# Ben S Bernanke: Lessons from emerging market economies on the sources of sustained growth

Speech by Mr Ben S Bernanke, Chairman of the Board of Governors of the Federal Reserve System, at the Cleveland Clinic "Ideas for Tomorrow" Series, Cleveland, Ohio, 28 September 2011.

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Good afternoon. I am pleased to participate in the Cleveland Clinic's "Ideas for Tomorrow" series. My public remarks often concern short-run economic developments, but it is important once in a while to place those shorter-term developments in the context of the powerful long-term trends shaping the global economy. Of these trends, surely one of the most important is the rapid and sustained economic growth achieved by the emerging market economies. Today, by some measures at least, developing and emerging market economies now account for more than one-half of global economic activity, up substantially from less than one-third in 1980. Today I will discuss what the experience of the emerging markets teaches us about the sources of economic growth and conclude with some thoughts about the prospects for future growth in this critical part of the global economy.

Among the emerging market economies, the Asian "growth miracle" is, of course, the most conspicuous success story, with the case of China being particularly dramatic. Over the past three decades, growth in Chinese output per person has averaged roughly 9 percent a year, putting per capita output about 13 times higher now than in 1980. The economy of Korea, another East Asian success story, has expanded, on average, at better than a 6 percent annual rate over the past 30 years. Growth in Latin America has been more moderate, but that continent has made substantial economic progress as well, most notably in terms of lower inflation and greater economic stability. More recently, the pace of recovery in most emerging market economies from the global financial crisis has been impressive. In short, in the past few decades the emerging market economies have made significant strides in raising living standards. Hundreds of millions of people have benefited from this progress, with many millions lifted out of poverty. To be sure, the gap with the advanced economies remains substantial, but it has been narrowed significantly.

These developments raise the question: How have the emerging market economies achieved such strong results in recent decades? The answer is complex, of course, and I can only scratch the surface of these issues today; but I hope to lay out some key themes and provide some food for thought.

#### Fostering growth in developing economies: the Washington Consensus

Ironically, the rapid growth of the emerging market economies reflects in part the low levels of development at which they began. In the economic-growth derby, in contrast to most types

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Based on gross domestic product (GDP) data from the International Monetary Fund (IMF), with the valuation of a country's GDP based on purchasing power parity exchange rates. The emerging market and developing economies group used here includes the IMF's classification of newly industrialized Asian economies. There is no consensus definition of emerging economies, as contrasted with developing economies, but generally speaking, emerging market economies are defined as those economies in the low- to middle-income category that are advancing rapidly and are integrating with global capital and product markets. Emerging economies account for most of the rise in the share of the developing and emerging economies in global output, and they are the focus of this speech.

<sup>&</sup>lt;sup>2</sup> According to data from World Bank Development Indicators, 2011, there were more than 500 million fewer people living below the \$1.25 a day poverty line in 2005 than 25 years earlier.

of competitions, starting from far behind has its advantages. For example, all else being equal, domestic and foreign investors are attracted to the higher returns they receive from investments where capital is relatively scarce, as is generally the case in poorer countries. In the 19th century, the United States drew capital from all over the world to finance railroad construction; although not all of these investments paid off, overall they helped generate enormous increases in wealth by reducing transport costs and fostering economic integration within the North American continent. Similarly, emerging market economies in recent decades have attracted substantial foreign investment in new manufacturing capacity, in part to take advantage of low labor costs. Developing countries also have the advantage of being able to import and adapt production technologies already in use in advanced economies. And, indeed, empirical studies have found some tendency for countries that start from further behind to grow faster than those that begin with higher incomes.<sup>3</sup>

However, much of the national and regional variation in growth rates is not explained by initial economic conditions. Notably, emerging Asian economies have tended to outperform, relative to what would be predicted based solely on their levels of income per person, say, 30 years ago. And some of the poorest countries, including a number in Africa, have continued to grow relatively slowly. So what factors — and what economic policies — differentiate the more successful performers from the less successful?

A classic attempt to generalize about the policies that best promote economic growth and development, and a useful starting point for discussion, is the so-called Washington Consensus, articulated by the economist John Williamson in 1990.<sup>4</sup> Writing about Latin America, Williamson outlined a list of 10 broad policies to promote economic development that he judged as commanding, at the time he wrote, substantial support between both economists and policymakers. Because these views were influential at major institutions like the World Bank located in Washington, this set of policies was dubbed the Washington Consensus.

Williamson's original list of recommendations can usefully be divided into three categories: first, steps to increase *macroeconomic stability*, such as reducing fiscal deficits (which had caused high inflation in many countries), broadening the tax base, and reallocating government resources to build human and physical capital; second, actions to increase the role of *markets* in the economy, such as privatization of public assets, appropriate deregulation, and the liberalization of trade, interest rates, and capital flows; and third, efforts to strengthen *institutions* that promote investment, business formation, and growth, particularly by enhancing property rights and the rule of law.

Aspects of the Washington Consensus have stirred considerable controversy over the past two decades.<sup>5</sup> Williamson himself viewed the Consensus as an attempt to synthesize the conventional wisdom of economists and policymakers of the time, not as a roadmap or comprehensive strategy for development. I have introduced this framework here because it is

The idea that levels of output per capita tend to converge across countries, which in turn implies that the countries that are initially the poorest tend to grow the fastest, is known in the research literature as "absolute convergence." A more sophisticated variant of this idea is "conditional convergence," which holds that convergence across countries holds only after we control appropriately for factors that affect the long-run level of output in each country, such as the domestic saving rate and the rate of population growth. Empirical analyses generally find somewhat mixed evidence for absolute convergence but fairly robust support for conditional convergence. See, for example, Barro and Sala-i-Martin (2004) and Durlauf, Johnson, and Temple (2005). Rodrik (2011) and some others have argued recently that absolute convergence holds at a more disaggregated level in the manufacturing sector.

Williamson initially articulated the Washington Consensus in a speech in 1989, but the first written version appears in Williamson (1990). See also Williamson (2004) for his views on the various interpretations given to his recommendations.

Examples of critiques of the Washington Consensus include Burki and Perry (1998), Rodrik (2006), and Birdsall and others (2010).

a nice summary of the prevailing views of 20 years ago, a time when the most dramatic growth in emerging markets still lay several years in the future. By comparing current views with those described by Williamson in 1990, and accepted by many, we may learn something about which ideas have held up and which have been modified or refuted by recent events. I will take in turn the three groups of policies that make up the Washington Consensus.

The first group of recommendations, as I noted, comprised policies aimed at increasing macroeconomic stability. In this case there is little controversy. Abundant evidence has linked fiscal discipline, low inflation, and a stable macroeconomic policy environment to stronger, longer-term growth in both emerging and advanced economies.<sup>6</sup> In particular, many emerging market economies in the 1990s emulated the success of the advanced economies in the 1980s in controlling inflation. Over the years, the emerging market economies have also improved their fiscal management to the point that their fiscal positions are now often more favorable than those of some advanced economies. Improvements in macroeconomic management have been particularly striking in Latin America, where large budget deficits and high inflation rates had produced costly swings in economic activity in previous decades. Brazil, for example, suffered hyperinflation from 1986 to 1994, with several years of inflation well in excess of 500 percent, but has maintained an average annual inflation rate of about 5 percent since 2006, while (not coincidentally) reducing the ratio of its budget deficit to its gross domestic product. Disciplined macroeconomic policies have also supported growth in emerging markets by fostering domestic savings, stimulating capital investment (including foreign direct investment), and reducing the risk of financial instability.

The second group of recommendations listed by Williamson emphasized the need for greater reliance on markets: the freeing up of the economy through privatization, deregulation, and liberalization. The basic idea here has held up pretty well; most observers today would agree that carefully managed liberalization – the substitution of markets for bureaucratic control of the economy - is necessary for sustained growth. For example, trade liberalization measures, such as the reduction of tariffs and the removal of other controls on exports and imports, have been a key element of the growth strategies of a number of fast-growing emerging market economies, including China. Openness to inflows of foreign direct investment has helped many emerging economies import foreign management techniques and technologies as well as to attract foreign capital. More generally, greater use of markets improves the allocation of resources, creates incentives for more efficient forms of production, and encourages entrepreneurship and innovation. However, as I will discuss in a moment, experience has also shown that the success of reform programs may depend crucially on how the transition to greater market orientation is managed, and in particular on how market reforms are sequenced, issues on which the Washington Consensus is largely silent.

The third part of the Washington Consensus focused on strengthening property rights and the rule of law – for example, through effective enforcement of contracts. The evidence suggests that these factors too can be important for development.<sup>8</sup> For example, the inability to establish clear title to land or buildings has inhibited entrepreneurship and investment in

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<sup>&</sup>lt;sup>6</sup> Fischer (1993) and Easterly (2001) document that poor growth is associated with high inflation, large budget deficits, and distorted foreign exchange markets. Durlauf, Kourtellos, and Tan (2008), emphasizing techniques that take into account model uncertainty, also find considerable support for the importance of stable macroeconomic policies. Fatas and Mihov (2009) establish that stability of policy is a relevant and robust determinant of cross-country differences in growth. Easterly and Levine (1997) link much of the plight of Africa to macroeconomic instability.

See, for example, Chapter 5 of World Bank (2005). Earlier studies documenting the importance of trade openness for growth include Sachs and Warner (1995, 1997) and Frankel and Romer (1999).

For example, Kaufmann and others (2002) provide some evidence linking economic development to the presence of institutions that promote the rule of law.

some poor countries. On the other hand, some critics fault the Washington Consensus for paying insufficient attention to the role in economic growth of a much broader range of institutional factors than property rights alone – standardized accounting conventions, political accountability, control of corruption, bankruptcy laws, and capable and transparent regulatory agencies, for example. Moreover, the Washington Consensus provided little specific advice on how to create and sustain a strong institutional framework, nor did it touch on a variety of institutional arrangements – central bank independence being one familiar example – that have been shown to promote economic stability and growth.

## **Amending the Washington Consensus**

Overall, some key elements of the Washington Consensus appear well supported both by basic economic logic and by their successful application by a number of countries. However, the experience of the past two decades also suggests some lessons that augment or modify what we thought we knew about economic development in 1990. I will highlight three specific lessons.

First, the *implementation* of the Washington Consensus recommendations is important and not so straightforward in practice. In particular, as I alluded to earlier, the sequencing of reforms matters. For example, some developing countries, following the principles of liberalization and deregulation, removed controls on the inflows of foreign capital, and foreign investors responded by pouring in funds. However, the banking systems and the associated regulatory and supervisory agencies in these countries were not always well prepared to manage these capital inflows. Consequently, some of the foreign capital was badly invested, which in turn contributed to emerging-market financial crises, like those in Mexico and emerging Asia in the 1990s. This experience suggests that measures to strengthen banks and bank regulation should be put in place before the domestic market is opened to capital flows from abroad.

Similarly, dismantling controls on the domestic financial industry has proven counterproductive when important complementary factors - such as effective bank supervision, the availability of bank managers trained in market-based lending, or consumer familiarity with financial products such as credit cards - were absent. For example, Korea experienced a mini financial crisis in early 2003, resulting from a massive run-up in household debt. In the wake of policy changes to liberalize and increase competition in domestic financial markets, credit card debt in Korea as a share of its gross domestic product more than tripled between 1999 and 2002, as the average number of credit cards for every adult in the country rose from 1 to 3. Korea's consumers, lenders, and regulators had little experience with credit cards, and institutional arrangements for sharing data on consumer credit, including credit reports, were inadequate. Not surprisingly, at least in retrospect, delinquency rates soared, putting the solvency of a number of the country's major financial institutions at risk. The broader lesson is that institutional arrangements, ranging from accounting rules to regulatory frameworks to tax-compliance tools, must be sufficiently developed to ensure that reforms are successful. Fortunately, even in the absence of a clear consensus on how best to sequence and implement reforms, many countries have successfully promoted growth through a slow and pragmatic but continuing process of liberalization.

Burki and Perry (1998) and Rodrik (2006) are among those who argue that the Washington Consensus did not sufficiently emphasize the development of institutions.

On the lack of specific advice on creating the proper institutional framework, see, for example, Rodrik (2011). On the benefits of central bank independence, see, for example, Alesina and Summers (1993) and Cukierman and others (2002).

A second important lesson of the past two decades involves the pivotal role of *technology* in economic development. For emerging market economies, which tend to lag behind in technological sophistication, rapid gains in productivity can be achieved by adapting state-of-the-art technologies already developed by the advanced economies rather than by having to develop these technologies from scratch. But successful importing of technologies does not happen automatically or without preparation. For example, strong educational systems producing increasingly skilled workforces have proven crucial for climbing the technological ladder. In the United States, substantial increases in educational attainment from the beginning of the 20th century through the period following World War II were instrumental in driving economic growth.<sup>11</sup>

In the emerging market world, India's information technology (IT) services industry has thrived in large part because of the country's large supply of well-educated, English-speaking workers. And it is not just higher education that matters. Encouraging basic levels of literacy is critical as well. Promising programs in some emerging market countries, such as Brazil and Mexico, provide modest amounts of money to poor families (generally to women) on the condition that their children attend school regularly and receive basic health care. The evidence suggests that these programs enhance the quality of the economy's labor forcewhile addressing social goals such as reducing gender and income inequality.

Many emerging market economies have also harnessed international trade as an engine of technical progress. Openness to trade has allowed these countries to import state-of-the-art capital goods, and vigorous international competition has increased the efficiency of domestic firms and facilitated the transfer of skills and knowledge. International trade has also helped shift these economies away from basic agriculture toward manufacturing, with substantial benefits for average productivity. These benefits of trade openness do not require large trade surpluses, by the way, only a willingness to engage with and integrate with the global economy. Notably, Korea ran current account deficits through much of its "growth miracle" phase.

A third important lesson that has come into sharper focus, and which was not fully appreciated by the Washington Consensus, involves the capacity to draw on *economies of scale* to accelerate the pace of technical progress and economic growth. Economies of scale refer to the efficiency gains that can be achieved in some industries when production is run at a very large scale. These gains may arise because of the nature of the technologies involved – as, for example, in steel manufacturing. But in some cases they can also arise because of the need to develop a critical mass of skilled workers and specialized suppliers. It is no coincidence that so many high-tech firms locate near each other in California's Silicon Valley or North Carolina's Research Triangle; these firms benefit from the ability to draw on sufficiently large pools of skilled labor and other resources, while sharing ideas and information in mutually beneficial ways. A single, isolated firm would not likely be as productive. Thus, scale economies can arise in the development of knowledge centers, like research universities, or in the building of large-scale infrastructure, like a national highway system. For example, India's IT industry is clustered in certain regions, such as Bangalore,

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Research by Goldin and Katz (2001) emphasizes the importance of the U.S. high school system in driving the country's growth during the first decades of the 20th century. The state-supported university system and the educational subsidies of the G.I. Bill boosted educational attainment and growth after World War II. (See, for example, Altschuler and Blumin (2009).) It should be noted that increasing the share of the public budget devoted to education was advocated by the Washington Consensus.

<sup>&</sup>lt;sup>12</sup> In such cases we call them "natural monopolies."

This idea whereby economies of scale can be continuously exploited by the sharing of ideas and "learning-by-doing" is one source of what is called "endogenous growth" in the economics literature. See, for example, Romer (1986) and Lucas (1988). While the idea of "natural monopolies" was well understood at the time the Washington Consensus came out, the "endogenous growth" literature was in its infancy.

<sup>&</sup>lt;sup>14</sup> See, for example, Barro (1990).

around some of the more successful and high-quality institutes of technology in the country. Moreover, recent research suggests that the growth of information technology activity in India has increased returns to schooling and has significantly increased primary school enrollment in areas where call centers are located.<sup>15</sup>

Encouraging international trade can also help countries capture the benefits of scale. For many emerging market economies, domestic markets are not large enough to support the amount of production needed to achieve efficiency gains. Access to global markets has enabled production to expand to levels where economies of scale could be more fully exploited. Additional efficiencies can sometimes be gained when countries specialize in particular stages of a good's production. They import parts and components from other countries and use them to produce new products, which themselves may be further processed or assembled in still other countries. At each stage, the production is for the world market rather than for domestic producers or consumers alone. Many Asian economies are interlinked through a network of vertical supply chains; China is often referred to as the endpoint in the global supply chain because the assembly of so many goods is completed there before being shipped to consumers around the world.

The existence of economies of scale may, in some circumstances, also create a rationale for targeted government interventions in the economy – in other words, industrial policy. The premise of industrial policy is that large-scale industries may not be able to get off the ground without government support or protection, given the substantial start-up costs and the existence of more-efficient competitors in other countries. Indeed, government support for certain industries does seem to have played a role in several of the best-performing emerging market economies, including China and Korea. But such interventions can be double-edged swords. The experience of many decades tells us that industrial policies are far from a sure-fire development strategy, as they require that the government be adept at picking winners. One example, the role of government intervention in promoting ethanol production in Brazil, illustrates the vagaries of industrial policies. After being introduced over the mid- to late 1970s, for several years the program was generally viewed as a failure. More recently, however, the sustained upward trend in world oil prices has turned ethanol production in Brazil into a profitable venture. Hother than the development of other, potentially more profitable industries.

## Lessons and implications for the future

What implications can we draw for longer-term prospects for growth in the emerging market economies? Notwithstanding the recent impressive growth, output per person in the emerging market economies generally remains much lower than in the advanced economies. This fact suggests that the emerging market economies should be able to maintain relatively high growth rates for some years to come, as they continue to catch up to the advanced economies. But over time, as the emerging market countries become wealthier and technologically more sophisticated, they will gradually lose the advantages of starting from behind. Even with continued strong policies, their growth will slow as returns to capital investments diminish and the most profitable opportunities are exploited. For example, over time, rising wages in manufacturing should make production and investment in China and

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<sup>&</sup>lt;sup>15</sup> See Oster and Millet (2011).

<sup>&</sup>lt;sup>16</sup> Rodrik (2010), for example, discusses China's case.

After 1989, ethanol subsidies in Brazil were removed, but other forms of indirect government support were maintained.

Recent research by Eichengreen and others (2011) draws on cross-country evidence to show that the pace of a country's economic growth tends to slow once its level of real per capita income crosses a certain threshold.

other East Asian nations less attractive. Also, technological progress will slow as the process of importing foreign technologies reaches its limits, forcing greater reliance on innovation in emerging countries themselves. Resource and environmental constraints, as well as aging populations, should also slow economic growth. But in many ways, such a slowdown in growth will be the inevitable result of progress – the culmination of a successful catching up process – and in that respect should be viewed as a consequence of success, not of failure.

Many emerging markets also will be challenged by their reliance on trade to drive growth. As I have discussed, international trade has many benefits. However, generating trade surpluses by suppressing domestic demand defeats the ultimate purpose of economic growth – improving the lot of the country's own citizens. Large and persistent imbalances in trade are also inconsistent, in the long run, with global economic and financial stability. Of course, the advanced economies, like the United States, need to do their part as well in reducing global imbalances, as I have noted on numerous occasions before.

In fact, with the emerging market economies accounting for a large and growing share of global activity, many of them can no longer view themselves as small, open economies whose actions have little effect on their neighbors. With increasing size and influence comes greater responsibility. In response to this new reality, many of our international institutions have been restructured in recent years to give an increased voice to the emerging market economies. For example, the Group of Twenty (which has significant emerging market representation) has largely supplanted the Group of Seven as the premier global forum for economic and financial policy matters, and emerging market economies have been given increased power in setting the policies of the International Monetary Fund. These forums should be used by advanced economies and emerging economies alike to meet their respective responsibilities to the global economy in a spirit of cooperation.

So, what lessons can we draw about the Washington Consensus and, more generally, about the experience of the dynamic emerging market economies over the past decades? Ultimately, the principles that John Williamson enumerated two decades ago have much to recommend them. Macroeconomic stability, increased reliance on market forces, and strong political and economic institutions are important for sustainable growth. However, with the experience and perspective of the past 20 years, we can see that Williamson's recommendations were not complete. Reforms must be sequenced and implemented appropriately to have their desired effects. And a successful development framework must take into account that activities such as the adaptation of advanced technologies and the harnessing economies of scale are often critical to economic growth and depend on a host of institutional conditions, such as an educated workforce, to be fully effective.

Indeed, advanced economies like the United States would do well to re-learn some of the lessons from the experiences of the emerging market economies, such as the importance of disciplined fiscal policies, the benefits of open trade, the need to encourage private capital formation while undertaking necessary public investments, the high returns to education and to promoting technological advances, and the importance of a regulatory framework that encourages entrepreneurship and innovation while maintaining financial stability. As the advanced economies look for ways of enhancing longer-term growth, a re-reading of Williamson's original Washington Consensus, combined with close attention to the experiences of successful emerging market economies, could pay significant dividends.

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