

Limited impact on GDP from fuel shortage

- **Mr. Lopez-Obrador announced a plan to combat fuel theft which has derived in supply shortages in some federal states**
- **In order to assess the impact of such shortages on economic activity nationwide, we compare the current episode with the impact of the 2009 A(H1N1) outbreak**
- **According to our estimations, the impact is limited assuming that the situation is not unnecessarily extended and that shortages in states where the situation has already normalized are not repeated**
- **In this context, we maintain our 1.8% growth forecast for 2019, with a negative balance of risks**

Interruptions in fuel distribution. On December 27th, President López-Obrador announced that he had started a plan to combat fuel theft, known in Mexico as "*huachicoleo*". According to press reports, the first delays in fuel supply in some federal states were registered as of the end of last year. Since then, we highlight supply shortages in about 13 states, being the most affected Guanajuato, Jalisco, Michoacán, Querétaro, and the State of Mexico (refer to the following table). It is important to mention that this analysis' timespan goes from December 31st to January 18th.

Federal states impacted by fuel supply shortages

days of shortage, % of national GDP

State	Number of Days	% of National GDP
Aguascalientes*	9	1.3
Coahuila	1	3.5
Chihuahua	1	3.2
Mexico City	8	17.5
Guanajuato*	18	4.2
Hidalgo	12	1.5
Jalisco*	18	6.9
State of Mexico	17	8.9
Michoacán*	17	2.4
Nuevo León	2	7.3
Oaxaca	1	1.4
Puebla	3	3.4
Querétaro*	17	2.3

*Days as of January 18th, 2019

Source: El Financiero, Reforma, El Economista, Banorte

High uncertainty surrounding the impact on economic activity. Under normal circumstances, estimating any given shock to economic activity represents a challenge for economists, more so in an unprecedented situation with a lot of uncertainty (no end date yet, for example). Nevertheless, in order to assess the potential damage of the fuel supply shortage on economic activity, we decided to use a similar episode in Mexico's economic history, the A(H1N1) flu episode back in April-May 2009, which allowed us to have an idea of the possible negative impact on GDP growth.

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Some considerations about the A(H1N1) outbreak. Firstly, during said episode, economic activity virtually stopped nationwide, highlighting the impact in the first 18 days (April 24th to May 11th), as shown in the following table. Moreover, we highlight three special features of this event that must be taken into account for the current analysis: (1) It took place amid the global economic-financial crisis of 2008-2009; (2) the impact was nationwide; and (3) it not only had an impact during these days, which were the most critical of the epidemic, but repercussions lingered for additional months after as confidence in the country's conditions and safety eroded, affecting both in terms of tourism and sentiment among investors as well, among others.

Relevant events during the A(H1N1) influenza outbreak

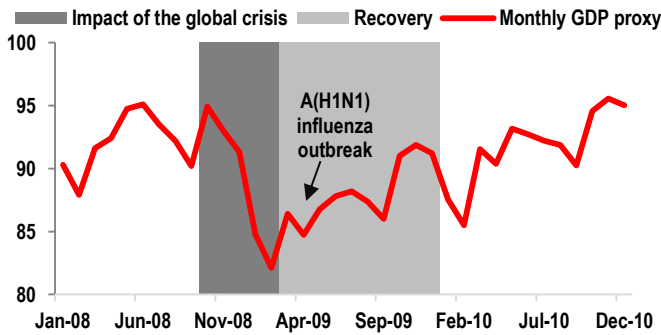
Date	Event
2-abr-09	First reported case in San Diego, California
11-abr-09	First reported case in Mexico, in the State of Veracruz
13-abr-09	First reported death in the State of Oaxaca
17-abr-09	The A(H1N1) is officially detected in Oaxaca. The Health Ministry issues a national sanitary alert
24-abr-09	Canada and the US fully identify the new A(H1N1) virus after taking samples from Mexican patients
24-abr-09	Mexico declares the National Sanitary Contingency and announces the suspension of several social activities
25-abr-09	Suspension of educational activities is added in Mexico City, State of Mexico, and San Luis Potosi
25-abr-09	The WHO formally declares "International Health Emergency" due to the virus
25-abr-09	Mexico's president declares National Emergency, which concedes the faculty to suspend all public acts and to declare a quarantine The Health Ministry states that, since March, 1,300 cases have been reported, with 83 deaths. As of April 26, 1,614 cases had been reported, with 103 deaths and 400 hospitalized
26-abr-09	The governor of Nuevo Leon announces suspension of all educational activities at least until May 6
29-abr-09	The Health Ministry announces the suspension of all educational activities in the country at least until May 6
29-abr-09	The WHO declares "Phase 5" / Pandemic stage because of swine flu cases
7-may-09	Mexico City authorities resumes activities in public venues
11-may-09	Mexico resumes daycare and basic-level education services in Mexico City and the State of Mexico
18-may-09	Students return to daily activities in San Luis Potosi, Hidalgo, Nayarit, Guerrero, Chiapas, and Zacatecas
10-may-09	The WHO formally declares the end of the A(H1N1) pandemic, entering into vigilance mode

Source: CEPAL, World Health Organization, several national media outlets

Differences and similarities with the current backdrop. Considering the factors mentioned above, and when compared to the current episode, we highlight some significant differences: (1) The impact is only circumscribed so far to around 13 states, as already mentioned; (2) economic activity has not been halted across the entire economy, but only in some industries; and (3) the event has not ended yet. Moreover, it is worth mentioning that, at the time of the 2009 outbreak, growth had already bottomed (on a monthly basis) and was starting to rebound. In this respect, the swine flu episode actually delayed the recovery (see chart on the left). By contrast, economic activity is currently starting to decelerate. We expect conditions to deteriorate further throughout this year, among others, given the fact that this is the first year of a new administration, when growth tends to be slightly lower as there is a learning curve associated with the execution of government spending (refer to the lower right graph). Meanwhile, global economic activity is also decelerating. In this context, we argue that the moderate recovery at that time and the magnitude of the slowdown that we could observe this year, are somewhat comparable. In addition, as it is not possible to isolate the impact of economic activity at the state level during the A(H1N1) outbreak using the *Quarterly Index of State Economic Activity* (ITAE), we used as a proxy the *Global Economic Activity Indicator* (IGAE), weighted by the size of each state's GDP on national product.

Monthly GDP proxy during the influenza outbreak

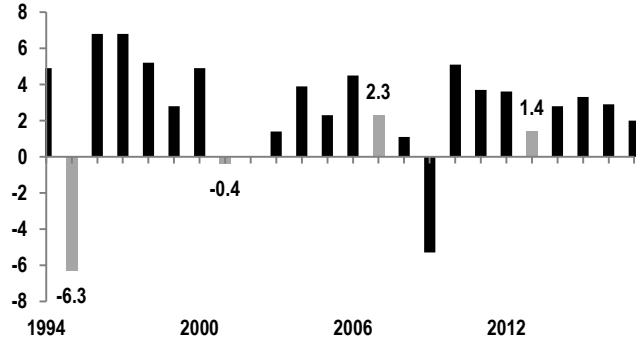
Index, seasonally adjusted figures



Source: INEGI, Banorte

GDP during the first year of a new federal administration

% yoy, nsa

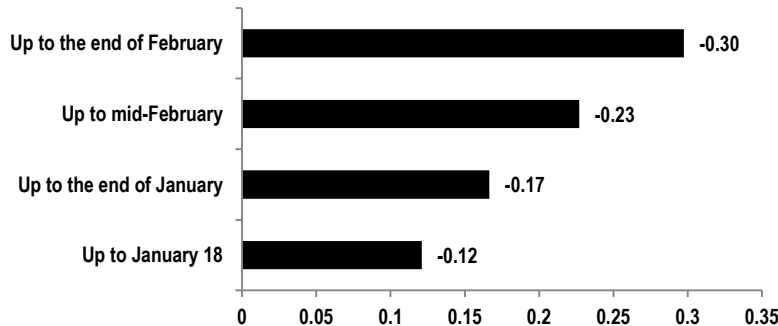


Source: INEGI, Banorte

Limited impact on national GDP, so far. Our analysis suggests that up, until January 18th, fuel supply shortages would have subtracted 0.12%-pts to GDP growth in 1Q18, assuming the A(H1N1) episode subtracted 0.36%-pts to GDP over the abovementioned period of 18 days, when most of the impact was felt. Looking ahead, and assuming that states where the supply has normalized no longer present shortages, we estimate that an extension of the problem until the end of January could result in a cumulative negative impact of 0.17% of GDP. If the shortage extends to the end of February (59 calendar days), we estimate a cumulative impact of -0.3% of GDP. In our view, there is some room for a rebound in activity in the event of an early normalization of supply in the short-term, especially in industries that can, to some extent, accumulate inventories, so the overall impact on 2019 growth would be negligible.

Estimated impact on GDP due to problems in fuel distribution*

% of GDP



*Note: We only forecast an impact in 5 states starting on January 18th, these being AGS, GTO, JAL, MICH and QRO.
Source: Banorte

We maintain our GDP forecast for 2019 at 1.8% y/y. We recognize that our estimate has downside risks. In our opinion, weaker global trade could eventually translate in a moderation of the manufacturing sector as already suggested by some leading indicators, such as business confidence levels and IMEF indices. Finally, we believe the reduction of monetary stimulus in advanced countries, with its consequences on financial conditions, could also impact domestic economic performance as well.

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