

THE BROKEN WINDOW FALLACY: ECONOMICS, INVESTMENT AND DISASTER RISK REDUCTION



In the economic sphere an act, a habit, an institution or a law produces not only one effect, but a series of effects. Of these effects, the first alone is immediate; it appears simultaneously with its cause; it is seen. The other effects emerge only subsequently; they are not seen; we are fortunate if we foresee them. It is often espoused by some liberal economists and social scientists that the advent of a disaster should be viewed as positive - destruction can lead to an economic boom as it provides the government with an opportunity to spend more money in rebuilding efforts; thus stimulating the local economy. Simply put, although disasters cause widespread destruction, it can mean a burst of activity and revenue in the short term. However, as articulated by Frederic Bastiat, it is that which is not seen, particularly in the long term, which determines economic equilibrium.

In the realm of disasters, these factors have dramatic influence on long-run development of countries that are subjected to regular or frequent exposure to disasters -since pursuing immediate relief efforts place additional burden on national budgets, and long-term development prospects suffer as public funding is diverted from social and economic development programs to fill these gaps. For instance, for the period 2007-2015, 131 disasters were recorded in the Caribbean region causing damage to the tune of US\$15.6 billion affecting nearly 8.5 million people. However, The Caribbean Catastrophe Risk Insurance Facility (CCRIF), the regional financial instrument established to provide short term liquidity, only made payouts of approximately US\$38 million during the same period - representing a 0.2% portion of losses. This case highlights a shortfall in financial relief, which leads to the general expectation that governments will provide support in the rehabilitation effort. Populations and governments are hence often left with the considerable task of reconstructing the structures of industry, economy and livelihood.

Natural hazards, like storm surges, hurricanes and earthquakes, tend to be short-lived events, lasting several seconds to a few hours, but causing substantial destruction in a concentrated area. These events typically set in motion a complex chain of events that shrinks the nation's ability to produce goods and services and hence disrupts both the local economy and, in severe cases, the national economy. When an economy undertakes to replace or repair those assets that are destroyed, a portion of the consequences incurred manifests itself by a drop of several percentage

points in average annual country growth rate. Data from *The Causal Effect of Environmental Catastrophe on Long-Run Economic Growth* (2014) illustrated that a cyclone of a magnitude that a country would expect to see once every few years can slow down an economy on par with “a tax increase equal to one percent of GDP, a currency crisis, or a political crisis in which executive constraints are weakened”. This is especially true if the economy is very capital dependent as it relates to industry, manufacturing and communication infrastructure; there is a struggle to return to former levels of production until it can recover the physical capital on which its productivity depended upon. It is in the face of this seemingly unsurmountable task of rehabilitation, the average purchasing power parity (PPP) suffers a blow. Average PPP losses from 2007 to 2014 due to disasters were crippling; with Mexico suffering losses to the order of US\$3.4 billion, Cuba US\$3.7 billion, Jamaica \$65 million and the Bahamas US\$82 million. What is also unseen is that disasters increase scarcity of goods and raw materials and reduce the output of economies. Immediately after Hurricane Dean struck in 2007, the Gross Domestic Product (GDP) in Belize fell by 3.5%, St. Lucia’s GDP, post inundation event in December 2013, tumbled to -1.9% and subsequent to Tropical Storm Erica, Dominica’s GDP dropped by 6.4%. These cases do not support the hypothesis that devastating events serve to stimulate growth. Instead, regionally, it presents significant evidence that in small vulnerable economies, national incomes decline, relative to their pre-disaster trend.

Corollary to the issue of the losses as a result of disasters is the issue of internal productivity and its impact on a county’s economic performance. Correspondingly, private and public sector must recognize both their vulnerability to these changing climate conditions, their resultant effects as it pertains to disaster severity and frequency, and their role as critical participants in national disaster preparedness. The marriage between performance and productivity failures and disasters is clear. It is in this way, using post disaster economic and functional struggles, that an argument for adopting preparatory measures to reduce productivity and performance losses in country can be mounted. Calculating and financing the damages of such an event can be an onerous task, however, building resilience can be realized through investment in, disaster risk reduction strategies and tools geared towards enhancing preparedness through hazard mapping and early warning systems. Integrating disaster risk reduction measures into infrastructure improvements, strengthening of governance structures, including the development of institutional mandates for disaster risk management, using the reconstruction process to address urban planning challenges, and establishing predictable contingent financing mechanisms are all processes that can be used to cover the residual risks that cannot be mitigated. On a national level, this also presents the opportunity to invest in financial disaster risk analytics and introduce sophisticated and robust solutions for disaster risk financing and insurance to protect and increase financial resilience in the private sector – as development is not achieved by public sector initiatives alone. The private sector, as an engine of economic growth, plays a key role in generating national wealth and is highly vulnerable to the drivers of disaster risk.

With damages from disaster occurrences in the region hovering at approximately US\$376 per person per annum from 2007 to 2012, it shines the spotlight on the opportunity to invest in ex-ante tools to reduce ex-post expenditure. If climate change leads to more frequent extreme weather, these costs are likely to rise in coming years. Hence, preparing for potential impacts of climate change, whether for the risks of sea level rise, storm surge, drought, or more frequent and severe storms in general, will position economies to recover more quickly from an extreme event if it occurs. In that vein, in the face of potential development growth and economic shocks, are investments better suited for increasing resilience versus rebuilding? The Hyogo Framework for Action (HFA) called for the ‘incorporation of disaster risk reduction’ measures into post-disaster recovery and rehabilitation processes, while The Sendai Framework, a post-2015 framework for disaster risk reduction, refers to “Building Back Better” as one of its guiding principles– a hypothesis which presents a concept of resilient recovery, to reduce risk from precipitating natural hazards. However, this hypothesis does posit that growth may suffer initially as the recovery process

accomplishes more than just restoring what was there before; including the restoration and improvement of facilities, livelihoods and living conditions of disaster-affected communities.

To maintain a path toward sustainability, resilience programs under this principle require predictable technical and financial resource commitments for planning, implementation, and performance management. For the best outcome, it thus necessitates that a decision be made of where the financial investment is committed. In the face of expected annual losses from, frequent events, deployment of capital that may have been otherwise used productively cannot be the means whereby to stimulate economic growth. While proponents of the broken window point to the development of corollary industries, such as insurance, and other services which may in themselves be signs of economic development, we posit here that it is better that the window not be broken at all. In the end, to break, to destroy, and to dissipate is not to encourage national employment. Destruction is not profitable.

George Nicholson is the Director of Transport and Disaster Risk Reduction and Nnyeka Prescod is the Advisor of the Director of Transport and Natural Disaster Risk Reduction of the Association of Caribbean States.

Any comments or feedback should be submitted to feedback@acs-aec.org