

## The Global Burden of Debt: Technical Notes

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### *1. Data sources and description*

We use debt data--both actual and forecasts--from the IMF's Fiscal Monitor (FM, [April 2011](#) and [June 2011 Update](#)) and nominal GDP data from the IMF's World Economic Outlook Database (WEO, [April 2011](#) and [June 2011 Update](#)). The FM provides ratios of debt to GDP. We use the nominal GDP data, which are available in current price U.S. dollars, to generate data on absolute levels of nominal debt. It has been assumed in FM and WEO that real effective exchange rates remain constant at their average levels for the period April 14–May 12, 2011, except for the currencies participating in the European exchange rate mechanism II (ERM II), which are assumed to remain constant in nominal terms relative to the euro. The implied nominal exchange rates are used in the GDP calculations. We take population data from WEO (April 2011) and labor force data from the International Labor Organization's Economically Active Population Estimates and Projections ([5th edition, revision 2009](#)) to compute ratios of debt to population and debt to the labor force (defined as the population aged 15-64).

### *2. Gross vs. net debt*

Gross debt is available for all countries on a reasonably consistent basis and is relevant for assessing debt rollover risks. Net debt is a better measure for evaluating the impact of debt accumulation on interest paid on borrowings. In the case of the United States, for example, net debt refers to the debt held by the public, while gross debt refers to the sum of debt held by the public and debt held by the government agencies. The interest paid on the debt held by government agencies accrues to the government, which does not add to the debt burden born by the government. Moreover, the differences between gross and net debt tend not to be very large for most countries for which we have both gross and net debt data.

Hence, our approach is to use net debt data for all countries for which that measure is available. For the remaining countries, we use gross debt data. This latter group of countries includes the following Advanced Economies--Czech Republic, Finland, Greece, Hong Kong SAR, Singapore, Slovak Republic and Slovenia; and Emerging Markets--Argentina, China, India, Indonesia, Malaysia, Pakistan, Peru, Philippines, Romania, Russia and Thailand.

### *3. Countries included in the analysis*

Advanced Economies: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hong Kong SAR, Iceland, Ireland, Israel, Italy, Japan, Korea, Netherlands, New Zealand, Portugal, Singapore, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, United Kingdom and United States.

Emerging Markets: Argentina, Brazil, Bulgaria, Chile, China, Colombia, Hungary, India, Indonesia, Jordan, Kazakhstan, Kenya, Latvia, Lithuania, Malaysia, Mexico, Morocco, Nigeria, Pakistan, Peru, Philippines, Poland, Romania, Russia, Saudi Arabia, South Africa, Thailand, Turkey and Ukraine.

These countries altogether account for about 89 percent of world GDP at market exchange rates. We exclude Norway from the analysis since it has a large negative net debt stock and is an outlier in the data.

#### *4. Revisions in July 2011 version of debt burden interactive feature relative to November 2010 version*

We use the latest versions of FM and WEO, which incorporate estimates for 2011 and forecasts for 2016. Our analysis uses 2007, 2011 and 2016 as the reference years, rather than 2007, 2010 and 2015 in the earlier version.

Working-age population, which was defined as the population aged 20-64 in the earlier version, has been revised to follow ILO's definition and include the population aged 15-64.

The list of countries in the analysis has been expanded to include Jordan, Kazakhstan and Morocco, all of them listed under EMs. Estonia, which was classified as an EM in the earlier version, is listed under AEs this time.

Hong Kong SAR, which reported zero net debt in FM May 2010, did not provide net debt data in the latest version. We use its gross debt numbers. Korea started to report net debt from FM April 2011. We use that, instead of gross debt, in our new calculations and analysis.