## Indirect Financial Impact on the Government

The macroeconomic costs of natural disasters, including the immediate decline in GDP growth and the cumulative, permanent GDP loss during the years following a major disaster, affect the government's budget. The 2011 floods in Thailand reduced government revenues in 2011 and 2012 by 3.6 percent and 2.8 percent, respectively, based on pre- and post-flood projections (World Bank and Government of Thailand 2012a). The impact on exports and imports of two droughts reduced government revenues in Malawi by 9 percent in fiscal year 1992/93 and by 11 percent in 1993/94. At the same time, public expenditure rose by 30 percent, resulting in an increase in the fiscal deficit of over 23 percent over these two years (Benson and Clay 2004).

Natural disasters can also escalate borrowing costs, especially for already highly indebted nations. For example, nearly all countries in the Caribbean are highly indebted, facing high borrowing costs from 6 to 8 percent for 10year bonds. Natural disasters raise the costs of borrowing for affected governments, increasing sovereign bond spreads by 1 to 2 percent on average for up to nine months following an event (World Bank 2012c). Following Hurricane Ivan in 2004, Grenada had to approach its creditors for a voluntary restructuring of public debt, extending its debt service payments by 20 years and adding significantly to its overall cost of funds (ibid). Financial impacts on the population often increase demand on pre-existing social programs, with a related increase in public spending on safety nets and other social programs such as unemployment benefits for those who lost their job. The 2010 earthquake in Chile caused a 3 percent (500,000 person) rise in the national poverty index to 19.4 percent (exacerbating an existing trend), and an increase in the number of people considered destitute by 80,000 to 700,000 (Muir-Wood 2011).

Together, the direct and indirect financial effects of disasters can seriously hurt public finances. The government's fiscal balance weakens as expenditures rise and the tax base shrinks, potentially generating or worsening fiscal deficits. The country's balance of payments deteriorates as exports decrease and imports increase. Finally, long-term development prospects suffer as the government diverts public funding from social and economic development programs to fill these gaps.



















