Chapter II

Economic policies for achieving development goals

Summary

• Economic policies leading to “sustained, inclusive and equitable” growth are found to be effective for promoting the achievement of the MDGs.

• Sustained growth requires economic policies aimed at building physical and human capital and promoting technological innovation, on the supply side, and managing broad macroeconomic stability, on the demand side.

• Inclusive growth requires policies focused on promoting employment, productivity and labour income. Equitable growth requires policies designed to expand equal opportunity, reduce income inequality, and ensure universal social protection floors, with adequate safety nets for the most vulnerable.

• Economic policies need to be adjusted in the post-2015 period by taking into account the important role of the planet’s ecosystems in production and consumption, so as to promote a new pattern of sustainable, inclusive and equitable growth that is appropriate for achieving the sustainable development goals (SDGs).

• Successful implementation of the SDGs requires a framework that can effectively integrate economic, social and environmental policies.
Introduction

The present chapter discusses lessons learned during the Millennium Development Goals (MDGs) reference period in the area of economic policies that can be helpful with respect to adopting and implementing the post-2015 development agenda. Many economic policies may not pertain directly to specific MDGs. For example, it is difficult to establish a direct relationship between policy interest rates set by a central bank and the poverty rate, the child mortality rate or other MDG targets. The effects of economic policies on the achievement of the MDGs are mostly transmitted through the broad impact of these policies on the overall efficiency, equity and stability of the economy. More specifically, this chapter analyses the experience during the MDG reference period regarding the role of economic policies in promoting “sustained, inclusive and equitable” growth, which the international community considers a key driver for achieving the MDGs.1

While economic growth, as measured by an increase in gross domestic product (GDP),2 is not an end by or of itself, it can provide a means for achieving many important development goals. For example, in the past two decades, economic growth, along with other efforts (to be discussed later), has played a critical role in freeing hundreds of millions of people from abject poverty and hunger. Growth also created the resources necessary to finance health care, education and the other MDGs.

The United Nations development agenda has long recognized the importance of economic growth. Early on, in its resolution 1710 (XVI) of 19 December 1961, the General Assembly had designated the 1960s as the First United Nations Development Decade, the global target being a minimum annual growth rate of 5 per cent at the end of the Decade. Although this target had not been fully met, in the International Development Strategy for the Second United Nations Development Decade (starting from 1 January 1971), as adopted by the Assembly in its resolution 2626 (X XV) of 24 October 1970, an even higher target was set, of at least 6 per cent. While the implementation of the International Development Strategy for the Third United Nations Development Decade (starting on 1 January 1981), as adopted by the Assembly in its resolution 35/56 of 5 December 1980, was foiled by the harsh economic realities facing most developing countries, such as the debt crisis and stagnation. In the 1990s, the United Nations development agenda was broadened, focusing more on the dimensions of social and human development, than on economic growth.

1 See, for example, General Assembly resolution 65/10 of 23 November 2010, entitled “Sustained, inclusive and equitable economic growth for poverty eradication and achievement of the Millennium Development Goals”.

2 In the present chapter, the terms “gross domestic product (GDP)”, “total value added of goods and services produced”, and “gross national income (GNI)” are used interchangeably, despite some statistical differences among them.
Although economic growth was not included as a goal when the MDGs were formulated in 2000, the crucial role of growth in promoting the MDGs was still recognized. In the report of the Secretary-General on the road map towards the implementation of the United Nations Millennium Declaration (United Nations, General Assembly, 2001), it was made clear that achieving sustained and broad-based economic growth was essential for significantly reducing poverty and promoting development (para. 80). In the same report (para. 252), support was expressed for the target of a GDP growth rate of above 7 per cent per annum for Africa for the period of the MDGs, as set in the New African Initiative.

After remaining somewhat in the background during the evolution of the United Nations development agenda over three decades, the goal of economic growth has re-emerged. It has been introduced as SDG 8 into the list of 17 proposed SDGs, as set out in the report of the Open Working Group of the General Assembly on Sustainable Development Goals of 12 August 2014 (United Nations, General Assembly, 2014b). Goal 8 is to “(p)romote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all”. One of its targets is to “(s)sustain per capita economic growth in accordance with national circumstances and, in particular, at least 7 per cent gross domestic product growth per annum in the least developed countries”.

The discussions presented in this chapter are organized as follows. The following section offers statistical evidence of the relationship between the pattern of growth and the achievement of MDGs. The third and fourth sections analyse the economic policies that are key to supporting the sustained, inclusive and equitable growth needed for achieving the MDGs. The fifth section examines the need for transforming the MDG growth pattern to enable achievement of the SDGs in the post-2015 period. The chapter concludes with a summarization of the lessons learned.

It may be noted that some of the economic policies analysed in this chapter can also be classified as social policies. Social policies will be discussed, from a different perspective, in chapter III.

**Sustained, inclusive and equitable growth for achieving the MDGs**

Economic growth matters for achieving the MDGs, but the pattern of that growth matters even more. The most effective growth pattern for promoting the achievement of the MDGs has three desirable—and interconnected—attributes: it is sustained, inclusive and equitable. Sustained growth is growth that is robust and stable over a long period, i.e., at least two or three decades. Under conditions of inclusive growth, people who are willing to participate should be able to contribute to and benefit from that growth. Equitable growth assures both equal opportunities to participate in growth and the equitable distribution of outcome in accordance with the basic principles of equality and human rights.
Economic growth in general is found to be supportive of achieving the MDGs, as an increase in income provides access to more public and private resources for the advancement of human development. For example, as shown in figures II.1 and II.2, the increase in income is associated with a decrease in the child mortality rate and an increase in the access to improved drinking-water sources.

Figure II.1

![GDP growth and child mortality, 1991–2012](image)

Source: World Development Indicators Database.

Figure II.2

![GDP growth and improved drinking water, 1991–2012](image)

Source: World Development Indicators Database.
However, for some MDG targets, the connection with economic growth may not always be so clear-cut. For instance, as shown in figure II.3, when income increases, the completion rate for primary school education tends to rise in most countries, particularly the resource-poor countries of sub-Saharan Africa; however, a negative correlation is found between these two indicators among the resource-rich countries of sub-Saharan Africa. Moreover, although per capita GDP growth in resource-rich countries in Africa was measurably higher than in resource-poor countries in the past decade, poverty reduction in the former was actually lower than in the latter. For example, in the second half of the 2000s, Ethiopia and Rwanda registered an annual average growth of 8 per cent and 10 per cent, reducing poverty by 1.3 and 1.7 percentage points annually, respectively. By contrast, with a similar robust growth of 6-7 per cent, the United Republic of Tanzania reduced poverty by less than 0.5 percentage point in the same period, while Zambia, a resource-rich country, made even less progress in reducing poverty. In general, resource-rich countries in Africa are disproportionately among the poorer performers in achieving MDGs compared with resource-poor countries, despite the fact that GDP growth rates in the former are, on average, twice as high as those in the latter.

One factor behind this divergence is the nature of growth in resource-rich African countries: it is less inclusive than in resource-poor countries, as the resources sector is capital-intensive, and therefore does not create enough jobs. These economies have failed to connect the resources sector with other sectors. In resource-rich countries, the increase in resource rent accounts for a larger share of GDP growth than value added in other sectors, such as agriculture, services and manufacturing. However, the share of employment in the resources sector is significantly smaller than in other sectors (World Bank, 2014a).

Moreover, the effects of GDP growth on poverty reduction seem to vary considerably across countries and over time. As demonstrated in figure II.4, the poverty reduction effect of growth seems to follow an inverted U-shaped curve with respect to the initial level of poverty across countries (World Bank, 2015a).
Any study of the complexities associated with the effect of GDP growth on poverty reduction and other MDG targets needs to take into account, as do subsequent sections, the specific conditions and policies of individual countries. However, a simplified frame-work, as presented in box II.1, can be used to illustrate the non-linearity of the relationship among growth, inequality and the headcount measure of income poverty.
A few interesting observations can be drawn from the exercises presented in box II.1.

First, the poverty reduction effect of growth in an economy varies over time, depending on the prevailing poverty rate and the income distribution. When the median income of the population is on the far left of the poverty line, the growth effect on poverty reduction is small. When the median income is closer to the poverty line, the growth effects on poverty reduction are larger. After the median income passes the poverty line, the growth effects on poverty reduction start to diminish.

Second, different countries exhibit different effects of growth on poverty reduction, because they have different initial poverty rates and/or different income distributions.

Third, the concept of headcount poverty underestimates the growth effect on poverty reduction. For example, as shown in figure B in box II.1, after the first and second spells of growth by a cumulative 40 per cent in sub-Saharan Africa, poverty will be reduced by 27 percentage points. However, those two spells of growth will have also increased the income level of some 12 million people, from $0.5 per day to a figure in the neighbourhood of $1 per day, and will have thereby moved them closer to the poverty line, making it easier for them to exit poverty in the near future. This growth effect is not reflected in poverty reduction when measured by the headcount.

The third point also signifies that a country in deep poverty will require “sustained” growth if it is to achieve meaningful poverty reduction.

Finally, if inequality is reduced at the same time that mean income grows, the growth effects on poverty reduction can be enhanced. As discussed subsequently in greater detail, this demonstrates the importance of a growth pattern that is not only sustained but inclusive and equitable as well.

Views are divided, however, on the issue of whether growth and improvement in equality can go hand in hand. Some economists believe that income inequality has positive effects on economic growth, because it can both provide incentives for innovation and entrepreneurship and increase saving and investment (Lazear and Rosen, 1981; Kaldor, 1957; and Barro, 2000). Others argue that inequality is detrimental to economic growth, because it can impede human capital (education and health) accumulation and may lead to political and economic instability, thereby discouraging investment (Aghion, Caroli and Garcia-Penalosa, 1999; Rodrik, 1999; and Galor and Moav, 2004). Still others suggest that the relationship is actually non-linear: As inequality rises from low levels, it can enhance growth; but once inequality rises beyond a certain range, it will start to hamper growth (Benhabib, 2003).

In a recent study, based on statistical analyses of a large data set covering 150 countries for 40 years, Ostry, Berg and Tsangarides (2014) found that reducing income inequality could contribute positively to future growth. Utilizing the same data, Hong, Li and Peng (2014) showed that reducing inequality could lead to higher growth in the countries with a Gini coefficient above 40 per cent.
Policies to support sustained growth

Building necessary conditions for sustained growth

Growth performance differed widely across countries, not only in the MDG reference period, but over a much longer span of time. In the several decades following the Second World War, only about a dozen world economies managed to achieve what can be considered sustained growth, i.e., an average annual growth rate of 7 per cent or higher, lasting for two decades or longer. Researchers and policymakers have long been searching for the determinants of sustained growth and have come up with a range of possibilities (see, for example, Aghion and Durlauf, eds. (2005; 2013)). However, as was humbly admitted by the Commission on Growth and Development (2008), economists still have not established what could be regarded as the sufficient conditions for growth.

Nevertheless, based on the experience during the MDG reference period, as well as the broad development experience acquired before the MDG reference period, a set of factors has been identified as constituting the necessary, albeit not sufficient, conditions for sustained growth. Policies and strategies should therefore focus on promoting those factors, which include a high level of long-term investment in productive capacity, improvement in human capital and technological innovation (Aghion and Durlauf, 2013).

Sustained growth requires high rates of investment in productive capacities, including infrastructure, business structure, equipment and software, and research and development (R&D). The economies with sustained growth in the past decades usually maintained an investment rate of 30 per cent of GDP, or higher. China, for example, by maintaining an investment rate of above 35 per cent of GDP for three decades, achieved an average annual growth rate of 10 per cent. In comparison, the average investment rate in sub-Saharan Africa increased from 16 to 23 per cent in the past decade (International Monetary Fund, 2013), which corresponded to an increase in the region’s growth rate to 5.5 per cent, ranking it in this regard second only to developing Asia. Among other developing regions, investment rates in most Latin American countries remain below 20 per cent.

As shown in figure II.5, economies that achieved an average growth rate of above 6 per cent in the past two decades maintained an investment rate of above 25 per cent. The figure also shows that while a few economies maintained an investment rate of above 25 per cent, they failed to achieve high growth, indicating that a high level of investment is only a necessary but not sufficient condition for sustained growth.

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3 Botswana; Brazil; China; China, Hong Kong Special Administrative Region; Indonesia; Japan; Republic of Korea; Malaysia; Malta; Oman; Singapore; Taiwan Province of China; and Thailand.
A critical requirement for the promotion of investment is the assumption by the government of the leading role in investing in infrastructure, such as roads, ports, airport, telecommunication and energy supply. There would be a deficit in infrastructure, given its status as a public good, without public investment, with other economic activities experiencing bottlenecks as a result. Public spending on infrastructure can crowd in private investment, by expanding investment opportunities and raising the return on private investment. Public investment in infrastructure can also generate positive spillover, encompassing promotion of new industries and export diversification. In economies characterized by sustained growth, public investment in infrastructure usually accounts for more than 5 per cent of GDP (Commission on Growth and Development, 2008).

In order to accelerate the expansion of infrastructure, Governments in many countries have also sought to tap private sources by forming public-private partnerships. However, experience shows that proper terms and regulations should be established so that oversight of the activities of private agents can be maintained and to ensure that private investors earn an honest return, not a monopoly profit. Investment risks should be borne also by the private party, in order to avert a situation where the private reaps profits while the public covers the risks.⁴

The financing of high-level investment, public or private, requires adequate savings. Successful experience during the MDG reference period indicates that countries with sustained growth and high investment rates relied mostly on high rates of domestic savings

⁴ See, for example, http://ppp.worldbank.org/public-private-partnership/.
Foreign savings, in terms of capital inflows, can complement, but not substitute domestic savings with respect to the financing of high levels of investment. Development of an effective, stable and inclusive financial sector is important for mobilizing domestic savings, channelling funds to productive investment and sharing risks.

For achieving sustained growth, improving human capital, that is, the quality of the labour force, is as important as, or even more important than, investing in physical capital. Successful MDG experience attests to the fact that government policies in support of education and health are crucial for improving human capital. That experience revealed that economies with sustained growth (see footnote 3) spent at least 7-8 per cent of GDP on education, training and health (Commission on Growth and Development, 2008).

Public spending on education is justified on the grounds of both efficiency and equality. Education can increase not only returns to individuals, but also social returns. Public spending on education is therefore capable of correcting the failure of the market to allocate adequate resources to education. In addition, public spending on education also provides opportunities to poor families who would otherwise be unable to afford sending their children to school (see chap. III for a more detailed discussion).

As is the case with education, public spending on health to improve human capital can also generate important payoffs both for sustained growth and for social equality. For instance, in areas where malaria is endemic, workers can expect to lose 10-20 working days per year, which represents a substantial loss of labour supply. Far worse is the damage that malaria contracted in childhood may inflict on the cognitive development of infants, and thus on human capital (Bloom and Canning, 2008). Therefore, public spending on the prevention of malaria in developing countries can contribute significantly to sustained growth (see chap. III for a more detailed discussion in this regard).

Technological innovation plays a key role in advancing the productivity of both capital and labour, thereby generating additional growth out of existing resources and productive factors. This important role of technological innovation has been fully recognized by many researchers and policymakers. For example, Deng Xiaoping, one of the great promoters of economic growth in practice, noted that “technology is the most important productive force” (Deng, 1994). In his pioneering work on modern growth theory, Solow (1956) considered technological innovation to be the only determinant of long-run growth, although he assumed it was exogenous. The 1990s, however, marked the emergence of endogenous growth theory, which attempted to explain how technological innovation could be endogenously promoted through various policies (Romer, 1994).

Technological innovation, in its broad sense, includes not only the invention and adoption of new technology, but also knowledge, know-how, and changes in the way the economy is organized and managed at both the macro and micro levels. For many developing countries, where the current level of technology is far below that of the advanced economies, technological innovation consists in narrowing this gap through effecting the
transfer of technology from more advanced countries (including other developing countries that are relatively more advanced in this domain). Successful adoption of more advanced technology can significantly transform the economic structure of developing countries, encompassing the shift from an agricultural to an industrial economy, and from low to high productivity. In economies with sustained growth, broad technological innovations account for a large part of that growth. For example, more than 70 per cent of China’s growth in the past three decades can be attributed to technological innovation in a broad sense (Zhu, 2012).

Nevertheless, it is not easy to effect successful technology transfer from more advanced to less advanced economies, for it does not entail a simple mechanical process of copying or mimicking. Indeed, the very process of transferring technology in and of itself requires innovation. Learning how to master the transferred technology requires painstaking efforts on the part of the recipient countries. Also required are well-conceived policies and strategies, including industrial, trade and investment policies, along with other, broader macro and more specific technology policy measures.

Industrial policies encompass the government’s selection of specific industries or sectors for prioritization within the context of national development, and its support for those industries or sectors through tax breaks, subsidies, tariff exemptions, preferential credit or discounted prices of resources (such as public land), or a bundle of these and other preferential measures. Many countries—both developed and developing, including those enjoying sustained growth and those experiencing stagnation—have tried at a particular stage of their development to implement such policies in one form or another. Some succeeded, while others failed (Salazar-Xirinachs, Nübler and Kozul-Wright, eds., 2014).

As a consequence of these experiences, there seems increasingly to be a shift in the focus of current discussions among economists and policymakers—from whether or not to adopt an industrial policy towards how to do it right (Salazar-Xirinachs, Nübler and Kozul-Wright, eds., 2014). Views are still divided over what the objectives, dimensions, scope and instruments of industrial policy should in fact be, which is not at all surprising, given the diversity of experiences, even among the countries that seem to have succeeded in using industrial policy to promote sustained growth. For example, under the growth identification and facilitation approach, as advocated by Lin and Treichel (2014), “industrial policy” is defined in a narrow sense, with the government in this regard mainly identifying new economic activities and facilitating changes in factor endowment structures, following the country’s international comparative advantage. In contrast, the capabilities approach, advocated by Nübler (2014), assigns to industrial policy the additional task of promoting productive capabilities and learning processes and shaping patterns and processes of productive transformation aimed at higher productivity growth, as well as enhancing the quantity and quality of jobs. It remains a challenge for individual countries to adopt the right industrial policy measures in accordance with their specific circumstances.

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Trade policy and foreign direct investment (FDI) policy, which are closely linked with industrial policy, also have important implications for technological innovation. Trade and FDI are the two main channels through which technologies can be transferred from more advanced to less advanced countries. As shown by some of the Asian economies with sustained growth, proper trade and FDI policies can facilitate technological innovation and structural transformation (Salazar-Xirinachs, Nübler and Kozul-Wright, eds., 2014).

Managing macroeconomic stability for sustained growth

While the policies designed to strengthen the productive factors on the supply side are important for supporting sustained growth, equally important are the policies enacted to foster broad macroeconomic stability, including the stability of prices, aggregate demand, employment, public and private finance, and the balance of payments.

Macroeconomic stability in most developing countries improved during the MDG reference period (excluding 2008-2009, when the global financial crisis erupted), as compared with the 1990s. For example, average GDP growth in developing countries was significantly higher in the MDG reference period than in the 1990s, while the variation in GDP growth across countries was noticeably lower (figure II.6). Inflation in most developing countries moderated significantly during the period from the 1990s to the 2000s (figure II.7). The inflation rate in a majority of developing countries is currently below 5 per cent, with only a dozen developing countries experiencing inflation rates in the double digits (United Nations, 2015c). Meanwhile, the number of developing countries undergoing a recession has been considerably lower during the MDG reference period (excluding 2008-2009, as discussed below) as compared with the 1990s (figure II.8). By other macroeconomic measures, both fiscal balance and public debt have also improved in the past decade in most developing countries. The ratio of external debt to GDP of the developing countries as a whole declined by more than 10 percentage points over the MDG reference period (United Nations, 2014b). The employment situation will be discussed below in the section on inclusive growth.

However, although the global financial crisis beginning in 2008 originated in major developed countries, it disrupted economic growth in many developing countries, substantially altering their growth path and setting back progress towards achieving the MDGs.
Figure II.6

Distribution of GDP growth across developing countries, 1991–2013

Source: UN/DESA.

Figure II.7

Distribution of inflation rates across developing countries, 1991–2013

Source: UN/DESA.
As illustrated in figures II.9 and II.10, six years after the onset of the global crisis, the total output of developing countries is far below the trend line that held prior to the crisis, with a cumulative GDP gap (over 2008-2014) of $1.7 trillion (6.5 per cent). The gap is about $250 billion (12.7 per cent) for Africa and $300 billion (12.5 per cent) for South Asia. The size of the gap for Africa is equivalent to the size of the ODA flows that it received in the same period. Because of the global financial crisis, the number of people in sub-Saharan Africa who would have been out of poverty by 2015 has been reduced by 20 million; and at the global level, an additional 55,000 infants might die in 2015; about 350,000 more children might be unable to complete primary school in 2015; and some 100 million more people might remain without access to an improved water source (World Bank, 2010).
Figure II.9

GDP gap in developing countries following the global financial crisis

Billions of 2010 United States dollars

- Developing countries (actual)
- Developing countries (trend)

Figure II.10

GDP gap in Africa and South Asia following the global financial crisis

Billions of 2010 United States dollars

- Africa (actual)
- Africa (trend)
- South Asia (actual)
- South Asia (trend)
The experience during the MDG reference period indicates that maintaining broad macroeconomic stability would require effective policies of three types, i.e., policies capable of: (a) ensuring a structurally balanced domestic economy, where high and escalating inflation, unsustainable public and private debt, boom and bust in investment, and a high-level of unemployment were all averted; (b) mitigating the impact of external shocks arising from excess volatility in foreign capital flows, international prices of primary commodities and exchange rates, and a large current-account deficit; and (c) preventing the frequent recurrence of international financial crises.

Policies of the first type comprise monetary and fiscal policies.

Maintaining a relatively low and stable inflation has long been an important objective of monetary policy in all countries. However, a large number of central banks have mandates to set other targets for monetary policy, such as full employment and exchange-rate stability. Moreover, although short-term interest rates and open market operation have increasingly become the primary instruments of monetary policy, a number of those banks in developing countries continue to rely on other instruments, such as reserve requirements, control of monetary aggregates and credit ceilings. In fact, in the aftermath of the global financial crisis, even central banks in major developed countries have adopted unconventional monetary policy instruments, such as large-scale quantitative easing to directly increase the monetary base. Clearly, monetary policy instruments and targets for an economy should be defined in accordance with the stage of development of its banking and financial system and specific economic circumstances.

In the past two decades, an increasing number of central banks of countries have adopted a new framework for monetary policy: one that targets inflation. However, after the global financial crisis, there was a tendency among some of those countries to modify this framework by making it more flexible, so as to enable them to strike a better balance among different determinants of macroeconomic stability, as broadly defined, including inflation, employment and financial stability (see box II.2).

The mandates of fiscal policy include not only maintaining macroeconomic stability, but also providing public goods and redistributing income. Within the context of macroeconomic stability, a key challenge for fiscal policy is to reduce its procyclicality and enhance its countercyclicality.

For decades prior to the MDG reference period, many developing countries tended to follow a procyclical fiscal policy, which entailed increasing government spending (or cutting taxes) during periods of expansion of the overall economy, but cutting government spending (or raising taxes) during periods of recession (Kaminsky, Reinhart and Végh, 2005; and Ilzetski and Végh, 2008). For example, Kaminsky, Reinhart and Végh (2005) documented the fact that for 94 countries during the period 1960-1999, more than 90 per cent of the developing countries conducted a procyclical fiscal policy, while 80 per cent of the developed countries conducted a countercyclical one. However, since 2000, an increasing number of
developing countries have shifted from a procyclical to a countercyclical fiscal policy (Frankel, Végh and Vuletin, 2011).

According to some studies (World Bank, 2015b; and Frankel, Végh and Vuletin, 2013), three major factors may have contributed to this shift. First, robust growth and rising prices of primary commodities in the 2000s boosted government revenue in many developing countries, particularly emerging economies. Second, international debt relief initiatives, i.e., the Heavily Indebted Poor Countries (HIPC) Initiative and the Multilateral Debt Relief Initiative (MDRI), have reduced the debt burdens imposed on the government budget in least developed and other developing countries. Third, institutional reforms, including new budget institutions, have improved fiscal management. As a result, in response to the eruption of the global financial crisis in 2008, a number of developing countries were able, in 2009-2010, to apply sizeable countercyclical fiscal stimuli, thereby managing to reduce the shocks, which could have otherwise led to even larger and longer negative impacts on growth and MDG progress.

Developing countries reduced fiscal procyclicality during the MDG reference period by adopting a few important institutional measures, including fiscal rules, medium-term expenditure frameworks, and stabilization funds.

A fiscal rule sets targets for government budgetary indicators, such as the debt-to-GDP ratio, budget balance, expenditures and revenues. Since the late 1990s, more than 30 developing countries, along with some 30 developed countries, have adopted fiscal rules. Like the monetary rule under the inflation targeting framework discussed above, fiscal rules have also received criticism, particularly in the aftermath of the global financial crisis. For example, the austerity measures adopted under the fiscal rules within the euro area following the sovereign debt crisis in Greece and a few other euro members were blamed for worsening the recession in those countries. After 2012, the fiscal rules regarding the debt-to-GDP and the deficit-to-GDP ratios were modified to introduce greater flexibility. Certain fiscal rules, however, may lead to more, not less, procyclicality (Bova, Carcenac and Guerguil, 2014). In view of the experience described above, more flexible fiscal rules with cyclically adjusted targets have become increasingly popular in both developing and developed economies.

While medium-term expenditure frameworks (MTEFs) had first been used in developed countries to manage long-term fiscal policy priorities, an increasing number of developing countries also adopted this framework starting in the late 1990s. Currently, about 70 per cent of countries worldwide have adopted medium-term expenditure frameworks in one form or another (World Bank, 2013a). The main objective of these frameworks is to establish and improve credibility in the budgetary process. Most MTEFs translate macroeconomic goals into budget aggregates and spending plans, but others simply target aggregate fiscal goals. Empirical studies suggest that medium-term expenditure frameworks could improve fiscal discipline; the experience in this regard, however, is not uniform across countries. For example, the experience of some African countries has demonstrated that formulation of MTEFs requires realistic expectations regarding revenues; otherwise, even well-designed frameworks will not succeed (Holmes and Evans, 2003).
Despite the improvement in respect of the cyclicality of fiscal policy in many developing countries, the capacity for conducting countercyclical fiscal policy remains weak in least developed and other low-income countries. For these countries, the improvement in fiscal cyclicality will depend not only on the strengthening of domestic budget institutions, as discussed above, but also on improvement in the predictability of the ODA flows that they receive (ODA is discussed in greater detail in chap. VI).

Policies of the second type address external shocks. As developing countries increasingly integrate their economies into the global economy, they are facing various external vulnerabilities through trade and financial channels: surges and reversals in short-term capital flows, vicissitudes of international prices of primary commodities, and business cycles associated with the external demand from major developed countries. The global financial crisis of 2008 and the attendant great recession have cast into sharp relief all of these external vulnerabilities, as well as others, faced by developing countries.

For countries where government revenues depend to a large extent on exports of primary commodities, stabilization funds have increasingly become a tool for mitigating the volatility in commodity prices. Stabilization funds are established using public revenues from natural resources, such as oil and natural gas, and can be utilized to stabilize boom-bust cycles. Some 30 developing countries have such funds, more than half of which were established starting in 2000. Many stabilization funds are integrated with government budgets having specified rules for accumulation and withdrawal (Bagnall and Truman, 2013). Studies show that these funds can smooth government expenditure and reduce volatility (Sugawara, 2014), but their effectiveness in shielding the domestic economy from fluctuations in commodity prices will never depend on their existence alone: there has to be government commitment to fiscal discipline and macroeconomic management (Gill and others, 2014).

With respect to capital flows, a number of developing countries have introduced, in addition to conventional monetary, fiscal and exchange-rate policies, capital-account management measures to contain volatile short-term capital flows.

To stem capital inflows and excessive credit growth, some countries, such as Croatia, Peru and the Republic of Korea, have conducted macroprudential policies, including measures designed to ensure that sound lending standards are maintained, countercyclical capital requirements to slow down credit expansion, and balance-sheet restrictions such as the placement of limits on the foreign-exchange positions of banks. While these measures appear to have deterred short-term capital inflows, the effect on total net flows has been limited. For example, in Peru, whose considerably dollarized economy is mediated through the banking system, macroprudential measures, such as limits on foreign-exchange mismatches, have been relatively effective in reducing risks. In the Republic of Korea, the introduction in 2009/2010 of a package of macroprudential measures appears to have brought about the intended deceleration in banks’ foreign borrowing but did not stem the overall level of capital inflows.
Other countries, such as Indonesia and Brazil, have imposed more direct capital-account regulations. Most available studies have found that capital-account management has been effective in changing the composition of inflows through a shift away from short-term debt in many cases, but the results in this regard have varied from country to country (United Nations, 2015c, chap. III). More broadly, the effectiveness of measures depends on the specific circumstances of a country, including the quality of the existing regulatory framework and regulatory capacity, the structure and persistence of inflows, and the design and implementation of capital flow management measures. In particular, capital-account regulations may be particularly difficult to implement in countries where there is a large derivatives market, since speculators can often circumvent the restrictions through foreign-exchange futures, options and other derivatives. Some countries, such as Brazil, have therefore implemented restrictions directly within the derivatives market, albeit initially at a low rate, in order to “test the waters”. Overall, there is no simple formula for effectively managing cross-border capital flows. Macroeconomic policies, macroprudential tools and capital-account regulations should be viewed as constituting part of a package of measures which will vary in accordance with the specific circumstances of individual countries.

More generally, determining when and how to open their capital and financial accounts remains a critical policy challenge for many developing countries. The experience of countries with sustained growth reveals that most of them did not rush to open their capital accounts. When they did start to open those accounts, they adopted a gradual approach with special attention to such factors as sequencing, the depth of financial markets, and regulatory capacity. For example, China has not yet fully opened its capital account. The need to proceed with caution in respect of capital mobility was the dire lesson learned in the late 1990s during the Asian financial crisis by a number of economies of the region.

Developing countries are also challenged by the need for both stability and flexibility in exchange rates. After the Asian financial crisis, an increasing number of developing countries moved away from fixed exchange-rate regimes towards more flexible ones. However, since the global financial crisis of 2008, more countries have exhibited a marked tendency to shift from flexible exchange-rate arrangements, reflecting the recurrent pressure on the currencies of emerging market economies as a result of capital flow volatility (International Monetary Fund, 2014a).

Another trend in the MDG reference period has been the continuous accumulation in developing countries of foreign-exchange reserves, which had increased 10-fold by the end of the period 2000-2014, with only a slight reversal since late 2014. This has strengthened the capacity of many developing countries to withstand external shocks, but it comes with costs (United Nations, 2015c). Build-up of reserves for self-insurance purposes is also an indication of deficiencies in the current international financial architecture.

The third type of policies encompasses international policy coordination and reforms of the international monetary system and international financial institutions to help mitigate systemic risks.
One key driver of recent heightened volatility in capital flows to developing countries has been the unconventional monetary policies adopted in major developed countries. More generally, the cross-border spillover effects on developing countries of policies in major economies have been significant. Mitigating these spillover effects and other international repercussions requires international policy coordination. Indeed, in the aftermath of the global financial crisis, international policy coordination has been strengthened, particularly in the G20. For example, the concerted policy stimuli in 2009-2010 and the framework for strong, sustainable and balanced growth (as set out in the G20 Toronto Summit Declaration of 27 June 2010) have contributed to some extent to preventing the world economy from otherwise descending into an even deeper recession. However, such policy coordination should also be promoted through more broadly representative international forums, particularly the United Nations, including the greater participation of developing countries.

To give another concrete example, international policy coordination is needed to prevent the re-emergence of global imbalances and to ensure a benign adjustment, as warranted. The size of global current-account imbalances ballooned to 5.6 per cent of world gross product in the run-up to the global financial crisis but narrowed to 3.5 per cent in 2014 (figure II.11). While G20 policy coordination may have contributed in part to the adjustment, a significant part of the narrowing appears to have been driven by weaker demand in the deficit countries, making for a counterproductive rather than a benign adjustment effected through stronger demand from the surplus countries. From the global perspective, the current magnitude of current-account imbalances does not appear to pose an imminent threat to the stability of the world economy in the near future. Nonetheless, there are still problems associated with the current pattern of imbalances and the ongoing adjustment processes, which require better international policy coordination.

The eruption of the global financial crisis revealed further the profound deficiencies in the international monetary and financial system. The international community has since taken important steps to strengthen the resilience of the financial sector through regulatory reform which, to date, has focused on the banking sector. Clearly, further progress is needed in addressing other items in the international regulatory agenda, including shadow banking and the issue of systemically important financial institutions that are considered “too big to fail”.
There is also a need for stronger cross-border sovereign debt resolution regimes with fair burden-sharing. Progress continues to be made on international cooperation in tax matters. At the same time, timely implementation of the 2010 IMF quota and governance reform will pave the way for the next round of quota and voice reforms; and successful completion of further reforms of international financial institutions will boost the coherence and stability of the global financial system. In addition, the development and implementation of international norms in the areas of financial regulation, taxation and debt crisis resolution would all benefit from greater representation of and participation by developing countries.\(^6\)

Without a sound international institutional framework designed to prevent or mitigate large-scale financial crises, a large number of developing countries will continue to be vulnerable to various external shocks, and the achievement of their development goals will be subject to frequent setbacks.

**Policies to support inclusive and equitable growth**

*Making growth inclusive through employment and productive jobs*

As labour earnings are the major sources of income for the poor, productive employment and decent wages are two key elements, among others, for defining inclusive growth.

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\(^6\) See chap. III of World Economic Situation and Prospects 2015 (United Nations, 2015c) for a more detailed discussion.
The general employment situation in developing countries remains challenging, although it varies across regions. The highest unemployment rates are found in Northern Africa and Western Asia, and are currently about 11-12 per cent higher than in the period before the global financial crisis, reflecting extremely high structural unemployment, particularly among the youth. By comparison, unemployment is relatively low in East and South Asia, with rates of about 4.0-4.5 per cent (United Nations, 2015c).

Many developing countries are also facing a high prevalence of informal and vulnerable employment. For example, the vulnerable employment rate, defined as the proportion of own-account and unpaid family workers in total employment, averaged 56 per cent in developing countries in 2013, following a 6.8 percentage point decline in the preceding decade. Workers in such situations, who receive low incomes and endure arduous working conditions, usually lack adequate social protection. Vulnerable employment rates are significantly higher for women than for men. The largest gender gaps in this respect were found in Northern Africa, sub-Saharan Africa and Western Asia (United Nations, 2014a).

Meanwhile, average annual labour productivity growth slowed markedly in most developing countries, from 5.6 per cent during 2003-2008, to 4.0 per cent during 2008-2013 (International Labour Organization, 2015).

In the face of these challenges, policies whose aim is to make growth inclusive by promoting productive employment and decent wages should encompass three goals: boosting labour demand and job creation, building human capital, and increasing labour income and productivity. Some policies in this context can be classified as both economic and social in nature.

One set of policies designed to boost labour demand entails a focus on improving the business environment for enterprises so that they can expand production and create more jobs. These include policies aimed at improving the access of enterprises to financing, reducing costs and volatility of finance, and improving enterprises’ access to markets through government’s increased investment in infrastructure. Other measures, such as reduction of corruption, regulatory uncertainty and regulation costs, as well as government’s promotion of trade and investment in general, are also necessary.

Another set of policies entails a focus on reducing unnecessary hiring costs. If policies increase labour costs for the purpose of improving workers’ benefits, such as health insurance and pensions, the impact on the overall labour market may not be negative. However, some regulations can raise labour costs and discourage employment without contributing to workers’ benefits. For example, a minimum wage, leave requirements and dismissal benefits can protect workers. If designed well, these policies can actually increase employment and improve matching. However, if designed poorly, they can reduce firms’ demand for certain types of jobs and workers. In some countries, overly strict labour standards may create a situation where there are large numbers of informal sector workers who fail to benefit from social protection, who receive low wages and who face uncertainty in terms of earnings (World Bank, 2012a).
Small and medium-sized enterprises require special policy attention, as they play a key role in creating jobs. For example, a study of 99 countries by Ayyagari, Demirguc-Kunt and Maksimovic (2011) demonstrates that those enterprises are important and that, in some cases, they are the biggest contributors to total employment and job creation in developing countries. Not only do they employ the largest number of people, but they also generate most of the new jobs. Small and medium-sized enterprises have the highest employment growth rates, and in many developing countries, small firms account for the largest share of job creation. Supporting innovation and enhancing access to finance are central to the policies focused on those enterprises.

Countercyclical macroeconomic policies, as discussed in the previous section, are also important for maintaining labour demand: in particular, when the economy is in a downturn, countercyclical monetary and fiscal policies implemented to stimulate aggregate demand can mitigate job loss.

On the supply side, policies for improving human capital remain fundamental to enhancing labour incomes. A number of such policies have already been discussed in the section on the necessary conditions for sustained growth, with regard to which human capital was considered a key factor.

Skills are crucial to improving workers’ opportunity and income. In many developing countries with persistently high unemployment, insufficient demand for workers remains a serious problem, but skills mismatches arising from the fact that workers are not adequately equipped to fulfil job requirements are also an important contributory factor. A continuous improvement in labour skills is required to enable workers to keep pace with the constant change in technology and demand.

Policies for increasing labour income and productivity would further enhance the inclusiveness of growth, through a strengthening of growth effects on the achievement of poverty reduction and other development goals.

The experience of some developing countries indicates that an increase in labour income is highly important for reducing poverty. The contribution of an increase in labour income can account for more than half of the reduction in poverty, which is greater than the contribution of non-labour income, such as government spending on subsidies and transfers, as well as private transfers (World Bank, 2015a).

In the long run, increase in labour income depends largely on growth of labour productivity. As noted earlier, while policies designed to facilitate the improvement of workers’ skills can strengthen individual labour productivity, policies promoting economic structural transformation can raise labour productivity of the economy as a whole.

For example, the remarkable achievement in poverty reduction in East Asia, including China, over the past decades, and more recently in South Asia, has been associated with policies promoting structural transformation, reallocating millions of people from the low-productivity agricultural sector to the relatively higher productivity manufacturing and
services sectors. As a result of this transformation, a large number of farmers became factory workers and saw their productivity and earnings increase substantially (Dinh and others, 2012).

However, the structural transformation in many countries of sub-Saharan Africa seems to be following a path different from that of Asia. The share of agriculture in GDP in these countries is declining (a development similar to that in Asia), but that of manufacturing is declining as well, with the share only of the services sectors rising rapidly. Despite this declining share of agriculture, which has fallen to an average of 15 per cent of GDP, 59 per cent of the labour force continues to be engaged in this sector, where there are more people with low income compared with other sectors. This also suggests that the responsiveness of poverty reduction to agricultural and rural growth in sub-Saharan Africa is likely to be higher than to growth in other sectors.

A study edited by Diao and others, eds. (2012) found that the poverty reduction effect of agricultural growth was 53-127 per cent larger than of non-agricultural growth. By splitting the agricultural sector into subsectors, the study showed that the poverty reduction effect of productivity growth of smallholder staple crops was greater than that of the productivity growth of export crops. A study by Hill and Tsehaye (2014) on the poverty-growth links in Ethiopia found that there was a significant relationship between agricultural growth and the decline in poverty in that country: zones with the most rapid increase in agricultural production experienced the largest decline in poverty. By contrast, growth in manufacturing and services did not exert a significant impact on poverty reduction. The experience of Rwanda confirmed these findings (World Bank, 2014b).

McMillan and Harttgen (2014) found that in a sample of 16 countries of sub-Saharan Africa, labour reallocation across sectors accounted on average for about half of overall labour productivity growth during a part of the MDG reference period (figure II.12), although there was substantial heterogeneity across countries. Another study, on Uganda, by Christiaensen and Kaminski (2014), found that 70 per cent of the decline in the poverty headcount during 2005-2009 resulted from an increase in the incomes of people staying in agriculture. The remaining (approximate) one third was due to rural non-farm diversification. Fostering non-agriculture in rural areas appeared disproportionally important for growth, while fostering agricultural productivity appeared disproportionally crucial for poverty reduction. Structural transformation within the rural economy (including rural non-farm income diversification) benefited both poverty and growth.

In general, the sectoral composition of growth can influence both its inclusiveness and its poverty reduction effect (Loayza and Raddatz, 2010). Sectors that are more labour-intensive tend to exert stronger effects on poverty alleviation.

More generally, given the coexistence of low- and high-productivity sectors in many low-income developing countries, and the opportunities this provides for reallocating people from low- to high-productivity sectors (Lewis, 1954), growth in overall labour productivity can be achieved in two ways: by increasing labour productivity within existing economic activities
through technological change (i.e., by increasing total factor productivity), capital accumulation or shifts in the terms of trade; and by moving labour from low- to high-productivity sectors (i.e., by effecting a structural transformation). The contribution of the latter approach depends on the labour productivity gap between the sectors and the speed with which labour is reallocated. Policies enacted to foster sectoral growth and remove barriers to labour movement can facilitate this structural change. Increasing land tenure security can, for example, help release labour for inclusion in the non-agricultural sector. Investments in rural public goods and services, such as education, health, rural roads, electricity and information and communications technologies, will be equally important for boosting the rural economy and facilitating a structural transformation through rural income diversification, while also ensuring that the next generation is equipped to under-take migration to the cities (World Bank, 2014a).

Figure II.12
Making growth equitable by improving equality in opportunity and outcome

Respect for equality, as one of the universally agreed fundamental values and principles of humankind, is enshrined in the Charter of the United Nations. In the United Nations Millennium Declaration,7 equality was affirmed as being one of the six fundamental values (the others being freedom, solidarity, tolerance, respect for nature and shared responsibility) essential to international relations in the twenty-first century. In this regard, while MDG 3 is the one Goal that explicitly refers to equality—in this case, gender equality—the achievement of the other Goals can help promote equality in various dimensions as well.

However, significant disparities remain among different groups of people, based on age, sex, race, ethnicity, origin, religion and economic and social status, in respect of their access to education, health, jobs and financial services, and in terms of political representation and participation. For example, as shown in figure II.13, inequality in education has declined over time in all developing regions, but significant disparities remain based on gender in some developing regions. Opportunities for children from families of differing economic status to attend primary school are also conspicuously unequal in many developing countries (figure II.14). At the same time, during the past two decades, income inequality and wealth inequality have widened considerably in a large number of countries. For example, between 1990 and 2012, income inequality after taxes and transfers increased in 65 out of 130 countries for which data are available. Those countries are home to more than two thirds of the world’s population (United Nations, General Assembly, 2013a).

Tackling inequality in all its dimensions is therefore set to become a key challenge for the post-2015 development agenda. The SDGs proposed by the Open Working Group of the General Assembly on Sustainable Development Goals include one whose focus is to “reduce inequality within and among countries”; in addition, equality has been made a cross-cutting issue embedded in almost all of the other SDGs. The proposed SDGs include some specific targets for ensuring equal opportunity and reducing inequalities of outcome. For example, a target has been set to progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average by 2030.

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7 General Assembly resolution 55/2.
Figure II.13

Gini coefficients of educational inequality, by sex, selected regions

Figure II.14

Proportion of children attending primary school by wealth quintile, selected countries, late 2000s
Experience derived from the MDGs and development practice in general shows that three broad categories of policies are needed in order to make growth more equitable: policies for improving equal opportunity, policies for reducing income inequality, and social safety nets for the most vulnerable and universal social protection floors.

The policies in the first category would aim at levelling the playing field for people irrespective of their group identities. These would include policies focusing on early childhood development, quantity and quality of schooling, skills training, social security, health, access to capital and land, the justice system, access to infrastructure and public services, and access to jobs and markets.

Some of these policy areas might seem to overlap with those associated with promoting inclusive growth, as discussed earlier, but the difference lies in the emphasis here on a further targeting of disadvantaged groups of people, such as children of poor families in rural and remote areas, girls, women, youth and minority ethnic groups, to enable them to narrow their opportunity gaps with respect to other groups.

For example, narrowing the gap with respect to women’s access to employment can make growth more equitable and inclusive. Despite some progress in the MDG reference period, worldwide, 48 per cent of women’s productive potential is unused, compared with 22 per cent of men’s (Morton and others, 2014). In addition to experiencing a lower likelihood of being employed than men, women are far more likely than men to have part-time jobs and be in a situation of time-related underemployment. The proportion of women in part-time employment is more than double that of men in almost all countries (United Nations, 2014a).

An increase in the income of women through employment, when compared with an increase in the income of men, can lead to the expenditure of a greater proportion of that income on food, health, education and investments in children. In addition, it can also reduce women’s risk of being subjected to domestic violence (Beegle, Goldstein and Rosas, 2011). When more women have the opportunity to realize their potential through employment and participation in other economic and political activities, they can improve their ability to make decisions regarding their lives and to act on those decisions. For example, in Viet Nam, women who hold joint title to property with their husbands are more aware of legal issues, have more say in the use and disposition of land, and are more likely to earn independent incomes than those who do not hold joint title. More specific policies for empowering women in employment and other areas are examined in chapter III.

Improving equal access to capital and land is also important for improving equal opportunity and making growth more equitable. However, policies in this area are also among the most challenging with respect to their design and implementation.

Landownership in many countries is highly unequal, with landless persons being among the poorest in developing countries. Inequalities in landownership can weigh particularly heavily on women. In some countries, the prevailing pattern of landownership is the legacy of historical discrimination practised against certain groups. Moreover, unequal land distribution is also found to correlate with lower economic growth (Deininger and
Olinto, 2000). Not only can landownership provide a means of livelihood, but it may also be used as collateral for credit and insurance, as well as influence in political participation. Therefore, addressing unequal land distribution can have far-reaching implications as regards improving social equity and economic efficiency.

In practice, however, significant hurdles to the implementation of land reforms remain to be surmounted. As indicated by a number of studies (see, for example, World Bank (2006)), transformative land reforms in some Asian economies—such as China, Japan, the Republic of Korea and Taiwan Province of China—were rare and often associated with exceptional events, including revolution or political upheaval. In India, while abolition of the land rights of rent-collecting intermediaries has been highly successful, the record on implementation of landownership ceilings and laws to protect tenants is mixed. In Latin America, land reforms have generally been “incomplete”. In Africa, while post-independence reforms in Kenya and Zimbabwe were highly effective, they did not last. The land redistribution programme launched by the Government of South Africa in the 1990s fell short of the targets set for 2014.

While the economic and political complexities underlying the successes and failures in land reforms in many countries are beyond the scope of the present analysis, a few of the lessons culled from consideration of many studies suggest the following initiatives. First, it is important to secure ownership for those who gain access to redistributed land, so as to reduce uncertainty and encourage investment. With respect to public ownership, as in the case of China, a long-term (70-year) contract can to some extent play a similar role. Second, it is important to provide beneficiaries with assistance, such as technical training and credit, so as to ensure self-sufficiency and maximize productivity. Third, it is critical in the process of land redistribution that transparency and observance of rules be maintained.

Policies in the second category would focus on the redistribution of income based on the implementation of various progressive tax frameworks through which disposable income of high-income groups would be reduced and a certain proportion of the tax revenue transferred to low-income groups in order to raise their disposable income. The other part of the tax revenue could be used for financing public goods and services.

Taxes and transfer have played a significant role in lowering inequality in developed countries. For instance, the market Gini coefficient in Finland in 2010 was 49, but after taxes and transfers the net Gini coefficient decreased to 27. In France, the corresponding decrease was from 51 to 31; in Germany, from 51 to 29; in the United Kingdom of Great Britain and Northern Ireland, from 53 to 34; and in the United States of America, from 51 to 39 (Organization for Economic Cooperation and Development, 2015a). As shown in figure II.15, government redistributive policies in developed countries can substantially reduce income inequality, with a lowering of the Gini coefficients by about 14 percentage points on average.

However, as is also shown in figure II.15, the effects of government redistributive policies in developing countries are very limited, with the Gini coefficient of inequality being
lowered by only a few percentage points. One cause is the limited fiscal capacity of the governments of developing countries: tax and social contribution revenues in most developing countries range only from 15 to 20 per cent of GDP, compared with the revenues in developed economies which range from 30 to 50 per cent of GDP. Low tax-to-GDP ratios in developing countries limit the scope for the social spending needed to effect a more equitable distribution of disposable income. Nevertheless, bucking the general trend of rising inequality in many countries in the world, a number of countries in Latin America have managed to reduce income inequality in the past decade through various redistributive policies, although the Gini coefficients in this region still remain high.

Policies in the third category provide social safety nets to the poor and vulnerable and universal social protection floors. They are discussed in chapter III.

While it is national Governments that are primarily responsible for adopting the policies and strategies needed to make growth in their countries more equitable and tackle multidimensional inequalities, global efforts are also important for reducing multidimensional inequality both among and within countries. However, within the context of improving equal opportunity among countries, global markets for goods, services, technology, labour and capital are far from equitable, with the rules governing those markets often disfavouring developing countries. Levelling global economic playing fields requires more equitable rules and more representation and participation of developing countries in rule-setting. Further, if international income inequality is to be reduced, the amount and effectiveness of ODA, and the broad global partnership for development, all need to be strengthened. These issues will be discussed in chapter VI.
As discussed above, sustained, inclusive and equitable growth has been important for promoting achievement of the MDGs, but is this growth pattern also effective for achievement of the SDGs in the post-2015 period? Perceived through the lens of the post-2015 development agenda, the current pattern of growth in the world economy is not sustainable. For instance, growth of GDP per capita has been closely associated with an increase in carbon dioxide (CO2) emissions, which is the main cause of global climate change. A positive correlation has been established between growth and carbon emissions in developing countries (figure II.16a and figure II.16b), although CO2 intensity in GDP has exhibited a downward trend. Even in developed countries (figure II.17), where the post-industrial structural transformation, new technology, trade, outsourcing and certain environmental policies have resulted in a relative decoupling between carbon emissions and growth, emissions can still increase when growth accelerates beyond a certain range (i.e., above 2 per cent).
Figure II.16

Trends in population, per capita GDP and CO₂ emissions in East Asia and the Pacific and sub-Saharan Africa

Relative change from the 1990 baseline year value

CO₂ emissions (kilograms per 2005 US$ of GDP)
- CO₂ emissions (kilotons)
- GDP per capita (constant 2005 US$)
- Population, total

Figure II.17

Carbon dioxide emission and GDP growth in developed countries, 1991–2012

Growth of CO₂ emission

- United States
- EU-15
- Australia
- Trend - US
- Trend - EU-15
- Trend - Australia

GDP growth (per cent)
More generally, environmental sustainability challenges, such as resource depletion, ecosystem degradation and climate change, have increasingly eroded the hard-earned gains in the area of economic and social development in many developing countries, as well as in developed countries. For example, some estimates show that the costs of environmental degradation in many developing countries can reach 3-10 per cent of their GDP (World Bank, 2015a). In some locations, the impacts of extreme weather-related events such as heatwaves, droughts, floods, cyclones and wildfires, are already demonstrating the vulnerability of human and natural systems to current climate variability and future changes (Intergovernmental Panel on Climate Change, 2014a; 2014b). Moreover, the people with low income are usually the most susceptible to these disasters.

As environmental sustainability is becoming increasingly challenging, the conventional pattern of growth has become increasingly unviable. However, the alternative model—of, say, no growth or degrowth—is not an option, at least not for many developing countries, where the income level for 30 or even 50 per cent of the population remains below the poverty line. The solution lies in the transformation of the pattern of sustained, inclusive and equitable growth to one of sustainable, inclusive and equitable growth. Sustained growth, as defined earlier, is growth achieved at a robust and stable pace for from two to three decades. However, viewed through the lens of sustainable development, choice of a horizon of from two to three decades evidences myopia. In contrast to sustained growth, sustainable growth is growth achieved at a robust and stable pace, without compromising environmental sustainability for all future generations.

An important step in the direction of this transformation entails counting the full value of natural resources in the measurement of national wealth, so that the decision-making of both Governments and businesses can incorporate the full value of natural resources in their objective functions and/or constraints when setting their budget, macroeconomic policies, development plans, and calculus of profits and costs. As noted in chapter I, the 2012 System of Environmental-Economic Accounting (SEEA)—Central Framework (United Nations, European Commission, Food and Agriculture Organization of the United Nations, International Monetary Fund, Organization for Economic Cooperation and Development and World Bank (2014)), adopted by the Statistical Commission in its decision 43/105 (United Nations, Economic and Social Council, 2012) is geared to serve this purpose, and a number of countries are working on institutionalizing the SEEA as part of their regular statistical programmes. However, much greater efforts are needed to mainstream the SEEA.

Another important step by Governments would entail setting the prices of environmental goods and services at the levels reflecting their intrinsic value. Given the status of many environmental goods and services as public and common goods, as well as the large externalities and information asymmetries associated with them, markets tend to under-price those goods and services significantly. It is up to Governments to use taxes and regulations as a means of setting the prices of environmental goods and services close to their value, so as to incentivize businesses and consumers to alter their behaviour, which would encompass changing unsustainable patterns of production and consumption.
Building effective, inclusive, equitable and environment-protecting institutions is equally important. Many countries are undertaking various institutional reforms oriented in this direction, but these reforms will by their very nature entail changing the rules of the game—rules that may be long-established—and could thus provoke the tenacious resistance of the vested interests.

In alignment with these steps, many economic policies designed (as discussed above) to support sustained, inclusive and equitable growth for achieving the MDGs could be modified to support sustainable, inclusive and equitable growth for the achievement of the SDGs post-2015.

The people-centred policies aimed at strengthening human capital will continue to be crucial to supporting sustainable, inclusive and equitable growth for SDGs post-2015. High level of investment, human capital and technological innovation will still be among the key factors needed to support sustainable growth. However, environmental capital should be included as an additional productive factor. Investment will be focused to a greater extent on sustainable development projects, technological innovation will be focused to a greater extent on green technology, and industrial, trade and other structural policies will be oriented towards achieving sustainable structural transformation.

Policies designed to manage broad macroeconomic stability will remain important for sustainable growth, but monetary and fiscal policies will also face the challenge of having to take into account parameters not only along economic and social dimensions, but also within the environmental domain.

Employment and productive jobs will remain the key elements for making growth inclusive, but the number of “green” and “greening” jobs will need to be greater than the number of “dark” ones.

Policies for improving equal opportunity, reducing income inequality, and providing social safety nets for the most vulnerable and universal social protection floors will continue to make growth more equitable, but addressing inequalities in the environmental dimension (at both national and international levels) should also be included in policy considerations, so as to ensure more equal access to environmental goods and services and a more equal sharing of environmental costs.

Integrating the economic, social and environmental dimensions will require an integrated policy framework for all policymaking in those dimensions. In reality, however, no country is likely to set up a super-centralized policy institution for this purpose. A practical approach will entail enhancing coordination of economic, social and environmental policies. However, even this coordination will require significant changes in policy-setting, with different line ministries and agencies incorporating additional variables and parameters in the framework of their policy objectives and constraints.
International policy coordination and cooperation will also become more challenging in the post-2015 period, not only among nations, but also among the international economic, financial, trade, social and environmental institutions.

Conclusion

The key MDG lessons regarding economic policies (with some of them understood as overlapping with social policies) and their implications for the post-2015 period in general and the SDGs in particular can be summarized as follows.

First, people-centred policies, such as those focused on early childhood development, education, training, health, social safety nets and universal social protection floors, are the most important policies for promoting sustained, inclusive and equitable growth for achieving the MDGs. These policies remain important for fostering the sustainable, inclusive and equitable growth needed to achieve SDGs post-2015.

Second, policies designed to promote high levels of long-term investment in productive capacity, improvement in human capital and technological innovation are crucial for sustained growth. While they remain crucial for sustainable growth as well, policies are also needed to promote environmental capital as an additional productive factor for sustainable growth.

Third, government plays a key role in investment in infrastructure, which can crowd in private investment and significantly raise economy-wide productivity. Public-private partnerships can be used to expand infrastructural investment; however, proper terms and regulations should be well established for sharing risks and profits. High-level investment, public or private, requires high domestic savings, with foreign savings, in the form of capital inflows, playing only a complemental role. An effective, stable and inclusive financial sector is important for mobilizing domestic savings, channelling funds to productive investment and redistributing risks.

Fourth, technological innovation advances the productivity of capital and labour, generating additional growth from the existing resources and transforming the economic structure. Industrial, trade and investment policies, along with other policies, can promote technological innovation and transfer, but countries still face the challenge of selecting the right policies in accordance with their specific circumstances.

Fifth, policies focused on maintaining broad macroeconomic stability are important for sustained growth, and they remain important as well for sustainable growth post-2015. Monetary policy instruments and targets should be selected in accordance with a given country’s stage of economic and financial development and specific economic circumstances. Efforts are needed to reduce fiscal procyclicality and enhance countercyclicality, through such measures as fiscal rules, medium-term expenditure frameworks, and stabilization funds. Improvement in fiscal cyclicality in the least developed countries will also depend on the
predictability of ODA flows. In the setting of monetary and fiscal policies, a balance between rules and flexibility will be required.

Sixth, policies are needed to enable management of systemic risks. Prudence must be exercised by developing countries with respect to the opening of their capital and financial accounts. Macroeconomic policies, macroprudential tools and capital-account regulations make up part of a package of measures needed to manage capital flows. Maintaining broad macroeconomic stability in developing countries requires international macroeconomic policy coordination and reforms of the international monetary system and international financial institutions. Stabilization funds can mitigate volatility in commodity prices for commodity exporters. With the SDGs, integrating economic, social and environmental dimensions, macroeconomic policy prioritization and coordination will become more challenging.

Seventh, productive employment and decent wages are two key elements, among others, for making growth inclusive. Labour demand can be boosted by policies designed to improve the business environment, reduce unnecessary hiring costs and support small and medium-sized enterprises. Developing and upgrading labour skills require continuous improvement in accordance with the constant changes in technology. Policies centred on facilitating structural transformation can lift economy-wide labour productivity.

Eighth, policies focused on improving equal opportunity, reducing income inequality, and providing social safety nets for the most vulnerable and universal social protection floors can make growth equitable. For the SDGs in the post-2015 period, policies are also needed to address inequality within the environmental dimension, at both national and international levels, in terms of equal access to environmental goods and services and equal sharing of environmental costs. Policies enacted to level the playing fields for people, irrespective of group identities, have to address issues of early childhood development, quantity and quality of schooling, skills training, health, access to capital and land, the justice system, access to infrastructure and public services, and access to jobs and markets. Narrowing the women’s opportunity gap in respect of employment and wages can make growth more equitable, inclusive and sustained.

Ninth, income inequality can be reduced through various progressive tax frameworks and transfers, but low tax-to-GDP ratios in developing countries limit the scope for redistributive measures. Various types of social protection policies can be combined with public works programmes to reduce poverty and inequality (see chap. III).

Last, for the SDGs to successfully integrate the economic, social and environmental dimensions, a framework is required for integrating policymaking in all three dimensions. Short of setting up a centralized policy institution to ensure such integration, significant enhancing of coordination of economic, social and environmental policies will be necessary.
Box II.1

An alternative approach to studying growth effects on poverty reduction

The issue of growth effects on poverty (measured by the yardstick of $1.25 per day) has been widely studied. Most studies of the issue are based on cross-country or panel-data regressions (see, for example, Adams (2004), Belke and Wernet (2015) and Fosu (2011)). Given the complex non-linearity of the relationship between growth and poverty reduction, as exhibited in figure II.4, the estimated poverty reduction elasticity of growth obtained from such regressions can be highly biased. A better approach is to use the density function of income for a country or a group of countries (a). For example, figure II.1.1, presents the density functions of income distribution for China, India and the sub-Saharan Africa region by 2010 (b).

By definition, the poverty rate is equal to the area under the curve of the density function on the left-hand side of the poverty line ($1.25 per day). Given the density functions in the figure, the 2010 poverty rates were 48 per cent for sub-Saharan Africa, 31 per cent for India and 12 per cent for China.

Three numerical exercises can be conducted based on these density functions.

In the first exercise, focused on sub-Saharan Africa, it is assumed that GDP per capita in that region will have four spells of growth, of 20 per cent during each, with the shape of the density function remaining unchanged (c) The results are shown in figure II.1.2. The effects on poverty reduction corresponding to each of the growth spells will be 12, 15, 8, and 13 percentage points, respectively. The corresponding poverty reduction elasticity of growth will be 0.60, 0.75, 0.40 and 0.65 (d). The elasticity is clearly non-linear, but does not correspond to an inverted-U pattern.

In the second exercise, it is assumed that GDP per capita in each of the three economies will grow by 50 per cent, and that the density functions will remain the same. As shown in figures C, D and E, the effects on poverty reduction will be 27, 29, and 9 percentage points for sub-Saharan Africa, India and China, respectively, and the corresponding poverty reduction elasticity of growth will be 0.54, 0.58 and 0.18, respectively.

In the third exercise, taking the results obtained in the second exercise for sub-Saharan Africa, it is assumed that income inequality improves in the region, so that the income of the lower fortieth percentile grows faster than average income, which grows by 50 per cent. As reflected in the narrowing of the density function in figure F, the poverty rate for sub-Saharan Africa will be reduced further, from 21 to 14 per cent.

The density function approach can reveal much more clearly than other approaches the complex non-linear dynamic relationships among growth, inequality and poverty.
Footnotes for Box II.1:

(a) Bourguignon (2003) suggested a similar framework to explain the relationship between growth and poverty reduction, but used a hypothetical normal density function.

(b) While these density functions are for consumption (as estimated by the Africa Progress Panel (2014) for other purposes) not income, they are adopted here for the examples without a loss of genericity of approach in the discussion.

(c) Strictly speaking, under this assumption, only the variance of the density function is maintained so as to remain the same; but the Gini can still be different.

(d) Growth elasticity of poverty reduction is defined as the percentage change in headcount poverty in response to a 1 per cent change in GDP per capita (see, for example, Bourguignon (2003)).

Figures for Box II.1:

Figure II.1.1

![Consumption density functions for China, India and sub-Saharan Africa, 2010](image)

Figure II.1.2.
Figure II.1.3.

Figure II.1.4
Figure II.1.5

Figure II.1.6
Box II. 2

Inflation targeting: rules versus flexibility

Within an inflation targeting framework, the central bank makes public its target inflation rate for a future period, of from one to two years, and attempts to steer actual inflation towards the target by adjusting interest rates and other monetary instruments. In some countries, the target is set as a legal agreement between the minister of finance and the governor of the central bank, as in the case of New Zealand (see Reserve Bank of New Zealand, 2012), with the latter being fully accountable for the achievement of that target.

Since December 1989, when New Zealand formally adopted its inflation targeting framework, a total of 27 countries, including developed, developing and transition economies, have adopted this framework: 5 countries target a point and another 5 target a range, while the remaining 17 target a point with a tolerance band for inflation, i.e., they operate within a flexible inflation targeting framework. The targeted inflation rates vary from country to country: the European Central Bank, for example, has a rate of 2 per cent, while the rate for Brazil is 4.5 per cent (target of 2016), the rate for the Russian Federation, 4 per cent (target of 2017), and that for Ghana, 8 per cent.

The inflation targeting framework was introduced to a large extent in response to the inflation escalation experienced by many economies in the 1980s. One advantage of the framework is that it enables the central bank to serve as an anchor for the expectation of inflation in the economy, in a context where the reinforced feedback between observed and expected inflation serves as a key driver of the inflation spiral, as was found to be the case in the
1980s. The framework may also strengthen the credibility of central banks by giving them both more independence and more accountability.

However, this framework has been criticized from the start based on some of its shortcomings. For example, by focusing exclusively on inflation, the central bank may fail to pay adequate attention to many other factors, such as unemployment, exchange-rate instability and financial bubbles, which are equally important for macroeconomic stability.

Criticism of the inflation targeting framework has been on the rise since the global financial crisis of 2008. As demonstrated by the experience in the run-up to the global financial crisis, stable inflation is a necessary but not a sufficient condition for macroeconomic stability. While central banks can effectively use their policy rates to control money growth and tame inflation, they may still encounter macroeconomic instability owing to the build-up in asset prices, volatile capital flows or exchange-rate fluctuations. Of greater significance is the fact that this policy framework became ineffective in the aftermath of the global financial crisis, when boosting economic recovery and dealing with deflationary pressures became a priority.

Some central banks are now pursuing a more flexible inflation targeting framework, and in doing so, are relying increasingly on a mix of tools—such as policy rates, macroprudential regulations and exchange-rate and capital-account management—to achieve price and broader macroeconomic stability.

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