



THE CONFERENCE BOARD

2012 Productivity Brief—Key Findings

Advanced Economies Show Dramatic Loss in Productivity Edge

Amid the threat of recession in Europe and slowing output growth in many other parts of the world, labor productivity growth around the globe weakened substantially in 2011 and shows no signs of significant recovery in 2012. According to these new annual estimates by The Conference Board, productivity growth in most advanced economies fell by more than half compared to 2010. While productivity growth rates in emerging economies remain much higher, those have also leveled off. Should the recession become entrenched in 2012, slow productivity will be the Achilles' heel of even the best performing economies within Europe. On the other hand, some weaker economies may actually see cyclical productivity gains as less productive businesses close down. In the longer term, structural reforms and innovation are needed to bring productivity back to a more sustainable growth path.

KEY NUMBERS

Productivity Performance in 2011 Shows Slowdown Relative To 2010

- In 2011, the world economy saw a significant slowdown in labor productivity growth (measured as the average change in output per person employed) to 2.5 percent, down from 3.6 percent in 2010. (Table 1)
- Slower productivity growth was entirely the result of less output growth. Gross domestic product (GDP), adjusted for inflation, dropped from 5 percent in 2010 to 3.9 percent in 2011; average employment growth remained practically unchanged compared to the previous year at 1.4 percent. (Table 1)
- Most of the productivity slowdown in 2011 was the result of slower output growth in advanced economies, which on average almost halved from 3.1 percent in 2010 to 1.6 percent 2011. (Table 3)
 - In the United States output growth dropped from 3 percent in 2010 to 1.8 percent in 2011.
 - In the United Kingdom, output growth slowed by half, from 1.4 percent in 2010 to 0.7 percent in 2011.
 - In Japan, output growth contracted by half a percent in 2011, whereas it had grown spectacularly at 4.4 percent in 2010.

- In the Euro Area, the already weak output growth of 2010 at 1.8 percent continued to decline into 2011, dropping to 1.5 percent. However, decline was less than in the United States, the United Kingdom and Japan.
- Advanced economies only showed a moderate advancement in employment and working hours whereas, at the same time, productivity growth suffered. (Table 3)
 - In the United States, the growth rate of total hours worked improved from 0.3 percent in 2010 to 1.2 percent in 2011, whereas productivity growth (measured as the change in output per hour worked) slowed from 2.7 percent in 2010 to only 0.6 percent in 2011.¹
 - In the United Kingdom, total hours increased at a modest 0.5 percent in both 2010 and 2011, while productivity growth fell from 0.9 percent in 2010 to only 0.2 percent in 2011.
 - In Japan, the output contraction was matched by an ongoing decline in total working hours. Working hours dropped to -0.7 percent in 2011 from -0.6 percent in 2010. Productivity slowed from 5 percent in 2010 to 0.2 percent in 2011.²
 - In the Euro Area, total working hours were stagnant in 2010 and rose only 0.3 percent in 2011. Productivity growth weakened from 1.8 percent in 2010 to 1.2 percent in 2011, although it was the highest among the major advanced economies.³
- Emerging and developing economies also saw a slowdown in productivity growth in 2011, down from 5.5 percent in 2010 to 4.7 percent on average in 2011. (Table 1)
 - In the Asia-Pacific region, most economies experienced a moderate slowing in productivity growth in 2011, mostly in the range of about 1 percentage point, primarily as a result of a slight moderation in output growth.
 - China still shows one the highest productivity growth rates in the world, at 8.8 percent in 2011, down from almost 10 percent in 2010.
 - Productivity growth in India rose more slowly than in China, at 5.2 percent in 2011, down from 6.3 percent in 2010. But India still sees job growth that is 7 times faster than China (2.2 percent in India versus 0.3 percent in China).
 - The slowdown in labor productivity growth in Latin America was more dramatic, dropping from 3.5 percent in 2010 to 1.5 percent in 2011, largely the result of slowed GDP growth (from 5.9 percent in 2010 to 4.1 in 2011). Employment growth in Latin America slightly improved to 2.6 percent in 2011.

¹ In terms of output per person employed, U.S. productivity growth slowed from 3.6 percent in 2010 to 1.2 percent in 2011.

² In Japan, output per person employed fell from 5.5 percent in 2010 to -0.3 percent in 2011.

³ In terms of output per person employed, the Euro Area's productivity slowdown was stronger, slowing from 2.3 percent in 2010 to 1.3 percent in 2011.

- Brazil's productivity growth slowed somewhat more than the Latin American average, from 4 percent in 2010 to 1.4 percent in 2011. Output growth dropped by more than half from 7.5 percent in 2010 to 3.4 percent in 2011. (Table 4)
- The Middle East, Russia, and other member countries of the Commonwealth of Independent States were the only regions that showed modest productivity improvements in 2011.

The Outlook for 2012 Suggests Further Decline in Global Productivity Growth Rates

- In 2012, average global labor productivity growth (measured as the change in output per person employed) will continue to weaken slightly from 2.5 percent in 2011 to 2.3 percent this year, mainly as a result of a further slowing of global output growth to 3.4 percent (from 3.9 percent in 2011). Global employment growth will also weaken slightly to 1.1 percent (from 1.4 percent in 2011), but not enough to prevent further slippage in productivity growth. (Table 1)
- Among the major advanced regions, productivity growth (measured as the change in output per hour worked) remains at around 1 percent. (Table 3)
 - The United States will see some modest strengthening in labor productivity growth in 2012 to 0.8 percent.
 - The United Kingdom will see a stronger improvement in productivity growth to 1.2 percent in 2012, as austerity measures strongly impact the labor market and produce a decline of -0.8 in total hours worked. GDP growth is forecasted to grow marginally (at 0.4 percent).
 - Japan will also see an improvement in productivity growth to 1.2 percent, as both GDP and hours growth return to positive territory coming out of the recession and crisis of 2011.
 - In contrast to the other advanced economies, the Euro Area will see a continued slowing in productivity growth from 1.2 percent in 2011 to 0.8 percent in 2012. Still, the 2012 projection of 0.8 percent equals that of the United States, as the latter gains ground with stronger labor performance in 2012 (a 1 percent rise in total hours in the United States versus a -0.7 percent contraction in hours in the Euro Area).
 - Within the Euro Area, there are large differences in the projections of productivity growth across member states. (Tables 5-7)
 - Some of the economies most troubled by sovereign debt and unstable financial markets, such as Spain and Greece, will see significant productivity improvements (1.8 and 1.1 percent respectively) as austerity measures squeeze out less productive activities.

- In contrast, in Portugal and Ireland, productivity declines will be among the largest (at -1 and -0.3 respectively) in the Euro area as output growth suffers more from the recession than employment.
- The large gap in labor productivity growth (the change in output per person employed) between emerging and advanced economies will continue into 2012. Labor productivity growth is projected at 4.2 percent for emerging and developing countries and at 1.2 percent for advanced ones.
 - China's productivity will continue to gradually slow from 8.8 percent in 2011 to 7.6 percent in 2012, in line with slowdown in output growth.
 - India's productivity growth will stabilize at 5.1 percent, as the moderate slowdown in output and employment offset each other.
 - The largest improvement in productivity among major emerging economies will occur in Mexico, which is projected to experience a major slowdown in employment growth, from an extraordinary 4.8 percent increase in 2011 to 1.5 percent in 2012.
 - In contrast, the biggest productivity slowdown in 2012 will occur in Turkey, which is looking at a drop in output growth of about half in 2012 relative to 2011, as the export market in Europe contracts.

HOW TO INTERPRET THE LATEST NUMBERS

A Larger Than Expected Slowdown in Productivity Growth in 2011

- The global productivity slowdown in 2011 was significantly larger than originally projected because of the greater slowdown in output growth in advanced economies, including the United States, most of Europe, and Japan. The normal procyclical recovery in productivity, as it occurred in 2010, came to an early halt as structural factors stood in the way or even intensified. The United States experienced much slower growth than was originally forecasted, and total hours growth (while comparatively weak) grew faster than in 2010. Japan's economy was severely hit by the tsunami in March, and recovery only emerged in the final quarter. The Euro Area's growth received a bigger hit than expected in the second half of the year, especially during the final quarter when the sovereign debt and bank crisis began to take its toll.
- Though not as dramatically as in the advanced countries, output growth in emerging economies did drop and was lower than originally projected in 2011. In Brazil, India, China, and Mexico, slightly lower output growth rates, not fully matched by slower employment growth, combined for a negative impact on productivity. Turkey's productivity growth turned out much better, however, as the projected slowdown from 2011 was much more moderate.

- Despite slower productivity growth around the globe, there is no sign yet of an ongoing long-term downward trend. In the past few years, the trend growth of global labor productivity has stabilized at just above 2 percent. (Chart 1) The shift of economic activity from advanced to emerging economies still favors countries with higher productivity growth rates. However, the long-term trend indicates that the potential to sustain growth through technology and innovation is weakening around the globe.

Productivity Is a Key Driver of Growth—Even More So When Austerity Reigns

- Productivity remains a more important driver of economic growth than increases in employment. Globally, productivity growth accounted for about two thirds of GDP growth in 2011, leaving the remaining one third to employment growth. (Chart 3). Job growth had a slightly bigger impact on economic growth in advanced countries in 2011, especially because of the solid labor market performance of some Asia-Pacific advanced economies such as Australia and New Zealand.
- In 2012, however, job growth in advanced countries will not continue. On average, almost all output growth in advanced economies will need to come from labor productivity, since there will be virtually no job creation. However, a decline in jobs in Europe and Japan will be offset by positive employment growth in the United States and several other advanced economies. For sustained growth, advanced economies must break through the short-term trade-off between productivity and job growth and focus on the creation of more productive jobs—a challenge not easily met in economies characterized by government budget cuts and austerity.
- Indeed, austerity can lead to productivity gains from the ousting of unproductive firms and economic activity in the economy. For example, as construction activity gets squeezed, the least productive contractors will close. Also small- and medium-sized enterprises cannot survive the pullback of demand and go out of business. Such productivity gains driven by a restructuring of the economy are being observed in Spain, Greece, and the United Kingdom.
- Strikingly, productivity makes an even more important contribution to output growth in emerging and developing economies than in advanced ones. On average, productivity contributed about three quarters to output growth in all emerging and developing economies in both 2011 and 2012. In China, productivity accounts for almost all GDP growth, as job growth is currently as low as 0.3 percent per year. Much of the emerging economies' productivity growth is transitional, since it reflects an ongoing restructuring as they emerge from an environment characterized by many weak and unproductive (and often small) businesses, which gradually disappear as reforms proceed.

- Despite the larger role for productivity, most emerging economies are still among the most important job creators, although that engine of growth is gradually losing steam as wages increase and the demographic impact of lower birth rates begin to kick in: during 2010, average employment growth in emerging and developing economies was 1.6 percent; in 2011 it reached only 1.5 percent and is projected at 1.3 percent for 2012. (Table 1)

Technology and Innovation Show No Signs of Picking Up

- Productivity is mostly measured as output per person employed or per hour worked. A more sophisticated measure, total factor productivity (TFP), which represents the output from all inputs in the production process, not just labor, shows an even stronger slowdown. The global TFP trend has slowed from around 1 percent in the early 2000s to around 0.5 percent currently. (Chart 2)
- Total factor productivity measures the efficiency with which inputs, such as labor and machinery, are being used in production. Its long-term trend is therefore a good representation of whether technology and innovation help to produce goods and services with increasing efficiency. The slowdown of TFP growth is therefore a possible indication of a slowdown in technological progress and innovation, especially in advanced economies.
- In the United States, TFP growth turned negative for most of the second half of the previous decade and only picked up again in 2010 as the recovery from the 2008–2009 recession took hold. However, a renewed slowdown in 2011 suggests that the TFP trend in the United States may continue downward and that the productivity effects from ICT applications, especially in the services sector of the U.S. economy, have begun to erode. Whether this path can reverse itself depends on whether the United States is able to reinvigorate its capacity for innovation. (Table 10)
- The revival of TFP growth in the Euro Area is more urgent, as 2010 and 2011 have not seen much of a recovery in this rate. In fact, the TFP trend in the Euro Area has been close to zero for most of the past decade. It points to a weakening capacity for innovation in Europe and a failure to strengthen competitiveness across the European Union, despite the good intentions laid down in various grand schemes, including Europe 2020 and the Lisbon Agenda in the first decade of the 2000s.
- Emerging economies have also seen a decline in the trend in TFP growth. Some of this is related to the extraordinarily rapid increases in investment in major emerging economies like China, India, and Brazil, before (and especially after) the 2008–2009 financial crisis. As transitional growth erodes, the combined effect of large investment and fewer reforms in the economy creates areas for slowing and marginal returns and less productivity from those investments.

Advanced Countries Are Gradually Losing Their Leading Edge

- Advanced countries lost their advantage in productivity growth over developing and emerging economies more than 15 years ago. Trend growth estimates of labor productivity and total factor productivity in emerging and developing countries overtook those of advanced economies in the mid-1990s. Today, the growth gap in the trend of labor productivity growth between emerging and advanced economies is about 4 percent. However, in terms of TFP, the gap is much smaller and has shrunk to only about 0.5 percent, reflecting the large impact of rapid investment on TFP performance in emerging economies.
- An important reason for the slowing productivity trend in advanced economies is the large output gap between actual and potential output that has been created since the beginning of the 2008 recession. Potential output, which measures the level of output an economy can produce assuming stable inflation and given its available resources and state of technology, has remained well ahead of actual output for several years. In the United States, the output gap today is still about 6 percent, and in Europe it is about 3 percent. This suggests that resources are not being used at full capacity, which has a negative impact on productivity. A more serious concern is that after a long period of slow growth in actual output, the growth rate of potential output weakens as businesses shed labor and capital, and other resources, permanently. This would cause an even more definitive erosion of the productivity of advanced economies.
- Another way to look at the challenge of productivity leadership for advanced economies is their levels of productivity, taking output per worker (corrected by purchasing power parities for price differences across countries) as a measure. Globally, the U.S. productivity level is still the highest for the large economies in the world at four times the average level of the world economy (among advanced economies, only Norway and Luxembourg have higher productivity levels than the United States). Euro Area productivity per workers falls about 25 percent below the U.S. level, and Japan's is about 30 percent lower. In Latin America and Asia-Pacific (including the advanced economies in the latter regions) the gap is almost 80 percent; in China, it is 85 percent and in India, 90 percent.
- These apparently large gaps in productivity levels hide large differences between sectors (industry, services), ownership categories (private, public) and origin (domestic, foreign). Also, large gaps in productivity may be matched with similar or even larger differences in cost, especially labor cost. This keeps countries with lower productivity levels more competitive. However, rising wages in emerging economies and more complex cost structures as companies become more sophisticated with regard to their product portfolio and processes, can help advanced economies to retain or regain competitiveness.

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

This data 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 twice yearly in The Conference Board Productivity Brief published in January and in more in-depth reports later in the year. The Conference Board Total Economy Database is the only comprehensive source on productivity in both emerging and advanced economies that is available to the public free of charge.

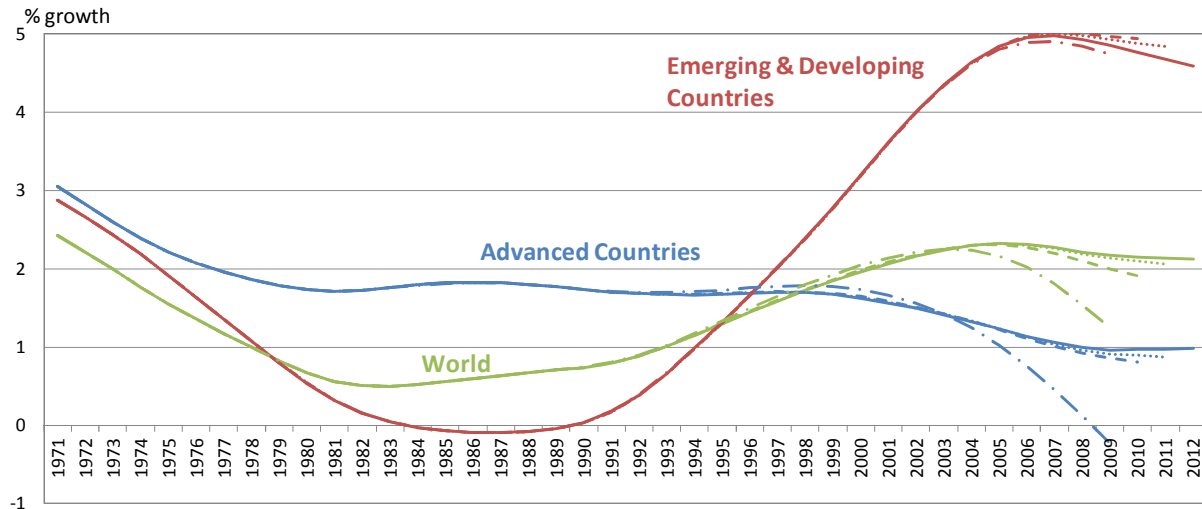
Related materials:

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

The Conference Board, Performance 2011, *Productivity, Employment, and Growth in the World's Economies*, Research Report R-1475-11-RR, New York, 2011.

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

Emerging economies increasingly drive the global labor-productivity trend

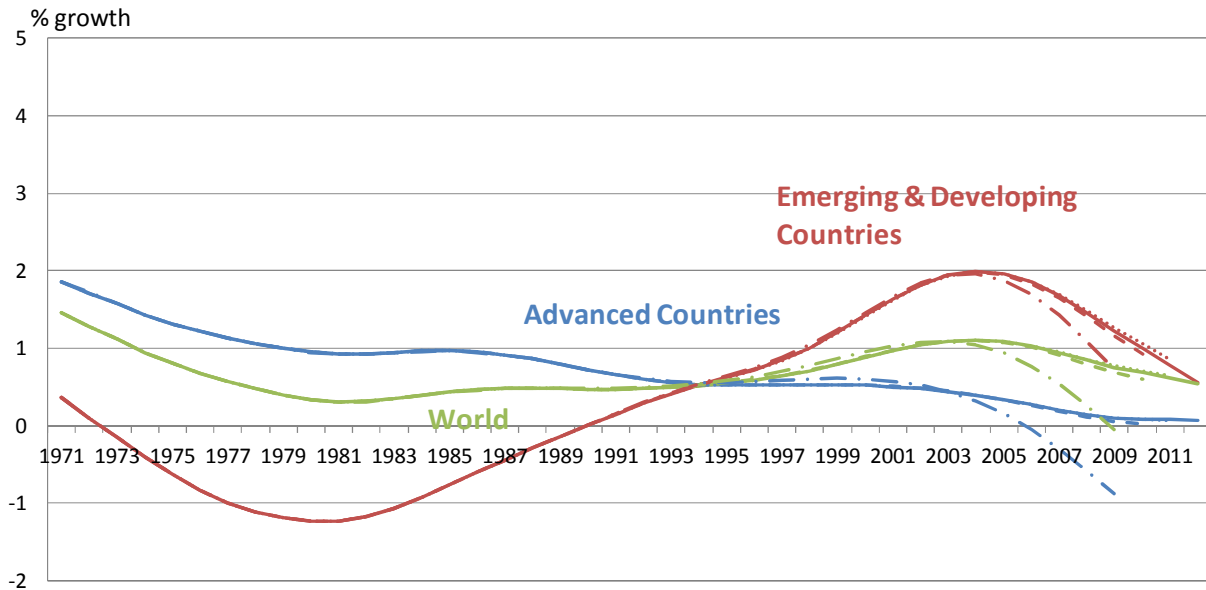


Source: The Conference Board *Total Economy Database*[™], January 2012

Note: The solid trend line is based on HP filters, including projections of productivity for 2011 and 2012, which are based on the last five years' average growth. Dotted lines have 2010 as end-year and dashed lines have 2011 as end-year.

Chart 2: Trend growth of total factor productivity

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

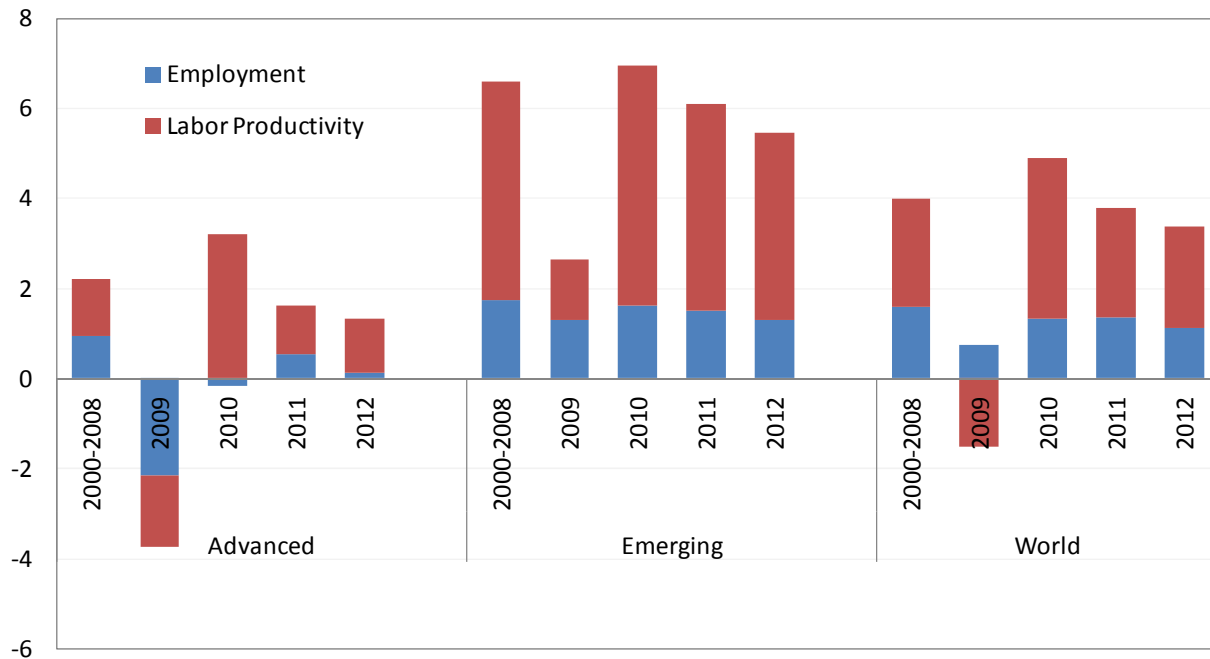


Source: The Conference Board *Total Economy Database*[™], January 2012

Note: The solid trend line is based on HP filters, including projections of productivity for 2011 and 2012, which are based on the last five years' average growth. Dotted lines have 2010 as end-year and dashed lines have 2011 as end-year.

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 2012