The Day After:

Latin America's response to key energy issues derived from COVID-19

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1. Introduction: The key energy issues for Latin America – Oil & Gas Focus

By now, the "dual crisis" that affected the oil industry globally in March 2020 is a well-known tale. The short version of what has been extensively reported and analyzed is a collapse in the price of oil when Saudi Arabia decided to increase production after failing to reach an agreement with Russia for a proposed production cut. Then, a collapse in demand when the World Health Organization (WHO) declared COVID-19 a pandemic and countries imposed expensive lockdowns and quarantines and consumption fell off a cliff. Global transportation was halted. Producers struggled to find storage for the rapidly growing inventories, resulting in a short but symbolic negative price of oil for future contracts.

The collapse of oil demand and prices impacts Latin America differently. According to Francisco Monaldi "The most vulnerable countries are not necessarily the largest producers, but the highly oil dependent. In other words: countries that are net oil exporters and where these revenues represent a large share of total exports, GDP and fiscal proceeds. In order of oil dependency, these countries are Venezuela, which produced close to 750 thousand barrels per day (bpd) in 2019; Ecuador (500 thousand bpd); and Colombia (800 thousand bpd)." (Monaldi 2020)

Brazil and Mexico, the region's largest producers are less exposed thanks to the diversification of their economies. In Mexico, oil contribution to government revenues has become less relevant as prices declined and Pemex posted growing losses. On the contrary, under President Andres Manuel Lopez Obrador, Pemex has become the recipient of massive government support[1]. Brazil, despite its massive oil production from the Pre-Salt, is still a net oil importer. The country's exposure to volatile commodities is mostly in mining and agriculture activities. Finally, Guyana, which made international headlines with its significant oil discoveries, is only starting production. Investments to ramp up production are not expected to decline in the short term.

It is not the objective of this document to provide a detailed analysis of Latin America's energy sector in a post-pandemic world. Rather, the goal is to focus on five specific topics and analyze them from the perspective of foreign investors interested in expected policy outcomes and what these areas may look like the "day after."

[1] https://www.bnnbloomberg.ca/amlo-s-big-pemex-rescue-plan-hobbled-by-record-23-billion-loss-1.1429603

The five topics are:

- ✓ The future of Pemex
- ✓ Brazil's oil sector and Petrobras
- ✓ Argentina's Vaca Muerta
- ✓ Venezuela's oil future
- ✓ Colombia's pro-investment efforts for oil & gas development

The analysis is based on policy and political trends we consider likely to impact these countries' oil industries as they emerge from the COVID-19 health crisis. The document begins with a brief analysis of how the region arrived at the pandemic crisis and how countries responded. Followed by a description of key emerging trends that are likely to influence policy decisions in Latin America. Finally, the document provides a brief analysis of each of the five selected topics and the "day after."

2. The Day Before: Latin America prior to the pandemic

Latin America emerged quickly from the 2008 recession and experienced high rates of growth until 2014 when commodity prices collapsed as shown in Figure 1. The downturn in commodity prices precipitated a constant deterioration of their economies. By the time the pandemic struck the region, several Latin American countries were ruled by new and/or relatively weak leaders, many overseeing depressed economies. Latin Americans expressed their frustration with a series of street protests, devoid of ideological preferences, focusing on their discontent with corruption, criminality, and deteriorating standard of living. The gains made during the commodity boom were rapidly reversing.

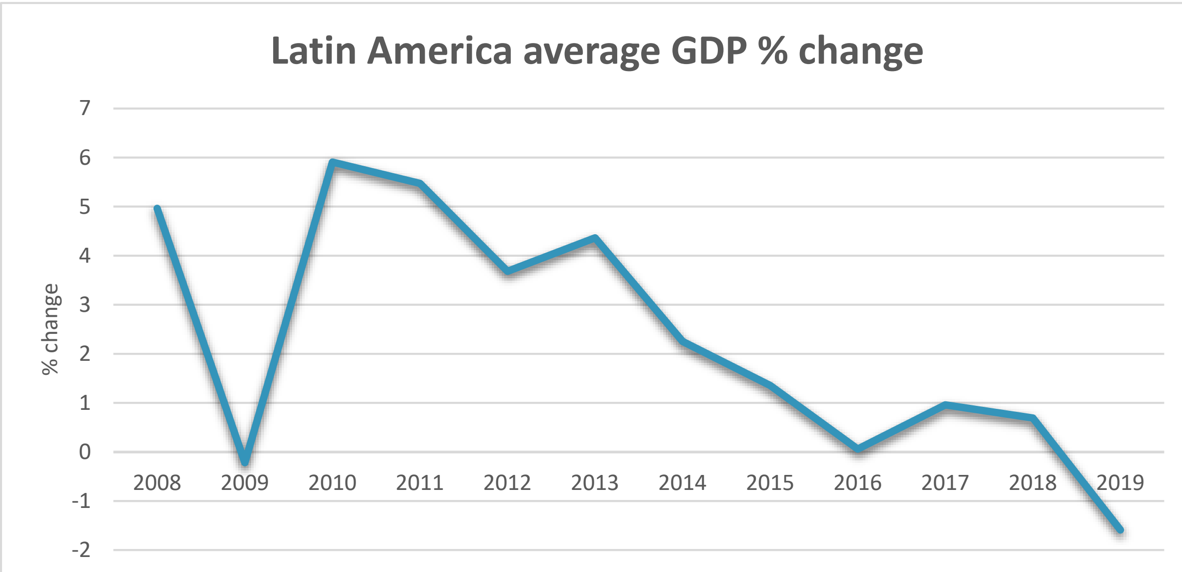


Figure 1

The region entered the pandemic crisis without a clear strategy for integration, and no regional leadership. That was particularly evident when regional powers such as Brazil or Mexico failed to address the Venezuelan collapse. Finally, Latin America –usually not a top priority for US foreign policy – became even less relevant as the inward-looking administration of President Trump took power. Not interested in grandiose regional economic development plans or multilateral initiatives, most of the engagement between Latin American countries and the Trump administration became transactional, focusing on reducing the flow of illegal immigration and/or drugs, or public relations efforts against Venezuela and Cuba. There is not a US-Latin American strategy, nor do the regional powers – Mexico or Brazil – have one to offer. If there is any engagement, it is at the bilateral level among the leaders of the US and countries of the region, such as the Trump-AMLO[2] and Trump-Bolsonaro relationships.

3. COVID-19: Diverse Responses

The response to the crisis has varied depending on a country's leadership and economic capabilities. In some countries – the "skeptical group" – political leaders doubted the need for costly quarantines and

[2] Andres Manuel Lopez Obrador, president of Mexico, is popularly known as AMLO

lockdowns, and minimized the risks caused by the virus; they instead focused on keeping the economy going. Brazil Mexico, Venezuela, and Nicaragua are part of that group. Not surprisingly, at the time of writing, Brazil is becoming the focus of attention for the spread of the virus. Brazil's COVID-19 crisis is also a South American one since the virus reached the Amazon, spreading into neighboring countries.

In Brazil, most of the efforts to contain the spread of the virus have fallen to state governors, while President Bolsonaro attacked their efforts, preferring instead to conduct political rallies and mocking his opponents. As the virus continues to spread, the president's popularity has been negatively impacted with the population questioning the wisdom of his decisions, even wondering if he would be able to finish his mandate.[3]

Similarly, in Mexico, the death rate is growing fast albeit at lower numbers than in Brazil. In the early days of the pandemic in Mexico, AMLO dismissed the risks too. Since then some efforts have been taken to reduce social transmission of the virus. The administration has offered some basic transfers to low-income families impacted by lockdowns. But overall, the president seems more concerned with the impact of closing the economy and – despite his leftist credentials - preferring to be fiscally prudent.

The rest of Latin America could be considered part of the "concerned group." Countries in this group adopted similar policies as to those in Europe or the US focusing on quarantines and lockdowns to reduce the spread of the virus. The main challenge for these countries has been their ability to offer financial support to families forced to stay home. Chile, Peru, and Colombia acted swiftly, largely in part due to their more positive fiscal situation or access to credit before the pandemic.[4]

Countries' economic response to the pandemic consisted largely of direct transfers to low-income families, easier access and expansion of unemployment programs, employment subsidies, temporary tax

[3] https://www.bbc.com/mundo/noticias-america-latina-52734668?at_campaign=64&at_custom2=facebook_page&at_custom1=%5Bpost+type%5D&at_custom4=DA23A406-9A94-11EA-8EAA-DC3B3A982C1E&at_medium=custom7&at_custom3=BBC+News+Mundo&fbclid=IwAR3SMd4I3Co42CusIRIYWkxFBKJu2hXdZR4SwK8h-pMYDs4Qxv83xQi7nnE

[4] https://blogs.imf.org/2020/04/16/economic-policy-in-latin-america-and-the-caribbean-in-the-time-of-covid-19/

breaks and deferrals, credit guarantees, and in some cases freezing of service payments. Countries with better credit quality and macroeconomic discipline such as Chile, Peru and Colombia were more aggressive in their response to the pandemic[5]. In many cases, the region's central banks have also pursued strong monetary easing policies.

However, with 50% or more of the working population in the informal sector, and many living in conditions of poverty, imposing long lockdowns have proven to be difficult. In addition, implementation policies have been impacted by common problems such as administrative red-tape or even corruption. As governments extend their lockdowns, increasing signs of social unrest driven by economic desperation are likely to challenge political order.

The economic impact of all the measures aimed at "flattening the curve" has been unprecedented. Countries are reaching depression-era levels of unemployment and economic decline. The IMF projects the global economy to contract sharply by –3 percent in 2020, much worse than during the 2008–09 financial crisis. (International Monetary Fund 2020). The short-term outlook is highly uncertain, and forecasts tend to look grimmer as the lockdowns are extended on time. The IMF proposes three scenarios and a baseline as shown in Figure 2. In the baseline scenario, the IMF assumes the pandemic would fade by the second half of 2020 and containment efforts will gradually be unwound. In the base case scenario, the IMF expects the world economy to grow around 5.8% in 2021 thanks to the normalization of activities and implementation of policies supporting growth. The other scenarios include: i) a new outbreak in 2021,

[5] https://blogs.imf.org/2020/04/16/economic-policy-in-latin-america-and-the-caribbean-in-the-time-of-covid-19/

ii) a longer outbreak in 2020 lasting until H2 2020, and iii) a new outbreak in 2021, plus the current outbreak lasting longer in H2 2020.

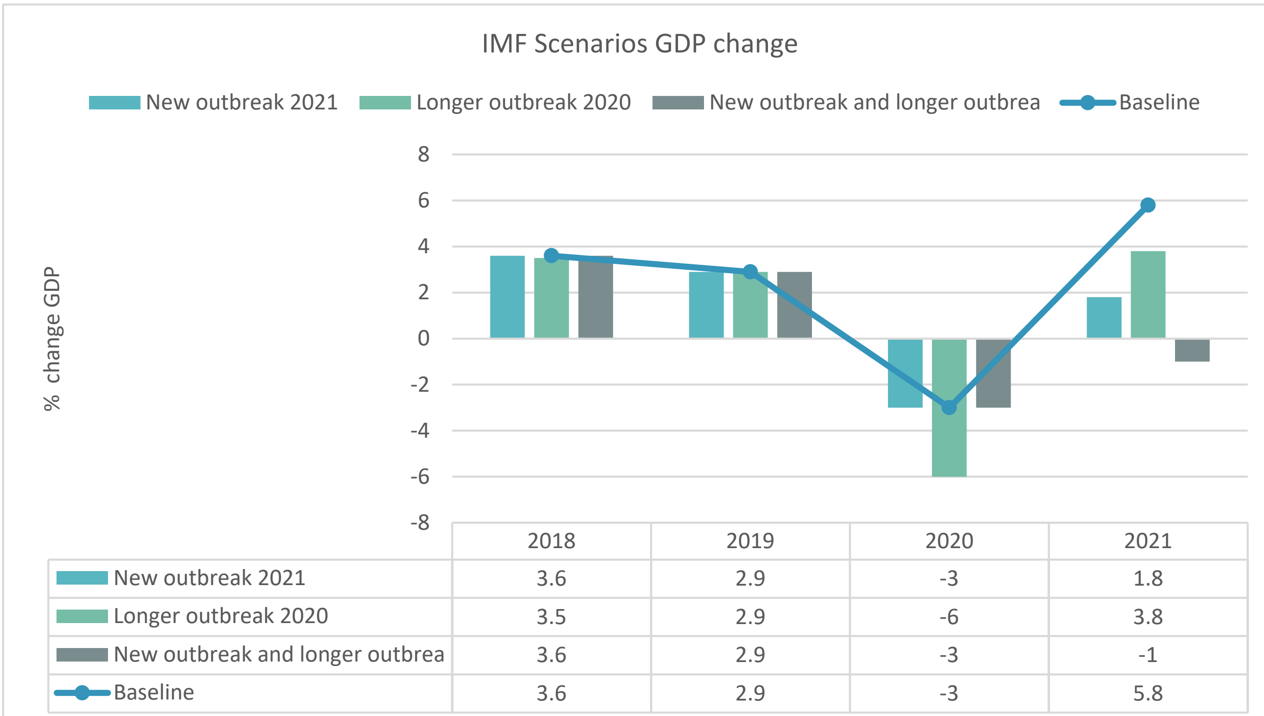


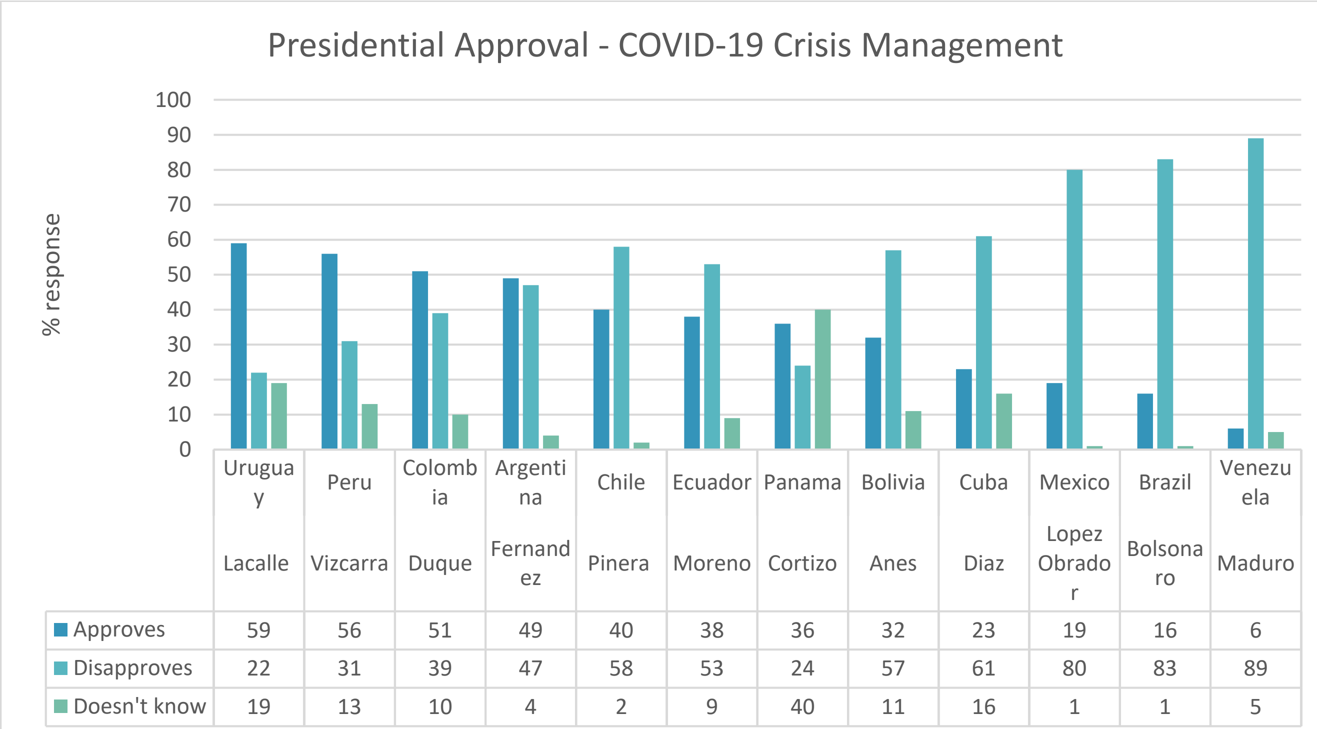
Figure 2

Table 1 shows the IMF growth rates for the base case scenario for selected Latin American countries. Recognizing that any forecast is confronted with a significant level of uncertainty since at the time of writing there is no clear indication of when the economies will resume their normal activities, the IMF provides a rather optimistic view in their base case scenario. Following a deep recession in 2020, the world, and most of Latin America, would experience a recovery by 2021. Venezuela is a clear outlier for which its economic troubles are not just due to the COVID-19 pandemic or the collapse of oil prices. Venezuela's collapse has been building for months if not years and is mostly structural driven by years of government mismanagement.

Table 1

GDP by country	2019	2020	2021
Mexico	-0.1	-6.6	3
Brazil	1.1	-5.3	2.9
Argentina	-2.2	-5.7	2.9
Colombia	3.3	-2.4	3.7
Chile	1.1	-4.5	5.2
Peru	2.2	-4.5	5.2
Venezuela	-35	-15	-5
Ecuador	0.1	-6.3	3.9
Paraguay	0.2	-1	4
Bolivia	2.8	-2.9	2.9
Uruguay	0.2	-3	5
Central America	2.4	-3	4.1
Caribbean	3.3	-2.8	4

In countries where leaders responded swiftly to the pandemic, the population rewarded them, while in countries where leaders dismissed the risk, populations have responded with low approval ratings. However, as quarantines extend and limitations of government ability to provide enough financial support becomes more evident, fear over the virus will be replaced by fear over the economy. The population could eventually turn against the same rulers who they praised before.



	Uruguay Lacalle	Peru Vizcarra	Colombia Duque	Argentina Fernandez	Chile Pinera	Ecuador Moreno	Panama Cortizo	Bolivia Anes	Cuba Diaz	Mexico Lopez Obrador	Brazil Bolsonaro	Venezuela Maduro
Approves	59	56	51	49	40	38	36	32	23	19	16	6
Disapproves	22	31	39	47	58	53	24	57	61	80	83	89
Doesn't know	19	13	10	4	2	9	40	11	16	1	1	5

Figure 3

4. What kind of future?

As the health crisis from COVID-19 and its economic impact drags on, there is no shortage of post-Covid scenarios, often with the over-used expression “the new normal” referring to how society would emerge and adapt to the new realities of living with the virus. Without pretending to forecast the future, we suggest below some basic trends that are likely to impact short to medium-term outlook.

4.1. Vaccine availability

The race to reach an effective vaccine that can be mass-produced relatively soon is fierce among leading laboratories, pharmaceutical companies, and university research centers. There are more than 100 vaccine candidates in development worldwide, from which only a handful will reach human trials.

Developing the vaccine is just the first step. The next challenge would be to secure its production and mass distribution. If past is any indication, nations leading the race for the vaccine would be tempted to hoard them and prioritize for their own citizens, delaying the reach of the vaccine to low-income nations. The WHO committed the international community to raise $8bn to accelerate a coronavirus vaccine that would be distributed equitably worldwide. Countries across Europe, Asia, Africa, Latin America, and the Middle East announced their participation. However, the United States and China the two global biggest pharmaceutical forces refused to participate[6]. The race for the vaccine has become a contentious issue where – in addition to financial gains for the companies involved – geopolitical prestige can be expected from the nation claiming intellectual property and distribution rights.

The more contentious the process to develop a vaccine becomes, the more difficult the process of global immunization, which is a prerequisite to a return to normal. Regional cooperation for finding a vaccine does not seem high on government agendas either. As such, Latin America’s future is in the hands of external political forces and their willingness to cooperate in the deployment of the vaccine.

4.2 Unprecedented level of debt

Most governments have responded to the social impacts of containing the virus with unprecedented levels of spending. Current spending is not intended to boost economic growth, but to secure households’ basic income while they are required to stay home. There are significant expectations that once lockdowns end and most normal economic activities resume, governments would consider additional fiscal expenditures to boost economic growth. The size of the fiscal stimulus and their destination would depend on countries’ ability to further increase debt and political priorities. Eventually, massive fiscal imbalances would have to be addressed as the world emerges from COVID-19 and economies start to recover. In the medium-term, taxes will eventually go up particularly for wealthy individuals and corporations as evolving policy discussions in several countries underscore

As countries in Latin America emerge from the COVID-19 crisis, their fiscal policy options will be severely limited. As the region accumulates unprecedented fiscal deficits, with their flag corporations requiring bailouts, commodity prices depressed, and investments on hold, countries will have difficulty raising revenues while expenditures continue to increase and pressure to reduce fiscal

[6] https://globalnews.ca/news/6868824/research-coronavirus-vaccine/

deficits mount. Expenditures will have to address growing social inequalities, poverty, and massive levels of unemployment. Help from International Financial Institutions and foreign donors may not be as generous as donor countries struggle with their own massive fiscal imbalances. Short of a rapid economic recovery supported by commodity price increases, one can expect Latin America's debt to last years, and drag down economic growth. Inflation pressures can also be expected.

4.3 Reorganization of supply chains

Without entering the debate of defining the future of globalization, it is safe to expect that "the world as we know it" is likely to change, particularly as it refers to supply chains.

Industrialization resulted in what is described as a series of unbundling. In the pre-globalized world, every village had to produce what it consumed due to high transportation costs. Railroads and steamships made it possible to separate production and consumption, resulting in the first unbundling. The development of information technology resulted in the second unbundling by allowing a separation of management and production process from one location (the factory) and instead allocating different production processes according to cost efficiencies. The second unbundling gave emergence to global supply chains. The second unbundling boosted economic growth in several emerging economies.[7] "Offshoring and labor-intensive stages of manufacturing and heightened international mobility of technology produced spectacular growth in emerging markets whose economic reforms fostered and were fostered by rapid industrialization." (World Trade Organization, Fund Global Institute 2013)

The post-COVID-19 world could be much less globalized[8]. First, the pandemic showed the vulnerabilities of many industrialized nations' supply chains in their medical and health care equipment. Governments would be expected to develop strategies to minimize those vulnerabilities. Manufacturing activities will be less supportive of "just-in-time" and "low cost" production process, establishing operations in countries offering lower costs. Instead they are likely to prefer building more resilience in their supply chains by localizing production

[7] Rene Roger Tissot draft report to UNIDO and the Sultanate of Oman: "Local Content Policies for Promoting Industrialization in Oman. 2040 Industrialization for Wellbeing"
[8] https://www.theglobeandmail.com/opinion/article-will-covid-19-kill-globalization/

process closer to their home countries and main markets. Even long before the pandemic, there has been growing social support for "buying local" and activities to defend their local businesses and jobs These initiatives will capture the interest of politicians favoring protectionist policies. Manufacturers will use in their marketing campaigns "made locally" as a differentiator.

4.4 An increasing role for China?

In recent years, Latin America became increasingly dependent on foreign direct investments in extractives, accounting for 20% of the total FDI announcements in 2018, despite declining commodity prices.

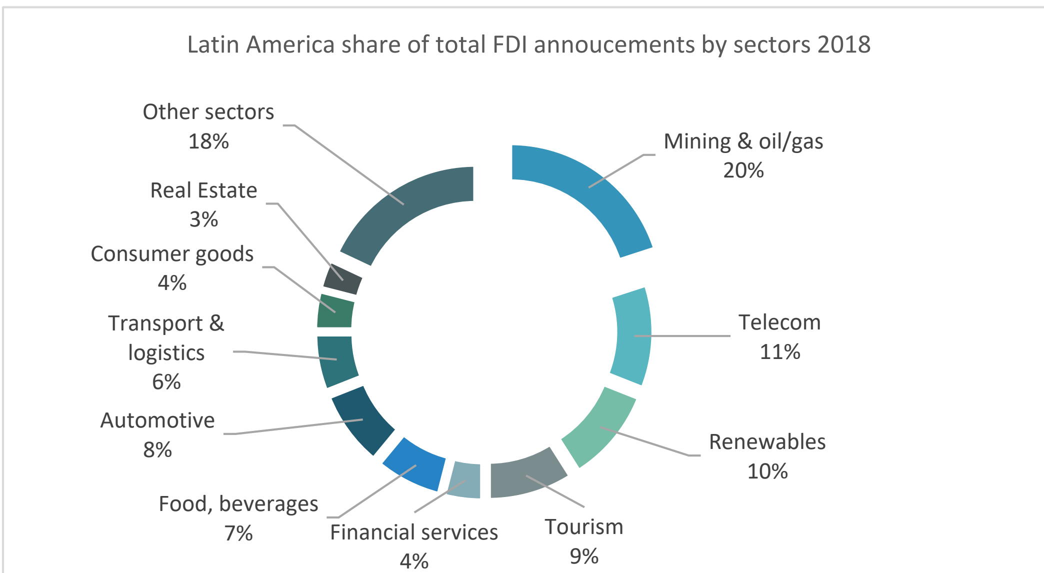


Figure 4

The US and EU historically led FDI in the region investing in diverse sectors while China focused on natural resources. However, in recent years Chinese investments in Latin America have grown significantly and diversified into other activities such as agribusiness, power generation, utilities and infrastructure. (Economic Commission Latin America and Caribbean ECLAC 2019)

As China emerges earlier from the COVID-19 crisis and its economy recovers, it could also benefit from a first-mover advantage capturing investment opportunities in Latin America, particularly in infrastructure or through acquisition of financially vulnerable corporations, while the US and EU would still be coping with their own health crisis. This could result in an increasing geopolitical influence of China in the region. A trend that was well underway before the COVID-19 crisis with a growing number of Latin American countries signing the Belt and Road Initiative (BRI). BRI refers to an ambitious vision connecting Asia with Africa and Europe and more recently Latin America via land and maritime networks along six corridors with the aim of improving regional integration, increasing trade and stimulating economic growth. The name was coined in 2013 by China's President Xi Jinping, who drew inspiration from the concept of the Silk Road established during the Han Dynasty 2,000 years ago – an ancient network of trade routes that connected China to the Mediterranean via Eurasia for centuries. The BRI has also been referred to in the past as 'One Belt One Road'.[9]

Chinese expansion in Latin America could be contested by efforts from western countries that would like to hold China accountable for the COVID-19 crisis. However, those considerations may not have as much sway in a region desperate for investments, if for example the US and the EU do not match any China containment effort with their own massive financial support and investments in the region.

4.5 Energy Transition

There is a growing clamor by international organizations and lenders, particularly in Europe, to use the current COVID-19 crisis to redouble efforts toward an energy transition that would help the world reduce C02 emissions.[10] Some experts have compared the current COVID-19 crisis to climate change.

In a recent paper (Rolando Fuentes 2020) provides a comparison between the two problems from the perspective of micro-economic theory. Climate change is often presented as the ultimate existential problem for humanity since what is at stake is the survival of the planet. On the other hand, COVID-19 is an immediate problem which would impact only a relatively small percentage of the population and would eventually be solved as vaccines and treatments are developed and humanity reaches herd immunity.

[9] https://www.ebrd.com/what-we-do/belt-and-road/overview.html
[10] https://www.weforum.org/agenda/2020/05/climate-action-top-global-agenda-covid-19/

The difference on time and impact from climate change mitigation policies vis-á-vis COVID-19 make these two problems fundamentally different from a political perspective. As Fuentes and his coauthors underscore in their paper, "Climate change is uncertain in its timing and extent. The climate threat is intangible and diffuse, and it can be obscured by natural variability" (Rolando Fuentes 2020). The urgency and desire to address climate change would be subject to the level of economic pain and political leverage of those under duress. Countries for which the short-term cost of action exceeds the long-term benefits of reducing C02 would be less enthusiastic at accepting costly policies aimed at phasing out the use of oil, gas or coal. On the other hand, the speed at which the virus spreads across communities, with mounting deaths and collapsing health care systems results in a deep emotional reaction by the population. Society tends to react with much more urgency to present deaths even if in absolute terms the numbers are lower and the impact more temporary than one expected by the hypothetical and distant collapse of the planet. Added to this confluence of emotions is the constant reminder of the cause-effect of a deadly virus as the media displays the official statistics of deaths caused by COVID-19.

Fuentes and his coauthors also point to the similarities both problems present, highlighting the importance of global solutions. However, as multilateralism and global governance efforts became under attack in recent years, progress toward a climate change global governance seems to be stalling particularly since the highly touted Paris Accord. What is perhaps harder to understand, and for historians to judge, is the global failure to address COVID-19. Because of its immediacy, global reach and deadliness one would have imagined that world leaders-would have put aside their ideological differences and embraced cooperation in the face of the collective threat. Instead the world has witnessed the rise of populist and nationalistic responses driven by short term political calculations. If the world failed – and continuous to fail- at adopting global solutions for COVID-19, one can wonder about the current outlook for addressing the much more complex issues related to climate change which requires rethinking entire energy systems and economic relations.

In Latin America there are countries, notably those that have long been energy and fossil fuel importers, that may face the toughest choices as the reduced price of oil also diminishes the economic strain of those imports. These are prime candidates for reconsidering their energy choices forward and supporting more aggressive policies reducing their dependency on fossil fuels. Although the path forward for many remains unclear, particularly in the Caribbean and Central America, Chile has set already a path for a recovery that is predicated on the energy transition.[11]

5. Mexico

5.1 Pause and return to the past

Following the economic collapse of 1982 Mexico re-defined its economic model, promoting industrialization through maquila development and increasing trade with the United States. By 1994, Mexico’s economic dependency toward the US was set to significantly increase when it entered into the North American Free Trade Agreement (NAFTA). Mexico benefited from NAFTA, while the US opted for a benign neglect of its Southern border. By 2009, the US accounted for more than 80% of Mexican exports. However, the economic successes of trade liberalization did not reduce economic inequalities. Social pressures resulted in rapid rise of illegal immigration and surge of criminality. With the election of Donald Trump, the US shifted its attention from trade and economic integration, refocused instead on negative aspects of the relationship: illegal immigration and the illicit drug trade.

Mexico’s presidents have traditionally opted for a cordial relationship with their northern neighbor, while also trying to counter its influence in Latin America. However, since NAFTA, Mexico became less of a regional soft power and more a commercial complement of the North America trade alliance. Like Canada, Mexico’s destiny seemed inexorably tied to that of the US. In recent years Mexico tried to reduce that dependency by expanding commercial relationships with Asia through the Pacific Partnership. China’s entry to the World Trade Organization (WTO) and its rapid process of export-oriented industrialization made Mexico’s US centric economic model somehow vulnerable. However, Mexico was expected to continue with its strong alignment with the US, supporting its role as the

[11] https://www.allintheloop.net/media/2762/1589920935_ChileEnergyPolicyDiscussion.pdf

hegemonic power in charge of implementing multilateralism during the second decade of the 21st century.

The election of Andres Manuel Lopez Obrador (AMLO) brought some unexpected changes. At a time when the "pink wave" - referring to the rise of leftist regimes in Latin America at the beginning of the 21st century - was on its way out, Mexico opted for a leftist candidate. But AMLO is not a Mexican version of the fiery Venezuelan leader, and symbol of the populist left in Latin America, Hugo Chavez. AMLO identifies more with the old-fashioned state corporatism that prevailed in Mexico during the 1950's and 1960's. He considers state-owned corporations, and particularly Pemex, an essential part of Mexico's economic future.

Moreover, AMLO does not appear to have regional ambitions, and despite his progressive rhetoric he has made efforts to maintain cordial relations with the US and President Trump: He agreed to a stronger military presence at the northern border while also securing the southern border to reduce the flow of immigrants from Central America trying to reach the US. He also endorsed the USMCA Free Trade agreement with the US and Canada. AMLO's priorities are domestic issues, but despite identifying as a progressive he is not a big spender, considering himself fiscally conservative; his budgets have reflected an extremely austere approach to government.

Prior to the pandemic AMLO enjoyed relatively strong popular support even if the economy was not performing well. A series of efforts to cancel contracts and planned investments in Mexico had called attention to an increasingly confrontational posture of his government towards private investors. There was an increasing uneasiness from investors, particularly in the energy sector.

5.2 A futile effort to revive Pemex?

After years of failed efforts, Mexico passed a comprehensive energy reform in 2014, ending 75 years of nationalistic oil policies that crippled Pemex with unmanageable debt, declining production, and reserves. The reform, it was believed, would give Mexico the opportunity to unlock massive oil reserves in the Gulf of Mexico and allow Pemex the access to capital, technology and know-how needed to boost its long-term prospects. The reform measures, despite being unveiled with global oil prices declining allowed Mexico to attract significant level of interest and investments. In 2018, the impact of the reform was described as follows: "In the oil sector, we have witnessed the signing of more than 100 contracts for E&P, with a total future investment value of more than US$160 Billion.

In mid-2018, the rig count in Mexico began to rise for the first time in years. Pemex is now partnering with private and foreign firms in oil exploration and production and has been allowed to farm out certain blocks entirely to private firms for a share of the profits" (Wood 2018). However, by then AMLO, a fierce opponent of the energy reform, had been elected. He vowed – if not to reverse – at least to do everything possible to stop the energy reform momentum. Since then he has hardened his position "essentially telling investors they should be happy they got the contracts they got, and happy they're not being taken away."[12]

AMLO's oil policy is based on the predominance of Pemex as a tool for economic development. His objective is not so much to increase Mexico's oil production but to secure Pemex oil output by providing additional funding and reducing competition. The company is tasked with developing oil fields it lacks the capability to operate efficiently and investing billions of dollars in new oil refineries which the country arguably does not need.[13.] However, the collapse of oil prices exposed the deep economic vulnerabilities of Pemex and Mexico. Pemex's problems – which were supposed to be fixed through the energy reform have only increased. Pemex finances are severely impacted by its bloated workforce of around 159,000 and the obligations toward 130,444 pensioners. Its unfunded pension liabilities were valued at more than US$77 bn dollars in 2018. Productivity is also a problem with each Pemex worker contributing to the production of only 10 barrels of oil per day.[14]

Although Pemex managed to get some financial respite from the hedging of part of its oil production, it is unlikely those revenues would save the corporation from its financial problems. Pemex's revenues slumped in the fourth quarter 2019, boosting the company's net loss to US$8.8 Billion.[15] Still, President Lopez Obrador seems intent on helping Pemex[16] even if that implies re-allocating a large share of the national budget toward the firm. However, it is unlikely the company would be able

[12] https://foreignpolicy.com/2019/10/04/mexico-amlo-lopez-obrador-energy-reform-rollback-pemex/
[13] https://foreignpolicy.com/2019/10/04/mexico-amlo-lopez-obrador-energy-reform-rollback-pemex/
[14] ExxonMobil daily oil production per worker is above 31 barrels.
[15] https://www.worldoil.com/news/2020/2/27/stagnating-output-hands-pemex-its-biggest-loss-in-two-years
[16] https://www.elfinanciero.com.mx/opinion/enrique-cardenas/pemex-primera-ficha-del-domino

to reform itself, or AMLO reverse his ideological preferences, thus losses should be expected to continue at Pemex. Short of a deep reform that goes further than what was approved in 2014 Mexico is unlikely to reverse the decline of its oil activity.

On the other hand, the lack of vision for a post-pandemic economic recovery could be a missed opportunity. Mexico is one of the few oil-dependent countries that were able to industrialize and diversify its economy. It would be essential that those industrial sectors – which benefitted from their proximity to the US – do not disappear. Supporting large industrial sectors may not be politically attractive for AMLO's political base but letting Mexico's large industrial sectors to decline is a strategic mistake that can set Mexico behind in its quest for economic development.

As North America corporations seek to reduce supply vulnerabilities while maintaining cost efficiencies, Mexico is well-positioned to again serve as the preferred location for manufacturing activities. The success of NAFTA is evidence of that strategy, partially challenged by the emergence of China. However, to achieve that Mexico must improve its environmental and labor practices. COVID-19 offers the opportunity to leave old paradigms behind and position the country as a leading industrial partner and an attractive oil investment destination, where the oil sector is operated by competitive private capital. The depth of the economic needs should not dismiss policy options that until yesterday were considered unimaginable: the privatization of Pemex, the return of oil concessions, and further integration of Mexico's oil infrastructure to the US. But none of this should be expected under the current administration.

6. Brazil

6.1 A tropical Trump and the end of soft power

Brazil enjoyed high rates of growth and an exaggerated level of optimism by the end of the first decade of the 21st Century. Goldman Sachs was forecasting Brazil to become the 5th largest economy in the world. High commodity prices, and a progressive administration implementing policies to lift millions of its citizens -out of poverty, in addition to world class oil discoveries made possible by the technical prowess of its proud National Oil Company (NOC) captured the world's imagination. Brazil was slated to host two major world events: The World Soccer Cup in 2014 and the Summer Olympics in 2016: The opportunity for Brazil to show that it has arrived among the leading nations of the world.

Eventually the dream ended with a hard landing – with a former president impeached and another one jailed, its famous NOC's reputation and finances in shambles because of massive corruption scandals, its political landscape in complete disarray and an entire population fed up with rising criminality and economic stagnation. It was in that environment of public dissatisfaction that a rather obscure Senator captured the imagination of Brazilians with a radical political discourse devoid of any correctness. Forging an alliance with the religious right, the military and market neoliberals, Jair Bolsonaro was elected president without a strong political structure behind him, but able to capture enough popular support from the protest vote - what many also referred to as PT-fatigue.

Bolsonaro vowed to do things differently. He wanted to end Brazil's roles as a regional power and a leader of the South/South. He particularly wanted to end Brazil's support for the "pink wave" and its relationship with Maduro's Venezuela. Instead, Bolsonaro – contradicting years of cordial but cautious relations with the United States – prioritized a strong alliance with the Trump administration. He relished his nickname of "the Trump of the tropics"[17]. Like the US president, he expected a strong economy to carry him to electoral success, and focused on market liberalization reforms, including the sale of the country's crown jewel Petrobras.

The day before the pandemic, Bolsonaro still enjoyed acceptable levels of support, but the population was protesting increasing levels of criminality, economic stagnation, and rising inequality. Many Brazilians also felt embarrassed watching their cherished Amazon rainforest burn, while the central government seemed unconcerned, focusing instead on the economic potential of the rain forest.

6.2 The return of a smaller but nimbler Petrobras?

President Bolsonaro was keen to revive the energy sector after years of disgrace caused by the corruption scandal that crippled Petrobras. Much of the revisions put in place by PT governments that had effectively overturned many facets of an earlier market opening were reversed by Congress. With support from the Bolsonaro government it allowed for a new round of market friendly reforms,

[17] https://www.bbc.com/news/world-latin-america-45746013

encouraging private sector participation in the oil industry, particularly in the smaller onshore and shallow water fields, while Petrobras focused on the vast Pre-Salt field. Indeed, bidding rounds were well received by the industry fetching record bonuses and huge competition from the globe's largest international energy firms. Petrobras was re-building its finances through a set of sales and divestitures. Despite declining oil prices, the mood was of cautious optimism within the industry. Petrobras responded quickly to the COVID-19 crisis by postponing investments, reducing costs, and closing less productive wells.[18]

The day after COVID-19, the main question will be the political future of Jair Bolsonaro[19]. Without a strong economy, massive unemployment and a surge in deaths caused by the virus, the support for the president is faltering fast – even among his political base. However, independently of what political future awaits Brazil, a revival of PT, a return to centrist catch all technocrats or the survival of right-wing populism from Bolsonaro, the country's future will continue to be tied to its commodities. Its competitive iron ore mines are likely to benefit from the normalization of economic activities in China, a major buyer of Brazilian iron. An oil price recovery would also benefit Petrobras. With an average production cost of US$5.60 per barrel, the Brazilian NOC is well-positioned to support a low oil price environment of US$30 per barrel[20] and benefit from even a modest price recovery. The Pre-Salt accounts for approximately 66% of its oil production. Petrobras also benefits from its established commercial relations with China – which fancies the low sulfur content of Brazilian oil, securing a market for its output.[21]

It is unlikely that an unpopular Bolsonaro, even with the support of his most ardent pro-market supporters would be able to privatize Petrobras. Instead, as its finances improve, and the world re-trenches into diverse nationalisms, Brazil may opt to defend its national champions. On the other

[18] https://www.argusmedia.com/en/news/2090979-petrobras-cuts-investment-production-update.
[19] https://www.bbc.com/mundo/noticias-america-latina-52734668
[20] https://www.linkedin.com/pulse/crise-do-petr%25C3%25B3leo-e-os-impactos-brasil-mundo-tabita-loureiro/?trackingId=61wr%2FFFPRA2fo4ZzBF%2BVFQ%3D%3D
[21] https://www.linkedin.com/pulse/crise-do-petr%25C3%25B3leo-e-os-impactos-brasil-mundo-tabita-loureiro/?trackingId=61wr%2FFFPRA2fo4ZzBF%2BVFQ%3D%3D

hand, the outlook for the smaller producers who operate the more expensive shallow and onshore fields, is much more uncertain[22].

Brazil large domestic market and the devaluation of the real could be expected to help local manufacturers as the economy resumes its normal activities. Finally, and despite its lack of novelty and numerous failed attempts in the past, Brazil and Argentina could try again to revive their regional dreams of economic integration through a revised Mercosur. Beyond that, the current crisis should be an opportunity for Brazilians to re-imagine their country. The massive corruption that crippled Brazil's institutions, State-Owned Enterprises and private flag corporations is not sustainable. Government regressive spending must be re-evaluated focusing on a massive effort at upgrading its human capital. However, the speed of Brazil's economic recovery will be strongly influence by the level of damage – in lives and health care infrastructure that is being inflicted currently and in the next few weeks, and the ability of government institutions to address them.

An area where Brazil can take a positive step forward as it emerges from the COVID-19 crisis is in the natural gas sector. Since its early opening in the 1990's the natural gas industry has seen only a modest level of development, mostly due to excessive government influence. Gasifying key segments of the economy while reducing the strain on Petrobras would help leverage investments and economic growth if a competitive market model is adopted.

Given the nature of the market and Petrobras' de facto control, experts agreed that only through a major legislative and regulatory overhaul would the goal of a more competitive gas market be possible. The first steps for the new model were unveiled in 2019 and were being debated in the national and state legislatures when the COVID-19 pandemic hit Brazil. [23] As Nelson Narciso, a former ANP director wrote in April 2020 as part of an Institute of the Americas publication on the impact of COVID-19 on the region's energy sector and what policy efforts are required: "In the oil and gas sector, the government should accelerate implementing the natural gas agenda. The New Natural Gas

[22] https://www.linkedin.com/pulse/brazil-oil-supply-crisis-mark-s-langevin-ph-d-/?trackingId=OegIRoqOVWPJffoduRJUAA%3D%3D
[23] https://www.petroleum-economist.com/articles/politics-economics/south-central-america/2019/brazil-gets-moving-on-gas-competition

Market, a government program aimed at creating an open and competitive gas market, needs to be fully implemented and embraced by the market. It is important that the new Gas Law, currently stuck in Congress, is ratified"[24]

7. Argentina

7.1 Managing (another) debt default

The end of the commodity boom hit Argentina particularly hard. Unable to maintain fiscal spending the leftist regime of Cristina Kirchner lost popularity. Argentines understood the need to put their financial house in order. In Mauricio Macri they elected a technocrat with the aim of correcting the excesses of Cristina Kirchner's administrations. While Macri corrected some of the macro-economic imbalances he failed, as did many before him, to bring the fiscal deficit under control.[25] The Macri government's economic house cleaning carried an inexorably high political cost. Eventually the population grew tired of fiscal tightening, high inflation, and unemployment. The election of Alberto Fernandez was mostly an escape from the pain rather than a path forward.

Argentina entered the COVID-19 crisis with what many analysts called a weak president and an uncertain mandate. President Alberto Fernandez was perceived by at least half of the population as ruling under the shadow of his vice president, Cristina Kirchner. The president was also confronted with the deep economic crisis inherited from his predecessor. Facing debt default, the government was managing a juggling act of promoting growth and job enhancing policies while at the same time keeping the fiscal deficit under control. However, since the crisis begun Fernandez acted swiftly and decisively imposing draconian quarantines. His response to the health crisis has been rewarded by the population, reaching levels of popularity only reserved to the national soccer team when they win.

7.2 Keeping Vaca Muerta alive

Former president Mauricio Macri had big hopes for Vaca Muerta, considered to be the second largest shale gas reserves in the world and the fifth largest in terms of shale oil. The potential of Vaca Muerta

[24] https://www.iamericas.org/2020/04/08/covid-19-latin-americas-energy-sector/
[25] https://www.csis.org/analysis/alberto-fern%C3%A1ndez-administration-two-months

is believed to exceed the prolific Permian basin in the US. Alberto Fernandez shares his predecessor's optimism. Argentina's national oil company had made projections of annual revenues of approximately US$20 Billion per year by 2029 or 2030.[26]

The re-nationalization of YPF facilitated somehow the development of Vaca Muerta from a leftist "Peronista" perspective. The NOC entered in joint venture contracts with several major oil corporations such as Chevron, Shell, etc. However, at $30 per barrel it is argued Vaca Muerta is not viable. Investments have all but stopped.

To save the project the government has returned to an old Peronista trick: market price intervention, offering US$45 per barrel to producers to shelter them from international prices.[27] Although domestic prices may be welcomed by producers and local governors since it increases their royalty revenues, local refiners, including YPF, are less enthusiastic about the idea of buying oil at higher prices. Moreover, as Jose Luis Manzano noted during the Institute of the Americas Virtual La Jolla Conference, shortly after the announcement of the "barril criollo:" the government cannot create demand through decree.[28]

That a debate re-emerged over establishing a fixed price, or what is now being called a "sustainable price," for oil in Argentina is not surprising. Indeed, the global oil price collapse only intensified the pressure points for provinces whose treasuries depend heavily on fiscal returns from taxes and royalties from the sector. The impact on already-widening budget deficits across the country will only increase in the coming weeks and months. And, of course, energy companies have significant interest in ameliorating their revenue prospects while they endure heavy losses with rigs idle and investment deferred.

[26] https://www.forbes.com/sites/afontevecchia/2019/12/09/argentinas-vaca-muerta-could-lead-to-a-shale-boom-to-rival-the-united-states/#5ff4097e211a

[27] https://www.bnnbloomberg.ca/the-crazy-dream-of-45-oil-could-become-reality-in-argentina-1.1432549.

[28] https://www.cronista.com/economiapolitica/Para-Manzano-es-clave-generar-dolares-bajar-los-costos-en-Vaca-Muerta-e-impulsar-represas-y-energia-nuclear-20200519-0053.html

There is a recent precedent for these type of market interventions. In 2016, the government intervened during a global price downturn and to fixed the price of oil in Argentina at US$67 per barrel. At that point in the country's energy history, it was a decision that united policymakers and industry all with the goal of furthering development of the country's then-nascent shale resource. The belief at that point was that the move was seen as providing time and space for optimization and achieving efficiencies across the country's emerging Vaca Muerta play.

The success of Vaca Muerta depends on keeping production costs low and being viable in a price environment of US$3 mmbtu for natural gas and a barrel of oil around US$40. The IMF 2020 outlook forecasts a 42% decline in oil prices in 2020 and a modest recovery by 2021. If the lockdown in 2020 reaches H2 2020 and there is also a new outbreak in 2021, the outlook for oil prices is much more pessimistic. In any case, all the scenarios would require a significant subsidy from the Argentine government while at the same time the government faces debt default and increasing fiscal pressures to address social problems due to massive unemployment.

Table 2

Scenarios IMF oil prices US$/barrel	2020	2021
Baseline	34.8	36.5
New outbreak 2021	34.8	35.6
Longer outbreak 2020	34.8	34.5
New outbreak and longer outbreak	34.8	32.3

Leaving the development of Vaca Muerta to purely market forces carries its own risks for the government. Albeit from a perspective of fiscal probity -and with mounting social pressures – that would be the correct approach, it could also signal the end of the shale gas and oil developments in Argentina for years, shattering hopes for using those vast resources for industrial development.[29]. On

[29] https://www.forbes.com/sites/afontevecchia/2019/12/09/argentinas-vaca-muerta-could-lead-to-a-shale-boom-to-rival-the-united-states/#d0f2fb3211af.

the other hand, if the world economy recovers faster than expected, and oil and gas prices surpass the most optimistic scenarios, Fernandez support for the project could be rewarded as visionary. Contrary to AMLO's bet on Pemex, Vaca Muerta benefits from having experienced partners with financial capabilities for long term project development. The project has a strong export component, via LNG or pipeline exports to Chile or Brazil. The challenge is to maintain the support of its oil partners and of international lenders wary of Argentina's history of immense richness followed by deep disappointments because of the notorious lack of fiscal discipline and rent capture.

8. Colombia

8.1 Keeping the peace with a conservative technocracy

In 2018, Colombia elected a novice technocrat perceived as a caretaker for former president Uribe. His election was believed to be thanks to the endorsement of President Uribe. Ivan Duque was also perceived as the only hope to stop the leftist Gustavo Petro from winning, a highly polarizing figure in Colombia's political landscape. Since his election, there has been a general perception that Duque's administration lacked direction. Forced to continue the implementation of the agreements of the peace process made by his predecessor, but with a deteriorating economic situation, his administration also experienced a rise in violence and large street protests. However, the Duque administration's response to the health crisis has also been serious and rapid, benefitting from the support of the population albeit decreasing marginally as the quarantines are prolonged and the population starts to become increasingly impatient in light of massive unemployment and economic hardship.

Confronted with rapidly declining petroleum reserves and the risk of a fiscal crisis, the government was balancing the potential development of unconventional shale oil and gas projects just before COVID-19 struck, in essence a national debate over fracking was building. The so-called fracking projects were criticized by community leaders and environmental organizations. The government has adopted a cautious approach, focusing first on a series of pilot projects before granting a green light to the use of fracking technologies. Ecopetrol was also embarking in large shale developments in the US – to diversify its portfolio and acquire experience with the technology. High hopes have also focused attention on offshore deep-water exploration, where the country was able to attract the interest of oil majors. Despite low oil prices, Colombia's investment in the oil sector remained positive, mostly driven by a government committed to increase private investments in oil exploration activity.

8.2 Pro-investment efforts and the consolidation of the majors

Most of oil in Colombia is produced by its National Oil Company Ecopetrol and by several junior oil companies. When the pandemic struck, Ecopetrol acted rapidly to reduce costs and secure cash by closing expensive wells, postponing and reducing investments, and securing lines of credits.[30] Junior oil companies face a more uncertain future, with limited options for financing and exposure to high production costs.[31] The government is addressing those issues by offering companies more flexibility in their contractual agreements and even considering reducing transportation tariffs.[32] Of particular importance are the government efforts, led by the ANH, to reduce oil transportation tariffs. Because the relative low volume by operator, difficult geography, and long distances, in addition to security costs, oil tariffs in Colombia are particularly high. Average international pipeline transportation costs run between US$2-$5 per barrel; in Colombia they are US$7-$15 per barrel. [33]

By reducing their tariffs, pipeline companies and the government are sending a signal of wanting to share the pain with oil companies. However, the short- term focus of the measure – 50% reduction for 6 months in addition to other incentives - is seen as insufficient by oil operators. Colombia must address its transportation bottleneck if it desires to ensure an oil future. Oil companies will be reluctant to renew investments if their expected profits are taken away by high transportation costs. Pipeline companies will be reluctant to invest if oil companies' production declines because of lack of new investments.

Emerging from the post-COVID-19 health crisis, the petroleum sector in Colombia is well positioned to attract more investment. Colombia enjoys a good reputation among

[30] https://www.eltiempo.com/economia/empresas/coronavirus-en-colombia-ecopetrol-explica-que-se-esta-haciendo-ante-la-crisis-487138

[31] https://www.larepublica.co/economia/sector-petrolero-colombiano-podria-no-recuperarse-de-la-crisis-que-ha-tenido-la-industria-3005907

[32] https://www.nytimes.com/reuters/2020/05/20/world/americas/20reuters-colombia-pipelines.html

[33] https://www.portafolio.co/economia/petroleras-y-transportadoras-enfrentadas-en-pulso-por-tarifas-541387

investors thanks to its political, fiscal, and regulatory stability. However, while the government is expected to focus on promoting an aggressive exploration activity, local communities facing higher levels of poverty and unemployment will pressure for a larger share of the petroleum rents. The success of the government attracting additional investments by offering better terms or reducing regulatory constrains would have to be balanced with the social tensions caused by rising poverty and unemployment. Increasing the share of royalty revenues to producing regions should help, conditional to regional authorities' ability to transform those revenues into tangible social improvements for the community. However, in the short term it is unlikely that social tensions would derail the current administration support for the industry. Appetite for populist adventures are unlikely. But a return to its long history of conflict cannot be discounted neither.

9. Venezuela

9.1 A failed state

Venezuela was already suffering from an unprecedented economic collapse resulting in massive migration and social strife prior to the arrival of COVID-19. With a constant prediction of further decline of its oil industry – in terms of output, investments, and revenues - the question by Venezuelan watchers was if the regime would finally fall that year. It was unimaginable that the population could continue to support a regime responsible for so much suffering. But even as oil production and prices continued to collapse, and people's desperation only seems to grow by the day, the regime has managed to survive, albeit increasingly isolated.

Independently of whose political leader would be at the Miraflores Palace, the economic future of the country will inexorably be attached to oil. However, one can suspect oil majors will remain wary from hypothetical overtures of a new regime for multi-million dollars investments. Oil majors poured millions of dollars into the development of the Orinoco Belt. Then, Venezuela was a solid allied to the US and heralded as one of the oldest democracies in the region with a large middle class and proud of its relatively well-run national oil company and its "meritocracy," the corporate attitude that percolated across the technocratic elite than run the company emulating the legacy of their former owners, the oil majors. Caracas was Miami's southern sister. However, the country was also vulnerable to populist grab due to its strong dependency on oil, the increasing levels of inequality and heightened corruption which eventually collapsed the traditional political structure. The brewing of social discontent was only waiting for a charismatic leader.

Chavez's revolutionary experience with its modest beginnings in an era of economic crisis would eventually by overtaken by the excesses of high prices, and the common problems associated to the resource curse: corruption, administrative incompetence, limited absorption capacity of the economy, etc. All that compounded by the flawed economic model based on excessive resource nationalism, state control, and cronyism. The sudden death of the leader brought to power a weak successor who was left to administer a country in free fall, with collapsing oil production, lower oil prices, and growing international isolation. Today one could describe Venezuela as a failed state. According to the IMF, Venezuela's economy collapsed by 35% in 2019. Its oil production reached historic lows[34]However, despite an entire industry of Venezuelan observers and pundits forecasting regime change, President Maduro is still in command.

9.2 PDVSA privatization?

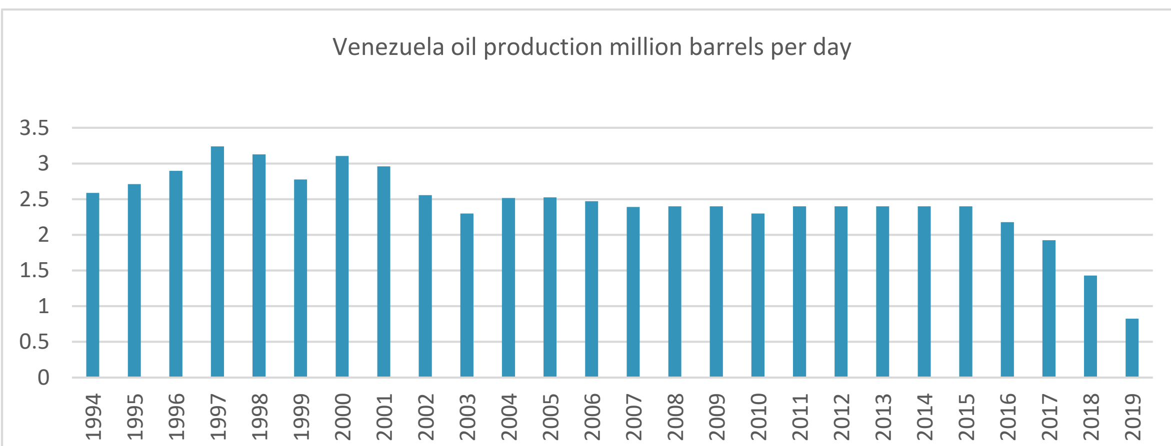


Figure 5

The Maduro government is proposing sweeping reforms such as ending PDVSA's shareholding majority in its joint ventures, outsourcing the marketing of oil, and privatizing local gas stations. Those

[34]https://www.reuters.com/article/us-venezuela-oil/venezuelas-oil-output-falls-to-five-month-low-amid-sanctions-demand-fall-idUSKBN21H2OB

proposals have been labeled as the privatization of the industry according to former Minister of Energy under Chavez regime, Rafael Ramirez[35]. A significant departure from the resource nationalism that characterized Chavez administration during the booming years of high oil prices and massive public spending and geopolitical ambitions.

The day after COVID-19, Venezuela will emerge with a collapsing infrastructure, nonfunctioning institutions and massive levels of poverty. The task ahead to revive the country's oil riches and its status as one of the wealthiest countries in Latin America is monumental.

Venezuela's vast oil riches would enter an already crowded market. One could suspect that Saudi Arabia, having made big sacrifices trying to defend its market share from Russia and US shale oil producers, will not be eager to accommodate rising oil production from Venezuela. As such, the most likely path would follow not too much a privatization of the NOC, but an outsourcing of its activities in exchange for a revenue. In addition to the current Chinese and Russian companies, - and depending on US decision to lift sanctions against Venezuela – other potential players could be other NOCs. But no matter what scenario is imagined for the day after, Venezuela's recovery – politically, economically and from its oil sector – will take years. The biggest damage caused by decades of economic mismanagement is the massive brain drain – depleting Venezuela from its educated workforce. As the diaspora settles in new jobs, schools, and ways of life, it is hard to imagine they would want to return in mass to rebuild their country.

10. Conclusions

Latin America will face unprecedented challenges the day after the pandemic. But the crisis is also an opportunity for the region to rethink its economic development. In a recent book, the Inter-American Development Bank proposes a series of policies that could not only help the region recover but also leapfrog to a higher income level[36]. Although the study was completed just before the pandemic, the authors address a key structural problem in Latin America: insufficient levels of investment. The study

[35] https://www.nytimes.com/2020/02/08/world/americas/venezuela-oil-maduro.html
[36] https://publications.iadb.org/es/como-acelerar-el-crecimiento-economico-y-fortalecer-la-clase-media-america-latina

calculates that if the annual rate of investments could increase from an average 2% of GDP to 6% of GDP in the next 20 years, Latin America could expect reaching "high-income status" in two decades.

To achieve such an ambitious goal, Latin America would also have to seriously reevaluate how taxes are charged and spent. Latin America relies too much on sales taxes which have detrimental income distribution impacts. Moreover, because the high level of informality in most economies, many businesses do not pay adequate taxes. As such, in addition to sales taxes the burden to finance government activities relies on a limited formal work force. Income taxes to corporations benefit from numerous exceptions, and most of the revenues are concentrated in extractive activities.

The expected huge fiscal deficits and even narrower source of income from governments requires Latin America to focus on how it collects and spend taxpayer contributions. Significant efforts must be achieved in the process of pre-selection, prioritization, and project evaluation of infrastructure investments. Creative solutions would have to be considered with the participation of the private sector. In addition, collecting revenues must be improved by increasing the coverage and reducing the cost of collection. Taking advantage of technological solutions, particularly given the impetus of social distancing and low or no touch technologies in the wake of COVID-19, should be considered. Finally, efficiency of subsidies would require reconsideration, particularly in energy where they tend to be regressive and even when targeted are too often wasted.

The day after the pandemic the existing oil dependent infrastructure will continue to exist – with its massive fleet of internal combustion vehicles, ships, and airplanes.[37] As the global economy returns to some level of normalcy, the demand for fossil fuels will increase, improving prices and revenues. Latin America, which is expected to emerge from the pandemic with some of its enduring problems worsening, particularly poverty and inequality, would be under strong pressure to find "quick wins" that ensure government revenues and economic growth. Governments seems to be betting on the hydrocarbon option at least by recent policy decisions such as Argentina's decree 488 and support for a domestic oil price above international references, or Colombia's considerations to lower transportation tariffs to

[37]https://www.economist.com/briefing/2020/05/21/can-covid-help-flatten-the-climate-curve

reduce costs to oil producers, or even Mexico where the government is providing massive bailouts to the national oil company Pemex.

Clamor for investing in renewables is also growing in Latin America[38], with supporters not only highlighting the benefit to the environment but also to the region's economy and jobs prospects. "Massive investments in the renewable energy sector could unleash significant growth over the course of the next three decades, by returning between $3 and $8 on every dollar invested. Not only would the potential return on investment be good, but the labor market would also benefit, with estimates suggesting the total number of jobs in the sector could quadruple globally" according to a recent report by IRENA 39. (Rodrigo Palma 2020)

However, without global governance on climate change, the energy transition agenda, particularly in many economically-challenged countries in Latin America, is more likely to rely on citizens' political preferences and personal efforts or those at the company and community level. The region's vast social and economic problems the day after COVID—19 leaves it with possibly reduced policy options, at least in the near-term, to support and accelerate the adoption of many of the key tenets of the global energy transition. Indeed, the developments in Mexico's power market underscore that the COVID-19 crisis has been used to actually roll back that country's policy and regulatory environment away from renewables and energy transition.

Despite those difficulties there is no reason why Latin America cannot rethink a "different normal", one that is less dependent on commodities, and where renewed efforts are made to revitalize industrialization and diversification of economies and its workforce. This would require strengthening the region's human and physical capital. For too long Latin America's education system has underperformed and with one or two exceptions woefully served its citizens. Massive investments in upgrading the physical infrastructure is also necessary to improve competitiveness. In the hydrocarbon sector, it is not enough to be blessed with low cost reserves. Oil company efforts at developing linkages between their activities and the rest of the economy must be encouraged, while adopting lessons from the past and correcting the excesses and mistakes that are littered across the literature. The industry must also aim for enhancing shared values as

[38] https://www.americasquarterly.org/article/now-is-the-time-for-latin-americas-renewable-energy-boom/
[39] https://www.irena.org/publications/2020/Apr/Global-Renewables-Outlook-2020

defined by Porter and Kramer (Kramer 2011) as "policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates." (Andrew Crane 2014) .

In summary, COVID-19 has exacerbated many of the ills and challenges that Latin America has faced for decades. But it has also provided a context for institutional capacity building, political leadership, citizen engagement and a broader and more plural and informed debate about the next steps -- the "day after" -- for the economies of the region. A key element of that debate, as illuminated through the cases of Argentina, Brazil, Colombia, Mexico and Venezuela is how to manage hydrocarbons, but with an eye on the energy transition.

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