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Macroeconomic Analysis

Earthquakes in Mexico: we are not changing our 2017 growth forecast and we introduce a positive bias for 2018

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- **Besides the economic losses caused by this natural disaster, the palpable effects are limited and only relevant to very specific regions and do not represent a major change in the economic growth rates at a national level**
- **The earthquakes did not damage the productive capacity of the economy, as productive infrastructure was largely unaffected**
- **The main effect in the short run was the disruption of activity in the services sector, but its nature is temporary and only relevant at a local level**
- **The economy is likely to rebound in the next quarters on the back of a boost to construction as lost capital is gradually replaced**

Like most natural disasters, strong earthquakes represent human losses and unfolding destruction. So far, the September earthquakes in Mexico have taken over three hundred and forty human lives alone. This loss of human lives signifies an irreversible tragedy.

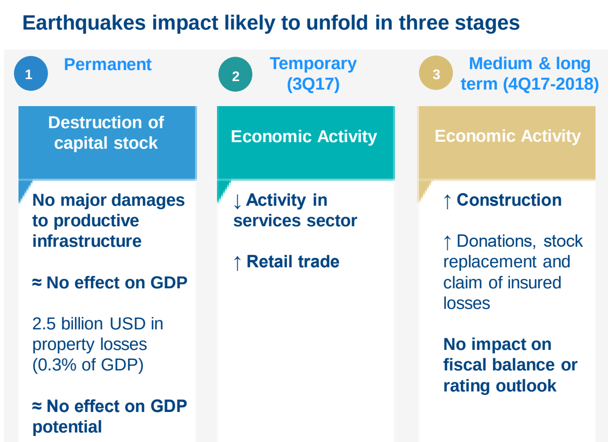
Natural disasters also bring economic losses. Our preliminary figures point to 2.5 billion USD in property losses (GDP 0.3%). These losses are significantly lower than those caused by the 1985 earthquake that were estimated at 11.5 billion USD.[1] This figure may growth in the following days as new information on damaged properties emerges. However, the assessment of the economic effects of this natural disaster must take into account a broader number of factors.

Natural disasters tend to have three different effects on economic activity (see Figure 1). The first one is immediate and comprises the destruction of the capital stock. The second one is of short term and encompasses the negative impact on economic activity. The third one is of medium and long term and comprises a boost because of reconstruction efforts. The overall effect on economic activity (GDP growth) can be large or small, depending mainly on the nature of the losses and the length of the economic impairment in the affected regions.

1: Real value, base year 2017.

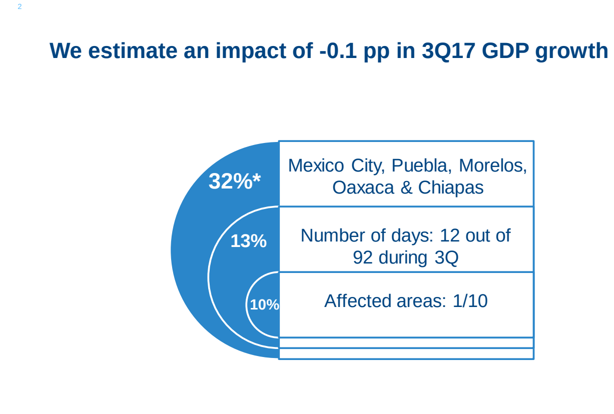
The loss of capital stock comprises the prime effect of earthquakes. Although the destruction of a share of the national capacity to produce does not affect the current measurement of the value added of all final goods and services produced in the economy, in the long run it could have an effect on the productive capacity of the country and therefore on potential GDP. The September earthquakes in Mexico did not damage the productive capacity of the economy, as infrastructure was largely unaffected. The main effect in this regard comprises the loss of private property, essentially housing, not public infrastructure or private productive capacity, and is localized and only relevant at a local level. In Mexico City around 4,000 houses were affected, from which probably 30% present severe structural deterioration and therefore remain inhabitable. Although considerable, this number represents only 0.2% of the housing stock in the city, while the figure for the Morelos state is around 2.1%, and for Oaxaca and Chiapas together 12.3%. It is worth mentioning that the latter represent two of the states with the lowest economic development at a national level, and account for 3.2% of GDP (where most of the housing is self-construction). Mexico City, on the other hand, represents a GDP percentage share of 16.8%.

Figure 1. September earthquakes: main effects on economic activity



Source: BBVA Research

Figure 2. Overall assessment on short term economic growth



* Percentage share of total tertiary sector
Source: BBVA Research

The second effect is of short term and encompasses the disruption of the activity in the services sector, including tourism, businesses, schools, restaurants, accommodation, real estate and rental services in the zero ground areas. Together, all five affected states (Mexico City, Morelos, Puebla, Oaxaca and Chiapas) account for 32% of total GDP of the tertiary sector, but we estimate an impact of only a tenth on the current value of all services produced on those regions.[2] This negative effect will be partially offset by the temporary dynamism in the retail trade sector due to a boost in private spending for disaster assistance to earthquake victims. Considering a time span effect of only 12 out of 92 days of the third quarter, our scenarios point to a drag of 3Q GDP growth of -0.1 to -0.2 percentage points (pp). Considering the offsetting effect of the retail sector we estimate an impact of -0.1 pp (see Figure 2). Taking into account the deceleration already expected for the

2: The states of Guerrero, Tlaxcala and Mexico also registered damages, but minor ones.

third quarter and so far supported by timely data (the IGAE index contracted -0.7% MoM, sa in July), the economy might register a QoQ GDP growth near zero in 3Q17 (our forecast prior to earthquakes was 0.1% QoQ).

The third effect has a medium and long term horizon and is associated with the subsequent recovery activity. The economy is likely to rebound in the next quarters on the back of a boost to construction as lost capital is gradually replaced. In Mexico, the construction sector represents 7% of GDP. Reconstruction combined with a higher public and private spending in the following months due to donations, claim of insured losses (around 9% of damaged houses), and use of the government emergency fund for natural disasters (FONDEN), introduce an upward bias in our growth forecast for 2018.

It is important to note that we do not expect looser fiscal policy. Overall, we do not foresee any impact on the public fiscal position, as available resources will be only relabeled for disaster relief. Therefore, we do not anticipate any change to the primary surplus goal of 0.9% of GDP. Government can tap resources at FONDEN, a trust established to meet financial needs after natural disasters, that amount to around 500 million USD. In addition, they will obtain 150 million USD from a catastrophic insurance purchased from the World Bank earlier this year. More funds will come from private donations.

Likewise, do not anticipate changes in the general level of prices, since no significant damage to the general supply of goods and services in the economy has occurred.

Thus, our overall assessment suggests that besides the economic losses caused by this natural disaster, the palpable effects are limited and only relevant to very specific regions and do not represent a major change in the economic growth rates at a national level. In the long run we will likely observe a marginal increase in the activity of the construction sector as well as private and public spending that would bolster a marginal positive effect in 2018.