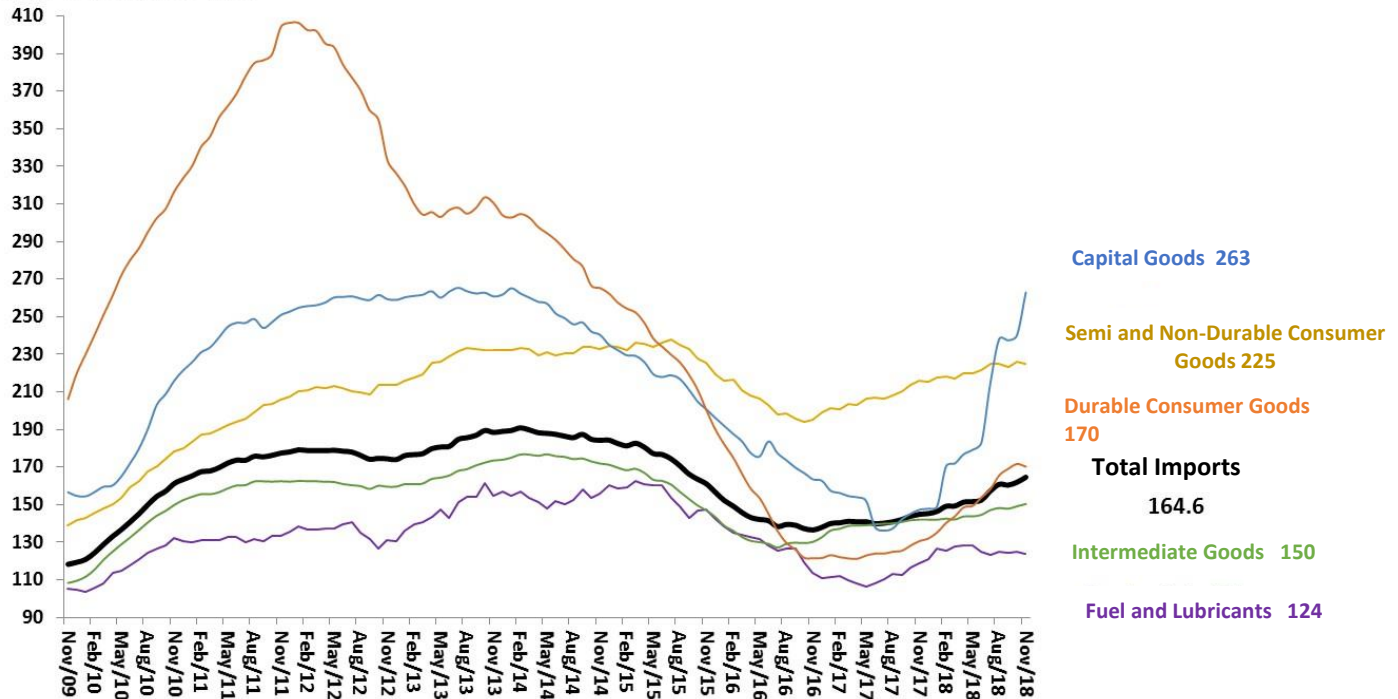
# Total Imports: value, quantum and price



Sources: SECEX/MDIC and FUNCEX.

# Quantum of Total Imports and by Economic Categories

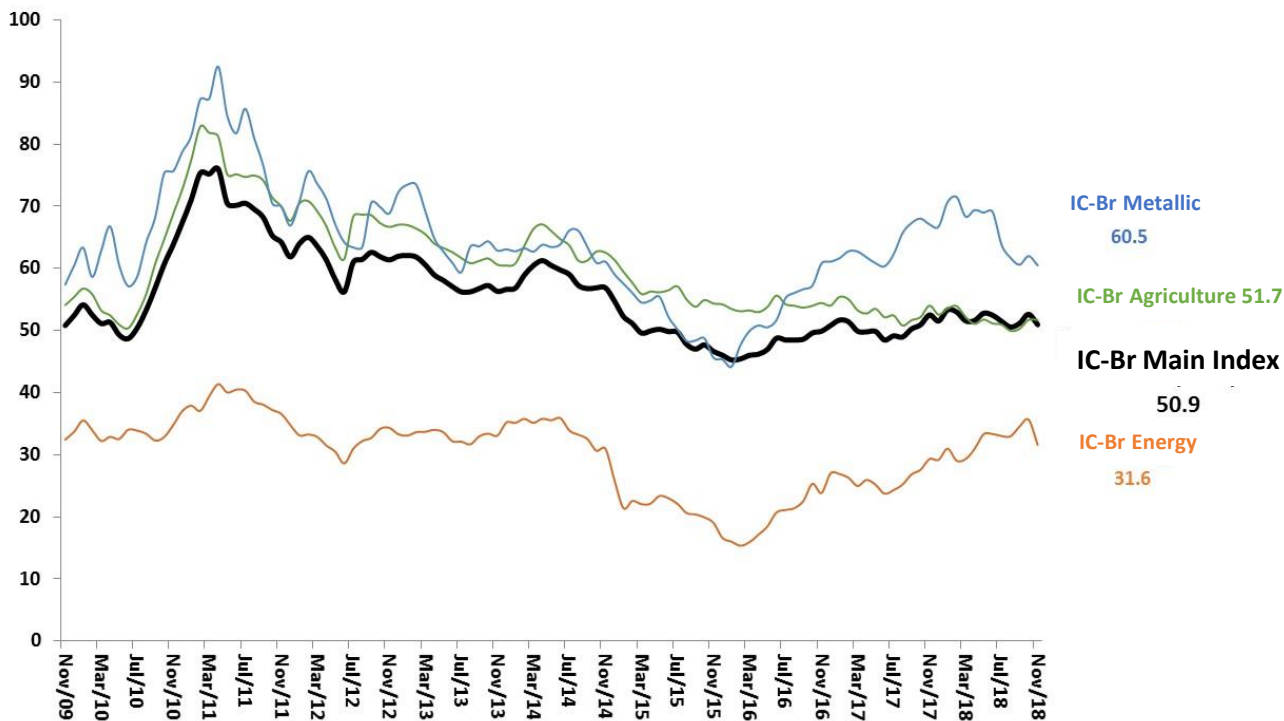
Imports Quantum by Economic Categories  
12-month Moving Average (2006=100)



Source: FUNCEX.

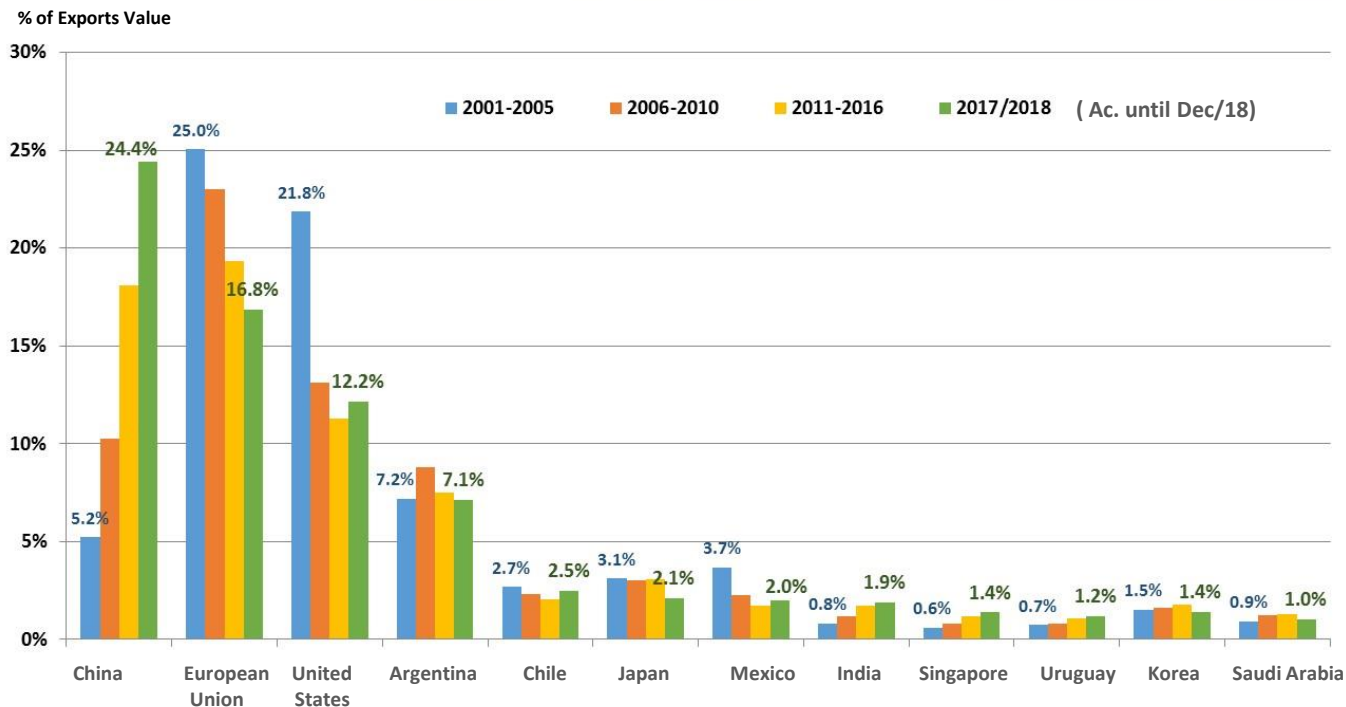
# Brazilian Commodity Price Indexes

Brazilian Commodity Index (IC-Br)  
12-month Moving Average (2006=100)



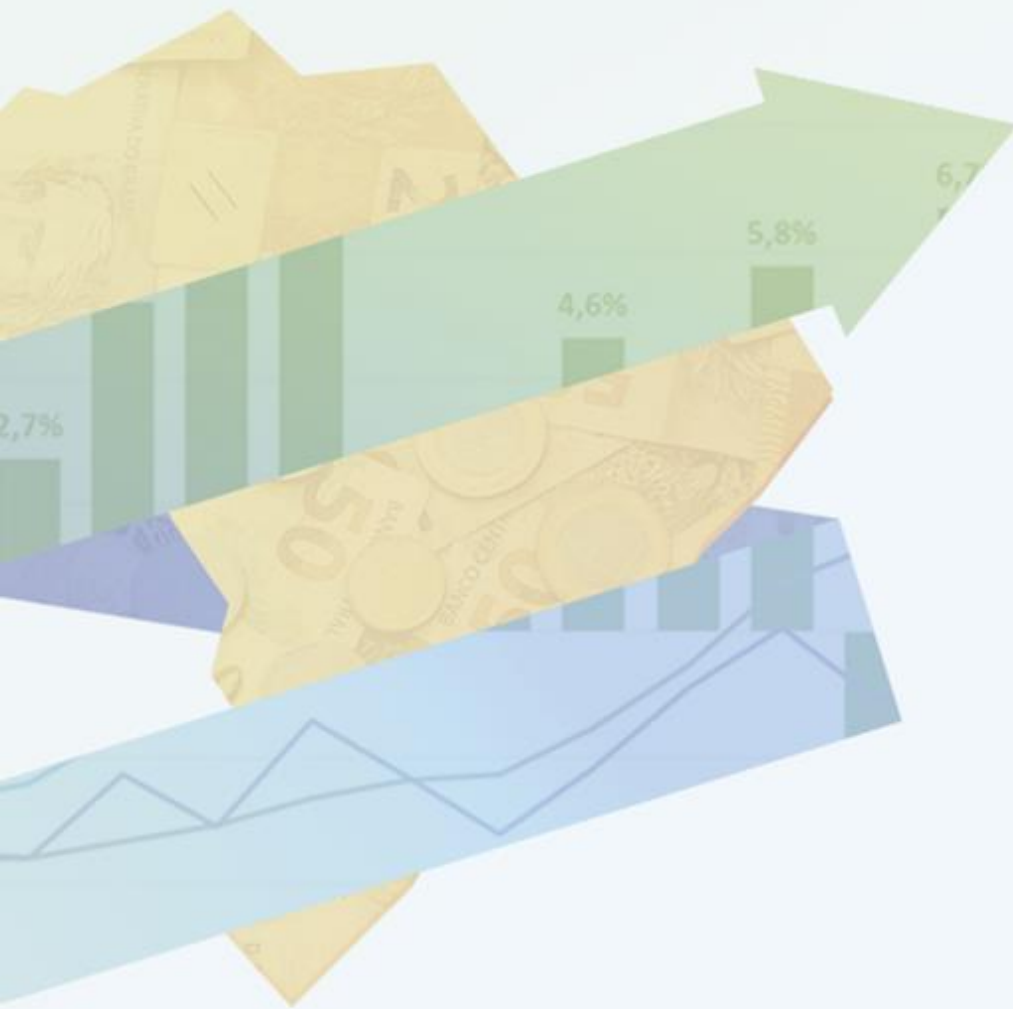
Source: Central Bank of Brazil.

# Brazilian Exports Evolution by Country of Destination



Source: MDIC/SECEX





## **EXTERNAL SECTOR**

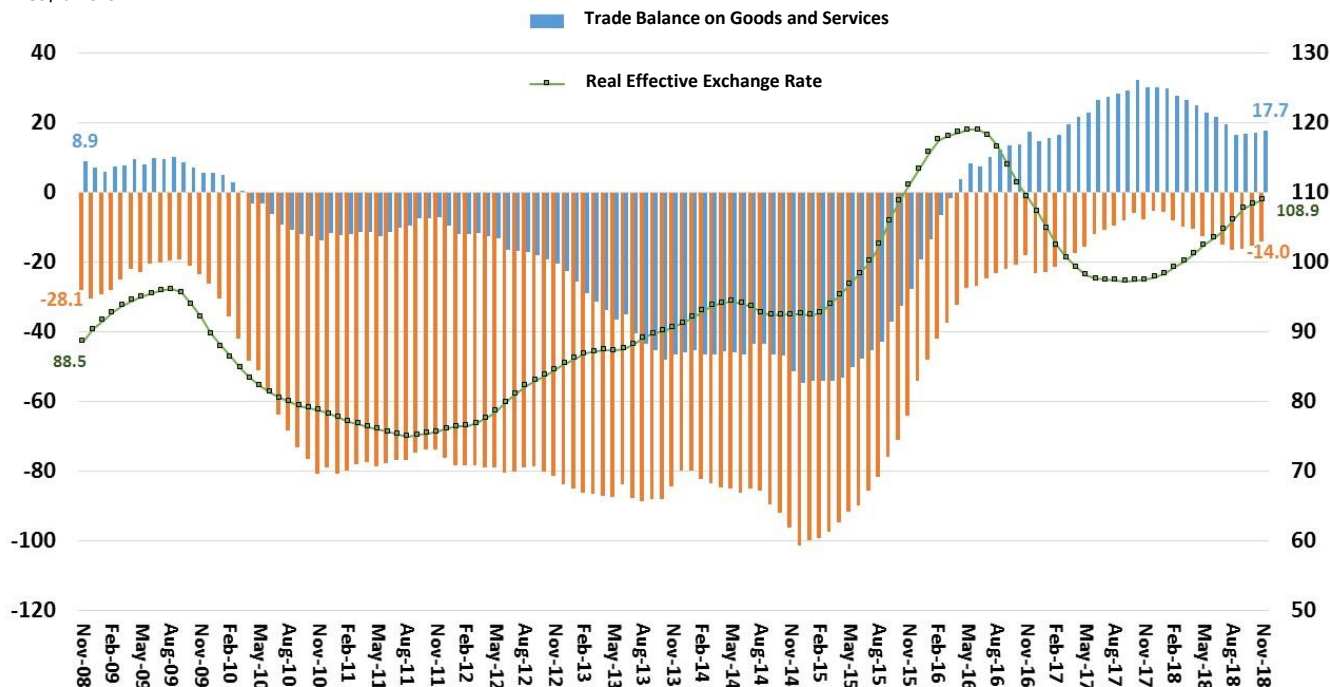
# External Sector

										BCB/Focus: 01/04/2019		
Balance of Payments (BCB)	November-18											
In US\$ millions	2016	2017	Nov/18 accum. in 12-months	chg.% 2017 / 2016	chg.% Nov/18 accum. 12-m / 2017	chg.% Oct/18 - Oct/17	chg.% Nov/18 - Nov/17	chg.% - Jan- Oct/18 - Jan-Oct/17	chg.% - Jan- Nov/18 - Jan-Nov/17	2018	2019	2020
<b>Balance of Payments</b>	<b>13,476</b>	<b>6,413</b>	<b>6,163</b>	<b>-52.4%</b>	<b>-3.9%</b>	<b>515.7%</b>	<b>-33.0%</b>	<b>-41.5%</b>	<b>-3.7%</b>			
<b>Current Account Balance (CAB)</b>	<b>-23,156</b>	<b>-5,487</b>	<b>-14,020</b>	<b>-76.3%</b>	<b>155.5%</b>	<b>-149.2%</b>	<b>-63.2%</b>	<b>-81.0%</b>	<b>238.3%</b>	-15.0	-26.0	-38.0
<i>CAB as % of GDP</i>	-1.3%	-0.3%	-0.7%	1.0 pp	-0.5 pp	-0.5 pp	-0.4 pp					
Balance on Goods	45,037	64,028	52,050	42.2%	18.7%	11.4%	10.2%	45.4%	-20.2%	50.9	45.2	43.0
Exports	184,453	217,243	237,092	17.8%	9.1%	16.6%	25.3%	18.5%	9.9%	246.0	257.1	273.0
Imports	139,416	153,215	185,042	9.9%	20.8%	16.4%	-13.2%	11.5%	1.7%	195.1	212.0	230.0
Balance on Services	-30,447	-33,850	-34,354	11.2%	1.5%	16.4%	-13.2%	11.5%	1.7%			
Primary Income	-40,691	-38,297	-34,668	-5.9%	-9.5%	-26.1%	-20.7%	-1.3%	-10.4%			
Secondary Income	2,944	2,632	2,951	-10.60%	12.1%	45.1%	113.3%	-23.1%	15.4%			
<b>Capital Account</b>	<b>274</b>	<b>379</b>	<b>422</b>	<b>38.6%</b>	<b>11.3%</b>	<b>-53.2%</b>	<b>1555.6%</b>	<b>41.1%</b>	<b>11.5%</b>			
<b>Financial Account</b>	<b>-9,407</b>	<b>1,305</b>	<b>-7,435</b>	<b>-113.9%</b>	<b>-669.7%</b>	<b>-169.8%</b>	<b>-97.6%</b>	<b>-148.0%</b>	<b>-253.1%</b>			
Direct Investments	-57,832	-49,157	-66,078	-15.0%	34.4%	16.2%	96.0%	-1.6%	33.5%			
Foreign Direct Investments (FDI)	72,525	68,510	80,686	-5.5%	17.8%	17.6%	123.7%	7.7%	18.6%	75.0	79.5	84.4
Portfolio Investments	18,993	14,042	9,043	-26.1%	-35.6%	-172.2%	72.4%	-35.6%	-43.5%			
Stock Market	-7,503	-2,482	915	-66.9%	-136.9%	-93.5%	-877.0%	-82.8%	-274.5%			
Bonds	30,726	9,713	5,432	-68.4%	-44.1%	-82.9%	62.7%	-81.9%	-83.3%			
Others Investments and Capital Flows	29,433	36,421	49,600	23.7%	36.2%	15.1%	-12132.3%	61.6%	31.0%			
<b>International Reserves - liquidity concept</b>	<b>365,016</b>	<b>373,972</b>	<b>379,722</b>	<b>2.5%</b>	<b>1.5%</b>	<b>0.0%</b>	<b>-0.4%</b>					
<b>Gross External Debt (BCB)</b>	November-18											
In US\$ millions	2016	2017	Nov-18	2016 % of total	Nov/18 % of total	chg. pp	2016 % of GDP	Nov/18 % of GDP	chg. pp			
<b>Total External Debt</b>	<b>675,841</b>	<b>667,103</b>	<b>674,792</b>	<b>100.0%</b>	<b>100.0%</b>	<b>-</b>	<b>37.6%</b>	<b>33.5%</b>	<b>-4.1 pp</b>			
<b>Gross External Debt</b>	<b>326,297</b>	<b>317,305</b>	<b>311,595</b>	<b>48.3%</b>	<b>46.2%</b>	<b>-2.1 pp</b>	<b>18.2%</b>	<b>15.5%</b>	<b>-2.7 pp</b>			
Public Sector	74,379	75,791	73,848	22.8%	23.7%	0.9 pp	4.1%	3.7%	-0.5 pp			
Private Sector and Public Financial Sector	251,918	241,514	237,748	77.2%	76.3%	-0.9 pp	14.0%	11.8%	-2.2 pp			
Short Term	56,327	51,287	61,623	17.3%	19.8%	2.5 pp	3.1%	3.1%	-0.1 pp			
Medium and Long Term	269,970	266,018	249,973	82.7%	80.2%	-2.5 pp	15.0%	12.4%	-2.6 pp			
<b>Intercompany Loans</b>	<b>222,344</b>	<b>227,841</b>	<b>235,998</b>	<b>32.9%</b>	<b>35.0%</b>	<b>2.1 pp</b>	<b>12.4%</b>	<b>11.7%</b>	<b>-0.7 pp</b>			
<b>Domestic Bonds with Foreign Investors</b>	<b>127,199</b>	<b>121,956</b>	<b>127,199</b>	<b>18.8%</b>	<b>18.9%</b>	<b>0.0 pp</b>	<b>7.1%</b>	<b>6.3%</b>	<b>-0.8 pp</b>			

# Brazil: Real Exchange Rate and External Sector Adjustment

Current Account Balance and Trade Balance  
on Goods and Services  
12-month Accumulated Figures  
US\$ billions

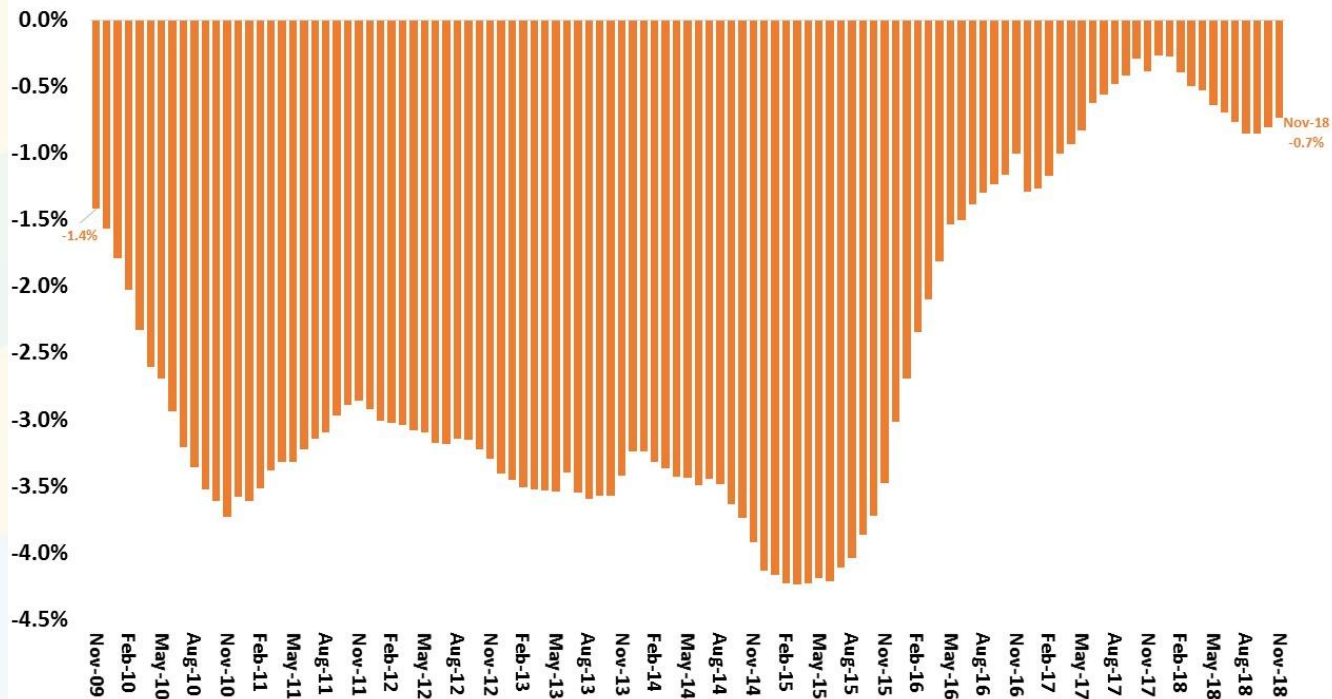
Real Effective Exchange Rate  
12-month Moving Average  
2006=100



Source: Central Bank of Brazil.

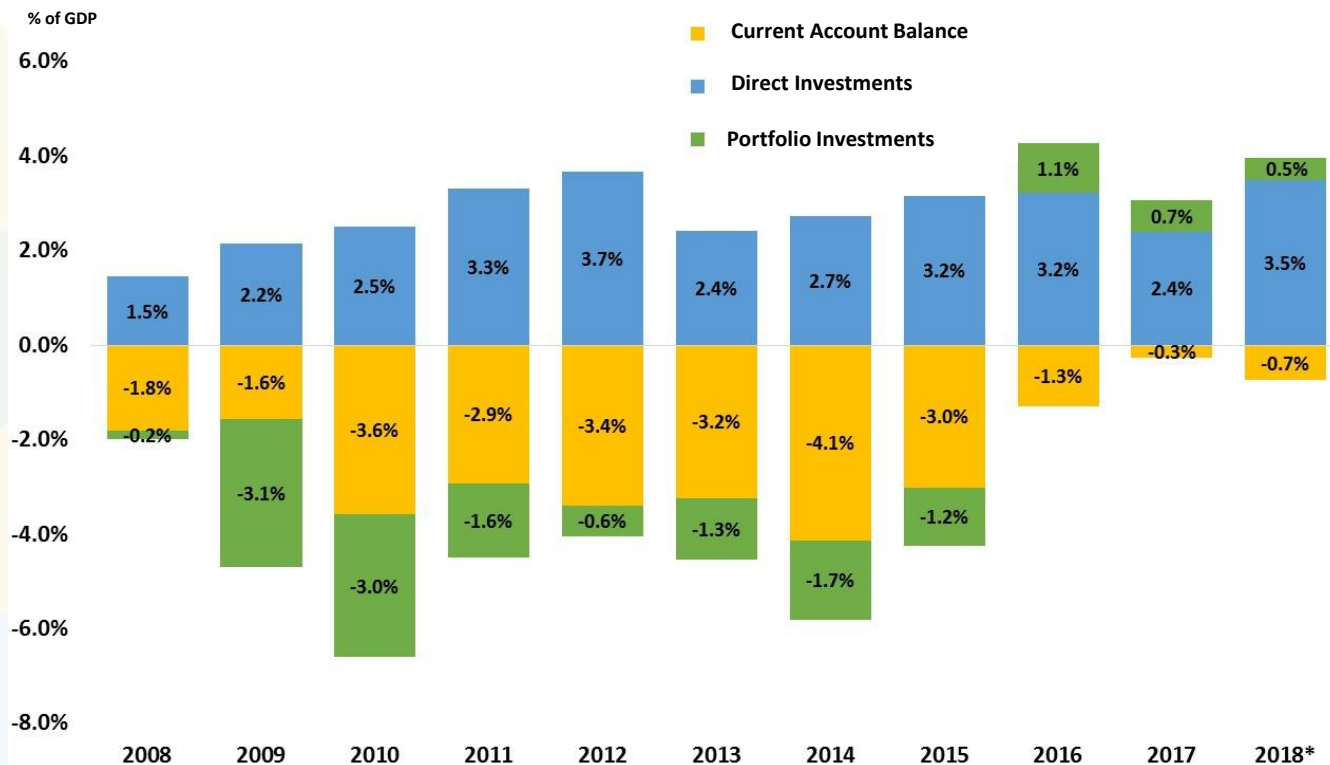
# Current Account Deficit as % of GDP

Current Account as % of GDP  
12-month Figures



Source: Central Bank of Brazil.

# Current Account Deficit Financing

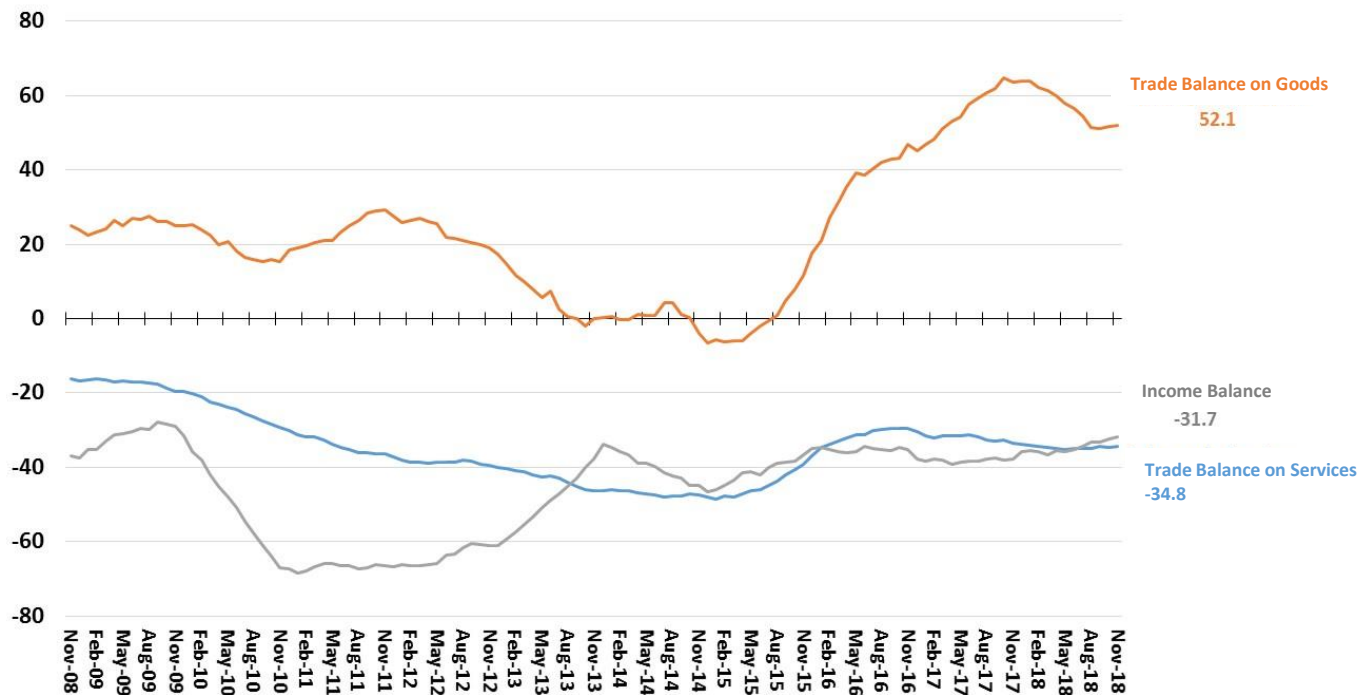


Source: Central Bank of Brazil.

2018\* = 12 months ac. until Nov/18.

# Current Account Balance Components

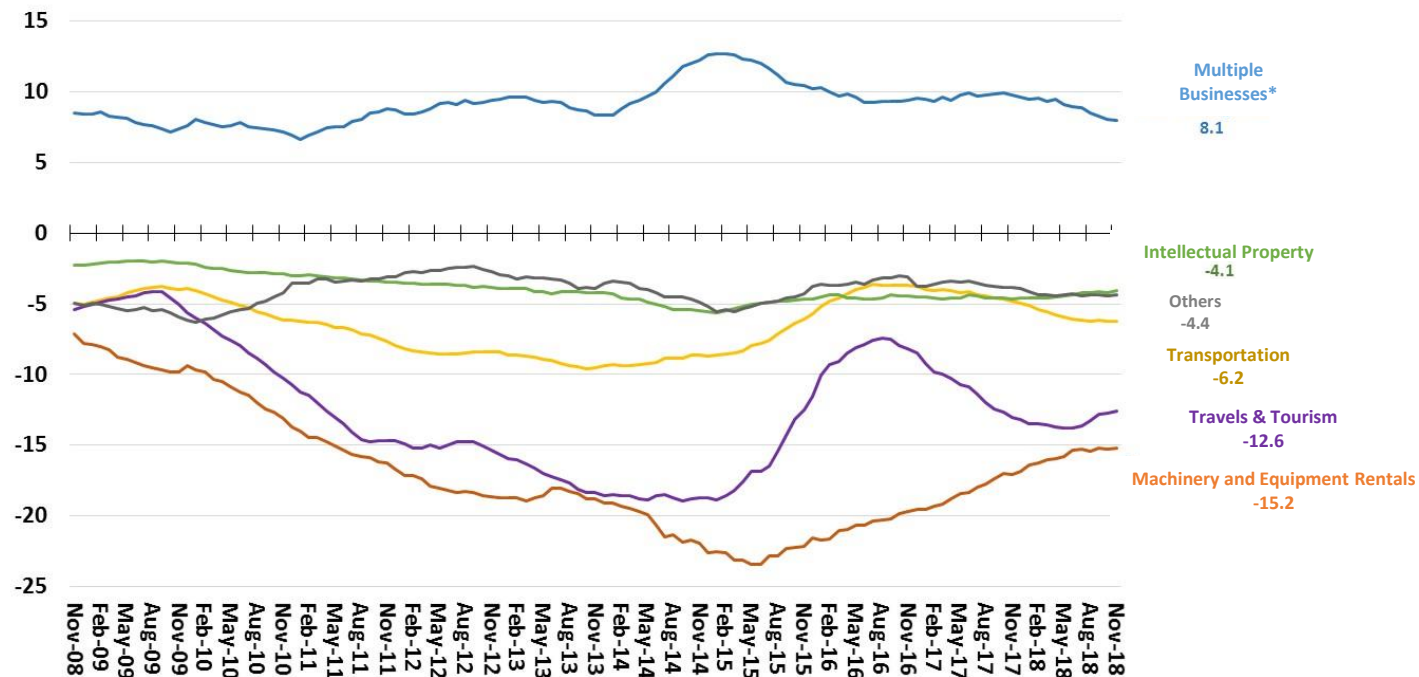
External Accounts Balance  
12-month Accumulated - US\$ billions



Source: Central Bank of Brazil.

# Service Account Balance and Components

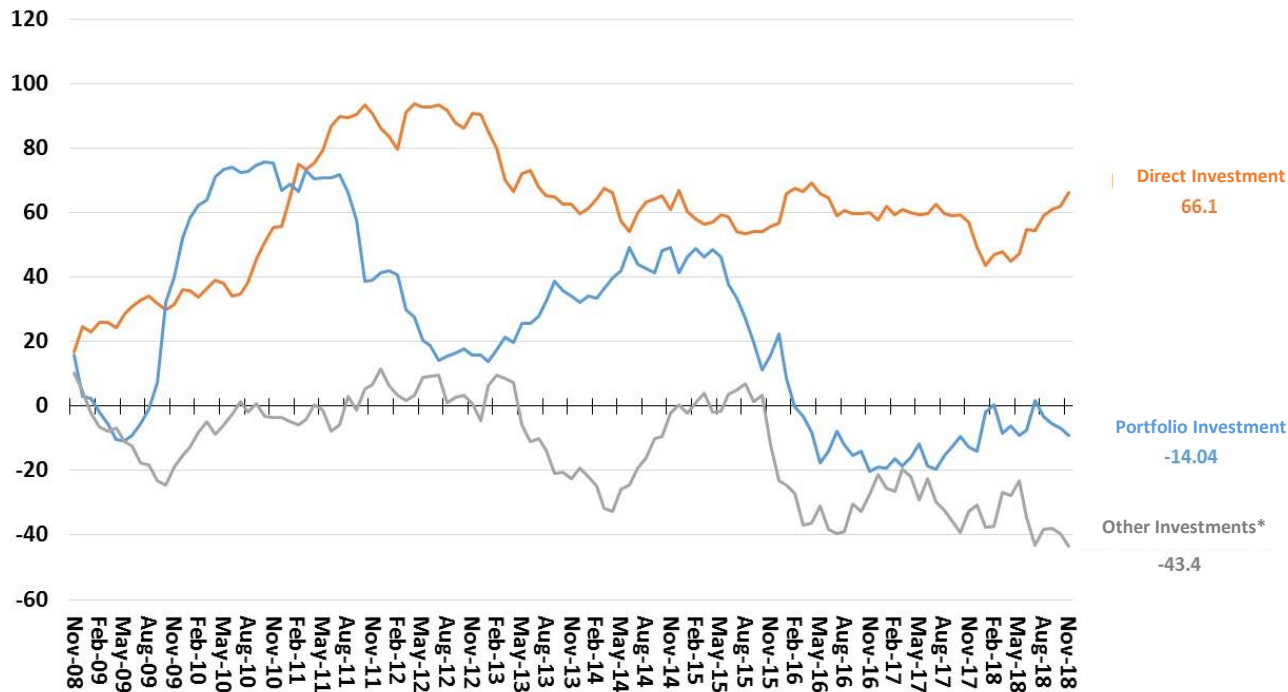
External Accounts Balance  
12-month Accumulated - US\$ billions



Source: Central Bank of Brazil. \*Includes services of P&D, legal services, marketing, architecture & engineering, environmental services, among others.

# Financial Account Balance and Components

External Financial Flows  
Net Inflow (+) and Net Outflow (-)  
12-month Accumulated - US\$ billions

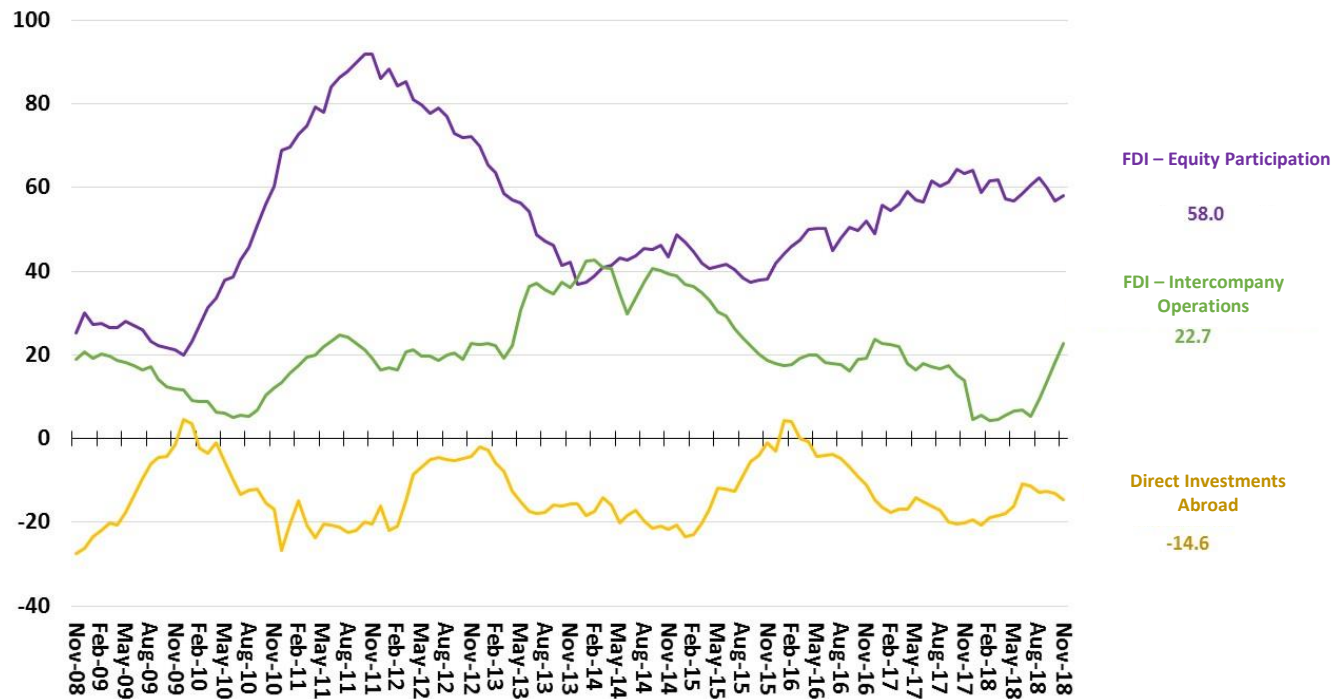


Source: Central Bank of Brazil. \*Commercial Credit and Loans.



# Direct Investments and Components

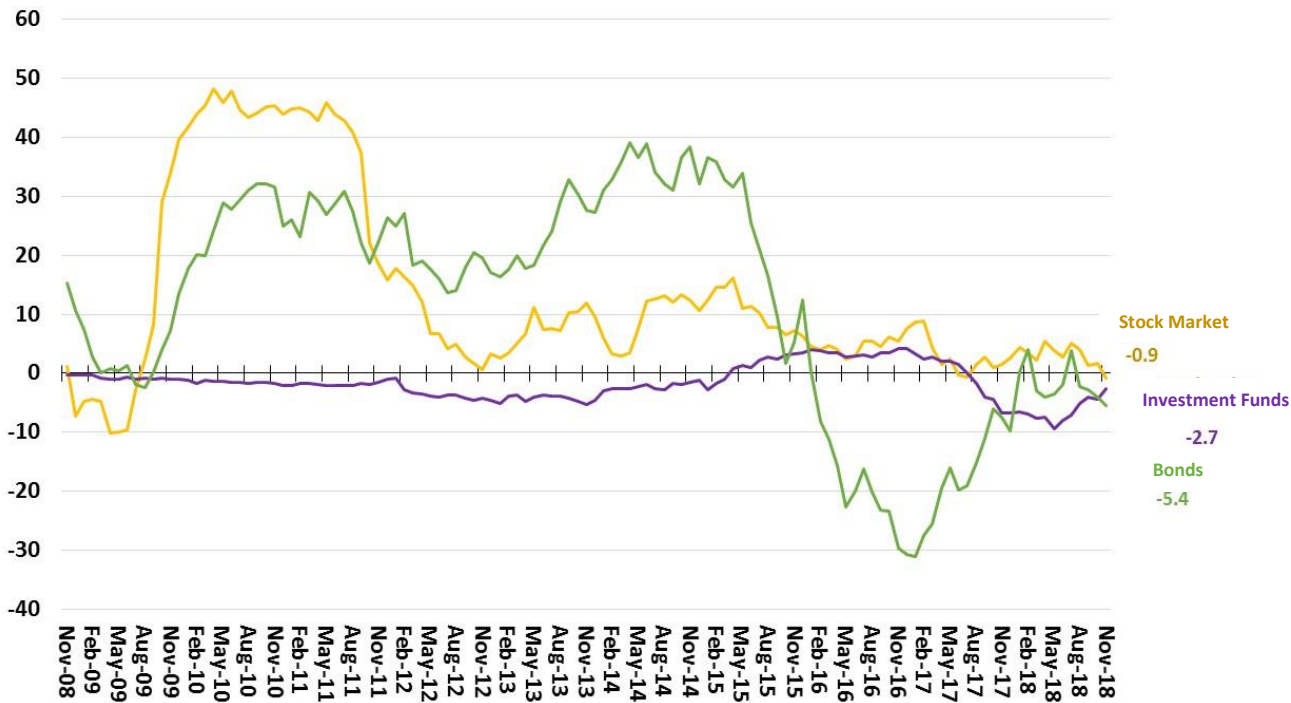
Direct Investment Flows  
Net Inflow (+) and Net Outflow (-)  
12-month Accumulated - US\$ billions



Source: Central Bank of Brazil.

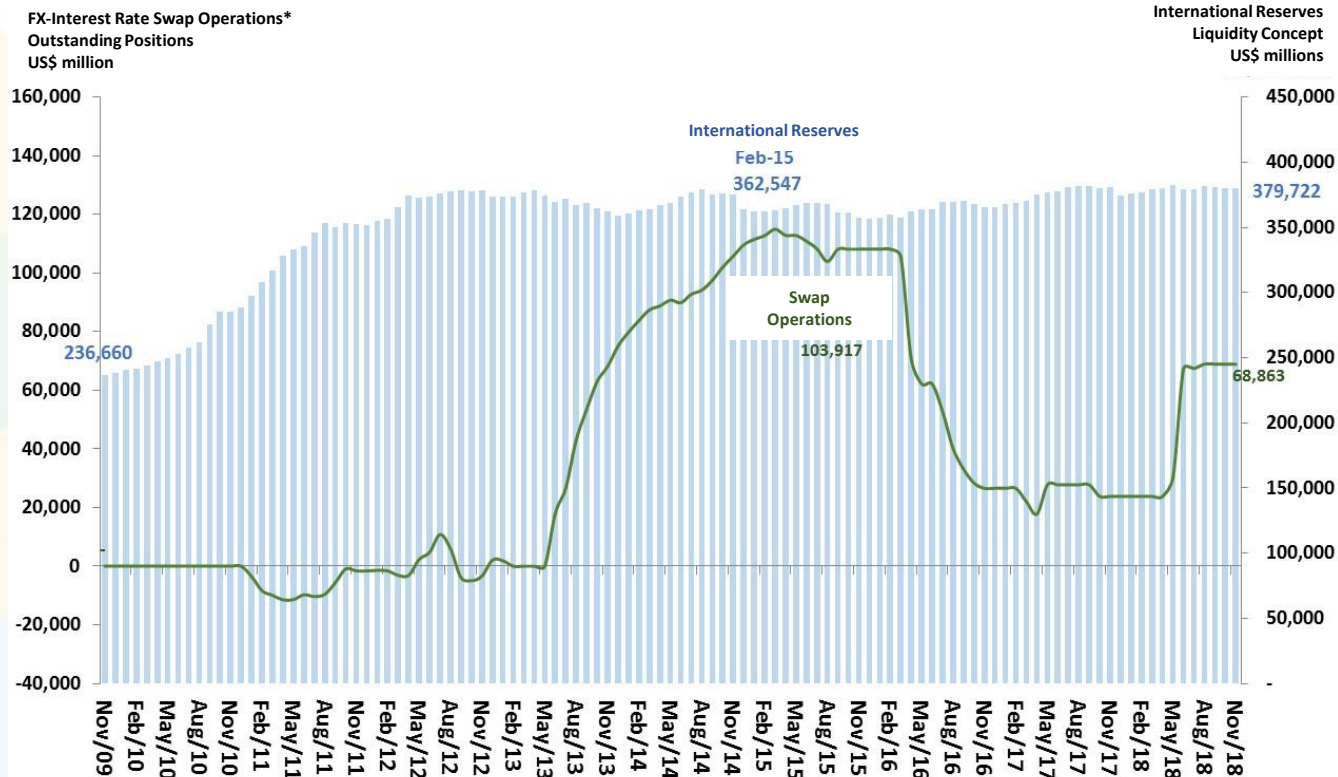
# Portfolio Investments and Components

Portfolio Investment Flows  
Net Inflow (+) and Net Outflow (-)  
12-month Accumulated - US\$ billions



Source: Central Bank of Brazil.

# Brazilian International Reserves



Source: Central Bank of Brazil. \*Positive values represent net sell position on fx and negative values net buy position on fx.

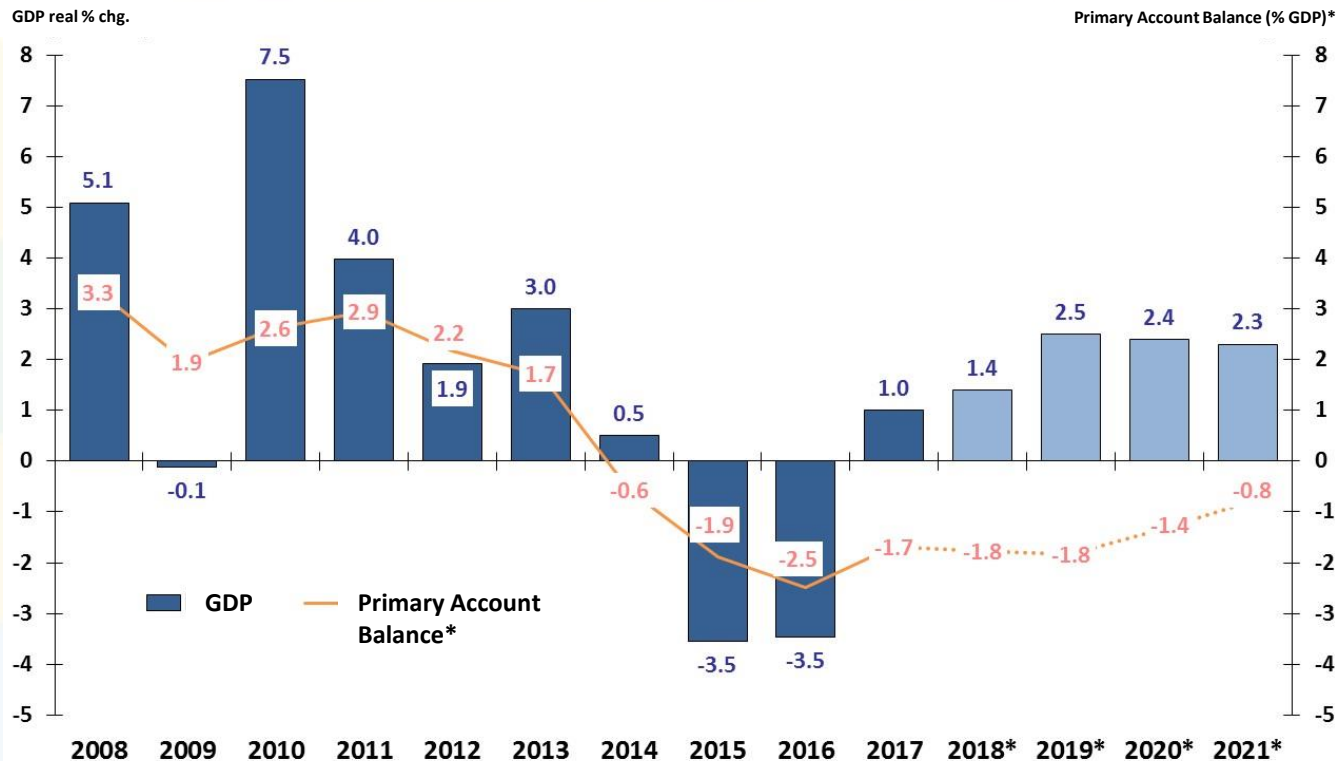


# **PUBLIC SECTOR ACCOUNTS**

# Public Sector Accounts

										BCB/Focus:	01/04/2019					
Federal Government Accounts	November-18	12-month Accumulated Figures (in R\$ millions)						chg. %								
Federal Budget (National Treasury/Ministry of Finance)	2013	2014	2015	2016	2017	Nov/18 accum. in 12- months	2016 / 2015	Dec/17 accum. 12- m / 2016	YTD 2018 / YTD 2017							
Total Primary Revenue (a)	157,550	1,221,474	1,247,789	1,314,953	1,383,082	1,491,289	5.2%	7.8%	8.8%							
National Treasury	871,836	883,971	897,517	956,816	1,008,297	1,104,439	5.4%	9.5%	10.6%							
Social Security General System	307,147	337,503	350,272	358,137	374,785	386,850	4.6%	3.2%	3.7%							
States and Municipalities Mandatory Transfers (b)	181,895	198,462	204,684	226,835	228,335	253,639	0.7%	11.1%	12.4%							
Net Primary Revenue (a-b)	997,088	1,023,013	1,043,105	1,088,118	1,154,746	1,237,650	6.1%	7.2%	8.1%							
Total Primary Expenditure	920,095	1,040,223	1,159,535	1,249,393	1,279,008	19,217	2.4%	5.6%	6.4%							
National Treasury	563,092	646,022	723,445	741,522	721,773	768,336	-2.7%	6.5%	7.4%							
Social Security General System	357,003	394,201	436,090	507,871	557,235	582,837	9.7%	4.6%	5.1%							
Federal Government Accounts	November-18	12-month Accumulated Figures (in R\$ millions)						% of GDP								
Federal Budget (National Treasury/Ministry of Finance)	2013	2014	2015	2016	2017	Nov/18 accum. in 12- months	2016	2017	Nov/18 accum. in 12- months							
Primary Account Balance of Federal Government (STN/MF)	76,994	-17,211	-116,430	-161,276	-124,261	-113,523	-2.6%	-1.9%	-1.7%							
National Treasury	126,850	39,487	-30,612	-11,542	58,189	82,464	-0.2%	0.9%	1.2%							
Social Security General System	-49,856	-56,698	-85,818	-149,734	-182,450	-195,988	-2.4%	-2.8%	-2.9%							
Consolidate Public Sector Accounts	November-18	12-month Accumulated Figures (in R\$ millions)						% of GDP								
Public Sector Financial Need (Central Bank of Brazil - BCB)	2013	2014	2015	2016	2017	Nov/18 accum. in 12- months	2015	2016	Nov/18 accum. in 12- months							
Primary Account Balance Target (% GDP)																
Primary Account Balance	-91,306	32,536	111,249	155,791	110,583	99,447	2.5%	1.7%	1.5%							
Federal Government	-75,291	20,472	116,656	159,473	-3,361	105,581	2.5%	1.8%	1.5%							
States and Municipalities	-16,337	7,790	-9,684	-4,666	-7,498	-3,187	-0.1%	-0.1%	0.0%							
State Owned Companies (except Petrobrás and Eletrobrás)	322	4,274	4,278	983	-362	-2,947	0.0%	0.0%	0.0%							
Net Financial Public Expenditure (Debt Interest Payments)	248,856	311,380	501,786	407,024	400,826	385,594	6.5%	6.1%	5.6%							
Nominal Account Balance	157,550	343,916	613,035	562,815	511,408	485,041	9.0%	7.8%	7.1%							
							-7.0%									

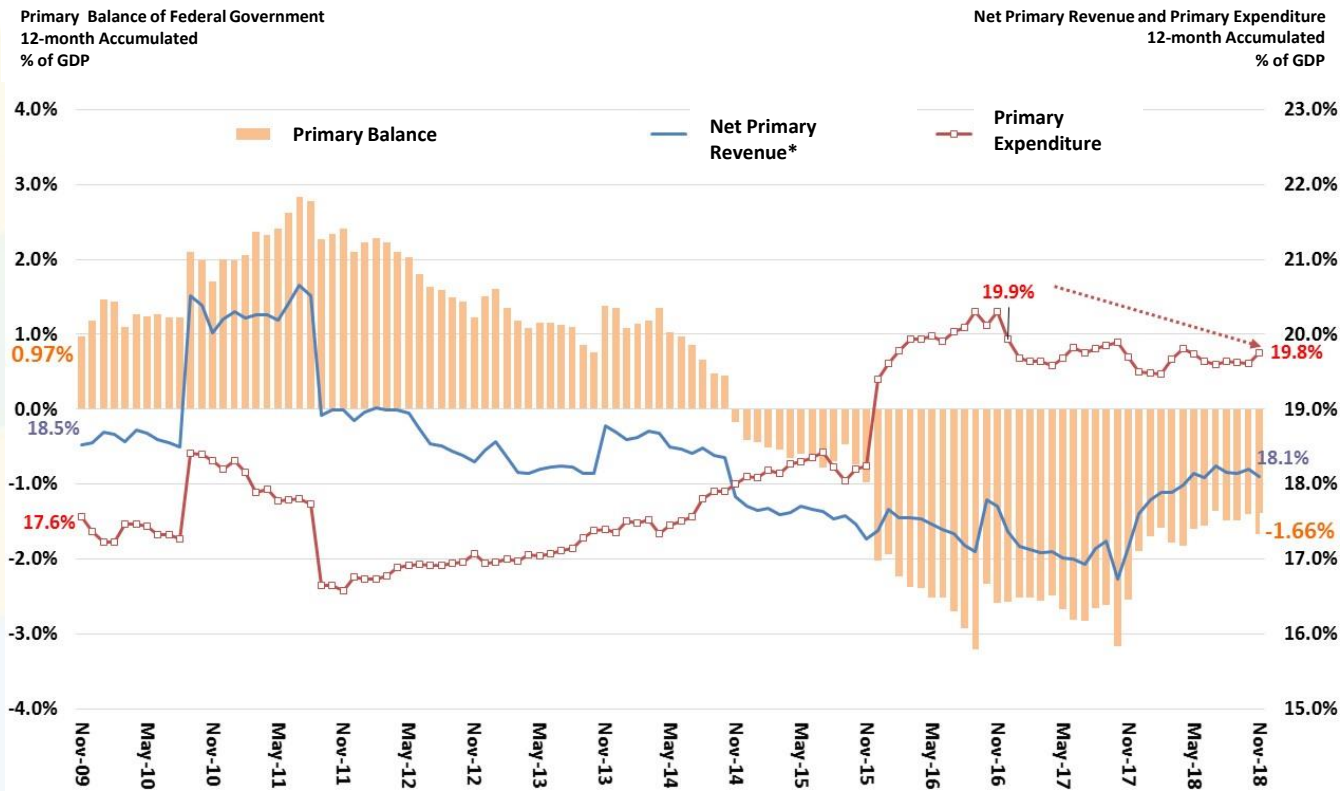
# Fiscal Adjustment and Economic Recovery



Sources: IBGE, MF and MP.

\* Annex IV-Fiscal Targets of 2017 Budgetary Guidelines Bill of Law (LDO 2018) and Macroeconomic Projections from Nov-2018 - SPE/MF.

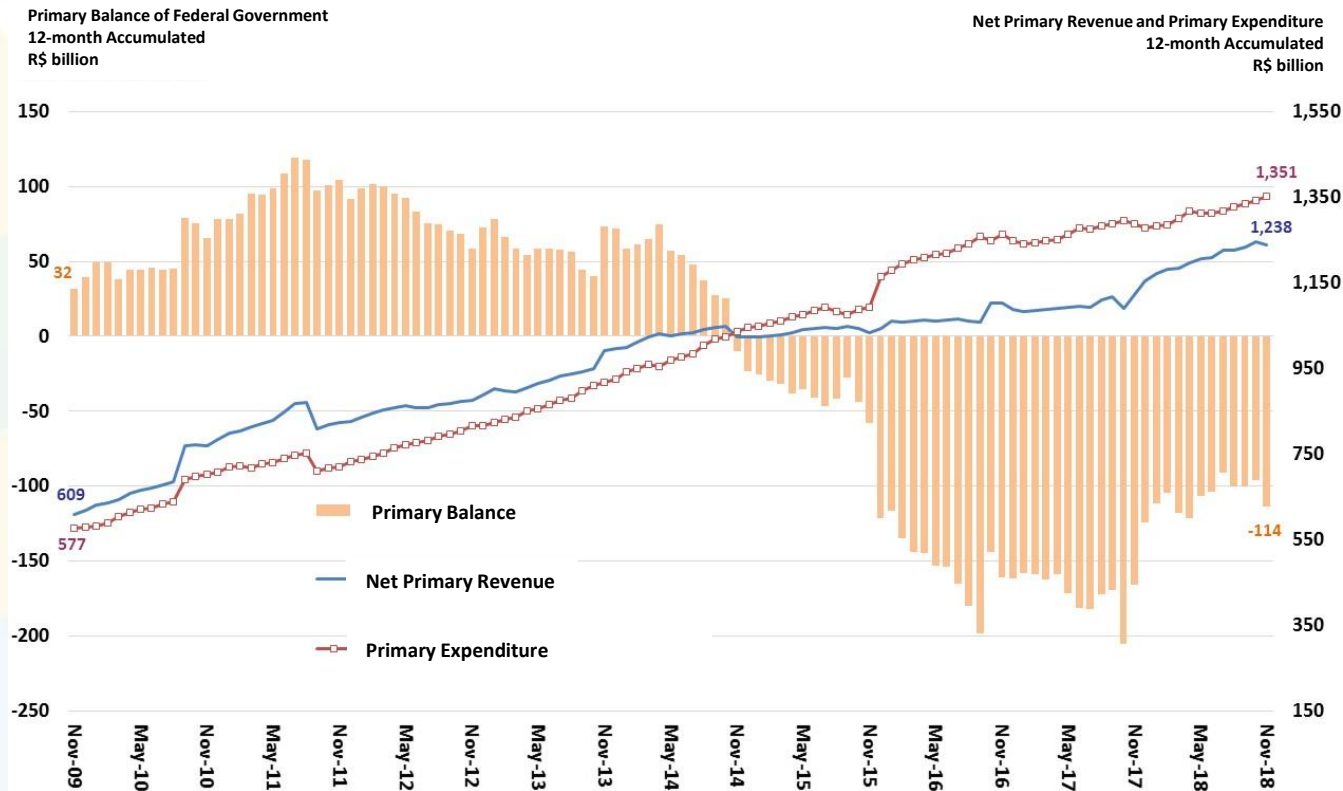
# Primary Balance of Federal Government (as % GDP)



Sources: STN/MF.

\*Excludes compulsory transfers to subnational entities

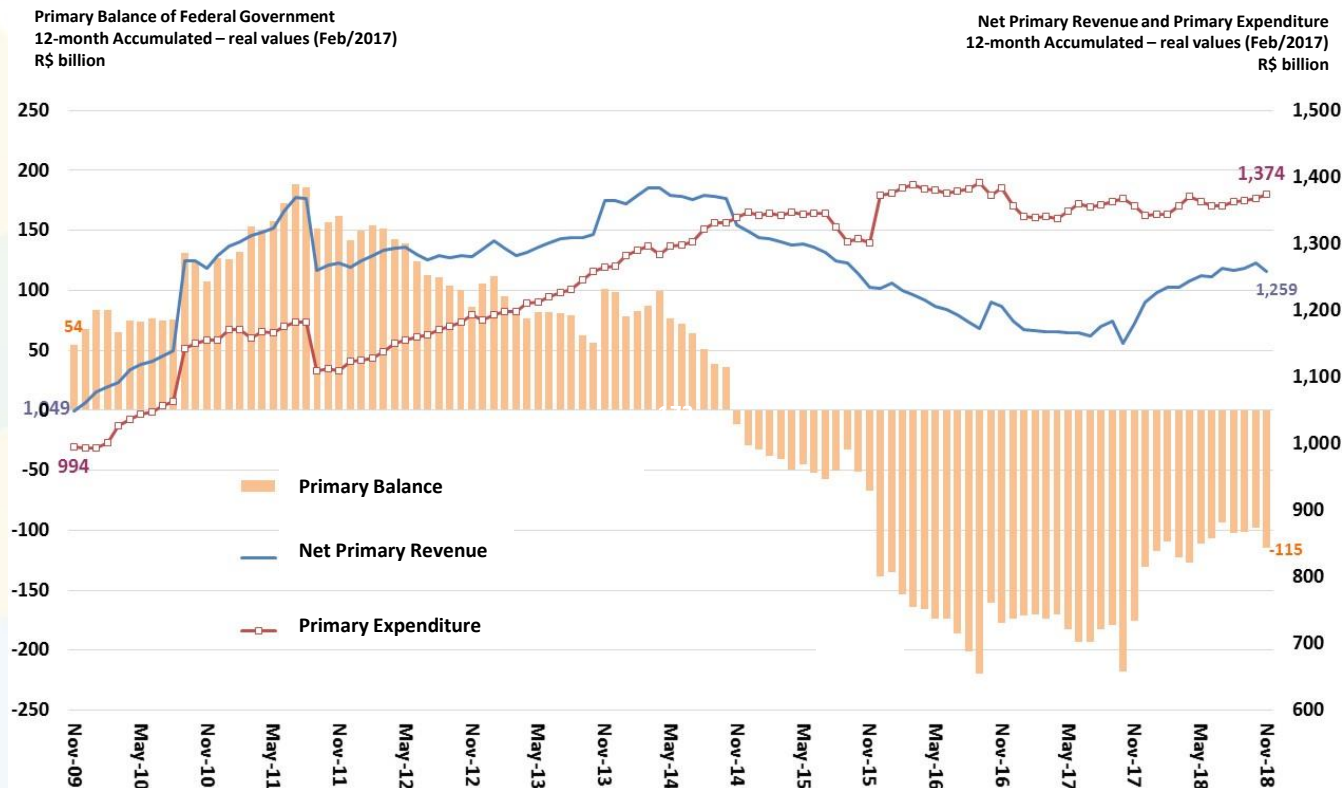
# Primary Balance of Federal Government (nominal values)



Source: STN/MF.

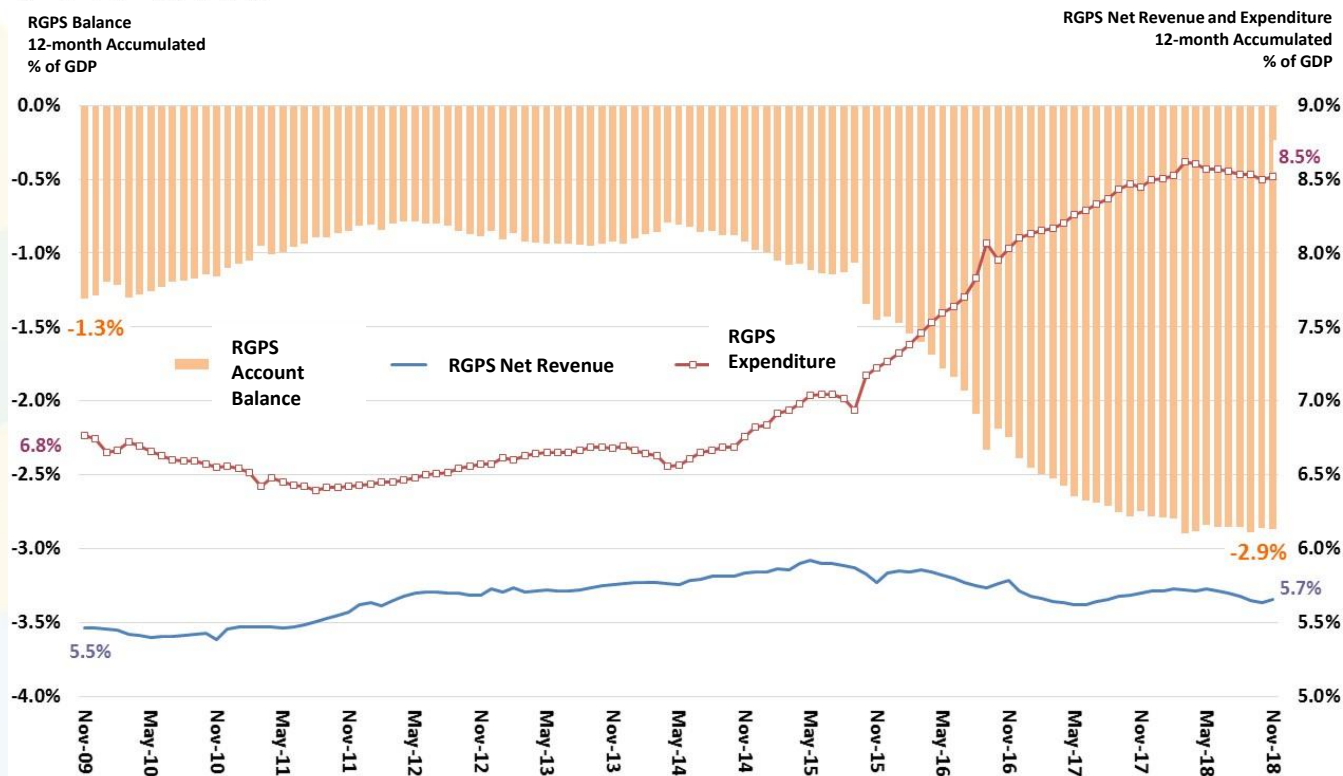


# Primary Balance of Federal Government (real values)



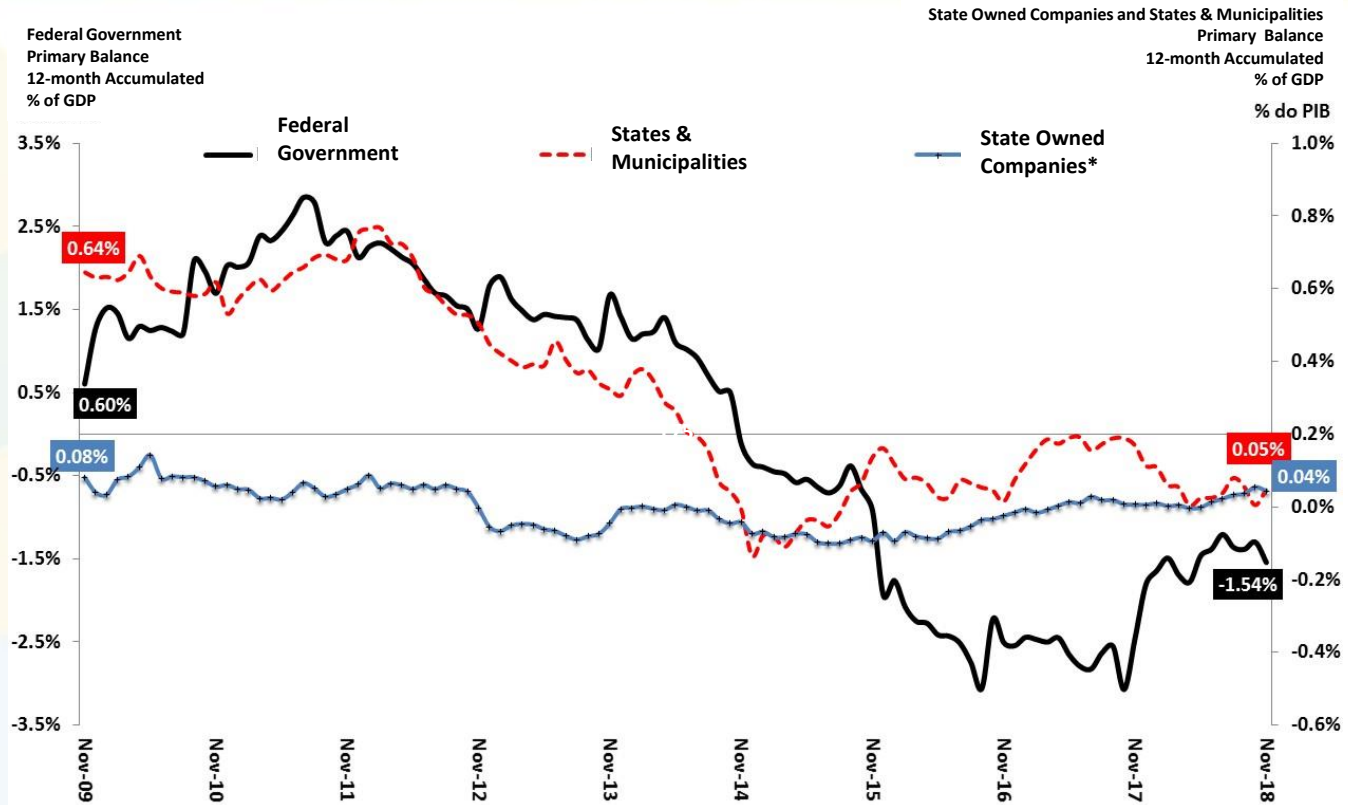
Source: STN/MF.

# General Social Security System (RGPS) Balance



Sources: STN/MF.

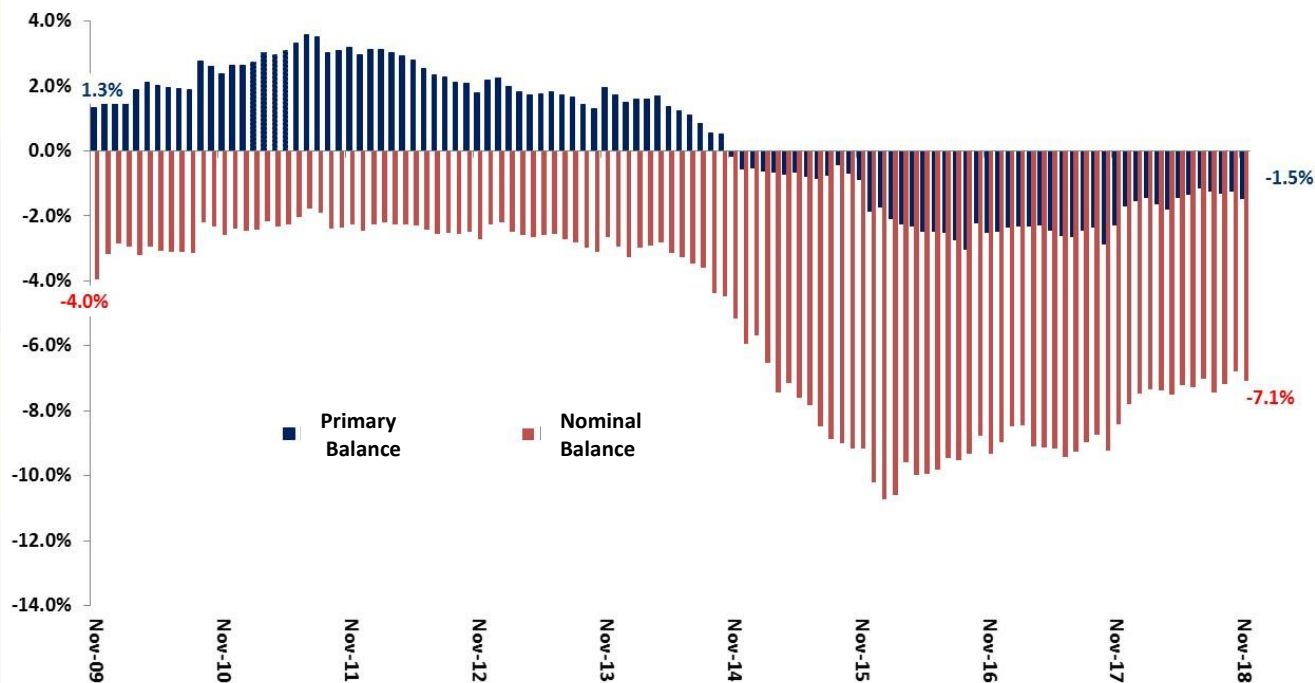
# Public Sector Primary Balance (as % GDP)



Sources: Central Bank of Brazil. \*Excludes Petrobras and Eletrobras.

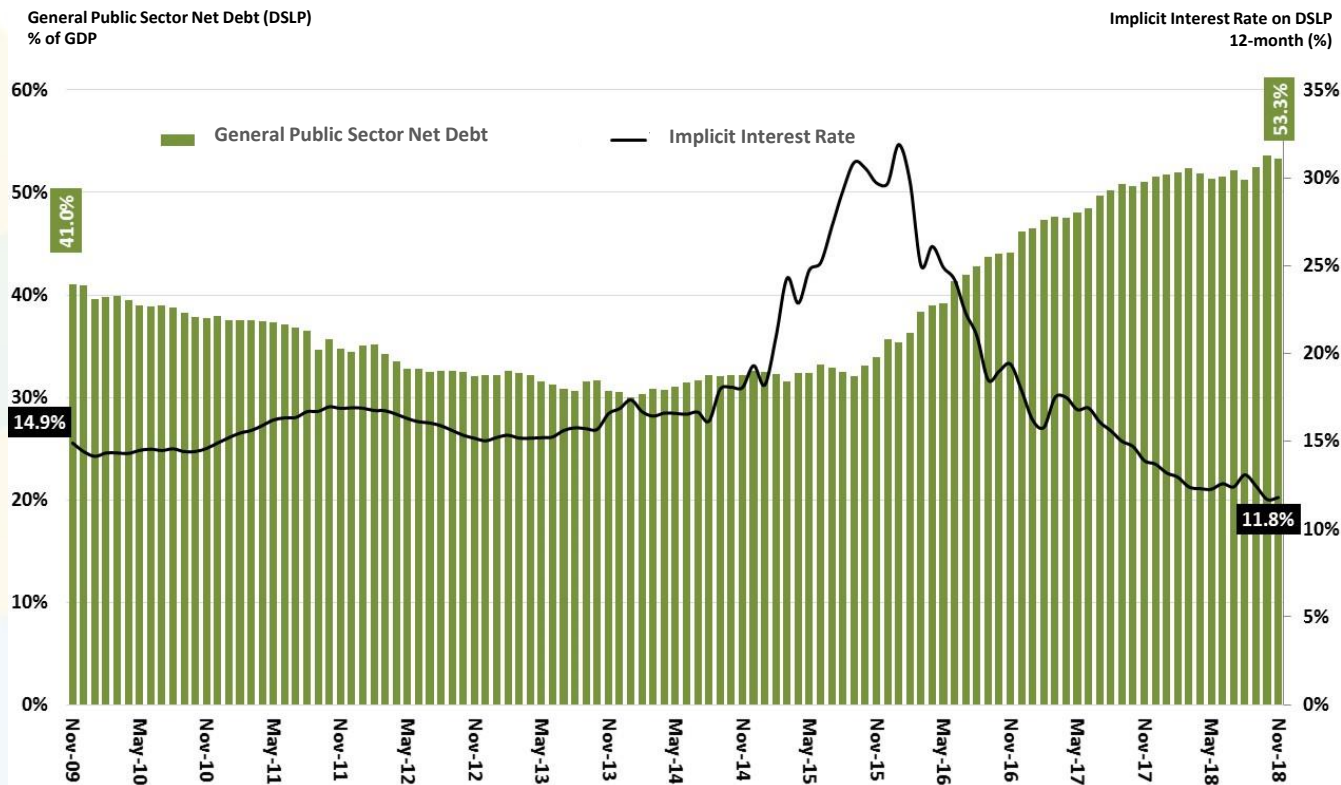
# Public Sector Primary and Nominal Balance

Consolidated Public Sector  
Primary and Nominal Balance  
12-month Accumulated  
% of GDP



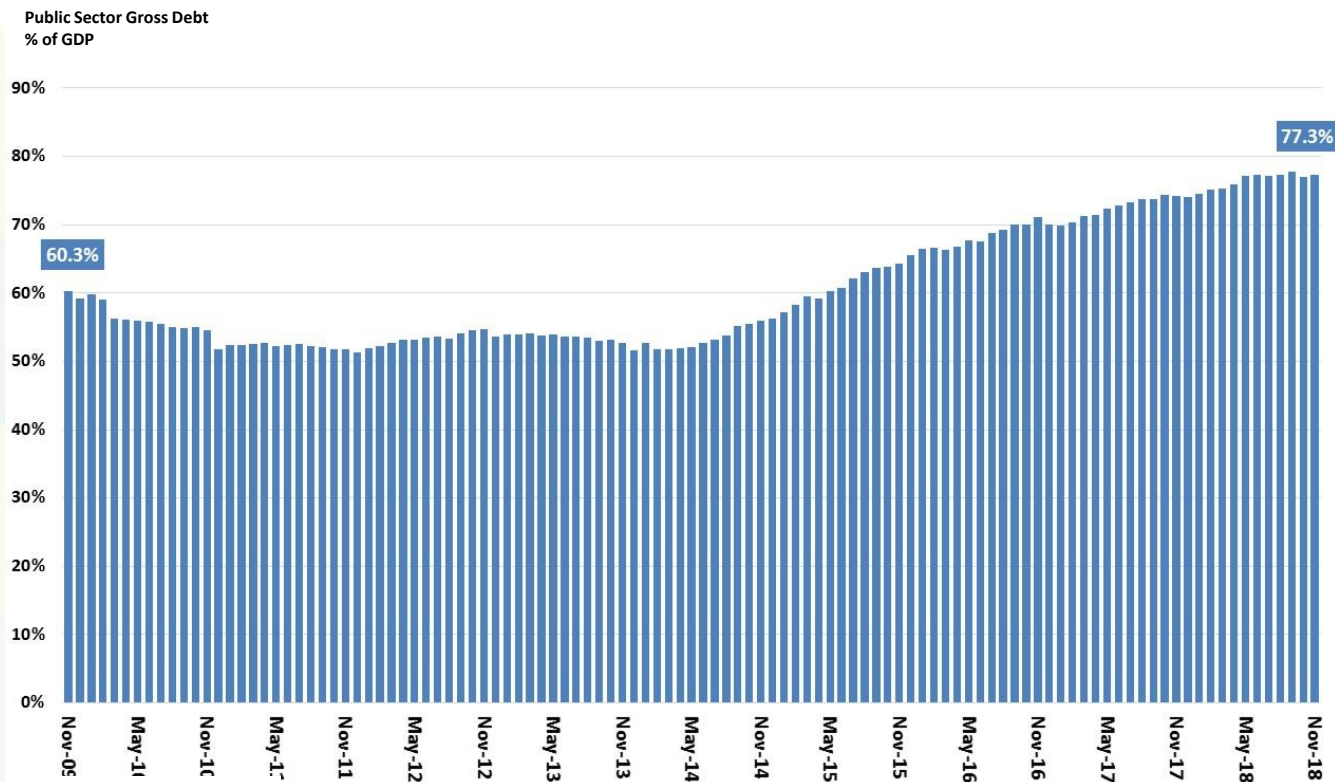
Source: Central Bank of Brazil.

# Public Sector Net Debt (as % GDP)



Source: Central Bank of Brazil.

# Public Sector Gross Debt (as % GDP)



Source: Central Bank of Brazil.



# **WORLD ECONOMY**

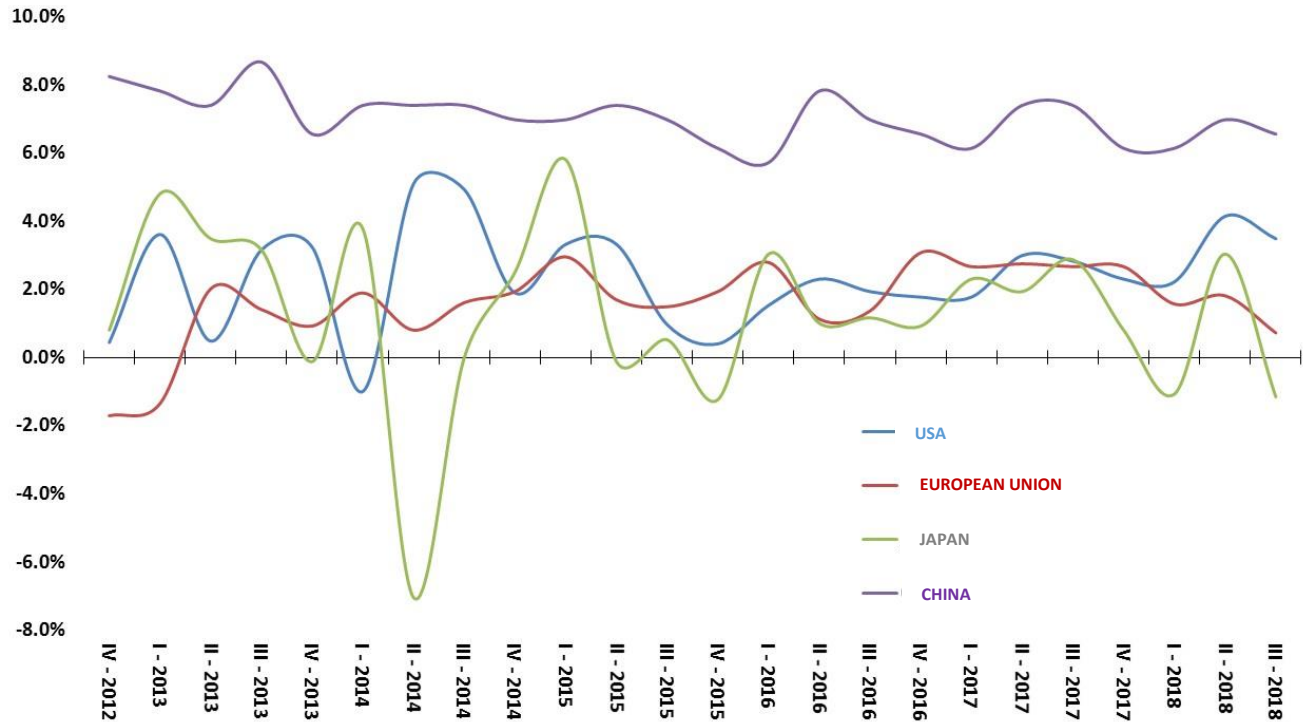
# World Economy

												IMF - WEO, October 2018.	
World	Q4 2017	2013	2014	2015	2016	2017	Q4-2015 / Q4-2014	Q4-2016 / Q4-2015	Q4-2017 / Q4-2016			2018	2019
<i>data from IMF and WTO</i>													
<b>World Output - GDP</b>		<b>3,5%</b>	<b>3,6%</b>	<b>3,5%</b>	<b>3,2%</b>	<b>3,7%</b>	<b>3,2%</b>	<b>3,2%</b>	<b>3,7%</b>			<b>3,7%</b>	<b>3,7%</b>
Advanced Economies		1,3%	2,1%	2,3%	1,7%	2,4%	1,8%	2,0%	2,3%			2,4%	2,1%
Emerging Market and Developing Economies		5,1%	4,7%	4,3%	4,4%	4,7%	4,4%	4,4%	4,8%			4,7%	4,7%
Latin America and the Caribbean		2,9%	1,3%	0,3%	-0,6%	1,3%	-1,1%	-1,1%	1,3%			1,2%	2,2%
<b>World Trade of Goods and Services</b>		<b>3,6%</b>	<b>3,8%</b>	<b>2,8%</b>	<b>2,2%</b>	<b>5,2%</b>	<b>1,4%</b>	<b>0,9%</b>	<b>4,9%</b>			<b>4,2%</b>	<b>4,0%</b>
<b>National Accounts</b>	<b>Q3 2018</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>Q2-2018 / Q2-2017</b>	<b>Q3-2018 / Q3-2017</b>	<b>Q1-2018 accum. in 4- quarters</b>	<b>Q2-2018 accum. in 4- quarters</b>	<b>Q3-2018 accum. in 4- quarters</b>	<b>2018</b>	<b>2019</b>
<i>data from IMF, OECD, Eurostat, NBSC and METI</i>													
<b>USA - GDP</b>		<b>1,8%</b>	<b>2,5%</b>	<b>2,9%</b>	<b>1,6%</b>	<b>2,2%</b>	<b>2,9%</b>	<b>3,0%</b>	<b>2,4%</b>	<b>2,6%</b>	<b>2,7%</b>	<b>2,9%</b>	<b>2,5%</b>
Household Expenditure		1,5%	2,9%	3,7%	2,7%	2,5%	2,6%	3,0%	2,5%	2,5%	2,7%		
Government Expenditure		-2,4%	-0,9%	1,9%	1,4%	-0,1%	1,3%	2,3%	0,1%	0,4%	1,1%		
Gross Fixed Capital Formation		6,9%	5,4%	4,8%	-1,3%	4,8%	4,6%	6,0%	5,7%	5,7%	5,5%		
Exports of Goods and Services		3,6%	4,3%	0,6%	-0,1%	3,0%	5,7%	3,6%	3,5%	4,2%	4,6%		
Imports of Goods and Services (-)		1,5%	5,1%	5,5%	1,9%	4,6%	4,2%	5,7%	4,8%	4,7%	5,1%		
<b>Industrial Production</b>		<b>3,7%</b>	<b>4,9%</b>	<b>-1,8%</b>	<b>-1,0%</b>	<b>3,6%</b>	<b>3,6%</b>	<b>5,0%</b>	<b>1,0%</b>	<b>3,2%</b>	<b>4,1%</b>		
<b>Unemployment (% of Labor Force)</b>		<b>7,4%</b>	<b>6,2%</b>	<b>5,3%</b>	<b>4,9%</b>	<b>4,3%</b>	<b>-0,30 pp</b>	<b>-0,1 pp</b>	<b>4,2%</b>	<b>4,1%</b>	<b>4,0%</b>	<b>4,1%</b>	<b>4,2%</b>
<b>Consumer Price Index</b>		<b>1,5%</b>	<b>0,8%</b>	<b>0,7%</b>	<b>2,1%</b>	<b>2,1%</b>	<b>2,9%</b>	<b>2,6%</b>	<b>2,1%</b>	<b>2,4%</b>	<b>2,4%</b>	<b>2,3%</b>	<b>2,1%</b>
<b>European Union - GDP</b>		<b>0,3%</b>	<b>1,7%</b>	<b>2,3%</b>	<b>1,9%</b>	<b>2,4%</b>	<b>2,2%</b>	<b>1,9%</b>	<b>2,6%</b>	<b>2,5%</b>	<b>2,2%</b>	<b>2,2%</b>	<b>2,0%</b>
Household Expenditure		-0,1%	1,2%	2,1%	2,4%	1,9%							
Government Expenditure		0,4%	1,1%	1,4%	1,6%	1,0%							
Gross Fixed Capital Formation		-1,3%	2,8%	4,8%	2,9%	3,1%							
Exports of Goods and Services		2,3%	4,6%	6,3%	3,1%	5,4%							
Imports of Goods and Services (-)		1,8%	5,1%	7,1%	4,1%	4,4%							
<b>Industrial Production</b>		<b>-0,5%</b>	<b>1,2%</b>	<b>2,3%</b>	<b>1,3%</b>	<b>4,7%</b>	<b>1,5%</b>		<b>3,0%</b>	<b>3,4%</b>			
<b>Unemployment (% of Labor Force)</b>		<b>10,8%</b>	<b>10,2%</b>	<b>9,4%</b>	<b>8,7%</b>	<b>7,6%</b>	<b>-0,6 pp</b>	<b>-0,2 pp</b>	<b>7,4%</b>	<b>7,2%</b>	<b>7,0%</b>	<b>7,6%</b>	<b>7,6%</b>
<b>Consumer Price Index</b>		<b>1,0%</b>	<b>0,2%</b>	<b>0,2%</b>	<b>0,9%</b>	<b>1,7%</b>	<b>2,2%</b>	<b>2,2%</b>	<b>1,6%</b>	<b>1,8%</b>	<b>1,8%</b>	<b>1,9%</b>	<b>1,9%</b>
<b>Japan - GDP</b>		<b>2,0%</b>	<b>0,4%</b>	<b>1,4%</b>	<b>0,9%</b>	<b>1,7%</b>	<b>1,4%</b>	<b>0,4%</b>	<b>1,7%</b>	<b>1,6%</b>	<b>1,2%</b>	<b>1,1%</b>	<b>0,9%</b>
<b>Industrial Production</b>		<b>-0,7%</b>	<b>2,1%</b>	<b>-0,9%</b>	<b>-0,2%</b>	<b>4,5%</b>	<b>2,0%</b>		<b>2,4%</b>	<b>3,8%</b>			
<b>Unemployment (% of Labor Force)</b>		<b>4,0%</b>	<b>3,6%</b>	<b>3,4%</b>	<b>3,1%</b>	<b>2,8%</b>	<b>-0,4 pp</b>	<b>0,0 pp</b>	<b>2,7%</b>	<b>2,6%</b>	<b>2,6%</b>	<b>2,9%</b>	<b>2,9%</b>
<b>Consumer Price Index</b>		<b>1,5%</b>	<b>2,5%</b>	<b>0,2%</b>	<b>-0,1%</b>	<b>1,0%</b>	<b>0,7%</b>	<b>1,1%</b>	<b>0,8%</b>	<b>0,9%</b>	<b>0,9%</b>	<b>0,8%</b>	<b>1,5%</b>
<b>China - GDP</b>		<b>7,8%</b>	<b>7,3%</b>	<b>6,9%</b>	<b>6,7%</b>	<b>6,9%</b>	<b>6,7%</b>	<b>6,5%</b>	<b>6,8%</b>	<b>6,8%</b>	<b>6,7%</b>	<b>6,6%</b>	<b>6,2%</b>
<b>Industrial Production</b>		<b>9,9%</b>	<b>7,9%</b>	<b>6,6%</b>	<b>6,0%</b>	<b>6,1%</b>	<b>6,6%</b>	<b>6,0%</b>	<b>7,2%</b>	<b>7,9%</b>			
<b>Unemployment (% of Labor Force)</b>		<b>4,1%</b>	<b>4,1%</b>	<b>4,1%</b>	<b>4,0%</b>	<b>4,0%</b>	<b>-0,2 pp</b>		<b>3,9%</b>			<b>4,0%</b>	<b>4,0%</b>
<b>Consumer Price Index</b>		<b>2,5%</b>	<b>1,5%</b>	<b>1,6%</b>	<b>2,0%</b>	<b>1,8%</b>	<b>1,9%</b>	<b>2,3%</b>	<b>1,8%</b>	<b>1,9%</b>	<b>2,0%</b>	<b>2,2%</b>	<b>2,4%</b>



# World Major Economies GDP

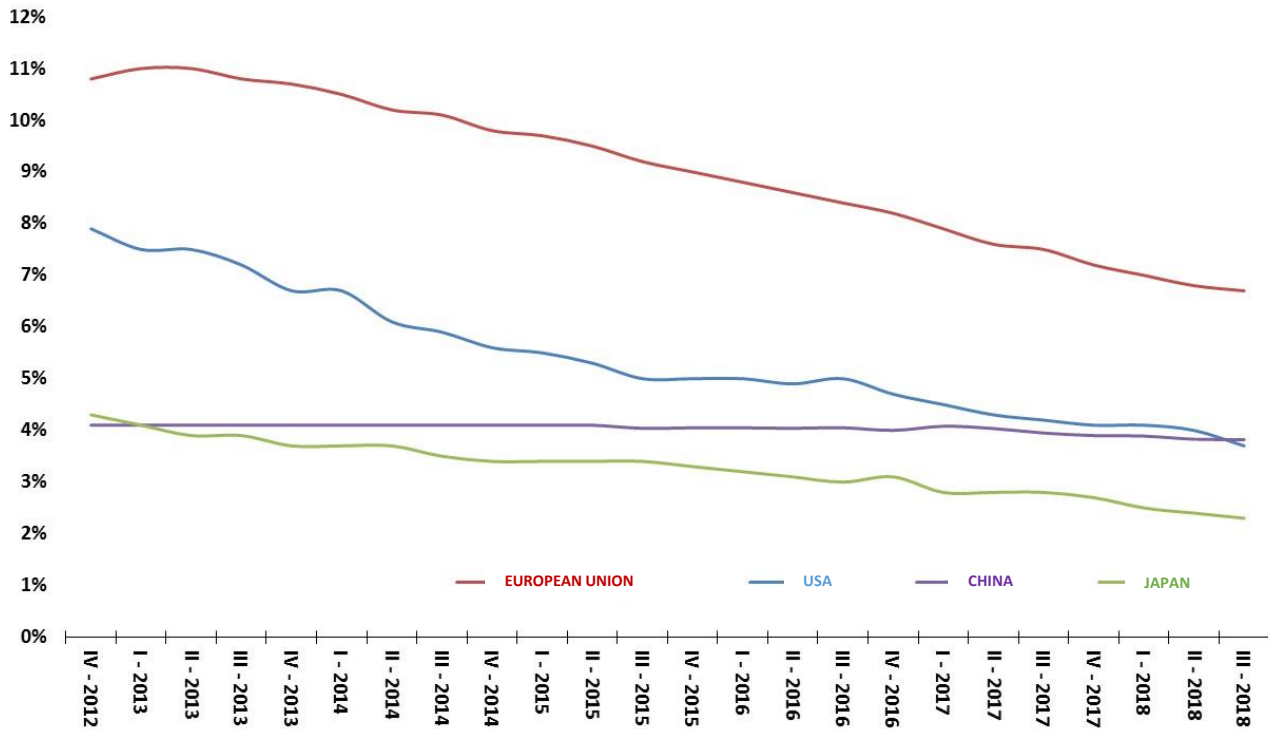
GDP - real quarterly % chg. – seasonally adjusted data



Source: OECD.

# World Major Economies Unemployment Rate

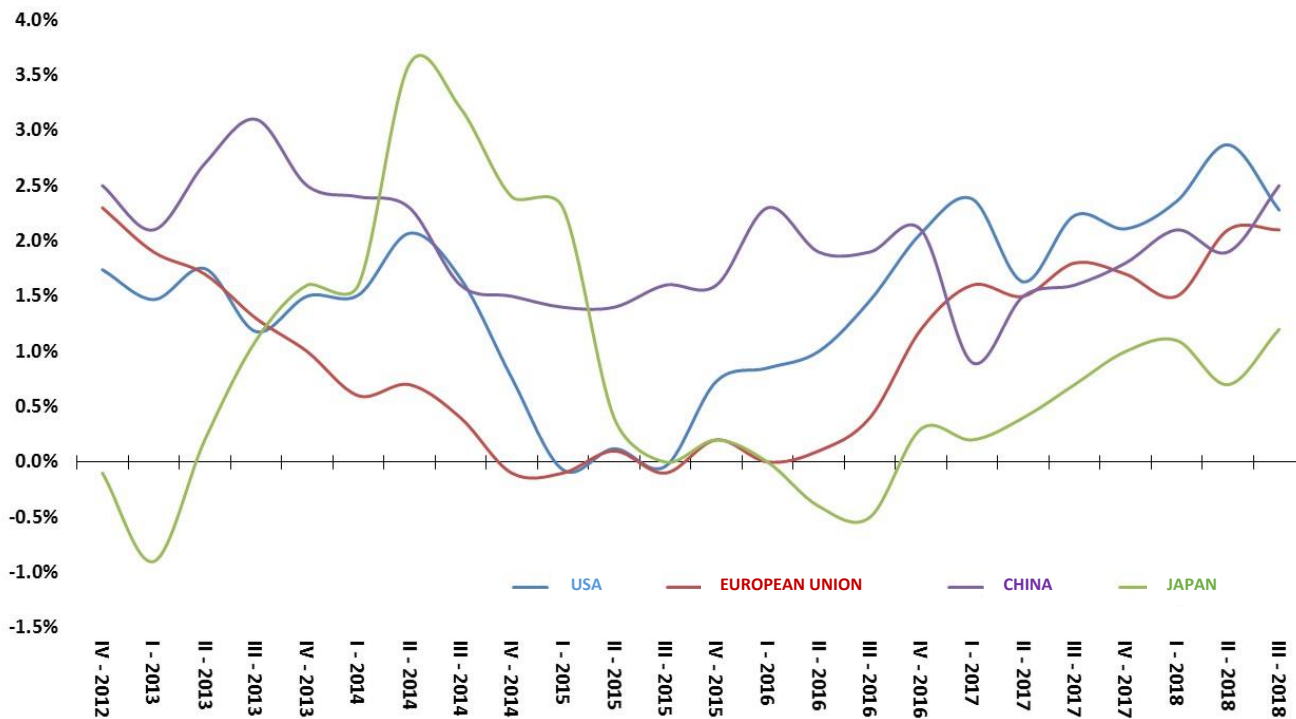
Unemployment Rate as % of Labor Force



Source: OECD.

# World Major Economies Consumer Price Index

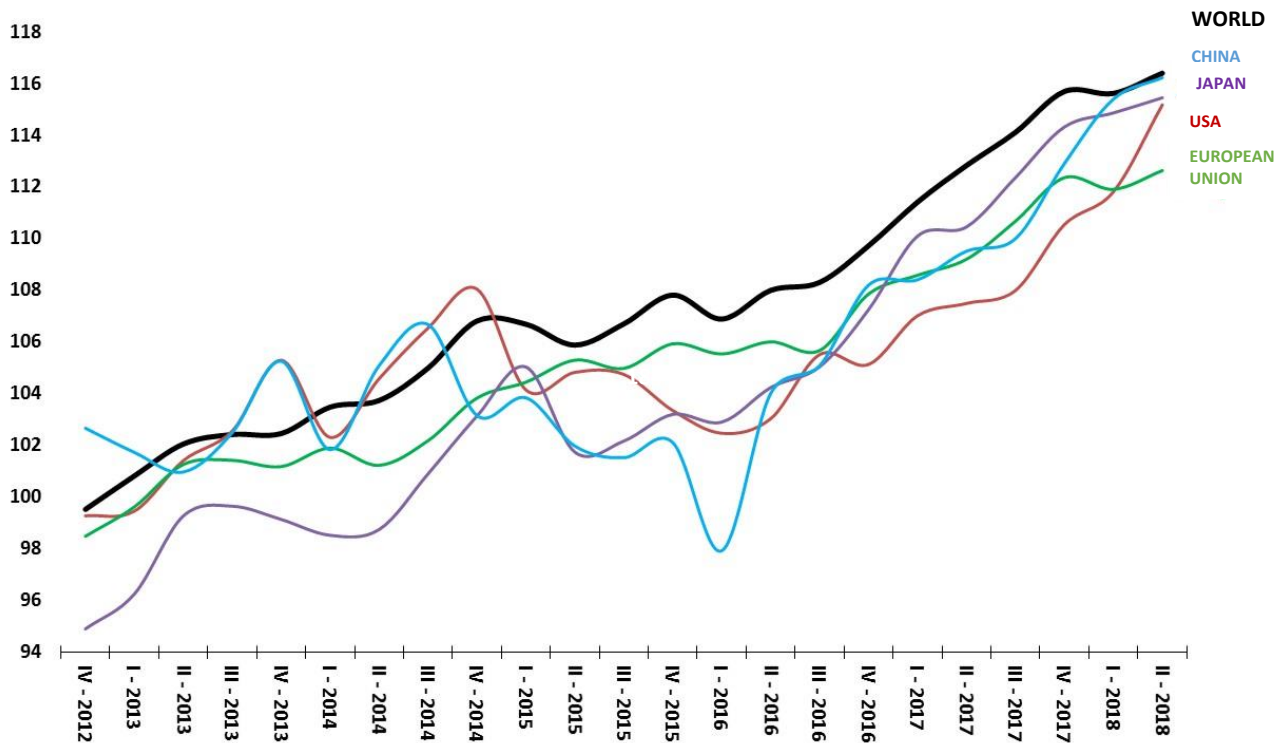
Consumer Price Indexes – annual chg. %



Source: OECD.

# World Major Economies Total Exports

Total Exports Volume Index – Q3-2012 = 100

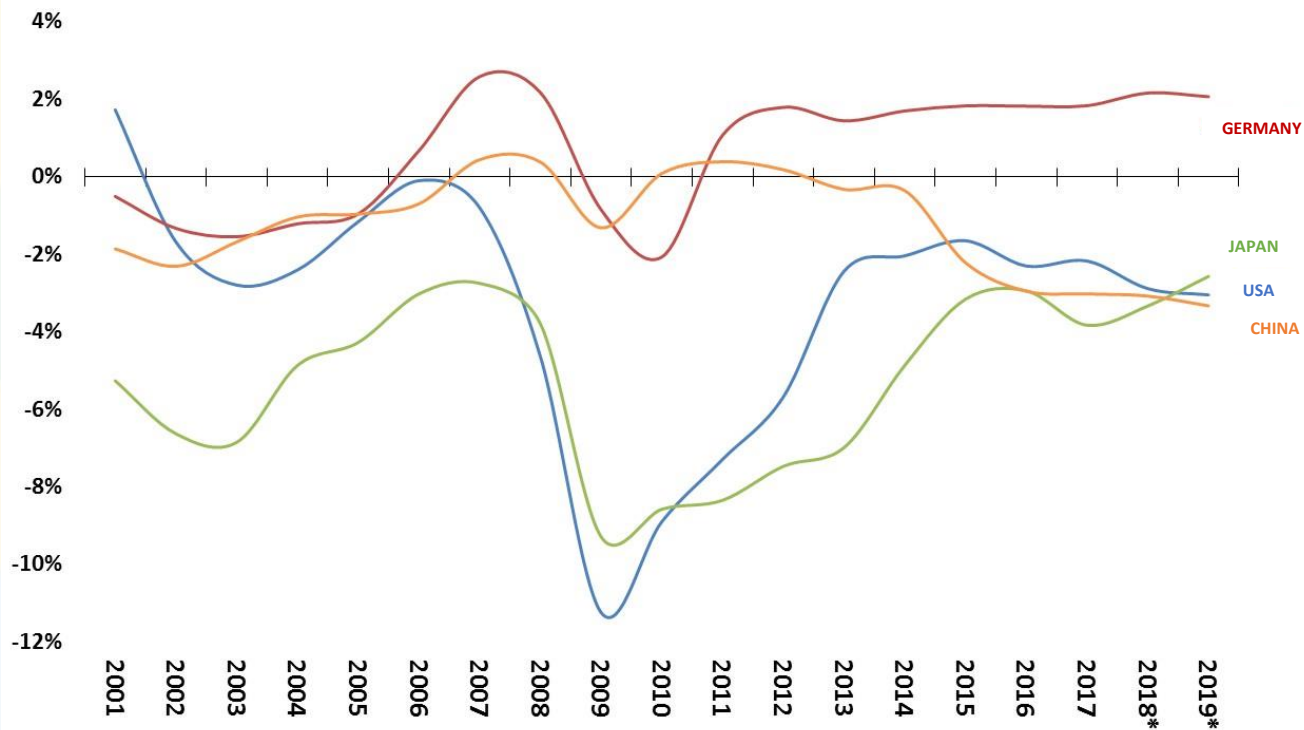


Source: OECD.

\*Estimated values IMF

# World Major Economies Government Primary Surplus

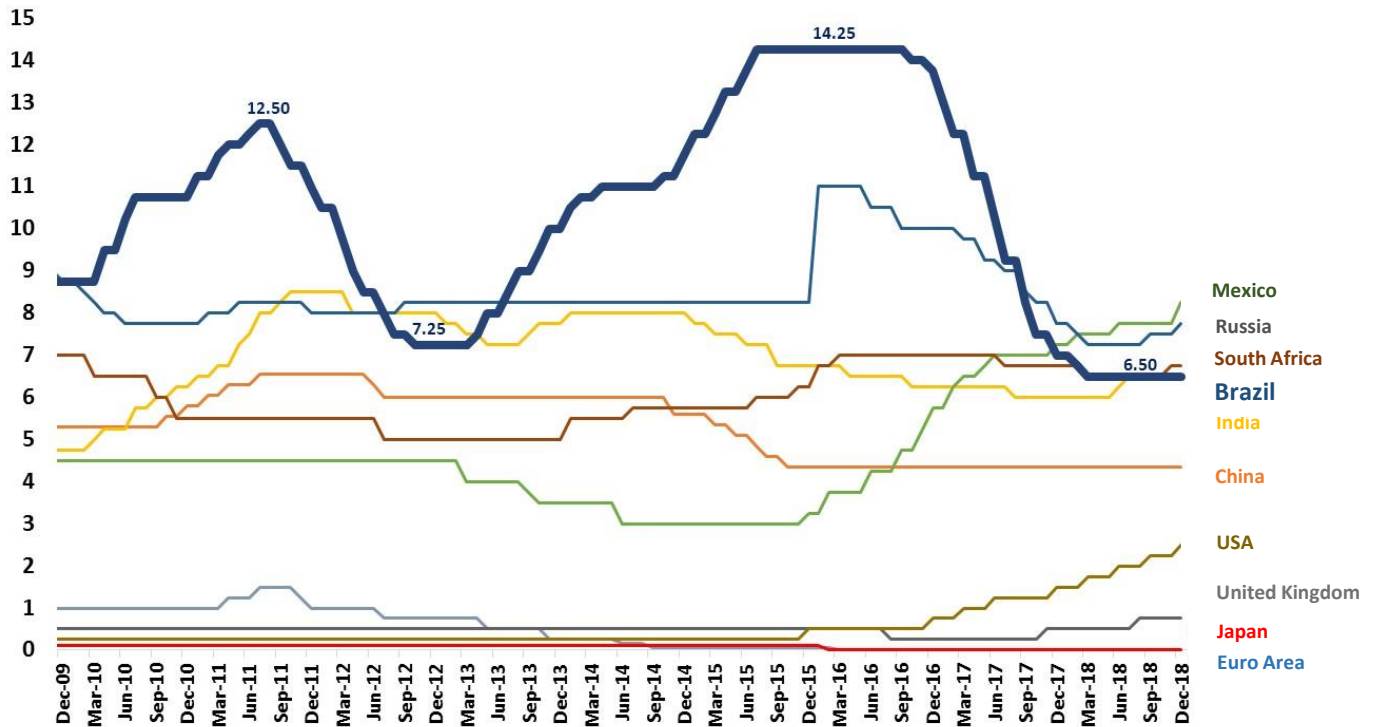
Central Government Primary Surplus as % of GDP



Source: IMF. \* Estimated values

# Selected Economies Main Interest Rate

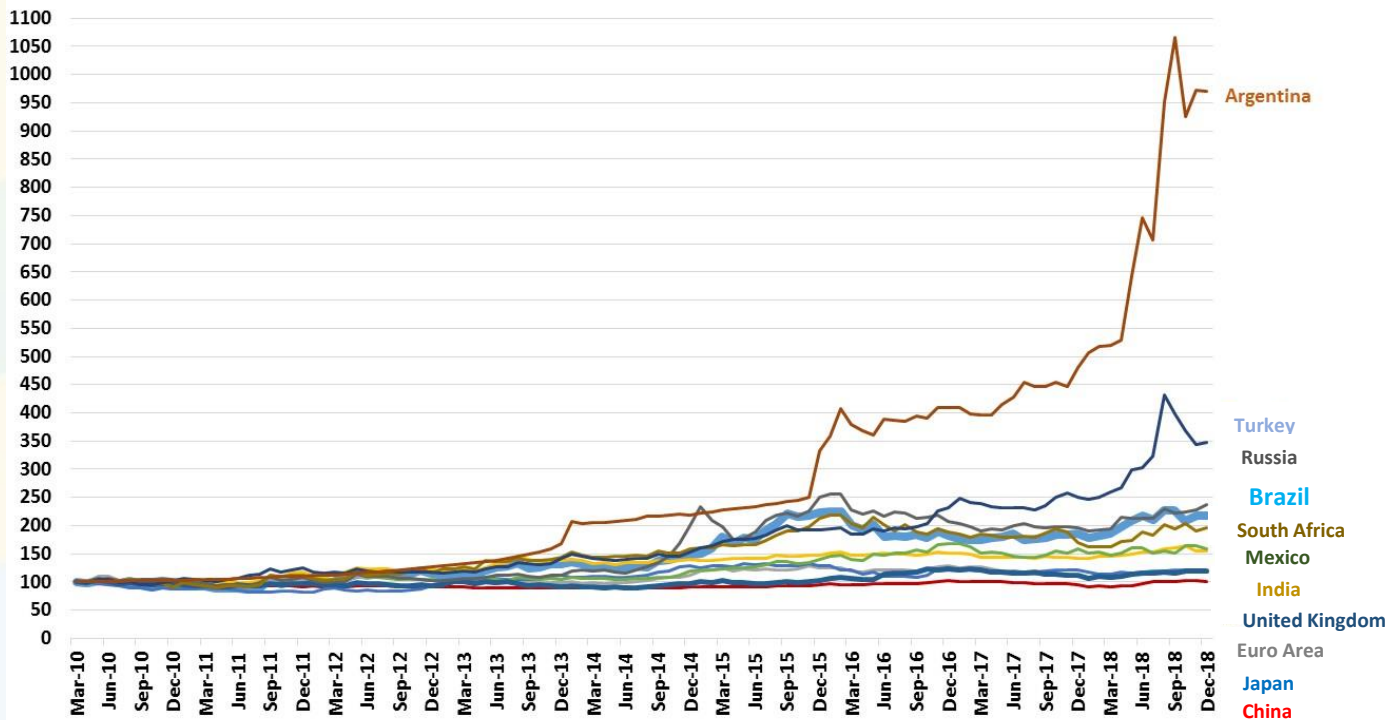
Main Interest Rates – Selected Economies – % per year



Source: Central Bank of Brazil.

# Selected Economies FX-dollar Rate Evolution

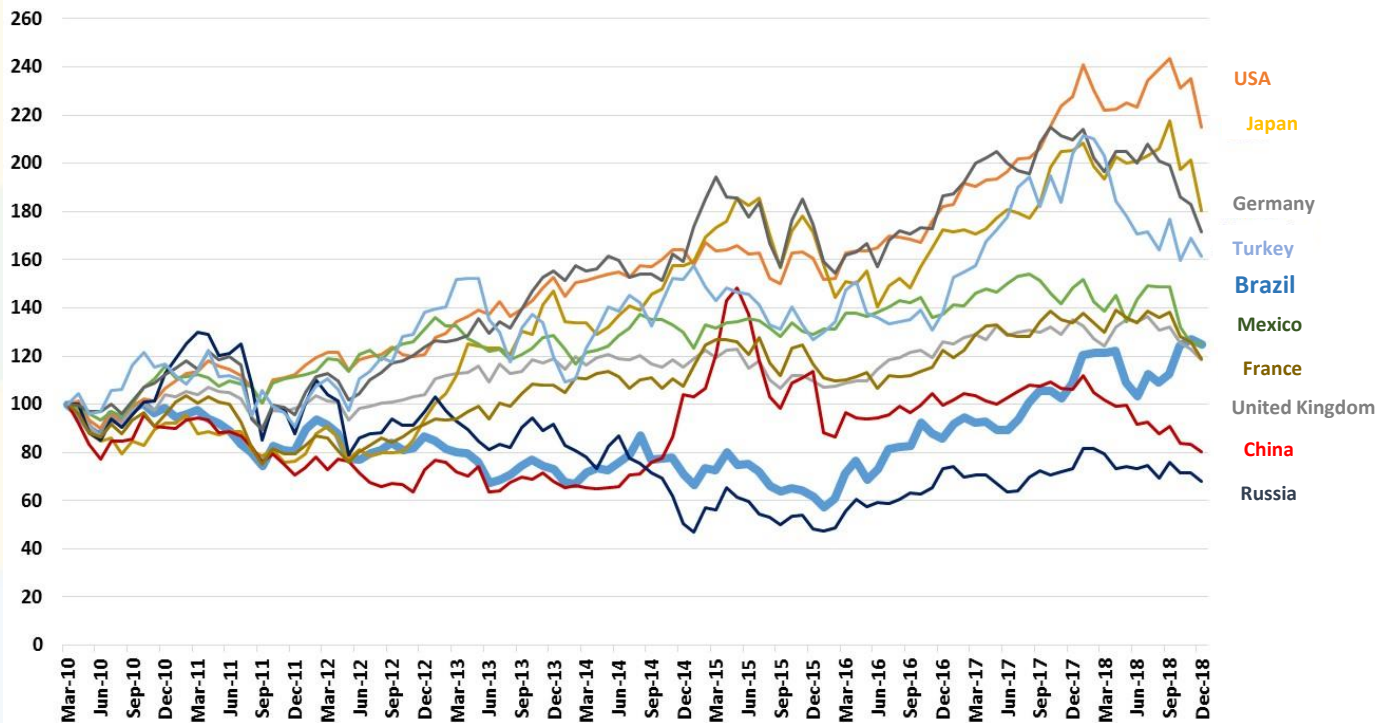
Selected Economies FX-rate Indexes – Dec/2008 = 100



Sources: Bloomberg.

# Selected Economies Main Stock Index Evolution

Selected Economies Main Stock Indexes – Dec/2008 = 100



Sources: Bloomberg.



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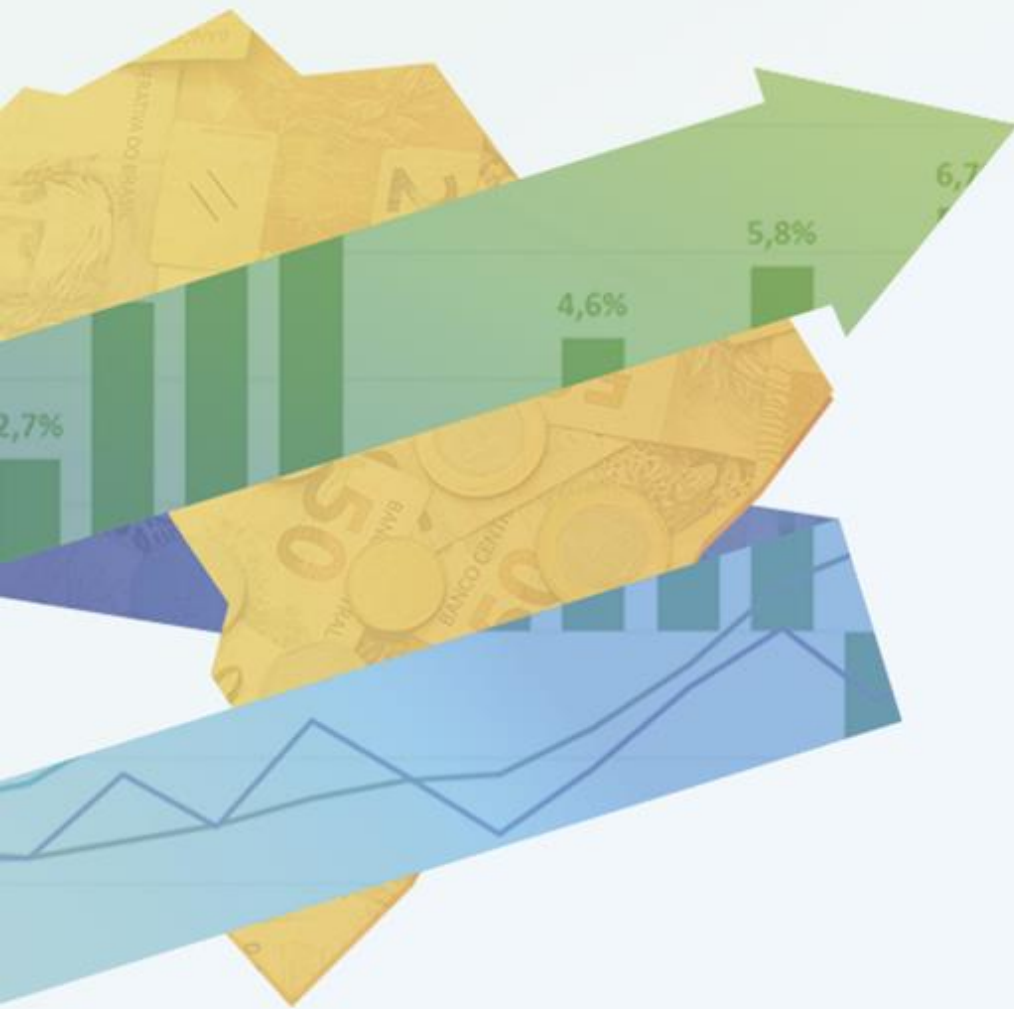
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