Goldman Sachs | Economics Research

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Latin America Economics Analyst

Brazil: Searching for a New Engine of Growth

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The Old and Tired Growth Engine Hit Road Bumps and Lost a Few Pistons

The official record is quite compelling in showing that Brazil's inward-looking growth model, with heavy direct and indirect presence of the government in the economy, failed to deliver solid, stable, and socially-inclusive growth. In fact, real per capita GDP growth during the last four decades has been markedly weak (less than 0.8% on average between 1981 and 2018); a reflection of weak investment spending and very low total factor productivity growth. To make things worse, rather than a much-needed upgrade/overhaul, the old weak growth engine seems to have suffered heavy core damage in recent years: we argue that some of the structural impediments to growth have increased and hardened in recent years. Hence, the current atypically weak cyclical recovery reflects to some extent structural damage to the economy's core engines of growth; thereby limiting its capacity to pull the economy out of the recent economic contraction.

A Longstanding Weak Growth Profile Just Got Worse

Among the factors that are hampering the recovery, we highlight, beyond policy uncertainty: (1) the decline of the capital stock in the economy, particularly of machinery and equipment. The capital-labor ratio declined due to weak and low-quality investment for a number of years; (2) Labor market *hysteresis*: loss of skill and productive ability due to large-scale long-term unemployment, sub-employment, and inefficient job-worker matching. The sharp cyclical labor market shock may have changed the trend of the economy: i.e., shifted part of the labor force from cyclical to the structural unemployment; (3) The significant increase in financial leverage/debt (government and households), which limits the capacity of domestic agents to increase spending through additional borrowing. After years of taking a prominent central role in the economy, the public sector is now entering a multi-year process of consolidation and retrenchment, driven by the unsustainable debt dynamics, but the private sector is not yet in a position to pick up the baton and support the recovery. Furthermore, large-scale unemployment and high debt levels may have generated hysteresis in private consumption: households' behavior changed with the crisis and they are now saving more.

Brazil: Searching for a New Engine of Growth

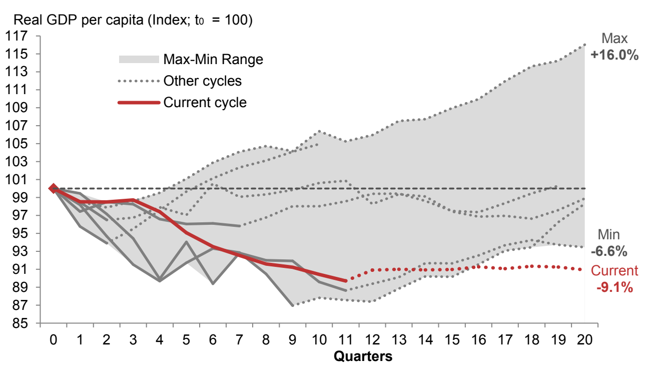
"Aerodynamics are for people who can't build engines."

Enzo Ferrari (1898-1988), Italian motor racing driver and entrepreneur.

Introduction

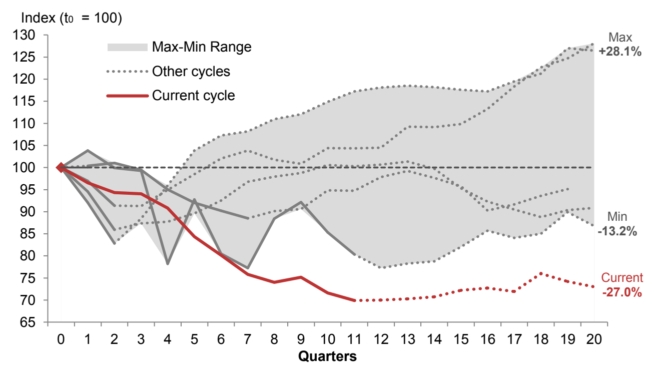
In recent publications (*Latin America Economics Analyst: Brazil: Two Lost Decades in Forty Years — Could it Lose Half a Century?*, May 3, 2019, and *The Weakest Cyclical Recovery on Record*, May 30, 2019) we showed that following the deep and record long 11-quarter 2Q2014-4Q2016 recession, Brazil's current cyclical recovery has been extraordinarily flat. In fact, it has been the weakest on record, with investment spending particularly soft (Exhibits 1, 2).

Exhibit 1: GDP per capita still 9.1% below pre-recession peak
(t=0 marks quarter before recession)



Source: IBGE, Goldman Sachs Global Investment Research

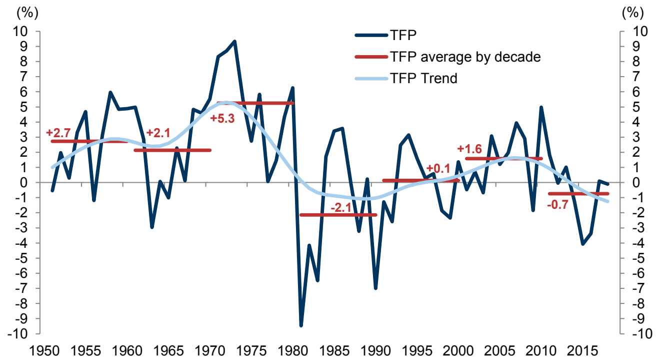
Exhibit 2: Investment spending still 27% below pre-recession peak
(t=0 marks quarter before recession)



Source: IBGE, Goldman Sachs Global Investment Research

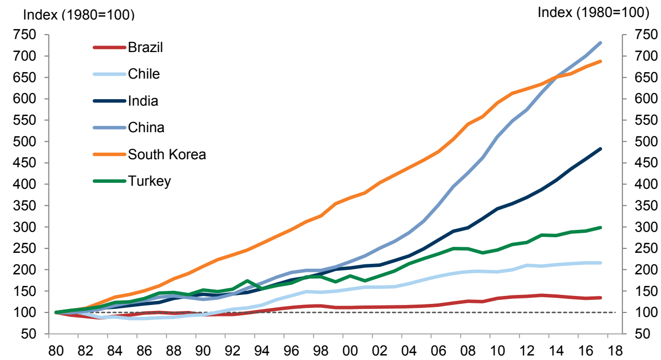
The official record is quite compelling in showing that Brazil's **inward-looking growth model, with its heavy direct and indirect presence of the government in the economy, failed to deliver solid, stable, and socially-inclusive growth during the last 4 decades.** In fact, real per capita GDP growth during the last four decades has been markedly weak (less than 0.8% on average between 1981 and 2018); a reflection of weak investment spending (which limited capital accumulation and kept the capital stock low) and very low total factor productivity growth. **To make things worse, rather than a much-needed upgrade/overhaul, the old weak growth engine seems to have suffered heavy structural damage in recent years through what has often been labeled the populist/interventionist *New Economic Matrix,* thereby significantly limiting its capacity to pull the economy out of the most recent economic contraction.**

Exhibit 3: Four Decades of Low Total Factor Productivity



Source: Goldman Sachs Global Investment Research

Exhibit 4: Labor Productivity Severely Lagging That of EM peers



Note: labor productivity is measured in output per hours worked

Source: Penn World Table, Goldman Sachs Global Investment Research

The Old Tired Growth Engine Hit Road Bumps and Lost a Few Pistons

In this *LatAm Analyst*, we review some of the structural impediments to growth (longstanding, well-known and extensively researched factors that have been keeping factor productivity and potential GDP low) and posit that some of the **structural barriers to growth have both increased and hardened in recent years**. In that sense, the **current atypically weak cyclical recovery reflects—beyond above-average policy uncertainty that restrains consumption and investment spending decisions—structural damage to the economy's core engines of growth**; rendering them even less powerful than in years past. Among the factors that are hampering the recovery, we highlight:

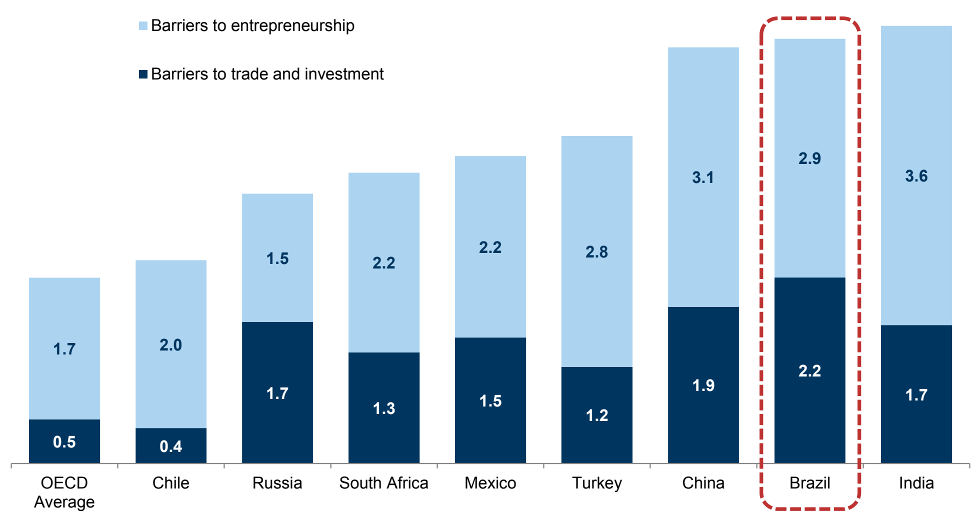
1. **The decline of the capital stock in the economy in recent years, particularly of infrastructure and machinery and equipment. The capital-labor ratio** in the economy has declined due to low, mis-allocated, and low-quality investment for a number of years;
2. **Labor market *hysteresis*:** loss of skill and productive ability due to the significant share of long-term unemployment (5 million workers have been looking for a job for more than a year; 3 million for more than 2 years), sub-employment, and firms' tendency during downturns to switch to automation. Overall, the sharp cyclical labor market shock ends up changing the trend, or the course of the economy: i.e., the loss of job skills triggered by prolonged unemployment, sub-employment, shifts workers from the cyclical to the structural unemployment group, and a rise in structural unemployment leads to a rise in the natural unemployment rate;
3. **The significant increase in financial leverage/debt over the last 15 years** (government, first and foremost, but also households, and to some extent corporates), which now limits the capacity of domestic agents to increase spending through additional borrowing.
   - After 15-years of taking a hyper-active and prominent central role in the economy, the public sector is now entering a multi-year process of consolidation and retrenchment, driven by the unsustainable debt dynamics,

but the private sector is not yet in a position to pick up the baton and support the recovery.

- Furthermore, the effects of large-scale long-term unemployment, precarious employment conditions, and the fact that many first-time or recent borrowers have found themselves excessively indebted may have also generated **hysteresis in private consumption**: households' spending-savings behavior may have changed with the crisis and going forward they may choose to spend less (save more).

4. The **steady increase of the tax burden over the private sector since the early 1990s,** to a level that now significantly exceeds that of the EM average**, and increase in regulatory overreach during 2010-16** (some of the previous reforms were undone or weakened and government intervention in the economy grew significantly). This combination rendered domestic production less competitive (discouraged investment) and reduced the degrees of freedom to engineer the required structural fiscal adjustment.

Exhibit 5: Brazil has higher regulatory restrictions to competition than most peers



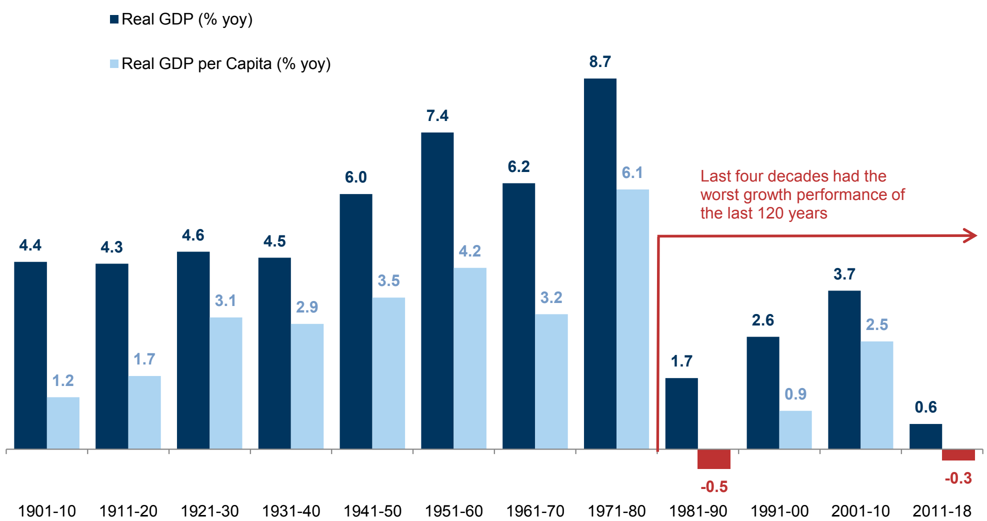
Source: OECD Product Market Database, Goldman Sachs Global Investment Research

These factors, individually and even more so together, have undermined the capacity of the economy to respond to policy stimuli and marshal the large amount of spare capacity in the economy in the manner and at the pace observed in previous business cycle recoveries.

A Longstanding Weak Growth Profile Just Got Worse

The low growth performance over the last four decades (Exhibit 6) can be explained by perennially low investment rates, even lower savings rates that often created external (balance of payments) binding constraints to growth, rapidly rising but highly inefficient public spending, a rising and increasing complex and distortionary tax burden, low levels of human and physical capital, the increasingly complex and unpredictable regulatory framework, the heavy and inefficient public bureaucracy, high levels of external protection and the extraordinarily low level of international trade (among the world's economies, that of Brazil is among the most closed to international trade, even when accounting for its population and territorial size). This rendered the economy uncompetitive as seen by low levels of labor and TFP productivity.

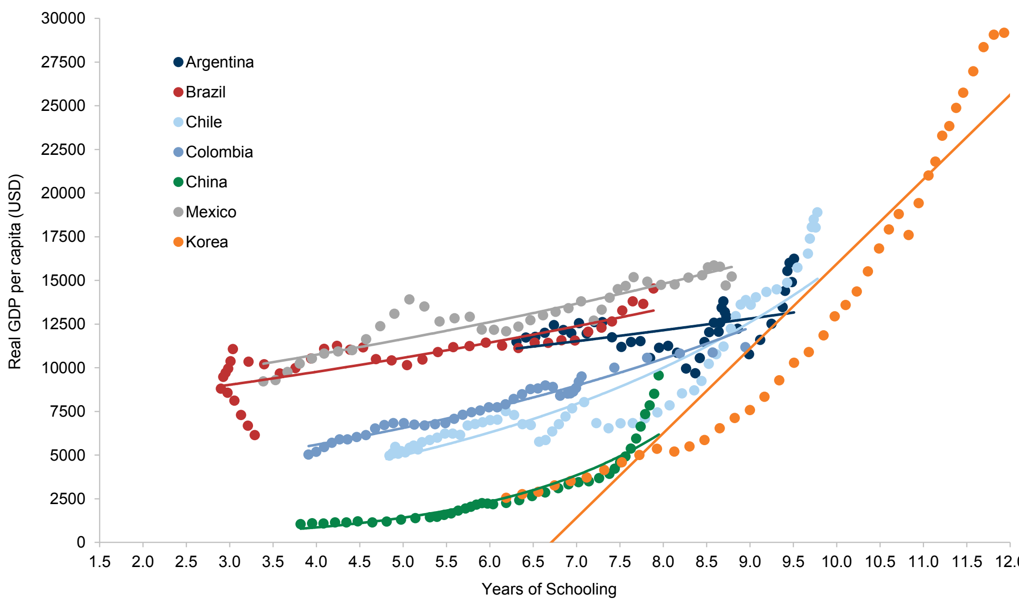
Exhibit 6: Two Lost Decades Since the 1980s
Real GDP and Real GDP per-capita growth average by decade since 1901



Source: Ipeadata, IBGE, Goldman Sachs Global Investment Research

Part of the low productivity backdrop is also explained by the fact that, since the 1980s, despite the increasing schooling of the labor force Brazil lost the ability to shift workers to high-productivity jobs: better-schooled workers were absorbed by low-productivity firms in traditional services, and the wage premium of skilled labor declined (see Pecora & Menezes Filho, 2014 and Pinheiro & Lins, 2019). Additionally, declining educational quality eroded the positive impact of rising schooling rendering effective human capital lower than what the figures suggest: despite rising education spending and expanding access and enrollment levels, Brazil's schools are not providing students with the know-how and skills necessary to become competitive and productive works in the marketplace (see World Bank (2018b) Skills and Jobs: An Agenda for Youth). Finally, there are likely other structural impediments in the economy, including the low and outdated stock of capital per worker that limits the impact of higher levels of human capital on overall productivity growth.

Exhibit 7: Brazil's returns to schooling lower than in other EM economies



Source: Penn World Table, Barro-Lee Education Database, Goldman Sachs Global Investment Research

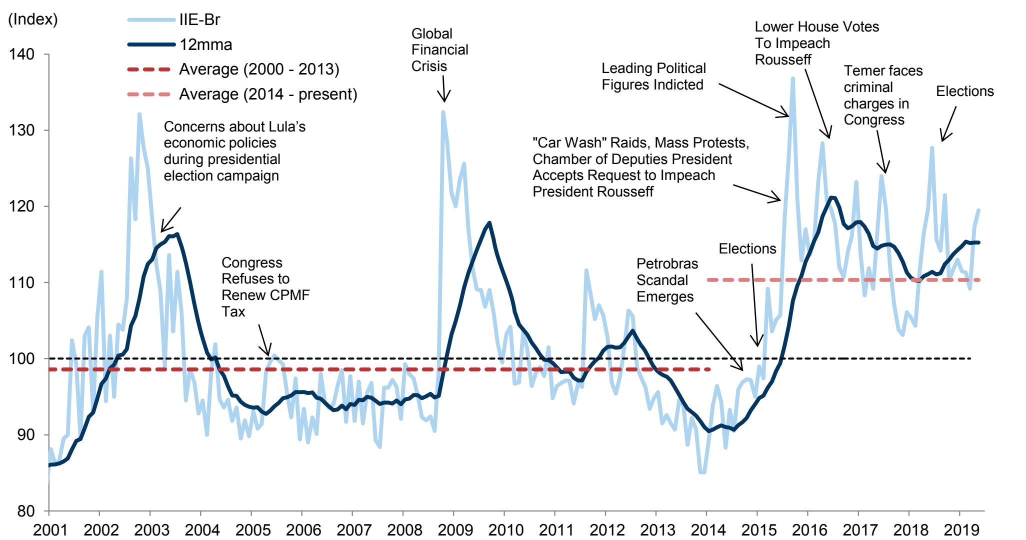
Another key driver of low productivity is the fact that compared with EM peers, Brazil has a very large share of small inefficient firms in the economy, many of which operating in the low-productivity informal economy (see, for example, Barbosa Filho & Correa, 2017).

All these impediments to growth are, to a large extent, still present. Some got worse in recent years and that helps to explain the sluggishness of the ongoing recovery. So why is the current cyclical recovery so weak? To name just a few reasons, **the slowest recovery on record reflects the combined effect of: (1) high and above-average policy uncertainty, (2) lower capital stock, (3) loss of skills by the active labor force given a very prolonged period of very high unemployment, (4) high levels of indebtedness (financial leverage in the system), and (5) higher tax burden/fiscal crisis.**

1. Lingering Political Friction and High Above-Norm Policy Uncertainty

Political noise has been intense and economic policy uncertainty has been tracking at historically high levels since the 2014 reelection of President Dilma Rousseff. In fact, almost two and half years after the end of the recession (4Q2016) and an election that jolted the political system and shifted the political needle (2018), economic policy uncertainty remains well above the historical average. This, all else constant, reduces the planning horizon and keeps the animal and entrepreneurial spirits of the economy depressed, which when acting together severely limit the propensity for investment spending and consumption.

Exhibit 8: Economic Policy Uncertainty Has Been High Since 2014

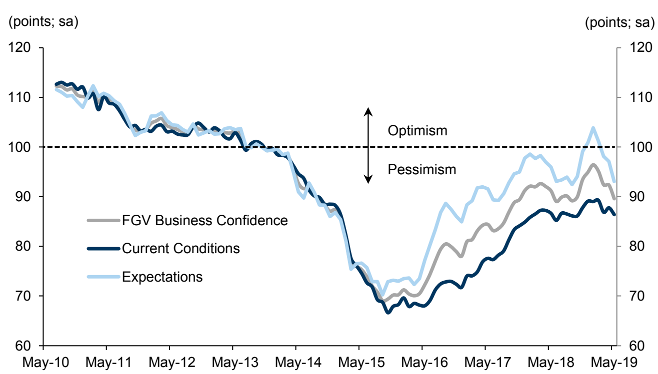


The Economic Uncertainty Index is made up of three components: (1) IIE-Br Media: based on the frequency that the word uncertainty in the news (online and press outlets); (2) IIE-Br Expectations: based on the dispersion of analysts' FX and inflation forecasts. (3) IIE-Br Market: based on stock market volatility (Ibovespa). The Economic Uncertainty Index is the weighted average of the three components: IIEBr = 0.7*IIEBr Media + 0.2*IIEBR Expectations + 0.1*IIEBr Market. The index is standardized to average 100 and standard deviation of 10 between January 2005 and December 2014.

Source: FGV, Goldman Sachs Global Investment Research

Given the rapid surge in unemployment during 2015-2016, more than three years of double-digit unemployment, and soft business conditions and growth outlook, fear of unemployment among those that are working remains high (Exhibit 10). This is another element of uncertainty that discourages household spending.

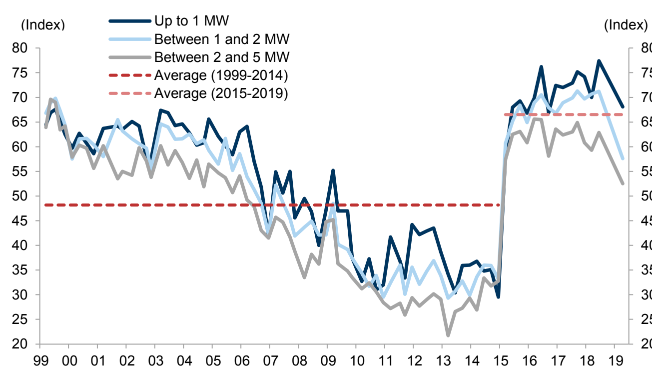
Exhibit 9: Business Confidence Trapped in Pessimistic Territory for 5 Years



Equal-weighted aggregate of retail, services, construction, and industrial confidence.

Source: FGV, Goldman Sachs Global Investment Research

Exhibit 10: Fear of Unemployment at Record High Levels



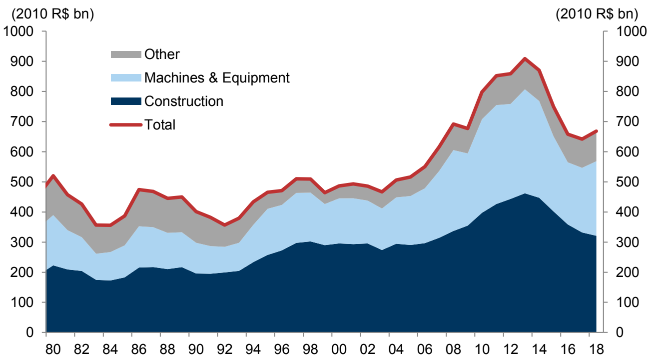
Diffusion index constructed through survey of economically active population with three options: very fearful of being unemployed (weight 100), somewhat fearful of being unemployed (weight 50), and no fear of being unemployed (weight 0).

Source: CNI, Goldman Sachs Global Investment Research

2. Decline in the Stock of Capital and Capital/Labor Ratio

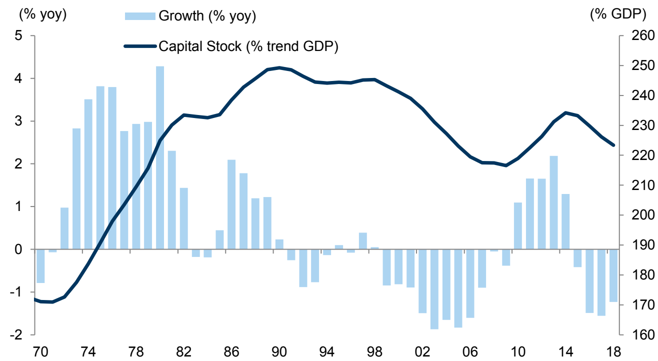
The severe contraction of investment spending during the recent long recession (a large 32% cumulative decline between 3Q13 and 4Q16) and the anemic response since the end of the recession led to a decline of the already-low stock of capital in the economy in absolute terms and even more so as a share of working age population. Investment spending was so low that it did not compensate for the normal depreciation and obsolescence of the existing capital stock.

Exhibit 11: Severe Decline of Investment Spending During 2013-2016



Source: IBGE, Goldman Sachs Global Investment Research

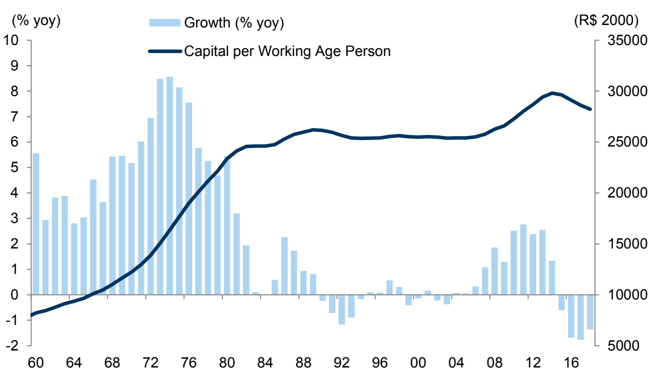
Exhibit 12: Falling Capital Stock as Share of GDP
Capital Stock (% trend GDP)



Source: Ipeadata, IBGE, Goldman Sachs Global Investment Research

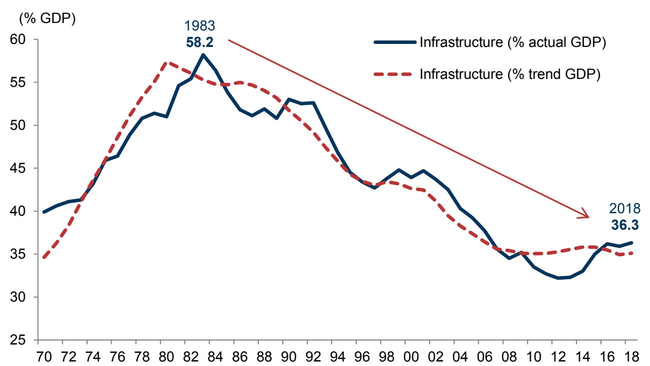
In the meantime, the active labor force continued to increase. This implies that the average worker in the economy now has fewer units of capital to work with, which, all else constant, makes that worker less productive.

Exhibit 13: Capital Stock Per Working Age Person Has Declined in Recent Years



Source: Ipeadata, IBGE, Goldman Sachs Global Investment Research

Exhibit 14: Infrastructure Stock has Been Declining Since the 1980s



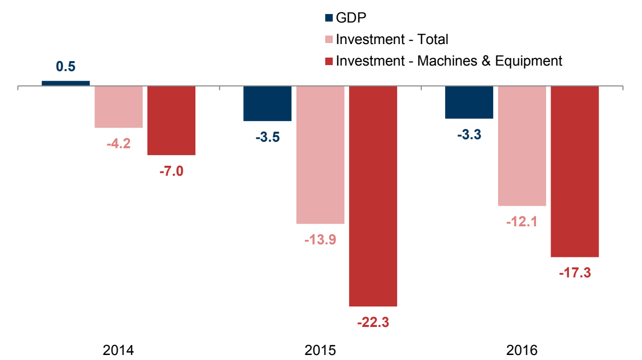
Source: Inter.B, Goldman Sachs Global Investment Research

The sharp 2013-16 contraction of investment spending and the decline of the capital stock was heavily skewed towards investment in machinery & equipment (M&E) and infrastructure (residential investment was somewhat protected by government sponsored social housing programs; e.g., *Minha Casa Minha Vida*) (Exhibit 15). **This composition of investment (a mix with relatively less infrastructure and machinery and equipment relative to housing) further limited the productive capacity of the overall capital stock**.

Furthermore, the stock of infrastructure has been on a declining trend since the early 1980s: infrastructure investment dipped below 2% of GDP in recent years given the severe fiscal pressures experienced by the federal and local governments (Exhibit 17).

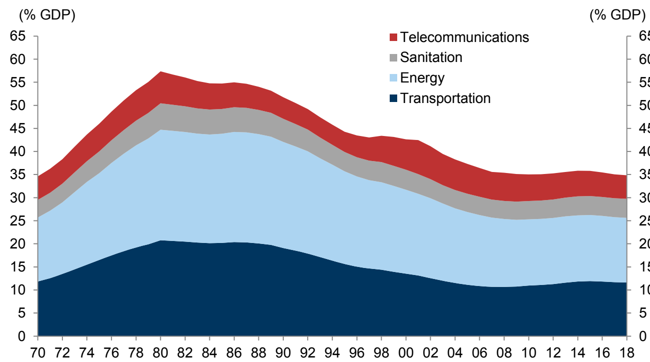
Overall, **during 1990-2016 real GDP more than doubled but infrastructure grew only 27%.**[1]

Exhibit 15: Very Sharp Decline of Investment in Machinery and Equipment
% variation



Source: IBGE, Goldman Sachs Global Investment Research

Exhibit 16: Steady Infrastructure Stock Decline Since the Late 1970s



Source: Inter.B, Goldman Sachs Global Investment Research

Exhibit 17: Infrastructure Investment (% GDP)

	1971-80	1981-90	1991-00	2001-10	2011	2012	2013	2014	2015	2016	2017	2018
Energy	2.47	1.26	0.68	0.57	**0.71**	**0.71**	**0.69**	**0.64**	**0.68**	**0.61**	**0.54**	**0.60**
Telecommunications	0.93	0.38	0.71	0.63	**0.48**	**0.50**	**0.42**	**0.51**	**0.45**	**0.40**	**0.38**	**0.43**
Sanitation	0.53	0.20	0.15	0.17	**0.48**	**0.50**	**0.42**	**0.51**	**0.45**	**0.40**	**0.18**	**0.20**
Transportation	2.36	1.26	0.57	0.59	**0.80**	**0.83**	**0.95**	**0.90**	**0.79**	**0.63**	**0.59**	**0.65**
Total	6.30	3.10	2.12	1.96	**2.16**	**2.23**	**2.28**	**2.26**	**2.07**	**1.80**	**1.69**	**1.88**

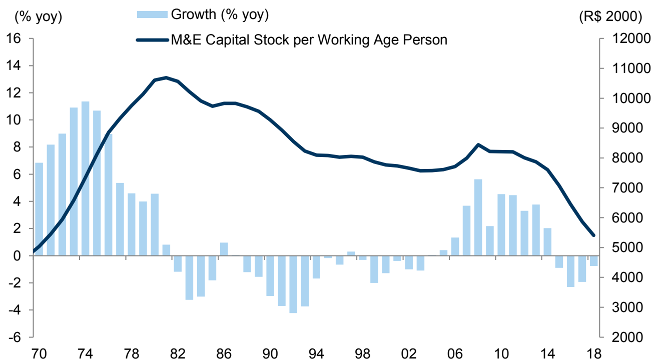
Source: Inter.B, Goldman Sachs Global Investment Research

The **official investment statistics are likely overstating the true amount of investment that took place in the economy in recent years, and the productive capacity of that investment was likely compromised by a poor allocation of investment spending, and corruption/over-billing**.

Beyond the observed decline in the relative share of more productive M&E and infrastructure in total investment, the medium- and **long-term economic multiplier of the investment that took place in 2010-2016 was likely reduced by** widely reported and investigated **corruption in large investment projects/contracts** and the significant **misallocation of investment** due to weak project selection criteria and the large increase in funding by official banks at significantly below-market rates (some funded at negative real rates).

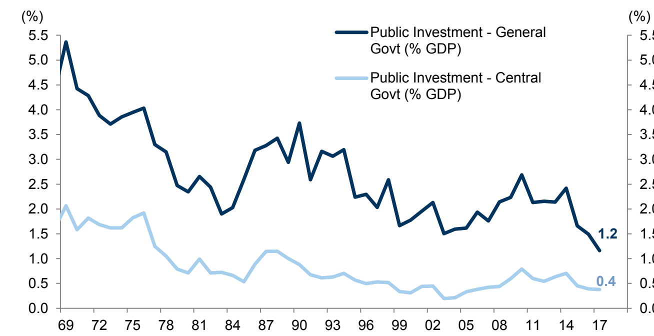
[1] We thank Claudio Frischtak from Inter.B for sharing his estimates of infrastructure capital stock and investment in Brazil.

Exhibit 18: Stock of Capital in Machinery & Equipment Per Working Age Person Declined Significantly



Source: Ipeadata, Goldman Sachs Global Investment Research

Exhibit 19: Fiscal Constraints Behind Large Reduction Public Investment



Source: FGV

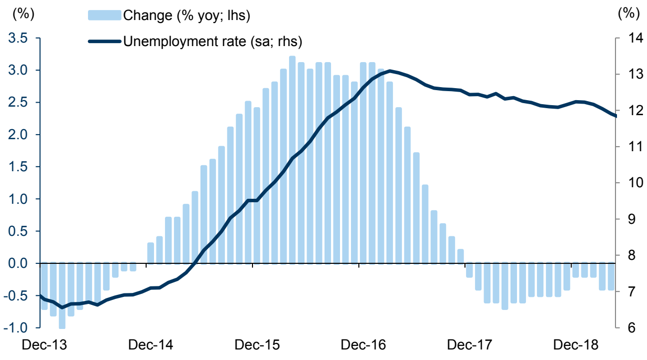
Furthermore, based on a number of press reports one can also safely infer that **part of the investment and new capital stock added in recent years is highly unproductive and is depreciating rapidly:** e.g., part of the reported investment was in costly soccer stadiums for the 2014 FIFA World Cup and sports infrastructure for the 2016 Summer Olympic that has since then been sparsely used and which is now rapidly deteriorating. There were also highly publicized bulky but highly inefficient and wasteful investments in the naval, petrochemical, and oil and gas sectors (e.g., the Comperj petrochemical complex, Abreu e Lima refinery complex, Sete Brazil in shipyards and naval construction).

Overall, the 2010-2016 investment captured by the national accounts is likely overstating the true amount of new capital stock added to the economy (part of the reported investment spending never took place as part of the funds were lost through corruption and over-pricing in contracts) and the quality and productive capacity of many of these investments was quite low to begin with, and many are now depreciating very rapidly.

3. Labor Market *Hysteresis*

The deep recession left a clear, likely long-lasting scar on the labor market. The unemployment rate has been in double digits for more than 3 years, and 2.5 years after the end of the recession the unemployment rate is still tracking at around 12% (Exhibit 20). Furthermore, more than 3 million workers have been unemployed and looking for a job for more than 2 years (more than 5 million for more than 1 year) and about 25% of the labor force (more than 28mn individuals) is being underutilized: this includes those currently unemployed but actively looking for a job, only partially employed, or too discouraged to look for a job.

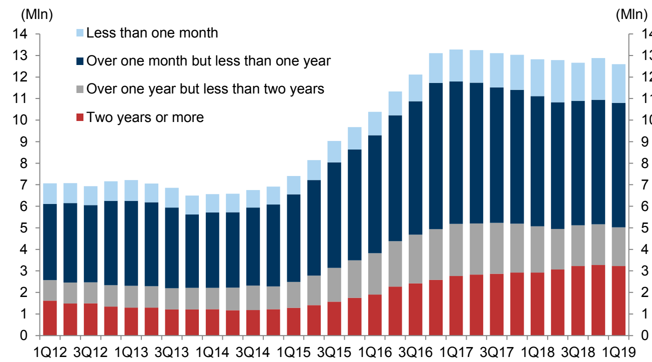
Exhibit 20: Very Slow Labor Market Improvement



Source: IBGE, Goldman Sachs Global Investment Research

Exhibit 21: Over 5 Million Individuals Have Been Unemployed for More than One Year

Unemployment by duration, millions

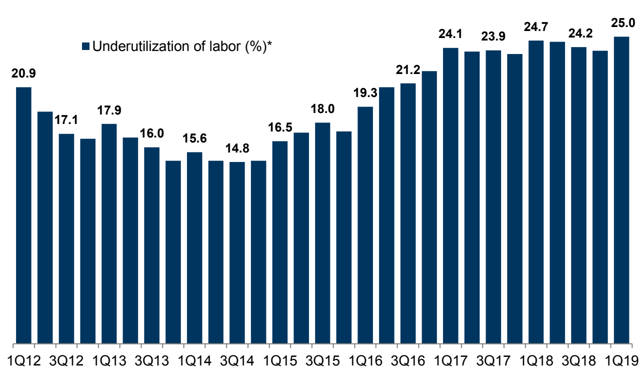


Source: IBGE, Goldman Sachs Global Investment Research

Large-scale long-duration unemployment, leaving the active labor force due to discouragement, undesired part-time employment, employment in the low-productivity informal sector, or self-employment due to lack of salaried job alternatives, tend to erode the skill set of workers, as part of the previous on-the-job learning depreciates, and many of the new jobs (informal market, self-employed) have low productivity due to inefficient matching of job-to-worker/skill. Hence, beyond having to work with a declining stock of capital, the marginal worker has become less productive than the last time he/she was employed.

In summary, it is possible that the large negative cyclical shock to the labor market ended up changing the labor trend (*hysteresis*), i.e., part of the current high unemployment rate is becoming semi-structural, rather than cyclical (which leads to an increase in the natural rate of unemployment).

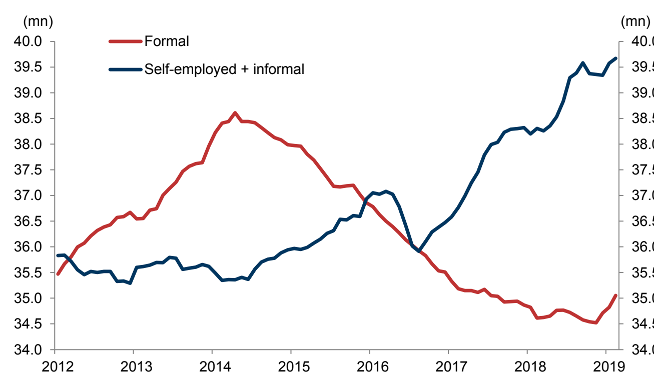
Exhibit 22: One Quarter of the Labor Force is Underutilized



*Unemployed, underoccupied due to insufficiency of hours worked, and people in potential labor force as a share of broad labor force.

Source: IBGE, Goldman Sachs Global Investment Research

Exhibit 23: Self-Employment and Informal Jobs Are Rising and Formal Salaried Jobs Declining



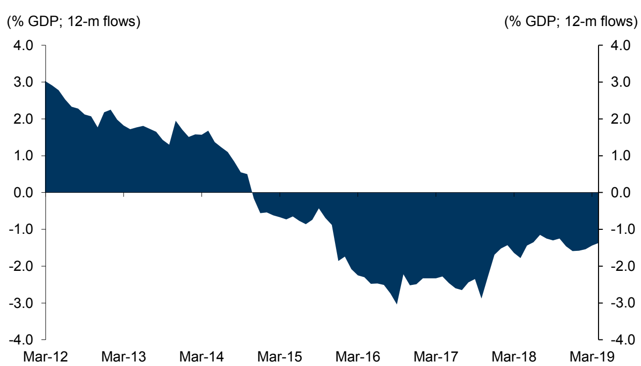
Source: IBGE, Goldman Sachs Global Investment Research

4. Record High Financial Leverage in the Economy

Over the last 15 years there has been a significant increase in financial leverage in the economy: this is particularly striking in the government and household sector balance sheets.

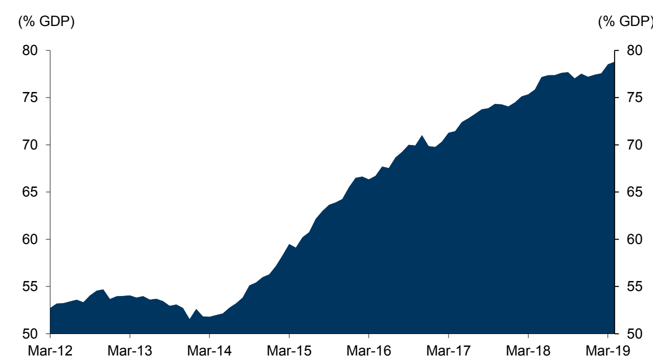
Gross non-financial public sector debt has been on a steady climb: it is now at a record high 79% of GDP (up from 51% of GDP at end-2013) and is expected to continue to rise for at least another 3-5 years. The fiscal crisis is undermining the recovery. Indirectly, heightened concern about medium-term fiscal insolvency is hindering investment and consumption of durable goods. Directly, the federal government has been reducing investment spending and discretionary consumption, and at the subnational level, the deep fiscal crisis is leading to rising payment arrears to public servants, retirees and suppliers. Public banks and some SOEs are also consolidating and strategically repositioning, thereby providing less impulse to demand than in recent years and in previous business cycle recoveries. In essence, following 15-years on an hyper-active and prominent central role in the economy, the public sector is now starting a multi-year process of consolidation and retrenchment, driven by the unsustainable debt dynamics, but for a number of reasons the private sector is yet not able to pick up the baton and support the recovery.

Exhibit 24: Five Consecutive Years of Large Primary Fiscal Deficits



Source: BCB, Goldman Sachs Global Investment Research

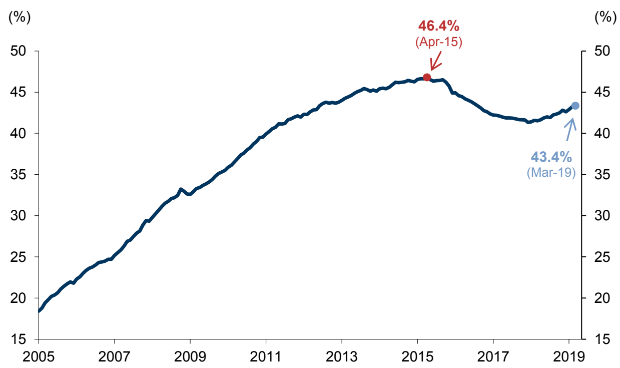
Exhibit 25: Rising Gross General Government Debt



Source: BCB, Goldman Sachs Global Investment Research

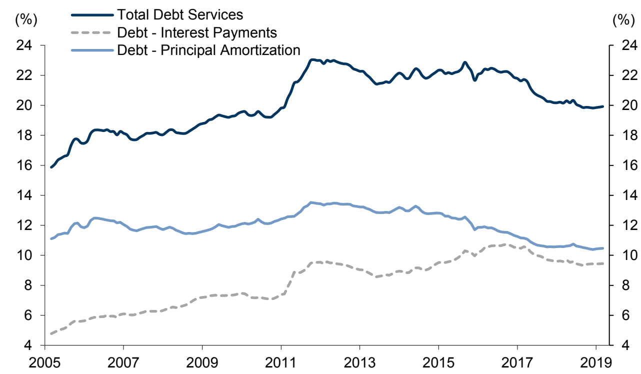
The **household sector also saw a significant increase in overall indebtedness over the last 10 years**, and despite some modest deleveraging in recent years, households are still quite indebted, debt service still takes about 20% of disposable income, and a relevant percentage are delinquent: 63% of households have debt, and 24% of all households are in arrears (Exhibits 26, 27).

Exhibit 26: High Level of Household Debt (% Disposable Income)



Source: BCB, Goldman Sachs Global Investment Research

Exhibit 27: Household Debt Service (% Disposable Income)

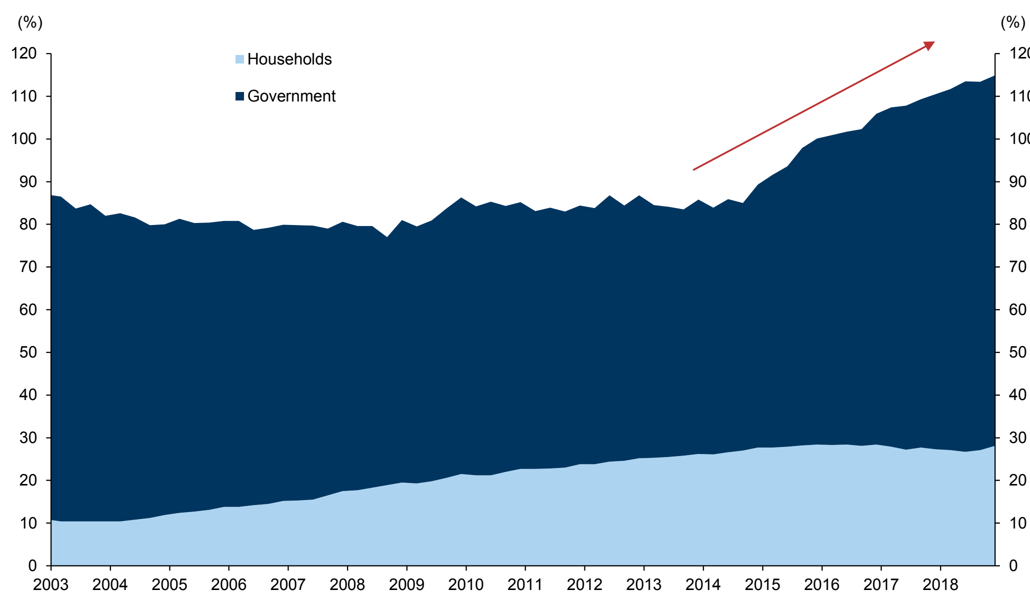


Source: BCB, Goldman Sachs Global Investment Research

Overall, household sector financial leverage went up from around 10% of GDP in 2004, to a record high 28.4% in mid-2016: went down slightly to 26.7% GDP by mid-2018 but with the acceleration of consumer credit is now back above 28.0% of GDP, i.e., near the record high (Exhibit 28).

In all, high levels financial leverage in the economy limit the capacity of the indebted agents to increase spending via additional borrowing or by responsibly lowering the savings rate. Finally, beyond government and households, we highlight that many large non-financial corporates also carry a significant amount of balance sheet debt.

Exhibit 28: High Government and Household Sector Leverage/Debt (% GDP)



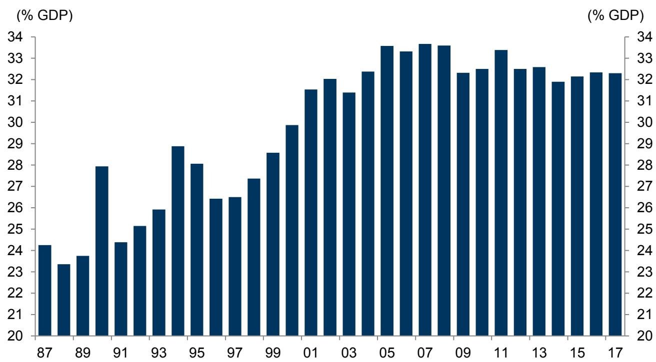
Source: IIF, Goldman Sachs Global Investment Research

5. Higher Tax Burden/Deeper Fiscal Imbalance

The tax burden on the economy increased very significantly between the early 1990s and 2008, and has remained at a high, above 32% of GDP level since then.

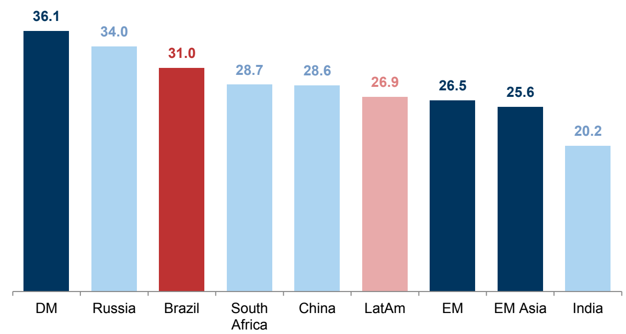
Furthermore, over the years the tax code became extremely complex and tax compliance very onerous. This shift has not only contributed to make the economy increasingly uncompetitive (which hinders investment spending) but also reduces the degrees of freedom to manage and deliver the much-needed fiscal adjustment.

Exhibit 29: High Tax Burden
Total Tax Collection % GDP



Source: IFI, Goldman Sachs Global Investment Research

Exhibit 30: Brazil's Tax Burden is High Relative to EMs
(2016-2018 average of general government revenue as a % of GDP)



Source: IMF, Goldman Sachs Global Investment Research

The current fiscal picture is notably weaker than that in the late 1990s, and this applies to the federal government and perhaps even more so to the highly financially distressed states and municipalities. The fiscal adjustment required to overcome the short-term fiscal imbalance is of a similar order of magnitude to that of 1999 (more than 3pt of GDP), but the initial conditions are far worse—higher debt level and higher tax burden—and the unsustainable public debt trajectory is front-and-center among investors' concerns. Today's tax burden is significantly higher than 15-20 years ago. Hence, from this level, raising taxes further to address the deep fiscal imbalances entails rising economic and social costs and undermines the capacity of the economy to grow.

Restoring Growth Requires Fiscal Consolidation and Pro-Growth Reforms

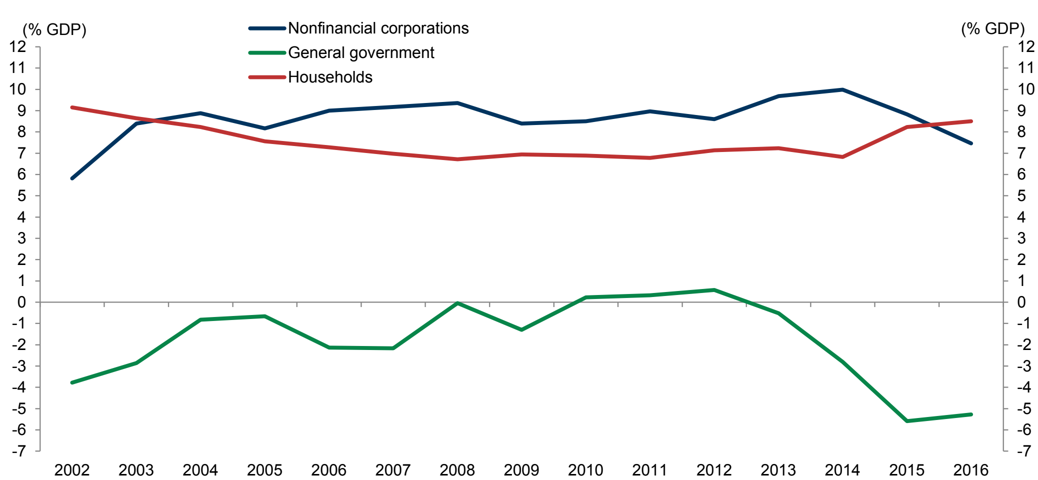
In the very near term, **without a positive sentiment shock** (or reduction of policy uncertainty) that turns the domestic agents less defensive in their spending and investment decisions, for some of the reasons highlighted above **there are no major sources of significant incremental demand to meaningfully accelerate the cyclical recovery.** For instance:

- Given the ongoing global growth and trade deceleration, Brazil cannot count on expanding **external demand** or **much firmer commodity prices**. In any case, **exports** are unlikely to turn into a major engine of growth given that they are just 14% of GDP.
- Given the need for urgent fiscal consolidation, the **federal and sub-national governments have no policy room to adopt counter-cyclical fiscal policies** to stimulate demand: **it will not be government consumption, transfers, or investment that will power the recovery** (contrary to the recovery that followed the 2008-09 recession). Quite the opposite, fiscal consolidation will likely imply a direct negative impulse from fiscal policy to activity. However, a potential reduction

in non-investment spending may not have a particularly large impact on the economy. After all, a recent IDB study puts wasteful government spending at close to 4.0% of GDP. This takes into account poorly directed spending including inadequately targeted income transfers and subsidies (e.g., leaking in social programs that benefits the rich rather than the poor) and government procurement, and reflects lack of control, negligence, and corruption, that have inflated the cost of inputs for the public sector to provide goods and services. Overall, we believe that fiscal adjustment can ultimately accelerate the recovery (expansionary fiscal consolidation) given the expected indirect positive impact on consumer and business sentiment and asset prices (a catalyst for easier domestic financial conditions).

- **Private consumption** may also fail to add a significant impulse to growth in the short term: with per capita income still 9.1% below the 1Q2014 peak, high (structural) unemployment, precarious and/or sub-optimal employment conditions (informal sector jobs, undesired part-time, self-employment), still-high levels of household indebtedness and debt service, and low confidence, the **capacity and predisposition for households to spend more is low.** Some form of **consumption spending hysteresis** may also be forming. With average income virtually flat for almost 2 years, the representative household is finding it difficult to pay off legacy debt: many households borrowed for the first time in recent years and have now found themselves with excessive debt versus their payment capacity. The risk of medium-term fiscal insolvency is also turning households more defensive, for they anticipate higher taxes, lower fiscal transfers, and/or higher inflation. In either case households seem to be saving more (*Ricardian Equivalence*). Overall, consumer spending behavior may have changed with the crisis: with the deep and long recession and still very weak labor market consumers are now saving more (similar to what happened in the United States post the 2008 crisis).

Exhibit 31: Households Are Saving More Despite Low Income Growth
Savings Rate (% GDP)

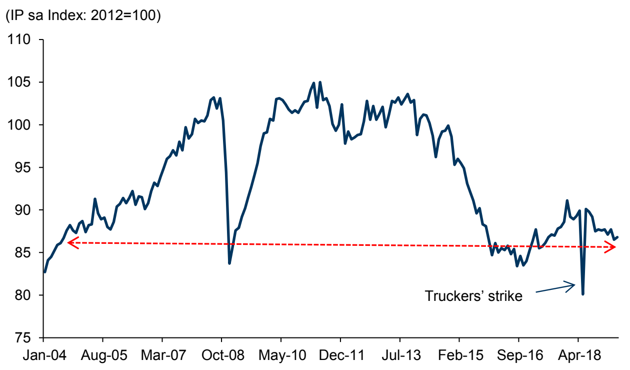


Note: Data not available for 2017 and 2018.

Source: IBGE, Goldman Sachs Global Investment Research

Overall, the most promising near-term engine of growth is **private investment**, but in the very near term private investment is discouraged not by exigent funding conditions, but by still-high levels of unused capacity in the industrial sector, high inventory levels in a number of sectors, the sub-par outlook for near-term growth and external demand, and lingering uncertainty with regards to the approval of needed reforms to boost potential GDP and overcome fears of medium-term fiscal insolvency.

Exhibit 32: Weak Industrial Sector Dynamics



Source: IBGE, Goldman Sachs Global Investment Research

Exhibit 33: Significant Slack in Industrial Capacity Utilization

Source: IBGE, Goldman Sachs Global Investment Research

Foreign direct investment (FDI) has been resilient, but it should not be taken for granted. For the first time Brazil dropped out of A.T. Kearney's *FDI Global Index* list of the 25 most favorable destinations in which to invest according to the opinion of large multinational companies (previous rankings: 25th in 2018, 12th in 2016 and 3rd in 2012-13). This index is seen as a leading indicator of FDI flows. Those surveyed stated that one of the main deterrents to investment in Brazil is low competitiveness/productivity, particularly in high valued-added products (i.e., outside commodities).

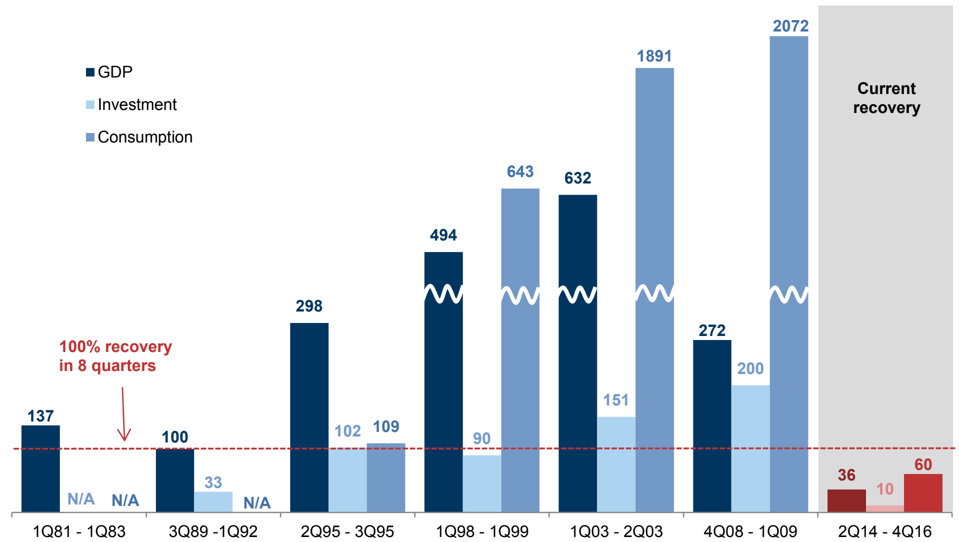
Overall, a **private investment-led recovery is highly contingent on progress on the fiscal and other macro reforms front and additional steps to accelerate the privatization and concession of poorly managed government productive assets.**

Conclusion: The Issues Hampering the Economy Are More Structural Than Cyclical

The dismal growth and real per capita income record since the 1980s strongly suggest that, more than a short-term cyclical issue, the Brazilian economy's growth underperformance is profoundly connected to deep-rooted structural issues, and the aging demographic profile will just compound the challenges the country will face. In fact, over the next decade Brazil will have to grow and invest while the public sector continues to gradually adjust/deleverage and the population pyramid ages, as we are leaving behind the optimal demographic window.

In the last 35 years, labor productivity was only marginally positive and the demographic bonus ended in 2018 (when the growth rate of the working age population was higher than the total rate of population growth). Hence, future growth will depend critically on boosting productivity. This will require heavy investment in scarce physical capital and insufficient human capital, and the embrace of a more outward-looking, less state-dependent growth model and international trade strategy.

Exhibit 34: Current Recovery Seeing Weak Cyclical Response of both Consumption and Investment
Share of recession phase peak-to-trough decline recovered 9 quarters after end of recession (%)



Source: Goldman Sachs Global Investment Research

Overall, a deep structural fiscal adjustment should be front-and-center on the policy agenda of the new administration. In our assessment, failure to deliver tangible and credible measures to reduce the fiscal deficit (flow) and through that stabilize the debt dynamics (stock) could hurt confidence and undermine even further what has been on many counts a very soft economic recovery following one of the deepest recessions on record. Conversely, we see upside risk to the growth outlook should the authorities (executive and legislative) succeed in implementing an investment- and productivity-enhancing macro and micro agenda and in moving decisively on the fiscal consolidation front. Progress in these areas would help to unleash the trapped entrepreneurial and animal spirits of the economy and accelerate the recovery.

Alberto M. Ramos

Gabriel Fritsch

LatAm and Global Macroeconomic Outlook

Consolidated Latin America Selected Economic Indicators

	2012	2013	2014	2015	2016	2017	2018	2019F	2020F	2021F	2022F
I. Economic Activity and Prices											
Nominal GDP (US$bn)	5,078	5,223	5,182	4,366	4,171	4,651	4,499	4,557	4,972	5,400	5,757
Real GDP growth (% yoy)	2.6	2.8	1.3	0.3	-0.2	1.7	1.4	1.4	2.5	2.8	3.0
CPI Inflation (% yoy)	6.6	7.1	8.7	9.0	8.8	6.5	8.8	7.4	5.3	4.4	3.9
Domestic Demand (% yoy)	2.8	3.0	1.0	-0.8	-1.0	1.9	1.6	1.3	2.6	2.9	3.1
II. External Sector (US$bn)											
Current Account Balance	-131.9	-157.8	-168.7	-136.2	-84.6	-77.2	-89.6	-84.1	-104.0	-126.1	-148.3
Trade Balance	46.7	9.8	-3.6	-10.7	34.1	56.9	45.4	42.5	32.0	23.1	11.0
Gross International Reserves	722.6	715.9	737.9	705.2	729.3	751.7	763.2	794.3	813.2	828.4	843.9
Change in Reserves	59.0	-6.8	22.0	-32.7	24.1	22.4	11.6	31.0	18.9	15.2	15.6
Net Capital Inflows	191.0	151.1	190.7	103.5	108.7	99.6	101.1	115.2	122.9	141.3	163.9
Foreign Direct Investment	155.4	167.8	168.1	150.0	146.0	144.2	163.8	163.7	175.3	185.3	195.3
III. Public Finance and Indebtness (% GDP)											
Primary Fiscal Balance	0.8	0.4	-0.9	-1.7	-1.8	-0.9	-0.8	-0.4	-0.3	0.0	0.1
Overall Fiscal Balance	-2.1	-2.5	-4.3	-6.3	-5.6	-4.7	-4.4	-4.2	-4.1	-3.8	-3.6
Total Public Sector Debt	42.0	42.1	46.2	51.3	55.1	55.9	58.1	60.1	61.1	61.5	62.1
Total External Debt	24.7	26.1	29.1	34.4	36.8	34.8	37.8	39.4	39.3	38.7	38.6

Note: Aggregates weighted by nominal GDP in US$ at PPP exchange rates.

Source: Goldman Sachs Global Investment Research

Global Macroeconomic Framework

						2018				2019F			
	2016	2017	2018	2019F	2020F	Q1	Q2	Q3	Q4	Q1F	Q2F	Q3F	Q4F
Real GDP Growth (%, yoy)													
United States	1.6	2.2	2.9	2.4	2.1	2.6	2.9	3.0	3.0	3.2	2.4	2.1	2.0
Euro Area	1.9	2.5	1.8	1.2	1.4	2.4	2.2	1.6	1.2	1.2	1.0	1.2	1.3
Japan	0.6	1.9	0.8	0.9	0.7	1.3	1.5	0.1	0.2	0.8	0.6	1.5	0.7
World Economy	3.1	3.7	3.8	3.5	3.6	4.0	4.0	3.6	3.6	3.5	3.4	3.6	3.6
CPI Inflation (%, yoy)													
United States	0.9	2.1	2.2	1.9	2.1	2.2	2.7	2.6	2.2	1.6	1.9	1.9	2.0
Euro Area	0.2	1.5	1.8	1.3	1.2	1.3	1.7	2.1	2.0	1.7	1.4	1.1	1.0
Japan	-0.1	0.5	1.0	0.3	0.7	1.3	0.6	1.1	0.9	0.3	0.3	0.1	0.4
Interest rates (%, e.o.p)													
Fed Funds	0.54	1.30	2.27	2.38	2.63	1.51	1.82	1.95	2.27	2.41	2.38	2.38	2.38
UST 10-Year	2.44	2.41	2.68	2.80	3.00	2.74	2.86	3.06	2.68	2.41	2.55	2.65	2.80

Source: Goldman Sachs Global Investment Research

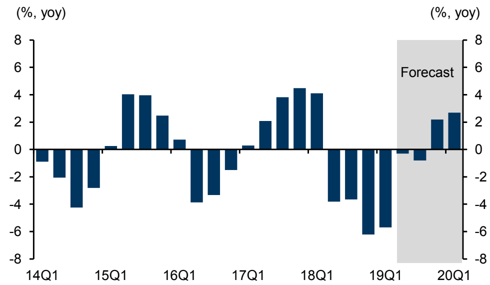
LatAm Country Data Tables

Argentina

	2017	2018	2019F	2020F
Activity and Prices				
Real GDP Growth (% yoy)	2.7	-2.5	-1.2	2.5
Nominal GDP (US$bn)	642	537	459	462
Consumer Prices, IPC (yoy, e.o.p.)*	24.8	47.6	36.9	20.3
Consumer Prices, IPCBA (yoy, e.o.p.)*	26.1	45.5	35.6	15.8
External Sector				
Current Account (% GDP)	-4.9	-5.2	-1.9	-2.8
Trade Balance (% GDP)	-0.9	-0.2	3.0	2.1
Exports (% yoy)	1.2	5.1	6.2	3.7
Imports (% yoy)	19.7	-2.5	-17.5	12.4
Exchange Rate ($/ARS, e.o.p.)	18.6	37.6	52.8	57.0
Gross International Reserves (US$bn)	55.1	65.8	68.8	69.8
Monetary Sector				
Monetary Base (% yoy)	24.7	36.0	18.0	20.0
Credit to the Private Sector (% GDP)	16.0	16.0	12.8	12.2
Reference Interest Rate	28.75	57.00	48.00	-
**Fiscal Sector ** **				
Federal Govt Primary Balance (% GDP)	-3.8	-2.4	-0.5	0.6
Federal Govt Overall Balance (% GDP)	-6.0	-5.2	-4.0	-3.2

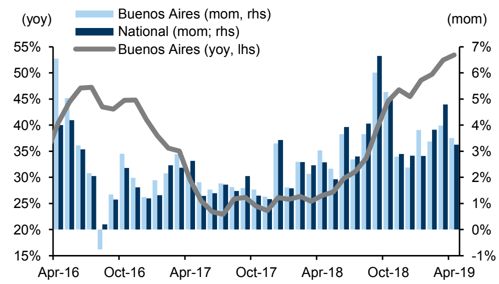
*IPC computed by INDEC, IPCBA by Statistical Institute City of Buenos Aires. **Before Rents from CB and Anses. Accumulated 4Q. *** Including non-performing debt.

Sharp Contraction since 2Q18



Source: INDEC, Statistical Inst. City of Buenos Aires, Goldman Sachs Global Investment Research

Deteriorating Inflation Dynamics



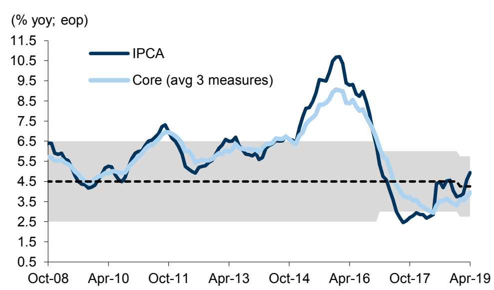
Source: INDEC, Statistical Inst. City of Buenos Aires, Goldman Sachs Global Investment Research

Brazil

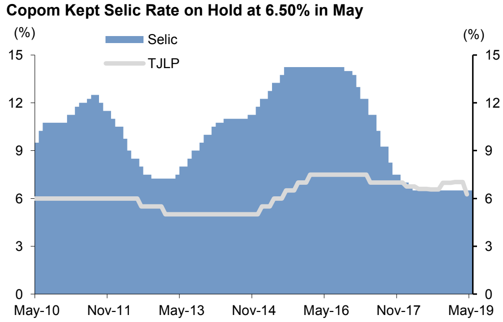
	2017	2018	2019F	2020F
Activity and Prices				
Real GDP Growth (% yoy)	1.1	1.1	1.0	2.5
Nominal GDP (US$bn)	2053.4	1875.9	1862.9	2010.3
IPCA Inflation (yoy e.o.p)	2.9	3.7	4.1	4.0
External Sector				
Current account (% GDP)	-0.4	-0.8	-1.3	-1.7
Trade balance (% GDP)	3.1	2.9	2.6	2.2
Exports of goods (% yoy)	17.8	10.0	3.5	5.0
Imports of goods (% yoy)	9.9	21.0	7.8	8.0
Nominal Exchange Rate ($/BRL e.o.p.)	3.3	3.9	3.8	3.8
Net International Reserves (US$bn)	374	375	390	405
Monetary Sector				
Monetary base (% yoy)	9.8	1.8	8.0	6.0
Credit to the Private Sector (%GDP)	43.9	44.5	47.5	50.8
SELIC rate (e.o.p)	7.00	6.50	6.50	7.25
Fiscal Sector				
Public Sector Primary Balance (% GDP)	-1.7	-1.6	-1.0	-0.8
Public Sector Nominal Balance (% GDP)	-7.8	-7.1	-6.6	-6.4
Debt Indicators				
Gross general govt debt (% GDP)	74.1	77.2	79.0	81.0
Domestic public debt (%GDP)	70.6	73.3	75.4	77.3
External public debt (%GDP)	3.5	3.9	3.6	3.7
Total external debt (% GDP)	26.7	29.8	31.8	32.1

Source: Goldman Sachs Global Investment Research

Headline/Core Inflation Back to Target Range



Copom Kept Selic Rate on Hold at 6.50% in May



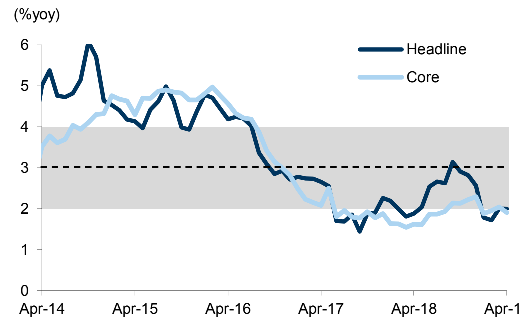
Sources: Bloomberg, Goldman Sachs Global Investment Research, Haver Analytics, IBGE

Chile

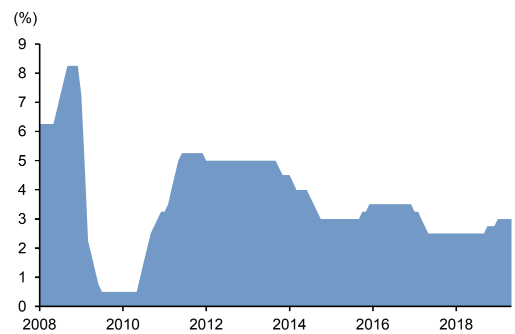
	2017	2018	2019F	2020F
Activity and Prices				
Real GDP Growth (% yoy)	1.3	4.0	3.0	3.3
Nominal GDP (US$bn)	278	299	297	340
Consumer Prices (% yoy, e.o.p.)	2.3	2.6	2.8	3.0
External Sector				
Current Account (% GDP)	-2.1	-3.1	-3.9	-3.6
Trade Balance (% GDP)	2.6	1.6	0.6	0.3
Exports (% yoy)	13.4	9.6	-1.6	2.3
Imports (% yoy)	10.1	15.1	2.4	3.5
Exchange Rate ($/CLP, e.o.p.)	615	696	667	600
Gross International Reserves (US$bn)	39.0	39.9	42.6	42.6
Monetary Sector				
Broad Money (M3, % yoy)	4.8	9.0	9.0	9.0
Credit to the Private Sector (% GDP)	80.0	81.5	82.7	83.9
Policy Rate (e.o.p.)	2.50	2.75	3.00	3.50
Fiscal Sector				
Central Gov't Primary Balance (% GDP)	-2.0	-0.8	-0.6	-0.4
Central Gov't Overall Balance (% GDP)	-2.8	-1.7	-1.5	-1.3
Debt Indicators				
Central Govt Debt (% GDP)	23.5	25.6	26.0	26.1
Domestic (% GDP)	19.1	20.3	20.5	20.1
External (% GDP)	4.4	5.3	5.5	6.0
Total External Debt (% GDP)	65.3	62.7	64.8	58.4

Source: Goldman Sachs Global Investment Research

Headline/Core Inflation Below Target Range



Central Bank Kept Policy Rate on Hold in May



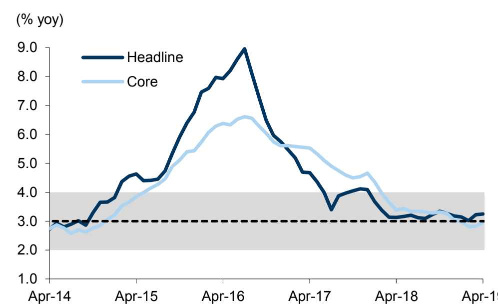
Source: Haver Analytics, INE, Central Bank of Chile

Colombia

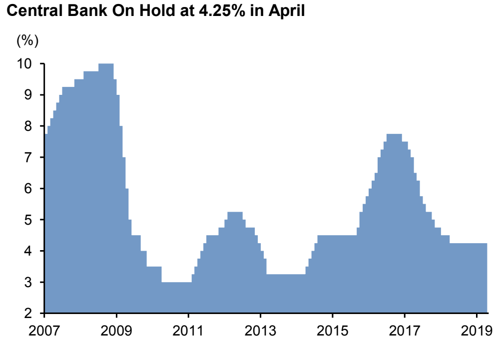
	2017	2018	2019F	2020F
Activity and Prices				
Real GDP Growth (% yoy)	1.4	2.6	3.0	3.5
Nominal GDP (US$bn)	312	331	341	383
Consumer Prices (% yoy, e.o.p.)	4.1	3.2	3.1	3.0
External Sector				
Current Account (% GDP)	-3.3	-3.9	-4.4	-4.2
Trade Balance (% GDP)	-1.5	-1.6	-3.0	-2.8
Exports (% yoy)	16.4	11.8	-1.5	4.4
Imports (% yoy)	2.3	12.1	9.1	3.9
Exchange Rate ($/COP, e.o.p.)	2984	3250	2950	2800
Gross International Reserves (US$bn)	47.1	47.7	55.1	57.1
Monetary Sector				
Monetary Base (% yoy)	5.0	7.0	9.0	9.0
Credit to the Private Sector (% GDP)	51.3	53.0	54.5	55.8
Policy Rate (% e.o.p.)	4.75	4.25	4.25	5.00
Fiscal Sector				
Central Government Primary Balance (% GDP)	-0.8	-0.2	0.2	0.4
Central Government Overall Balance (% GDP)	-3.7	-3.1	-2.7	-2.3
Debt Indicators				
Gross Non-fin. Public Sector Debt (% GDP)	54.4	57.6	59.1	59.7
Domestic (% GDP)	32.2	34.5	36.6	37.7
External (% GDP)	22.3	23.1	22.5	22.0
Total External Debt (% GDP)	40.0	39.6	38.0	38.0

Source: Goldman Sachs Global Investment Research

Headline/Core Inflation Converged to 3% Target



Central Bank On Hold at 4.25% in April



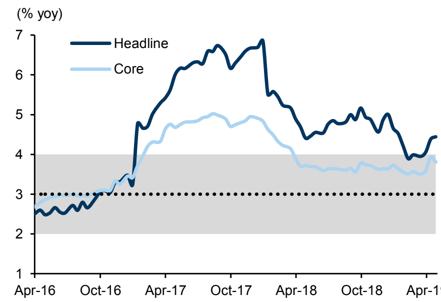
Source: Banco de la Repœblica

Mexico

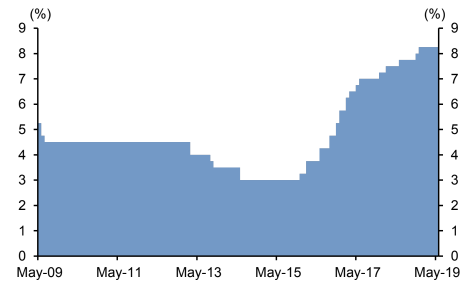
	2017	2018	2019F	2020F
Activity and Prices				
Real GDP Growth (% yoy)	2.1	2.0	1.5	1.7
Nominal GDP (US$ bn)	1157	1222	1293	1364
Consumer Prices (yoy, e.o.p.)	6.8	4.8	3.7	3.2
External Sector				
Current Account (% GDP)	-1.7	-1.8	-1.5	-1.5
Trade Balance (% GDP)	-0.9	-1.1	-1.2	-1.2
Exports (% yoy)	9.5	10.1	4.9	6.1
Imports (% yoy)	8.6	10.4	5.1	6.1
Exchange Rate ($/MXN, e.o.p.)	19.79	19.68	19.30	19.00
Net International Reserves (US$ bn)	172.8	174.8	175.0	175.0
Monetary Sector				
Monetary Base (% yoy)	8.8	8.3	10.3	10.0
Credit to the Private Sector (% GDP)	18.5	18.9	19.2	19.4
Tasa de Fondeo Rate (e.o.p.)	7.25	8.25	7.50	6.75
Fiscal Sector				
Public Sector Primary Balance (% GDP)	1.4	0.9	0.5	-0.1
Public Sector Overall Balance (% GDP)	-1.1	-2.0	-2.4	-3.0
Debt Indicators				
Gross Federal Govt Debt (% GDP)	45.8	44.9	45.0	45.6
Domestic (% GDP)	28.9	28.5	29.0	29.7
External (% GDP)	16.9	16.4	16.1	15.9
Total External Debt (% GDP)	37.7	37.2	37.0	37.8

Note: *Public Sector Borrowing Requirements
Source: Goldman Sachs Global Investment Research

Headline Inflation Has Likely Peaked



Banxico On Hold at 8.25% in May



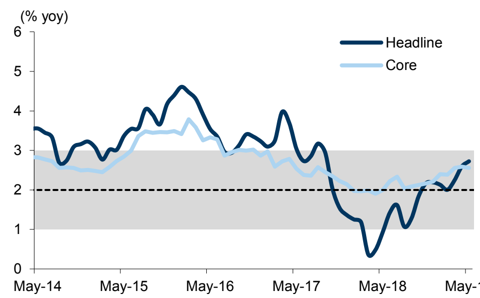
Source: Haver Analytics, INEGI, Goldman Sachs Global Investment Research

Peru

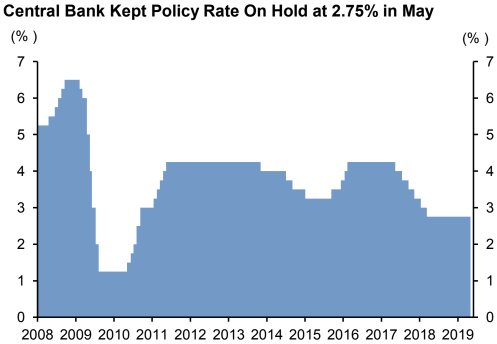
	2017	2018	2019F	2020F
Activity and Prices				
Real GDP Growth (% yoy)	2.5	4.0	3.7	4.1
Nominal GDP (US$bn)	214	225	237	260
Consumer Prices (% yoy, eop)	1.4	2.2	2.5	2.5
External Sector				
Current Account (% GDP)	-1.2	-1.5	-2.4	-2.6
Trade Balance (% GDP)	3.1	3.1	2.1	1.4
Exports (% yoy)	22.1	8.1	2.7	4.6
Imports (% yoy)	10.2	8.2	8.3	7.7
Gross International Reserves (US$bn)	63.7	60.3	62.7	63.6
Exchange Rate ($/PEN, e.o.p.)	3.24	3.37	3.26	3.15
Monetary Sector				
Monetary Base (% yoy)	7.2	3.6	7.9	9.8
Credit to the Private Sector (% GDP)	28.8	27.0	29.0	30.0
Reference Interest Rate (e.o.p.)	3.25	2.75	3.00	3.50
Fiscal Sector				
Non-fin Pub. Sector Primary Balance (% GDP)	-1.9	-1.8	-1.5	-0.7
Non-fin Pub. Sector Overall Balance (% GDP)	-3.1	-2.8	-2.6	-1.9
Debt Indicators				
Total Federal Govt Debt (% GDP)	24.9	25.7	26.5	26.8
Domestic Public Debt (% GDP)	16.1	16.4	16.7	16.6
External Public Debt (% GDP)	8.8	9.3	9.8	10.2
Total External Debt (% GDP)	35.9	37.0	38.3	38.4

Source: Goldman Sachs Global Investment Research

Headline Inflation Back to Target Range

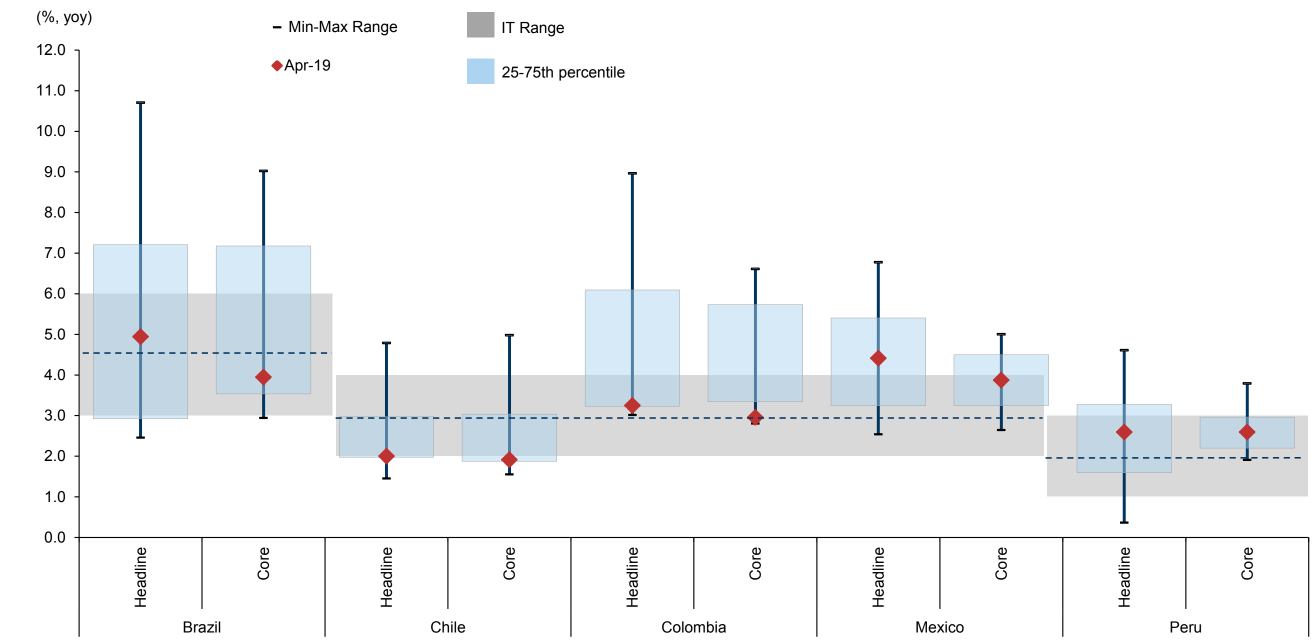


Central Bank Kept Policy Rate On Hold at 2.75% in May



Source: BCRP, INEI, Goldman Sachs Global Investment Research

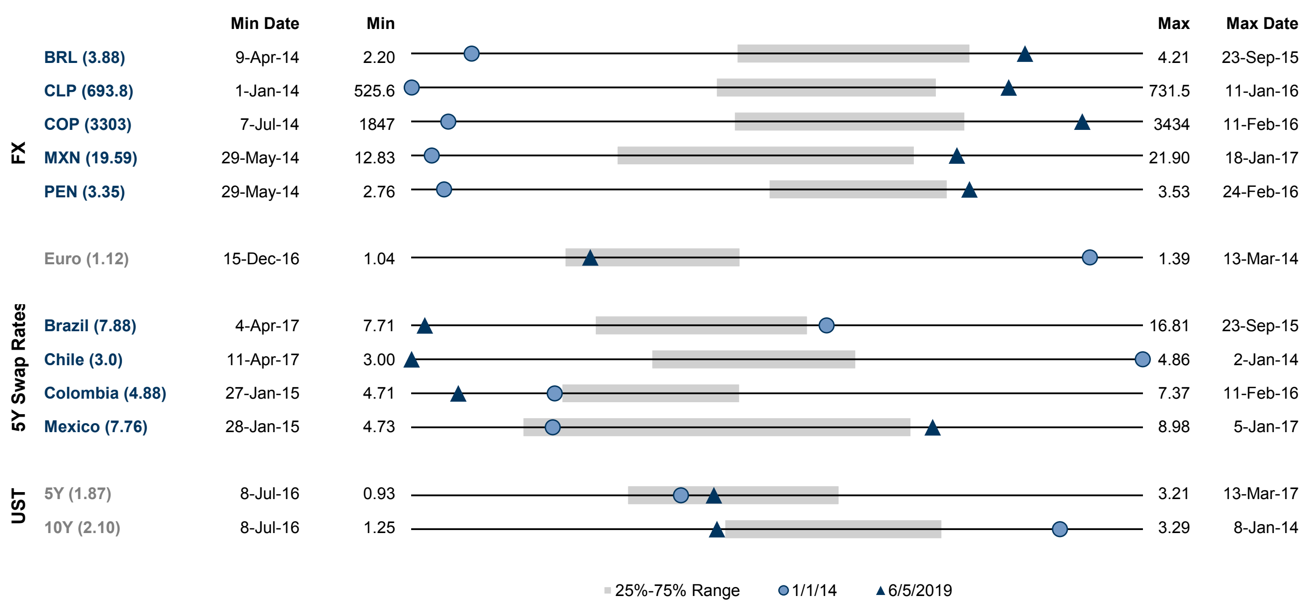
LAIT-5 Annual Headline and Core Inflation Dynamics Since January 2016



Source: Haver Analytics, Goldman Sachs Global Investment Research

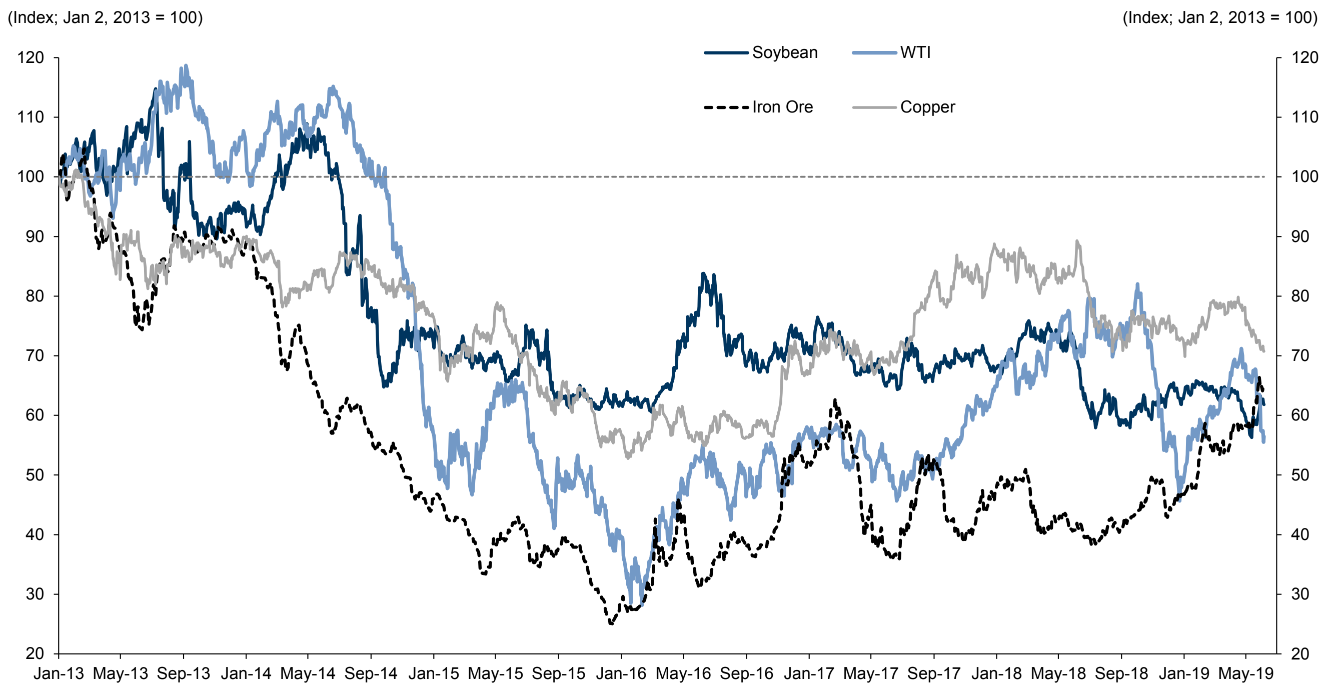
LatAm Financial Markets Outlook

LatAm Financial Markets Indicators (2014-2019)



Source: Goldman Sachs Global Investment Research

Key Commodities Prices



Source: Goldman Sachs Global Investment Research

Latin America Swap Rates

					Change Since (bps)	
		End-2017	End-2018	Current (06/05/2019)	End-2017	End-2018
Swap Rates (%)	**Brazil**					
	2y	8.06	7.36	7.28	-79	-8
	10y	10.78	9.57	9.15	-162	-42
	Chile					
	2y	2.84	3.29	2.67	-18	-63
	10y	4.24	4.06	3.50	-74	-56
	Colombia					
	2y	4.46	4.62	4.32	-14	-30
	10y	6.10	6.11	5.62	-48	-49
	Mexico					
	2y	8.02	8.61	8.05	3	-56
	10y	7.98	8.84	8.01	3	-83
	United States					
	2y	2.07	2.66	1.91	-16	-75
	10y	2.42	2.74	2.12	-30	-62

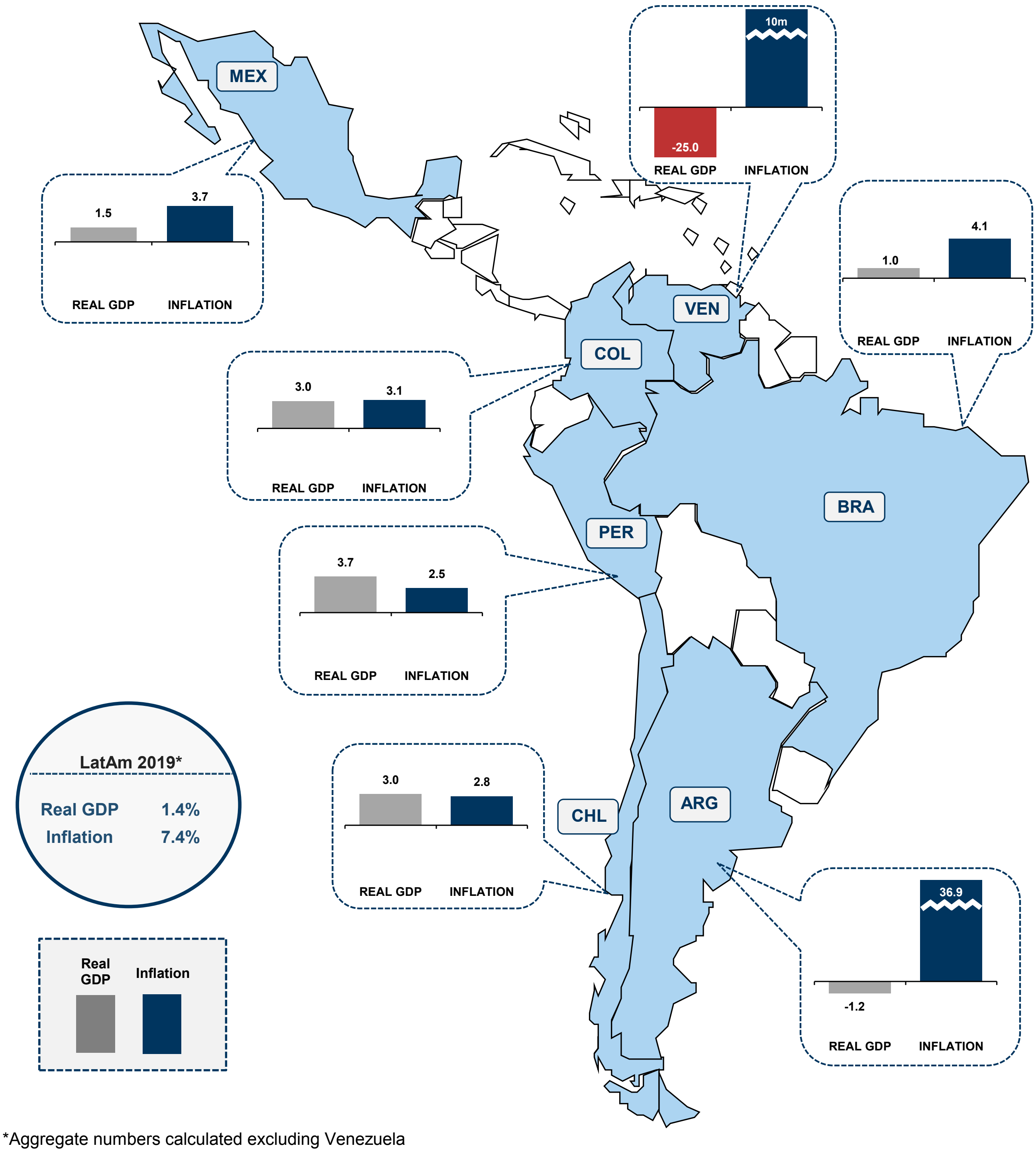
Source: Goldman Sachs Global Investment Research

Latin America Forecasts

		Policy Rates and FX Levels (End of Period)						Implied Change (Policy Rate in bps; FX in %)			
		Current	2Q2019	3Q2019	4Q2019	1Q2020	2Q2020	2Q2019	3Q2019	4Q2019	1Q2020
Policy Rate (%)	**Brazil**	6.50	6.50	6.50	6.50	6.50	6.50	0	0	0	0
	Chile	3.00	3.00	3.00	3.00	3.00	3.00	0	0	0	0
	Colombia	4.25	4.25	4.25	4.25	4.25	4.25	0	0	0	0
	Mexico	8.25	8.25	8.00	7.50	7.25	7.25	0	-25	-75	-100
	Peru	2.75	2.75	2.75	3.00	3.25	3.50	0	0	25	50
FX (Local / USD)	**Argentina**	44.90	46.30	49.44	52.79	53.82	54.86	3.1%	10.1%	17.6%	19.9%
	Brazil	3.88	3.90	3.80	3.80	3.80	3.80	0.5%	-2.1%	-2.1%	-2.1%
	Chile	693.1	703.3	694.2	666.7	656.7	642.9	1.5%	0.2%	-3.8%	-5.3%
	Colombia	3306	3033	2992	2950	2937	2899	-8.3%	-9.5%	-10.8%	-11.2%
	Mexico	19.58	19.30	19.30	19.30	19.23	19.15	-1.4%	-1.4%	-1.4%	-1.8%
	Peru	3.35	3.30	3.27	3.26	3.25	3.22	-1.4%	-2.3%	-2.6%	-2.9%

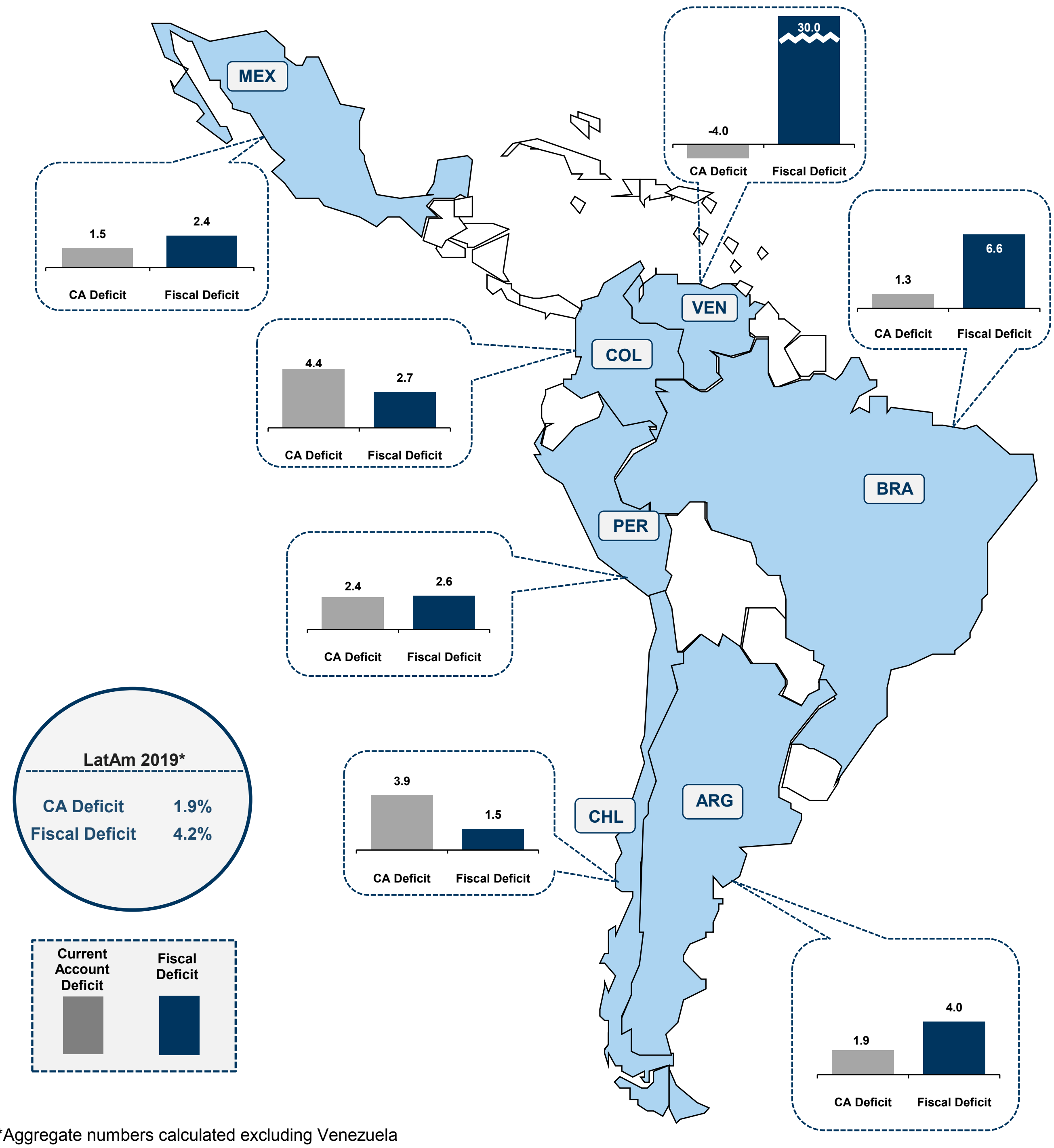
Source: Goldman Sachs Global Investment Research

LatAm Outlook for 2019: Real GDP Growth and Inflation (YoY, %)



Source: Goldman Sachs Global Investment Research

LatAm Outlook for 2019: Current Account and Fiscal Deficit (% of GDP)



Source: Goldman Sachs Global Investment Research

Calendar of Economic and Political Events

Date	Forthcoming Events	Comment
Argentina		
11-Aug	National Open and Mandatory Primaries (PASO)	Primary elections to define party candidates. Citizens may vote for any candidate of any party, but may only cast a single vote.
27-Oct	Presidential Election (First Round)	On October 27, Argentines will elect a new president. Mauricio Macri is expected to seek re-election.
24-Nov	Presidential Election Runoff (if needed)	The two leading candidates will face a run-off on November 24 if no candidate wins more than 45% of the vote in the first round or over 40% of the vote with a >10pp lead over the second candidate.
Brazil		
19-Jun	COPOM Meeting	We expect the Copom to leave the Selic policy rate unchanged at 6.50%.
Chile		
7-Jun	MPC Meeting	We expect the BCCh to leave the policy rate unchanged at 3.00%.
Colombia		
21-Jun	MPC Meeting	We expect Banrep to keep the policy rate at 4.25% in the near future.
Mexico		
27-Jun	MPC Meeting	We expect the Banxico to keep the policy rate at 8.25%.
Peru		
13-Jun	MPC meeting	We expect BCRP to keep the policy rate at 2.75% in the near future.

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

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