



THE CONFERENCE BOARD

2014 Productivity Brief—Key Findings

Global Productivity Slowdown Moderated in 2013 – 2014 May See Better Performance

The global economy witnessed a deceleration in labor productivity growth for the third consecutive year. Yet, compared to the intensity of the slowdown in previous years, the 2013 decline was modest. Labor productivity growth, measured as the average change in output per person employed, declined from 3.9 percent in 2010 to 2.6 percent in 2011, 1.8 percent in 2012, and 1.7 percent in 2013.

The moderation in the productivity decline is mainly the result of a stabilization of productivity growth rates in mature economies at 0.9 percent. Labor productivity growth in the United States remained at 0.9 percent in 2013. Europe even saw some improvement in output per person employed—from 0.1 percent in 2012 to 0.5 percent in 2013 (for the Euro Area from –0.1 percent in 2012 to 0.4 percent in 2013)—as the output contraction due to the recession abated. However, emerging economies saw a further slowdown in productivity growth (even if their overall rate was relatively strong compared to mature economies) as a result of weaker growth performance in some of the larger economies, such as China, India, Brazil, and Mexico. Overall, labor productivity growth in emerging and developing economies slowed from 3.7 percent in 2012 to 3.3 percent in 2013.

One dramatic result from this year's estimates in The Conference Board Total Economy Database is that the growth rate of total factor productivity, which measures the productivity of labor and capital together, is less than zero for the global economy. This indicates a stalling in the efficiency of optimally allocating and using resources. This stalling appears to be the result of slowing demand in recent years, which caused a drop in productive use of resources that is possibly related to a combination of market rigidities and stagnating innovation.

For 2014, we may expect a moderate improvement in global labor productivity growth to 2.3 percent (up from 1.7 percent in 2013), mainly as a result of improved growth performance in mature economies (up to 1.5 percent in 2014 from 0.9 percent in 2013). Also, emerging and developing economies may see a moderate improvement in productivity growth. However, at 3.6 percent in 2014, their growth rates will stabilize at much lower levels than experienced during the first decade of the century, when productivity growth rates ranged between 5 and 7 percent.

WEAK PRODUCTIVITY RESULTS MAINLY FROM SLOW OUTPUT GROWTH

Global labor productivity, measured as output per person employed, increased at only 1.7 percent in 2013, which is at the low end of the spectrum of productivity growth rates in recent decades. Ever since emerging markets such as China and India started performing impressively in the early 1990s, the world economy has rarely witnessed productivity growth of less than 2 percent, with the exceptions of the recessions of 2001/2002 and 2008/2009.

The modest slowdown in global labor productivity growth in 2013 to 1.7 percent (down from 1.8 percent in 2012) was largely the result of a continued weakening in output growth (Table 1).¹ Growth of real GDP (GDP adjusted for inflation) in the world dropped from 3.1 percent in 2012 to 2.9 percent in 2013, while employment growth slowed from 1.3 percent to 1.2 percent. The average growth rate of GDP for emerging and developing economies fell more (from 5.2 percent in 2012 to 4.7 percent in 2013) than the rate did in mature economies (from 1.4 percent in 2012 to 1.3 percent in 2013). This caused a drop in the productivity growth rate for emerging and developing economies (from 3.7 percent in 2012 to 3.3 percent in 2013), whereas the same rate stabilized in mature economies at 0.9 percent.

Despite the slowdown in output and productivity growth, the relative contribution of emerging markets to world productivity growth remained unchanged at 1.8 percentage points, while the contribution of the mature economies increased marginally (from 0.3 percentage points in 2012 to 0.4 percentage points in 2013) (Table 2). Yet there has been a negative reallocation effect that has led to slower global productivity growth. Evidently, as the emerging and developing economies have lower levels of productivity measured in US dollars compared to mature economies, the ongoing shift in economic activity from mature economies to emerging markets has played a role in the overall world productivity slowdown as well (Table 2 and Table 8). This slowdown is indicative of less efficient use of factor inputs (for example, labor and capital used by firms) and movement of resources from high to less productive regions across the globe.

Developments in mature economies in 2013

While the growth rate of labor productivity in the *United States* stabilized at 0.9 percent in 2013, if productivity is measured as output per hour, it improved slightly from 0.7 percent in 2012 to 0.8 percent in 2013, which reflects a moderate drop in average hours worked per person from 2012 to 2013. Indeed, while GDP growth decreased from 2.8 percent in 2012 to 1.9 percent in 2013, total hours growth declined somewhat more—from 2 percent to 1.1 percent in 2013. The slowdown in labor productivity growth in recent years is due to a combination of slow

¹ The tables which are referred to in this brief can be found in the accompanying document *The Conference Board Total Economy Database™, Summary Statistics 1997-2014*, January 2014, available on <http://www.conference-board.org/data/economydatabase/>.

investment growth, held back by low business confidence that is related to the fiscal crisis, and a lack of efficiency gains, as measured by total factor productivity growth. While the manufacturing sector had been a stronghold of productivity growth for several years, manufacturing productivity growth weakened considerably during the course of 2013 due to the slowdown in global demand. In contrast, the services sector has shown bigger productivity gains as services output growth has strengthened.

Total factor productivity growth in the United States weakened from 0.7 percent in 2012 to 0.4 percent in 2013 (Table 10). The decline in GDP growth, which is related to the drop in global demand, is the main reason for this slowdown, even though there are concerns that a slowing long-term trend in total factor productivity growth could be related to a lack of implementation of new technologies and innovation.

In the *Euro Area*, labor productivity growth (measured as output per person employed) increased from –0.1 percent in 2012 to 0.4 percent in 2013 (Table 1). However, if measured as output per hour worked, Euro Area productivity growth dropped slightly from 0.7 percent in 2012 to 0.6 percent in 2013 (Table 3) because of contractions in both output and hours. Though the decline in output growth in 2013 moderated from –0.7 percent in 2012 to –0.3 percent in 2013, the negative growth rate in total hours moderated somewhat more from –1.4 to –0.9 percent. Indeed, not only did the contraction in jobs ease a little, but the fall in the number of hours per worker moderated from –0.8 percent in 2012 to –0.2 percent in 2013.

Within the Euro Area, there was an unusually large variation in productivity growth rates between economies, reflecting the different impacts of the banking and debt crisis. Among the most troubled economies in the Euro Area, *Italy* in fact showed a positive productivity growth rate in 2013, with the contraction in hours growth exceeding the decline in output growth. Italy's output contracted at –0.7 percent, but hours declined even more sharply at –0.9 percent. While *Spain* also saw output declining at –1.5 percent and hours at –2.8 percent, and therefore a positive productivity growth of 1.4 percent, other troubled economies like *Cyprus*, *Greece*, and *Slovenia* saw negative productivity growth rates, with output declines exceeding the drop in total working hours. While labor productivity growth slightly declined for the Euro Area as a whole, it remained stable in *Germany*, though at a lower growth rate (0.4 percent) than for the Euro Area as a whole (0.6 percent). In *France*, productivity growth was somewhat lower at 0.3 percent, while in the *Netherlands*, which experienced one of the most severe recessions in northern Europe, labor productivity declined at –0.5 percent.

In contrast to labor productivity, the efficiency of resource use in Euro Area, as measured by total factor productivity, continued to fall dropping by –0.6 percent in 2013, following a fall of 0.8 percent in 2012. This means that, during this latest recession, labor and capital in the Euro Area has been less efficiently allocated for two years in a row (Table 10). Total factor

productivity declined at –0.5 percent in both Germany and France, and at –1.1 percent in the Netherlands (Table 12). The widespread weakness of total factor productivity growth among major European countries points to ongoing structural rigidities in labor, capital, and product markets, as reflected in the failure to forge a true single market in Europe (especially for services) and the lack of mobility of labor within and between European economies.

On average, the Euro Area is less productive than the United States. The productivity level in the Euro Area, measured as output per hour in US dollars (after adjustment for differences in relative price levels using purchasing power parities), is just 76.7 percent of the US level in 2013, leaving an almost 25 percent gap between Europe and the United States. This average hides a very large variation, which reflects the countries' different levels of development and economic structure (such as the share of manufacturing in the economy) (Table 8). Major European economies like Germany and France show higher productivity levels than the Euro Area average at 85 and 88 percent level of the United States, respectively, whereas economies like Spain and Italy are only posting 74 percent and 67 percent, respectively. The productivity levels of Greece (49 percent) and Portugal (40 percent) are much lower than those of Spain and Italy.

The developments in the larger European Union are similar to those in the Euro Area (which includes only 17 of the 27 EU member states), although several Central and Eastern European (CEE) economies, which are somewhat less exposed to the fallout from the Euro Area crisis, showed less of a decline in output and hours.² The largest economy in the region, *Poland*, showed some slowdown in output growth (from 1.9 percent in 2012 to 1.1 percent in 2013), while hours growth declined, although not as intensely as in 2012. As a result, labor productivity increase at only 1.4 percent in 2013, down from 5.6 percent in 2012. At a level of output per hour of only 38.3 percent of the US productivity level, there is still much scope for improvement in Poland's productivity performance, as well as in most other CEE economies (Table 8).

The *United Kingdom* showed notable improvement in GDP growth (1.3 percent) as it emerged from the recession. Growth in total hours declined by more than 1 percent to 0.9 percent, resulting in an improvement in labor productivity growth in 2013 of 0.5 percent, after a substantial contraction in 2012 (–1.8 percent). However, at 76 percent of the US level, the UK's level of output per hour remains well below that of its main continental counterparts, France and Germany. (Table 8)

Despite a large monetary and fiscal stimulus in *Japan*, output growth (1.8 percent in 2013) has declined by 0.1 percent relative to the year before. As hours growth picked up from 0.7 percent in 2012 to 1 percent in 2013, productivity growth dropped from 1.2 percent in 2012 to 0.8

² Latvia, which became a member of Euro Area on January 1, 2014, is not included in the estimates.

percent in 2013 (Table 3). At 0.7 percent, Japan's total factor productivity growth grew modestly in 2013, a rate somewhat higher than that in the United States and substantially higher than in Europe, suggesting a slower growth rate in inputs, such as labor and capital, relative to output growth. However, Japan's productivity level is still lower than in Europe, at only 65 percent of the US level, reflecting the weak performance of Japan's services sector relative to other major mature economies.

Developments in emerging and developing economies in 2013

Emerging and developing economies, on average, witnessed a larger slowdown in labor productivity growth than mature economies in 2013, even though their growth rates remained much higher. On average, labor productivity growth (measured as output person employed) declined from 3.7 percent in 2012 to 3.3 percent in 2013.

In the Asia-Pacific region, most emerging and developing economies experienced a relatively moderate slowing of productivity growth. At 7.1 percent annual labor productivity growth in 2013, *China* continues to post one of the highest labor productivity growth rates in the world, which has made it by far the largest contributor to overall global productivity growth. However, Chinese productivity growth has shown a declining trend for several years now—from almost 8.8 percent in 2011 to 7.3 percent in 2012 and 7.1 percent in 2013, which is the lowest productivity growth the Chinese economy has experienced during the last decade (Table 4). The productivity slowdown in China, which largely results from slower GDP growth, may represent an adjustment to a growth rate more in line with its level of development. Although the statistical information for the latest years is sketchy, the indications are that sustained investment growth in China has not been accompanied by the efficiency gains (measured by total factor productivity growth) similar to those of the previous decade. In 2013, total factor productivity growth in China stalled, compared to 3.1 percent from 2007 to 2011 and 0.6 percent in 2012 (Table 10). China can climb the value chain by focusing on higher productivity activities through technological change and innovation, but the results of those efforts typically take a significant time to materialize.

Productivity growth in *India*, which had already slowed dramatically in 2012 to 3.1 percent (from 5.8 percent in 2011), fell to 2.4 percent in 2013, the slowest growth rate of that economy since 2002. The productivity slowdown happened despite a marginal decline in employment growth (from 1.8 percent in 2012 to 1.7 percent in 2013) as output declined much faster (from 5 percent in 2012 to 4.2 percent in 2013). According to provisional estimates of total factor productivity growth, the efficiency of resource use in 2013 is -1.2 percent (Table 10). India's economy is going through a difficult time, as it suffers major macroeconomic challenges, including high inflation, slowing exports, increasing current account and fiscal deficits, a falling exchange rate, and a slowdown in structural reforms. The lack of reform hampers the ability of the labor market to perform better and slows the opening up of sectors for new foreign direct

investment, both of which have a direct impact on productivity growth. In addition, business firms in India also face a severe lack of skilled employees, which triggers the high-skilled wage rates, thereby making businesses less competitive.

Within the ASEAN group, while *Malaysia* and *Vietnam* saw an improvement in productivity growth in 2013, the *Philippines* and *Thailand* both had a decline in productivity growth. *Indonesia* also showed a significant slowdown in productivity growth (from 5.1 percent in 2012 to 3.6 percent in 2013). While the ASEAN economies are all affected by the slowdown in global exports, the strengthening of the domestic sectors in most economies in the region has had strongly positive productivity effects. Productivity growth in *Singapore*, which is the only ASEAN member that is included in the mature economies group in this report, improved in 2013, up from –2.5 percent in 2012 to 1.6 percent in 2013 (Table 9).

Labor productivity growth in Latin America decelerated marginally from 0.8 percent in 2012 to 0.7 percent in 2013 (Table 9). Brazil and Mexico, the major economies in the region, have shown opposing trends. While *Brazil* has recovered from a dismal negative productivity growth of –0.4 percent in 2012 to 0.8 percent in 2013, *Mexico* has lost 0.1 percentage point of its productivity growth in 2013, recording productivity growth of 0.3 percent in 2013. As shown in Table 12, the efficiency of resource use, as measured by total factor productivity, worsened for both Brazil (–0.9 percent) and Mexico (–2 percent) (Table 12). The main productivity deterrents relate to inadequate infrastructure, too little investment in new machinery and equipment, high payroll taxes, and slow improvements in worker skills and management practices.

Productivity growth in the *Middle East and North Africa* slowed as output growth in the region declined in 2013, partly as a result of weakening oil prices and partly due to political and social unrest in much of the region, while employment growth remained stable.

Labor productivity growth in sub-Saharan Africa has remained at 2.1 percent in 2013, the same as in 2012, accompanied by stable output and employment growth rates. Africa still, however, has the lowest level of productivity (at about 5 percent of the US level), with South Africa at the top with 28 percent of the US productivity level (Table 9). Estimates for *South Africa*, the largest economy in the region, suggest relatively solid labor productivity growth of more than 3 percent, but there is still much scope for a more efficient use of resources since total factor productivity growth is declining (Table 13). There are also large variations in productivity growth between African economies, ranging from more than 4 percent in large economies such as *Ghana*, and *Côte d'Ivoire* to contractions in economies such as *Zimbabwe* and *Madagascar*.

In *Russia*, labor productivity growth declined by about half from 3.1 percent in 2012 to 1.6 percent in 2013 (Table 3). While output growth declined by about 2 percentage points (from 3.4 percent in 2012 to 1.5 percent in 2013), employment contracted by –0.2 percent (down from 0.4

percent in 2012), resulting in a productivity decline. Russia still has a lot of room for productivity improvement, as it remains at only 34 percent of the US productivity level.

Productivity growth in *Turkey* continued to contract at –0.6 percent in 2013, which was added on to the productivity decline of –0.8 percent in 2012. Underlying these estimates was a slightly better improvement in output growth (from 2.2 percent in 2012 to 2.8 percent in 2013) than employment growth (from 2.9 percent in 2012 to 3.4 percent in 2013), but, overall, the economy seems to have become more rather than less labor intensive. Turkey’s total factor productivity growth continues to be negative (–3 percent) and its labor productivity level is at 37 percent of the US level. Turkey seems to have suffered severely from the European crisis, but it is also struggling with its transition from a low-cost producing economy to a higher position in the value chain and raising its efficiency through productivity-enhancing investments in labor skills, technology, and innovation.

Comparisons of overall productivity levels

Productivity levels in emerging and developing economies, measured as output per person employed (converted to US dollars using purchasing power parities), are much lower than in mature economies, but there are large differences between regions. Productivity levels were generally lowest in Africa, at 5 percent of US levels in 2013. At 10.1 percent on average, emerging and developing nations in Asia-Pacific have only marginally higher productivity levels. Output per person employed in China is 17.1 percent of the US level, and in India it is 8.1 percent of the US level. African and Asian economies are generally abundant in labor and scarce in capital, explaining their low starting positions in levels of output per person. Notable exceptions to low labor productivity levels are South Africa (28 percent) and Malaysia (32 percent). In both cases, mining activities, which are very capital intensive, contribute to the high averages. Several Middle East economies also typically score higher productivity levels because of a high share of capital-intensive exploitation and production of oil and natural gas.

Most economies in Latin America, and Central Asia and Southeastern Europe are characterized by higher levels of output per person compared to Asia and Africa. In the first group, capital is typically more abundant relative to labor, creating higher output per worker. For example, on average the level of labor productivity in Russia, Central Asia and Southeastern Europe was 27.6 percent in 2013. Still some Central Asian states like the Kyrgyz Republic, Tajikistan, and Uzbekistan have productivity levels as low as 6 percent of the US level, comparable to developing economies in East Asia, such as Vietnam. In Latin America, the average productivity level is 22.2 percent of the U.S. level, with the notable exception is Bolivia, which had a productivity level of only 9.4 percent of the US level in 2013.

THE PRODUCTIVITY OUTLOOK FOR 2014 SHOWS SOME IMPROVEMENT

Productivity measures are difficult to project because two variables need to be estimated: the growth in output or GDP and the growth in employment or, more precisely, in total hours worked. Based on the current forecasts and estimates available, average global labor productivity growth is projected to improve slightly to 2.3 percent relative to 1.7 percent in 2013 (Table 1). The productivity improvement is entirely driven by output growth, which is expected to increase only marginally—from 2.9 percent in 2013 to 3.5 percent in 2014. Hence the productivity improvement could largely represent a pro-cyclical effect from the recovery in mature economies, even though emerging and developing economies contribute as well.

Developments in mature economies in 2014

Among the mature economies, productivity growth (measured as the change in output per hour worked) may improve slightly, largely driven by the United States and, to a lesser extent, Japan (Table 3). In the *United States*, productivity growth could be more than double to 1.8 percent in 2014, compared with 0.8 percent in 2013. US productivity performance in 2014 will be an important economic variable to track, as the United States is likely to be among the first economies to show positive effects from a recovery in demand, as markets are relatively flexible to support allocation of resources to its most productive industries and sectors.

The *Euro Area* is projected to come out of recession slowly in 2014, but as the labor market recovery typically lags, the growth in output per hour is expected to remain at 0.6 percent in 2014 (Table 3). More sustainable productivity improvement in Europe will need to come from an acceleration in investment and a more efficient allocation and use of resources. Many of those potential gains will arise from the finalization of a single market in Europe, where labor, capital, products, and services can float freely through trade and there are harmonized banking rules, greater migration, and cross-border investments. Such sustainable productivity gains will likely take longer to achieve along Europe's path to recovery from the crisis.

Germany is expected to see GDP growth of 1.7 percent, with productivity growth at 1.2 percent and total hours at 0.5 percent. *France* is expected to have a GDP growth of 0.9 percent, with productivity growing at 0.4 percent and total hours at 0.5 percent. Productivity growth in Spain is expected to drop significantly to only 0.1 percent (compared to 1.4 percent in 2013), as the GDP will grow only marginally and hours are expected to grow at almost the same rate as GDP in 2014.

Compared to the Euro Area, the *United Kingdom* is expected to maintain a relatively high GDP growth rate of 1.9 percent in 2014. However, with faster hours growth, labor productivity growth is likely to decelerate marginally from 0.5 percent in 2013 to 0.4 percent in 2014, which is slightly below the Euro Area projection. Total factor productivity growth, which measures the

rise in the productivity of labor and capital, may remain negative until demand for products and services accelerates allowing for a bigger contribution from technology and innovation to productivity growth.

Japan will see only a moderate productivity improvement in 2014 (from 0.8 percent in 2013 to 1.2 percent in 2014). Output growth is projected to slow to 1.5 percent, which is lower than 1.8 percent in 2013, but there will be a faster decline in the growth rate of hours, moving to 0.2 percent in 2014 from 1 percent in 2013. Efficiency gains in Japan are extremely difficult to come by as long as crucial structural rigidities in Japan's labor market and in several services industries are not being resolved.

Developments in emerging and developing economies in 2014

Emerging and developing economies are also expected to see a moderate improvement in productivity growth in 2014 (Table 4). However, this will not represent a return to the productivity growth rates of the past decade, which were almost double those of today. As emerging economies begin to mature, productivity growth is harder to achieve and requires bigger efforts in building critical infrastructure, including "soft" infrastructure such as information technology, research and development, and the development of human capital (rather than roads, railways, and airports). With service industries becoming more important sectors as economies advance, productivity growth becomes almost entirely dependent on human capital and on organizational capabilities. A larger reservoir of skilled workers that can operate in flexible and transparent labor markets where they can put their talents to the most productive use is crucial to the achievement faster productivity growth. While China is expect to continue to show a further slowdown in productivity growth in 2014, from 7.1 percent to 6.7 percent, Brazil, India, Russia, and Mexico will all show signs of small improvements.

For *China*, the economy is projected to hold up well at 7.0 percent GDP growth, but the slowing underlying growth trend, which is characteristic of the transition toward a more consumer- and services-sector driven economy, typically translates into slowing productivity growth. Moreover, as large parts of the economy begin to mature, a larger burden of innovating at the technological frontier rests on the shoulders of Chinese companies, requiring more resources and higher risk to increase productivity compared to their traditional "catch-up" mode with the best practices of foreign enterprises.

India's productivity growth is likely to improve slightly in 2014 to 2.7 percent, up from 2.4 percent in 2013, as output growth improves from 4.2 percent to 4.4 percent. Critical macroeconomic constraints, notably persistent high inflation, worsening fiscal and current accounts, and above all the upcoming elections, reduce the prospect for a faster output recovery beyond 5 percent. With slow demand and abundant labor supply, businesses may find it more difficult to achieve productivity gains through investment and greater efficiency.

In developing Asia, the productivity growth performance of 2013 will be sustained into 2014, especially if in global trade does not deteriorate. The most mature and smallest economies in the region, especially *Singapore* and *Hong Kong* (which is especially tied to the mainland Chinese economy), are much more dependent on the growth performance of the rest of world, so it is even more important for those countries to manage the impact of the global slowdown by creating greater efficiency from internal resources, such as human capital, innovation, and operational excellence.

In Latin America, *Brazil* will most likely see an improvement in productivity growth, as output is projected to recover to 2.3 percent. However, since firms are likely to be cautious in hiring due to an uncertain recovery, labor productivity growth will recover to 1.1 percent in 2014, up from 0.8 percent in 2013, and employment growth will remain the same as in 2013. Output per person employed in *Mexico* is expected to grow at only 0.5 percent, but it will result from both faster output growth (3.1 percent) and employment growth (2.5 percent) compared to Brazil. The Mexican economy benefits from continued reforms in labor markets and product markets, as well as its integration into NAFTA and its role in the global value chain.

Most other emerging markets will see moderate improvements in productivity in 2014, including the *Middle East and North Africa* and especially *sub-Saharan Africa*. On average, Africa may experience a slight deceleration in output growth and consequently a decline in productivity growth. *Russia* should see a moderate slowdown in output growth but a faster decline in employment growth, translating into higher productivity growth. A critical challenge for Russia remains the diversification of the economy to generate more employment growth, which ultimately may have an offsetting effect on Russia's labor productivity performance because the new industries will be less capital intensive than the energy sector. *Turkey* is projected to see a hike in productivity growth to 0.8 percent in 2014, thus departing from its negative trajectory in 2012 and 2013. The increase in output growth, along with a decline in employment brings a slow productivity growth in Turkey.

Variables definitions

Productivity provides a simple but powerful indicator of economic efficiency. Labor productivity measures output per employed worker. Where working hours can also be measured (mostly only in mature economies), labor productivity can also be measured on a per hour basis. A more sophisticated productivity measure, named total factor productivity, represents output from all inputs in the production process, not just labor. Total factor productivity growth is the result of a combination of improvements in efficiency (fewer inputs are needed for a given output) as well as technology and innovation (more output is achieved from a given input).

All growth rates are measured in real terms, that is, after adjustment for inflation. The comparative levels of productivity in this report are based on US dollar measures, which are obtained by converting output in national currencies by purchasing power parities (PPPs) for 2013. These PPPs provide an adjustment for differences in relative price levels between the output produced in different countries.

About The Conference Board *Total Economy Database*[™]

This data for the Productivity Brief is drawn from The Conference Board *Total Economy Database*[™], which provides a comprehensive overview of growth rates of productivity, GDP, and employment for 123 economies representing 97 percent of the world's population and 99 percent of global output. Widely watched and utilized by analysts, the database is updated and re-benchmarked every year in January. This productivity brief is followed by more in-depth reports later in the year.

Related materials:

The full *Total Economy Database*[™] is available on The Conference Board website: <http://www.conference-board.org/data/economydatabase/>

The Conference Board *Global Economic Outlook*, November 2014 is available on The Conference Board website: <http://www.conference-board.org/data/globaloutlook.cfm>. See also "Time to Realize the Opportunities for Growth," *StraightTalk*, November 2013.

The Conference Board *International Labor Comparisons Program* is available on: <http://www.conference-board.org/ilcprogram/>. See also: The Conference Board, *International Comparisons of Productivity and Unit Labor Cost Trends*, 2012.

The Conference Board CEO Challenge 2014, People and Performance Reconnecting with Customers and Reshaping the Culture of Work, New York, January 2014.

Chart 1: Trend growth of labor productivity (GDP per person employed)

Emerging economies increasingly drive the global labor-productivity trend

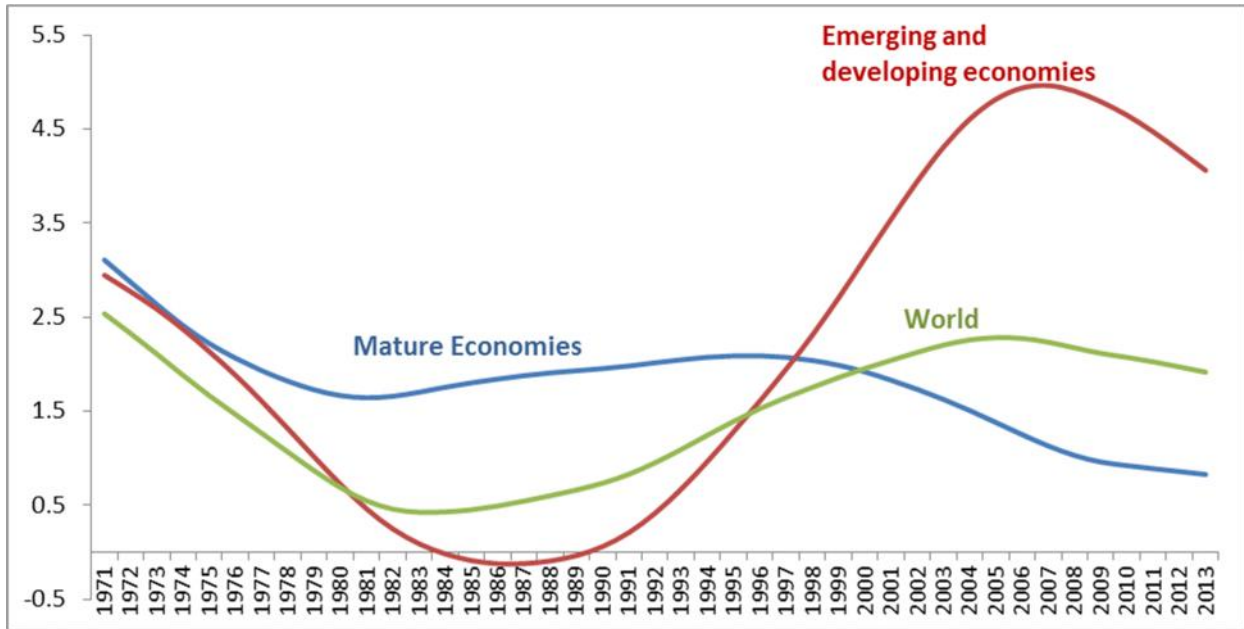
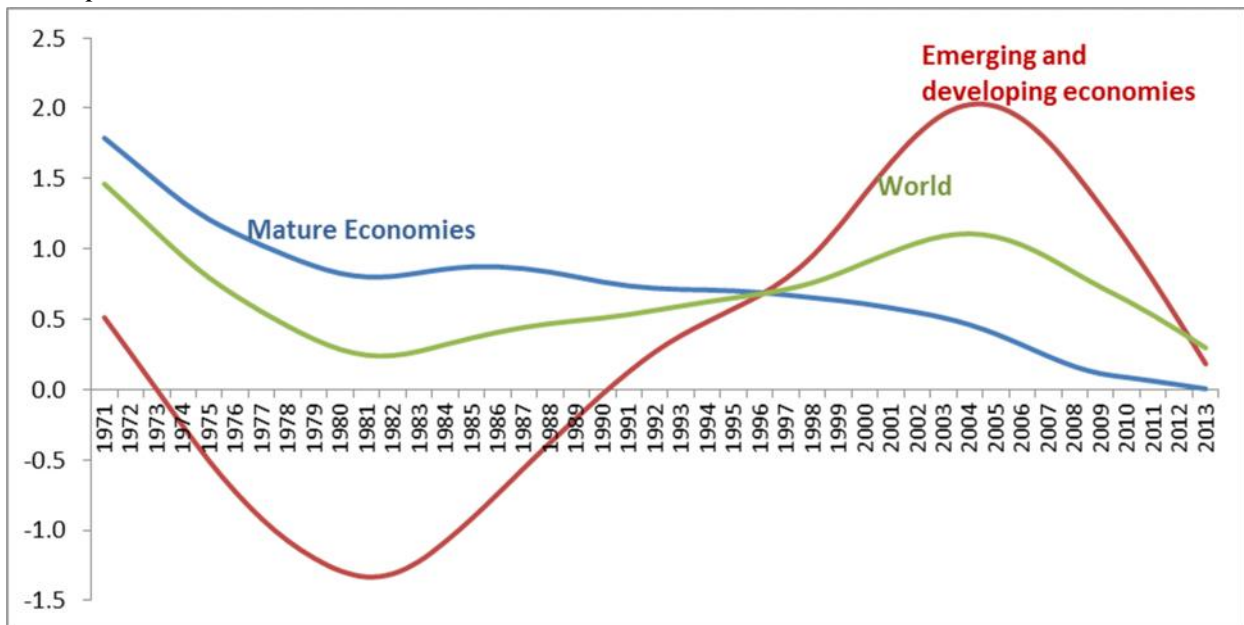


Chart 2: Trend growth of total factor productivity

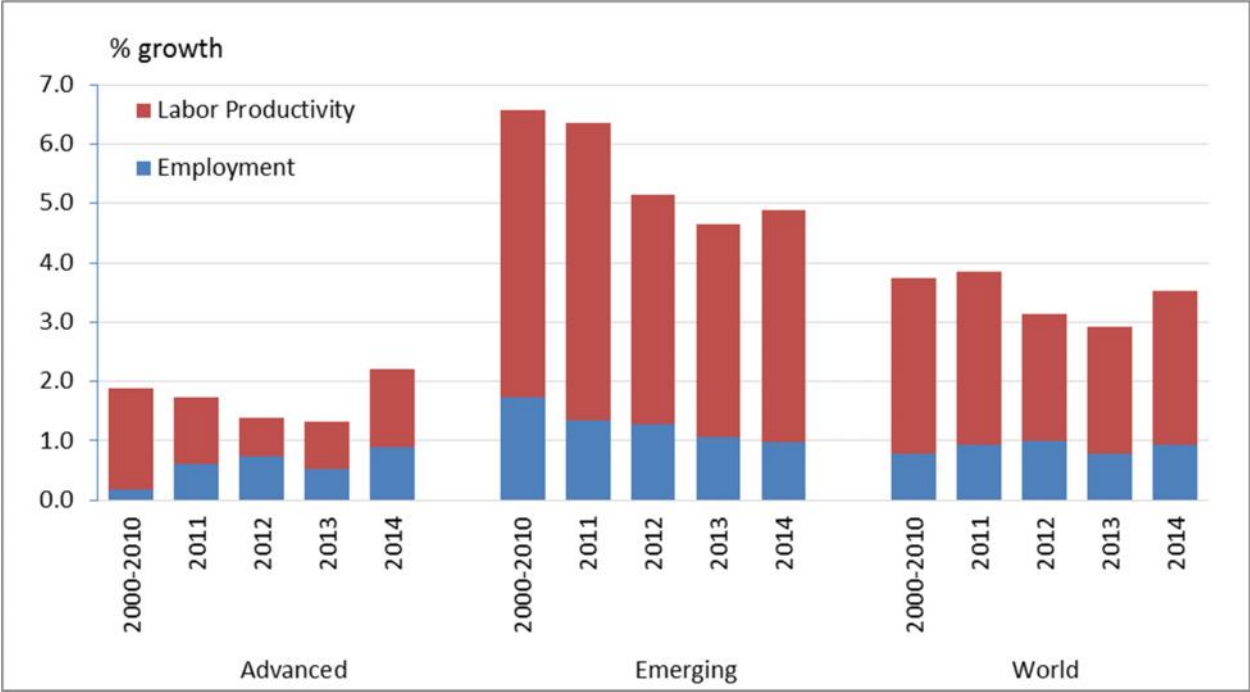
Greater efficiency in emerging economies has boosted global trend in Total Factor Productivity, but impact is almost lost



Source: The Conference Board *Total Economy Database*™, January 2014

Note: The solid trend line is based on HP filters, including projections of productivity for 2013.

Chart 3: Percentage Contribution of Employment and Labor Productivity to Global Growth
Productivity remains a more important driver of economic growth than increases in employment.



Source: The Conference Board *Total Economy Database*[™], January 2014