

Economic analysis

The economic aftermath of Hurricane Otis

El Economista (México)

Diego López Tamayo

November 1, 2023

Weather forecasting models failed last week when in less than 12 hours Tropical Storm Otis intensified into a major Category 5 hurricane (breaking Patricia's intensification record back in 2015) before landfalling at the coast of Guerrero. The aftermath goes beyond the beach resort bay of Acapulco, extending into neighboring municipalities, such as Ajuchitlán del Progreso and Coyuca de Benítez. The interruption of basic services such as water, electricity and communication adds up to stores looting, stranded people at the airport and inaccessibility to bring supplies to the affected homes.

Facing one of the most devastating natural phenomena in the last decade, to estimate the economic aftermath requires two elements: 1) to understand the economic outlook in Guerrero state prior to Otis landfall; and 2) rely on empirical evidence of hurricanes in Mexico to estimate the economic impact.

Guerrero's Gross Domestic Product (GDP) accounted for 1.3% of National GDP in 2021 (most recent official data), with a growth rate of 4% y/y compared to 2020, but still 5.1% below its pre-pandemic levels. Although the state's GDP experienced a positive trend recently, the hurricane will put a dent in the state's GDP growth slowing industries driving the state's economy; namely tourism (3.1% of Guerrero's GDP) and related industries such as retail (16.7%), transportation (7.5%) and real estate (13.9%).

Focusing on tourism, Guerrero accounts for 2.1% of tourism in Mexico; receiving 9.52 million tourists in 2022 with a hotel occupancy rate of 47.4% according to figures from the Ministry of Tourism. The municipality of Acapulco (popular tourist destination) concentrates 38.5% of Guerrero's economic activity (measured by the Gross Value Added in the 2019 Economic Census), with a significant economic spillover to the rest of the municipalities in terms of employment and income for households. From January to August 2023, Acapulco recorded a hotel occupancy rate of 51% with the end of year high season just a couple months away. Noting that in December 2022 Acapulco hotels reported the best occupancy in the last 12 years.

Back in 2018, [Mexico's Central Bank \(Banxico\)](#) studied the effect of different hurricanes between 2003 and 2016 on the Quarterly Indicator of State Economic Activity (ITAE) of coastal entities, including Guerrero. Retrieving the findings of this study and taking into account that Hurricane Otis is comparable to Hurricane Patricia in terms of intensity (Category 5), dates (end of October 2015) and geography (Pacific Ocean), BBVA Research estimates a contraction in the quarterly variation of Guerrero's ITAE of -11.71% in 4Q23 with effects lasting until the end of 2024. Based on the pre-Otis base scenario, the estimated Guerrero's GDP y/y% growth in 2023 falls from 2.1% to 1.1% (-1.1 points) and from 1.2% to 0.4% (-0.8 points) in 2024.

Although this calculation is based on bold assumptions; still provides an (optimistic) estimate of the economic effects. GDP fall could be even more pronounced considering that Jalisco (the main entity affected by Patricia in 2015) launched support programs for those affected within seven days after the hurricane's landfall and is less dependent on tourism, one of the main affected industries in Guerrero. Looking forward, government support and economic reactivation programs are key in the quarters immediately after the shock so that Guerrero, one of the entities with the highest indicators of poverty and lagging behind at the national level in economic performance, may face this adversity.

DISCLAIMER

The present document does not constitute an “Investment Recommendation”, as defined in Regulation (EU) No 596/2014 of the European Parliament and of the Council of 16 April 2014 on market abuse (“MAR”). In particular, this document does not constitute “Investment Research” nor “Marketing Material”, for the purposes of article 36 of the Regulation (EU) 2017/565 of 25 April 2016 supplementing Directive 2014/65/EU of the European Parliament and of the Council as regards organisational requirements and operating conditions for investment firms and defined terms for the purposes of that Directive (MIFID II).

Readers should be aware that under no circumstances should they base their investment decisions on the information contained in this document. Those persons or entities offering investment products to these potential investors are legally required to provide the information needed for them to take an appropriate investment decision.

This document has been prepared by BBVA Research Department. It is provided for information purposes only and expresses data or opinions regarding the date of issue of the report, prepared by BBVA or obtained from or based on sources we consider to be reliable, and have not been independently verified by BBVA. Therefore, BBVA offers no warranty, either express or implicit, regarding its accuracy, integrity or correctness.

This document and its contents are subject to changes without prior notice depending on variables such as the economic context or market fluctuations. BBVA is not responsible for updating these contents or for giving notice of such changes.

BBVA accepts no liability for any loss, direct or indirect, that may result from the use of this document or its contents.

This document and its contents do not constitute an offer, invitation or solicitation to purchase, divest or enter into any interest in financial assets or instruments. Neither shall this document nor its contents form the basis of any contract, commitment or decision of any kind.

The content of this document is protected by intellectual property laws. Reproduction, transformation, distribution, public communication, making available, extraction, reuse, forwarding or use of any nature by any means or process is prohibited, except in cases where it is legally permitted or expressly authorised by BBVA on its website www.bbvarsearch.com.

ENQUIRIES TO:

BBVA Research: Paseo de la Reforma 510, Colonia Juárez, C.P. 06600 Mexico City, Mexico.

Tel.: +52 55 5621 3434

www.bbvarsearch.com