

SPECIAL BRIEFING

The Business Impact of the Zika Epidemic

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OVERVIEW

On 1 February the World Health Organization (WHO) declared that the surge in diseases and disorders believed to be linked to the Zika virus, which recently re-emerged in the Americas, constituted a Public Health Emergency of International Concern. The declaration activated a global response and released financial, technical and other resources to improve surveillance and detection of related illnesses, implement prevention campaigns and drive research into establishing whether there is a causal link between the virus and the surge in diseases. Development of a vaccine is also high on the agenda.

The epidemic is unfolding quickly, with 30 countries and territories in Latin America, the Caribbean, the Pacific Islands and Cape Verde reporting active transmissions of the virus via the *Aedes Aegypti* mosquito. However, quantifying the eventual cost of the virus both in financial terms and quality of life remains extremely difficult. By some estimates, the outbreak of dengue fever, which is spread by the same mosquito, caused almost 14,000 fatalities globally in 2013 and cost nearly USD9bn.

Major challenges in calculating the economic cost include the paucity of research on the total impact of previous epidemics on economic growth and development, as well as weak public health data collection and reporting procedures in affected countries. Moreover, epidemics such as SARS, HIV and dengue fever have different characteristics in terms of transmission, affected groups and local and global responses, and can only provide clues rather than firm guidance on what to expect with the Zika outbreak.

Thus far, we believe the epidemic's effects can be classified into short- and long-term impacts. In addition to the immediate cost of surveillance, diagnosis, treatment, prevention, and loss of productivity, as well as lower private domestic consumption and investment spending, a failure to curb the spread of the virus could, in generations to come, lead to a smaller pool of skilled workers – a crucial factor in unlocking growth potential, particularly in developing economies such as Brazil, Colombia and El Salvador.

COMMERCIAL IMPLICATIONS

- Tourism-related sectors, perhaps with the exception of travel insurance, will be negatively impacted. Travellers (for business and pleasure) from key source markets such as the US and Europe may heed official warnings and respond to travel advisories that particularly target women who are pregnant or planning pregnancies in the near future.
- The fear factor: retail activity could also decline if consumers avoid business centres, especially since the virus' mode of transmission has not been limited to the *Aedes Aegypti* mosquito; there have been recent suggestions that the virus could be spread through human contact.
- Firms in the health sector and related industries (such as pharmaceutical companies, as well as producers/suppliers of chemicals used in vector control) could experience higher demand for their products and services. In this vein, R&D into treatment and vaccinations will also be boosted given the co-ordinated global effort to curb the current outbreak.

RECOMMENDATIONS

- Closely monitor official reports on new developments related to the epidemic.
- Ensure careful compliance with advisories or guidelines issued by relevant government agencies and international public health authorities.
- Importantly, avoid automatically responding to unconfirmed reports and anecdotes.
- Expect heightened caution on the part of consumers of goods and services that rely heavily on personal interaction.
- Plan for deferrals in business-related travel to countries that have reported active transmission of the virus.
- Where possible, use alternative methods of service delivery if operating in vulnerable sectors, as a means of mitigating possible revenue declines due to lower footfall.
- Firms in health-related industries should watch for opportunities to partner with local and/or international agencies in the fight to curb transmission of the Zika virus and/or eradication of the *Aedes Aegypti* mosquito.

OUTLINE SCENARIOS

SCENARIO



In the next several months, despite global efforts to curb transmission and develop a vaccine, the epidemic will spread to most of the Americas, with the exception of Chile and Canada (neither of which hosts the *Aedes Aegypti* mosquito). This will add significant burdens to already-tight government finances and public health systems of economies that are already being hit by the collapse in global commodity prices. However, economic and other costs associated with managing the epidemic could be significantly offset by financial and technical support from the global community.

WE ASSIGN A 40% PROBABILITY TO THIS SCENARIO.

SCENARIO



If, however, there is inadequate international support to assist governments in affected countries to diagnose, treat and prevent the spread of the virus, economic activity in those countries will decline: in addition to the diversion of government revenue from planned spending, firms will feel the effect of lower private consumption and reduced inward investment. In addition, companies could also face a rise in the loss of time and productivity due to employee illness or absence because of fear of contracting the virus. Combined, these will depress regional growth, which is already expected to be a meagre 0.1% this year.

WE ASSIGN A 25% PROBABILITY TO THIS SCENARIO.

SCENARIO



Vector control strategies will effectively eliminate or significantly reduce the *Aedes Aegypti* mosquito population in the next several months, and by Q3 a vaccine will be ready, at least for the first testing stage. This would control the spread to the rest of the Americas, reduce the incidence of transmission in affected countries, and prevent the outbreak from becoming endemic in some countries (as feared by several public health experts). If this scenario materialises, the economic and commercial costs as well as negative quality of life impacts would be contained, and long-term effects would be negligible.

WE ASSIGN A 35% PROBABILITY TO THIS SCENARIO.



BACKGROUND AND CONTEXT

The virus was first identified in 1947 in rhesus monkeys in the Zika forest in Uganda, and the first human cases were recorded in 1952 in Uganda and the United Republic of Tanzania, with several outbreaks occurring in Africa, the Americas, the Pacific and Asia in the following six decades. While only one-fifth of persons infected with the virus display symptoms including joint pain, flu-like fever and rashes that last around a week, the most troubling impact of the virus is the potential for infected pregnant women to transmit it to their unborn babies, causing severe birth defects.

In October 2015 the virus began to take centre stage on the global public health front because of a sharp spike in the number of babies born with microcephaly in the northeastern

state of Pernambuco in Brazil: the authorities suspected that these were linked to the Zika virus. Microcephaly is a birth defect characterised by a small head and incomplete brain development. By February 2016 there was a 20-fold increase in suspected cases of microcephaly in Brazil over the average 200 annual cases in the previous five years, thus triggering the WHO declaration of a Public Health Emergency of International Concern. Brazilian scientists have also noted that brain disorders and physical disabilities other than microcephaly have been found in most of the affected babies. Thus far, in Latin America, Brazil has recorded the highest number of cases, with 3,850 suspected and 460 confirmed.

Containing the virus quickly is crucial for Brazil, which is experiencing its worst recession in several decades – the economy is expected to contract by 3.5% this year – and which will be hosting the Summer Olympic Games from 5-21 August; the International Olympic Committee has projected 480,000 visitors to Brazil for the event. Positively, the Games will occur during the dry season, inimical to the *Aedes Aegypti* mosquito, which breeds in stagnant water. For the Brazilian authorities, apart from the routine preparations associated with large international sporting events such as security, transportation and accommodation, protecting the health of athletes, officials and visitors is now also a priority. In February, Brazilian President Dilma Rousseff announced the deployment of 220,000 members of the armed force to educate the public on how to eradicate the *Aedes Aegypti* mosquito.

Also linked to the virus is a rising incidence of the Guillain-Barre Syndrome (GBS) which has been shown to be triggered by infections such as flu. GBS is an autoimmune condition that attacks peripheral nerves, resulting in weakness in the hands and/or legs, among other symptoms. According to the WHO, in severe cases, which account for a small percentage of total patients, near-complete paralysis can occur, with the syndrome proving fatal for 3-5% of patients. Adults and males appear to be more susceptible to the syndrome. However, most patients make a full recovery.

For firms operating or considering doing business in Latin America, there is also rising concern in Colombia, where the earliest cases of the virus were confirmed in October; the first affected patients were recorded in Cartagena city and Turbaco municipality in Bolivar Department. The first three virus-related deaths in Colombia were confirmed in early February,

as an estimated 30,000 persons have been infected with the virus, of whom 5,000 were pregnant women. Thus far, there have been no confirmed cases of babies born with microcephaly caused by the Zika virus, but this is mainly because of the lag between the outbreak in Brazil and that in Colombia; this is expected to change in coming months. Worryingly, fears continue to rise as the country approaches its secondary rainy season in April-May.

Turning to the US, the Centre for Disease Control (CDC) has noted that mosquito-borne transmission of the virus has been found in the US territories of Puerto Rico and the US Virgin Islands; however, on continental America only travel-related cases have been confirmed. At the time of writing, affected states included Arkansas, California, Delaware, the District of Columbia, Florida, Georgia, Illinois, Massachusetts, Minnesota, Nebraska, New Jersey, Ohio, Oregon, Pennsylvania, Texas and Virginia; Hawaii has also recorded travel-associated cases of the virus. In early-February, US President Barack Obama asked Congress for USD1.8bn to fight the outbreak; his proposal includes USD250m for affected women in Puerto Rico.

As with most epidemics in the last several decades, fear plays a major role in how individuals and businesses respond. We are therefore advising customers to ensure that business decisions are made on reliable information, as failure to do so could inflate the already-high risk perception and lead to sub-optimal business planning.

For more information on Dun & Bradstreet's country risk capabilities.

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