

The Global Competitiveness Report 2007-2008: adjustments to Global Competitiveness Index

The World Economic Forum has been studying the competitiveness of nations for nearly three decades. Since 1979, annual *Global Competitiveness Reports* have examined the factors enabling national economies to achieve sustained economic growth and long-term prosperity.

Over the years our reports have served as benchmarking tools for business leaders and policymakers to identify obstacles to improved competitiveness, with the goal of stimulating discussion on strategies to overcome them.

The methodology used to assess national competitiveness has necessarily evolved over time as we have taken into account the latest thinking on the factors driving competitiveness and growth. It was in this context that in 2004 the World Economic Forum introduced the Global Competitiveness Index (GCI), a highly comprehensive index for measuring national competitiveness, taking into account the microeconomic and macroeconomic foundations of national competitiveness.

We define *competitiveness* as the set of institutions, policies, and factors that determine the level of productivity of a country. The level of productivity, in turn, sets the sustainable level of prosperity that can be earned by an economy. In other words, more competitive economies tend to be able to produce higher levels of income for their citizens. The productivity level also determines the rates of return obtained by investments in an economy. Because the rates of return are the fundamental determinants of the growth rates of the economy, a more competitive economy is one that is likely to grow faster over the medium to long run.

Our experience in studying competitiveness has made it clear that the determinants of competitiveness are many and complex. The GCI captures this open-endedness by providing a weighted average of many different components, each of which reflects one aspect of the complex reality that we call competitiveness.

Adjustments to the model

We have been publishing the calculations of the GCI for the past four years. Although we have maintained the basic structure and overall logic of the model, we have introduced refinements to reflect the results of our experience of testing and working with it.

To begin, compared with the version published in 2005 and 2006, we have this year returned to a 12-pillar model, similar to the one presented in 2004. This is the result of two modifications:

- 1) First, the single pillar on market efficiency has been broken into its three subcomponents (goods, labor, and financial markets), which better demonstrate the differences in the various aspects of market efficiency. These three pillars clearly represent very different phenomena. As explained earlier, among other things, the financial sector pillar measures how easy it is for firms to have access to the right kind of financing and how much businesses trust their financial institutions. The labor market pillar reflects how flexible labor regulation is, and how meritocratic jobs are. Finally, the goods market measures the degree to which government regulation interferes in the activities of private businesses, and the extent to which competition across firms enhances competitiveness. Aggregating these three sectors into one pillar concealed important economic lessons. For example, countries might score very well in two of the pillars but do very poorly in the third one, a distinction that will be made entirely clear only when the performance of each is shown.
- 2) Second, market size, which was last year a subcomponent of the goods market pillar, is now reinstated as a pillar in its own right, as it was in the original index in 2004. This highlights the key importance of access to large domestic and foreign markets allowing for economies of scale, as described in the section above. In addition to moving back to a 12-pillar model, we have included better data proxies for some variables and more hard data variables when available.

We have also included new Survey data for some concepts that were previously missing from the model. For example, in the financial markets sophistication pillar we have introduced a hard data variable to capture the

strength of investors' legal rights, and in the health and primary education pillar, we have introduced a Survey variable capturing the quality of primary education.

We have also dropped the real exchange rate (RER) from the model. The problem with using this as a measure of actual competitiveness is that, when it comes to the value of money, there are two sides to each coin: when the exchange rate is low, exports are cheaper but imports are more expensive. The implication is that firms that need to import capital goods from abroad will find it very expensive to work in that environment. Thus one can easily argue that the economy with an undervalued exchange rate is less, not more, competitive because the cost of doing business is higher. In addition, the RER is a very complex phenomenon to measure. For these reasons, we have removed this variable from the index. Please refer to box 2 on page 11 of the report for a detailed explanation of our reasoning.

The structure of the GCI 2007-2008 as presented in the report is as follows:

Basic requirements Key for Institutions Infrastructure factor-driven Macroeconomic stability economies · Health and primary education Efficiency enhancers · Higher education and training · Goods market efficiency Key for · Labor market efficiency efficiency-driven Financial market sophistication economies Technological readiness Market size Key for Innovation and sophistication factors Business sophistication innovation-driven Innovation

Figure 1: The 12 pillars of competitiveness

Modifications to the criteria for stages and weighting scheme:

Another modification is that, as described in the text above, we reinstated a second criterion for separating countries into stages of development that aims at capturing the resource intensity of the economy, based on the share exports of mineral products in the economy.

Finally, we have modified the weights used for calculating the final scores for countries based on their stages of development. The weights used over the past three years were derived from a growth regression using three decades of data proxies capturing the basic categories measured by the Index. This year we have been able to refine these weights, since we have data available for the three years during which the Index has been calculated. This was done by using maximum likelihood estimates of a GDP per capita equation using different coefficients for different stages of development. Specifically, this has allowed the data from the past few years to indicate the most appropriate weights. The weights are very similar to those used until now, but are not exactly identical. However, we believe they are an improvement since they have a solid econometric foundation based on more recent data.

Modifications to the Survey data process

The GCI is composed of 113 variables, of which 79 come from the Executive Opinion Survey (Survey) carried out annually by the World Economic Forum. This year, we introduce a new approach for computing the country scores for Survey variables.

We have adopted a *moving average* technique, which consists of taking a weighted average of the results of the 2007 Survey and of the 2006 Survey. The weights are determined so that each individual response of the 2007 sample is given 1.5 times more weight than each response of the 2006 sample.

In light of the adjustments made to the model and the improved Survey data treatment detailed above, this year's *Report* presents recalculated numbers for 2006 in order to allow countries to follow their progress over time since last year.