...Monetary Freedom

Monetary freedom combines a measure of price stability (http://www.heritage.org/index/open-markets) with an assessment of price controls. Both inflation and price controls distort market activity. Price stability without microeconomic intervention is the ideal state for the free market.

The score for the monetary freedom component is based on two factors:

- The weighted average inflation rate for the most recent three years and
- Price controls.

The weighted average inflation rate for the most recent three years serves as the primary input into an equation that generates the base score for monetary freedom. The extent of price controls is then assessed as a penalty of up to 20 points subtracted from the base score. The two equations used to convert inflation rates into the monetary freedom score are:

$$\text{Weighted Avg. Inflation}_i = \theta_1 \text{ Inflation}_{it} + \theta_2 \text{Inflation}_{it-1} + \theta_3 \text{ Inflation}_{it-2}$$

$$\text{Monetary Freedom}_i = 100 - \alpha \sqrt{\text{Weighted Avg. Inflation}_i} - \text{PC penalty}_i$$

where θ_1 through θ_3 (thetas 1–3) represent three numbers that sum to 1 and are exponentially smaller in sequence (in this case, values of 0.665, 0.245, and 0.090, respectively); Inflation_{it} is the absolute value of the annual inflation rate in country i during year t as measured by the consumer price index; α represents a coefficient that stabilizes the variance of scores; and the price control (PC) penalty is an assigned value of 0–20 points based on the extent of price controls.

The convex (square root) functional form was chosen to create separation among countries with low inflation rates. A concave functional form would essentially treat all hyperinflations as equally bad, whether they were 100 percent price increases annually or 100,000 percent, whereas the square root provides much more gradation. The α coefficient is set to equal 6.333, which converts a 10 percent inflation rate into a freedom score of 80.0 and a 2 percent inflation rate into a score of 91.0.

Sources. Unless otherwise noted, the *Index* relies on the following sources for data on monetary policy, in order of priority: International Monetary Fund, *International Financial Statistics Online*; International Monetary Fund, *World Economic Outlook*, 2012; Economist Intelligence Unit, *ViewsWire*; and official government publications of each country.