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The SAI Report

SPECIAL REPORT

COVID-19

Spread and Cure of the Economic Virus

April 4, 2020

Special Report – COVID-19: Spread and Cure of the Economic Virus

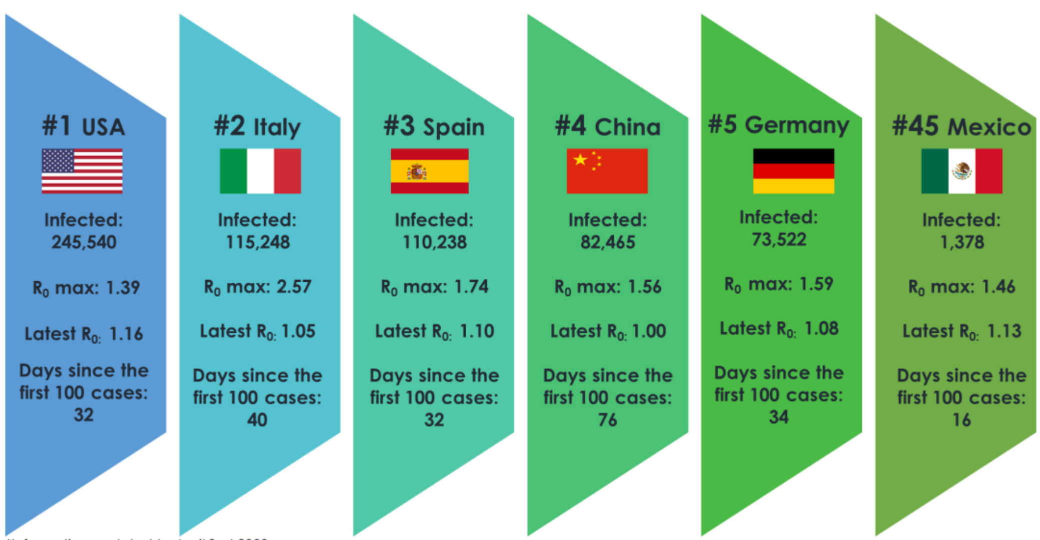
As the COVID-19 pandemic develops around the world and the response that both the private sector and the government adopt to face it, questions arise regarding its impacts to the Mexican economy and to specific businesses. There is no doubt that social restrictions imposed to contain the spread of the virus will have adverse economic effects. These restrictions will entail significant losses and lay-offs for many businesses, which, in consequence, will spend and invest less. Therefore, the COVID-19 crisis complicates further the already troubled outlook for the Mexican economy.

In this context, companies will have to take extraordinary measures to face the COVID-19 crisis and quickly adapt to the operational and regulatory challenges arising from the pandemic. We prepared this memo for our clients with the objective of highlighting the most important risks for the Mexican economy and to propose some recommendations of action planning in the short and medium terms.

The situation

As the time of writing this report, more than one million COVID-19 cases have been confirmed worldwide, of which 225,519 recovered and 58,773 died. While Mexico is still one of the countries in which the spread of the disease, according to official reports, appears to be more controlled, until more widespread testing is done, the full scope and scale of the national outbreak will not be clear.

Exhibit 1. Countries with the highest number of confirmed cases[1]



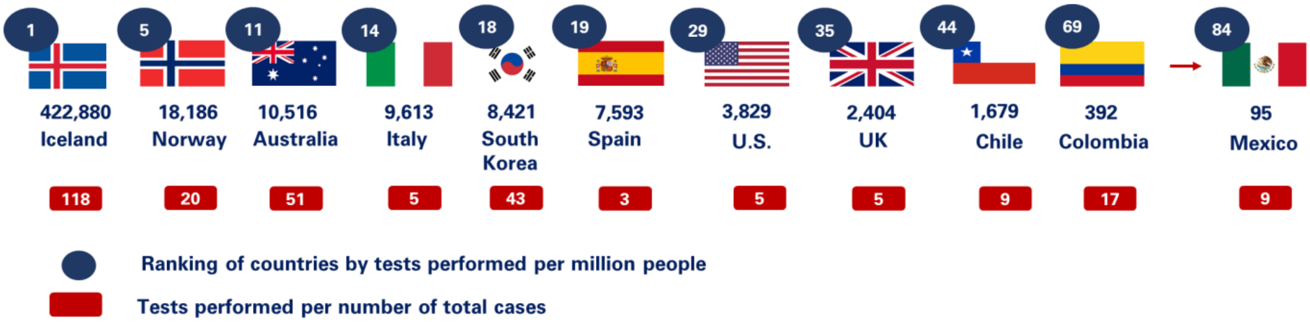
*Information updated to April 2nd 2020.

** R_0 is calculated as the weekly average (present day and 6 days prior) of the daily growth of total accumulated cases.

*** R_0 max is the highest weekly averge growth of accumulative cases. Latest R_0 is the weekly averge growth in April 2nd 2020.

[1] Source: SAI Law & Economics with data from European Centre for Disease Prevention and Control (ECDC).

Exhibit 2. Ranking of countries by tests performed per million people[2]



Mexico's strategy for containment

There is no doubt that the global economy will be hit hard by the pandemic. The main dilemma that governments across the World are facing is to apply measures of social distancing to contain the spread of the virus, to the detriment of economic activity, as opposed to delaying these measures as much as possible so that the effects on the economy are not so devastating, while dealing with the collapse of the healthcare system and the death of hundreds or maybe even million citizens. This dilemma is a tough one.

A lot has been said about the Mexican Government strategy for containment, some praise the strategy while others believe that actions were enforced too late. The bet of the Mexican Government was to rely on the tracing of the few imported confirmed cases identified at first and to delay the economic impacts as long as possible. For instance, many Latin American countries, such as El Salvador, Colombia or Argentina[3], implemented more restrictive actions for containment way before Mexico. The biggest risk on doing so is that meanwhile hundreds or probably thousands of asymptomatic patients might have been spreading the disease even further. For instance, the United States, Mexican neighboring country, also delayed the confinement and now it is the number one country with more confirmed cases (see Exhibit 1 above).

When compared to other countries, the Mexican strategy seems quite successful since the evolution of the daily number of accumulated confirmed cases, after the barrier of the 100 cases, lies far below Italy, Spain, and the United States. Nevertheless, if we make this same comparison since the first day that a case was confirmed, Mexico seems to be doing much worse than these countries, except for Italy.

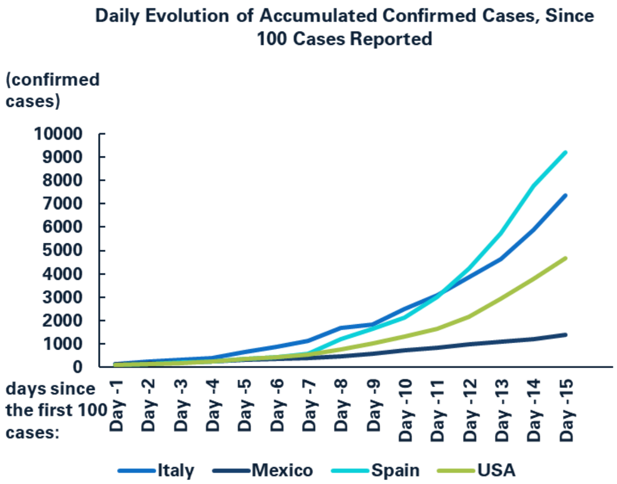
Also, the most successful experiences to contain the contagion and maintain economic activity are those of countries, such as South Korea, that have done intensive testing to detect and isolate the infected population, while in Mexico the number of tests seems

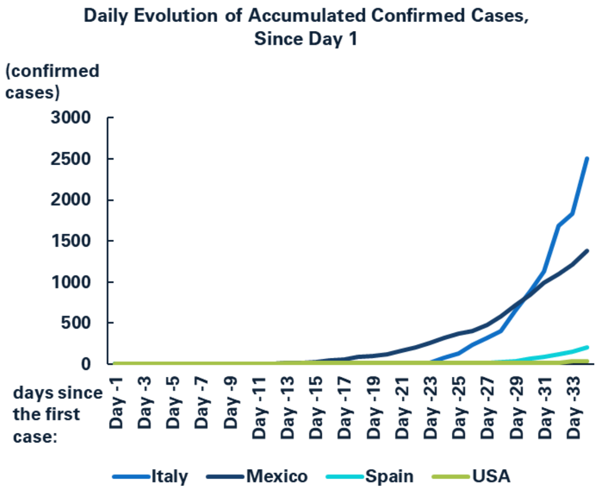
[2] Source: SAI Law & Economics with data from FIND and the Department of Health.

[3] El Salvador closed its borders in March 11th. Argentina and Colombia closed their borders for non-nationals in March 15th.

insufficient, given the size of the population, to assess the spread of the virus (see Exhibit 2).

Exhibit 3. Daily evolution of accumulated confirmed cases after the barrier of the 100 cases (right) & since the first case reported (left)[4]





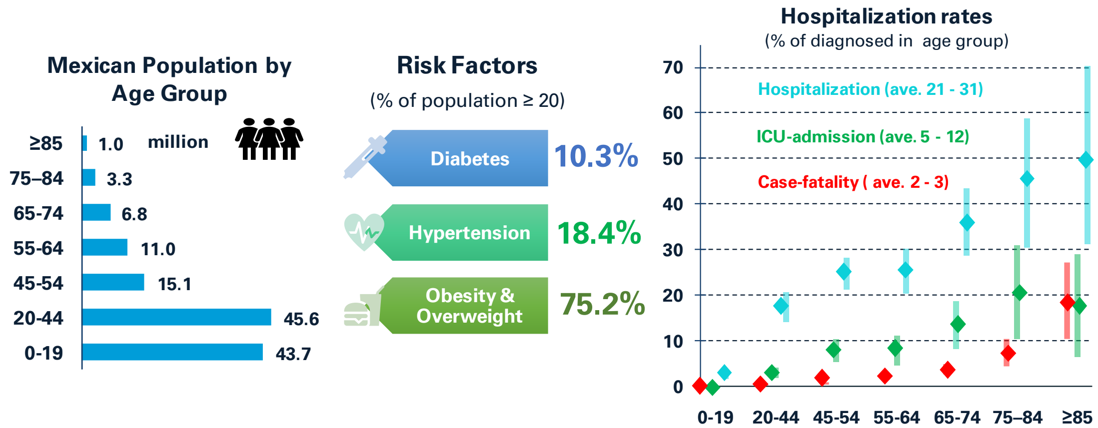
The reality is that the communication strategy of the Mexican Government has been misleading, and we have no idea of how many cases are out there and —hopefully not— but it is very likely that official numbers are underestimating the magnitude of the problem. If this is the case, social bans will remain longer than expected (and longer than what they would have last if the bans were imposed earlier) amplifying the impacts on the Mexican economy.

Potential collapse of the Healthcare System

Based on data available for the United States, the average rate of hospitalization among COVID-19 confirmed cases is 20.7–31.4% and of intensive care unit (ICU) treatment, 4.9–11.5%. Even though Mexico has a younger population compared to other parts of the world (9% of its population is aged 65 and above, compared with 20% in the European Union (EU) and 16% in the U.S.[5]), hospitalization rates might be higher in Mexico considering prevailing overweight and obesity, diabetes and respiratory diseases. The mortality rate might also be higher for these same reasons.

[4] Source: SAI Law & Economics with data from European Centre for Disease Prevention and Control (ECDC).
[5] Source: World Bank. Available at: https://data.worldbank.org/indicator/sp.pop.65up.to.zs

Exhibit 4. Mexican population by age group, risk factors by age group in Mexico (table) & U.S hospitalization rates[6]



According to the National Center for Disease Control and Prevention (CENAPRECE for its acronym in Spanish), there are 121,435 hospital beds to deal with the COVID-19, 4,291 intensive care unit (ICU) beds, and 2,053 ventilators.[7] As shown in the table below, if the number of infected reaches 85,820 simultaneously (under a conservative scenario), the healthcare system will collapse since it will not have enough ICU capacity for all the COVID-19 patients in critical conditions. Furthermore, if it reaches 41,060, there will not be enough ventilators capacity. Therefore, the collapse of the system is very likely since the Ministry of Health estimates that between 0.5 and 1.0% of the population will get infected (i.e. between 0.6 and 1.2 million people)[8].

Exhibit 5. Capacity of the health care system under different scenarios[9]

Scenario 1 (optimistic): 20% hospitalization rate; 5% ICU-admissions
Scenario 2 (pesimistic): 30% hospitalization rate; 12% ICU-admissions

Scenario / Patient condition	1	2	1	2
	Collapse of the system (shortage of ICU)		Collapse of the system (shortage of ventilators)	
Infected	85,820	35,758	41,060	17,108
Hospitalized	17,164	10,728	8,212	5,133
Intensive care	4,291	4,291	2,053	2,053

[6] Source: SAI Law & Economics with data for Mexico from the 2018 National Survey of Health and Nutrition (ENSANUT), and for the U.S. from "Severe Outcomes Among Patients with Coronavirus Disease 2019 (COVID-19)—United States, February 12–March 16, 2020". Available at: http://dx.doi.org/10.15585/mmwr.mm6912e2externalicon.

[7] Source: El Universal, "Sector salud, con 4,291 camas y 2,053 ventiladores para combatir Coronavirus." Available at: https://www.eluniversal.com.mx/nacion/sector-salud-con-4291-camas-y-2053-ventiladores-para-combatir-coronavirus

[8] Source: El Financiero, "¿Qué implica que declaren Fase 3 en México?" Available at: https://www.elfinanciero.com.mx/nacional/que-implica-que-declaren-fase-3-en-mexico

[9] Source: SAI Law & Economics with data from Centers for Disease Control and Prevention (CDC) and ENSANUT.

Slumping growth expectations for the Mexican economy

Expectations have been recently revised downwards for Mexico's economic growth by financial institutions, rating agencies and even by the Mexican Government in its latest "Pre-Criterios 2021" document. The consensus is that the impact will be devastating.

Exhibit 6. Latest growth expectations for 2020[10]

Institution	2020 Prior	2020 Current
Bank of America (BofA)	-4.5%	-8.0%
JP Morgan	-1.8%	-7.0%
Citibanamex	-2.6%	-5.1%
CEPAL	1.3%	-4.9%
BBVA	1.3%	-4.5%
Specialists' Survey (Banxico)	0.9%	-4.0%
Moody's	0.9%	-3.7%
Banorte	0.8%	-3.5%
SHCP's "Pre-Criterios"	2.0%	-2.9%
Citibanamex Survey (mean)	0.8%	-2.8%
S&P Global Ratings	1.0%	-2.5%
Santander	1.0%	-2.0%

* For CEPAL and SHCP's "Pre-Criterios", the mean of their expectations interval is provided. CEPAL: Economic Commission for Latin America and the Caribbean. SHCP: Ministry of Finance and Public Credit.

The impacts on the Mexican economy will come through different channels that imply both supply and demand shocks:

- Lockdown and social restrictions will cause an internal demand shock that will impact mostly airlines, hotels, restaurants, movie theaters, sports centers, museums, and retail stores of non-essential products, among others.
- Added to this is the drop in global demand, and especially in the demand of the United States, which will mainly impact the approximately 8,000[11] Mexican big exporting companies.
- The cessation of economic activity and borders closures will cause a supply shock because businesses will not be able to produce. This effect will eventually impact the whole production chain and will be highly relevant for the companies that are integrated in global value chains (GVCs).

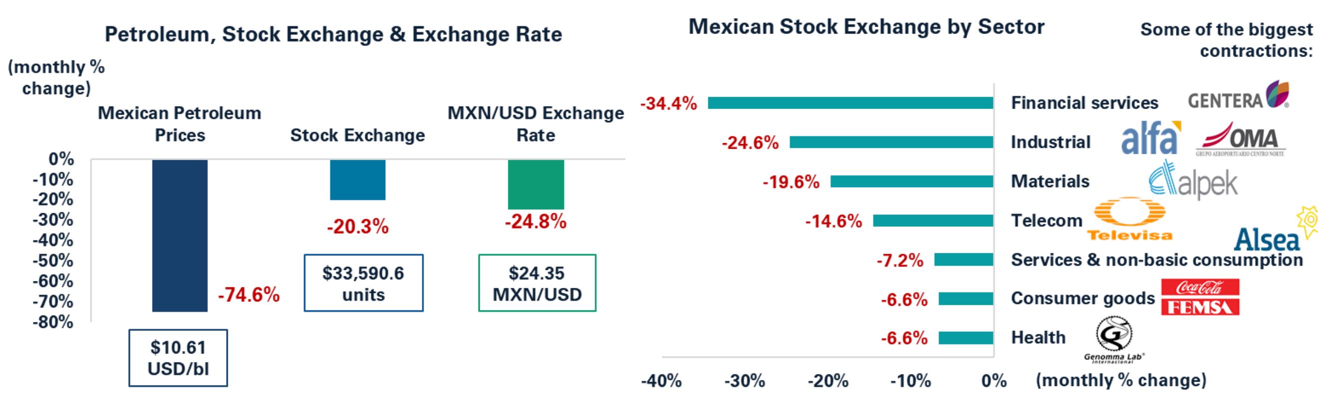
[10] Source: SAI Law & Economics with data from Banxico, Citibanamex, S&P Global and Moody's.
[11] The estimation of exporting economic units is obtained from the sales declaration of goods and services in the foreign market. Big economic units are those which: i) employ more than 50 employees; or ii) have revenues greater or equal to $50 million pesos. Source: 2014 Economic Census, released by INEGI.

- The two previous effects will bankrupt many medium and small business and will have a direct impact on employment, which will cause a subsequent demand shock that will deepen the effects of the crisis.

Concern and uncertainty among investors have caused a turmoil in financial markets, with all indicators registering historical decreases. As observed in the Exhibit 7 below:

- Petroleum prices decreased by almost 75% during March, and reached a level of $10 USD/barrel, far below the $49.01 USD/barrel considered in the 2020 Economic Package, which will bring enormous pressure to the already fragile public finances.
- The Mexican Stock Exchange fell by 20.3%, following exchanges around the world, but also due to bad policy announcements such as the cancelation of the plant of Constellation Brands or the Mexican Government's late response to the Covid-19 crisis.
- The peso-dollar exchange rate reached historical maximums (even surpassing the $25.00 MXN/USD level) and lost 24.8% of its value.
- Publicly-listed companies in all sectors—even health and consumer goods—registered severe losses during the month, which implies that, even if small and medium businesses are the most susceptible, there exist important risks for big companies in Mexico as well.

Exhibit 7. Financial markets collapse during March (March 2nd-April 2nd)[12]



In response to this, on March 26, S&P Global Ratings lowered its long-term foreign and local currency sovereign credit ratings on Mexico, complicating the outlook even further. The agency expressed that they "*expect a pronounced hit to the Mexican economy following the combined shocks of COVID-19—in Mexico itself and in the U.S., its main trading partner—and lower global oil prices. These shocks, while temporary, will worsen already weak trend GDP growth dynamics for 2020-2023 that reflect, in part, low private-sector confidence and poor investment dynamics.*" During the following days, HR Ratings

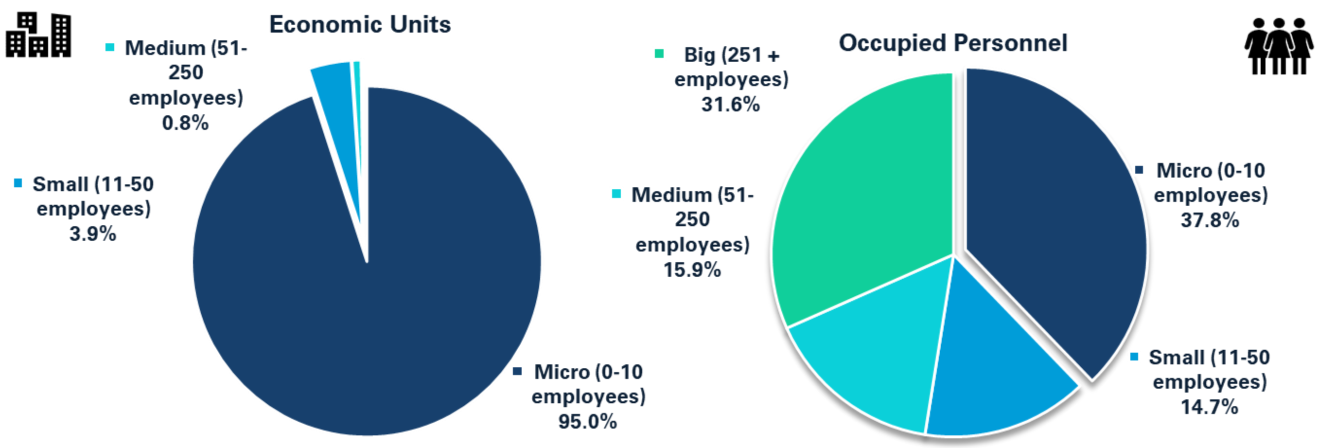
[12] Source: SAI Law & Economics with data from Banxico and the Mexican Stock Exchange.

followed suit, downgrading Mexico's sovereign credit rating to "HR BBB+", still three levels above the investment level, but with a negative perspective.

Small and medium businesses will be the most affected

The economic impacts of the crisis will be deep and widespread, especially in countries like Mexico in which micro, micro, small and medium enterprises (MSMEs) are the main source of employment (they concentrate more than 99% of all economic units and almost 70% of total employment in Mexico), and in which 56.2% of the population works in the informal sector and depends on their daily income.

Exhibit 8. Distribution of economic units by occupied personnel and number (2018)[13]



These raise concern since MSMEs are expected to undergo serious liquidity problems due to the lack of reserves to face the crisis. According to a statement given by the president of the National Chamber of the Transformation Industry (CANACINTRA), MSMEs only have the capacity to pay wages for one month and a half, in a lockdown situation[14]. Moreover, 30% of MSMEs[15] report not having any financial reserves to deal with crisis or disasters (not even cash reserves).

Businesses that are most vulnerable to social distancing

Exhibit 9 below shows the share of economic units and employment for those activities that are most susceptible of having a very significant contraction in demand due to social distancing (for instance, airlines without passengers, hotels—which are bound to close without national nor international guests—, or restaurants without customers). As it can be seen, these activities represent 41.2% of all economic units in the country and 28.2% of

[13] Source: SAI Law & Economics with data from the 2019 Economic Census, released by INEGI.
[14] Excelsior, "Las pymes no podrán aguantar la cuarentena; Canacintra prevé crisis en el sector", March 25th, 2020. Available here (last revision: March 26th, 2020): https://www.excelsior.com.mx/nacional/las-pymes-no-podran-aguantar-la-cuarentena-canacintra-preve-crisis-en-el-sector/1371925
[15] Source: 2018 National Survey of Business Financing (ENAFIN in Spanish), released by INEGI.

all occupied personnel[16]; therefore, putting at risk a very significant share of jobs and businesses.

Exhibit 9. Economic activities most vulnerable to social distancing (2018)[17]

Economic Activity	Economic Units		Jobs	
Non-essential retail*	929,014	19.5%	2,907,063	10.9%
Restaurants and bars	610,590	12.8%	2,135,746	8.0%
Personal services**	280,880	5.9%	501,988	1.9%
Educational services	52,238	1.1%	825,294	3.1%
Amusement, gambling and entertainment	46,440	1.0%	210,703	0.8%
Accommodation services	24,513	0.5%	443,205	1.7%
Transportation services (air, passenger, tourism)	9,507	0.2%	368,516	1.4%
Travel agencies	7,867	0.2%	55,991	0.2%
Art, culture and sports	5,480	0.1%	44,377	0.2%
Museums, historical sites, zoos	746	0.0%	10,720	0.0%
Total at risk	**1,967,275**	**41.2%**	**7,503,603**	**28.2%**

* Includes department stores, textiles and clothing, paper stores, sporting goods and hobbies, electronics and appliances stores, building materials and supplies, motor vehicles and parts dealers

** Includes personal care, drycleaning and laundries, funeral services, parking lots and pensions, and photograph services.

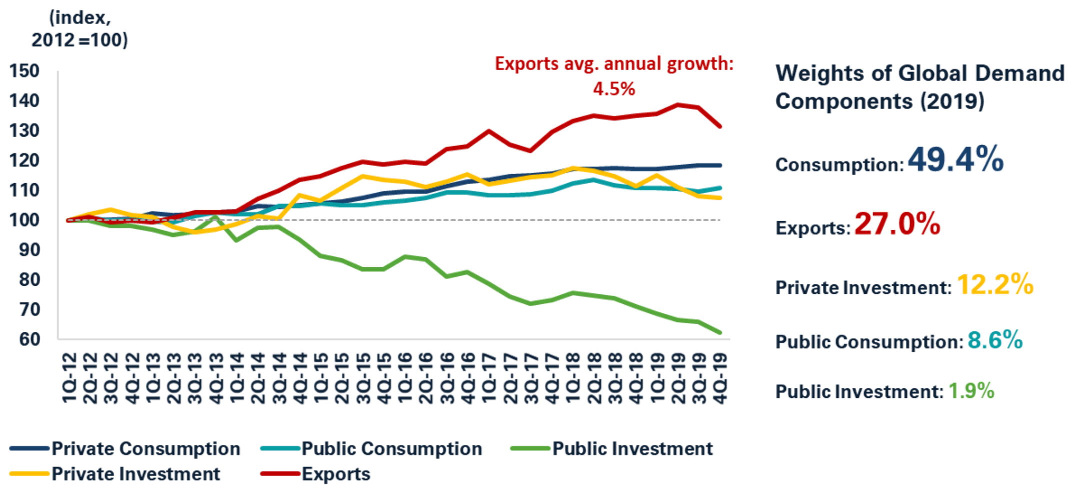
Moreover, 93% of these units, which employ approximately 50% of the occupied population within these economic activities, are micro establishments that employ 10 or less workers, and therefore are the most likely to run out of cash first[18].

Businesses that are integrated to global value chains (GVCs)

The companies that are integrated into global value chains will be among the most affected by the COVID-19 crisis, both by the contraction of global demand and by the breakdown or fragmentation of these chains due to the closure of borders. In consequence, exports, which have been the main growth engine for aggregate demand, as shown in the Exhibit 10 below, will plummet. Major automakers in Mexico already announced temporary closures due to the drop in the demand for cars and to shortages of auto parts supplies.

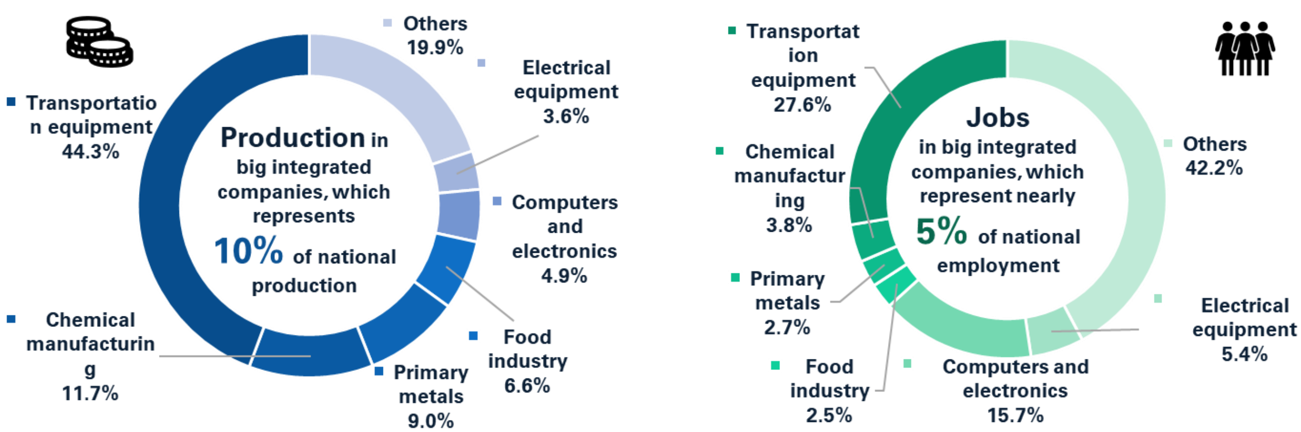
[16] The concept of occupied personnel differs from total working population, in the sense that the former does not include people working in a position of informality outside economic units.
[17] Source: SAI Law & Economics with data from the 2019 Economic Census, released by INEGI.
[18] Source: National Directory of Economic Units (DENUE) and 2019 Economic Census, released by INEGI.

Exhibit 10. Aggregate Demand components evolution[19]



Big companies integrated to GVCs represent only 0.1% of total economic units in Mexico; however, they represent 10% of total national production and 5% of the country's jobs.[20] Manufacturing companies are the most integrated to GVCs. Among companies integrated to GVCs, the ones that produce transportation equipment represent 44.3% of their production and 27.6% of their jobs, as shown in the Exhibit 11 below.

Exhibit 11. Distribution of integration to GVCs by economic sector[21]

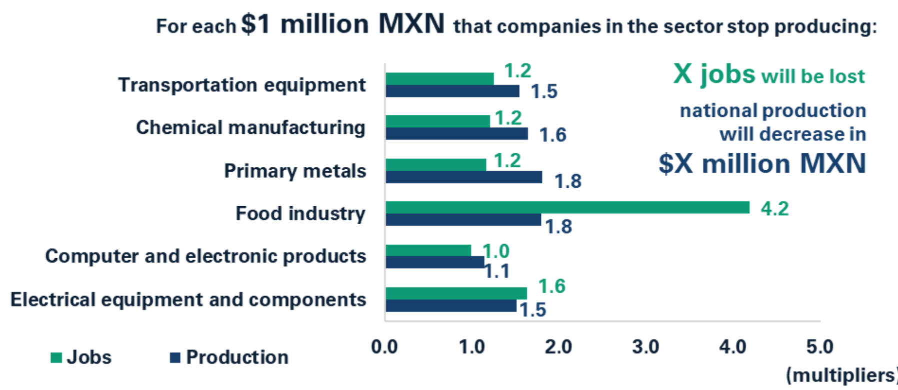


Furthermore, the affectations to these companies will also affect local suppliers and clients that are part of the local supply chain. As shown below, for each $1 million MXN

[19] Source: SAI Law & Economics with data from INEGI.
[20] Economic units are considered to participate in integrated production processes when, through contracts or collaboration programs, they carry out the design, supply, production, distribution or commercialization of goods and services, with companies located in other countries, for which they manufacture goods, parts or components with the purpose of exporting them. Source: 2014 Economic Census, released by INEGI.
[21] Source: SAI Law & Economics with data from the 2014 Economic Census, released by INEGI.

that transportation equipment companies stop producing, national production will decrease by $1.5 million MXN and 1.2 jobs will be lost[22].

Exhibit 12. Production and jobs multipliers for selected industries[23]



To illustrate the multiplying effects discussed above, we next present the impacts in local supply chains of a decrease in production in the transportation equipment industry for three scenarios. Even in the best-case scenario we estimate production losses equivalent to nearly $600,000 million MXN (-1.5% from baseline) and to nearly 500,000 jobs.

- Scenario 1: Infection curve flattens in the following months. Sharp contraction, rapid partial return, longer path to full economic recovery. Assumption: **10% decrease in transportation equipment production (equivalent to approximately 388,160 million MXN)[24].**

- Scenario 2: Infection curves take longer to flatten; economies operate at severe recession levels for one year. Assumption: **25% decrease in transportation equipment production (equivalent to approximately 970,400 million MXN).**

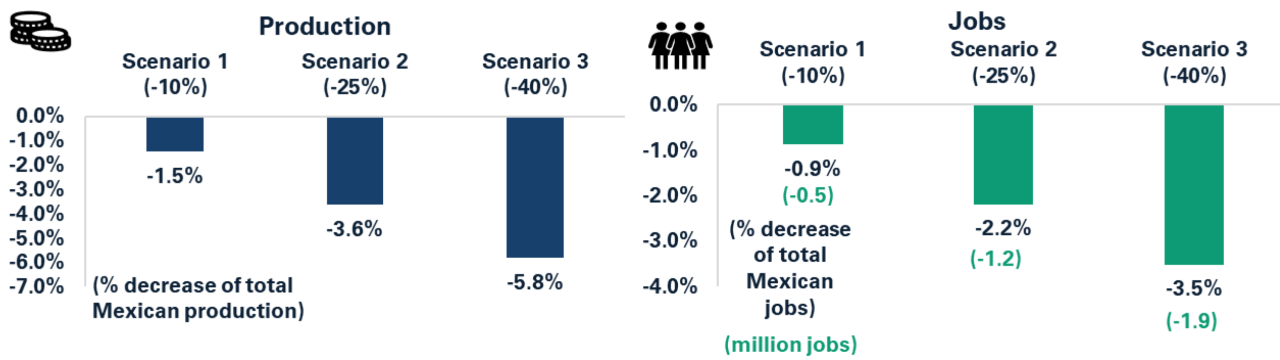
- Scenario 3: Infection curves are not flattened during the year; lasting social, health and economic damage derived from higher mortality rates. Assumption: **40% decrease in transportation equipment production (equivalent to 1,552,650 million MXN).**

To give these scenarios some perspective, INEGI announced on April 2nd that total domestic light vehicles sales during March decreased 25.5% annually. While production figures are still pending, the contraction of the automotive sector seems to be imminent at

[22] To obtain these multipliers, and for the impact estimations below, we use the most recent Input-Output Matrix released by INEGI, which permits to analyze the interdependence of all economic sectors in the Mexican economy.
[23] Source: SAI Law & Economics with data from the 2014 Economic Census and from the 2013 Input-Output Matrix, released by INEGI.
[24] Source: INEGI's National Accounts, INEGI's Monthly Manufacturing Survey (EMIM in Spanish), and Banxico.

the moment, and the following estimations give an overview of its relevance for the supply chain in Mexico.

Exhibit 13. Total impacts in all the Mexican economy derived from downturn of transportation equipment production[25]



How much help is expected from the Mexican Government?

Around the world, several countries have taken extraordinary measures to preserve jobs and support MSMEs during the following months. Some of these have been the deduction of investment subsidies during the year; direct payments to families in need; payroll credits; suspension of the payment of services to the government (water, electricity, gas or rent); unemployment subsidies; exemption of social security payments and selected taxes; and the extension of fiscal periods[26].

To date, however, the Mexican Government has been vague and limited in its announced supports. Specifically, it has announced: i) providing micro credits to small economic units, whether in the informal or the formal sector (through the new Welfare Bank of AMLO's administration or through the Development Banks of the Federal Government); ii) advancing payments for the elderly and for the impaired; iii) advancing health resources from the federation to the states; and iv) providing resources to the National Defense. Even, on April 2nd, several leaders of the private sector held a meeting with President López Obrador, who insisted no fiscal support would be given, but rather stated that supports would focus on MSMEs and announced more supports through the Development Banks (included in the "Pre-Criterios 2021" just-released document). The next of these meetings is scheduled for after the Holy Week holidays but, for now, the private sector manifested disappointment with the government's enacted actions.

In addition, Banxico decided to advance its monetary policy decision and reduce its overnight interbank funding rate by 50 basis points to 6.5% out of schedule. Still, this reduction is insufficient (Mexican rates are much higher than those of most of the

[25] Source: SAI Law & Economics with data from the 2013 Input-Output Matrix, released by INEGI.
[26] Source: Tax Foundation.

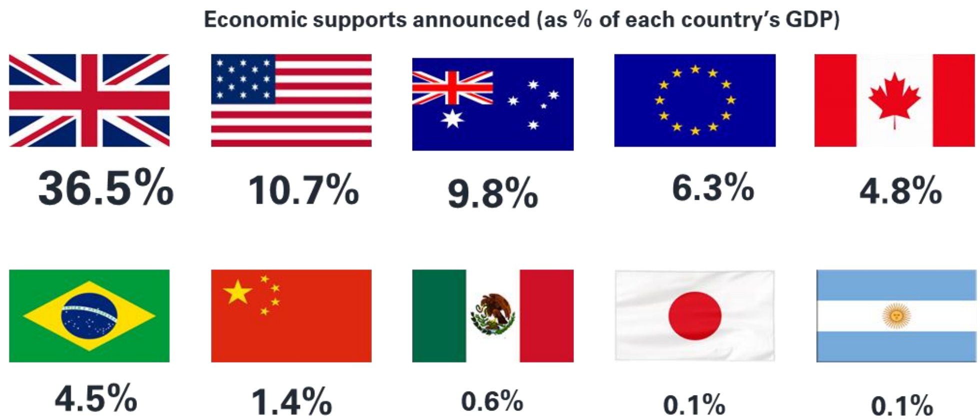
countries, even in Latin America, as can be seen in the table below) to facilitate access to credit for companies and individuals, and for the government itself (see Exhibit 14 below).

In any event, the amount for supports announced so far drastically contrast with the amount announced by other countries, as can be seen in the Exhibit 14 below. While the health status has not been very severe so far (as it has been in the U.S.), and should the situation indeed worsen, the Mexican Government will need to implement much more clear and convincing actions to aid the Mexican economy.

Exhibit 14. Central banks' reference rates and supports for Covid-19 announced[27]

Central banks' reference rates

Country	Reference rate
Ecuador	8.81%
Mexico	**6.50%**
Honduras	4.50%
Brazil	3.75%
Colombia	3.75%
Peru	1.25%
Chile	0.50%
Canada	0.25%
United States	0.25%
Euro Area	0.00%



However, the downside is that there is not much fiscal space for the Mexican economy to do so. The rating agencies clearly have Mexico in their sight and, if the government does not follow a prudent fiscal policy, it is highly likely that we will observe more downgrades to the sovereign credit rating. This is extremely delicate because a fiscal crisis would lead us to a much longer recession. Even as it is, in its just-released "Pre-Criterios 2021" document, the Ministry of Finance anticipates a -0.4% primary deficit for 2020 (compared to the approved 0.7% surplus in the 2020 Economic Package), and a -0.6% primary deficit for 2021; as well as an increase of Mexican debt[28] from 44.9 to 52.1% of GDP.

In this context, something that the government could do, and that it is clearly not doing, is to redistribute public spending to support these extraordinary measures instead of infrastructure projects, such as Dos Bocas, the Maya Train or Santa Lucia, which have generated so much controversy (nevertheless, in the "Pre-Criterios 2021" document, these are still contemplated for 2021[29]). It should also work closely with the private sector

[27] Source: SAI Law & Economics with data from Tax Foundation, the OECD, the European Union official website, SHCP's "Pre-Criterios 2021", Brazil's Federal Government webpage, the World Bank, Trading Economics, Expansión and El Economista.
[28] Measured through the Historical Balance of the Public Sector Borrowing requirements ("SHRFSP" in Spanish).
[29] Only Dos Bocas is not included, since it is a project for PEMEX, which is not considered in the document.

to review regulatory provisions and support through development banks so that private banks can relax credit terms.

Economic Emergency Measures

COVID-19 has become the greatest threat to the global economy since the 2008-2009 financial crisis. The response of governments and international institutions to the pandemic with effective public relief policies and measures will set the pace for the world's economic and financial recovery.

Several members of the G-20[30] have already taken that step forward, announcing comprehensive economic support packages. Indeed, according to the OECD, 95% of its members have already adopted measures to financially support companies; 85% have announced income support measures for the unemployed, and 70% have declared the implementation of partially government funded part-time work programs. Meanwhile, the Mexican Government has yet to announce the critically needed and so expected epidemic response plan.

In this regard, SAI conducted a review of relevant economic relief measures proposed by international organizations, experts, private sector councils, and professional and industry associations. In many instances, combinations of such emergency measures have been implemented across the globe, which are summarized in **Exhibit 15.** The purpose of this review is to offer an overview of the wide range of alternative actions that the Mexican government could promote, in addition to those in place, to mitigate the impacts caused by the COVID-19.

The measures have been organized in the following categories:

- trade in goods and services
- temporary direct cash payments
- credit and financial support
- tax benefits
- adjustment to working terms
- communications strategy
- health relief and social protection
- development of teleworking capacity
- online work and training
- procurement and payment delays

The recipients of the measures vary greatly depending on the category of the measures. Contrary to most developed countries, where measures can and are being directed through the formal economy, Mexico, as many other developing countries, faces a greater challenge. As mentioned before, 56% of our economy is informal. Any measure focused on benefitting the informal economy will need to be directed through the social programs

[30] The G-20 is comprised by: Argentina, Australia, Brazil, Canada, China, the European Union, Germany, France, India, Indonesia, Italy, Japan, Mexico, the Russian Federation, Saudi Arabia, South Africa, South Korea, Turkey, the United Kingdom and the U.S.

already in place. The informal sector will also benefit from avoiding greater competition from layoffs of employees and self-employed becoming part of the informal sector.

For purposes of the table, references to corporations, MSMEs, employees, and self-employed are to those within the formal economy, except as noted.

Exhibit 15. Relevant Economic Emergency Measures- Proposed or Adopted[31]

Measures	Recipients	Specific Actions
Trade in goods and services	Importers, exporters and cross-border services providers	• Keep global supply chains fluid and trade lines open and free of encumbrances.
		• Regarding medical equipment, surgical and healing supplies and other essential goods and services needed to deal with the pandemic: ○ Exempt those goods from the payment of import taxes and countervailing duties; and the application of non-tariff measures. ○ Apply a 0% import VAT rate. ○ Limit export restrictions on such goods, particularly by developed countries.
		• Ensure the adequate supply of trade finance.
		• Take immediate steps to legally recognize the use of electronic trading documentation in lieu of paper-based documentation to ensure the continued shipment and release of goods.
		• Adopt a standstill on all new trade-restrictive measures for the rest of 2020 and agree to take concrete actions to reduce protectionism.
		• Safeguard the smooth and continued operation of the logistics networks that serve as the backbone of global supply chains.

[31] Source: SAI Law & Economics, with information from the sources indicated at the end of this Special Report.

Measures	Recipients	Specific Actions
		• Ensure the essential movement of health personnel and businesspeople across borders.
Temporary direct cash payments	Employees and MSMEs	• Support to employers who provide workers that cannot work from home, with paid leave. • Assistance can be limited to the employers in the economic sectors most affected by the crisis and/or the most important for the economy (e.g., tourism and transportation industries). • Depending on the size of the company, the government covers a different percentage of the workers wage, reducing the impact to employers who commit not to fire their employees.
	Employees in partially government funded part-time work programs	• It can apply to all companies or only MSMEs. • Firms maintain their contract with an employee. • In Mexico, during the 2009 economic crisis, under the Program for the Preservation of Work, employees agreed to reduce 1/3 of their wage, the employer committed to pay 1/3 of the wage and the Mexican Government covered the other 1/3. • The benefitted companies were chosen based on their degree of vulnerability to the economic crisis, the number of their permanent workers, the number of workers retained, and the reduction of their sales. Such program protected 311,000 jobs. • Other criteria applied by other countries are based on the reduction of production or considering regions in "state of emergency". The percentage of the wage paid varies depending on the size of the company.

Measures	Recipients	Specific Actions
	Unemployed	• Income support while unemployed or a one-time lump-sum payment, suspension of evictions and deferring mortgage and utility payments. Supplemental Nutrition Assistance.
	Households	• To each member in working age of the poorest households identified in social programs to combat poverty (e.g. Becas Benito Juárez). ○ 20 million of Mexicans are benefitted thorough social programs, but there are 54 million living in poverty.
	Self-employed	• To those registered in the Internal Revenue Service (Mexico-SAT), in proportion to the taxes paid in 2019, establishing a maximum amount.
Credit and financial support of the government to credit institutions	Financial institutions and debtors	• Freeze on dividends and share buybacks for financial institutions as well as debtors (corporations) benefitting from assistance.
	Financial institutions	• Central bank to promote temporary deregulation of capital requirements and cost reduction of liquidity facilities for commercial banks.
		• Government to guarantee loans to finance receivables.
	Debtors	• Credit institutions- Provide temporary relief from mortgage payments, as well as personal and household loans, e.g. Granting of deferrals of principal and/or interest payments for a short-term period (3-6 six months) for clients whose source of income is affected by the emergency, and who were up to date in their payments before the crisis.
	Companies and self-employed, that are preserving their employees	• Commercial banks offer credit under more flexible terms.

Measures	Recipients	Specific Actions
	MSMEs that are preserving their employees	• Business loan scheme that provides credit institutions with a high percentage of government guarantee for loans granted.
		• Provide no- or low-interest bridging loans; trade finance; working capital credit with flexible deferred terms and no collateral.
		• Reduce the time required for banks to provide credit approval.
		• Credit mediation for SMEs wishing to renegotiate credit terms.
Tax benefits	Companies that are preserving their employees	• Prioritize the prompt refund of taxes. ○ E.g. set forth an expeditious procedure to speed up the refund of VAT balances throughout the fiscal year 2020.

		• Defer the payment of:
		    ○ income tax withholdings for salaries and similar items;
		    ○ the declaration of VAT returns;
		    ○ provisional income tax returns for legal entities.
		• In the case of payment obligations of employers and other obligated subjects, as provided in the Social Security Law, authorize the suspension during three of four months of the employers and employees' contributions to their retirement and housing funds. (Afores and Infonavit), but the government would cover during such period the employer and employees' contributions to public health insurance and other social programs.
		• If the former is not possible, deferral of such payments and in installments, without generating surcharges.
		• Coverage by labor agencies of a percentage of the social insurance contributions for the lost hours.

Measures	Recipients	Specific Actions
Tax benefits		• Extend the deadline for filing the annual income tax return for corporate entities
		• Suspend the deadlines for requests of information made in the context of audits being performed by federal tax authorities.
		• Temporarily exempt the limit of deductions for donations made to authorized donors destined to support the fight against the COVID-19.
	Employees and self-employed	• Temporarily exempt the limit of personal deductions, relating to hospital expenses, medical fees, nursing, clinical studies and funeral expenses.
		• Refrain from considering as cumulative income, withdrawals from personal retirement plans.
		• Extend the deadline for filing the annual income tax return for individuals.
	MSMEs	• Deferral of tax payments: Authorize the payment of 2019 federal taxes in installments, with a soft or no interest rate, and without surcharges, for those that earn below certain amount.
		• Suspend audit interactions with taxpayers and their representatives.
		• Provide special tax relief (e.g. changes in depreciation rules, greater time extension of tax deferrals, waive late-payment penalties during certain months or abolishment of taxes for a determined period for companies in the most affected sectors- hospitality)
Communication platform	Society as a whole	• Governments may deliver information and support through the channels most utilized by MSMEs and their workers, e.g. digital platforms and mobile phone payment applications.

Measures	Recipients	Specific Actions
Health relief and social protection	Employees	• Adoption of procedures to reduce exposure to the COVID-19 in the workplace by workers who cannot work from home.
		• The government payment for the first 15 days of leave taken by workers identified with the COVID-19.
	MSMEs	• Coordinated partnership between government and MSMEs to transform production lines to support health relief efforts.
	Households, essential employees, informal sector	• The government pays hotels with no occupancy to take as guests those that have contracted the virus but that don't need hospitalization; "essential workers" (e.g. port operators, heath workers) or homeless that cannot have physical distancing at home or in the streets. • The government could also pay hotels to provide food through their own restaurant or nearby restaurants to the sick and homeless.
	Employees and families with caring responsibilities	• Reducing the working hours and workload and cover a percentage of their wages. Offering public childcare options to working parents in essential services (e.g. health care, public utilities).
	Employees, self-employed, informal sector, households	• The federal and state governments adapt emergency procedures for remote processing of economic, social and health benefits (e.g. by phone, email or online applications, eliminating the requirement to be made in person.)
Development of teleworking capacity	MSMEs and self-employed	• Providing financial and non-financial assistance to MSMEs to help them quickly develop teleworking capacities (e.g. subsidies or financial assistance to purchase equipment, to install telework facilities).
	Employees, MSMEs and self-employed	• Large tech companies provide temporary free of charge access to their tools.

<table>
<tr><th>Measures</th><th>Recipients</th><th>Specific Actions</th></tr>
<tr><td>Online work and training</td><td>MSMEs and self-employed</td><td>• Government sets up a website of the various available web-based tools that permit remote work, remote education and training (to re-skill or upskill their workforce).</td></tr>
<tr><td rowspan="2">Procurement and payment delays</td><td rowspan="2">MSMEs</td><td>• Suspension of penalties for payment delays on government services contracts (e.g. light and water).</td></tr>
<tr><td>• Online conflict mediation between SMEs and clients and/or suppliers.</td></tr>
</table>

Balancing Mexico's Challenges

The catalogue of relief measures is ample, however, not all are available to Mexico at this time. Mexico faces a deeper challenge than other countries due to its problematic economic, labor and social situation that arose prior to the epidemic. A comprehensive relief package must be implemented that seeks to achieve the difficult balance among the following objectives:

- Reducing the human costs of COVID-19 on the population, which requires a clear communications policy at all levels of government to apply strict social distancing measures, despite the upfront economic consequences; and guaranteeing that the Mexican health services have the sufficient and timely medical and financial resources to face the crisis.
- Mitigating the foreseeable negative economic impacts of the epidemic, which will require determining which sectors to provide assistance to, focusing on job protection and vulnerable MSMEs, and designing a less restrictive fiscal policy in 2020.[32]
- Refocusing the efforts of social programs to provide assistance to informal workers and self-employed to cover essentials based on actual needs instead of satisfying electoral purposes.
- Seeking debt to cover the costs of these measures and the consequences of the severe economic contraction, while maintaining macroeconomic stability and credibility that the government will maintain a sound fiscal policy in the midterm to be able to pay back its creditors.

[32] See subsection "Small and medium businesses will be the most affected", page 9.

The government must emphasize the temporary nature of the relief measures and incentives to be provided. Once the health emergency is over, all actors will need to adopt preventive measures to be better prepared for the coming epidemic wars, that scientists believe will hit again.

Finally, COVID-19 is contributing to rescue the weakened multilateral institutions and agreements that have been fundamental in the past to address global challenges such as trade protectionism. In the present crisis, policies that promote trade facilitation, liberalization, and the protection of global value chains, have come hand in hand with health public policies.

What should companies be doing?

Medium and big businesses will be impacted by one or all of the following: turmoil in financial markets and the loss in value of investments; more restrictive conditions to access credit and capital; drop in demand due to social restrictions and job losses; shortages in the supply chain.

The duration of the COVID-19 crisis throughout the world is highly uncertain and it will completely change the status quo and consumer´s consumption patterns. Therefore, companies should be prepared for different adverse scenarios; anticipate for new opportunities, and be ready to adapt processes, whenever possible, to allow digitalization and remote sales and services.

Short term actions: Contain the crisis

- Make macroeconomic and company specific forecasts for different stress scenarios.
- Identify impacted services and products and determine actions to ameliorate the impact.
- Develop a strategy for process digitalization and online sales.
- Track regulatory changes and make interpretations for businesses operations.
- Anticipate liquidity shortfalls and complications with the cash & balance.
- Estimate impacts to the value chain and identify possible shortages.
- Prepare a communication strategy that gives certainty to clients, suppliers and the work team.
- Negotiate payment schemes with suppliers and lessors to deal with liquidity shortages.

Medium term actions: Reincorporation and search of new opportunities

- Identify new markets and alternative sources for the supply chain.

- Adapt to changes in consumer patterns and develop new products.
- Identify opportunities and develop and M&A roadmap strategy,
- Adaptation strategy when the USMCA enters into force.

References for Exhibit 15

- APEC Business Advisory Council. (March 28, 2020). APEC Collaboration the First-best Strategy to Combat COVID-19, Says Business.
- Baldwin, Richard and Weder di Mauro, Beatrice. (2020). Economics in the Time of COVID-19. Center for Economic Policy Research Press.
- Barra Mexicana de Abogados. (March 31, 2020). Recomendaciones para paliar los efectos económicos negativos derivados de la pandemia de COVID-19 y sus secuelas.
- Consejo Coordinador Empresarial. (March 31, 2020). La preservación de empleos y la operación de las empresas requieren medidas urgentes.
- Calderón, Felipe. (2012). Presentación del Programa para la Preservación del Empleo. Presidencia de la República and the Fondo de Cultura Económica.
- Carstens, Agustin. (March 29, 2020). Bold steps to pump coronavirus rescue funds down the last mile. Financial Times.
- G20. (2020). Statement on COVID-19. Extraordinary G20 Leaders' Summit.
- G20. (March 30, 2020). Ministerial Statement. G20 Trade and Investment.
- International Chamber of Commerce. (2020). A Call to Action to Save Our SMEs.
- International Labour Organization. (2020). COVID-19 and the world of work: Impact and policy responses.
- Levy, Santiago. (March 25, 2020). Superemos juntos la emergencia. Nexos.
- OECD. (2020). Employment and social policy response tracker.
- OECD. (updated March 30, 2020). SME Policy Responses.
- OECD. (updated March 20, 2020). Supporting people and companies to deal with the COVID-19 virus: Options for an immediate employment and social-policy response.

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