

Latin America Economics Analyst Implications of the Fiscal Response to the Pandemic

Unprecedented Policy Response to an Unprecedented Shock

The covid-19 pandemic has led to a deep and rapid deterioration of the LatAm economic and financial backdrop. Most of the LatAm countries have already announced sizeable fiscal stimulus/relief packages. Combined with a recessionary backdrop, this is likely to lead to a deterioration of fiscal metrics: significantly wider fiscal deficits and large increases in public debt.

Fiscal Stimulus: Everybody is Doing It!

Fiscal policy space varies considerably across LatAm. However, policy room considerations have not been a deterrent to sizeable fiscal stimulus packages. Even countries with no theoretical fiscal space (Argentina, Brazil) have committed to large fiscal packages to mitigate the economic and social impact of the viral outbreak. For them, like for those with genuine fiscal space, the overriding near-term objective is not fiscal discipline, but addressing critical public health needs and preventing the collapse and deep-freeze of economic activity. After all, a sudden and deep contraction of activity can generate significant social pain and force the exit of even financially sound and well-managed businesses. A large number of bankruptcies would reduce the capital stock of the economy, undermining the pace of the recovery once the viral outbreak subsides.

Short-Term Fiscal Stimulus Justified but Far from a Free-Lunch

Large fiscal stimulus packages have clear benefits in the current unique and deeply recessionary context, but the significant accumulation of debt also entails long-term costs (it will expose inter-generational equity issues and impact savings and capital accumulation decisions). The significant increase in public debt may force governments to embrace painful adjustment once the epidemic subsides, or face the risk of a fiscal/funding crisis. This may prove especially challenging for countries with weak fiscal fundamentals at the outset. For them, the price of near-term relief may well be future deeper fiscal adjustment or financial distress. Countries such as Brazil will have to restart the fiscal consolidation process in 2021, but from a much weaker position, which leaves them vulnerable and exposed to future macro shocks.

Alberto Ramos

+1(212)357-5768 | alberto.ramos@gs.com Goldman Sachs & Co. LLC

Paulo Mateus

+1(212)357-5772 | paulo.mateus@gs.com Goldman Sachs & Co. LLC

Tiago Severo

+1(212)357-4742 | tiago.severo@gs.com Goldman Sachs & Co. LLC

Gabriel Fritsch

+1(212)902-0170 | gabriel.fritsch@gs.com Goldman Sachs & Co. LLC

Implications of the Fiscal Response to the Pandemic

"We should give as we would receive, cheerfully, quickly, and without hesitation; for there is no grace in a benefit that sticks to the fingers."

Lucius Annaeus Seneca (c. 4 BC – AD 65), Roman Stoic philosopher, statesman, and dramatist of the Silver Age of Latin literature.

Unprecedented Policy Response to an Unprecedented Shock

The rapidly expanding covid-19 pandemic has led to a deep and rapid deterioration of the economic and financial backdrop for Latin America. The sharp deterioration of the global growth backdrop, decline in commodity prices, capital outflows, tightening of domestic financial conditions, and expanding social distancing measures and containment protocols to arrest the viral outbreak within the region's own borders have already started to weigh heavily on local economies. While the viral pandemic will most likely be a temporary shock, the duration and depth of the economic downturn remains highly uncertain. What is safe to assume is that the ultimate economic, and likely social, impact will be significant.

In light of these considerations, we recently sharply downgraded our growth forecasts for the main Latin American economies (see "LatAm Economies Are About to Hit the Wall and Experience a Sudden Stop", Latin America Economics Analyst, March 27, 2020). We now expect the region to record a severe recession in 2020: we project that activity will hit a wall and face a sudden stop in 2Q2020, with sequential quarterly annualized contraction exceeding -20%, followed by a gradual recovery during 2H2020, back-loaded towards the end of the year. Overall, we now forecast LatAm's real GDP to decline by 3.8% in 2020, a significantly deeper contraction than during the GFC (GDP contracted by 2.1% in 2009) and also without precedent in the post-war period despite several severe regional crises and financial sudden stops (during the 1983 debt crisis real GDP declined 2.4%).

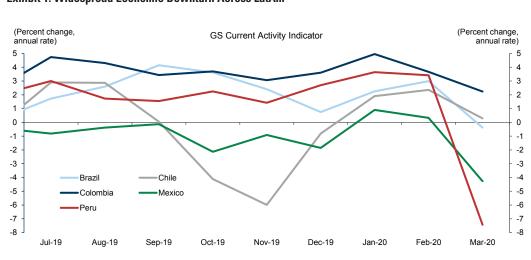


Exhibit 1: Widespread Economic Downturn Across LatAm

Source: Goldman Sachs Global Investment Research

Fast, Meaningful, All-Encompassing Policy Easing

The gloomy macroeconomic outlook and the risk of deep and lasting economic, financial, and social disruptions have prompted global and LatAm policymakers alike to ease macro policy fast and meaningfully.

On the monetary/financial front, local central banks have lowered policy rates, engaged in regulatory easing and forbearance, and adopted decisive measures to boost domestic and foreign currency liquidity, all with a view to support credit intermediation and the smooth functioning of local financial markets.

On the fiscal front, most of the LatAm policymakers have already announced sizeable stimulus packages, combining temporary tax relief and tax compliance forbearance with measures geared to broaden social safety nets (including measures to expand existing unemployment insurance programs) alongside income support transfers to low-wage workers and low-income households, and subsidized and concessional credit lines to financially distressed businesses. The sizeable fiscal packages combined with a recessionary backdrop are likely to lead to a meaningful deterioration of fiscal metrics in 2020: significantly wider fiscal deficits and large increases in public debt loads (Exhibit 2).

Exhibit 2: Meaningful Deterioration of Fiscal Metrics Due to Combined Impact of Stimulus/Relief Packages and Recessionary Backdrop

	Primary Fiscal	Balance (% GDP)	Gross Public	: Debt (% GDP)
	2019	2020F Range	2019	2020F Range
Argentina	-0.5	[-5.0, -6.0]	71.5	
Brazil	-0.9	[-7.0, -9.0]	75.8	[87, 91]
Chile	-1.9	[-7.0, -8.0]	27.9	[35, 39]
Colombia	0.5	[-1.5, -3.0]	48.4	[55, 58]
Ecuador	1.5	[-3.0, -4.0]	52.5	[60, 65]
Mexico	1.1	[-2.5, -4.0]	44.9	[54, 57]
Peru	-0.2	[-7.0, -9.0]	26.9	[35, 39]

Source: Goldman Sachs Global Investment Research

Fiscal Stimulus: Everybody is Doing It!

Fiscal policy space varies considerably across LatAm. However, **fiscal policy room** considerations have not been a limitation or deterrent to the announcement of sizeable fiscal stimulus measures/packages. Interestingly, even countries with no theoretical fiscal space such as Argentina and Brazil, where fiscal consolidation remains a must, have already announced relatively large fiscal packages to mitigate the economic and social impact of the viral outbreak. For them, like for those with genuine fiscal space, the overriding near-term objective is not fiscal discipline, but rather addressing critical public health needs and also preventing the collapse and deep-freeze of economic activity. After all, a sudden and deep contraction of activity can generate significant social pain (through the loss of jobs and income) and easily force the exit of

even financially sound and well-managed businesses. A large number of bankruptcies would not only reduce the capital stock of the economy (undermining the pace of the recovery once the viral outbreak subsides) but would also have a deep and potentially disruptive labor market and social impact.

Exhibit 3: Significant Fiscal Policy Space in Chile/Peru; Weak Fiscal Backdrop in Argentina/Brazil

	Primary Balance	Interest Balance	Overall Fiscal Balance	Gross Debt
Argentina	-0.5	-3.5	-3.9	71.5
Brazil	-0.9	-5.1	-5.9	75.8
Chile	-1.9	-1.0	-2.8	27.9
Colombia	0.5	-3.0	-2.5	48.4
Ecuador	1.5	-2.6	-1.1	52.5
Mexico	1.1	-2.8	-1.6	44.9
Peru	-0.2	-1.4	-1.6	26.9

Source: IMF, Ministries of Finance, Goldman Sachs Global Investment Research

Short-Term Fiscal Stimulus is Justified but Far From a Free Lunch

Large fiscal stimulus packages have clear short-term benefits in the current unique and deeply recessionary context, but the significant accumulation of new debt may also entail non-trivial medium- and long-term costs, impact future savings and capital accumulation, and expose complex inter-generational equity issues.

Meaningful increases in public spending and tax relief in the midst of what is likely to be a severe slump in economic growth that will lead to a significant decline in tax collection and deterioration of tax compliance, may leave some LatAm countries with large fiscal deficits and saddled with high levels of public debt. This will force governments to embrace either painful adjustment measures once the epidemic subsides, or face the risk of a disorderly fiscal/funding crisis. It may prove especially challenging for countries with weaker fiscal fundamentals and more limited fiscal space at the outset. For those, the price of near-term relief may well be future faster and deeper fiscal adjustment or financial/funding distress. But no matter how thorny the short- vs. medium-term fiscal trade-offs appear from the current standpoint, the least costly fiscal, social, and economic proposition may still be to open the fiscal purse now and accept the risk a potentially costly and disorderly adjustment down the road if the post-viral crisis political-economy equilibrium fails to embrace the needed counter-cyclical fiscal adjustment. For instance, some countries such as Brazil will be forced to restart the interrupted fiscal consolidation process in 2021-22, but from a much weaker position than the current one, which leaves them more vulnerable and exposed to future macro, financial, or political shocks.

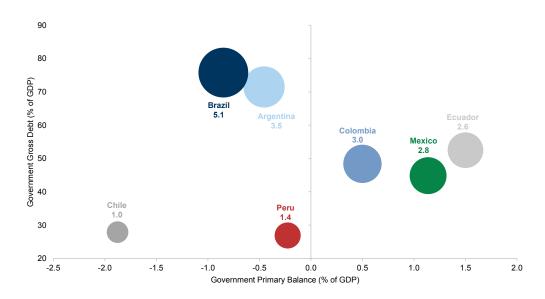
In this paper we analyze in great detail the fiscal position of the main LatAm economies, and how their fiscal outlooks may be affected by the significant deterioration of the macro-financial backdrop and the budgetary pressures associated with the need to respond to the viral epidemic.

Fiscal Fundamentals Vary Considerably Across Countries

Latin America's fiscal balances improved slightly in recent years despite the region's underwhelming growth performance. The average primary fiscal deficit across LatAm peaked at close to 2.0% of GDP in 2016, and has since declined to a milder 0.1% of GDP in 2019. Overall fiscal deficits have diminished in tandem, but remain fairly large in absolute terms due to the high interest costs faced by some of the region's largest economies. As a result, aggregate public indebtedness has climbed steadily over the last several years and is now tracking at a high of nearly 60% of regional GDP (up from 41% in 2013 and 34% in 2007).

These aggregates conceal a fair amount of cross-country heterogeneity, at both the flow and stock levels. For instance, while Ecuador and Mexico recorded respectable primary surpluses in 2019, Brazil and Chile recorded primary deficits (Exhibit 4). In the case of Brazil, the consolidated public sector has been recording primary fiscal deficits for six consecutive years. Finally, while Chile and Peru ended 2019 with gross debt-to-GDP ratios below a modest 30%, the corresponding ratios for Argentina and Brazil topped 70% of GDP (although net debt ratios are visibly smaller).

Exhibit 4: Significant Fiscal Policy Room in Chile/Peru; Weak Fiscal Metrics in Argentina/Brazil



Size of bubbles and figures next to them represent interest payments as share of GDP

Source: IMF, Ministries of Finance, Goldman Sachs Global Investment Research

Other relevant characteristics like the currency composition and maturity structure of debt, the residency of creditors, and the credibility of macro policies also vary considerably across countries. For instance, Brazil's large debt stock is mostly denominated in local currency and is typically funded in the country's deep local market, which mitigates its risk profile to a certain extent. Ecuador's considerably smaller debt stock, by contrast, is subject to much greater roll-over risk due to the lack of independent monetary policy (Ecuador is a fully dollarized economy), shallow domestic

¹ For reference, the IMF typically recommends that emerging markets should maintain debt ratios at or below 60% of GDP over the long-term to keep the risk of fiscal distress relatively contained.

financial markets, and an extensive record of sovereign defaults.

How Much Fiscal Space is Left, if Any?

While standard fiscal indicators and market prices provide useful information about the fiscal picture, they do not offer an objective answer to the question of how much fiscal space individual countries have to respond to the coronavirus crisis. To address this issue head-on, we follow the standard practice in the literature and work with the concept of the *Debt Limit*, the maximum stock of public debt a country may accumulate before reaching the tipping point and shifting to an explosive fiscal trajectory. An explosive trajectory materializes when public debt grows so large that actual debt service costs exceed the primary surpluses the authorities can generate given the typical constraints on fiscal policy. Fiscal space can thus be defined (and measured) as the difference between model-implied debt limits and actual debt stocks.

Box 1 provides a detailed description of the steps and assumptions involved in the actual computation of the debt limit and the resulting fiscal space for each country. Our calculations -based on data since the 1990s for 26 EMs (including 12 LatAm economies) - indicate that the debt limit for the **representative EM** in our sample is approximately 70% of GDP (Exhibits 5 and 6). Alternatively, country-specific estimates show that debt limits range from 60% in Colombia to as much as 90% in Peru. However, we find no individual computational solutions for the debt limits of Argentina, Ecuador, and Mexico.

Exhibit 5: Significant Heterogeneity in Debt Limits and Fiscal Space Across LatAm

	Argentina	Brazil	Chile	Colombia	Mexico	Peru
Debt limit - EM avg.	72	72	72	72	72	72
Debt limit - country-specific	-	65	80	60	-	90
Current debt stock	72	76	28	48	45	27
Fiscal space	-	-4	44	24	27	45
Fiscal space (country-specific)	-	-11	52	12	-	63

Source: IMF, Goldman Sachs Global Investment Research

Our findings confirm that both Chile and Peru currently have significant fiscal space and may, therefore, use fiscal policy actively to mitigate the economic and social impact of the coronavirus pandemic without concerns of a significant increase in medium-term fiscal risk-premia. Fiscal space in Colombia and Mexico, on the other hand, is somewhat smaller. Colombia's individual estimate suggests the country may have no more than roughly 10ppt of GDP left in terms of fiscal space, a maneuvering room that could quickly vanish amidst declining growth and worsening terms of trade, shrinking fiscal revenues, and a sliding currency.

(% GDP) (% GDP) ■ Current debt stock ■Debt limit - country-specific 100 100 90 90 80 80 Debt limit for EMs 70 70 60 60 50 50 40 40 76 72 30 30 48 20 20 28 27 10 10 0 Argentina Brazil Chile Colombia Mexico Peru

Exhibit 6: Brazil's Debt Already Above Model-Based and Country-Specific Debt-Limit Estimation

Source: IMF, Goldman Sachs Global Investment Research

Finally, our findings show that fiscal space in Brazil at this stage is very limited (or plainly non-existent) given its already large stock of public debt and persistent primary fiscal deficits. Government leaders should be mindful of this constraint as they embrace fiscal stimulus measures to mitigate the economic and social impact of the coronavirus outbreak. The unavoidable further near-term deterioration of the fiscal balances and debt indicators may raise investors' concerns about future debt sustainability unless the authorities manage soon to credibly commit to address fiscal sustainability issues once the viral pandemic subsides.

Sizeable and Expanding Fiscal Response

The coronavirus outbreak and the policy responses designed to limit its public health, social and economic impacts are expected to pose a significant drag on the fiscal position of the main LatAm economies, in terms both of fiscal deficits and rising public debt loads. The effects will likely materialize through three main channels, namely: (i) the implementation of large fiscal stimulus packages (tax relief and additional spending); (ii) the decline in tax and non-tax revenues and the broader effects of automatic stabilizers on spending; and (iii) the mechanic impact of exchange rate depreciation in the share of foreign currency debt and net interest payments.

Exhibit 7 presents a stylized summary of the fiscal packages already announced across LatAm. More fiscal stimulus announcements are expected in coming days and weeks as the severe recession dynamics start to grip the regional economies. The figures show a wide range of outcomes in terms of resources involved: from minimal in Ecuador and Mexico to around 7% of GDP in Peru, although in certain cases it is still somewhat unclear how much of that will represent "new money/spending" versus a simple re-allocation and frontloading of previously budgeted funds. The various fiscal programs share a number of similar characteristics: subsidized credit lines from public

banks; tax breaks and income transfers to selected workers, households and firms; tax relief and payment deferrals for corporates; and supplemental budgetary appropriations to healthcare and local governments.

Exhibit 7: Sizeable and Growing Set of Fiscal Measures to Deal With Public Health, Economic and Social Impact of Covid-19 Pandemic

	Fiscal Pac	kage	
Country	Amount	% GDP	Notes
Brazil	~R\$250bn	3.4%	Direct cash-transfers, tax deferrals, anticipation and expansion of social benefits, increase in unemployment insurance, healthcare spending, credit lines to SMEs. Overall measures add up to ~R\$527bn, but large share consists of reallocation within budget; add'l spending and credit measures add up to ~R\$250bn.
Mexico	No meaningful fiscal response so far	-	-
Chile	US\$11.7bn	4.7%	Additional resources for public health, expansion of unemployment insurance, income transfers to households, tax breaks and deferments for businesses and households, credit lines to businesses and households.
Argentina	~ARS350bn	1.5%	Credit lines for housing, temporary elimination of payroll taxes for heavily affected sectors, partial payments of private sector salaries, increase in unemployment insurance and social security benefits, public investments.
Colombia	COP14.8tn	1.3%	Tax breaks/deferrals for firms, more resources to healthcare and social programs, freezing of water bills, faster VAT rebate to low income families, elimination of import duties
Peru	PEN48.4bn	7.0%	More resources to healthcare, income transfers to low income families, credit lines to SMEs, public works, job creation program, tax breaks

Source: Goldman Sachs Global Investment Research

Significant Negative Impact on Fiscal Revenue

To gauge the potential impact of the recessionary dynamics on government revenues, we survey the existing literature on fiscal revenue buoyancy. According to a number of studies, the elasticity of tax revenue to real GDP growth in DM and EM economies usually varies between 1 and 2, i.e., tax revenues tend to decline by 1%-2% for each percentage point drop in real GDP. The evidence also suggests that tax elasticities may be, on average, slightly higher in LatAm compared to other EMs, although still below 2 in most cases. In addition, some authors have found that tax revenues tend to become more sensitive to economic activity during periods of crisis and distress, i.e., tax elasticities may be counter-cyclical. In fact, we posit that given the singular nature of the current shock, the speed at which the crisis is unfolding and its intensity, tax compliance and tax payment capacity may deteriorate more than what is typically observed during the "garden variety" recession or cyclical contraction.

Based on these findings, we use a uniform tax elasticity of 1.5 across the main LatAm economies. We assume the same elasticity to non-tax revenue, which may prove to be

a conservative assumption, as for instance, royalties (e.g., oil, mining) and profit transfers to national treasuries from SOEs may decline by a larger magnitude than the overall tax streams. We then multiply it by the change in our growth forecasts since the onset of the coronavirus epidemic to project the impact of the pandemic on fiscal revenues across the region. We also consider an alternative specification with a higher elasticity of 2.0, to account for the possible counter-cyclicality of fiscal revenue buoyancy and deterioration of tax compliance.

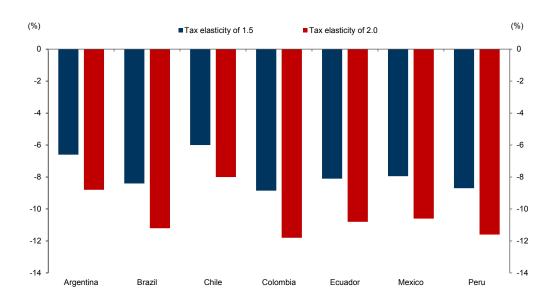
Exhibits 8 and 9 present the results. According to our calculations, compared with the original pre-virus growth baseline, the viral pandemic may lower tax revenues by at least 6.6% in Argentina, and likely by more than 8% in Brazil, Colombia, Ecuador, Mexico, and Peru. In all, the significant loss of fiscal tax and non-tax revenue and the impact of lower real GDP on government spending ratios could increase primary fiscal deficits by 2.5-3.5% of GDP in 2020 across LatAm, this before adding the fiscal relief and stimulus measures.

Exhibit 8: Significant Projected Across the Board Impact of Pandemic on Tax Revenue (%)

	Argentina	Brazil	Chile	Colombia	Ecuador	Mexico	Peru
Pre-Covid-19 2020 Growth Forecast	-1.0	2.2	1.0	3.4	-0.3	1.0	3.3
Current 2020 Growth Forecast	-5.4	-3.4	-3.0	-2.5	-5.7	-4.3	-2.5
Revision (pp)	-4.4	-5.6	-4.0	-5.9	-5.4	-5.3	-5.8
Impact on tax revenues (elasticity of 1.5)	-6.6	-8.4	-6.0	-8.9	-8.1	-8.0	-8.7
Impact on tax revenues (elasticity of 2.0)	-8.8	-11.2	-8.0	-11.8	-10.8	-10.6	-11.6

Source: Goldman Sachs Global Investment Research

Exhibit 9: Potentially Double-Digit Fiscal Revenue Losses Versus Pre-virus Growth Budget-Baselines

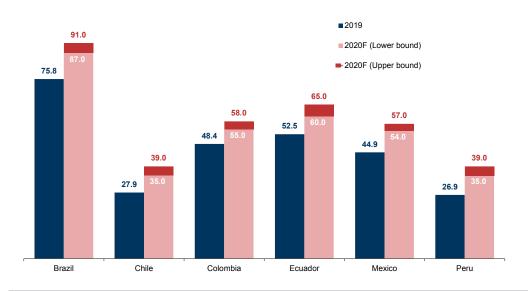


Source: Goldman Sachs Global Investment Research

The Sum of the Parts: Weaker Fiscal and Public Debt Metrics Across LatAm

We expect the fiscal picture across LatAm to deteriorate significantly in 2020 driven by the forecasted significant widening of primary fiscal deficits and sizeable increase of the public debt stock as share of GDP. The forecasted deterioration of fiscal balances is expected to be driven by the impact of the automatic stabilizers on revenue (lower) and spending (higher), by the deterioration of tax compliance given the unique nature, speed, and severity of the negative shock to activity, and the impact of sizeable fiscal stimulus and relief packages to mitigate the social, public health and economic costs of the corona virus pandemic.

Exhibit 10: Gross Public Debt Burden Expected to Increase Significantly % GDP



Source: Goldman Sachs Global Investment Research

Brazil: No Fiscal Space, No Problem!

In **Brazil** the near-term fiscal outlook was already challenging, and the medium-term picture is likely to become even more difficult. Brazil has been running primary fiscal deficits for 6 consecutive years (since 2014) and, at 77% of GDP, gross public debt is significantly above the EM average and that of similarly rated peers. In recent years, progress towards much-needed fiscal consolidation was slow: admittedly insufficient at the federal level and minimal at the highly fiscally distressed sub-national level. In all, despite the fiscally orthodox and reformist inclination of the current economic team, there has not been sufficient progress to date to dispel concerns about medium-term fiscal sustainability, much less to build valuable fiscal buffers.

We expect to see a very significant deterioration of the fiscal picture in 2020 on top of an already weak and fragile fiscal backdrop. The expected deep recession will erode the tax base and increase spending as a share of GDP through the work of automatic stabilizers (e.g., higher unemployment payments as the labor market deteriorates). Given the nature and severity of the expected activity contraction, tax compliance is expected to deteriorate more than that observed in previous economic downturns

(higher elasticity of revenue to economic activity). Furthermore, the government and congress have been approving a number of measures and programs to deal with the economic, social, and public health impacts of the coronavirus pandemic, involving both tax relief/forbearance and extra spending. When all is said and done, we expect the fiscal measures to add up between R\$300bn and R\$400bn (or 4.1% to 5.5% of estimated 2020 GDP).

Taking into consideration the fiscal stimulus package plus the projected deterioration of the fiscal baseline due to the recession, our preliminary estimates point to a deterioration of the consolidated public sector primary fiscal balance from -0.85% of GDP in 2019 to between -7.0% and -9.0% of GDP in 2020. This would be consistent with an overall nominal fiscal deficit in double digits, to between -11.5% of GDP and -13.5% of GDP, despite the forecasted further decline of interest funding costs. Such a large fiscal flow imbalance is likely to push the debt load significantly higher: from 76.5% of GDP at end-2019 to close to a high 90% of GDP in 2020. Against this backdrop, in our assessment it is critical that most of the recent fiscal measures are temporary in nature (not a permanent increase in spending commitments) and that the authorities simultaneously embrace reforms and fiscal adjustment measures that point to a medium- and long-term fiscal equilibrium given the likely large increase in the public debt burden. In truth, it is key to avoid the policy mistakes of 2008-09, as the counter-cyclical fiscal and quasi-fiscal policy response to the GFC — a very large and multi-year fiscal expansion — turned highly pro-cyclical in 2010-13 and ended up generating large imbalances that led to a major economic and social crisis a few years later.

Mexico: Underwhelming Policy Response

In **Mexico**, despite the rapidly deteriorating macro backdrop, the AMLO administration remains reluctant to validate a meaningful fiscal stimulus package despite manifestly benefiting from more fiscal policy space than many of its large EM peers. The government seems keen to focus the fiscal effort on the most vulnerable (expanding the social safety net) and remains ideologically not predisposed to commit significant fiscal resources to help private sector businesses navigate the crisis (no tax relief for the corporate sector or financial support to the most affected sectors). In our assessment, the revised 2020 federal budget (primary balance forecast downgraded from +0.7% of GDP to -0.4% of GDP) is still based on optimistic underlying assumptions (for real GDP growth, oil production and overall tax collection buoyancy) and will therefore be difficult to execute.

Given our forecast for a deep real GDP decline in 2020 (-4.3%), and eventual announcement of a fiscal stimulus package to deal with the expected significant business and social impact on the recession, we expect the public sector primary fiscal balance to deteriorate from +1.1% of GDP in 2019 to between -2.0% and -3.5% of GDP in 2020, which would be consistent with public sector borrowing requirements (nominal deficit) of -6.0% to -7.5% of GDP. These figures could be stretched further by potential financial assistance to Pemex, given the that the company is yet to significantly adjust its business plan and strategic direction in the face of significantly lower crude oil prices. Furthermore, we expect the authorities to exhaust the remaining savings in the Macro

Stabilization Fund (FEIP) of ≈0.6% GDP. Overall, the significant widening of the fiscal deficit and the recession is likely to push gross public sector debt from 44.9% of GDP in 2019 to around 54%-57% of GDP by end-2020. Finally, we highlight that a combination of weak growth, fiscal balance deterioration, rising quasi-fiscal liabilities, deteriorating business sentiment, and weak policy credibility is likely to lead to near-term credit rating downgrades.

2019 3.7 2020F (Old) ■2020F (New; Upper bound) 2020F (New; Lower bound) 1.5 0.6 0.5 -0.2 -1.9 -3.0 -6.0 Argentina Brazil Chile Colombia Ecuador Mexico Peru

Exhibit 11: Primary Fiscal Balances Expected to Deteriorate Markedly in 2020

Source: Goldman Sachs Global Investment Research

Argentina: Monetizing Large Fiscal Deficit

Argentina's fiscal position remains fragile and the country remains involved in a complex debt restructuring negotiation with private and official creditors. The primary deficit of the central government narrowed to 0.5% of GDP in 2019 (from 2.4% of GDP in 2018) as the previous administration curtailed public spending sharply in the context of an IMF program, but the trend is likely to be reversed this year due the economic and social consequences of the viral epidemic and the associated policy responses. Our calculations suggest that downward revisions to growth alone may subtract 2-3ppt of GDP from fiscal revenues in 2020, whereas public expenditures may increase as much as 2ppt of GDP due to stimulatory measures and the effects of other automatic stabilizers in a recessionary context. While the authorities may implement some compensatory measures to mitigate the near-term deterioration of the fiscal accounts, the 2020 primary fiscal deficit will probably approach 5% of GDP. With bond markets nearly shut, government officials will likely rely on a combination of money issuance and emergency assistance from multilateral and bilateral organizations (including the IMF) to close the budget. However, the evolution of public indebtedness is hard to predict as it will be heavily influenced by the outcome of the restructuring negotiation and the possibility of significant debt relief.

Ecuador: Little Policy Flexibility Amidst Increasing Fiscal Pressures

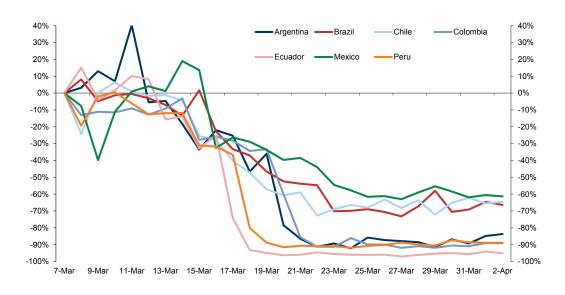
The near-term fiscal outlook for **Ecuador** is very challenging, as it is a dollarized economy that cannot rely on monetary expansion to cover fiscal shortfalls. Just like in the case of Argentina, private funding markets have shut and are unlikely to re-open before a new administration takes office by mid-2021. Hamstrung by these constraints, we do not expect the authorities to deliver a significant stimulus package; they may, in fact, reduce some public expenditures to protect the fiscal accounts somewhat. Nevertheless, the sharp deterioration of the domestic growth outlook due to the viral epidemic will likely subtract about 2ppt of GDP from tax revenues this year, while the plunge in global oil prices may reduce revenues by another 2-3ppt of GDP. Consequently, we project the primary deficit of the NFPS to reach 3.0% of GDP in 2020, which would force the authorities to ramp up borrowing from bilateral and multilateral organizations and would boost public indebtedness to nearly 60% of GDP.

Chile: Bold Policy Response

In **Chile**, following the social unrest that began in October 2019, the government announced a revised (central government) fiscal deficit projection of 4.5% of GDP for 2020, which would already be the largest deficit since 1990. However, the COVID-19 health crisis has led the government to announce a large US\$11.75bn (~5.0% of GDP) fiscal stimulus package, of which US\$6bn (~2.5% of GDP) consists of additional expenditures over the previous scenario, while the remainder is mostly tax deferrals that will be reversed during 2020 and 2021. The US\$6bn is to be funded through a combination of debt issuance (US\$4bn), deferrals of contributions to sovereign funds (US\$1.5bn) and budget reallocations (US\$0.5bn). Besides the growth impact on tax revenues, lower copper prices will also weaken copper-related fiscal revenues (1.3% of GDP in 2019). As a result, we now expect a large overall budget deficit of 8-9% of GDP in 2020 (7-8% primary deficit), driving gross debt to around 37% of GDP from 28% in 2019.

Exhibit 12: Traffic Congestion Intensity Has Collapsed Across LatAm

Daily % change relative to week of March 1-7



Source: IADB, Goldman Sachs Global Investment Research

Colombia: Rating Downgrades May Limit Space for Fiscal Stimulus

Different from Chile, the fiscal picture in **Colombia** had improved recently with the central government delivering a 0.5% of GDP primary surplus in 2019, its first surplus since 2012 when the Fiscal Rule was implemented. However, the fiscal consolidation path will now reverse considerably as tax revenues decline sharply as a result of the large contraction in domestic activity and the severe decline in oil prices. So far, the government has announced a modest fiscal stimulus package of 1.4% of GDP, which is expected to be fully funded with resources from national savings funds, therefore not requiring additional debt issuance. We believe increasing social and political pressures for additional government stimulus will likely lead to a larger stimulus package, though the recent credit rating/outlook downgrades by Fitch and S&P may limit the size of the fiscal response.

In order to gauge the potential impact on government finances, we consider the sensitivities to growth, inflation, exchange rate, and oil prices published by the Ministry of Finance in the 2018 and 2019 Medium Term Fiscal Plans (MFMP). We note, however, that uncertainty around these forecasts is considerable, given the large uncertainty around the outlook for those variables and the potential for additional fiscal spending measures. The 2019 MFMP states that the elasticity of central government revenues to real GDP growth is 1.15, but we find it likely that lower tax compliance will lead to an even larger decline in revenues. While most of the impact on oil revenues (1.5% of GDP in 2019) will be mostly felt in 2021 as taxes on oil companies and Ecopetrol dividends are based on the results from the previous year, other tax revenues will decline significantly given our -2.5% real GDP growth forecast for 2020. All in, we now expect a central government primary *deficit* of around 1.5-3.0% of GDP in 2020 (vs 0.5% *surplus* in 2019), the largest deficit since 1999 (3.6%), leading to an overall fiscal deficit of

4.5-6.0% of GDP (including interest payments), well above the previous target of 2.2% (which is likely to be relaxed by the Fiscal Rule Committee as a result of lower growth and oil prices). Coupled with the significant exchange depreciation, we expect gross (central government) debt to rise from 48% of GDP in 2019 to around 55-58% in 2020.

Peru: The Largest Fiscal Package Yet

While Colombia has announced one of the smallest fiscal stimulus packages in the region, **Peru** has announced an unprecedented 7% of GDP fiscal package to support households and firms. The package includes 5.5% of GDP in direct public spending and 1.5% in tax relief measures, besides an additional 4.7% in government-backed credit to the private sector with no direct fiscal impact, for a combined stimulus of nearly 12% of GDP. While we expect the 5.5% additional public spending to directly impact the fiscal deficit, it is not clear whether the 1.5% tax relief measures would be reversed later in 2020 (e.g., short-term tax deferrals) or in subsequent years. Coupled with the expected decline in revenues, we expect the sizable stimulus package to lead to a large 7-9% of GDP primary fiscal deficit of the consolidated public sector in 2020, up from a small 0.2% deficit in 2019, for an overall fiscal deficit (including interest payments) of around 8.5-10.5% of GDP, significantly above the 2.1% ceiling set by the fiscal rule. Accordingly, we expect the public debt-to-GDP ratio to breach the 30% constitutional limit, up from 27% in 2019.

Alberto M Ramos

Paulo Mateus

Tiago Severo

Gabriel Fritsch

Box: Debt Limit and Fiscal Space

We rely on the theoretical concept of the **debt limit** to make inferences about the degree of fiscal space available to the main LatAm economies.² The debt limit is defined as the maximum stock of public debt a country may accumulate before embarking on an explosive fiscal trajectory, i.e., before public debt grows so large that actual debt service costs exceed the primary surpluses the authorities can generate given the typical constraints on fiscal policy.

Interest Rates, Primary Balances, and the Debt Limit

As it is widely known, the government's period budget constraint establishes that changes to the public debt-to-GDP ratio Δd are determined by the difference between growth-adjusted interest costs (r-g)/(1+g) on the existing stock of debt and the primary fiscal balance pb. If interest costs exceed/fall short of the primary balance, the debt ratio increases/decreases. We assume that both the interest rate r and the primary balance pb are increasing functions of the stock of debt. The first assumption is fairly uncontroversial, for higher leverage raises the odds of distress and default (other things equal), boosting interest costs. Interestingly, the link between leverage, distress risk, and interest rates also underpins the assumed positive relationship between primary balances and debt: a growing stock of debt should eventually prompt the government to enact corrective fiscal measures (boost the primary balance) to reduce credit risks and lower the public sector interest bill. Researchers have shown that governments in both DM and EM countries tend to act in that way.

Exhibit 13 displays a heuristic diagram of the dynamics of public debt (horizontal axis) and its main determinants (vertical axis) implied by these assumptions. The red line is a stylized representation of the interest cost function; its exponential shape accounts for the potential impact of leverage on distress risk and borrowing costs. The blue line, in turn, represents the "fiscal reaction function", the mapping between public debt and primary balances.

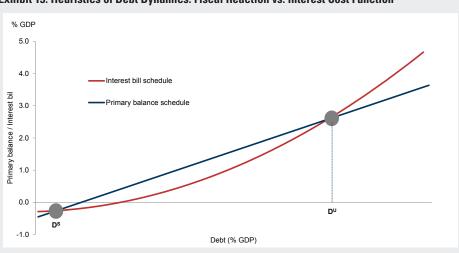


Exhibit 13: Heuristics of Debt Dynamics: Fiscal Reaction vs. Interest Cost Function

Source: Goldman Sachs Global Investment Research

The intersection of the two curves defines the set of points consistent with a constant debt-to-GDP ratio,

² See IMF(2010): "Fiscal Space" for a detailed discussion of this concept.

i.e., the points at which primary surpluses exactly offset interest costs. The first intersection in the left gives rise to a so-called <u>stable steady state</u> with debt level **D**^s. Small shocks that move the debt slightly below/above **D**^s lead to a relaxation of fiscal policy above/below the corresponding reduction in interest costs, bringing debt back towards the original level. The second intersection point at the right, in turn, gives rise to an <u>unstable steady state</u> with debt level **D**^u. Small shocks that move the debt slightly below **D**^u lead to a disproportionately large decline in interest costs relative to primary balances, bringing debt further down towards **D**^s over time. More importantly for our purposes, small shocks that move the debt slightly above **D**^u raise interest costs disproportionately more than what the government can deliver in terms of primary surpluses, leading to further increases in debt. Hence, **D**^u represents the threshold beyond which fiscal policy embarks on an explosive trajectory, i.e., the <u>debt limit</u>.

Empirical Implementation

To make inferences about actual debt limits, we estimate the fiscal response and interest cost functions based on information from 26 EMs – including 12 LatAm economies – since the early 1990s. First, we run a panel regression model of primary balances as a function of the lagged debt ratio, as well as additional drivers of fiscal outcomes like the output gap, inflation, the real effective exchange rate, and country fixed effects. Second, we estimate similar models for sovereign credit spreads, adding the VIX and 10-year US yields to capture the effects of global financial conditions on spreads. Exhibit 14 reports the results.³

Exhibit 14: Fiscal Reaction and Interest Cost Functions for EMs

	Fiscal Response Function Primary Balance (% GDP)	Interest Cost Function Sovereign Credit Spread (bps)
Constant	-1.34 [-1.2]	-783 [-3.1]**
Debt-to-GDP (-1)	0.06 [7.2]**	9.96 [5.7]**
Output Gap	0.18 [4.7]**	-59.4 [-7.5]**
Inflation	0.01 [0.7]	20.22 [6.2]**
Real Effective Exchange Rate (-1)	-0.02 [-3.9]**	8.46 [6.9]**
VIX		18.57 [7.7]**
US 10Y Yield		33.1 [1.8]*
Country fixed effects Adjusted R-square	yes 0.34	yes 0.57
Sample	1991-20	19 (annual)
Obs	5	71

^{*} Denotes significance at the 10% level

Source: Goldman Sachs Global Investment Research

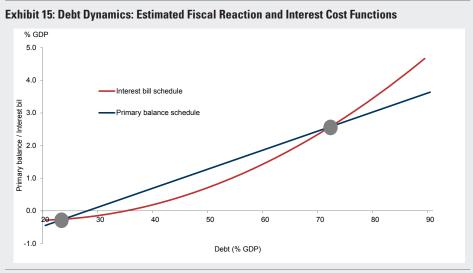
The estimated sensitivity of the primary balance to the lagged public debt is positive and statistically significant, consistent with a positive fiscal response (fiscal tightening) in reaction to growing debt. A similar dynamic characterizes the interest cost function as well: sovereign spreads increase with government indebtedness.

To find the intersection points between the two functions and the corresponding debt limit, we must make

^{**} Denotes significance at the 5% level

assumptions about the steady-state values of the control variables in the regressions.⁴ We calibrate the level of the output gap at 0% (actual output converges to potential output in the long term), inflation at 3%, and the real-effective exchange rate at 100 (in line with the historical average). To compute the interest bill schedule, we must also calibrate the level of the risk-free interest rate to be added to the model-implied values of sovereign credit spreads: we set the base rate at 1.0%, in line with the current yield on 10-year US Treasuries. We also set the level of the VIX at 16. Finally, we calibrate the steady-state growth rate of dollar GDP at 3%, in line with reasonable estimates for potential growth across LatAm.

Exhibit 15 illustrates the resulting intersection points between the fiscal response and interest cost functions for the average EM in our sample. The corresponding debt limit – the debt ratio associated with the unstable steady state – is at around 72% of GDP. In other words, **given the estimated dynamics of EM fiscal policy and sovereign credit spreads**, a representative emerging market with potential growth of around 3% may not be able to sustain debt ratios much above 70% of GDP before embarking on an explosive fiscal trajectory.



Source: Goldman Sachs Global Investment Research

Finally, we also computed the individual debt limits for each one of the main economies in LatAm, based on their specific primary balance and interest cost functions derived from the panel regressions above. We have found that debt limits range from about 60% of GDP in Colombia to as much as 90% of GDP in Peru. Unfortunately, we could not find solutions for Argentina, Ecuador, and Mexico. This is not especially surprising in the cases of Argentina and Ecuador given their long track-record of sovereign crises and defaults (any level of debt seems to eventually become explosive for these two countries). The lack of a solution for Mexico, however, is somewhat more puzzling.

³ We also considered an alternative specification where we included time dummies to account for all aggregate factors that may have impacted primary balances and credit spreads in our sample. The results are quantitatively and qualitatively very similar.

⁴ There is no guarantee that an intersection point will exist.

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)	5,081	5,226	5,186	4,368	4,172	4,666	4,509	4,387	3,813	4,299	4,864
Real GDP growth (% yoy)	2.7	2.9	1.4	0.3	-0.2	1.8	1.5	0.6	-3.8	3.3	2.7
CPI Inflation (% yoy)	5.1	5.3	7.1	6.0	4.2	6.4	8.4	8.5	6.2	5.6	4.7
Domestic Demand (% yoy)	2.8	3.2	0.9	-0.8	-1.0	2.1	1.8	0.2	-4.1	3.6	3.2
II. External Sector (US\$bn)											
Current Account Balance	-134.2	-161.8	-169.5	-140.1	-85.1	-86.1	-120.2	-86.2	-46.1	-65.3	-83.1
Trade Balance	46.6	8.9	-2.4	-13.1	34.5	57.9	45.3	65.7	85.9	78.2	68.0
Gross International Reserves	727.5	720.1	744.6	708.7	733.8	754.0	766.1	749.4	748.7	773.8	805.8
Change in Reserves	60.3	-7.4	24.4	-35.9	25.1	20.3	12.0	-16.7	-0.6	25.1	32.0
Net Capital Inflows	194.5	154.4	193.9	104.2	110.2	106.3	132.2	69.5	45.5	90.4	115.1
Foreign Direct Investment	183.7	179.9	165.7	152.9	147.0	139.7	154.0	148.1	149.3	164.8	176.9
III. Public Finance and Indebtness (% GDP)											
Primary Fiscal Balance	0.8	0.4	-1.0	-1.8	-1.9	-1.0	-0.8	-0.1	-5.4	-1.7	-0.3
Overall Fiscal Balance	-2.0	-2.4	-4.0	-6.1	-5.6	-4.7	-4.4	-3.6	-8.8	-5.0	-3.7
Total Public Sector Debt	40.8	41.0	45.1	50.2	53.6	54.8	57.1	58.8	69.8	68.3	66.6
Total External Debt	23.9	25.4	28.5	34.0	36.3	34.9	37.1	38.1	44.5	42.8	40.8

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

Source: Goldman Sachs Global Investment Research

Global Macroeconomic Framework

						20	20F			202	21F	
	2018	2019F	2020F	2021F	Q1F	Q2F	Q3F	Q4F	Q1F	Q2F	Q3F	Q4F
Real GDP Growth (%, yoy)												
United States	2.9	2.3	-6.2	5.5	2.3	-0.8	-11.0	-7.6	-5.4	-1.4	11.0	7.6
Euro Area	1.9	1.2	-9.0	7.8	1.0	-3.4	-14.6	-10.8	-7.3	-0.7	14.3	10.9
Japan	0.3	0.7	-3.1	1.1	-0.7	-2.4	-4.7	-3.8	-1.3	0.0	2.1	1.3
World Economy	3.7	3.1	-1.8	6.2	2.9	-2.3	-4.7	-1.6	0.6	6.8	9.4	6.2
CPI Inflation (%, yoy)												
United States	2.2	2.2	1.3	2.1	2.0	2.2	8.0	0.9	1.1	1.3	2.5	2.4
Euro Area	1.8	1.2	1.0	1.7	1.0	1.2	8.0	1.0	1.0	1.5	1.7	1.8
Japan	1.0	0.5	-0.1	0.0	0.5	0.9	0.0	-0.2	-0.9	-0.9	-0.3	0.5
Interest rates (%, e.o.p)												
Fed Funds	2.27	1.55	0.13	0.13	1.55	0.13	0.13	0.13	0.13	0.13	0.13	0.13
UST 10-Year	2.68	1.92	0.75	1.35	1.92	0.60	0.40	0.55	0.75	0.90	1.05	1.20

Source: Goldman Sachs Global Investment Research

6 April 2020

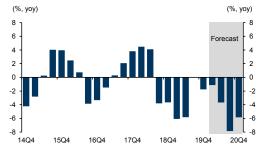
LatAm Country Data Tables

Argentina

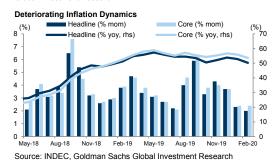
	2017	2018	2019	2020F
Activity and Prices				
Real GDP Growth (% yoy)	2.7	-2.5	-2.2	-5.4
Nominal GDP (US\$bn)	642	538	452	396
Consumer Prices, IPC (yoy, e.o.p.)*	24.8	47.6	53.8	35.0
External Sector				
Current Account (% GDP)	-4.9	-5.1	-0.8	1.7
Trade Balance (% GDP)	-0.8	-0.1	4.0	6.1
Exports (% yoy)	1.2	5.3	5.4	-11.9
Imports (% yoy)	19.7	-2.4	-25.0	-29.2
Exchange Rate (\$/ARS, e.o.p.)	17.7	37.9	59.9	77.0
Gross International Reserves (US\$bn)	55.1	65.8	44.8	56.1
Monetary Sector				
Monetary Base (% yoy)	51.3	36.6	21.5	40.0
Credit to the Private Sector (% GDP)	16.0	15.9	13.0	14.9
Fiscal Sector **				
Federal Govt Primary Balance (% GDP)	-3.9	-2.4	-0.5	-5.0
Federal Govt Overall Balance (% GDP)	-6.0	-5.1	-3.9	-7.5

*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 3Q18



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

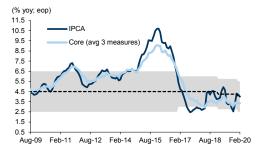


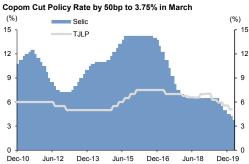
Brazil

	2017	2018	2019	2020F
Activity and Prices				
Real GDP Growth (% yoy)	1.3	1.3	1.1	-3.4
Nominal GDP (US\$bn)	2062.6	1892.7	1839.6	1555.6
IPCA Inflation (yoy e.o.p)	2.9	3.7	4.3	3.2
External Sector				
Current account (% GDP)	-0.7	-2.2	-2.8	-2.8
Trade balance (% GDP)	3.1	2.8	2.1	2.6
Exports of goods (% yoy)	18.3	9.8	-6.3	2.5
Imports of goods (% yoy)	10.3	21.0	-0.8	2.7
Nominal Exchange Rate (\$/BRL e.o.p.)	3.31	3.87	4.03	4.60
Net International Reserves (US\$bn)	374	375	357	355
Monetary Sector				
Monetary base (% yoy)	9.8	1.8	4.8	5.0
Credit to the Private Sector (%GDP)	43.8	44.2	45.2	47.4
SELIC rate (e.o.p)	7.00	6.50	4.50	3.00
Fiscal Sector				
Public Sector Primary Balance (% GDP)	-1.7	-1.6	-0.9	-7.5
Public Sector Nominal Balance (% GDP)	-7.8	-7.1	-5.9	-12.1
Debt Indicators				
Gross general govt debt (% GDP)	73.7	76.5	75.8	89.0
Domestic public debt (%GDP)	70.3	72.6	72.2	85.0
External public debt (%GDP)	3.5	3.9	3.6	4.0
Total external debt (% GDP)	26.6	29.5	31.2	37.9

Source: Goldman Sachs Global Investment Research

Headline/Core Inflation Back to Target Range



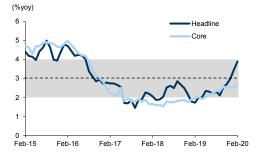


Sources: Bloomberg, Goldman Sachs Global Investment Research, Haver Analytics, IBGE

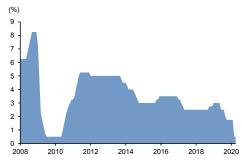
Chile

	2017	2018	2019	2020F
Activity and Prices				
Real GDP Growth (% yoy)	1.2	3.9	1.1	-3.0
Nominal GDP (US\$bn)	277	299	283	235
Consumer Prices (% yoy, e.o.p.)	2.3	2.6	3.0	2.4
External Sector				
Current Account (% GDP)	-2.3	-3.5	-3.9	0.7
Trade Balance (% GDP)	2.7	1.6	1.5	5.2
Exports (% yoy)	13.3	9.3	-7.1	-15.7
Imports (% yoy)	10.1	14.8	-6.8	-28.9
Exchange Rate (\$/CLP, e.o.p.)	615	696	745	820
Gross International Reserves (US\$bn)	39.0	39.9	40.7	36.7
Monetary Sector				
Broad Money (M3, % yoy)	7.2	6.8	10.1	9.0
Credit to the Private Sector (% GDP)	80.2	83.0	86.4	93.4
Policy Rate (e.o.p.)	2.50	2.75	1.75	0.50
Fiscal Sector				
Central Gov't Primary Balance (% GDP)	-2.5	-2.1	-1.9	-7.5
Central Gov't Overall Balance (% GDP)	-2.8	-1.7	-2.8	-8.5
Debt Indicators				
Central Govt Debt (% GDP)	23.5	25.6	27.9	36.7
Domestic (% GDP)	19.1	20.3	22.0	30.5
External (% GDP)	4.4	5.3	5.9	6.2
Total External Debt (% GDP)	65.1	61.8	70.1	87.0

Rising Headline but Low Core Inflation



Central Bank Cut Rate to 0.50% Effective Lower Bound



Source: Haver Analytics, INE, Central Bank of Chile

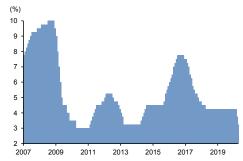
Colombia

	2017	2018	2019	2020F
Activity and Prices				
Real GDP Growth (% yoy)	1.4	2.5	3.3	-2.5
Nominal GDP (US\$bn)	312	334	324	271
Consumer Prices (% yoy, e.o.p.)	4.1	3.2	3.8	2.9
External Sector				
Current Account (% GDP)	-3.3	-3.9	-4.3	-4.2
Trade Balance (% GDP)	-1.4	-1.5	-2.6	-3.4
Exports (% yoy)	16.8	11.7	-4.6	-19.1
Imports (% yoy)	2.3	12.1	2.5	-14.4
Exchange Rate (\$/COP, e.o.p.)	2984	3250	3277	3900
Gross International Reserves (US\$bn)	47.1	47.9	52.7	53.3
Monetary Sector				
Monetary Base (% yoy)	5.0	10.4	9.0	9.0
Credit to the Private Sector (% GDP)	67.7	68.1	71.0	78.1
Policy Rate (% e.o.p.)	4.75	4.25	4.25	3.00
Fiscal Sector				
Central Government Primary Balance (% GDP)	-0.8	-0.2	0.5	-2.3
Central Government Overall Balance (% GDP)	-3.7	-3.1	-2.5	-5.3
Debt Indicators				
Gross Non-fin. Public Sector Debt (% GDP)	54.4	57.5	57.3	67.0
Domestic (% GDP)	32.2	34.5	35.0	41.4
External (% GDP)	22.3	23.1	22.4	25.6
Total External Debt (% GDP)	40.0	39.6	42.7	47.6

Headline Inflation Near 4% Target Upper Limit



Central Bank Cut 50bp to 3.75% in March



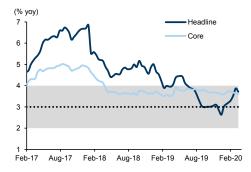
Source: DANE, Banco de la Repœblica

Mexico

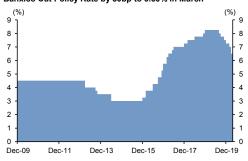
	2017	2018	2019	2020F
Activity and Prices				
Real GDP Growth (% yoy)	2.1	2.1	-0.1	-4.3
Nominal GDP (US\$ bn)	1158	1221	1258	1138
Consumer Prices (yoy, e.o.p.)	6.8	4.8	2.8	3.8
External Sector				
Current Account (% GDP)	-1.8	-1.9	-0.2	0.4
Trade Balance (% GDP)	-0.9	-1.1	0.4	1.0
Exports (% yoy)	9.5	10.1	2.3	-9.3
Imports (% yoy)	8.6	10.4	-1.9	-10.6
Exchange Rate (\$/MXN, e.o.p.)	19.79	19.68	18.85	20.00
Net International Reserves (US\$ bn)	172.8	174.8	180.9	176.0
Monetary Sector				
Monetary Base (% yoy)	8.8	8.3	4.1	6.0
Credit to the Private Sector (% GDP)	18.5	19.0	19.3	20.0
Tasa de Fondeo Rate (e.o.p.)	7.25	8.25	7.25	5.00
Fiscal Sector				
Public Sector Primary Balance (% GDP)	1.4	0.6	1.1	-3.0
Public Sector Overall Balance (% GDP)	-1.1	-2.1	-1.6	-6.0
Debt Indicators				
Gross Federal Govt Debt (% GDP)	45.8	44.9	44.9	54.9
Domestic (% GDP)	28.9	28.5	29.5	37.5
External (% GDP)	16.9	16.4	15.4	17.4
Total External Debt (% GDP)	37.7	36.6	36.8	42.6

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

Headline Inflation Back to Target



Banxico Cut Policy Rate by 50bp to 6.50% in March

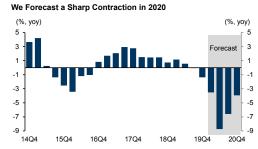


Source: INEGI, Goldman Sachs Global Investment Research

Ecuador

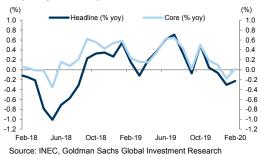
	2017	2018	2019F	2020F
Activity and Prices				
Real GDP Growth (% yoy)	2.4	1.3	0.1	-5.7
Nominal GDP (US\$bn)	104	108	108	104
Consumer Prices (yoy, e.o.p.)	-0.2	0.3	-0.1	-1.1
External Sector				
Current Account (% GDP)	-0.5	-1.4	-0.5	-2.5
Trade Balance (% GDP)	0.3	-0.2	0.7	0.6
Exports (% yoy)	13.6	13.8	3.3	-9.8
Imports (% yoy)	15.4	18.1	3.2	-11.9
Gross International Reserves (US\$bn)	2.5	2.7	3.4	1.9
Monetary Sector				
Monetary Base (% yoy)	16.4	14.9	11.3	5.0
Credit to the Private Sector (% GDP)	33.4	37.2	41.2	45.1
Fiscal Sector **				
Federal Govt Primary Balance (% GDP)	-2.4	1.3	1.5	-3.0
Federal Govt Overall Balance (% GDP)	-4.5	-1.2	-1.1	-6.0
Debt Indicators ***				
Gross Non-fin. Public Sector Debt (% GDP)	44.6	46.0	52.5	62.2
Total External Debt (%GDP)	38.1	41.3	0.0	0.0

Source: Goldman Sachs Global Investment Research



Source: BCE, Goldman Sachs Global Investment Research



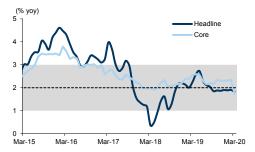


Peru

	2017	2018	2019	2020F
Activity and Prices				
Real GDP Growth (% yoy)	2.5	4.0	2.2	-2.5
Nominal GDP (US\$bn)	214	225	230	217
Consumer Prices (% yoy, eop)	1.4	2.2	1.9	1.5
External Sector				
Current Account (% GDP)	-1.3	-1.7	-1.5	-0.3
Trade Balance (% GDP)	3.1	3.2	2.9	3.2
Exports (% yoy)	22.5	8.0	-2.8	-11.2
Imports (% yoy)	10.2	8.1	-1.9	-14.0
Gross International Reserves (US\$bn)	63.7	60.3	68.4	69.8
Exchange Rate (\$/PEN, e.o.p.)	3.24	3.37	3.31	3.48
Monetary Sector				
Monetary Base (% yoy)	7.2	7.3	5.2	6.3
Credit to the Private Sector (% GDP)	40.4	42.1	43.1	44.1
Reference Interest Rate (e.o.p.)	3.25	2.75	2.25	0.75
Fiscal Sector				
Non-fin Pub. Sector Primary Balance (% GDP)	-1.8	-0.9	-0.2	-8.0
Non-fin Pub. Sector Overall Balance (% GDP)	-3.0	-2.3	-1.6	-9.4
Debt Indicators				
Total Federal Govt Debt (% GDP)	24.9	25.8	26.9	36.5
Domestic Public Debt (% GDP)	16.2	16.9	17.4	23.2
External Public Debt (% GDP)	8.8	8.8	9.5	13.4
Total External Debt (% GDP)	35.7	34.5	35.2	41.7

Source: Goldman Sachs Global Investment Research

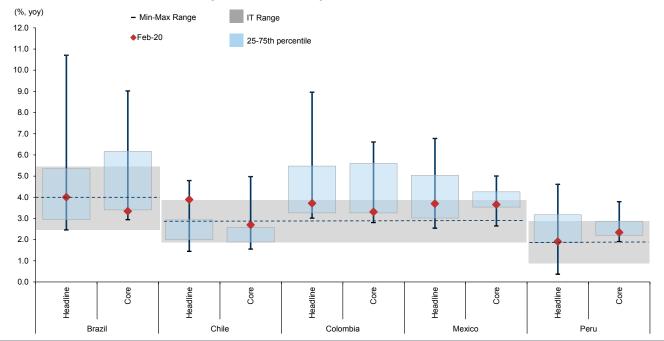
Headline/Core Inflation Below 2% Target



Central Bank Cut 100bp to 1.25% in Emergency Meeting

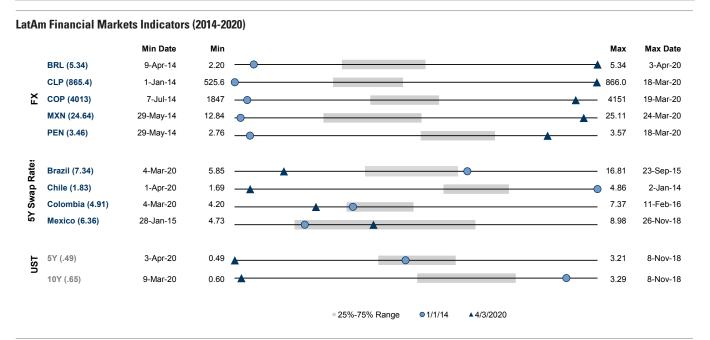


LAIT-5 Annual Headline and Core Inflation Dynamics Since January 2016



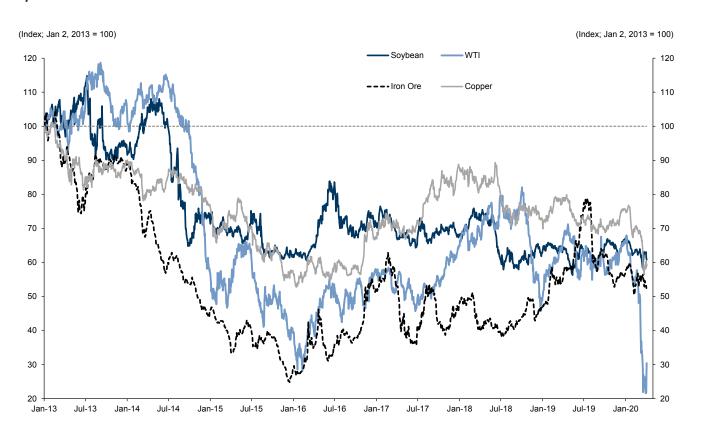
Source: Haver Analytics, Goldman Sachs Global Investment Research

LatAm Financial Markets Outlook



Source: Goldman Sachs Global Investment Research

Key Commodities Prices



Source: Goldman Sachs Global Investment Research

Latin America Swap Rates

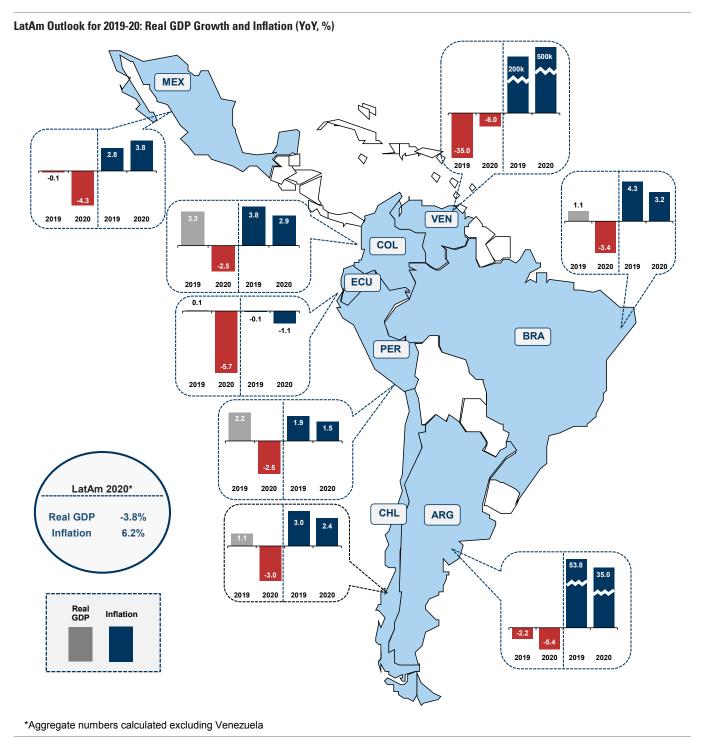
						Change Since (bps)	
		End-2017	End-2018	End-2019	Current (04/03/2020)	End-2018	End-2019
	Brazil						
	2y	8.06	7.36	5.28	4.47	-289	-81
	10y	10.78	9.57	7.01	8.60	-97	159
	Chile						
	2y	2.84	3.29	1.75	0.94	-235	-81
	10y	4.24	4.06	2.93	2.82	-124	-11
	Colombia						
Swap Rates (%)	2y	4.46	4.62	4.43	3.71	-91	-72
	10y	6.10	6.11	5.53	5.86	-25	34
	Mexico						
	2y	8.02	8.62	6.67	5.65	-298	-103
	10y	7.98	8.84	6.81	7.13	-172	32
	United States						
	2y	2.07	2.66	1.70	0.47	-219	-123
	10y	2.42	2.74	1.90	0.65	-209	-124

Source: Goldman Sachs Global Investment Research

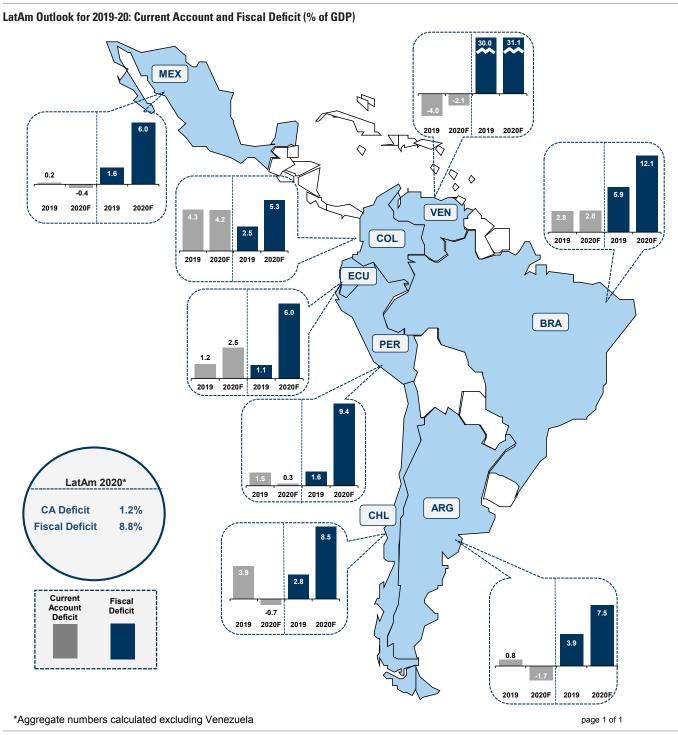
Latin America Forecasts

Policy Rates (End of Period)							Implied Change (bp; %)			
		Current	2Q2020	3Q2020	4Q2020	1Q2021	2Q2020	3Q2020	4Q2020	1Q2021
	Brazil	3.75	3.00	3.00	3.00	3.00	-75	-75	-75	-75
Policy Rate	Chile	0.50	0.50	0.50	0.50	1.00	0	0	0	50
(%)	Colombia	3.75	3.00	3.00	3.00	3.50	-75	-75	-75	-25
	Mexico	6.50	5.50	5.25	5.00	5.00	-100	-125	-150	-150
	Peru	1.25	0.75	0.75	0.75	1.25	-50	-50	-50	0
	Brazil	5.35	4.90	4.60	4.60	4.60	-8.4%	-14.0%	-14.0%	-14.0%
	Chile	866.1	880.0	840.0	820.0	800.0	1.6%	-3.0%	-5.3%	-7.6%
FX (Local / USD)	Colombia	4065.5	4200	4000	3900	3800	3.3%	-1.6%	-4.1%	-6.5%
	Mexico	24.98	22.00	21.00	20.00	19.59	-11.9%	-15.9%	-19.9%	-21.6%
	Peru	3.45	3.60	3.50	3.48	3.45	4.3%	1.4%	0.7%	-0.1%

Source: Goldman Sachs Global Investment Research



Source: Goldman Sachs Global Investment Research



Source: Goldman Sachs Global Investment Research

Calendar of Economic and Political Events

Date	Forthcoming Events	Comment
Brazil		
6-May	COPOM Meeting	We expect the Copom to cut the policy rate by another 50bp to 3.25%.
Chile		
26-Apr	Constitutional Referendum	Chileans will vote on two questions. First, on whether they want a new constitution. Second, on whether the new constitution should be drafted by either a "Constitutional Convention" (composed of members elected exclusively for the Convention) or a "Mixed Constitutional Convention" (composed of 50% newly elected members and 50% currently sitting members of Congress).
6-May	MPC Meeting	We expect BCCh to keep the policy rate unchanged at the 0.50% effective lower bound through 2020.
Colombia		
30-Apr	MPC Meeting	We expect Banrep to cut the policy rate by another 50bp to 3.25%.
Mexico		
14-May	MPC Meeting	We expect Banxico to deliver another 50bp cut to 6.00% in May.
Peru		
16-Apr	MPC meeting	We expect the BCRP to ease policy by a further 50bp to a terminal rate of 0.75%.

Source: Goldman Sachs Global Investment Research

Disclosure Appendix

Reg AC

We, Alberto Ramos, Paulo Mateus, Tiago Severo and Gabriel Fritsch, hereby certify that all of the views expressed in this report accurately reflect our personal views, which have not been influenced by considerations of the firm's business or client relationships.

Unless otherwise stated, the individuals listed on the cover page of this report are analysts in Goldman Sachs' Global Investment Research division.

Disclosures

Regulatory disclosures

Disclosures required by United States laws and regulations

See company-specific regulatory disclosures above for any of the following disclosures required as to companies referred to in this report: manager or co-manager in a pending transaction; 1% or other ownership; compensation for certain services; types of client relationships; managed/co-managed public offerings in prior periods; directorships; for equity securities, market making and/or specialist role. Goldman Sachs trades or may trade as a principal in debt securities (or in related derivatives) of issuers discussed in this report.

The following are additional required disclosures: **Ownership and material conflicts of interest:** Goldman Sachs policy prohibits its analysts, professionals reporting to analysts and members of their households from owning securities of any company in the analyst's area of coverage. **Analyst compensation:** Analysts are paid in part based on the profitability of Goldman Sachs, which includes investment banking revenues. **Analyst as officer or director:** Goldman Sachs policy generally prohibits its analysts, persons reporting to analysts or members of their households from serving as an officer, director or advisor of any company in the analyst's area of coverage. **Non-U.S. Analysts:** Non-U.S. analysts may not be associated persons of Goldman Sachs & Co. LLC and therefore may not be subject to FINRA Rule 2241 or FINRA Rule 2242 restrictions on communications with subject company, public appearances and trading securities held by the analysts.

Additional disclosures required under the laws and regulations of jurisdictions other than the United States

The following disclosures are those required by the jurisdiction indicated, except to the extent already made above pursuant to United States laws and regulations. Australia: Goldman Sachs Australia Pty Ltd and its affiliates are not authorised deposit-taking institutions (as that term is defined in the Banking Act 1959 (Cth)) in Australia and do not provide banking services, nor carry on a banking business, in Australia. This research, and any access to it, is intended only for "wholesale clients" within the meaning of the Australian Corporations Act, unless otherwise agreed by Goldman Sachs. In producing research reports, members of the Global Investment Research Division of Goldman Sachs Australia may attend site visits and other meetings hosted by the companies and other entities which are the subject of its research reports. In some instances the costs of such site visits or meetings may be met in part or in whole by the issuers concerned if Goldman Sachs Australia considers it is appropriate and reasonable in the specific circumstances relating to the site visit or meeting. To the extent that the contents of this document contains any financial product advice, it is general advice only and has been prepared by Goldman Sachs without taking into account a client's objectives, financial situation or needs. A client should, before acting on any such advice, consider the appropriateness of the advice having regard to the client's own objectives, financial situation and needs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests and a copy of Goldman Sachs' Australian Sell-Side Research Independence Policy Statement are available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. Brazil: Disclosure information in relation to CVM Instruction 598 is available at https://www.gs.com/worldwide/brazil/area/gir/index.html. Where applicable, the Brazil-registered analyst primarily responsible for the content of this research report, as defined in Article 20 of CVM Instruction 598, is the first author named at the beginning of this report, unless indicated otherwise at the end of the text. Canada: Goldman Sachs Canada Inc. is an affiliate of The Goldman Sachs Group Inc. and therefore is included in the company specific disclosures relating to Goldman Sachs (as defined above). Goldman Sachs Canada Inc. has approved of, and agreed to take responsibility for, this research report in Canada if and to the extent that Goldman Sachs Canada Inc. disseminates this research report to its clients. Hong Kong: Further information on the securities of covered companies referred to in this research may be obtained on request from Goldman Sachs (Asia) L.L.C. India: Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (India) Securities Private Limited, Research Analyst - SEBI Registration Number INH000001493, 951-A, Rational House, Appasaheb Marathe Marg, Prabhadevi, Mumbai 400 025, India, Corporate Identity Number U74140MH2006FTC160634, Phone +91 22 6616 9000, Fax +91 22 6616 9001. Goldman Sachs may beneficially own 1% or more of the securities (as such term is defined in clause 2 (h) the Indian Securities Contracts (Regulation) Act, 1956) of the subject company or companies referred to in this research report. Japan: See below. Korea: This research, and any access to it, is intended only for "professional investors" within the meaning of the Financial Services and Capital Markets Act, unless otherwise agreed by Goldman Sachs. Further information on the subject company or companies referred to in this research may be obtained from Goldman Sachs (Asia) L.L.C., Seoul Branch. New Zealand: Goldman Sachs New Zealand Limited and its affiliates are neither "registered banks" nor "deposit takers" (as defined in the Reserve Bank of New Zealand Act 1989) in New Zealand. This research, and any access to it, is intended for "wholesale clients" (as defined in the Financial Advisers Act 2008) unless otherwise agreed by Goldman Sachs. A copy of certain Goldman Sachs Australia and New Zealand disclosure of interests is available at: https://www.goldmansachs.com/disclosures/australia-new-zealand/index.html. Russia: Research reports distributed in the Russian Federation are not advertising as defined in the Russian legislation, but are information and analysis not having product promotion as their main purpose and do not provide appraisal within the meaning of the Russian legislation on appraisal activity. Research reports do not constitute a personalized investment recommendation as defined in Russian laws and regulations, are not addressed to a specific client, and are prepared without analyzing the financial circumstances, investment profiles or risk profiles of clients. Goldman Sachs assumes no responsibility for any investment decisions that may be taken by a client or any other person based on this research report. Singapore: Further information on the covered companies referred to in this research may be obtained from Goldman Sachs (Singapore) Pte. (Company Number: 198602165W). Taiwan: This material is for reference only and must not be reprinted without permission. Investors should carefully consider their own investment risk. Investment results are the responsibility of the individual investor. United Kingdom: Persons who would be categorized as retail clients in the United Kingdom, as such term is defined in the rules of the Financial Conduct Authority, should read this research in conjunction with prior Goldman Sachs research on the covered companies referred to herein and should refer to the risk warnings that have been sent to them by Goldman Sachs International. A copy of these risks warnings, and a glossary of certain financial terms used in this report, are available from Goldman Sachs International on request.

European Union: Disclosure information in relation to Article 6 (2) of the European Commission Delegated Regulation (EU) (2016/958) supplementing Regulation (EU) No 596/2014 of the European Parliament and of the Council with regard to regulatory technical standards for the technical arrangements for objective presentation of investment recommendations or other information recommending or suggesting an investment strategy and for disclosure of particular interests or indications of conflicts of interest is available at https://www.gs.com/disclosures/europeanpolicy.html which states the European Policy for Managing Conflicts of Interest in Connection with Investment Research.

Japan: Goldman Sachs Japan Co., Ltd. is a Financial Instrument Dealer registered with the Kanto Financial Bureau under registration number Kinsho 69, and a member of Japan Securities Dealers Association, Financial Futures Association of Japan and Type II Financial Instruments Firms Association. Sales and purchase of equities are subject to commission pre-determined with clients plus consumption tax. See company-specific disclosures as to

any applicable disclosures required by Japanese stock exchanges, the Japanese Securities Dealers Association or the Japanese Securities Finance Company.

Global product; distributing entities

The Global Investment Research Division of Goldman Sachs produces and distributes research products for clients of Goldman Sachs on a global basis. Analysts based in Goldman Sachs offices around the world produce research on industries and companies, and research on macroeconomics, currencies, commodities and portfolio strategy. This research is disseminated in Australia by Goldman Sachs Australia Pty Ltd (ABN 21 006 797 897); in Brazil by Goldman Sachs Brasil: 0800 727 5764 and / or ouvidoriagoldmansachs@gs.com. Available Weekdays (except holidays), from 9am to 6pm. Ouvidoria Goldman Sachs Brasil: 0800 727 5764 e/ou ouvidoriagoldmansachs@gs.com. Horário de funcionamento: segunda-feira à sexta-feira (exceto feriados), das 9h às 18h; in Canada by either Goldman Sachs Canada Inc. or Goldman Sachs & Co. LLC; in Hong Kong by Goldman Sachs (Asia) L.L.C.; in India by Goldman Sachs (India) Securities Private Ltd.; in Japan by Goldman Sachs Japan Co., Ltd.; in the Republic of Korea by Goldman Sachs (Asia) L.L.C., Seoul Branch; in New Zealand by Goldman Sachs New Zealand Limited; in Russia by OOO Goldman Sachs; in Singapore by Goldman Sachs (Singapore) Pte. (Company Number: 198602165W); and in the United States of America by Goldman Sachs & Co. LLC. Goldman Sachs International has approved this research in connection with its distribution in the United Kingdom and European Union.

European Union: Goldman Sachs International authorised by the Prudential Regulation Authority and regulated by the Financial Conduct Authority and the Prudential Regulation Authority, has approved this research in connection with its distribution in the European Union and United Kingdom.

General disclosures

This research is for our clients only. Other than disclosures relating to Goldman Sachs, this research is based on current public information that we consider reliable, but we do not represent it is accurate or complete, and it should not be relied on as such. The information, opinions, estimates and forecasts contained herein are as of the date hereof and are subject to change without prior notification. We seek to update our research as appropriate, but various regulations may prevent us from doing so. Other than certain industry reports published on a periodic basis, the large majority of reports are published at irregular intervals as appropriate in the analyst's judgment.

Goldman Sachs conducts a global full-service, integrated investment banking, investment management, and brokerage business. We have investment banking and other business relationships with a substantial percentage of the companies covered by our Global Investment Research Division. Goldman Sachs & Co. LLC, the United States broker dealer, is a member of SIPC (https://www.sipc.org).

Our salespeople, traders, and other professionals may provide oral or written market commentary or trading strategies to our clients and principal trading desks that reflect opinions that are contrary to the opinions expressed in this research. Our asset management area, principal trading desks and investing businesses may make investment decisions that are inconsistent with the recommendations or views expressed in this research.

We and our affiliates, officers, directors, and employees, will from time to time have long or short positions in, act as principal in, and buy or sell, the securities or derivatives, if any, referred to in this research, unless otherwise prohibited by regulation or Goldman Sachs policy.

The views attributed to third party presenters at Goldman Sachs arranged conferences, including individuals from other parts of Goldman Sachs, do not necessarily reflect those of Global Investment Research and are not an official view of Goldman Sachs.

Any third party referenced herein, including any salespeople, traders and other professionals or members of their household, may have positions in the products mentioned that are inconsistent with the views expressed by analysts named in this report.

This research is focused on investment themes across markets, industries and sectors. It does not attempt to distinguish between the prospects or performance of, or provide analysis of, individual companies within any industry or sector we describe.

Any trading recommendation in this research relating to an equity or credit security or securities within an industry or sector is reflective of the investment theme being discussed and is not a recommendation of any such security in isolation.

This research is not an offer to sell or the solicitation of an offer to buy any security in any jurisdiction where such an offer or solicitation would be illegal. It does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of individual clients. Clients should consider whether any advice or recommendation in this research is suitable for their particular circumstances and, if appropriate, seek professional advice, including tax advice. The price and value of investments referred to in this research and the income from them may fluctuate. Past performance is not a guide to future performance, future returns are not guaranteed, and a loss of original capital may occur. Fluctuations in exchange rates could have adverse effects on the value or price of, or income derived from, certain investments.

Certain transactions, including those involving futures, options, and other derivatives, give rise to substantial risk and are not suitable for all investors. Investors should review current options and futures disclosure documents which are available from Goldman Sachs sales representatives or at https://www.theocc.com/about/publications/character-risks.jsp and

https://www.fiadocumentation.org/fia/regulatory-disclosures_1/fia-uniform-futures-and-options-on-futures-risk-disclosures-booklet-pdf-version-2018.

Transaction costs may be significant in option strategies calling for multiple purchase and sales of options such as spreads. Supporting documentation will be supplied upon request.

Differing Levels of Service provided by Global Investment Research: The level and types of services provided to you by the Global Investment Research division of GS may vary as compared to that provided to internal and other external clients of GS, depending on various factors including your individual preferences as to the frequency and manner of receiving communication, your risk profile and investment focus and perspective (e.g., marketwide, sector specific, long term, short term), the size and scope of your overall client relationship with GS, and legal and regulatory constraints. As an example, certain clients may request to receive notifications when research on specific securities is published, and certain clients may request that specific data underlying analysts' fundamental analysis available on our internal client websites be delivered to them electronically through data feeds or otherwise. No change to an analyst's fundamental research views (e.g., ratings, price targets, or material changes to earnings estimates for equity securities), will be communicated to any client prior to inclusion of such information in a research report broadly disseminated through electronic publication to our internal client websites or through other means, as necessary, to all clients who are entitled to receive such reports.

All research reports are disseminated and available to all clients simultaneously through electronic publication to our internal client websites. Not all research content is redistributed to our clients or available to third-party aggregators, nor is Goldman Sachs responsible for the redistribution of our research by third party aggregators. For research, models or other data related to one or more securities, markets or asset classes (including related services) that may be available to you, please contact your GS representative or go to https://research.gs.com.

Disclosure information is also available at https://www.gs.com/research/hedge.html or from Research Compliance, 200 West Street, New York, NY 10282.

© 2020 Goldman Sachs.

No part of this material may be (i) copied, photocopied or duplicated in any form by any means or (ii) redistributed without the prior written

consent of The Goldman Sachs Group, Inc.