

through the UN Development Cooperation Forum. Despite signatories' commitment to transparency, the outcome document does not contain any other time-bound measurable commitments or targets to which citizens can hold them to account.

The post-Busan architecture has yet to take shape. But some intermediate priorities have surfaced. One is for traditional donors to meet their commitments from the 2005 Group of Eight Gleneagles summit to increase aid and to deliver on better coordination and alignment.<sup>20</sup> Traditional donors can also work with emerging donors, who can contribute knowledge and experience from a developing country perspective. The United Nations, with its universal membership, is well positioned to engage partners from the South in such trilateral development cooperation through the UN Development Cooperation Forum. One of the main tasks is to achieve better alignment between North–South and South–South development cooperation and global norms.

The Busan agreement marks a first step in reshaping development cooperation so that it can be more effective and better harness the potential of emerging countries. As with other global public goods, once common understanding is reached at the global level, operationalizing the principles can in most cases be decentralized to national governments using the agreed common policy frameworks. Take the Millennium Declaration of September 2000 and the global agreement on the Millennium Development Goals that eventually emerged. Agreement on these goals gave impetus to a wide range of activities and institutions by highlighting a simple truth: enhancing the capabilities of people and advancing the development of all societies are important global public goods.<sup>21</sup> The actual progress in the achievement of these goals has been very much at the country level, through national initiatives and ownership.

## Better representation for the South

---

The current institutions and principles for international governance require rethinking or at least recalibrating to accommodate the growing diversity in voice and power and to sustain

long-term development progress. Many were designed, long before the rise of the South, for a post–Second World War order that does not match contemporary reality.

As a consequence, these institutions greatly underrepresent the South. Voting quotas in the Bretton Woods institutions are weighted towards countries in the North, despite changing global economic realities. For example, China, which is the world's second largest economy and holds more than \$3 trillion in foreign reserves, has had a smaller voting share in the World Bank than both France and the United Kingdom.

Similarly, the United Nations Security Council makes decisions on global peace and security with a permanent membership that reflects the geopolitical structure of 1945. At the 2012 United Nations General Assembly meeting in New York, several heads of government from the South again voiced their long-standing demands for permanent seats on the council for Africa, Latin America and such unrepresented developing country powers as India.<sup>22</sup>

The major international institutions need to be more representative, transparent and accountable. The Bretton Woods institutions, the regional development banks and even the UN system all risk diminishing relevance if they fail to represent all member states and their people adequately. These bodies need to respect and draw constructively on the experiences of both the South and the North and to aim for equitable and sustainable outcomes for present and future generations.

At the same time, the rising South has to assume more responsibility on the global stage, in line with its increasing economic power and political clout, including by contributing more resources to multilateral organizations.<sup>23</sup> The South has to take larger leadership roles at both the regional and global levels. Greater transparency and accountability in global institutions, while desirable in and of themselves, will facilitate more such participation by the South.

There have been some positive moves in this direction. Developing countries are already playing a greater role in the Bretton Woods institutions and in global dialogues through the summits for Group of 20 (G20) heads of state. The OECD has opened membership to some

---

Current institutions and principles for international governance require rethinking to accommodate the growing diversity in voice and power and to sustain long-term development progress

International governance is increasingly influenced by a multitude of voices and actors through global movements and transnational activist networks

developing countries. Developed countries should welcome these changes, as the success of the South extends benefits to the North and advances the prosperity of all.

Indeed, some intergovernmental processes would be invigorated by greater participation from the South, which can bring substantial financial, technological and human resources. Emerging economies could lead in achieving the Millennium Development Goals, innovating in climate change mitigation and concluding the Doha development round.

Global organizations that are more representative of the world's countries would in principle be accountable to the world's people through national governments. However, state mediation alone is inadequate. International governance is increasingly influenced by a multitude of voices and actors through global movements and transnational activist networks. Indeed, this has been the thrust of antiglobalization movements, sometimes self-described as “global democracy” movements, which cut across a range of issues, articulate diverse concerns and embrace an almost endless variety of political messages but share the basic concern of making transnational power and governance accountable to civil society.

To this end, today's multilateral institutions are encouraged to recalibrate their representation and guiding principles, in areas such as:

- *Voice*. Matching the circles of stakeholders and decisionmakers so that all have an effective voice in global matters that concern them.
- *Public goods*. Building bridges across organizational lines to facilitate the multilevel, multisector, multiactor production that many global public goods require.
- *Leadership*. Encouraging global leaders, state and nonstate, individually or collectively, to exercise leadership to assist the international community on issues that are caught in global policy stalemates and problems that are reaching crisis proportions.
- *Convening*. Realigning existing organizations to reflect changing global economic and political realities, and vesting them with the authority and expertise to effectively mediate among different stakeholders.
- *Information and resources*. Helping poorer countries in the South participate more

effectively in global governance through better access to information, technical assistance and finance.

- *Citizen participation*. Drawing on the wealth of ideas and views emerging from citizen networks and from participants previously sidelined from the global discourse.

International organizations are becoming more inclusive and sensitive to the requirements of a rapidly changing world. The United Nations Economic and Social Council, for example, has established the Development Cooperation Forum to promote more broad-based discussion of development assistance. There is scope for renewed multilateralism. However, there have been only modest governance reforms at the International Monetary Fund (IMF) and the World Bank. The United Nations Security Council's core structure remains unchanged, despite decades of debate. More-determined reform is needed for multilateral institutions to facilitate cross-national collaboration on stalemated global issues in ways viewed as fair and just by all countries.

## Global civil society

International governance institutions can be held to account not just by member states, but also by global civil society, which can shape the exercise of power and act as a countervailing force to states and markets. All kinds of voluntary associations—including nongovernmental organizations, social movements, advocacy groups, unions and community groups—have used channels of influence such as elections, lobbying, media and public campaigns to become drivers of social change within many leading countries of the South—including Brazil, Egypt, India and South Africa. In the Indian state of Kerala a rich history of civic engagement influenced the government to prioritize extensive social rights and equity-promoting public policies. In Brazil, the Sanitarista movement of health care professionals played a central role in developing the country's public health care system and expanding services to the poor.<sup>24</sup>

National civil society groups are increasingly using their experience engaging with national governments to open up independent networks

of North–South and South–South dialogues outside traditional official international governance channels. These transnational networks are laying the groundwork for an emerging global civil society that is pushing for action on issues ranging from climate change to migration policy to human rights.

The potential for global civil society to influence decisionmaking on critical global issues has been greatly magnified by the Internet revolution, which enables hyperconnectivity of disparate groups and offers platforms for citizens' ideas and concerns to spread rapidly around the globe. People can speak to people, and communities of scientists and other professionals can share ideas, unmediated by state power or markets. This new ease of global communication is fuelling creative partnerships, empowering individuals and social organizations, leading to new forms of solidarity and allowing people to interact and express their values internationally.

The recent uprisings in several Arab States countries, the culmination of complex historical developments, have shown that social media is a force that world leaders and global institutions ignore at their peril. The rapid spread and wide response to the video *Kony 2012*, about indicted war criminal Joseph Kony of the Lord's Resistance Army, showed that social media can engage many millions of people in discussion of important issues within days.<sup>25</sup> There may be disagreement over the legitimacy of particular concerns and platforms, but the rapid sharing of information across social networks clearly sways public opinion on issues that matter to the global citizenry and ultimately influences international governance.

Indeed, one of the most valuable tools of global civil society is the ability to diffuse new norms that transform the behaviour of state and private actors. By taking up and framing issues and pressuring states, civil society networks can put new issues on the table and influence government and international action towards new treaties, stronger enforcement mechanisms and even direct intervention. Classic examples of civil society influence on global norms include the global diffusion of the women's suffrage movement, the antislavery movement and the Red Cross movement that led to the production of the Geneva conventions and the

International Federation of the Red Cross and Red Crescent Societies. More recently, global civil society networks have been influential in institutionalizing anti-land mine legislation, more open access to AIDS medicines and campaigns opposing violence against women.

While global civil society holds much potential for influencing international governance norms and decisionmaking, the likely contribution of civil society organizations and transnational networks should be kept in perspective. Higher levels of resourcing lead the international nongovernmental organizations of the North to wield disproportionate influence in the global civil society space.<sup>26</sup> The international human rights regime, for example, often emphasizes civil and political rights, which are of particular concern to civil society in Eastern Europe, rather than social rights, which figure much more centrally in the demands of popular movements in the South. Limitations on civic space as well as other constraints can affect the capacity of civil society organizations to function.<sup>27</sup> A further consideration is one of transparency, as it can be unclear how autonomous civil society groups are from state and market forces. When civil society organizations become extensions of state power, economic influence or traditional authority, civil society activity may magnify rather than reduce inequalities and instability.<sup>28</sup>

The future legitimacy of international governance will depend on the capabilities of institutions to engage with citizen networks and communities—understanding their concerns and borrowing from their ideas and approaches to find direction for their own efforts and energies. Such engagement will maximize the legitimacy of their actions and ensure accountability to the citizens of member states (box 5.2). The idea of ecological citizenship, for example, may be a promising way to construct from the ground up global public opinion on the provisioning of global public goods.<sup>29</sup>

To be effective, international organizations need to form productive partnerships with social media communities and nongovernmental organizations in the South and North alike. They should engage with citizen groups to support policy changes and a transition towards more-equitable principles and institutions of

---

Global civil society has the ability to diffuse new norms that transform the behaviour of state and private actors

### A world parliament for global democracy?

Legitimacy and representativeness of the world's people in global decisionmaking are imperative for the governance of global issues, but global decisionmaking bodies have no institutional mechanisms for effective and influential citizen participation. At a time when intergovernmental decisionmaking has shown its limits, the quest for equity and sustainability and the urgency of addressing defining challenges for our planet require the engagement of the global citizenship.

A world parliament would complement the United Nations General Assembly—either formally integrated in the UN system or instituted as a separate body. This idea is not new, but as it matures, it is receiving increasing support from civil society actors and regional parliaments (including the European, Latin American and African Parliaments) and was recently highlighted in the Manifesto for Global Democracy put forward by a multinational group of intellectuals.<sup>1</sup>

A world parliament would be composed of delegates from national parliaments, representing multiple political parties from each country. Since the great majority of national parliaments are democratically elected, such

a body would have a high level of representativeness and political accountability. A world parliament would serve as a link between national policymaking and global decisionmaking, providing incentives for national parliaments and governments to consider the implications of decisions beyond national borders and instilling national parliaments with knowledge and experience on governing global issues.

This assembly could have one extended annual session, during which it would issue recommendations and add agenda items to the UN General Assembly and, by a qualified majority, submit agenda items to the UN Security Council for debate and decisions. The deliberations would possess a high moral and political authority, although the final decisionmaking power would remain with national governments. The composition of each national delegation could be determined either by national parliaments or through special elections allowing citizens to choose representatives for the world parliament. Delegation size would be proportional to a country's population, an approach considerably different from international bodies where voting quotas are based on monetary contributions.

1. Beeston 2012.

international governance. The World Health Organization, for example, has had to manage state interests carefully and adjust to the emphasis on privatizing health services that became dominant in the 1980s. Its core commitments to public health and its ties to civil society, however, have enabled it to continue to pursue policies that emphasize a rights-based approach to health.<sup>30</sup>

### Towards coherent pluralism

The challenge facing the multilateral system in response to the rise of the South is not a false choice between globalism and regionalism or between older structures devised and managed by the traditional powers of the North and newer arrangements responding to the needs of the developing world. Rather, it is integrating, coordinating and in some cases reforming these institutions so that they can all work more effectively together. Diversity and flexibility in global governance mechanisms can be net positives for the international system but cannot substitute for the global pursuit of solutions to problems that are inherently global in nature. Policymakers working both regionally and internationally should strive towards a more coherent pluralism in multilateral governance,

with shared norms and goals supporting varied yet complementary regional and global development initiatives.

Recent experience in much of the South has shown that some public goods can be effectively provided at the regional level. As noted in chapter 2, regional institutions can sometimes respond to regional needs faster and more efficiently than can global forums—for example, programmes for eradicating endemic diseases, protecting shared ecosystems and removing barriers to intraregional commerce. In such cases, it makes sense for like-minded neighbouring states to address these challenges cooperatively while pursuing global responses to these issues where needed.

Increasing regional cooperation can also have disadvantages—adding further complexity to an already diverse array of multilateral institutions, with all the attendant risks of exclusion, duplication and interagency competition. In many areas, regional institutions have the potential to complement global structures, even if that kind of coordination seems rare or inadequately synchronized today.

Global governance arrangements must respect the mixed strategies that countries are choosing. It is clear that developing and emerging economies are choosing to cooperate in different ways—bilaterally, regionally

The challenge facing the multilateral system is not a false choice between older structures devised by the North and newer arrangements responding to the needs of the developing world. It is integrating, coordinating and in some cases reforming these institutions so that they can work more effectively together

and internationally. Over time, as new sets of challenges have emerged, countries have created new forms of governance to deal with these. In finance, for example, countries want to diversify their exposure and their “insurance policies”. They seek to use a mixture of national reserves, bilateral credit lines, regional arrangements and the IMF. The international regime needs to be pluralist while ensuring that cooperation at the regional and subregional levels is consistent with mechanisms and policies at the international level.

The ultimate purpose of this “coherent pluralism” is to ensure that institutions at all levels work in a coordinated fashion to provide global public goods. The complementarity not just between global and regional institutions, but also across public, private and civil society organizations, has the potential to be constructive, even if it may appear fledgling and inadequate at present. Where new arrangements and new partnerships arise to meet the gaps left by old arrangements, they should be encouraged, avoiding duplication to the greatest extent possible. New arrangements at all levels must work in concert with each other and in step with existing multilateral organizations, aligning interests and sharing responsibilities.

While pluralism and greater diversity are welcome developments, duplication and inefficiency occur among the plethora of new organizations. Moving towards a coherent structure, some organizations will survive, and others will be deemed redundant.

The governance of global public goods for sustained progress in human development requires effective multilateralism. International institutions can also provide guidance on human rights and other universal principles and arbitrate in such areas as public international law. However, multilateralism will need to be more flexible to deal with new challenges and geopolitical realities. In a coherent pluralistic system, international institutions can serve as coordinating bodies, playing a catalytic or convening role for all stakeholders. To do this, they need the mandate and sufficient expertise and resources to mediate and facilitate, to analyse and respond to often divergent interests and to propose workable and mutually beneficial outcomes. To fully engage the South, many international organizations need updating

and transforming. The South in turn is more likely to use and fully support multilateral institutions that are seen to be acting as much in the interests of the South as in the interests of developed countries.

## Financial architecture: redesign for the rising South

The rise of the South is creating new patterns of resource accumulation, potentially leading to a denser, multilayered and more heterogeneous financial architecture. This could promote financial stability and resilience, support long-run productive capacities, advance human development and enlarge national policy space.

In some cases, these emerging institutions and arrangements could substitute for some of the functions of the Bretton Woods institutions, but in most cases, they complement the existing global financial architecture. Moreover, emerging institutions may prove transformative by prodding the Bretton Woods institutions to respond to concerns about representation, governance principles and conditionalities.

The South has already developed several alternative institutions and approaches, including regional monetary and support arrangements:

- The Chiang Mai Initiative emerged in the wake of the 1997 Asian financial crisis, taking the form of a series of swap arrangements among Asian countries. It evolved into the Chiang Mai Initiative Multilateralization, which allows members to draw on the multilateral swap facility to address balance of payments and short-term liquidity difficulties.
- The Arab Monetary Fund, founded in 1976 by the 22 member countries of the League of Arab States, has some \$2.7 billion to support emergency financing for member countries as well as broader monetary cooperation. There is also an aspiration for a unified Arab currency.<sup>31</sup>
- The Reserve Bank of India recently announced a \$2 billion swap facility for members of the South Asian Association for Regional Cooperation.<sup>32</sup>
- The Latin American Reserve Fund, with a capitalization of about \$2.3 billion, offers balance of payments support to members. It also guarantees third-party loans and

---

The ultimate purpose of “coherent pluralism” is to ensure that institutions at all levels work in a coordinated fashion to provide global public goods

facilitates reserve investments and regional coordination of monetary policies. Its potential is limited by its incomplete regional membership; Brazil, the region's largest economy, does not participate.<sup>33</sup>

- The Andean Development Corporation is gaining attention due to its fourfold growth in lending over 1991–2007 and almost exclusive ownership by members, nearly all of which are developing countries (except Portugal and Spain).<sup>34</sup>

Such regional arrangements, however, do not necessarily reduce the role of the IMF. Large disbursements from the funds can require borrowing countries to be under IMF surveillance programmes, as with the Chiang Mai Initiative Multilateralization (box 5.3).

The evolving regional financial architecture fostered by countries of the South offers renewed space for policies that emphasize pragmatism rather than ideology and ensures that conditionality is narrow and appropriate to the country (box 5.4).<sup>35</sup> Regional institutions that lend closer to home are also more likely to design programmes that are more sensitive

to political concerns and economically appropriate, with light-touch surveillance and less emphasis on conditionality.

Some institutions, such as the nascent Bank of the South,<sup>36</sup> renounce conditionality altogether. Others, including the Chiang Mai Initiative Multilateralization and the Arab Monetary Fund, use conditionality only in specific circumstances, and it remains a point of discussion among members. Still others, such as the Latin American Reserve Fund, apply surveillance but do not use the IMF's top-down approach and instead collaborate with borrowing governments.

## Regional trade agreements

Regional and subregional trade arrangements have expanded and deepened in Africa, Asia and Latin America, even as the Doha round of global trade negotiations has stalled. Agreements that open up South–South trade hold enormous potential, with benefits at least as large as those providing greater access to markets in the North. OECD estimates

### BOX 5.3

#### Regional finance in Asia: Chiang Mai Initiative Multilateralization and the Asian Development Bank

The current financial crisis has been a powerful impetus for expanding the scope of the Chiang Mai Initiative, a regional agreement among the Association of Southeast Asian Nations, plus China, Japan and the Republic of Korea (ASEAN+3). In early 2009, the initiative was multilateralized and renamed the Chiang Mai Initiative Multilateralization. At that time, disbursements of more than 20% of the credits available to a country required that the borrowing country be under an International Monetary Fund (IMF) surveillance programme to address the difficult task of devising and implementing regional surveillance.

ASEAN+3 members have continued to deepen the Chiang Mai Initiative Multilateralization. In May 2012, the size of the currency swap pool was doubled to \$240 billion. For 2012–2013, the need to be under an IMF programme does not become operative until the swap drawn equals 30% of the maximum for the country (40% in 2014, pending the outcome of current discussions). The maturity of both the IMF-linked and the delinked swaps were lengthened. And for the first time, a precautionary credit line facility was introduced, allowing members to draw on swaps governed by a formula based on country size. (The Asian Bond Market Initiative was also expanded in May 2012.)

The ASEAN+3 Macroeconomic Research Office opened on 30 January 2012 to conduct IMF Article IV–type monitoring of members. It describes itself as the “regional surveillance unit of the Chiang Mai Initiative

Multilateralization”. Its purposes are to monitor and analyse regional economies and to contribute to the early detection of risks, implementation of remedial actions and effective decisionmaking by the initiative. Some observers have noted the tensions over the mandate and the continuing reluctance in Asia to criticize the policies of regional neighbours and thus the obstacles to conducting firm surveillance.

Prior to the global financial crisis, the Asian Development Bank (ADB) was already lending more in the region than the World Bank was. The crisis accelerated this trend. In some cases, the ADB responded more quickly and with larger loans than the IMF and the World Bank did, and it introduced new types of temporary rapid financing programmes and countercyclical lending facilities to support developing and low-income countries. In April 2009, Indonesia proposed that a portion of the IMF's new financing be devolved to the ADB. With Group of 20 backing, the ADB introduced the Countercyclical Support Facility to provide up to \$3 billion to economies in Asia affected by the crisis.

Between 2008 and 2009, the ADB's lending commitments grew 42% and its disbursements 33%. Other regional development banks quickly followed the ADB's example and were granted a portion of the new funds committed to the IMF to establish new regional lending facilities to promote rapid countercyclical support within their region.

Source: Woods 2010; Chin 2010, 2012; Ocampo and others 2010; ADB 2009; Ciorciari 2011; AMRO 2012.

a welfare gain for the South of \$59 billion if South–South tariffs were lowered to that of North–South levels.<sup>37</sup> Even within Africa, given appropriate institutional arrangements for more open agricultural trade, there is huge potential for increasing the trade of the region’s many and diverse crops.

An example of a successful regional arrangement is the Sao Paulo Round in 2010, in which 22 developing countries agreed to reduce tariffs at least 20% on about 70% of the trade among themselves. The reductions were negotiated within the 1989 framework of the Global System of Trade Preferences, established to take advantage of the enabling clause within the agreements of the WTO, which allows developing countries to provide concessions to each

other without jeopardizing their most favoured nation obligations.

Bilateral arrangements can facilitate trade flows when multilateral negotiations stall. Other options such as preferential trade arrangements for furthering the goal of freer, nondiscriminatory trade could be overseen by a global multilateral institution like the WTO or by regional bodies.

Take, for example, negotiations aimed at reducing the massive production and export subsidies in agriculture given mainly by developed countries. Those subsidies distort world trade and expose farmers in developing countries to unfair competition. However, this issue is almost impossible to settle satisfactorily in a bilateral or regional setting; it requires multilateral

#### BOX 5.4

*Enrique Garcia, President, CAF*

#### **CAF: a Latin American development bank**

When established in 1970, the multilateral bank CAF had five Andean country members (Bolivia, Colombia, Ecuador, Peru and Venezuela). Today, its shareholders include 18 countries from Latin America, the Caribbean and Europe as well as 14 private banks, and it obtains most of its funding in global financial markets. CAF promotes sustainable development and regional integration through credit operations, grants and technical support and offers financial structuring to public and private sector projects in Latin America. Its headquarters are in Caracas, and it has offices in Asuncion, Bogota, Brasilia, Buenos Aires, La Paz, Lima, Madrid, Montevideo, Quito and Panama City. Over the last decade, Latin America has experienced rapid economic growth thanks to a favourable external environment, which has resulted in higher commodity prices, a stable macroeconomic environment and greater domestic demand due to poverty reduction and higher income. CAF has helped its member countries take advantage of these favourable economic conditions through a comprehensive development agenda that includes projects and programmes designed to support the region’s productive transformation and its competitive participation in the global economy, to improve the quality of institutions and to promote environmental conservation. CAF has provided substantial financing at times when markets were “dry” and other international financial institutions were imposing stringent conditions on their financing.

Among the reasons for CAF’s success in the region are its Latin American essence, the strong political and financial commitment of its member countries, the maintenance of prudent financial policies (especially in times of economic stress) and its policy of nonconditionality. Today, CAF is one of the main sources of multilateral financing for infrastructure and energy in the region, with approvals of more than \$10 billion at the end of 2011, or some 30% of total multilateral lending for Latin America (compared with and \$12.4 billion for the Inter-American Development Bank and \$13.9 billion for the World Bank; see Ocampo and Titelman 2012). CAF’s countercyclical role in times of economic turbulence in international markets and its

support to shareholders when financing has become scarce have been especially valuable. In addition to channelling funds from international markets to the region, directed mainly to infrastructure projects, CAF, together with its member countries, has designed and implemented an ambitious agenda of programmes and projects supported by grants aimed at tackling some of Latin America’s major obstacles to growth.

CAF borrows in international capital markets through a funding strategy that aims to diversify sources of financing to mitigate interest rate and currency risks while matching the average maturity of its assets and liabilities to maintain sufficient liquidity in its portfolio. CAF obtained its first credit ratings in 1993 from the three main rating agencies, and its ratings have steadily improved, even during economic crises in the region. CAF is now the highest rated frequent bond issuer in Latin America. Since 1993 CAF has borrowed more than \$13.9 billion through 87 bond issues in the most important international capital markets in the Asia, Europe Latin America and the United States. Prudent financial policies have made CAF a profitable institution that reinvests, through grants and technical cooperation, in programmes and projects to support its member countries.

CAF’s performance has been distinguished due to capacity to adapt to a changing and challenging environment. Of particular importance has been its governance structure. Since its foundation, CAF’s shareholders have given the institution the autonomy to design and implement operational policies without political pressure. Member countries have always supported the institution. Never in CAF’s history has a member country defaulted on its obligation, even during economic crises. With an ownership that is almost entirely Latin American (Portugal and Spain are minority shareholders due to their historical ties to the region), CAF has avoided the conflicts that have arisen in other multilateral institutions where donors’ and recipients’ aims are not always aligned. In this regard, CAF is recognized as an institution run by and for Latin America, providing a useful example of pragmatic financial integration.

disciplines that can be negotiated only at the WTO. Most countries accept the necessity of a strong multilateral body to referee the rules of world trade while knowing that regionalism is here to stay; one way forward is to gradually “multilateralize regionalism”.<sup>38</sup>

## Responsible sovereignty

While most governments support the principles of multilateralism, they are also understandably concerned with preserving national sovereignty. Overly strict adherence to the primacy of national sovereignty can encourage cross-border rivalries and zero-sum thinking. Countries on their own are less able to defend themselves from the contagion effects of financial crises or the ill effects of global warming. National action does not ensure that a country’s citizens have access to global public goods. Some governments are unable to sufficiently protect the human rights of their citizenry. A better strategy is responsible sovereignty—that is, taking the long-term interests of the world as a whole into account when formulating national policy.

Most global public goods depend on the effective management of cross-border consequences and an adequate provision of national and regional public goods, and thus on national institutional capacity and a willingness to cooperate regionally and globally. Countries must take into account their respective international responsibilities in providing public goods and avoid undermining the collective welfare and the well-being of other countries, such as through pollution or other abuses of the global or regional commons. Responsible sovereignty includes taking steps towards collective endeavours—such as trade liberalization and climate change mitigation—that, if designed effectively, could greatly enhance global collective welfare.

In a highly interconnected world, effective national decisionmaking cannot be carried out in isolation from regional and global policies. National policies have regional and global consequences; examples include protectionist national responses to international economic downturns and the failure to regulate overfishing and ocean pollution. At the same time,

regional and global policies provide a context for national policymaking. Countries and regional and multilateral organizations must come together and align national policies towards common international goals. In an increasingly globalized and interconnected world, this is a matter of enlightened self-interest: decisions taken at the national level today can affect people in all countries for generations to come.

If national leaders are unable to look beyond narrowly conceived immediate national interests, the potential gains from cooperation will be lost, and the costs of inaction will mount. National policies will undermine rather than reinforce and complement each other. Examples include public spending and stimulus policies in the wake of the global financial crisis: coordination by central banks around the world to lower interest rates in concert helped avert further deepening of the worldwide recession.

The South, due to its rising economic stature and political influence, is an increasingly important partner in global decisionmaking. The rise of the South, accompanied by stronger cross-border links, makes decisionmaking more interdependent than ever. The North and the South must find common ground for meaningful progress on today’s pressing global problems.

Responsible sovereignty also requires that states honour agreed universal human rights and obligations towards people residing in their territories and ensure their security and safety. The Responsibility to Protect initiative, for example, is an attempt to develop a new international security and human rights norm that can address the international community’s failures to prevent and stop genocides, war crimes, ethnic cleansing and crimes against humanity. In this view, sovereignty is seen not just as a right, but also as a responsibility. While a positive step towards establishing guiding principles on global governance in human security, the initiative lacks procedures to ensure that the principles are upheld.<sup>39</sup> There are no agreed thresholds of violations or atrocities that would automatically activate international interventions. This mismatch between principles and procedures highlights the importance of building capacities into

---

Responsible sovereignty takes the long-term interests of the world as a whole into account when formulating national policy

international governance systems to hold governments and political systems accountable to the people they represent. Without binding mechanisms for holding states accountable to their citizens, the legitimacy of institutions such as the United Nations Security Council is brought into question. But agreement on a principle of responsible and mutually supportive sovereignty will be forthcoming only if the preconditions of global fairness and justice are met.

## New institutions, new mechanisms

The rise of the South presents opportunities for innovative new structures for development partnerships and new approaches to development policy, both globally and regionally. The substantial foreign reserves accumulated by the leading economies of the South could be leveraged for development financing in less developed countries, for example. New mechanisms for aid, trade and technology exchange within regions of the developing world can usefully parallel and complement existing arrangements. The countries of the South themselves could take greater leadership roles in the global policy dialogue about the most urgent international development needs and about the most effective ways to meet these 21st century challenges.

### Infrastructure development banks

The rise of the South is also creating new possibilities for financing equitable and sustainable human development. Brazil, China, India, the Russian Federation and South Africa, for example, have proposed a BRICS Development Bank that would draw upon their considerable reserves to finance projects in developing countries.<sup>40</sup> Like the European Bank for Reconstruction and Development, such a bank could offer a range of instruments, including loans, equity and guarantees. In addition to financing productive projects, this flow of resources would also assist with global financial rebalancing.

An important use for such reserves would be building infrastructure. To meet urgent needs, infrastructure spending in developing countries

must reach \$1.8–\$2.3 trillion a year by 2020, or about 6%–8% of GDP, compared with current levels of \$0.8–\$0.9 trillion a year, or about 3% of GDP.<sup>41</sup> One means of enabling and facilitating such investments would be through a development bank for infrastructure and sustainable development. That could bolster developing country borrowing to finance economically productive infrastructure.

Because borrowers need to be concerned about debt sustainability, efforts are required to go beyond domestic government borrowing by leveraging other forms of financial assistance. A new institution could crowd in the right type of capital through guarantees and other instruments.<sup>42</sup> New institutions will be more effective if they work in concert with existing regional and global institutions, filling gaps in funding and investment.

Chapter 4 presented an accelerated progress scenario that set ambitious targets for raising the Human Development Index (HDI) value in all regions by 2050 through a series of public spending initiatives. This scenario assumes about 20% improvement in infrastructure by 2050, universal access to electricity by 2030, elimination of solid fuels as the primary source for heating and cooking in the home by 2030, renewable energy production 50% above the base case by 2050 and universal access to mobile telephone and broadband by 2030. The largest projected increases in HDI value under this scenario are in Sub-Saharan Africa (65%) and South Asia (47%; figure 5.1). Current average public investment in Sub-Saharan Africa and South Asia is around 7.7% of GDP.<sup>43</sup>

Allocating a small fraction of the international reserves of the nine G20 countries of the South could provide substantial additional resources for public investment in infrastructure in Sub-Saharan Africa and South Asia (figure 5.2). Depending on the share of reserves allocated, public investment would rise 17.6%–52.8%. In fact, allocating just 3% of liquid international reserves of the nine G20 countries of the South would increase the share of public investment in these countries 4.1%–11.7% of GDP, close to the average level of public investment for all developing countries.<sup>44</sup>

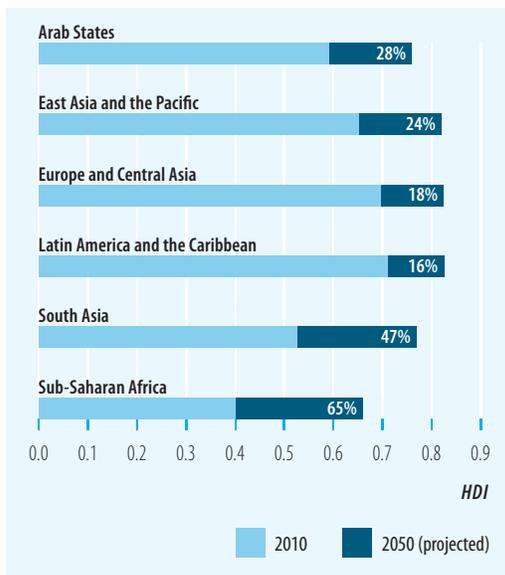
For reserve-holding countries and their sovereign wealth funds, investing in developing

---

The rise of the South presents opportunities for innovative new structures for development partnerships and new approaches to development policy, both globally and regionally

**FIGURE 5.1**

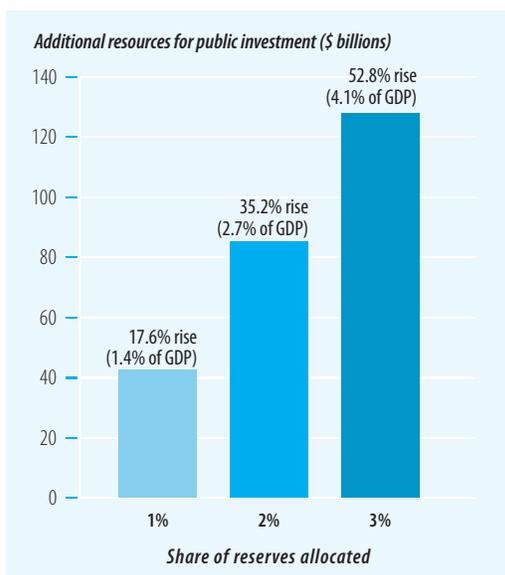
**Under the accelerated progress scenario, the largest projected increases in the Human Development Index are in Sub-Saharan Africa and South Asia**



Note: See chapter 4 for discussion of the accelerated progress scenario. Source: HDRO calculations based on Pardee Center for International Futures 2013.

**FIGURE 5.2**

**Allocating a small fraction of the international reserves of the nine G20 countries of the South could provide substantial additional resources for public investment in infrastructure in Sub-Saharan Africa and South Asia**



Note: Numbers in parentheses are the increase in public investment as a share of GDP. Source: HDRO calculations based on World Bank (2012a).

countries is financially attractive, allowing them to diversify while gaining higher profits without added risks.<sup>45</sup> Sovereign wealth funds have long investment horizons and low risk of redemption, enabling them to make long-term investments. Since many give priority to social over private returns, they can also take socially responsible positions. For example, Norway has applied global sustainability criteria to its sovereign wealth fund investments through the Norges Bank Investment Management, committing to the UN Global Compact Norms and investing in initiatives to reduce deforestation in Guyana, Indonesia and Tanzania.<sup>46</sup> The governance challenge is to operationalize socially responsible investment, define suitable benchmarks and provide sovereign wealth funds easier access to investments with a high human development impact.<sup>47</sup>

Institutions from the South, ranging from the BRICS Bank to the Chiang Mai Initiative Multilateralization to the African Union, have considerable potential to influence international governance. Collective action requires a shared vision. The premise for this vision cannot be taken for granted. The proliferation of regional and other arrangements shows that governments recognize the benefits of, and have a commitment to, collective development.

### A new South Commission?

In 1987, leaders of the Non-Aligned Movement established the South Commission to explore policy options and areas for cooperation for the countries of the South. Its final report in 1990, *The Challenge to the South*, produced under the leadership of Julius Nyerere, then-president of Tanzania, and the economist Manmohan Singh, future prime minister of India, was a seminal and prescient analysis.<sup>48</sup> It identified climate change as a priority and underscored challenges that stubbornly persist today, such as poverty, social exclusion and the widening gap between rich and poor.<sup>49</sup> Equally important, the South Commission looked closely at the then-emerging possibilities of greater South–South cooperation in aid, trade and other aspects of international policymaking.

The world and the South have been thoroughly transformed over the past two decades. The South of the 21st century is led by fast-growing economies with trillions of dollars of foreign exchange reserves and trillions more to invest outside their borders. Businesses from the South number among the world's largest. The possibilities for collective action have never been greater; however, agreement on this cannot be taken for granted. The institutions for South–South cooperation—the Group of 77, the Non-Aligned Movement and South Summits—were forged in the crucible of decolonization, which created strong political, economic, social, and cultural bonds among the emerging countries of the developing world. That formative experience is increasingly distant from the current generation, and the commitment to South solidarity common to their elders is in many cases now giving way to the pursuit of national interests.

The new realities of the 21st century require a fresh look at these issues and at institutions led by the countries of the South themselves. A new South Commission, building on the legacy of the first commission but reflecting the strengths and needs of the South today, could provide a fresh vision, based on recognition of how the diversity of the South can be a force for a new kind of solidarity, aimed at accelerating human development progress for decades to come. The economic links within the South and the mutual benefits of cooperation are likely to provide further incentives to establish such a body.

## Conclusions: partners in a new era

The rise of the South has to some extent caught the world by surprise. The previous, if unspoken, assumption was that developing countries would steadily approach the standards of human development in industrialized countries (“convergence”) but that the industrialized countries would remain in a strong, leading position. In many respects, that is still the case: average HDI values are substantially lower in many countries of the South. What has caught the world unawares, however, is that even at lower levels of human development, the

countries of the South are now weighty players on the global stage, with the financial resources and political clout to sway international decisionmaking.

This was already evident during the early years of the 21st century, as China and other emerging economies accumulated vast reserves, which they held as US Treasury bonds, effectively propping up the US dollar. But the situation came into sharper relief after 2008, following the banking crisis and subsequent economic shocks that pushed some of the richer countries into recession and threatened the survival of one of the world's major currencies. Now the countries of the North are looking to those of the South to keep the global economy moving forward.

In practice, each group of countries needs the other more than ever. The North needs the most vigorous countries of the South to sustain demand for exported goods and services, especially as a number of their own economies and societies are weakened by fierce austerity programmes. The South needs the North not only as a mature market, but also as a source of innovation and complex technologies.

The rise of the South demonstrates that the world has become more diffuse and cross-connected. One consequence is that rather than looking to the North for inspiration, developing countries are looking to their peers in the South for appropriate development models. Here, rather than seeing a sterile menu of ideological options, they can examine what has worked, under what circumstances, and choose the most appropriate tools. Chapter 3 provided examples of programmes and policies that have worked to improve human development in emerging economies of the South, from investments in public health and education to conditional cash transfer programmes. Such examples can inspire similar policies in other countries, but with understandings of specific national conditions, institutions and needs.

This Report has summarized some of the most effective drivers of development: a proactive developmental state, the capacity to tap into global markets and the promotion of social inclusion and broad-based human development. Within each of these there are multiple options but no universal solutions.

---

Rather than looking to the North for inspiration, developing countries are looking to their peers in the South for appropriate development models

---

Good policymaking requires greater focus on enhancing social capacities, not just individual capabilities

What worked in one country might have stood little chance in another.

Nevertheless, the most successful countries have demonstrated that innovative and sometimes counterintuitive options can work. Paying parents to take their children to health clinics may seem unnecessary, but as the case of Mexico illustrates, it can work to improve children's health; its conditional cash transfer programmes have sparked interest around the world. Similarly, using a mobile phone for banking made eminent sense in Kenya and the Philippines to people who had never had a personal bank account before and often lived nowhere near a bank office.

The countries of the South have thus been using their own ideas and energy to create a new momentum for human development. In a complex global political, economic and social environment, however, this dynamism may still not yield sustainable outcomes. Already there are signs of rising inequality and frustrated expectations that could lead to violent social strife. And there are serious concerns that over-exploitation of global resources combined with the effects of climate change could wreck the earth for future generations.

That is why this Report has also focused on what is needed to ensure that human development proceeds in ways that are both productive and sustainable. This includes measures aimed at enhancing equity, enabling voice and participation, confronting environmental pressures and managing demographic change.

Addressing these issues will demand considerable skill and commitment from national governments and civil society. As this chapter has argued, it will also demand much more fruitful global cooperation as national governments, international organizations and a nascent global civil society feel their way towards new models of mutual understanding and cooperation. Some of these will involve refashioning existing institutions to accommodate a new global power balance. Others may take any number of new institutional forms.

Through all this, the fundamental principles of human development endure. As ever, the aim is to expand the choices and capabilities for everyone, wherever they live. Many countries of the South have already demonstrated what can

be done, but they have gone only part of the way. For the years ahead, this Report suggests five broad conclusions.

### Rising economic strength in the South must be matched by a full commitment to human development

Investments in human development are justified not only on moral grounds, but also because good health, education and social welfare are key to success in a more competitive and dynamic world economy. In particular, these investments should target the poor—connecting them to markets and increasing their livelihood opportunities. Poverty is an injustice that can and should be remedied by determined action. There are sufficient global resources to achieve that goal, if they are directed towards that purpose.

Good policymaking also requires greater focus on enhancing social capacities, not just individual capabilities. Individuals function within social institutions that can limit or enhance their development potential. Policies that change social norms that limited human potential, such as new legal strictures against early marriages or dowry requirements, can open up additional opportunities for individuals to reach their full potential.

As this Report highlights, one consequence of the rise of the South is that most countries now have growing policy and fiscal space to set bold targets—to eliminate poverty, push for full employment commitments and innovate towards low-carbon pathways. More countries are unencumbered by conditionalities often attached to international aid and resource transfers, and the recent rise in commodity prices has reversed the long decline in terms of trade faced by many primary goods producers.<sup>50</sup> This provides a cushion of resources that can be managed in ways that enhance national human development by governments committed to avoiding the “resource curse”.

Projections presented in chapter 4 reinforce this point. They show that with strong commitment to human development and prudent macroeconomic policies, it is possible to reduce poverty dramatically in Sub-Saharan Africa—a region where baseline scenarios show a likely future increase in the number of poor people

because population growth outpaces economic growth.

### Less developed countries can learn and benefit from the success of emerging economies in the South

The unprecedented accumulation of financial reserves and sovereign wealth funds in the South (\$6.8 trillion) as well as the North (\$3.3 trillion) provides an opportunity to accelerate broad-based progress. Even a small portion of these funds dedicated to human development and poverty eradication could have a large effect. As mentioned, public investment in South Asia and Sub-Saharan Africa could increase to 11.7% of GDP using just 3% of international reserves from some of the largest economies in the South.

At the same time, South–South trade and investment flows can leverage foreign markets in new ways, such as participating in regional and global value chains to facilitate the spread of ideas and technologies. Burgeoning South–South trade and investment in particular can lay the basis for shifting manufacturing capacity to other less developed regions and countries. Recent Chinese and Indian joint ventures and startup manufacturing investments in Africa serve as a prelude to a much expanded force that this potential represents. To harness the full extent of this potential, new and innovative institutions may be called for. International production networks provide opportunities to speed up the development process by allowing countries to leap-frog to more sophisticated production nodes while offering the double benefit of protection against the vagaries of foreign exchange fluctuations.

South–South development cooperation and technology transfer hold immense potential to support human development. Technology transfers from the North require costly adaptation due to differences in absorptive capacity, but technological transfers within the South are more likely to need little adaptation and to involve more-appropriate technologies and products. Growing markets in developing countries provide companies in the South an opportunity to mass market innovative and affordable versions of standard products, including food, clothing, appliances and motor

vehicles. Importantly, the sharp drop in the price of capital goods as a result of intense global competition led by China and India could accelerate the creation of manufacturing production capacities in many developing countries. Such production can be adapted to the income levels and tastes of local consumers. This dynamic has the potential to provide the poor access to consumer goods, while innovators create jobs and develop producer capabilities.

### New institutions and new partnerships can facilitate regional integration and South–South relationships

New institutions and partnerships can help countries share knowledge, experiences and technology.

In finance and aid, the South is already actively establishing regional governance institutions. Regional alternatives to the IMF, such as the Chiang Mai Initiative Multilateralization and the Latin American Reserve Fund, have freed up policy space for countries to protect national priorities while also addressing balance-of-payments problems and short-term liquidity issues.

The foundations exist for strong regional institutions, but more can be done to accelerate and deepen these relationships and ensure inclusiveness. As wealthy countries have curtailed aid to address domestic issues, regional development banks and bilateral aid relationships provide additional resources for development projects. These new aid mechanisms also tend to emphasize pragmatism over ideology. Infrastructure development banks, for example, offer new possibilities for development finance. Brazil, China, India, the Russian Federation and South Africa have proposed a development bank to mobilize their considerable reserves to finance projects across developing countries. Building infrastructure would be an important use of such reserves.

Trade with other developing countries now accounts for a majority of merchandise and manufactures exports from developing countries, and these exports are increasingly skill- and technology-intensive. Stronger institutions are now needed to facilitate these South–South trade and investment links. Expanded

---

The foundations exist for strong regional institutions, but more can be done to accelerate and deepen these relationships and ensure inclusiveness

South–South trade and investment can reduce vulnerability to economic downturns in the North and provide opportunities to leverage foreign markets in new ways.

Regional trade and investment relationships can also be strengthened by streamlining transit, transport and customs procedures; harmonizing regulatory schemes; investing in regional transport infrastructure; and lowering tariffs on South–South trade in final products. Lowering such tariffs could yield collective gains of an estimated \$59 billion for the economies of the South.<sup>51</sup>

A new South Commission for the early 21st century could help bring a fresh vision of how the strength and diversity of the South can be a global force for development solidarity. The key elements are there: different endowments provide a basis for expanded exchange, diverse experiences are ripe for sharing, new cross-border partnerships can compete in world markets and, above all, the recognition and implementation of win-win strategies can motivate new forms of South–South cooperation.

### Greater representation for the South and civil society can accelerate progress on major global challenges

The rise of the South is leading to a greater diversity of voice on the world stage. This represents an opportunity to build governance institutions that fully represent all constituencies that would make productive use of this diversity in finding solutions to world problems.

New guiding principles for international organizations are needed that incorporate the experience of the South. The G20 incorporates their experience, but the countries of the South also need more-equitable representation in the Bretton Woods institutions, the United Nations and other international bodies.

Active civil society and social movements, both national and transnational, are using the media to amplify their calls for just and fair governance. The spread of movements and increasing platforms for vocalizing key messages and demands challenge governance institutions to adapt more-democratic and more-inclusive principles. More generally, a fair and less unequal world requires space for a multiplicity of voices and a system of public discourse.

---

A fair and less unequal world requires space for a multiplicity of voices and a system of public discourse

### The rise of the South presents new opportunities for generating a greater supply of public goods

A sustainable world requires both better governance and a greater availability of global public goods. Global issues today are increasing in number and urgency, from mitigation of climate change and international economic and financial instability to the fight against terrorism and nuclear proliferation. They require a global response. Yet in many areas, international cooperation continues to be slow—and at times dangerously hesitant. The rise of the South presents new opportunities for providing global public goods more effectively and for unlocking today’s many stalemated global issues.

“Publicness” and “privateness” are in most cases not innate properties of a public good but social constructs. As such, they represent a policy choice. National governments can step in when there is underprovision at the national level, but when global challenges arise, international cooperation is necessary and can happen only by voluntary action of many governments. Given the many pressing challenges, progress in determining what is public and what is private will require strong, committed, personal and institutional leadership.

\* \* \*

The rise of the South is fundamentally the story of the fast-paced transformation of the developing world and its profound impact on diverse facets of human development. Global discussions of this phenomenon so far have focused almost exclusively on economic growth in the biggest developing countries. This Report uses a human development lens to cast a wider net and show that the impacts are widespread in terms of the large number of developing countries involved and the intertwining of ever-growing global challenges and possibilities—from environmental sustainability and equity to poverty eradication and the reform of global institutions. The changes are occurring at unprecedented speed and scale, propelled by interaction with the wider world through trade, travel and telecommunications in ways that were not possible before.

The fast-developing countries chose their own distinct development pathways. Yet they share important characteristics, including effective leadership from governments, open engagement with the world economy and innovative social policies addressing domestic human development needs. They also face many of the same challenges, from social inequalities to environmental risks. And they have developed their own domestic policy approaches with increasing autonomy, for their own sovereign national reasons, without the strictures of enforced conditionality or imposed external models.

The South's progress is propelled by interconnections with developed countries and increasingly with the developing world. In fact, economic exchanges are expanding faster "horizontally"—on a South–South basis—than on the traditional North–South axis. People are sharing ideas and experiences through new communications channels and seeking greater accountability from governments and international institutions alike. The South as a whole is driving global economic growth and societal change for the first time in centuries. The South still needs the North, but, increasingly, the North also needs the South.



# Notes

## Overview

- 1 Atsmon and others 2012.
- 2 Samake and Yang 2011.
- 3 The demographic dividend is considered a window of opportunity for additional economic growth when the proportion of the working-age population increases. As fertility levels fall in a demographic transition, the number of children declines while the working-age population increases, lowering the dependency ratio. A country can reap the benefits of increased productive capacity associated with the lower proportion of dependents. As fertility levels continue to decline, however, dependency ratios eventually rise with the increase in retired workers.

## Introduction

- 1 According to World Bank (2012a), the average GDP growth rate in 2009 for high-income members of the Organisation for Economic Co-operation and Development was -3.9%, compared with 7.5% in East Asia and Pacific, 7.4% in South Asia, 3.6% in the Middle East and North Africa and 2.1% in Sub-Saharan Africa.
- 2 According to Maddison (2010), GDP per capita (in international dollars) rose from \$1,250 in 1700 to \$2,330 in 1850 in the United Kingdom and from \$1,257 in 1820 to \$2,445 in 1870 in the United States.
- 3 Atsmon and others 2012.
- 4 In addition to increased voting shares and senior appointments at the International Monetary Fund and the World Bank, in recent years, the South has held leadership positions at the International Labour Organization, the World Health Organization, the World Trade Organization and the World Intellectual Property Organization.
- 5 Chen and Ravallion (2012) using the \$1.25 a day poverty line.
- 6 For example, in 1990, Uganda's HDI (0.306) was comparable to that of Benin, Central African Republic and Gambia. By 2012, Uganda's HDI had increased to 0.456, a substantial improvement compared with its peers (and statistically significant at the 95% level). Benin's increased from 0.314 to 0.436, Central African Republic's from 0.312 to 0.352 and Gambia's from 0.323 to 0.439.

- 7 In purchasing power parity terms, the standard GDP and GNI calculus in *Human Development Reports*.
- 8 Japan is not included in the long-term historical comparison between the other Group of Seven economies and Brazil, China and India because it did not industrialize until late in the 19th century and did not emerge as a major world economic power until the second half of the 20th century.
- 9 In current US dollars.
- 10 Proportion of the population living on less than \$1.25 a day (in 2005 purchasing power parity terms), according to World Bank (2012a).
- 11 Estimates refer to years between 2002 and 2011.
- 12 The measures used—life expectancy and mean years of schooling—have upper bounds towards which developing countries tend to eventually converge. There is no upper threshold of convergence for income.
- 13 HDRO calculations based on Brookings Institution (2012). The middle class includes people earning or spending \$10–\$100 a day in 2005 purchasing power parity terms.
- 14 Dobbs and others 2012. Ali and Dadush (2012), using car ownership as a proxy for the middle class, suggest that there are up to 600 million people in the middle class in the developing G20 countries, about 50% more than previous estimates by Milanović and Yitzhaki (2002), who counted people earning \$10–\$50 a day in purchasing power parity terms as belonging to the middle class.
- 15 UNDP 2009; World Bank 2010a.
- 16 UNCTAD 2010.
- 17 Zuckerberg 2012.
- 18 Esteveordal, Frantz and Taylor (2003); the trade to GDP ratio is the sum of exports and imports of goods and services divided by total output.
- 19 The current trade ratio is a five-year average from 2006 to 2010, obtained from World Bank (2012a).
- 20 Hamdani 2013.
- 21 Heilmann 2008.
- 22 United Nations 2012a.
- 23 United Nations 2012a.
- 24 Based on data between 2005 and 2008 from Kharas, Makino and Jung (2011) and extrapolation thereafter.

## Chapter 1

- 1 This is in nominal terms. In purchasing power parity terms, the share is about 46%.

- 2 IMF 2011b.
- 3 Iley and Lewis (2011); see also IMF (2011b).
- 4 HDRO calculations based on data on general government expenditure on social protection from the Organisation for Economic Co-operation and Development show that some industrialized countries, including Australia, Austria, Denmark and Norway, increased expenditure on social protection between 2007 and 2010.
- 5 For some countries confronting high debt levels (such as Greece, Italy and Japan), the subprime crisis spiralled into a sovereign debt crisis, leaving little fiscal space to postpone fiscal consolidation. Holland and Portes (2012) suggest that, while in normal times fiscal consolidation would lower debt to GDP ratios, under current circumstances, in the European Union, it will likely lead to higher debt to GDP ratios in the region in 2013, with the exception of Ireland.
- 6 Guajardo, Leigh and Pescatori 2011.
- 7 ILO 2012.
- 8 Sen 2012.
- 9 Keynes 1937.
- 10 ILO 2012.
- 11 Throughout the crisis, the solutions implemented (such as fiscal consolidation and easy monetary policies) have been criticized for reaching their limits, for their secondary effects and for their transitory nature. In some countries, the solutions have caused the economy to contract, and in others, they have pushed short-term interest rates in key money markets close to zero. These policies run the risk of creating new asset bubbles and exporting inflationary pressures to countries in the South. See Naqvi and Acharya (2012, pp. 11–12) for more detail.
- 12 IMF (2011b, p. 29) points out that “emerging and developing economies account for about half of global output and two-thirds of global growth in purchasing power parity (PPP) terms.” Moreover, it argues that although the share of emerging and developing countries' consumption (measured as consumption in constant US dollars, not as GDP in purchasing power parity terms) does not make up for the lower consumption contribution of advanced economies on their own, it is large enough to rebalance when combined with US (or European) consumption.
- 13 HDRO calculations show that countries as disparate as China and the United States have benefited in the long term from government investment in health and education (see chapter 3 for more details).
- 14 Given by the ratio of GNI per capita for Seychelles (\$22,615) and the Democratic Republic of Congo (\$319).
- 15 HDRO calculations based on Burd-Sharp and Lewis (2010).
- 16 These disparities are of a similar order of magnitude as the disparity between the HDI values of, say, Mexico (0.78) or Ecuador (0.72) on the one hand, and Nigeria, Senegal or Mauritania (0.47), on the other. Subnational HDI values are not directly comparable with national HDI values because they consist of different indicators and are for different years.
- 17 These disparities are of a similar order of magnitude as the disparity between the HDI values of Belgium (0.90), on the one hand, and Honduras or Kiribati (0.63), on the other.
- 18 Based on a balanced panel comparison and data from World Bank (2012a).
- 19 Since income is a flow variable and education and health outcomes are stock variables, sometimes a positive difference between GNI per capita and HDI rank can emerge when a country has built up its development achievements but its income falls in the short term (as in Zimbabwe).
- 20 United Nations 2012a.
- 21 World Bank 2012a.
- 22 United Nations Enable 2012.
- 23 Sen 2007.
- 24 Smith 1776.
- 25 UNDP 2011a.
- 26 Estimates refer to years between 2002 and 2011.
- 27 World Bank 2012b.
- 28 See, for example, Wilkinson and Pickett (2009).
- 29 Inequality in the HDI components is measured by the Atkinson inequality index, which takes into account inequality in distribution within and across groups consistently. In addition, it puts more weight on the lower end of the distribution, thus accounting for child mortality, illiteracy and income poverty better than the Gini coefficient.
- 30 OECD (2011b) shows that in the context of Organisation for Economic Co-operation and Development

- countries, the provision of health care, education and acceptable living standards have important direct and indirect redistributive effects, especially among population groups at high risk of poverty. Among a range of public services, health and education contribute by far the most to reducing inequality.
- 31 Anand and Segal 2008.
- 32 Sala-i-Martin 2006. He uses population-weighted GDP per capita to calculate the mean of country-level distributions and obtains the dispersion around each mean from micro surveys. After estimating a distribution of income for each country and year, he constructs the world distribution of income by integrating all country distributions.
- 33 Milanović 2009.
- 34 Bourguignon and Morrisson 2002.
- 35 The Supreme Court in India recently upheld a government mandate that private schools offer a quarter of their seats to underprivileged children, a measure with the potential to substantially dilute the economic segregation in access to education.
- 36 Based on 78 countries for which the GII is available.
- 37 China (1.18), Azerbaijan (1.15), Armenia (1.14), Georgia (1.11), Republic of Korea (1.10), Solomon Islands (1.09), India (1.08), the former Yugoslav Republic of Macedonia (1.08), Montenegro (1.08), Papua New Guinea (1.08), Samoa (1.08), Serbia (1.08) and Suriname (1.08).
- 38 Dowry here refers to the payment of cash and gifts by a woman's family to her husband's family at the time of the wedding. Many countries have dowry systems that involve small or moderate gifts, but in some countries, such as India, exorbitant amounts can be extracted in dowry from the bride's family during marriages.
- 39 For instance, the Dowry Prohibition Act of 1961 makes giving or receiving dowry illegal in India. However, the practice continues, sporadically fueling both female feticide and dowry deaths of new brides.
- 40 Cleland 2002; Drèze and Murthi 1999; Martin and Juarez 1995.
- 41 Elson 2002.
- 42 Fukuda-Parr 2003.
- 43 As indicated in the 1994 *Human Development Report* (UNDP 1994), the universalism of life claims advocates equality of opportunity, not equality of income—though in a civilized society a basic minimum income should be guaranteed to everyone.
- 44 UNDP 1994, p. 18.
- 45 Rockström and others 2009, p. 32.
- 46 United Nations Secretary-General's High Level Panel on Global Sustainability 2012.
- 47 Global Footprint Network 2011.
- 48 The ecological footprint is a measure of humanity's demand on nature that takes into account the quantity of land and water area that a country uses to provide all it takes from nature, including areas used to produce the resource it consumes, the space for accommodating its buildings and roads, and the ecosystems for absorbing its waste emissions such as carbon dioxide (Global Footprint Network 2011).
- 49 Blanden and others (2005); Wilkinson and Pickett (2012).
- 50 UNDP 2010b.
- 51 Bourguignon, Ferreira and Menéndez 2007.
- 52 De Hoyos, Martinez de la Calle and Székely 2009.
- 53 Ivanov and others 2003; Ivanov and others 2006.
- 54 UNDP 1994.
- 55 Rosenfeld, Messner and Baumer (2001) hypothesized that civic engagement and trust, core elements of social integration, are associated with strong social organization and therefore are indicators of low criminal violence.
- 56 UNDP 2012.
- 57 Data refer to the most recent year available between 2005 and 2012. Homicide data suffer from reporting errors in the Supplementary Homicide Reports and inconsistency among reporting systems at the country level, among other problems.
- 58 Sen 2007, p. 106.
- 59 The average incidence of murder is 2.7 per 100,000 people across all Indian cities and 2.9 in Delhi. In comparison, the incidence is 2.4 in London, 5.0 in New York, 8.8 in Los Angeles, 21.5 in Johannesburg, 24.0 in São Paulo and an astonishing 34.9 in Rio de Janeiro.
- 60 United Kingdom, Office of the Deputy Prime Minister, Social Exclusion Unit 2002. Many prisoners have been socially excluded all their lives. Relative to the general population, prisoners are much more likely to have been in state care as a child (13 times), to be unemployed (13 times), to have had a family member convicted of a criminal offence (2.5 times) and to be HIV positive (15 times).
- 61 Many prisoners were effectively excluded from access to services. An estimated 50% of prisoners had no physician before coming into custody; prisoners are more than 20 times more likely than the general population to have been excluded from school; and in at least one instance, although 70% of those entering the prison had a drug misuse problem, 80% of them had never received any drug treatment services (United Kingdom, Office of the Deputy Prime Minister, Social Exclusion Unit 2002).
- 62 Pinker 2011; Center for Systemic Peace 2012.
- 63 Branczik 2004.
- 64 Dahal and others 2003.
- 65 Iyer 2009.
- 66 Since a large number of participants in internal conflicts are nonstate actors, there are no official records of their expenditure on armaments. Data on military expenditure refer to expenditure by governments alone and not expenditure by nonstate actors.
- 67 Bird 1981.
- 68 Green 2010.
- 69 Justino 2008.
- 70 UNDP 1991, p. 37.
- 10 The eight countries are Argentina, Brazil, China, India, Indonesia, Mexico, South Africa and Turkey. However, the least developed countries saw only about an eightfold increase, from less than \$20 billion to \$150 billion.
- 11 When service exports are added to merchandise exports, the difference in export earnings per capita between Sub-Saharan Africa and India narrows from \$221 to \$130. Smaller countries tend to engage more in international trade than larger ones such as India, whose intranational trade is high. Furthermore, African exports are dominated by commodities whose prices increased in the 2000s.
- 12 Based on 2011 nominal values adjusted to be comparable to 1996 values.
- 13 Removing fuel, metals and ores from aggregate trade statistics means that the share of South–South trade in world trade rose from 6.3% in 1980 to 26.1% in 2011 and that the share of North–North trade declined from 50.6% in 1980 to 31.4% in 2011.
- 14 The traditional classification of goods as high or low technology has become less meaningful as trade in parts and components has increased.
- 15 Romero 2012.
- 16 AfDB and others 2011.
- 17 Gupta and Wang 2012.
- 18 Hook and Clark 2012.
- 19 Tourism-related statistics in this paragraph draw on UNWTO (2011).
- 20 Based on United Nations Conference on Trade and Development data. Its category of developing economies, which includes Hong Kong, China (SAR), the Republic of Korea, Singapore and Taiwan Province of China but excludes Commonwealth of Independent States countries, accounted for 5.3% of overall FDI inflows in 1990–1991 and 8% in 2009–2010.
- 21 UNCTAD 2011b.
- 22 Furthermore, South–South FDI is less deterred by differences in institutional quality between host and receiving countries. By similar logic, employment of local personnel and lower overhead costs are likely to make South–South FDI more resilient to local crises. Because the motives for investing and selecting sectors often differ, South–South FDI does not necessarily displace North–South FDI; it can even attract more of it (Bera and Gupta 2009; Aleksynska and Havrylchuk 2011).
- 23 This figure is for 2010 and includes Hong Kong, China (SAR).
- 24 The evidence in this paragraph draws on Hamdani (2013).

## Chapter 2

- Three-quarters of the 1.6 billion people who are multidimensionally poor live in middle-income countries of the South.
- HDRO calculations based on UNSD (2012).
- Internet-related data are from World Bank (2012a); tourism data are from UNWTO (2011).
- Esteveadoral, Frantz and Taylor 2003.
- World Bank (2012a). These ratios are based on gross values, not value added in exports and imports, for which globally comparable data are not yet available. The World Trade Organization (WTO) has an ongoing initiative, Made in the World, to measure and analyse trade in value added.
- Based on a balanced panel of 127 developing countries. Based on HDRO calculations, when the trade to output ratio is adjusted to cover only trade with the South, 141 of 144 economies (for which data are available) increased trade with the South between 1990–1991 and 2010–2011 (the exceptions were the small economies of Dominica, the Maldives and Tuvalu); in contrast, 92 decreased trade with the North.
- World Bank (2008). Contrary to popular perception, real prices of air and maritime transport have not changed much since the 1970s, but the decreasing weight to value ratio of international shipments and the growing use of air transport have favoured time-sensitive goods such as fashion, processed food and electronics.
- HDRO calculations based on UNSD (2012).
- World Bank 2012a.

- 25 Blinder 2006.
- 26 UNIDO 2009.
- 27 UNDP 2009; World Bank 2010a.
- 28 These HDRO calculations are based on the bilateral migration matrix in World Bank (2010a).
- 29 Ratha and Shaw 2007.
- 30 As explained in World Bank (2006), estimates of South–South remittances depend on which explanatory variable is used to apportion the aggregate remittance received by each country among the destination countries of its migrant nationals. The estimate of South–South remittances is higher (30%) when flows are a function of migrant stock and lower (18%) when they are a function of migrant stock plus average incomes of host and sending countries. The upper limit of 45% is obtained when Saudi Arabia is counted as a developing country.
- 31 See Felbermayr and Jung (2009) and other citations in Kugler and Rapoport (2011).
- 32 Foley and Kerr 2011.
- 33 See *The Economist* (2011a) and works cited therein.
- 34 HDRO calculation based on data for 144 countries from World Bank (2012a) and ITU (2012).
- 35 socialbakers.com 2012. A more recent update by Zuckerberg (2012) is that there are now 1 billion active monthly users of Facebook, with the largest number of users located in Brazil, India, Indonesia, Mexico and the United States.
- 36 The labour force consists of employed people and unemployed people actively seeking employment.
- 37 Fu 2008.
- 38 When the sample excludes developed countries, the correlation coefficient remains statistically significant but drops from 0.66 to 0.48.
- 39 See Whalley and Weisbrod (2011) for estimates of the contribution to annual growth rates attributed to inward Chinese FDI in resource-rich countries such as Angola, Democratic Republic of Congo, Niger, Nigeria, Sudan and Zambia. Average FDI inflow into these six countries nearly quadrupled from \$2.4 billion in 1990–2000 to \$9 billion in 2001–2011, according to UNCTAD (2011a).
- 40 Jones and Kierzkowski 2001.
- 41 Vos 2010.
- 42 IMF 2011a.
- 43 Samake and Yang 2011.
- 44 Whalley and Weisbrod 2011.
- 45 Hazard and others 2009; Kamau, McCormick and Pinaud 2009; Kaplinsky 2008.
- 46 See Kamau, McCormick and Pinaud (2009) for the Kenyan case; Kaplinsky and Morris (2009).
- 47 Jenkins and Barbosa 2012.
- 48 ICTSD 2011.
- 49 Davies 2011.
- 50 Bräutigam 2009.
- 51 Sonobe, Akoten and Otsuka 2009.
- 52 Bräutigam 2009.
- 53 United Nations 2012b.
- 54 Moyo 2012.
- 55 According to Hiemstra-van der Horst (2011), China now accounts for a third of the world furniture market.
- 56 Kaplinsky, Terheggen and Tijaja 2011.
- 57 United Nations 2012b.
- 58 These points draw on Dobbs and others (2012); surveys found that positive product recommendations from friends and family were, for example, three times as important for consumers in Egypt than in the United Kingdom or the United States.
- 59 HDRO calculations based on Brookings Institution (2012).
- 60 Dobbs and others 2012.
- 61 World Bank 2012a.
- 62 In 2008, South–South aid amounted to \$15.3 billion—about 10% of total aid flows (UNDESA 2010).
- 63 Based on data for 2005 and 2008 in Kharas, Makino and Jung (2011) and extrapolated for later years.
- 64 Kragelund 2013.
- 65 United Nations 2012b.
- 66 Its wide-ranging technical assistance initiatives include, among others, broadband connectivity of African health and education institutions with centres in India and bringing some 1,600 young Africans to study in India each year (United Nations 2012b).
- 67 United Nations 2012b.
- 68 The larger developing countries have had long-standing, if modest, development assistance programmes to Africa. India’s Technical and Economic Cooperation Programme was launched in 1964. The Brazilian Cooperation Agency was established in 1987. China’s cooperation with Africa has an even longer history, though it is now formalized in the Forum on China–Africa Cooperation, established in 2000 (Kragelund 2013).
- 69 Bremmer 2012.
- 70 World Bank 2010c.
- 71 According to United Nations (2012b), they were the Islamic Development Bank, the Kuwait Fund for Arab Economic Development, the Arab Fund for Economic and Social Development, the Arab Bank for Economic Development in Africa, the Saudi Fund for Development and the Abu Dhabi Fund for Development.
- 72 These regional institutions have tended to draw their policy inspiration from the Bretton Woods institutions. Neither the Asian Development Bank nor the Inter-American Development Bank, under their prevailing charters, is empowered to modify their ownership structure in any substantial way. The United States retains veto power over changes in the capital base, which has narrowed the policy space in the two organizations. If, for example, the Asian Development Bank were to be reconstructed as a fully Asian entity that retained the flexibility to establish its own policy space, it would need to reconstitute its ownership structure by assigning much larger contributions and voting rights to countries such as China, India and the Republic of Korea (Sobhan 2013).
- 73 Mwase and Yang 2012.
- 74 Zuzana and Ndikumana forthcoming.
- 75 Developing countries could gain an estimated \$59 billion from lowering South–South tariffs to North–South levels (OECD 2010a).
- 76 Grabel 2013.
- 77 Grabel 2013.
- 78 Opportunity costs capture the benefits that can be obtained from alternative uses of these resources. See Rodrik (2006) and IMF (2011b).
- 79 China has the fifth largest voting share, but an agreement reached in 2010 by the Board of Governors, if implemented, will make China the third largest voteholder (IMF 2010).
- 80 World Bank 2010d.
- 81 Hansen 2010.
- 82 UNDP 2009.
- 83 Leape 2012.
- 84 Romero and Broder 2012.
- 85 Keohane and Victor 2010.
- 86 Li 2010; Bradsher 2010.
- 87 REN21 2012.
- 88 See Jacob (2012); Chinese infrastructure companies in Africa are, for instance, boosting demand for heavy machinery and other capital imports.
- 89 Akyuz (2012) argues that large countries need to change course. Developing countries benefited unusually in the 2000s from the unsustainable consumption patterns in advanced economies; since the global financial crisis, developing countries have relied more on domestic demand.
- method is completely satisfactory (Ranis and Stewart 2005).
- 3 Excluded from this list are all developed economies in 1990 as well as Hong Kong, China (SAR), Israel, Singapore and countries from Central and Eastern Europe that have joined the European Union. This gives a balanced panel of 96 countries between 1990 and 2012.
- 4 The internal armed conflict also meant that national statistics often excluded the northeast of the country.
- 5 UNDP 1993, 1996.
- 6 UNDP 1996.
- 7 Abe 2006.
- 8 For elaboration of the concepts of ownership and capacity for development, see Fukuda-Parr, Lopes and Malik (2002).
- 9 See Commission on Growth and Development (2008).
- 10 For example, Rodrik (2004) emphasized that no short list of evident policy reforms can be applied to yield growth in developing countries.
- 11 Hausmann, Pritchett and Rodrik 2005.
- 12 Serra and Stiglitz 2008.
- 13 Hausmann, Rodrik and Velasco 2005.
- 14 Arrighi (2007) argues that self-regulating markets are not the means to development and that governments must play a leading role in organizing market exchange and divisions of labour.
- 15 A country is said to have comparative advantage in an economic activity if it can undertake that activity at a lower opportunity cost than another country can.
- 16 See Harrison and Rodriguez-Clare (2010) for single-industry, cross-industry and cross-country evidence on infant industry protection and other forms of industrial policy. Succeeding in world markets is just one criterion (“Mill” test) for justifying government support. Such success can come at a net welfare cost to the economy and fail the “Bastable” test, which requires the discounted future benefits to compensate for short-term costs of protection. According to Harrison and Rodriguez-Clare (2010), more instances of industrial policy satisfy the Mill test than the Bastable test.
- 17 Rodrik 2012, p. 9.
- 18 Chibber 1999.
- 19 Osmani 2005.
- 20 Ranis and Stewart 2005.
- 21 India Ministry of Finance 2012.
- 22 Rodrik 2005.
- 23 See Das (2000) and DeLong (2004).
- 24 UNCTAD 2003.
- 25 Done 2011. Between 1996 and 2005 Embraer delivered 710 regional jets around the world (Baer 2008).
- 26 Pasha and Palanivel 2004.

## Chapter 3

- 1 Life expectancy, for example, had nearly doubled from 35 years in 1949 to 67.9 in 1981 (UNDP 2008).
- 2 One caveat is that the identification of rapid improvers on the HDI through this method is biased towards countries with high HDI values. But identifying rapid improvers by calculating simple percentage improvement on the HDI provides a bias towards countries with low HDI values. Neither

- 27 UNDP 1993, 1996.
- 28 Fine and others (2012), whose classification of Africa includes North Africa as well as Sub-Saharan Africa.
- 29 Fine and others 2012.
- 30 AfDB and others 2012.
- 31 Subramanian and Roy 2001.
- 32 Chuhan-Pole and Angwafo 2011.
- 33 The headcount poverty rate fell from 52% in 1983–1984 to 50% in 1991–1992; by 2000, it had dropped to 40% (Osmani and others 2006).
- 34 Khan 2005.
- 35 Nielsen and Spenceley 2011.
- 36 Kabanankye and others 2004.
- 37 The figures for Thailand and Brazil in this paragraph draw on Fine and others (2012).
- 38 Islam (2002) discussed in Khan (2005).
- 39 Khan 2005.
- 40 Kaminski and Ng 2006.
- 41 Ayadi and others 2005.
- 42 Cammett 2007.
- 43 Lautier 2008.
- 44 Agosin 1997.
- 45 Hussain and Stern 2006, p. 14.
- 46 Malik 2006.
- 47 Howell 2004.
- 48 Ravallion 2009.
- 49 Malik 2012.
- 50 Rodrik 2011.
- 51 For faster economic growth, accessing world markets alone is not enough: the sophistication of exports matters equally, for which constant upgrading with the aid of foreign knowhow is key (see Hausmann, Hwang and Rodrik 2007).
- 52 Commission on Growth and Development (2008, p. 22).
- 53 Rodrik 2001.
- 54 See Rodriguez and Rodrik (2001) for a critique of four influential works in this vein: Dollar (1992), Sachs and Warner (1995), Edwards (1998) and Frankel and Romer (1999).
- 55 Winters 2004.
- 56 The case for the use of in-depth country-specific case studies to understand and evaluate policy regimes is best articulated by Bhagwati and Srinivasan (2001). They note that even if the theoretical, data and methodological weaknesses inherent in most cross-country regressions were ignored, cross-country results indicate only average effects, masking differences in individual country responses.
- 57 Rodrik 2001.
- 58 See Baldwin (2004) and references therein to notable country case studies.
- 59 Wacziarg and Welch 2008.
- 60 Rodrik 2011.
- 61 Mauritius embraced global markets early in the 1970s by fully using trade preferences and quotas, notably to export sugar and clothing. In the 2000s, with the termination of quotas that governed world trade in textiles and clothing and the reduction of EU sugar protocol prices, Mauritius sought to diversify more into light manufacturing and services such as offshore banking and ICT (Zafar 2011).
- 62 While the state monopolies were abolished early, they were replaced by tariffs, nontariff barriers and import-restricting licences until the mid-1990s. Between 1980 and 2000, China consolidated its industrial base without facing the constraints imposed by the international rules of the World Trade Organization (which it joined in 2001).
- 63 Between 2008 and 2010, China (excluding Hong Kong, China [SAR]) attracted an average of 7.2% of global FDI inflows (UNCTAD 2011a).
- 64 China can be viewed as a case that shows the usefulness of a gradual approach. As Arrighi (2007) argues, the steps taken in China's reforms included gradualism, the use of the market as an instrument of governance, the initial reforms occurring in agriculture and then moving to industry and foreign trade, making capitalists compete among themselves.
- 65 Ahluwalia 2002.
- 66 OECD 2007.
- 67 Ahluwalia 2002.
- 68 World Bank 2012a.
- 69 Celasun 1994.
- 70 In addition to import protection, export promotion measures were also used to further industrial development. These included subsidized credit, tax breaks, export processing zones, bonded manufacturing warehouses, duty drawbacks, privatization of customs administration and direct export subsidies.
- 71 World Bank 2010b. Foreign firms are noticing the strengthening of competencies in Thailand despite political instability in recent years. In 2010, new investment plans were announced by Ford, General Motors, Mazda and Toyota, with new investors such as BMW and Tata also expected to join.
- 72 See Athukorala (2011) for a detailed study of Penang's rise as an export hub.
- 73 World Bank 2011a.
- 74 NEAC 2010.
- 75 Athukorala and Waglé 2011.
- 76 Radelet, Sachs and Lee 1997.
- 77 Sharma 2012.
- 78 Clapp 1995; Agosin 1997; Rodrik 2004.
- 79 UNCTAD 2006.
- 80 World trade in apparel and textiles was governed by quotas for more than 40 years, beginning in the 1960s with the Short Term and Long Term Arrangements Regarding International Trade in Cotton Textiles, followed by the Multi-Fibre Arrangement between 1974 and 1994 and the World Trade Organization Agreement on Textiles and Clothing until 2004. The Multi-Fibre Arrangement in particular forced many successful exporting economies (especially from East Asia) to shift investment to countries less restrained by bilateral quotas. This distorted world trade but benefited such countries as Bangladesh and Mauritius in their efforts to diversify into manufacturing.
- 81 Kabeer and Mahmud 2004.
- 82 Based on mirrored trade data from the United Nations Commodity Trade Statistics Database; products belonging to Standard International Trade Classification (Revision 3) Division 84 were classified as apparel exports. Analysis is limited to countries that reported data for apparel exports in each year.
- 83 Subramanian and Roy 2001.
- 84 Chuhan-Pole and Angwafo 2011.
- 85 Ofosu-Asare 2011.
- 86 Suri and others 2011. In particular, they find that for a one standard deviation decrease in infant mortality rate, over a decade there would be a 2.2 percentage point increase in economic growth. Similarly, a one standard deviation increase in life expectancy over a decade implies a 2.7 percentage point increase in growth, while a one standard deviation increase in secondary enrolment rate over a decade increases growth 1.9 percentage points.
- 87 Commission on Growth and Development 2008.
- 88 Hanushek and others (2008) found that across the 50 countries they studied, each additional year of average schooling in a country increased the average 40 year growth rate of GDP about 0.37 percentage point. However, they found that a country whose test score performance was 0.5 standard deviation higher than another country during the 1960s had a growth rate that was, on average, 1 percentage point higher annually over the following 40 year period.
- 89 To address this question, Hanushek and others (2008) measured the share of students in each country who reach a threshold of basic competency in mathematics and science, as well as the share of students who perform at very high levels.
- 90 Bloom, Canning and Sevilla (2007) found that a one year increase in a population's life expectancy contributes to a 4% increase in output. Similar positive effects are also associated with improvements in reproductive health. In a study of 97 countries, Bloom and others (2009) found that higher fertility is associated with lower labour force participation of women during their fertile years. On average, each additional child reduces female labour force participation 5–10 percentage points for women ages 20–44.
- 91 Stern 2003.
- 92 Cornia 2004.
- 93 Rodrik 1998.
- 94 Stern 2003.
- 95 Ssewanyana, Matovu and Twimukye 2011.
- 96 Foster and Mijumbi 2002.
- 97 Bertrand and Mullainathan 2003.
- 98 Essama-Nssah 2011.
- 99 Sivananthiran and Venkata Ratnam 2005.
- 100 Tsounta 2009.
- 101 Tangcharoensathien and others 2011.
- 102 UNESCAP 2011.
- 103 Frenk, Gómez-Dantés and Knaul 2009.
- 104 Kanbur 2004.
- 105 Ravallion 2009.
- 106 Glewwe and Kassouf 2008.

## Chapter 4

- 1 The distinction between equity and equality is linked to the difference between what can be observed and what cannot be. Equity is associated with equal opportunities, which are not observable. Unfortunately, as only outcomes can be observed and measured, the evaluation of whether a society is equitable can only be approximated based on the degree of prevailing inequality.
- 2 Inequalities across racial, ethnic and religious groups are particularly likely to cause political violence and tend to be extremely persistent unless confronted by comprehensive policies (Stewart 2013).
- 3 This beneficial trend in Latin America is driven by declining labour income inequality, a closing wage gap between skilled and unskilled workers and conditional cash transfers (see López-Calva and Lustig 2010).
- 4 Cleland 2002. Martin and Juarez (1995) argue that in some cases, over the short term, education does not necessarily immediately affect reproductive behaviour. See also Hori (2011); Serbessa (2002); Cochrane (1979); Bloom and others (2009); Psacharopoulos and Tzannatos (1992).
- 5 Taylor, Newman and Kelly 1976.
- 6 UNDESA 2007; Diamond, Newby and Varle 1999; Population Reference Bureau 2000.
- 7 This indicator is more commonly reported as deaths per 1,000 live births, or the infant mortality rate,

- which is 61.7 deaths per 1,000 live birth per year.
- 8 UNDP 1995.
  - 9 ILO 2012. The International Labour Organization constructed the index using Gallup survey data.
  - 10 Westaway 2012.
  - 11 Lagi, Bertrand and Bar-Yam 2011. The Food and Agriculture Organization food price index topped 180 in 2008.
  - 12 ILO 2012. According to International Labour Organization estimates based on Gallup data, the majority of people in nearly all regions of the world are not satisfied with the availability of quality jobs. Dissatisfaction is highest in Central and Eastern Europe and Sub-Saharan Africa, followed by the Middle East and North Africa.
  - 13 Bland 2012.
  - 14 Tejada 2012.
  - 15 Gooch 2012.
  - 16 ILO 2012.
  - 17 See, for example, Jenkins and Wallace (1996), who find an association between education and protest involvement, and Dalton, Van Sickle and Weldon (2010), who find a strong positive correlation between education levels and protest involvement across a wide range of developed and developing countries.
  - 18 Between now and 2050, under varying assumptions, the share of the global population older than age 15 that is uneducated is projected to fall to either 3% or 8% depending on the scenario, down from 12% in 2010; the share of the population with secondary or tertiary education will rise to either 50% or 64% depending on the scenario, up from 44% in 2010 (see figure 4.1).
  - 19 Hook 2012.
  - 20 LaFraniere 2011; Wines and LaFraniere 2011.
  - 21 Amartya Sen makes this distinction: unfair exclusion means that some people are kept out or left out; unjust inclusion means that some people are included on deeply unfavourable terms (APRI 2003).
  - 22 Huntington (1968), cited in Campante and Chor (2012).
  - 23 See Campante and Chor (2012).
  - 24 Based on health, education and income attainments in 78 countries over 1980–2011. Unlike mean years of schooling, health and income attainments have been reversed during this period in some countries.
  - 25 Campante and Chor 2012.
  - 26 Campante and Chor 2012, p. 175.
  - 27 Polanyi 1944.
  - 28 FitzGerald, Stewart and Venugopal 2006.
  - 29 For example, Guangdong Province and Liaoning Province have similar HDI values, but Guangdong has more than three times the carbon productivity of Liaoning (UNDP 2010c).
  - 30 UNDP 2011a.
  - 31 See UNDP (2011a) for more detail.
  - 32 The United Nations International Strategy for Disaster Reduction defines *resilience* as “the ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions” (United Nations Office for Disaster Risk Reduction 2009).
  - 33 Daniell and Vervaeck 2012.
  - 34 IPCC 2012.
  - 35 Each age group in a population faces different needs and behaves differently. Young people (ages 0–14) require investments in health and education. Working-age adults (ages 15–64) require jobs and financial infrastructure to support production and savings. Older adults (ages 65 and older) require health care and retirement income. A country’s age structure thus alters its challenges and opportunities.
  - 36 With fewer children to support, parents invest more in their children’s education (Becker, Murphy and Tamura 1990; Galor 2006), save more for their retirement (Bloom, Canning and Sevilla 2003), and women increasingly participate in the formal labour market (Bloom and others 2009). As a result, economic growth accelerates, yielding what has been called “the demographic dividend” (Bloom, Canning and Sevilla 2003).
  - 37 A low dependency ratio can generate a demographic dividend, since the increase in the labour force can spur economic growth and greater investment, given the low demand for spending from dependents. (See Abdurazakov, Minsat and Pineda [2013] for a detailed analysis of demographic trends based on projections by Lutz and KC 2013.) But countries can reap these dividends only if they provide productive employment for the large number of new entrants to the labour force.
  - 38 Lutz and KC 2013.
  - 39 A scenario of education level distribution where universal primary education is complemented by broad-based secondary education brings the highest annual economic growth rates for a typical low HDI country with a large share of young people (IIASA 2008). This analysis uses a dataset that disaggregates each country’s population by age, sex and educational attainment. Thus, each five-year cohort’s population share can be described as having no education, primary education, secondary education or tertiary education. And these attainments can be differentiated by gender. The proportion of the population in each five-year cohort changes with trends in fertility, mortality and migration. The proportion of the young, working-age and elderly populations will thus also change over time.
  - 40 This approach is consistent with that of the Millennium Development Goals and the Education for All initiative. Governing this scenario are several key targets: near universal (99%) primary education by 2015, 50% lower secondary education by 2030 and 90% by 2030, and 60% tertiary education by 2050.
  - 41 HDRO calculations based on Lutz and KC (2013).
  - 42 UNDESA 2007. For developed countries, international migration is unlikely to ease the economic impacts of an ageing population because the volume of migration needed is much larger than is politically feasible. In scenario III of the study, the migration needed to halt the expected increase in the ratio of the elderly over 1995–2050 ranges from an average annual net inflow of 1.1 million people for the United Kingdom and 1.7 million for France to more than 10 million each for Japan and the United States.
  - 43 Becker, Murphy and Tamura 1990; Galor 2006; Bloom, Canning and Sevilla 2003; Bloom and others 2009.
  - 44 Bloom and others 2012. In Sub-Saharan Africa, the youth dependency ratio is 1.07 for the poorest 20% of households but 0.72 for the wealthiest 20%. In Latin America, the ratio is 0.91 for the poorest households and 0.57 for the wealthiest.
  - 45 See *The Economist* (2012b) for a discussion of the main results of the Bloom and others (2012) study.
  - 46 Hausmann and Székely (2001) found that the demographic transition in Latin America accentuated existing inequality trends, with faster and earlier demographic shifts among the wealthiest population groups widening the gap between the rich and the poor. Giroux (2008) found that although fertility differentials associated with education have remained relatively stable in Sub-Saharan African countries as national fertility has fallen, inequality has increased. They show that changes in the education composition of the population have shaped recent variations in reproductive inequality in the region.
  - 47 Bloom and others 2012.
  - 48 World Bank 2011c.
  - 49 In many countries, if the current age of retirement is unchanged, this window will close in a matter of decades. This suggests that important discussions about the retirement age will take place in many countries where the population is ageing quickly.
  - 50 The previous section discussed the role of migration on demographic trends; here the role of migration is more comprehensive, since it is fully integrated into a model in which demographic trends are just one part of several modules used in these projections exercise. See Pardee Center for International Futures (2013).

## Chapter 5

- 1 The Doha round for trade negotiations at the World Trade Organization have been at an impasse since 2008 (Castle and Landler 2008; WTO n.d.). At the United Nations Framework Convention on Climate Change 18th Conference of the Parties in Doha in December 2012, the main legally binding global agreement on climate change, the Kyoto Protocol, was extended until 2020. Countries reiterated that they are determined to adopt, in 2015, a new “protocol, another legal instrument or an agreed outcome with legal force” to come into effect from 2020. However, any agreement on the structure of the new protocol and financing mechanisms was left until next year. (Broder 2012; Harvey 2012)
- 2 Heller 2013.
- 3 Global public goods are those that have cross-border consequences. National governments, acting on their own, as well as markets, are unable to produce sufficient quantities of global public goods, and collective intergovernmental action is needed. In a world where trade, financial flows, environmental resources and pollution increasingly transcend national borders, multilateral cooperation for the provision of global public goods becomes crucial for human development (Kaul 2013).
- 4 While bilateral arrangements can sometimes disadvantage the weaker partner, regional arrangements can help empower poorer regions in their negotiations with richer ones.
- 5 This is called trade diversion. Lowering of tariff barriers that leads to more trade is called trade creation. See Krugman (1991).
- 6 See Krugman (1991), who argues further that the net effect on world efficiency is unlikely to be negative

because trading blocs consist of geographical neighbours. Since these countries would be natural trading partners even without special arrangements, the losses from trade diversion are small, while gains from trade creation are large.

7 Multilateralizing regionalism also requires harmonizing a diverse array of trade regulations (such as varying rules of origin for determining local content) and expanding regional agreements to include as many developing country partners as possible. These ideas draw on Baldwin (2007).

8 The International Organization for Migration, not a part of the UN system, has the broadest mandate for migration issues of any international institution. With 146 member states, it has become an increasingly prominent forum for discussions on international migration.

9 UNDP 2009.

10 Hansen 2010.

11 Betts and others 2013.

12 King, Richards and Tyldesley 2011.

13 UNDP 2011a.

14 Han 2012.

15 Leape 2012.

16 Leape 2012.

17 Romero and Broder 2012.

18 Glennie 2011.

19 OECD 2011c.

20 G8 2005.

21 Ocampo 2010.

22 General Assembly addresses by heads of government Sept. 25-Oct.1 (UN News Service [www.un.org/news/](http://www.un.org/news/)).

23 At the Group of 20 Summit in Los Cabos in 2012, Brazil, China, India, the Russian Federation and South Africa announced contributions of \$75 billion towards International Monetary Fund resources. These funds come with several conditions. They can be called upon only after existing resources are substantially used. The money was also given in anticipation that “all the reforms agreed upon in 2010 will be fully implemented in a timely manner, including a comprehensive reform of voting power and reform of quota shares” (Chowla 2012).

24 Heller 2013.

25 The video received more than 100 million views and is one of the most “viral” videos of all time.

26 Chandhoke 2009; Heller 2013.

27 This takes many forms—restrictive nongovernmental organization laws, foreign currency and taxation regulations, registration requirements and the like—and is justified by governments on grounds such as national security, accounting failures by nongovernmental organizations, coordination and control, among others. The International Center for Non-profit Law and CIVICUS have consistently been reporting on and analyzing this situation worldwide.

28 Castells 2003; Burawoy 2003.

29 British political theorist Andrew Dobson developed the idea of an “ecological citizenship”. Thinking ecologically implies a broad notion of citizenship, one that includes the goal of reducing ecologic footprints. Ecological citizenship goes beyond individual responsibility, since ecological thinking views citizens as products of and influences on their communities (and their ecosystems) (Revkin 2012).

30 Chorev 2012.

31 Grabel 2013. For a useful summary see also Lamberte and Morgan (2012).

32 Reserve Bank of India 2012.

33 Grabel 2013.

34 Ocampo and Titelman 2009.

35 Grabel 2013.

36 The Bank of the South was founded in 2007 by Venezuelan President Hugo Chavez and officially launched in 2009. Initially envisaged with a very broad mission, by the time of its launch in 2009, its mandate had been narrowed to project finance in the South American region (Chin 2010). Its precise functions and goals are still being debated among member countries.

37 OECD 2010a.

38 Baldwin 2006.

39 See United Nations Security Council (2011), which contains the concept note on responsibility while protecting, as developed by the government of Brazil.

40 India Ministry of External Affairs 2012.

41 Bhattacharya, Romani and Stern 2012.

42 Bhattacharya, Romani and Stern 2012.

43 HDRO calculations based on World Bank (2012a) data on average spending for each country in the region between 2005 and 2010.

44 Based on HDRO calculations using World Bank (2012a) data on international reserves. Given that international reserves play a prominent role in monetary and exchange rate policy, it may be too ambitious to expect a larger proportion of the reserves to be allocated for other purposes.

45 Some have proposed a global infrastructure initiative whereby rich countries channel investment funds to developing countries, generating a greater return on investment than they could at home (Harding 2012). The same principle applies to investment by emerging economies.

46 Bolton, Samama and Stiglitz 2011. Norway has also offered \$1 billion to Brazil for its deforestation efforts, albeit not through its sovereign wealth fund.

47 Public-private partnerships and community-level initiatives can also help broaden the scope and impact of sovereign wealth fund investments.

48 See Hamdani (2013) and South Commission (1990).

49 The South Commission was formally established in 1987, following years of informal discussion among leaders from the South. The report of the South Commission (1990) emphasized that developing countries have many problems and much experience in common. It found that the South is not well organized at the global level and has been unable to effectively mobilize its combined expertise, experience and bargaining power. The report made practical suggestions to be carried out by concerned policymakers.

50 Mwase and Yang 2012.

51 OECD 2010a.

# References

- Abdurazakov, A., A. Minsat, and J. Pineda. 2013.** "Implications of Education Policies in a Country's Demographic Prospects: Detailed Analysis of Demographic Trends Based on Projections by Lutz and KC." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Abe, M. 2006.** "The Developmental State and Educational Advance in East Asia." *Educate* 6 (1): 6–12.
- ADB (Asian Development Bank). 2009.** *Annual Report 2009*. Vol. 1. Manila. [www.adb.org/documents/adb-annual-report-2009](http://www.adb.org/documents/adb-annual-report-2009). Accessed 15 May 2012.
- AfDB (African Development Bank), OECD (Organisation for Economic Co-operation and Development), UNDP (United Nations Development Programme), and UNECA (United Nations Economic Commission for Africa). 2011.** *African Economic Outlook 2011: Africa and Its Emerging Partners*. Paris and Tunis.
- . 2012. *African Economic Outlook 2012: Promoting Youth Employment*. Paris and Tunis.
- Agosin, M. 1997.** "Trade and Growth in Chile: Past Performance and Future Prospects." United Nations Economic Commission for Latin America, International Trade Unit, Santiago. [www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/4/4234/P4234.xml&xsl=/comercio/tpl-i/p9f.xsl&base=/comercio/tpl/top-bottom.xsl](http://www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/4/4234/P4234.xml&xsl=/comercio/tpl-i/p9f.xsl&base=/comercio/tpl/top-bottom.xsl). Accessed 15 May 2012.
- Ahluwalia, M.S. 2002.** "Economic Reforms in India since 1991: Has Gradualism Worked?" *Journal of Economic Perspectives* 16 (3): 67–88.
- Akyuz, Y. 2012.** "The Staggering Rise of the South." Research Paper 44. South Center, Geneva.
- Aleksynska, M., and O. Havrylchuk. 2011.** "FDI from the South: The Role of Institutional Distance and Natural Resources." Working Paper 2011-05. Centre D'Études Prospectives et D'Informations Internationales, Paris. [www.cepii.fr/anglaisgraph/workpap/pdf/2011/wp2011-05.pdf](http://www.cepii.fr/anglaisgraph/workpap/pdf/2011/wp2011-05.pdf). Accessed 15 May 2012.
- Ali, S., and U. Dadush. 2012.** *In Search of the Global Middle Class: A New Index*. Washington, DC: Carnegie Endowment for International Peace. [http://carnegieendowment.org/files/middle\\_class-edited.pdf](http://carnegieendowment.org/files/middle_class-edited.pdf). Accessed 4 October 2012.
- AMRO (ASEAN+3 Macroeconomic Research Office). 2012.** "The Joint Statement of the 15th ASEAN+3 Finance Ministers and Central Bank Governors' Meeting." Manila. [www.amro-asia.org/wp-content/uploads/2012/05/120503AFMGM+3-JS.pdf](http://www.amro-asia.org/wp-content/uploads/2012/05/120503AFMGM+3-JS.pdf). Accessed 31 May 2012.
- Anand, S., and P. Segal. 2008.** "What Do We Know about Global Income Inequality?" *Journal of Economic Literature* 46: 57–94.
- Anderson, L. 2011.** "Demystifying the Arab Spring: Parsing the Differences between Tunisia, Egypt, and Libya." *Foreign Affairs* 90 (3): 2–7.
- APRI (Asia Pacific Regional Human Development Reports Initiative). 2003.** "Potential and Challenges in Human Development Reporting." Report of the UNDP Training Workshop, 24–26 September 2003, Colombo, Sri Lanka. UNDP Asia-Pacific Regional Centre, Bangkok.
- Arrighi, G. 2007.** "China's Market Economy in the Long Run." In Ho-Fung Hung, ed., *China and the Transformation of Global Capitalism*. Baltimore, MD: Johns Hopkins University Press.
- Athukorala, P. 2011.** "Production Networks and Trade Patterns in East Asia: Regionalization or Globalization?" *Asian Economic Papers* 10 (1): 65–95.
- Athukorala, P., and S. Waglé. 2011.** "Foreign Direct Investment in Southeast Asia: Is Malaysia Falling Behind?" *ASEAN Economic Bulletin* 28 (2): 115–33.
- Atkinson, A. 2011.** "Public Economics after the Idea of Justice." 1st Annual Amartya Sen Lecture, 5 September, The Hague, The Netherlands. [www.ethicsandtechnology.eu/images/uploads/1stAnnualAmartyaSenLecture\\_TonyAtkinson.pdf](http://www.ethicsandtechnology.eu/images/uploads/1stAnnualAmartyaSenLecture_TonyAtkinson.pdf). Accessed 15 May 2012.
- . 2012. "Public Economics in an Age of Austerity." Agnar Sandmo Lecture, 12 January, Norwegian School of Economics and Business Administration, Bergen, Norway.
- Atsmon, Y., P. Child, R. Dobbs, and L. Narasimhan. 2012.** "Winning the \$30 Trillion Decathlon: Going for Gold in Emerging Markets." *McKinsey Quarterly*, August. [www.mckinseyquarterly.com/Winning\\_the\\_30\\_trillion\\_decathlon\\_Going\\_for\\_gold\\_in\\_emerging\\_markets\\_3002](http://www.mckinseyquarterly.com/Winning_the_30_trillion_decathlon_Going_for_gold_in_emerging_markets_3002). Accessed 15 August 2012.
- Ayadi, M., G. Boulila, M. Lahouel, and P. Montigny. 2005.** "Pro-Poor Growth in Tunisia." International Development and Strategies, Paris.
- Baer, W. 2008.** *The Brazilian Economy: Growth and Development*. Boulder, CO: Lynne Rienner Publishers.
- Baldwin, R.E. 2004.** "Openness and Growth: What's the Empirical Relationship? In R.E. Baldwin and L.A. Winters, eds., *Challenges to Globalization: Analyzing the Economics*. Chicago, IL: University of Chicago Press. [www.nber.org/chapters/c9548.pdf](http://www.nber.org/chapters/c9548.pdf). Accessed 6 August 2012.
- . 2006. "Multilateralizing Regionalism: Spaghetti Bowls as Building Blocks on the Path to Global Free Trade." *World Economy* 29 (11): 1451–1518.
- . 2007. "Ideas for a WTO Action Plan on Regionalism: Implications for Asia." Post-event Statement. Asian Development Bank Institute Distinguished Speaker Seminar, 26 November, Tokyo. [www.adbi.org/event/2366.dance.east.asia.reflections/](http://www.adbi.org/event/2366.dance.east.asia.reflections/). Accessed 23 October 2012.
- Barro, R.J., and J.-W. Lee. 2010.** Educational Attainment Dataset. [www.barrolee.com](http://www.barrolee.com). Accessed 5 May 2012.
- Becker, G., K. Murphy, and R. Tamura. 1990.** "Human Capital, Fertility, and Economic Growth." *Journal of Political Economy* 98 (5): S12–S37.
- Beeston, K. 2012.** "Time for Democracy 2.0? The Launch of the Manifesto For A Global Democracy." *Global Policy Journal*, 5 July. [www.globalpolicyjournal.com/blog/05/07/2012/time-democracy-20-launch-manifesto-global-democracy](http://www.globalpolicyjournal.com/blog/05/07/2012/time-democracy-20-launch-manifesto-global-democracy). Accessed 28 December 2012.
- Bera, S., and S. Gupta. 2009.** "South-South FDI vs. North-South FDI: A Comparative Analysis in the Context of India." Working Paper 238. Indian Council of Research in International Economic Relations, New Delhi. [www.icrier.org/pdf/WorkingPaper238.pdf](http://www.icrier.org/pdf/WorkingPaper238.pdf). Accessed 15 May 2012.
- Berg, J., and S. Cazes. 2007.** "The Doing Business Indicators: Measurement Issues and Political Implications." Economic and Labour Market Paper 2007/6. International Labour Organization, Geneva.
- Bertrand, M., and S. Mullainathan. 2003.** *Are Emily and Greg More Employable than Lakisha and Jamal? A Field Experiment on Labor and Market Discrimination*. Working Paper 9873. Cambridge, MA: National Bureau of Economic Research. [www.nber.org/papers/w9873](http://www.nber.org/papers/w9873). Accessed 15 May 2012.
- Betts, A., J. Pranti, D. Sridhar, and N. Woods. 2013.** "Transforming Global Governance for the Twenty-First Century." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York. [www.spp.nus.edu.sg/docs/HDR-GEG2012-LKYSP.pdf](http://www.spp.nus.edu.sg/docs/HDR-GEG2012-LKYSP.pdf). Accessed 15 May 2012.
- Bhagwati, J., and Srinivasan, T. 2001.** "Outward-Orientation and Development: Are Revisionists Right?" In D. Lal and R. Snape, eds., *Trade, Development, and Political Economy*. London: Palgrave.
- Bhattacharya, A., M. Romani, and N. Stern. 2012.** "Infrastructure for Development: Meeting the Challenge." Centre for Climate Change Economics and Policy, London. [www.cceep.ac.uk/Publications/Policy/docs/PP-infrastructure-for-development-meeting-the-challenge.pdf](http://www.cceep.ac.uk/Publications/Policy/docs/PP-infrastructure-for-development-meeting-the-challenge.pdf). Accessed 15 May 2012.
- Bird, L.A. 1981.** *Costa Rica: A Country without an Army*. Bolton, UK: Leeds Northern Friends Peace Board.
- Bland, B. 2012.** "Vietnam's Factories Grapple with Growing Unrest." *Financial Times*, 19 January. [www.ft.com/intl/cms/s/0/67380b5c-427e-11e1-97b1-00144feab49a.html](http://www.ft.com/intl/cms/s/0/67380b5c-427e-11e1-97b1-00144feab49a.html). Accessed 21 December 2012.
- Blanden, J., A. Goodman, P. Gregg, and S. Machin. 2005.** "Changes in Intergenerational Income Mobility in Britain." In M. Corak, ed., *Generational Income Mobility in North America and Europe*. Cambridge, MA: Cambridge University Press.
- Blinder, A. 2006.** "Offshoring: The Next Industrial Revolution?" *Foreign Affairs* 85 (2): 113.
- Block, F. 2008.** "Swimming Against the Current: The Rise of a Hidden Developmental State in the United States." *Politics and Society* 36 (2): 169–206.
- . 2013. "Can the Path of the World's Richer Nations be Sustained? The Future of the U.S. Model." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Bloom, D.E., D. Canning, G. Fink, and J.E. Finlay. 2009.** "Fertility, Female Labor Force Participation, and the Demographic Dividend." *Journal of Economic Growth* 14 (2): 79–101.
- . 2012. "Microeconomic Foundations of the Demographic Dividend." Working Paper 93. Harvard University, Program on the Global Demography of Aging, Cambridge, MA. [www.hsph.harvard.edu/pgda/WorkingPapers/2012/PGDA\\_WP\\_93.pdf](http://www.hsph.harvard.edu/pgda/WorkingPapers/2012/PGDA_WP_93.pdf). Accessed 27 December 2012.
- Bloom, D.E., D. Canning, and J. Sevilla. 2003.** *The Demographic Dividend: A New Perspective on the*

- Economic Consequences of Population Change*. Santa Monica, CA: Rand Corporation.
- . 2007. "The Effect of Health on Economic Growth: A Production Function Approach." Working Paper 28. Harvard University, Program on the Global Demography of Aging, Cambridge, MA. [www.hsph.harvard.edu/pgda/WorkingPapers/2007/PGDA\\_WP\\_28.pdf](http://www.hsph.harvard.edu/pgda/WorkingPapers/2007/PGDA_WP_28.pdf). Accessed 10 August 2012.
- Bolton, P, F. Samama, and J. Stiglitz.** 2011. *Sovereign Wealth Funds and Long-Term Investing*. New York: Columbia University Press.
- Bourguignon, F., F.H.G. Ferreira, and M. Menéndez.** 2007. "Inequality of Opportunity in Brazil." *Review of Income and Wealth* 53 (4): 585–618.
- Bourguignon, F., and C. Morrisson.** 2002. "Inequality among World Citizens: 1820–1992." *American Economic Review* 92 (4): 727–744.
- BRAC.** n.d. "About BRAC Bangladesh." [www.brac.net/content/about-brac-bangladesh](http://www.brac.net/content/about-brac-bangladesh). Accessed 15 May 2012.
- Bradsher, K.** 2010. "China Leading Global Race to Make Clean Energy." *The New York Times*, 30 January. [www.nytimes.com/2010/01/31/business/energy-environment/31renew.html](http://www.nytimes.com/2010/01/31/business/energy-environment/31renew.html). Accessed 15 May 2012.
- Branczik, A.** 2004. "Humanitarian Aid and Development Assistance." Beyond Intractability. [www.beyondintractability.org/bi-essay/humanitarian-aid](http://www.beyondintractability.org/bi-essay/humanitarian-aid). Accessed 15 May 2012.
- Bräutigam, D.** 2009. *The Dragon's Gift: The Real Story of China in Africa*. Oxford, UK: Oxford University Press.
- Bremmer, I.** 2012. "Africa and the Power of the Pivot." *The New York Times*, 14 May. [www.nytimes.com/2012/05/15/opinion/africa-and-the-power-of-the-pivot.html](http://www.nytimes.com/2012/05/15/opinion/africa-and-the-power-of-the-pivot.html). Accessed 15 May 2012.
- Broder, J.M.** 2012. "Climate Talks Yield Commitment to Ambitious, but Unclear, Actions." *The New York Times*, 8 December. [www.nytimes.com/2012/12/09/science/earth/talks-on-climate-produce-promises-and-complaints.html](http://www.nytimes.com/2012/12/09/science/earth/talks-on-climate-produce-promises-and-complaints.html). Accessed 8 December 2012.
- Brookings Institution.** 2012. "Middle Class Measures." Development, Aid and Governance Indicators. Washington, DC. [www.brookings.edu/research/interactives/development-aid-governance-indicators](http://www.brookings.edu/research/interactives/development-aid-governance-indicators). Accessed 4 October 2012.
- Burawoy, M.** 2003. "For A Sociological Marxism: The Complementary Convergence of Antonio Gramsci and Karl Polanyi." *Politics and Society* 31 (2): 193–261.
- Burd-Sharp, S., and K. Lewis.** 2010. *The Measure of America 2010–2011: Mapping Risks and Resilience*. New York: NYU Press.
- Cammett, M.** 2007. "Business-Government Relations and Industrial Change: The Politics of Upgrading in Morocco and Tunisia." *World Development* 35 (11): 1889–1903.
- Campante, F., and D. Chor.** 2012. "Why Was the Arab Spring Poised for Revolution? Schooling, Economic Opportunities, and the Arab Spring." *Journal of Economic Perspectives* 26 (2): 167–188.
- Castells, M.** 2003. *The Power of Identity*. Malden, MA: Blackwell.
- Castle, S., and M. Landler.** 2008. "After 7 Years, Talks Collapse on World Trade." *The New York Times*, 30 July.
- Celasun, M.** 1994. "Trade and Industrialization in Turkey: Initial Conditions, Policy and Performance in the 1990s." In G. Helleiner, ed., *Trade and Industrialization in Turbulent Times*. London: Routledge.
- Center for Systemic Peace.** 2012. "Global Conflict Trends: Measuring Systemic Peace." Vienna, VA. [www.systemicpeace.org/conflict.htm](http://www.systemicpeace.org/conflict.htm). Accessed 15 May 2012.
- Chandhoke, N.** 2009. "What Is the Relationship Between Participation and Representation?" In O. Törnquist, N. Webster, and K. Stokke, eds. *Rethinking Popular Representation*. New York: Palgrave Macmillan.
- Chang, H.J.** 2010. "How to 'Do' a Developmental State: Political, Organizational and Human Resource Requirements for the Developmental State." In O. Edigheji, ed., *Constructing a Democratic Developmental State in South Africa, Potentials and Challenges*. Cape Town: HSRC Press.
- Chen, S., and M. Ravallion.** 2012. "More Relatively-Poor People in a Less Absolutely-Poor World." Policy Research Working Paper 6114. Washington, DC, World Bank.
- Cheng, H., Y. Hu, and J. Zhao.** 2009. "Meeting China's Water Shortage Crisis: Current Practices and Challenges." *Environmental Science & Technology* 43 (2): 240–244.
- Chibber, V.** 1999. "Building a Developmental State: The Korean Case Reconsidered." *Politics & Society* 27 (3): 309–346.
- Chin, G.** 2010. "Remaking the Architecture: The Emerging Powers, Self-Insuring and Regional Insulation." *International Affairs* 86 (3): 693–715.
- . 2012. "Responding to the Global Financial Crisis: The Evolution of Asian Regionalism and Economic Globalization." Working Paper 343. Asian Development Bank Institute, Tokyo. [www.adbi.org/working-paper/2012/01/31/4846.gfc.evolution.asian.regionalism.economic.globalization/](http://www.adbi.org/working-paper/2012/01/31/4846.gfc.evolution.asian.regionalism.economic.globalization/). Accessed 15 May 2012.
- China Daily.** 2012. "Overseas M&A Deals Hit \$43b in 2011." 27 February. [www.chinadaily.com.cn/bizchina/2012-02/27/content\\_14703801.htm](http://www.chinadaily.com.cn/bizchina/2012-02/27/content_14703801.htm). Accessed 15 May 2012.
- Chorev, N.** 2012. *The World Health Organization between North and South*. Ithaca, NY: Cornell University Press.
- Chowla, P.** 2012. "Spotlight G20: Does BRICS Money for the IMF Mean They Are Bailing Out Europe?" 21 June. Triple Crisis: Global Perspectives on Finance, Development, and Environment. <http://triplecrisis.com/spotlight-g-20-does-brics-money-for-the-imf-mean-they-are-bailing-out-europe/>. Accessed 8 December 2012.
- Chuhan-Pole, P., and M. Angwafo, eds.** 2011. *Yes Africa Can: Success Stories From A Dynamic Continent*. Washington, DC: World Bank. [http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC\\_Consolidated\\_Web.pdf](http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC_Consolidated_Web.pdf). Accessed 10 August 2012.
- Ciorciari, J.** 2011. "Chiang Mai Initiative, Multilateralization International Politics and Institution-Building in Asia." *Asian Survey* 51 (5): 926–952.
- Clapp, R.A.** 1995. "Creating Comparative Advantage: Forest Policy as Industrial Policy in Chile." *Economic Geography* 71 (3): 273–296.
- Cleland, J.** 2002. "Education and Future Fertility Trends with Special Reference to Mid-Transitional Countries." United Nations Department of Economic and Social Affairs, Population Division, New York. [www.un.org/esa/population/publications/completingfertility/RevisedCLELANDpaper.PDF](http://www.un.org/esa/population/publications/completingfertility/RevisedCLELANDpaper.PDF). Accessed 15 May 2012.
- Cochrane, S.H.** 1979. *Fertility and Education: What Do We Really Know?* Baltimore, MD: Johns Hopkins University Press.
- Commission on Growth and Development.** 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington, DC: World Bank.
- Cornia, G.A.** 2004. *Inequality, Growth and Poverty in an Era of Liberalization and Globalization*. Oxford, UK: Oxford University Press.
- Dahal, S.H., H. Gazdar, S.I. Keethapongcalan, and P. Murthy.** 2003. "Internal Conflict and Regional Security in South Asia." United Nations Institute for Disarmament Research, Geneva. [www.unidir.org/pdf/ouvrages/pdf-1-92-9045-148-3-en.pdf](http://www.unidir.org/pdf/ouvrages/pdf-1-92-9045-148-3-en.pdf). Accessed 15 May 2012.
- Dalton, R., A. Van Sickle, and S. Weldon.** 2010. "The Individual–Institutional Nexus of Protest Behaviour." *British Journal of Political Science* 40 (1): 51–73.
- Daniell, J., and A. Vervaeck.** 2012. "Damaging Earthquakes Database 2011—the Year in Review." Center for Disaster Management and Risk Reduction Technology, Potsdam, Germany. [http://reliefweb.int/sites/reliefweb.int/files/resources/Full\\_Report\\_3285.pdf](http://reliefweb.int/sites/reliefweb.int/files/resources/Full_Report_3285.pdf).
- Das, G.** 2000. *India Unbound: The Social and Economic Revolution from Independence to the Global Information Age*. New York: Anchor Books.
- Davies, J.E.** 2011. "Washington's Growth and Opportunity Act or Beijing's Overarching Brilliance: Will African Governments Choose Neither?" *Third World Quarterly* 32 (6): 1147–1163.
- De Hoyos, R., J.M. Martínez de la Calle, and M. Székely.** 2009. "Education and Social Mobility in Mexico." Mexico Education Ministry, Mexico City. [www.pagnet.ifwv-kiel.de/activities/de\\_hoyos\\_de\\_la\\_calle\\_szekely2009.pdf](http://www.pagnet.ifwv-kiel.de/activities/de_hoyos_de_la_calle_szekely2009.pdf). Accessed 15 May 2012.
- Deloitte.** 2011. "The Connected Archipelago: The Role of the Internet in Indonesia's Economic Development." Deloitte Access Economics, Sydney. [www.deloitte.com/view/en\\_gx/global/bde64a5db2134310VgnVCM1000001a56f00aRCRD.htm](http://www.deloitte.com/view/en_gx/global/bde64a5db2134310VgnVCM1000001a56f00aRCRD.htm). Accessed 15 May 2012.
- . 2012a. "Lateral Trades, Breathing Fire into the BRICS: China Outbound M&A Activity into Brazil, Russia, India and South Africa." China Services Group, Beijing. [www.deloitte.com.mx/documents/BoletinFactorChina/LateralTrades-BreathingFireintotheBRICS-English.pdf](http://www.deloitte.com.mx/documents/BoletinFactorChina/LateralTrades-BreathingFireintotheBRICS-English.pdf). Accessed 21 June 2012.
- . 2012b. "Turkish Outbound M&A." Corporate Finance, Istanbul. [www.deloitte.com/assets/Dcom-Turkey/Local%20Assets/Documents/turkey\\_tr\\_mnaoutbound\\_27012012.pdf](http://www.deloitte.com/assets/Dcom-Turkey/Local%20Assets/Documents/turkey_tr_mnaoutbound_27012012.pdf). Accessed 10 May 2012.
- DeLong, J.B.** 2004. "India since Independence: An Analytical Growth Narrative." In D. Rodrik, ed., *Modern Economic Growth: Analytical Country Studies*. Princeton, NJ: Princeton University Press.
- Diamond, I., M. Newby, and S. Varle.** 1999. "Female Education and Fertility: Examining the Links." In C. Bledsoe, J. Casterline, J. Johnson-Kuhn, and J. Haaga, eds., *Critical Perspectives on Schooling and Fertility in the Developing World*. Washington, DC: National Academy of Science Press.
- Dobbs, R., J. Remes, J. Manyika, C. Roxburgh, S. Smit, F. Schaeer.** 2012. *Urban World: Cities and the Rise of the Consuming Class*. New York: McKinsey Global Institute. [www.mckinsey.com/insights/mgi/research/urbanization/](http://www.mckinsey.com/insights/mgi/research/urbanization/)

- urban\_world\_cities\_and\_the\_rise\_of\_the\_consuming\_class. Accessed 28 August 2012.
- Dolan, P., R. Layard, and R. Metcalfe. 2011.** *Measuring Subjective Well-Being for Public Policy*. London: UK Office for National Statistics.
- Dollar, D. 1992.** "Outward-Oriented Developing Countries Really Do Grow More Rapidly: Evidence from 95 LDCs, 1976–85." *Economic Development and Cultural Change* 40 (30): 523–544.
- Done, K. 2011.** "Embraer Faces Headwinds." *Financial Times*, 10 October.
- Drèze, J., and M. Murthi. 1999.** "Fertility, Education and Development: Further Evidence from India." Research Paper DEDPS20. London School of Economics, Suntory and Toyota Centres for Economics and Related Disciplines, London, UK.
- Duhigg, C., and K. Bradsher. 2012.** "How the U.S. Lost Out on iPhone Work." *The New York Times*, 21 January. www.nytimes.com/2012/01/22/business/apple-america-and-a-squeezed-middle-class.html. Accessed 22 January 2012.
- Duhigg, C., and S. Greenhouse. 2012.** "Electronic Giant Vowing Reforms in China Plants." *The New York Times*, 30 March. www.nytimes.com/2012/03/30/business/apple-supplier-in-china-pledges-changes-in-working-conditions.html. Accessed 15 May 2012.
- The Economist. 2011a.** "The Magic of Diasporas." 19 November. www.economist.com/node/21538742. Accessed 15 May 2012.
- . **2011b.** "South-North FDI: Role Reversal." 24 September. www.economist.com/node/21528982. Accessed 15 May 2012.
- . **2012a.** "Indian Takeovers Abroad: Running with the Bulls." 3 March. www.economist.com/node/21548965. Accessed 15 May 2012.
- . **2012b.** "Points of Light." 14 July. www.economist.com/node/21558591. Accessed 4 November 2012.
- Edigheji, O. 2010.** *Constructing a Democratic Developmental State in South Africa: Potentials and Challenges*. Cape Town: HSRC Press.
- Edwards, S. 1998.** "Openness, Productivity, and Growth: What Do We Really Know?" *Economic Journal* 108 (447): 383–398.
- Elson, D. 2002.** "Gender Justice, Human Rights and Neo-liberal Economic Policies." In M. Molyneux and S. Razavi, eds., *Gender Justice, Development and Rights*. Oxford, UK: Oxford University Press.
- Engerman, S.L., and K.L. Sokoloff. 2002.** *Factor Endowments, Inequality, and Paths of Development among New World Economies*. Working Paper 9259. Cambridge, MA: National Bureau of Economic Research. www.nber.org/papers/w9259. Accessed 15 May 2012.
- Essama-Nssah, B. 2011.** "Achieving Universal Primary Education through School Fee Abolition: Some Policy Lessons from Uganda." In P. Chuhan-Pole and M. Angwafo, eds., *Yes Africa Can: Success Stories From A Dynamic Continent*. Washington, DC: World Bank. http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC\_Consolidated\_Web.pdf. Accessed 10 August 2012.
- Esteveordal, A., B. Frantz, and A.M. Taylor. 2003.** "The Rise and Fall of World Trade, 1870–1939." *Quarterly Journal of Economics* 2 (118): 359–407.
- Evans, P.B. 2010.** "Constructing the 21st Century Developmental State: Potentialities and Pitfalls." In O. Edigheji, ed., *Constructing a Democratic Developmental State in South Africa: Potentials and Challenges*. Cape Town: HSRC Press.
- Fan, S., B. Nestorova, and T. Olofinbiyi. 2010.** "China's Agricultural and Rural Development: Implications for Africa." China–Development Assistance Committee Study Group on Agriculture, Food Security and Rural Development, 27–28 April, Bamako. www.ifpri.org/sites/default/files/publications/chinaafricadac.pdf. Accessed 23 October 2012.
- Fan, S., and A. Saurkar. 2006.** "Public Spending in Developing Countries: Trends, Determination, and Impact." World Bank, Washington, DC. http://siteresources.worldbank.org/EXTRESPUBEXPANAAGR/Resources/ifpri2.pdf. Accessed 23 October 2012.
- Felbermayr, G.J., and B. Jung. 2009.** "The Pro-Trade Effect of the Brain Drain: Sorting Out Confounding Factors." *Economics Letters* 104 (2): 72–75.
- Fine, D., A. van Wamelen, S. Lund, A. Cabral, M. Taoufik, N. Dörr, A. Leke, C. Roxburgh, J. Schubert, and P. Cook. 2012.** *Africa at Work: Job Creation and Inclusive Growth*. New York: McKinsey Global Institute. www.mckinsey.com/insights/mgi/research/africa\_europe\_middle\_east/africa\_at\_work. Accessed 23 September 2012.
- FitzGerald, V., F. Stewart, and R. Venugopal. 2006.** *Globalization, Violent Conflict and Self-Determination*. Basingstoke: UK: Palgrave Macmillan.
- Foley, C.F., and W. R. Kerr. 2011.** "Ethnic Innovation and U.S. Multinational Firm Activity." Working Paper 12-006. Harvard Business School, Cambridge, MA. www.people.hbs.edu/ffoley/foleykerr.pdf. Accessed 15 May 2012.
- Foster, M., and P. Mijumbi. 2002.** "How, When and Why Does Poverty Get Budget Priority: Poverty Reduction Strategy and Public Expenditure in Uganda." Case Study 1. Working Paper 163. Overseas Development Institute, London. www.odi.org.uk/resources/docs/2061.pdf. Accessed 15 May 2012.
- Frankel, J.A., and D. Romer. 1999.** "Does Trade Cause Growth?" *American Economic Review* 89 (3) 379–399.
- Frenk, J., O. Gómez-Dantés, and F.M. Knaul. 2009.** "The Democratization of Health in Mexico: Financial Innovations for Universal Coverage." *Bulletin of the World Health Organization* 87 (7): 542–548.
- Fu, X. 2008.** "Foreign Direct Investment, Absorptive Capacity and Regional Innovation Capabilities in China." *Oxford Development Studies* 36 (1): 89–110.
- Fukuda-Parr, S. 2003.** "The Human Development Paradigm: Operationalizing Sen's Ideas on Capabilities." *Feminist Economics* 19 (2–3): 301–317.
- Fukuda Parr, S., C. Lopes, and K. Malik. 2002.** "Overview. Institutional Innovations for Capacity Development." In *Capacity for Development: New Solutions to Old Problems*. London: Earthscan.
- G8 (Group of Eight). 2005.** "The Gleneagles Communiqué: Climate Change, Energy and Sustainable Development." 8 July. www.unglobalcompact.org/docs/about\_the\_gc/government\_support/PostG8\_Gleneagles\_Communique.pdf. Accessed 15 May 2012.
- Gallup. 2012.** Gallup World Poll Database. http://worldview.gallup.com. Accessed 15 May 2012.
- Galor, O. 2006.** "Economic Growth in the Very Long-Run." Working Paper 2006-16. Brown University, Department of Economics, Providence, RI.
- Giroux, S.C. 2008.** "Child Stunting Across Schooling and Fertility Transitions: Evidence from Sub-Saharan Africa." DHS Working Paper 57. United States Agency for International Development, Washington, DC. http://pdf.usaid.gov/pdf\_docs/PNADM570.pdf. Accessed 21 December 2012.
- Glennie, J. 2011.** "Busan Has Been an Expression of Shifting Geopolitical Realities." *The Guardian*, 2 December. www.guardian.co.uk/global-development/poverty-matters/2011/dec/02/busan-shifting-geopolitical-realities. Accessed 15 May 2012.
- Glewwe, P., and A.L. Kassouf. 2008.** "The Impact of the Bolsa Escola/Família: Conditional Cash Transfer Program on Enrollment, Grade Promotion and Drop-Out Rates in Brazil." Annals of the 36th Brazilian Economics Meeting of the Brazilian Association of Graduate Programs in Economics. www.anpec.org.br/encontro2008/artigos/200807211140170-.pdf. Accessed 15 May 2012.
- Global Footprint Network. 2011.** "The National Footprint Accounts, 2011 Edition." Oakland, CA. www.footprintnetwork.org/en/index.php/GFN/page/footprint\_data\_and\_results/. Accessed 15 May 2012.
- Gooch, L. 2012.** "Seeking the Right to Be Female in Malaysia." *The New York Times*, 5 October. www.nytimes.com/2012/10/06/world/asia/seeking-the-right-to-be-female-in-malaysia.html. Accessed 21 December 2012.
- Government of India. 2009.** "The Right of Children to Free and Compulsory Education Act, 2009." *The Gazette of India*, 2009: 35.
- Gabel, I. 2013.** "Financial Architectures and Development: Resilience, Policy Space, and Human Development." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Grameen Bank. n.d.** "A Short History of Grameen Bank." www.grameen-info.org/index.php?option=com\_content&task=view&id=19&Itemid=114. Accessed 15 May 2012.
- Green, G. 2010.** "Imagine There's No Army." *Diplomat Magazine*, 1 September. www.diplomatmagazine.com/index.php?option=com\_content&view=article&id=321&Itemid=. Accessed 15 May 2012.
- Guajardo, J., D. Leigh, and A. Pescatori. 2011.** "Expansionary Austerity: New International Evidence." Working Paper WP/11/158. International Monetary Fund, Washington, DC. www.imf.org/external/pubs/ft/wp/2011/wp11158.pdf. Accessed 15 May 2012.
- Gupta, A., and H. Wang. 2012.** "India's Misguided China Anxiety." *Businessweek*, 21 March. www.businessweek.com/printer/articles/14394-indias-misguided-china-anxiety. Accessed 15 May 2012.
- Hailu, D., and V. Veras Soares. 2008.** "Cash Transfers in Africa and Latin America: An Overview." Poverty in Focus 15. International Poverty Centre for Inclusive Growth, Brasilia.
- Hamdani, K. 2013.** "The Challenge of the South." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Han, S. 2012.** "South Korean Parliament Approves Carbon Trading System." *Bloomberg*, 2 May. www.bloomberg

- .com/news/2012-05-02/south-korean-parliament-approves-carbon-trading-system.html. Accessed 15 May 2012.
- Hansen, R. 2010.** "An Assessment of Principal Regional Consultative Processes." Migration Research Series 38. International Organization for Migration, Geneva.
- Hanushek, E.A., D. Jamison, E. Jamison, and L. Woessmann. 2008.** "Education and Economic Growth." *Education Next*, Spring. [http://media.hoover.org/sites/default/files/documents/ednext\\_20082\\_62.pdf](http://media.hoover.org/sites/default/files/documents/ednext_20082_62.pdf). Accessed 8 August 2012.
- Harding, R. 2012.** "Interview: Justin Yifu Lin: Funding Developing World Infrastructure Could Buy Time for Europe to Reform, Hears Robin Harding." *Financial Times*, 6 June.
- Harrison, A., and A. Rodriguez-Clare. 2010.** "Trade, Foreign Investment and Industrial Policy for Developing Countries." In D. Rodrik and M. Rosenzweig, eds., *Handbook of Development Economics*, Vol. 5. New York: North-Holland.
- Harvey, F. 2012.** "Doha Climate Change Deal Clears Way for 'Damage Aid' to Poor Nations." *The Observer*, 8 December. [www.guardian.co.uk/environment/2012/dec/08/doha-climate-change-deal-nations?intcmp=122](http://www.guardian.co.uk/environment/2012/dec/08/doha-climate-change-deal-nations?intcmp=122). Accessed 8 December 2012.
- Hausmann, R., J. Hwang, and D. Rodrik. 2007.** "What You Export Matters." *Journal of Economic Growth* 12 (1): 1–25.
- Hausmann, R., L. Pritchett, D. Rodrik. 2005.** "Growth Accelerations." *Journal of Economic Growth* 10 (4): 303–329.
- Hausmann, R., D. Rodrik, and A. Velasco. 2005.** "Growth Diagnostics." Harvard University, John F. Kennedy School of Government, Cambridge, MA.
- Hausmann, R., and M. Székely. 2001.** "Inequality and the Family in Latin America." In N. Birdsall, A.C. Kelley, and S. Sinding, eds., *Population Matters: Demographic Change, Economic Growth, and Poverty in the Developing World*. New York: Oxford University Press.
- Hazard, E., L. De Vries, M.A. Barry, A.A. Anouan, and N. Pinaud. 2009.** "The Developmental Impact of the Asian Drivers in Senegal." *World Economy* 32 (11): 1563–1585.
- Heilmann, S. 2008.** "Policy Experiments in China's Economic Rise." *Studies in Comparative International Development* 43 (1): 1–26.
- Heller, P. 2013.** "Civil Society and Social Movements in a Globalizing World." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Hiemstra-van der Horst, G. 2011.** "We Are Scared to Say No: Facing Foreign Timber Companies in Sierra Leone's Community Woodlands." *Journal of Development Studies* 47 (4): 574–594.
- HM Treasury. 2010.** *Spending Review*. London. [http://cdn.hm-treasury.gov.uk/sr2010\\_completereport.pdf](http://cdn.hm-treasury.gov.uk/sr2010_completereport.pdf). Accessed 15 May 2012.
- Hoff, K. 2003.** "Paths of Institutional Development: A View from Economic History." *World Bank Research Observer* 18 (2): 205–226.
- Holland, D., and K. Portes. 2012.** "Self-Defeating Austerity?" *National Institute Economic Review* 222 (1): F4–F10.
- Hook, L. 2012.** "China's Post-90 Generation Make their Mark." *The Financial Times*, 9 July. [www.ft.com/intl/cms/s/0/4fcbab6c-c67d-11e1-963a-00144feabdc0.html](http://www.ft.com/intl/cms/s/0/4fcbab6c-c67d-11e1-963a-00144feabdc0.html). Accessed 15 July 2012.
- Hook, L., and P. Clark. 2012.** "China's Wind Groups Pick up Speed." *The Financial Times*, 15 July. [www.ft.com/intl/cms/s/0/fb4bc872-c674-11e1-963a-00144feabdc0.html](http://www.ft.com/intl/cms/s/0/fb4bc872-c674-11e1-963a-00144feabdc0.html). Accessed 15 July 2012.
- Hori, T. 2011.** "Educational Gender Inequality and Inverted U-Shaped Fertility Dynamics." *Japanese Economic Review* 62 (1): 126–150.
- Howell, J. 2004.** *Governance in China*. Lanham, MA: Rowman & Littlefield.
- Huntington, S. 1968.** *Political Order in Changing Societies*. Fredericksburg, VA: BookCrafters, Inc.
- Hussain, A., and N. Stern. 2006.** "Public Finance: The Role of the State and Economic Transformation in China: 1978–2020." *Comparative Studies* 26: 25–55.
- Hvistendahl, M. 2011.** "Unnatural Selection." *Psychology Today*, 5 July. [www.psychologytoday.com/articles/201107/unnatural-selection](http://www.psychologytoday.com/articles/201107/unnatural-selection). Accessed 24 July 2012.
- ICTSD (International Centre for Trade and Sustainable Development). 2011.** "Brazil Pushes Forward with Currency Discussion at WTO." *Bridges Weekly Trade News Digest* 15 (32): 5–7. <http://ictsd.org/i/news/bridgesweekly/114573/>.
- IIASA (International Institute for Applied Systems Analysis). 2008.** "Economic Growth in Developing Countries: Education Proves Key." Policy Brief 03. Laxenburg, Austria. [www.iiasa.ac.at/Admin/PUB/policy-briefs/pb03-web.pdf](http://www.iiasa.ac.at/Admin/PUB/policy-briefs/pb03-web.pdf). Accessed 4 June 2012.
- Iley, R.A., and M.K. Lewis. 2011.** "Has the Global Financial Crisis Produced a New World Order?" *Accounting Forum* 35 (2): 90–103.
- ILO (International Labour Organization). 2012.** *World of Work Report 2012: Better Jobs for a Better Economy*. Geneva. [www.ilo.org/wcmsp5/groups/public/--dgreports/--dcomm/--publ/documents/publication/wcms\\_179453.pdf](http://www.ilo.org/wcmsp5/groups/public/--dgreports/--dcomm/--publ/documents/publication/wcms_179453.pdf). Accessed 4 June 2012.
- IMF (International Monetary Fund). 2010.** "IMF Executive Board Approves Major Overhaul of Quotas and Governance." Press release 10/418. Washington, DC. [www.imf.org/external/np/sec/pr/2010/pr10418.htm](http://www.imf.org/external/np/sec/pr/2010/pr10418.htm). Accessed 15 May 2012.
- . **2011a.** "New Growth Drivers for Low-Income Countries: The Role of BRICs." Strategy, Policy, and Review Department, Washington, DC. [www.imf.org/external/np/pp/eng/2011/011211.pdf](http://www.imf.org/external/np/pp/eng/2011/011211.pdf). Accessed 15 May 2012.
- . **2011b.** *World Economic Outlook*. Washington, DC. [www.imf.org/external/pubs/ft/weo/2011/02/](http://www.imf.org/external/pubs/ft/weo/2011/02/). Accessed 15 May 2012.
- India Ministry of External Affairs. 2012.** "Fourth BRICS Summit – Delhi Declaration." 29 March. New Delhi. [www.mea.gov.in/mystart.php?id=190019162](http://www.mea.gov.in/mystart.php?id=190019162). Accessed 15 May 2012.
- India Ministry of Finance. 2012.** "Human Development." In *Economic Survey 2011–2012*. New Delhi. [www.indiabudget.nic.in/es2011-12/echap-13.pdf](http://www.indiabudget.nic.in/es2011-12/echap-13.pdf). Accessed 15 May 2012.
- Institute for Economics and Peace. 2012.** "Global Peace Index Fact Sheet." Sydney. [www.visionofhumanity.org/wp-content/uploads/2012/06/2012GPI-Fact-Sheet2.pdf](http://www.visionofhumanity.org/wp-content/uploads/2012/06/2012GPI-Fact-Sheet2.pdf). Accessed 28 August 2012.
- IPCC (Intergovernmental Panel on Climate Change). 2012.** *Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation*. Special Report of the Intergovernmental Panel on Climate Change. Cambridge, UK: Cambridge University Press. [http://ipcc-wg2.gov/SREX/images/uploads/SREX-All\\_FINAL.pdf](http://ipcc-wg2.gov/SREX/images/uploads/SREX-All_FINAL.pdf). Accessed 15 May 2012.
- Islam, I. 2002.** "Poverty, Employment and Wages: An Indonesian Perspective." International Labour Organization, Recovery and Reconstruction Department, Geneva.
- ITU (International Telecommunications Union). 2012.** World Telecommunication/ICT Indicators Database. [www.itu.int/ITU-D/ict/statistics/](http://www.itu.int/ITU-D/ict/statistics/). Accessed 15 May 2012.
- Ivanov, A., M. Collins, C. Grosu, J. Kling, S. Milcher, N. O'Higgins, B. Slay, and A. Zhelyazkova. 2006.** *At Risk: Roma and the Displaced in Southeast Europe*. Bratislava: United Nations Development Programme Regional Bureau for Europe and the Commonwealth of Independent States.
- Ivanov, A., K. Mizsei, B. Slay, D. Mihailov, and N. O'Higgins. 2003.** *Avoiding the Dependency Trap: The Roma Human Development Report*. Bratislava: United Nations Development Programme Regional Bureau for Europe and the Commonwealth of Independent States.
- Iyer, L. 2009.** "The Bloody Millennium: Internal Conflict in South Asia." Working Paper 09-086. Harvard Business School, Cambridge, MA. [www.hbs.edu/research/pdf/09-086.pdf](http://www.hbs.edu/research/pdf/09-086.pdf). Accessed 15 May 2012.
- Jacob, R. 2012.** "Flagging Western Demand Drives China's Exporters to New Markets." *Financial Times*, 13 June. [www.ftchinese.com/story/001045040/en/](http://www.ftchinese.com/story/001045040/en/). Accessed 15 May 2012.
- Jenkins, J.C., and M. Wallace. 1996.** "The Generalized Action Potential of Protest Movements: The New Class, Social Trends and Political Exclusion Explanations." *Sociological Forum* 11 (2): 183–207.
- Jenkins, R., and A. Barbosa. 2012.** "Fear for Manufacturing? China and the Future of Industry in Brazil and Latin America." *The China Quarterly* 209: 59–81.
- Jones, R., and H. Kierzkowski. 2001.** "Horizontal Aspects of Vertical Fragmentation." In L. Cheng and H. Kierzkowski, eds., *Global Production and Trade in East Asia*. Norwell, MA: Kluwer Academic Publishers.
- Justino, P. 2008.** "Tackling Civil Unrest: Policing or Redistribution?" MICROCON Policy Briefing Paper 2. Institute of Development Studies, Brighton, UK. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1141142&http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1141142](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1141142&http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1141142). Accessed 15 May 2012.
- Kabananukye, K. I. B., A. E.K. Kanbananukye, J. Krishnamurthy, and D. Owomugasho. 2004.** "Economic Growth, Employment, Poverty and Pro-Poor Policies in Uganda." Issues in Employment and Poverty Discussion Paper 16. International Labour Organization, Geneva. [www.ilo.org/employment/Whatwedo/Publications/WCMS\\_120732/lang-en/index.htm](http://www.ilo.org/employment/Whatwedo/Publications/WCMS_120732/lang-en/index.htm). Accessed 24 September 2012.
- Kabeer, N., and S. Mahmud. 2004.** "Rags, Riches and Women Workers: Export Oriented Garment Manufacturing in Bangladesh." In M. Carr, ed., *Chains of Fortune: Linking Women Producers and Workers with Global Markets*. London: Commonwealth Secretariat.
- Kahneman, D., and A. Krueger. 2006.** "Developments in the Measurement of Subjective Well-Being." *Journal of Economic Perspectives* 20 (21): 3–24.

- Kamau, P., D. McCormick, and N. Pinaud. 2009.** "The Developmental Impact of Asian Drivers on Kenya with Emphasis on Textiles and Clothing Manufacturing." *World Economy* 32 (11): 1586–1612.
- Kaminski, B., and F. Ng. 2006.** "Turkey's Evolving Trade Integration into Pan-European Markets." Working Paper 3908. World Bank, Development Research Group, Washington, DC. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1294804](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1294804). Accessed 15 May 2012.
- Kanbur, R. 2004.** "Growth, Inequality and Poverty: Some Hard Questions." Commentary prepared for the State of the World Conference at the Princeton Institute for International and Regional Studies, 13–14 February, Princeton, NJ. [www.arts.cornell.edu/poverty/kanbur/GrolneqPov.pdf](http://www.arts.cornell.edu/poverty/kanbur/GrolneqPov.pdf). Accessed 15 May 2012.
- Kaplinsky, R. 2008.** "What Does the Rise of China do for Industrialisation in Sub-Saharan Africa?" *Review of African Political Economy* 35 (1): 7–22.
- Kaplinsky, R., and M. Morris. 2009.** "The Asian Drivers and SSA: Is There a Future for Export-Oriented African Industrialization?" *The World Economy* 32 (11): 1638–1655.
- Kaplinsky, R., A. Terheggen, and J. Tijaja. 2011.** "China as a Final Market: The Gabon Timber and Thai Cassava Value Chains." *World Development* 39 (7): 1177–1190.
- Karimuddin, A. 2011.** "MarkPlus Insight Survey: Indonesia Has 55 Million Internet Users." *DailySocial.net*, 1 November. <http://dailysocial.net/en/2011/11/01/markplus-insight-survey-indonesia-has-55-million-internet-users/>. Accessed 15 May 2012.
- Kaul, I. 2013.** "The Rise of the Global South: Implications for the Provisioning of Global Public Goods." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Keohane, R., and D. Victor. 2010.** "The Regime Complex for Climate Change." Discussion Paper 10-33. Harvard University, John F. Kennedy School of Government, Harvard Project on International Climate Agreements. [http://belfercenter.ksg.harvard.edu/files/Keohane\\_Victor\\_Final\\_2.pdf](http://belfercenter.ksg.harvard.edu/files/Keohane_Victor_Final_2.pdf). Accessed 15 May 2012.
- Keynes, J.M. 1937.** "How to Avoid a Slump." *The Times*, 12–14 January. Reprinted in *The Collected Writings of John Maynard Keynes* Vol. 21. London: Macmillan.
- Khan, A.R. 2005.** "Growth, Employment and Poverty: An Analysis of the Vital Nexus Based on Some Recent UNDP and ILO/SIDA Studies." Issues in Employment and Poverty Discussion Paper 19. International Labour Office, Geneva. [www.ilo.org/wcmsp5/groups/public/---ed\\_emp/documents/publication/wcms\\_120683.pdf](http://www.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_120683.pdf). Accessed 24 September 2012.
- Kharas, H., K. Makino, and W. Jung, eds. 2011.** *Catalyzing Development: A New Vision of Aid*. Washington, DC: Brookings Institution Press.
- King, D., K. Richards, and S. Tyldesley. 2011.** "International Climate Change Negotiations: Key Lessons and Next Steps." University of Oxford, Smith School of Enterprise and the Environment, UK. [www.smithschool.ox.ac.uk/wp-content/uploads/2011/03/Climate-Negotiations-report\\_Final.pdf](http://www.smithschool.ox.ac.uk/wp-content/uploads/2011/03/Climate-Negotiations-report_Final.pdf). Accessed 15 May 2012.
- Kraemer, K., G. Linden, and J. Dedrick. 2011.** "Capturing Value in Global Networks: Apple's iPad and iPhone." University of California, Irvine, University of California, Berkeley, and Syracuse University, NY. [http://pcic.merage.uci.edu/papers/2011/Value\\_iPad\\_iPhone.pdf](http://pcic.merage.uci.edu/papers/2011/Value_iPad_iPhone.pdf). Accessed 15 May 2012.
- Kragelund, P. 2013.** "New Development Partnerships." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Krueger, A.B., and D.A. Schkade. 2008.** "The Reliability of Subjective Well-Being Measures." *Journal of Public Economics* 92 (8–9): 1833–1845.
- Krugman, P. 1991.** "The Move Towards Free Trade Zones." Symposium of the Federal Reserve Bank of Kansas City, 22–24 August, Jackson Hole, WY. [www.kansascityfed.org/publicat/sympos/1991/S91krugm.pdf](http://www.kansascityfed.org/publicat/sympos/1991/S91krugm.pdf). Accessed 23 October 2012.
- Kugler, M., and H. Rapoport. 2011.** "Migration, FDI, and the Margins of Trade." Working Paper 222. Harvard University, Center for International Development, Cambridge, MA.
- LaFraniere, S. 2011.** "Five Days Later, Chinese Concede Design Flaw Had Role in Wreck." *The New York Times*, 28 July. [www.nytimes.com/2011/07/29/world/asia/29trains.html](http://www.nytimes.com/2011/07/29/world/asia/29trains.html). Accessed 15 May 2012.
- Lamberte, M., and P.J. Morgan. 2012.** "Regional and Global Monetary Cooperation." Working Paper 346. Asian Development Bank Institute, Tokyo. [www.adbi.org/working-paper/2012/02/21/5006.regional.global.monetary.cooperation/](http://www.adbi.org/working-paper/2012/02/21/5006.regional.global.monetary.cooperation/). Accessed 15 May 2012.
- Lautier, M. 2008.** "Export of Health Services from Developing Countries: The Case of Tunisia." *Social Science and Medicine* 67: 101–110.
- Leape, J. 2012.** "It's Happening, But Not in Rio." *The New York Times*, 24 June. [www.nytimes.com/2012/06/25/opinion/action-is-happening-but-not-in-rio.html](http://www.nytimes.com/2012/06/25/opinion/action-is-happening-but-not-in-rio.html). Accessed 24 June 2012.
- Li, J. 2010.** "Decarbonising Power Generation in China—Is the Answer Blowing in the Wind?" *Renewable and Sustainable Energy Reviews* 14 (4): 1154–1171.
- López-Calva, L., and N. Lustig, eds. 2010.** *Declining Inequality in Latin America: A Decade of Progress?* Harrisonburg, VA: RR Donnelley.
- Luedi, T. 2008.** "China's Track Record in M&A." *McKinsey Quarterly*, June. [www.mckinseyquarterly.com/Chinas\\_track\\_record\\_in\\_MA\\_2151](http://www.mckinseyquarterly.com/Chinas_track_record_in_MA_2151). Accessed 15 May 2012.
- Lutz, W., and S. KC. 2013.** "Demography and Human Development: Education and Population Projections." Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.
- Maddison, A. 2010.** Statistics on World Population, GDP and Per Capita GDP, 1–2008 AD. Groningen Growth and Development Centre, The Netherlands. [www.ggdcc.net/MADDISON/oriindex.htm](http://www.ggdcc.net/MADDISON/oriindex.htm). Accessed 15 May 2012.
- Malik, M. 2006.** "Bilateral Investment Treaties of South Asian States: Implications for Development." United Nations Development Programme, Asia-Pacific Trade and Investment Initiative, Colombo.
- . 2012. *Why Has China Grown So Fast For So Long?* New Delhi: Oxford University Press India.
- Martin, T.C., and F. Juarez. 1995.** "The Impact of Women's Education on Fertility in Latin America: Searching for Explanations." *International Family Planning Perspectives* 12 (2): 52–57, 80.
- Milanović, B. 2009.** "Global Inequality and the Global Inequality Extraction Ratio." Policy Research Working Paper 5044. World Bank, Development Research Group, Poverty and Inequality Team, Washington, DC. [http://www-wds.worldbank.org/servlet/WDSContentServer?WDSPath=/ib/2009/09/09/000158349\\_20090909092401/Rendered/PDF/WPS5044.pdf](http://www-wds.worldbank.org/servlet/WDSContentServer?WDSPath=/ib/2009/09/09/000158349_20090909092401/Rendered/PDF/WPS5044.pdf). Accessed 15 May 2012.
- . 2010. *The Haves and the Have-Nots: A Brief and Idiosyncratic History of Global Inequality*. New York: Basic Books.
- Milanović, B., and S. Yitzhaki. 2002.** "Decomposing World Income Distribution: Does the World Have a Middle Class?" *Review of Income and Wealth* 48(2): 155–178.
- Moyo, D. 2012.** "Beijing, a Boon for Africa." *The New York Times*, 27 June. [www.nytimes.com/2012/06/28/opinion/beijing-a-boon-for-africa.html](http://www.nytimes.com/2012/06/28/opinion/beijing-a-boon-for-africa.html). Accessed 28 August 2012.
- Mwase, N., and Y. Yang. 2012.** "BRICs' Philosophies for Development Financing and Their Implications for LICs." Working Paper WP/12/74. International Monetary Fund, Washington, DC.
- Nagel, T. 1974.** "What Is It Like To Be a Bat?" *The Philosophical Review* 83 (4): 435–450.
- Naqvi, H., and V.V. Acharya. 2012.** "Bank Liquidity and Bubbles: Why Central Banks Should Lean Against Liquidity." In D. Evanoff, G. Kaufman, and A.G. Malliaris, eds., *New Perspectives on Asset Price Bubbles: Theory, Evidence and Policy*. Oxford, UK: Oxford University Press.
- Nayyar, D. 2012.** "Macroeconomics and Human Development." *Journal of Human Development and Capabilities* 13 (1): 7–30.
- NEAC (Malaysia National Economic Advisory Council). 2010.** "New Economic Model for Malaysia, Parts 1 and 2." Kuala Lumpur.
- Nielsen, H., and A. Spenceley. 2011.** "The Success of Tourism in Rwanda: Gorillas and More." In P. Chuhan-Pole and M. Angwafo, eds., *Yes Africa Can: Success Stories from a Dynamic Continent*. Washington, DC: World Bank. [http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC\\_Consolidated\\_Web.pdf](http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC_Consolidated_Web.pdf). Accessed 10 August 2012.
- Ocampo, J.A. 2010.** "Rethinking Global Economic and Social Governance." *Journal of Globalization and Development* 1 (1).
- Ocampo J.A., S. Griffith-Jones, A. Noman, A. Ortiz, J. Vallejo, and J. Tyson. 2010.** "The Great Recession and the Developing World." Paper presented at the conference on Development Cooperation in Times of Crisis and on Achieving the MDGs, 9–10 June, Madrid.
- Ocampo, J.A., and D. Titelman. 2009.** "Subregional Financial Cooperation: the South American Experience." *Journal of Post-Keynesian Economics* 32 (2): 249–68.
- . 2012. "Regional Monetary Cooperation in Latin America." Columbia University, Initiative for Policy Dialogue, New York, and United Nations Economic Commission for Latin America and the Caribbean, Financing for Development Division, Santiago.
- OECD (Organisation for Economic Co-operation and Development). 2006.** *Promoting Pro-Poor Growth: Agriculture*. Paris. [www.oecd.org/dac/povertyreduction/37922155.pdf](http://www.oecd.org/dac/povertyreduction/37922155.pdf). Accessed 23 October 2012.
- . 2007. "Economic Survey of India, 2007." *OECD Observer*, October. Policy Brief. [www.oecd.org/economy/](http://www.oecd.org/economy/)

- economicsurveysandcountrysurveillance/39452196.pdf. Accessed 6 August 2012.
- . **2010a.** *Perspectives on Global Development 2010: Shifting Wealth*. Paris.
- . **2010b.** *PISA 2009 Results: What Students Know and Can Do*. Vol. I. Paris. [www.oecd.org/dataoecd/10/61/48852548.pdf](http://www.oecd.org/dataoecd/10/61/48852548.pdf). Accessed 24 July 2012.
- . **2011a.** "Brazil." In *Agricultural Policy Monitoring and Evaluation 2011*. Paris. [www.oecd-ilibrary.org/agriculture-and-food/agricultural-policy-monitoring-and-evaluation-2011/brazil\\_agr\\_pol-2011-22-en](http://www.oecd-ilibrary.org/agriculture-and-food/agricultural-policy-monitoring-and-evaluation-2011/brazil_agr_pol-2011-22-en). Accessed 23 October 2012.
- . **2011b.** *Divided We Stand: Why Inequality Keeps Rising*. Paris.
- . **2011c.** "Busan Partnership for Effective Development Cooperation." Paris. [www.oecd.org/dac/aideffectiveness/busanpartnership.htm](http://www.oecd.org/dac/aideffectiveness/busanpartnership.htm). Accessed 24 July 2011.
- Oforu-Asare, K. 2011.** "Mobile Phone Revolution in Ghana's Cocoa Industry." *International Journal of Business and Social Science* 2 (13): 91–99.
- Osmani, S.R. 2005.** "The Employment Nexus between Growth and Poverty: An Asian Perspective." Swedish International Development Cooperation Agency, Stockholm.
- Osmani, S.R., W. Mahmud, B. Sen, H. Dagdeviren, and A. Seth. 2006.** "The Macroeconomics of Poverty Reduction: The Case Study of Bangladesh." United Nations Development Programme, Asia-Pacific Regional Programme on the Macroeconomics of Poverty Reduction, New York.
- Pardee Center for International Futures. 2013.** "Development-Oriented Policies and Alternative Human Development Paths." Background paper for the 2013 *Human Development Report*. United Nations Development Programme, Human Development Report Office, New York.
- Park, K. 2011.** "New Development Partners and a Global Development Partnership." In H. Kharas, K. Makino, and W. Jung, eds., *Catalyzing Development: A New Vision for Aid*. Washington, DC: Brookings Institution Press.
- Pasha, H.A., and T. Palanivel. 2004.** "Pro-Poor Growth and Policies: The Asian Experience." United Nations Development Programme, Asia-Pacific Regional Programme on the Macroeconomics of Poverty Reduction, New York.
- Pinker, S. 2011.** "Violence Vanquished." *The Wall Street Journal*, 24 September. <http://online.wsj.com/article/SB10001424053111904106704576583203589408180.html>. Accessed 15 May 2012.
- Polanyi, K. 1944.** *The Great Transformation*. New York: Rinehart.
- Population Reference Bureau. 2000.** "Is Education the Best Contraceptive?" Policy Brief. Population Reference Bureau, Washington, DC. [www.prb.org/Publications/PolicyBriefs/IsEducationtheBestContraceptive.aspx](http://www.prb.org/Publications/PolicyBriefs/IsEducationtheBestContraceptive.aspx). Accessed 15 May 2012.
- Psacharopoulos G., and Z. Tzannatos. 1992.** "Latin American Women's Earnings and Participation in the Labor Force." Working Paper 856. World Bank, Washington, DC. [http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469372&piPK=64165421&menuPK=64166322&entityID=000009265\\_3961002093302](http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469372&piPK=64165421&menuPK=64166322&entityID=000009265_3961002093302). Accessed 15 May 2012.
- Radelet, S., J. Sachs, and J.-W. Lee. 1997.** "Economic Growth in Asia." Development Discussion Paper 609. Harvard Institute for International Development, Cambridge, MA.
- Ranis, G., and F. Stewart. 2005.** "Dynamic Links Between the Economy and Human Development." Working Paper 8. United Nations Department of Economic and Social Affairs, New York. [www.un.org/esa/desa/papers/2005/wp8\\_2005.pdf](http://www.un.org/esa/desa/papers/2005/wp8_2005.pdf). Accessed 15 May 2012.
- Ratha, D., and W. Shaw. 2007.** "South-South Migration and Remittances." Working Paper 102. World Bank, Washington, DC. <http://siteresources.worldbank.org/INTPROSPECTS/Resources/334934-1110315015165/SouthSouthMigrationandRemittances.pdf>. Accessed 15 May 2012.
- Ravallion, M. 2009.** "A Comparative Perspective on Poverty Reduction in Brazil, China and India." Policy Research Working Paper 5080. World Bank, Washington, DC. [http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469382&piPK=64165421&menuPK=64166093&entityID=000158349\\_20091130085835](http://econ.worldbank.org/external/default/main?pagePK=64165259&theSitePK=469382&piPK=64165421&menuPK=64166093&entityID=000158349_20091130085835). Accessed 15 May 2012.
- REN21 (Renewable Energy Policy Network for the 21st Century). 2012.** *Renewables Global Status Report*. Paris. [www.map.ren21.net/GSR/GSR2012.pdf](http://www.map.ren21.net/GSR/GSR2012.pdf). Accessed 15 May 2012.
- Reserve Bank of India. 2012.** "Reserve Bank of India Announces SAARC Swap Arrangement." Press Release, 16 May. Mumbai. [www.rbi.org.in/scripts/BS\\_PressReleaseDisplay.aspx?prid=26475](http://www.rbi.org.in/scripts/BS_PressReleaseDisplay.aspx?prid=26475). Accessed 15 May 2012.
- Revin, A. 2012.** "Beyond Rio: Pursuing 'Ecological Citizenship.'" *The New York Times*, 25 June. <http://dotearth.blogs.nytimes.com/2012/06/25/beyond-rio-pursuing-ecological-citizenship/>. Accessed 25 June 2012.
- Ribas, R., V. Veras Soares, and G. Hirata. 2008.** "The Impact of CCTs: What We Know and What We Are Not Sure About." Poverty in Focus 15. International Poverty Centre for Inclusive Growth, Brasilia.
- Rockström, J., W. Steffen, K. Noone, Å. Persson, F.S. Chapin, III, E. Lambin, T.M. Lenton, M. Scheffer, C. Folke, H. Schellnhuber, B. Nykvist, C.A. De Wit, T. Hughes, S. van der Leeuw, H. Rodhe, S. Sörlin, P.K. Snyder, R. Costanza, U. Svedin, M. Falkenmark, L. Karlberg, R.W. Corell, V.J. Fabry, J. Hansen, B. Walker, D. Liverman, K. Richardson, P. Crutzen, and J. Foley. 2009.** "Planetary Boundaries: Exploring the Safe Operating Space for Humanity." *Ecology and Society* 14 (2). [www.ecologyandsociety.org/vol14/iss2/art32/](http://www.ecologyandsociety.org/vol14/iss2/art32/). Accessed 15 May 2012.
- Rodriguez, F., and D. Rodrik. 2001.** "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence." *NBER Macroeconomics Annual* 2000 15: 261–338.
- Rodrik, D. 1998.** *Democracies Pay Higher Wages*. Working Paper 6364. Cambridge, MA: National Bureau of Economic Research.
- . **2001.** "The Global Governance of Trade as if Development Really Mattered." Background Paper prepared for the United Nations Development Programme. [www.wcfia.harvard.edu/sites/default/files/529\\_Rodrik5.pdf](http://www.wcfia.harvard.edu/sites/default/files/529_Rodrik5.pdf). Accessed 6 August 2012.
- . **2004.** "Industrial Policy for the Twenty-first Century." Draft prepared for the United Nations Industrial Development Organization. Harvard University, John F. Kennedy School of Government, Cambridge, MA. [www.hks.harvard.edu/fs/drodrik/Research%20papers/UNIDOSep.pdf](http://www.hks.harvard.edu/fs/drodrik/Research%20papers/UNIDOSep.pdf). Accessed 6 August 2012.
- . **2005.** "Notes on Trade and Industrialization Policy, in Turkey and Elsewhere." *METU Studies in Development* 32 (1): 259–274.
- . **2006.** *The Social Cost of Foreign Exchange Reserves*. Working Paper 11952. Cambridge, MA: National Bureau of Economic Research. [www.nber.org/papers/w11952](http://www.nber.org/papers/w11952). Accessed 15 May 2012.
- . **2011.** *The Globalization Paradox: Democracy and the Future of the World Economy*. New York: W.W. Norton.
- . **2012.** "Global Poverty amid Global Plenty: Getting Globalization Right." *Americas Quarterly*, Spring: 40–45.
- Romero, S. 2012.** "Brazil Gains Business and Influence as It Offers Aid and Loans in Africa." *The New York Times*, 7 August. [www.nytimes.com/2012/08/08/world/americas/brazil-gains-in-reaching-out-to-africa.html](http://www.nytimes.com/2012/08/08/world/americas/brazil-gains-in-reaching-out-to-africa.html). Accessed 8 August 2012.
- Romero, S., and J.M. Broder. 2012.** "Progress on the Sidelines as Rio Conference Ends." *The New York Times*, 23 June. [www.nytimes.com/2012/06/24/world/americas/rio20-conference-ends-with-some-progress-on-the-sidelines.html](http://www.nytimes.com/2012/06/24/world/americas/rio20-conference-ends-with-some-progress-on-the-sidelines.html). Accessed 4 November 2012.
- Rose, P. 1995.** "Female Education and Adjustment Programs: A Cross-Country Statistical Analysis." *World Development* 23 (11): 1931–1949.
- Rosenfeld, R., S. Messner, and E. Baumer. 2001.** "Social Capital and Homicide." *Social Forces* 80 (1): 283–310.
- Sachs, J.D., and A. Warner. 1995.** "Economic Reform and the Process of Global Integration." *Brookings Papers on Economic Activity* 1: 1–118.
- Sala-i-Martin, X. 2006.** "The World Distribution of Income: Falling Poverty and . . . Convergence, Period." *Quarterly Journal of Economics* 121 (2): 351–397.
- Samake, I., and Y. Yang. 2011.** "Low-Income Countries' BRIC Linkage: Are There Growth Spillovers?" Working Paper 11/267. International Monetary Fund, Washington, DC. [www.imf.org/external/pubs/ft/wp/2011/wp11267.pdf](http://www.imf.org/external/pubs/ft/wp/2011/wp11267.pdf). Accessed 15 May 2012.
- Sen, A. 2007.** "Unity and Discord in Social Development." Keynote lecture delivered at the 15th Symposium of the International Consortium for Social Development at the Polytechnic University of Hong Kong, 16–20 July, Hong Kong, China (SAR).
- . **2012.** "A Crisis of European Democracy." *The New York Times*, 22 May. [www.nytimes.com/2012/05/23/opinion/the-crisis-of-european-democracy.html](http://www.nytimes.com/2012/05/23/opinion/the-crisis-of-european-democracy.html). Accessed 15 July 2012.
- Serbessa, D.D. 2002.** "Differential Impact of Women's Educational Level on Fertility in Africa: The Case of Ethiopia." Hiroshima University, Japan. [http://home.hiroshima-u.ac.jp/cice/e-forum/69Differential%20Impact%20Ed%20on%20Pop%20\\_Final\\_.pdf](http://home.hiroshima-u.ac.jp/cice/e-forum/69Differential%20Impact%20Ed%20on%20Pop%20_Final_.pdf). Accessed 15 May 2012.
- Serra, N., and J. E. Stiglitz. 2008.** *The Washington Consensus Reconsidered: Towards a New Global Governance*. Oxford, UK: Oxford University Press.
- Sharma, R. 2012.** *Breakout Nations: In Pursuit of the Next Economic Miracles*. New York: W.W. Norton.
- Sivananthiran, A., and C.S. Venkata Ratnam, eds. 2005.** *Informal Economy: The Growing Challenge for*

Labor Administration. Geneva: International Labour Office.

**Smith, A. 1776.** *An Inquiry into the Nature and Causes of the Wealth of Nations*. New York: Modern Library.

**Sobhan, R. 2010.** *Challenging the Injustice of Poverty*. Washington, DC: Sage.

———. **2013.** “Commentary on Financial Architectures and Development: Resilience, Policy Space, and Human Development in the Global South by Prof. Ilene Grabel.” Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.

**Socialbakers.com. 2012.** Facebook Statistics by Country. [www.socialbakers.com/facebook-statistics/](http://www.socialbakers.com/facebook-statistics/). Accessed 15 May 2012.

**Sonobe, T., J.E. Akoten, and K. Otsuka. 2009.** “An Exploration into the Successful Development of the Leather-Shoe Industry in Ethiopia.” *Review of Development Economics* 13 (4): 719–736.

**South Commission. 1990.** *The Challenge to the South: The Report of the South Commission*. Oxford, UK: Oxford University Press. [www.southcentre.org/files/Old%20Books/The%20Challenge%20to%20the%20Southresized.pdf](http://www.southcentre.org/files/Old%20Books/The%20Challenge%20to%20the%20Southresized.pdf). Accessed 23 October 2012.

**Ssewanyana, S., J.M. Matovu, and E. Twimukye. 2011.** “Building on Growth in Uganda.” In P. Chuhan-Pole and M. Angwafo, eds., *Yes Africa Can: Success Stories From A Dynamic Continent*. Washington, DC: World Bank. [http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC\\_Consolidated\\_Web.pdf](http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC_Consolidated_Web.pdf). Accessed 10 August 2012.

**Stads, G.-J., and N.M. Beintema. 2009.** *Public Agricultural Research in Latin America and the Caribbean: Investment and Capacity Trends*. ASTI Synthesis Report. Washington: International Food Policy Research Institute. [www.asti.cgiar.org/pdf/LAC\\_Syn\\_Report.pdf](http://www.asti.cgiar.org/pdf/LAC_Syn_Report.pdf). Accessed 23 October 2012.

**Stern, N. 2003.** “Public Policy for Growth and Poverty Reduction.” *CESifo Economic Studies* 49 (1): 5–25.

———. **2006.** *The Stern Review Report on the Economics of Climate Change*. Cambridge, UK: Cambridge University Press.

**Stewart, F. 2013.** “Capabilities and Human Development: Beyond the Individual: The Critical Role of Social Institutions and Social Competencies.” Human Development Research Paper. United Nations Development Programme, Human Development Report Office, New York.

**Stiglitz, J.E. 2012.** “Macroeconomic Fluctuations, Inequality, and Human Development.” *Journal of Human Development and Capabilities* 13 (1): 31–58.

**Stiglitz, J.E., A. Sen, and J.-P. Fitoussi. 2009.** *Report by the Commission on the Measurement of Economic Performance and Social Progress*. Paris: Commission on the Measurement of Economic Performance and Social Progress.

**Subramanian, A., and D. Roy. 2001.** “Who Can Explain the Mauritania Miracle: Meade, Romer, Sachs, or Rodrik?” Working Paper 01/116. International Monetary Fund, Washington, DC. [www.imf.org/external/pubs/cat/longres.cfm?sk=15215.0](http://www.imf.org/external/pubs/cat/longres.cfm?sk=15215.0). Accessed 15 May 2012.

**Supreme Court of India. 2012.** “Society for Un-aided Private Schools of Rajasthan Petitioner(s) versus U.O.I. &

Anr.” Supreme Court judgement of 12 April 2012 on Writ Petition (C) No. 95 of 2010.

**Suri, T., M.A. Boozer, G. Ranis, and F. Stewart. 2011.** “Paths to Success: The Relationship between Human Development and Economic Growth.” *World Development* 39 (4): 506–522.

**Tangcharoensathien, V., W. Patcharanarumol, P. Ir, S.M. Aljunid, A.G. Mukti, K. Akkhavong, E. Banzon, D.B. Huong, H. Thabrany, and A. Mills. 2011.** “Health-Financing Reforms in Southeast Asia: Challenges in Achieving Universal Coverage.” *The Lancet* 377 (9768): 863–873.

**Taylor, C.E., J.S. Newman, and N.U. Kelly. 1976.** “The Child Survival Hypothesis.” *Population Studies* 30 (2): 263–278.

**Tejada, C. 2012.** “China Cancels Waste Project after Protests Turn Violent.” *Wall Street Journal*, 28 July. <http://business.newsplurk.com/2012/07/china-cancels-waste-project-after.html>. Accessed 21 December 2012.

**Thorp, R., and M. Paredes. 2011.** *Ethnicity and the Persistence of Inequality: The Case of Peru*. Basingstoke, UK: Palgrave Macmillan.

**Tomlinson, B.R. 2003.** “What Was the Third World?” *Journal of Contemporary History* 38 (2): 307–321.

**Tsounta, E. 2009.** “Universal Health Care 101: Lessons from the Eastern Caribbean and Beyond.” Working Paper WP/09/61. International Monetary Fund, Washington, DC. [www.imf.org/external/pubs/ft/wp/2009/wp0961.pdf](http://www.imf.org/external/pubs/ft/wp/2009/wp0961.pdf). Accessed 15 May 2012.

**UNCTAD (United Nations Conference on Trade and Development). 2003.** *World Investment Report 2003: FDI Policies for Development: National and International Perspectives*. New York and Geneva.

———. **2006.** *A Case Study of the Salmon Industry in Chile*. New York and Geneva. [http://unctad.org/en/docs/iteiit200512\\_en.pdf](http://unctad.org/en/docs/iteiit200512_en.pdf). Accessed 15 May 2012.

———. **2011a.** World Investment Report 2011 Annex Tables. <http://archive.unctad.org/Templates/Page.asp?intItemID=5823&lang=1>. Accessed 15 May 2012.

———. **2011b.** “South-South Integration Is Key to Rebalancing the Global Economy.” Policy Brief 22. United Nations Conference on Trade and Development, Geneva. [http://unctad.org/en/Docs/presspb20114\\_en.pdf](http://unctad.org/en/Docs/presspb20114_en.pdf). Accessed 2 November 2012.

**UNDESA (United Nations Department of Economic and Social Affairs). 2007.** *World Economic and Social Survey 2007: Development in an Ageing World*. New York: United Nations Publications.

———. **2010.** *Development Cooperation for the MDGs: Maximizing Results*. New York: United Nations.

**UNDP (United Nations Development Programme). 1991.** *Human Development Report 1991*. New York: Oxford University Press.

———. **1993.** *Human Development Report 1993*. New York: Oxford University Press.

———. **1994.** *Human Development Report 1994*. New York: Oxford University Press.

———. **1995.** *Human Development Report 1995*. New York: Oxford University Press.

———. **1996.** *Human Development Report 1996*. New York: Oxford University Press.

———. **2008.** *China Human Development Report 2007/08: Access for All: Basic Public Services for 1.3 Billion People*. Beijing: China Translation and Publishing Corporation.

———. **2009.** *Human Development Report 2009: Overcoming Barriers: Human Mobility and Development*. New York: Palgrave Macmillan.

———. **2010a.** *Human Development Report 2010: The Real Wealth of Nations: Pathways to Human Development*. New York: Oxford University Press.

———. **2010b.** *Regional Human Development Report for Latin America and the Caribbean 2010: Acting on the Future: Breaking the Intergenerational Transmission of Inequality*. New York.

———. **2010c.** *China Human Development Report 2009/10: China and A Sustainable Future: Towards a Low Carbon Economy and Society*. Beijing: China Translation and Publishing Corporation.

———. **2011a.** *Human Development Report 2011: Sustainability and Equality: A Better Future for All*. New York: Palgrave Macmillan.

———. **2011b.** *Regional Human Development Report: Beyond Transition: Towards Inclusive Societies*. Bratislava.

———. **2012.** *Caribbean Human Development Report 2012: Human Development and the Shift to Better Citizen Security*. New York.

**UNESCAP (United Nations Economic and Social Commission for Asia and the Pacific). 2011.** *The Promise of Protection: Social Protection and Development in Asia and the Pacific*. Bangkok.

**UNESCO (United Nations Educational, Scientific, and Cultural Organization) Institute for Statistics. Various years.** Data Centre. <http://stats.uis.unesco.org>. Accessed 15 May 2012.

**UNIDO (United Nations Industrial Development Organization). 2009.** *Industrial Development Report 2009: Breaking In and Moving Up: New Industrial Challenges for the Bottom Billion and the Middle-Income Countries*. Vienna.

**United Kingdom, Office of the Deputy Prime Minister, Social Exclusion Unit. 2002.** “Reducing Re-Offending by Ex-Prisoners.” London. [www.thelearningjourney.co.uk/file.2007-10-01.1714894439/file\\_view](http://www.thelearningjourney.co.uk/file.2007-10-01.1714894439/file_view). Accessed 15 May 2012.

**United Nations. 2012a.** “The State of South-South Cooperation: Report of the Secretary-General.” Sixty-Seventh Session of the General Assembly. New York.

———. **2012b.** *The Millennium Development Goals Report 2012*. New York. [www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf](http://www.un.org/millenniumgoals/pdf/MDG%20Report%202012.pdf). Accessed 15 May 2012.

**United Nations Enable. 2012.** “Factsheet on Persons with Disabilities.” [www.un.org/disabilities/default.asp?id=18](http://www.un.org/disabilities/default.asp?id=18). Accessed 24 July 2012.

**United Nations Office for Disaster Risk Reduction. 2009.** “Terminology.” Geneva. [www.unisdr.org/we/inform/terminology](http://www.unisdr.org/we/inform/terminology). Accessed 8 December 2012.

**United Nations Secretary-General’s High Level Panel on Global Sustainability. 2012.** *Resilient People, Resilient Planet: A Future Worth Choosing*. New York: United Nations.

**United Nations Security Council. 2011.** “Letter Dated 9 November 2011 from the Permanent Representative of Brazil to the United Nations Addressed to the

- Secretary-General." Sixty-Sixth Session, Agenda Items 14 and 117. UN-Doc A/66/551-S/2011/701. [www.un.int/brazil/speech/Concept-Paper-%20RwP.pdf](http://www.un.int/brazil/speech/Concept-Paper-%20RwP.pdf). Accessed 15 May 2012.
- UNODC (United Nations Office on Drug and Crime).** **2012.** *2011 Global Study on Homicide: Trends, Contexts, Data*. [www.unodc.org/documents/data-and-analysis/statistics/Homicide/Globa\\_study\\_on\\_homicide\\_2011\\_web.pdf](http://www.unodc.org/documents/data-and-analysis/statistics/Homicide/Globa_study_on_homicide_2011_web.pdf). Accessed 30 May 2012.
- UNSD (United Nations Statistics Division).** **2012.** United Nations Commodity Trade Statistics Database. <http://comtrade.un.org>. Accessed 15 May 2012.
- UNWTO (World Tourism Organization).** **2011.** *Tourism Highlights: 2011 Edition*. Geneva.
- Vos, R.** **2010.** "The Crisis of Globalization as an Opportunity to Create a Fairer World." *Journal of Human Development and Capabilities* 11 (1): 143–160.
- Wacziarg, R., and K.H. Welch.** **2008.** "Trade Liberalization and Growth: New Evidence." *World Bank Economic Review* 22 (2): 187–231.
- Westaway, J.** **2012.** "Globalization, Sovereignty and Social Unrest." *Journal of Politics and Law* 5 (2): 132–139.
- Whalley, J., and A. Weisbrod.** **2011.** "The Contribution of Chinese FDI to Africa's Pre-Crisis Growth Surge." VoxEU, 21 December. [www.voxeu.org/article/contribution-chinese-fdi-africa-s-growth](http://www.voxeu.org/article/contribution-chinese-fdi-africa-s-growth). Accessed 15 May 2012.
- Wilkinson, R., and K. Pickett.** **2009.** *The Spiritual Level*. New York: Bloomsbury Press.
- . **2012.** "Sorry Nick Clegg – Social Mobility and Austerity Just Don't Mix." *The Guardian*, 15 May. [www.guardian.co.uk/commentisfree/2012/may/15/nick-clegg-social-mobility-austerity](http://www.guardian.co.uk/commentisfree/2012/may/15/nick-clegg-social-mobility-austerity). Accessed 15 May 2012.
- Wines, M., and S. LaFraniere.** **2011.** "In Baring Facts of Train Crash, Blogs Erode China Censorship." *The New York Times*, 28 July. [www.nytimes.com/2011/07/29/world/asia/29china.html](http://www.nytimes.com/2011/07/29/world/asia/29china.html). Accessed 15 May 2012.
- Winters, L.A.** **2004.** "Trade Liberalisation and Economic Performance: An Overview." *Economic Journal* 114 (493): F4–F21.
- Wiseman, P.** **2002.** "China Thrown Off Balance as Boys Outnumber Girls." *USA Today*, 19 June. [www.usatoday.com/news/world/2002/06/19/china-usat.htm](http://www.usatoday.com/news/world/2002/06/19/china-usat.htm). Accessed 24 July 2012.
- Woods, N.** **2010.** "Global Governance after the Financial Crisis: A New Multilateralism or the Last Gasp of the Great Powers?" *Global Policy* 1 (1): 51–63.
- World Bank.** **2003.** *Private Participation in Infrastructure: Trends in Developing Countries in 1990–2001*. Washington, DC. <http://documents.worldbank.org/curated/en/2003/01/2522708/private-participation-infrastructure-trends-developing-countries-1990-2001>. Accessed 15 May 2012.
- . **2006.** *Global Economic Prospects: Economic Implications of Remittances and Migration*. Washington, DC. <http://go.worldbank.org/0G6XW1UPP0>. Accessed 15 May 2012.
- . **2008.** *World Development Report 2009: Reshaping Economic Geography*. Washington, DC. <http://web.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTRESEARCH/EXTWDRS/0,,contentMDK:23062295–pagePK:478093–piPK:477627–theSitePK:477624,00.html>. Accessed 15 May 2012.
- . **2010a.** Bilateral Migration and Remittances. <http://go.worldbank.org/JITC7NYTTO>. Accessed 15 May 2012.
- . **2010b.** *Thailand Economic Monitor*. Bangkok. [http://siteresources.worldbank.org/THAILANDEXTN/Resources/333295-1280288892663/THM\\_June2010\\_fullreport.pdf](http://siteresources.worldbank.org/THAILANDEXTN/Resources/333295-1280288892663/THM_June2010_fullreport.pdf). Accessed 15 May 2012.
- . **2010c.** *Arab Development Assistance: Four Decades of Cooperation*. Washington, DC. <http://siteresources.worldbank.org/INTMENA/Resources/ADAPub82410web.pdf>. Accessed 15 May 2012.
- . **2010d.** "World Bank Reforms Voting Power, Gets \$86 Billion Boost." Press Release, 25 April. Washington, DC. <http://web.worldbank.org/WBSITE/EXTERNAL/NEWS/0,,contentMDK:22556045–pagePK:64257043–piPK:437376–theSitePK:4607,00.html>. Accessed 15 May 2012.
- . **2011a.** *Malaysia Economic Monitor: Brain Drain*. Washington, DC. <http://documents.worldbank.org/curated/en/2011/04/14134061/malaysia-economic-monitor-brain-drain>. Accessed 15 May 2012.
- . **2011b.** *Growing Old in Older Brazil*. Washington, DC.
- . **2012a.** World Development Indicators Database. <http://data.worldbank.org/>. Accessed 15 May 2012.
- . **2012b.** "An Update to World Bank's Estimates of Consumption Poverty in the Developing World." Briefing Note. Washington, DC. [http://siteresources.worldbank.org/INTPOVCALNET/Resources/Global\\_Poverty\\_Update\\_2012\\_02-29-12.pdf](http://siteresources.worldbank.org/INTPOVCALNET/Resources/Global_Poverty_Update_2012_02-29-12.pdf). Accessed 15 May 2012.
- . **n.d.** "India Transport: Public Private Partnership." <http://web.worldbank.org/WBSITE/EXTERNAL/COUNTRIES/SOUTHASIAEXT/0,,contentMDK:22020973–pagePK:146736–piPK:146830–theSitePK:223547,00.html>. Accessed 15 May 2012.
- WTO (World Trade Organization).** **n.d.** "The Doha Round." [www.wto.org/english/tratop\\_e/dda\\_e/dda\\_e.htm](http://www.wto.org/english/tratop_e/dda_e/dda_e.htm). Accessed 28 December 2012.
- Xing, Y., and N. Detert.** **2010.** "How the iPhone Widens the United States Trade Deficit with the People's Republic of China." Working Paper 257. Asian Development Bank Institute, Tokyo. [www.adbi.org/working-paper/2010/12/14/4236.iphone.widens.us.trade.deficit.prc/](http://www.adbi.org/working-paper/2010/12/14/4236.iphone.widens.us.trade.deficit.prc/). Accessed 15 May 2012.
- Zafar, A.** **2011.** "Mauritius: An Economic Success Story." In P. Chuhan-Pole and M. Angwafo, eds., *Yes Africa Can: Success Stories From A Dynamic Continent*. Washington, DC: World Bank. [http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC\\_Consolidated\\_Web.pdf](http://siteresources.worldbank.org/AFRICAEXT/Resources/258643-1271798012256/YAC_Consolidated_Web.pdf). Accessed 10 August 2012.
- Zuckerberg, M.** **2012.** "One Billion People on Facebook." <http://newsroom.fb.com/News/457/One-Billion-People-on-Facebook>. Accessed 4 October 2012.
- Zuzana, B., and L. Ndikumana.** **Forthcoming.** "The Global Financial Crisis and Africa: The Effects and Policy Responses." In G. Epstein and M. H. Wolfson, eds., *The Oxford Handbook of the Political Economy of Financial Crisis*. Oxford, UK: Oxford University Press.

# Statistical annex

<b>Readers guide</b>	<b>140</b>
<b>Key to HDI countries and ranks, 2012</b>	<b>143</b>
<b>Statistical tables</b>	<b>144</b>
<b>Human development indices</b>	
1 Human Development Index and its components	144
2 Human Development Index trends, 1980–2012	148
3 Inequality-adjusted Human Development Index	152
<b>Experimental indices</b>	
4 Gender Inequality Index	156
5 Multidimensional Poverty Index	160
<b>Human development indicators</b>	
6 Command over resources	162
7 Health	166
8 Education	170
9 Social integration	174
10 International trade flows of goods and services	178
11 International capital flows and migration	182
12 Innovation and technology	186
13 Environment	190
14 Population trends	194
<b>Regions</b>	<b>198</b>
<b>Statistical references</b>	<b>199</b>
<b>Technical appendix: explanatory note for projections exercise</b>	<b>200</b>

# Readers guide

The 14 statistical tables provide an overview of key aspects of human development. The tables include composite indices estimated by the Human Development Report Office (HDRO) using data available to the HDRO on 15 October 2012. All indicators, along with the technical notes on the calculation of composite indicators and additional sources of information, are available online at <http://hdr.undp.org/en/statistics>.

Countries and territories are ranked by their 2012 HDI value. Robustness and reliability analysis has shown that for most countries the HDI is not statistically significant at the third decimal place (see Aguna and Kovacevic 2011 and Høyland, Moene and Willumsen 2011). For this reason countries with the same HDI value at the third decimal place are listed with tied ranks.

## Sources and definitions

The HDRO uses data from international data agencies with the mandate, resources and expertise to collect national data on specific indicators, unless otherwise noted.

Definitions of indicators and sources for original data components are given at the end of each table, with full source details in *Statistical references*.

## Comparisons over time and across editions of the Report

Because national and international data agencies continually improve their data series, the data—including the HDI values and ranks—presented in this Report are not comparable to those published in earlier editions. For the HDI, trends using consistent data calculated at five-year intervals for 1980–2012 are presented in table 2.

## Discrepancies between national and international estimates

National and international data estimates can vary because international agencies harmonize national data for comparability across countries, produce an estimate of missing data or do not incorporate the most recent national data. When HDRO becomes aware of discrepancies, these are brought to the attention of national and international data authorities.

## Country groupings and aggregates

Several weighted aggregates are presented in the tables. In general, an aggregate is shown only when data are available for at least half the countries and represent at least two-thirds of the available population in that classification. Aggregates for each classification represent only the countries for which data are available.

### Human development classification

HDI classifications are relative—based on quartiles of HDI distribution across the 187 countries denoted as very high, high, medium (each with 47 countries) and low (with 46 countries).

### Regional groupings

Regional groupings are based on United Nations Development Programme regional classification. Least Developed Countries and Small Island Developing States are defined according to UN classifications. The composition of each region is presented in *Regions*.

## Country notes

Data for China do not include Hong Kong Special Administrative Region of China, Macao Special Administrative Region of China or Taiwan Province of China, unless otherwise noted. Data for Sudan include South Sudan unless otherwise noted.

## Symbols

A dash between two years, as in 2005–2012, indicates that the data are the most recent year available in the period specified. A slash between years, as in 2005/2012, indicates average for the period defined. Growth rates are usually average annual rates of growth between the first and last years of the period shown.

The following symbols are used in the tables:

..	Not available
0 or 0.0	Nil or negligible
—	Not applicable

## Statistical acknowledgements

The Report's composite indices and other statistical resources draw on a wide variety of the most respected international data providers in their specialized fields. We are particularly grateful to the Carbon Dioxide Information Analysis Center of the US Department of Energy; Centre for Research on the Epidemiology of Disasters; Eurostat; Food and Agricultural Organization; Gallup; ICF Macro; International Energy Agency; International Labour Organization; International Monetary Fund; International Telecommunication Union; International Union for Conservation of Nature; Inter-Parliamentary Union; Luxembourg Income Study; Organisation for Economic Co-operation and Development; Stockholm International Peace Research Institute; United Nations Children's Fund; United Nations Conference on Trade and Development; United Nations Department of Economic and Social Affairs; United Nations Economic Commission for Latin America and the Caribbean; United Nations Educational, Scientific and Cultural Organization Institute for Statistics; United Nations Office on Drug and Crime; United Nations World Tourism Organization; World Bank; World Health Organization; and World Intellectual Property Organization. The international educational database maintained by Robert Barro (Harvard University) and Jong-Wha Lee (Korea University) is another invaluable source for the calculation of the Report's indices.

## Statistical tables

The first five tables contain the composite human development indices and their components; the remaining nine tables present a broader set of indicators related to human development. Four composite human development indices—the Human Development Index (HDI), the Inequality-adjusted Human Development Index (IHDI), the Gender Inequality Index (GII) and the Multidimensional Poverty Index (MPI)—have been presented since the 2010 *Human Development Report*. The GII and the MPI remain experimental indices.

HDI values along with values of the four component indicators on life expectancy, educational attainment and income are presented in **table 1**. Countries are ranked according to HDI value. The difference between rank by gross national income and HDI indicates whether a country is efficiently using its income for advancement in the two nonincome HDI dimensions. The nonincome HDI is calculated to provide an additional means of cross-country comparison and to order countries by achievements in the nonincome dimensions. A time series of HDI values based on data available in 2012, thus using the most recent revision of historical data and

methodology, is presented in **table 2**. It is the only means for comparing HDI values for 2012 with those for past years. The change in HDI rank over the last five years and between 2011 and 2012 as well as the average annual HDI growth rate across four time periods allow for easy assessment of the direction and speed of HDI changes.

**Table 3** presents the IHDI, which goes beyond a country's average achievements in health, education and income to show how the achievements are distributed among residents by discounting the value of each dimension according to its level of inequality. The IHDI can be interpreted as the actual level of human development (accounting for inequality), while the HDI is the potential human development that could be obtained if achievements were distributed equally among residents. The difference between the HDI and IHDI, expressed as a percentage, defines the loss in potential human development due to inequality. The difference in ranking by the HDI and the IHDI indicates that taking inequality into account would either lower a country's rank (negative value) or improve it (positive).

**Table 4** presents the Gender Inequality Index, an experimental composite measure of inequality in achievement between women and men in three dimensions: reproductive health, empowerment and the labour market. The GII is designed to provide empirical foundations for policy analysis and advocacy efforts. A high value indicates high inequality between women and men.

The Multidimensional Poverty Index, an experimental measure designed to capture the overlapping deprivations that people face in education, health and living standards, is presented in **table 5**. The MPI gives both the incidence of nonincome multidimensional poverty (a headcount of those in multidimensional poverty) and its intensity (the relative number of deprivations people experience at the same time). The contributions of deprivations in each dimension to overall poverty are included to provide a comprehensive picture of people living in poverty. Countries are presented alphabetically in two groups according to the year of the survey used to estimate the MPI.

**Table 6** combines macroeconomic indicators such as gross domestic product (GDP), gross fixed capital formation and the consumer price index with public spending indicators. During economic uncertainty or recession, gross fixed capital formation typically declines. The consumer price index is presented as a measure of inflation. Indicators of public spending are given for two points in time to allow for analysis of change in spending. These indicators can be used to examine priorities in public spending and the pattern of expenditure and how it relates to human development outcomes.

Several indicators on the health of children, youth and adults as well as two indicators of health care quality are presented

in **table 7**. **Table 8** comprises standard education indicators along with indicators on education quality, including average test scores (and deviations from the average scores) in reading, mathematics and science. The education quality indicators are based on standardized tests assigned to 15-year-old students by the Organisation for Economic Co-operation and Development–managed Programme on International Student Assessment using the 2009 dataset for 63 UN Member States. Two additional indicators of education quality, primary education teachers trained to teach and a perception-based indicator of satisfaction with the quality of education, complement the test-based quality indicators.

**Table 9**'s data on social integration indicate whether a society is inclusive and integrated. In particular, indicators show the extent of equal rights and opportunities for employment, overall inequality, human safety, and trust and community satisfaction. Complementary objective indicators and perception-based indicators allow for a more nuanced picture of social integration. Life, freedom and job satisfaction focus on individuals' views of their personal conditions, while trust in people and government, along with community satisfaction, give insight into people's satisfaction with broader society.

The extent to which a country is integrated into the global economy is reflected in **table 10**. A distinction between trade in final goods and trade in parts and components is made to capture the phenomenon of global value added and production sharing, which have important policy implications for

the growth of world trade and for economic development in countries of the South.

Indicators on two aspects of globalization: capital flows and human mobility are shown in **table 11**. Increasing foreign investment is one measure of growing economic globalization. Migration is an opportunity for work and to send funds back home while expanding the labour force in recipient countries. Human mobility in all forms is also a potential factor in cross-cultural understanding.

**Table 12** captures the importance of investment in research and development to advancing human development and building country capacities to effectively adopt and use technologies. **Table 13** sheds light on environmental sustainability. It shows the proportion of fossil fuels and renewable energy sources in the energy supply, presents three ways of looking at carbon dioxide and greenhouse gas emissions data and shows important measures for ecosystems and natural resources. The table also presents indicators on the direct human impacts of changes to the physical environment.

Major population indicators needed to understand current population conditions and the direction of changes are presented in **table 14**. Statistics on median age of the population, dependency ratios and total fertility rates can be compared to assess the burden on the labour force and the ability of societies to sustain themselves. Deviations from the natural sex ratio at birth have implications for population replacement levels and indicate gender bias and potential future social and economic problems.

# Key to HDI countries and ranks, 2012

Afghanistan	175	Georgia	72	Norway	1
Albania	70	Germany	5	Oman	84
Algeria	93	Ghana	135	Pakistan	146
Andorra	33	Greece	29	Palau	52
Angola	148	Grenada	63	Palestine, State of	110
Antigua and Barbuda	67	Guatemala	133	Panama	59
Argentina	45	Guinea	178	Papua New Guinea	156
Armenia	87	Guinea-Bissau	176	Paraguay	111
Australia	2	Guyana	118	Peru	77
Austria	18	Haiti	161	Philippines	114
Azerbaijan	82	Honduras	120	Poland	39
Bahamas	49	Hong Kong, China (SAR)	13	Portugal	43
Bahrain	48	Hungary	37	Qatar	36
Bangladesh	146	Iceland	13	Romania	56
Barbados	38	India	136	Russian Federation	55
Belarus	50	Indonesia	121	Rwanda	167
Belgium	17	Iran, Islamic Republic of	76	Saint Kitts and Nevis	72
Belize	96	Iraq	131	Saint Lucia	88
Benin	166	Ireland	7	Saint Vincent and the Grenadines	83
Bhutan	140	Israel	16	Samoa	96
Bolivia, Plurinational State of	108	Italy	25	Sao Tome and Principe	144
Bosnia and Herzegovina	81	Jamaica	85	Saudi Arabia	57
Botswana	119	Japan	10	Senegal	154
Brazil	85	Jordan	100	Serbia	64
Brunei Darussalam	30	Kazakhstan	69	Seychelles	46
Bulgaria	57	Kenya	145	Sierra Leone	177
Burkina Faso	183	Kiribati	121	Singapore	18
Burundi	178	Korea, Republic of	12	Slovakia	35
Cambodia	138	Kuwait	54	Slovenia	21
Cameroon	150	Kyrgyzstan	125	Solomon Islands	143
Canada	11	Lao People's Democratic Republic	138	South Africa	121
Cape Verde	132	Latvia	44	Spain	23
Central African Republic	180	Lebanon	72	Sri Lanka	92
Chad	184	Lesotho	158	Sudan	171
Chile	40	Liberia	174	Suriname	105
China	101	Libya	64	Swaziland	141
Colombia	91	Liechtenstein	24	Sweden	7
Comoros	169	Lithuania	41	Switzerland	9
Congo	142	Luxembourg	26	Syrian Arab Republic	116
Congo, Democratic Republic of the	186	Madagascar	151	Tajikistan	125
Costa Rica	62	Malawi	170	Tanzania, United Republic of	152
Côte d'Ivoire	168	Malaysia	64	Thailand	103
Croatia	47	Maldives	104	The former Yugoslav Republic of Macedonia	78
Cuba	59	Mali	182	Timor-Leste	134
Cyprus	31	Malta	32	Togo	159
Czech Republic	28	Mauritania	155	Tonga	95
Denmark	15	Mauritius	80	Trinidad and Tobago	67
Djibouti	164	Mexico	61	Tunisia	94
Dominica	72	Micronesia, Federated States of	117	Turkey	90
Dominican Republic	96	Moldova, Republic of	113	Turkmenistan	102
Ecuador	89	Mongolia	108	Uganda	161
Egypt	112	Montenegro	52	Ukraine	78
El Salvador	107	Morocco	130	United Arab Emirates	41
Equatorial Guinea	136	Mozambique	185	United Kingdom	26
Eritrea	181	Myanmar	149	United States	3
Estonia	33	Namibia	128	Uruguay	51
Ethiopia	173	Nepal	157	Uzbekistan	114
Fiji	96	Netherlands	4	Vanuatu	124
Finland	21	New Zealand	6	Venezuela, Bolivarian Republic of	71
France	20	Nicaragua	129	Viet Nam	127
Gabon	106	Niger	186	Yemen	160
Gambia	165	Nigeria	153	Zambia	163
				Zimbabwe	172

# Human Development Index and its components

HDI rank	Human Development Index (HDI)	Life expectancy at birth	Mean years of schooling	Expected years of schooling	Gross national income (GNI) per capita	GNI per capita rank minus HDI rank	Nonincome HDI	
	Value	(years)	(years)	(years)	(2005 PPP \$)	2012	Value	
	2012	2012	2010 <sup>a</sup>	2011 <sup>b</sup>	2012	2012	2012	
<b>VERY HIGH HUMAN DEVELOPMENT</b>								
1	Norway	0.955	81.3	12.6	17.5	48,688	4	0.977
2	Australia	0.938	82.0	12.0 <sup>c</sup>	19.6 <sup>d</sup>	34,340	15	0.978
3	United States	0.937	78.7	13.3	16.8	43,480	6	0.958
4	Netherlands	0.921	80.8	11.6 <sup>c</sup>	16.9	37,282	8	0.945
5	Germany	0.920	80.6	12.2	16.4 <sup>e</sup>	35,431	10	0.948
6	New Zealand	0.919	80.8	12.5	19.7 <sup>d</sup>	24,358	26	0.978
7	Ireland	0.916	80.7	11.6	18.3 <sup>d</sup>	28,671	19	0.960
7	Sweden	0.916	81.6	11.7 <sup>c</sup>	16.0	36,143	6	0.940
9	Switzerland	0.913	82.5	11.0 <sup>c</sup>	15.7	40,527	2	0.926
10	Japan	0.912	83.6	11.6 <sup>c</sup>	15.3	32,545	11	0.942
11	Canada	0.911	81.1	12.3	15.1	35,369	5	0.934
12	Korea, Republic of	0.909	80.7	11.6	17.2	28,231	15	0.949
13	Hong Kong, China (SAR)	0.906	83.0	10.0	15.5	45,598	-6	0.907
13	Iceland	0.906	81.9	10.4	18.3 <sup>d</sup>	29,176	12	0.943
15	Denmark	0.901	79.0	11.4 <sup>c</sup>	16.8	33,518	4	0.924
16	Israel	0.900	81.9	11.9	15.7	26,224	13	0.942
17	Belgium	0.897	80.0	10.9 <sup>c</sup>	16.4	33,429	3	0.917
18	Austria	0.895	81.0	10.8	15.3	36,438	-5	0.908
18	Singapore	0.895	81.2	10.1 <sup>c</sup>	14.4 <sup>f</sup>	52,613	-15	0.880
20	France	0.893	81.7	10.6 <sup>c</sup>	16.1	30,277	4	0.919
21	Finland	0.892	80.1	10.3	16.9	32,510	2	0.912
21	Slovenia	0.892	79.5	11.7	16.9	23,999	12	0.936
23	Spain	0.885	81.6	10.4 <sup>c</sup>	16.4	25,947	8	0.919
24	Liechtenstein	0.883	79.8	10.3 <sup>g</sup>	11.9	84,880 <sup>h</sup>	-22	0.832
25	Italy	0.881	82.0	10.1 <sup>c</sup>	16.2	26,158	5	0.911
26	Luxembourg	0.875	80.1	10.1	13.5	48,285	-20	0.858
26	United Kingdom	0.875	80.3	9.4	16.4	32,538	-5	0.886
28	Czech Republic	0.873	77.8	12.3	15.3	22,067	10	0.913
29	Greece	0.860	80.0	10.1 <sup>c</sup>	16.3	20,511	13	0.899
30	Brunei Darussalam	0.855	78.1	8.6	15.0	45,690	-23	0.832
31	Cyprus	0.848	79.8	9.8	14.9	23,825	4	0.869
32	Malta	0.847	79.8	9.9	15.1	21,184	9	0.876
33	Andorra	0.846	81.1	10.4 <sup>i</sup>	11.7	33,918 <sup>j</sup>	-15	0.839
33	Estonia	0.846	75.0	12.0	15.8	17,402	13	0.892
35	Slovakia	0.840	75.6	11.6	14.7	19,696	9	0.872
36	Qatar	0.834	78.5	7.3	12.2	87,478 <sup>k</sup>	-35	0.761
37	Hungary	0.831	74.6	11.7	15.3	16,088	13	0.874
38	Barbados	0.825	77.0	9.3	16.3	17,308	10	0.859
39	Poland	0.821	76.3	10.0	15.2	17,776	7	0.851
40	Chile	0.819	79.3	9.7	14.7	14,987	13	0.863
41	Lithuania	0.818	72.5	10.9	15.7	16,858	7	0.850
41	United Arab Emirates	0.818	76.7	8.9	12.0	42,716	-31	0.783
43	Portugal	0.816	79.7	7.7	16.0	19,907	0	0.835
44	Latvia	0.814	73.6	11.5 <sup>c</sup>	14.8	14,724	10	0.856
45	Argentina	0.811	76.1	9.3	16.1	15,347	7	0.848
46	Seychelles	0.806	73.8	9.4 <sup>l</sup>	14.3	22,615	-9	0.808
47	Croatia	0.805	76.8	9.8 <sup>c</sup>	14.1	15,419	4	0.837
<b>HIGH HUMAN DEVELOPMENT</b>								
48	Bahrain	0.796	75.2	9.4	13.4 <sup>e</sup>	19,154	-3	0.806
49	Bahamas	0.794	75.9	8.5	12.6	27,401	-21	0.777
50	Belarus	0.793	70.6	11.5 <sup>l</sup>	14.7	13,385	11	0.830
51	Uruguay	0.792	77.2	8.5 <sup>c</sup>	15.5	13,333	11	0.829
52	Montenegro	0.791	74.8	10.5 <sup>l</sup>	15.0	10,471	24	0.850
52	Palau	0.791	72.1	12.2	13.7 <sup>e</sup>	11,463 <sup>m</sup>	18	0.840
54	Kuwait	0.790	74.7	6.1	14.2	52,793	-51	0.730
55	Russian Federation	0.788	69.1	11.7	14.3	14,461	0	0.816
56	Romania	0.786	74.2	10.4	14.5	11,011	16	0.836
57	Bulgaria	0.782	73.6	10.6 <sup>c</sup>	14.0	11,474	12	0.826
57	Saudi Arabia	0.782	74.1	7.8	14.3	22,616	-21	0.774
59	Cuba	0.780	79.3	10.2	16.2	5,539 <sup>n</sup>	44	0.894
59	Panama	0.780	76.3	9.4	13.2	13,519	1	0.810
61	Mexico	0.775	77.1	8.5	13.7	12,947	4	0.805

HDI rank	Human Development Index (HDI)	Life expectancy at birth	Mean years of schooling	Expected years of schooling	Gross national income (GNI) per capita	GNI per capita rank minus HDI rank	Nonincome HDI	
	Value	(years)	(years)	(years)	(2005 PPP \$)	2012	Value	
	2012	2012	2010 <sup>a</sup>	2011 <sup>b</sup>	2012	2012	2012	
62	Costa Rica	0.773	79.4	8.4	13.7	10,863	12	0.816
63	Grenada	0.770	76.1	8.6 <sup>e</sup>	15.8	9,257	21	0.827
64	Libya	0.769	75.0	7.3	16.2	13,765	-8	0.791
64	Malaysia	0.769	74.5	9.5	12.6	13,676	-7	0.791
64	Serbia	0.769	74.7	10.2 <sup>e</sup>	13.6	9,533	16	0.823
67	Antigua and Barbuda	0.760	72.8	8.9	13.3	13,883	-12	0.776
67	Trinidad and Tobago	0.760	70.3	9.2	11.9	21,941	-28	0.743
69	Kazakhstan	0.754	67.4	10.4	15.3	10,451	8	0.791
70	Albania	0.749	77.1	10.4	11.4	7,822	21	0.807
71	Venezuela, Bolivarian Republic of	0.748	74.6	7.6 <sup>e</sup>	14.4	11,475	-2	0.774
72	Dominica	0.745	77.6	7.7 <sup>l</sup>	12.7	10,977	-1	0.771
72	Georgia	0.745	73.9	12.1 <sup>o</sup>	13.2	5,005	37	0.845
72	Lebanon	0.745	72.8	7.9 <sup>l</sup>	13.9	12,364	-5	0.762
72	Saint Kitts and Nevis	0.745	73.3	8.4 <sup>e</sup>	12.9	12,460	-5	0.763
76	Iran, Islamic Republic of	0.742	73.2	7.8	14.4	10,695	-1	0.769
77	Peru	0.741	74.2	8.7	13.2	9,306	6	0.780
78	The former Yugoslav Republic of Macedonia	0.740	75.0	8.2 <sup>a</sup>	13.4	9,377	2	0.777
78	Ukraine	0.740	68.8	11.3	14.8	6,428	22	0.813
80	Mauritius	0.737	73.5	7.2	13.6	13,300	-17	0.745
81	Bosnia and Herzegovina	0.735	75.8	8.3 <sup>l</sup>	13.4	7,713	13	0.787
82	Azerbaijan	0.734	70.9	11.2 <sup>l</sup>	11.7	8,153	5	0.780
83	Saint Vincent and the Grenadines	0.733	72.5	8.6 <sup>e</sup>	13.3	9,367	-1	0.767
84	Oman	0.731	73.2	5.5 <sup>l</sup>	13.5	24,092	-51	0.694
85	Brazil	0.730	73.8	7.2	14.2	10,152	-8	0.755
85	Jamaica	0.730	73.3	9.6	13.1	6,701	14	0.792
87	Armenia	0.729	74.4	10.8	12.2	5,540	16	0.808
88	Saint Lucia	0.725	74.8	8.3 <sup>e</sup>	12.7	7,971	1	0.768
89	Ecuador	0.724	75.8	7.6	13.7	7,471	7	0.772
90	Turkey	0.722	74.2	6.5	12.9	13,710	-32	0.720
91	Colombia	0.719	73.9	7.3	13.6	8,711	-6	0.751
92	Sri Lanka	0.715	75.1	9.3 <sup>e</sup>	12.7	5,170	18	0.792
93	Algeria	0.713	73.4	7.6	13.6	7,418	4	0.755
94	Tunisia	0.712	74.7	6.5	14.5	8,103	-6	0.746
<b>MEDIUM HUMAN DEVELOPMENT</b>								
95	Tonga	0.710	72.5	10.3 <sup>e</sup>	13.7	4,153	26	0.807
96	Belize	0.702	76.3	8.0 <sup>e</sup>	12.5	5,327	8	0.767
96	Dominican Republic	0.702	73.6	7.2 <sup>e</sup>	12.3	8,506	-11	0.726
96	Fiji	0.702	69.4	10.7 <sup>e</sup>	13.9	4,087	24	0.794
96	Samoa	0.702	72.7	10.3 <sup>l</sup>	13.0	3,928	28	0.800
100	Jordan	0.700	73.5	8.6	12.7	5,272	8	0.766
101	China	0.699	73.7	7.5	11.7	7,945	-11	0.728
102	Turkmenistan	0.698	65.2	9.9 <sup>a</sup>	12.6 <sup>e</sup>	7,782	-10	0.727
103	Thailand	0.690	74.3	6.6	12.3	7,722	-10	0.715
104	Maldives	0.688	77.1	5.8 <sup>e</sup>	12.5	7,478	-9	0.715
105	Suriname	0.684	70.8	7.2 <sup>a</sup>	12.4	7,327	-7	0.710
106	Gabon	0.683	63.1	7.5	13.0	12,521	-40	0.668
107	El Salvador	0.680	72.4	7.5	12.0	5,915	-5	0.723
108	Bolivia, Plurinational State of	0.675	66.9	9.2	13.5	4,444	7	0.740
108	Mongolia	0.675	68.8	8.3	14.3	4,245	10	0.746
110	Palestine, State of	0.670	73.0	8.0 <sup>l</sup>	13.5	3,359 <sup>q</sup>	20	0.761
111	Paraguay	0.669	72.7	7.7	12.1	4,497	4	0.730
112	Egypt	0.662	73.5	6.4	12.1	5,401	-6	0.702
113	Moldova, Republic of	0.660	69.6	9.7	11.8	3,319	19	0.747
114	Philippines	0.654	69.0	8.9 <sup>e</sup>	11.7	3,752	11	0.724
114	Uzbekistan	0.654	68.6	10.0 <sup>a</sup>	11.6	3,201	19	0.740
116	Syrian Arab Republic	0.648	76.0	5.7 <sup>e</sup>	11.7 <sup>e</sup>	4,674 <sup>r</sup>	-2	0.692
117	Micronesia, Federated States of	0.645	69.2	8.8 <sup>a</sup>	11.4 <sup>e</sup>	3,352 <sup>m</sup>	14	0.719
118	Guyana	0.636	70.2	8.5	10.3	3,387	11	0.703
119	Botswana	0.634	53.0	8.9	11.8	13,102	-55	0.596
120	Honduras	0.632	73.4	6.5	11.4	3,426	8	0.695
121	Indonesia	0.629	69.8	5.8	12.9	4,154	-3	0.672
121	Kiribati	0.629	68.4	7.8 <sup>a</sup>	12.0	3,079	13	0.701
121	South Africa	0.629	53.4	8.5 <sup>e</sup>	13.1 <sup>e</sup>	9,594	-42	0.608

**TABLE 1 HUMAN DEVELOPMENT INDEX AND ITS COMPONENTS**

	Human Development Index (HDI)	Life expectancy at birth	Mean years of schooling	Expected years of schooling	Gross national income (GNI) per capita	GNI per capita rank minus HDI rank	Nonincome HDI
	Value	(years)	(years)	(years)	(2005 PPP \$)		Value
HDI rank	2012	2012	2010 <sup>a</sup>	2011 <sup>b</sup>	2012	2012	2012
124 Vanuatu	0.626	71.3	6.7 <sup>e</sup>	10.6	3,960	-1	0.672
125 Kyrgyzstan	0.622	68.0	9.3	12.6	2,009	24	0.738
125 Tajikistan	0.622	67.8	9.8	11.5	2,119	19	0.731
127 Viet Nam	0.617	75.4	5.5	11.9	2,970	9	0.686
128 Namibia	0.608	62.6	6.2	11.3	5,973	-27	0.611
129 Nicaragua	0.599	74.3	5.8	10.8	2,551	10	0.671
130 Morocco	0.591	72.4	4.4	10.4	4,384	-13	0.608
131 Iraq	0.590	69.6	5.6	10.0	3,557	-4	0.623
132 Cape Verde	0.586	74.3	3.5 <sup>e</sup>	12.7	3,609	-6	0.617
133 Guatemala	0.581	71.4	4.1	10.7	4,235	-14	0.596
134 Timor-Leste	0.576	62.9	4.4 <sup>s</sup>	11.7	5,446	-29	0.569
135 Ghana	0.558	64.6	7.0	11.4	1,684	22	0.646
136 Equatorial Guinea	0.554	51.4	5.4 <sup>o</sup>	7.9	21,715	-97	0.463
136 India	0.554	65.8	4.4	10.7	3,285	-3	0.575
138 Cambodia	0.543	63.6	5.8	10.5	2,095	9	0.597
138 Lao People's Democratic Republic	0.543	67.8	4.6	10.1	2,435	2	0.584
140 Bhutan	0.538	67.6	2.3 <sup>s</sup>	12.4	5,246	-31	0.516
141 Swaziland	0.536	48.9	7.1	10.7	5,104	-30	0.515
<b>LOW HUMAN DEVELOPMENT</b>							
142 Congo	0.534	57.8	5.9	10.1	2,934	-5	0.553
143 Solomon Islands	0.530	68.2	4.5 <sup>p</sup>	9.3	2,172	1	0.572
144 Sao Tome and Principe	0.525	64.9	4.7 <sup>s</sup>	10.8	1,864	7	0.579
145 Kenya	0.519	57.7	7.0	11.1	1,541	15	0.588
146 Bangladesh	0.515	69.2	4.8	8.1	1,785	9	0.567
146 Pakistan	0.515	65.7	4.9	7.3	2,566	-9	0.534
148 Angola	0.508	51.5	4.7 <sup>s</sup>	10.2	4,812	-35	0.479
149 Myanmar	0.498	65.7	3.9	9.4	1,817	5	0.537
150 Cameroon	0.495	52.1	5.9	10.9	2,114	-4	0.520
151 Madagascar	0.483	66.9	5.2 <sup>p</sup>	10.4	828	28	0.601
152 Tanzania, United Republic of	0.476	58.9	5.1	9.1	1,383	10	0.527
153 Nigeria	0.471	52.3	5.2 <sup>s</sup>	9.0	2,102	-6	0.482
154 Senegal	0.470	59.6	4.5	8.2	1,653	4	0.501
155 Mauritania	0.467	58.9	3.7	8.1	2,174	-12	0.473
156 Papua New Guinea	0.466	63.1	3.9	5.8 <sup>e</sup>	2,386	-15	0.464
157 Nepal	0.463	69.1	3.2	8.9	1,137	11	0.526
158 Lesotho	0.461	48.7	5.9 <sup>c</sup>	9.6	1,879	-8	0.476
159 Togo	0.459	57.5	5.3	10.6	928	16	0.542
160 Yemen	0.458	65.9	2.5	8.7	1,820	-7	0.474
161 Haiti	0.456	62.4	4.9	7.6 <sup>e</sup>	1,070	7	0.521
161 Uganda	0.456	54.5	4.7	11.1	1,168	5	0.511
163 Zambia	0.448	49.4	6.7	8.5	1,358	0	0.483
164 Djibouti	0.445	58.3	3.8 <sup>o</sup>	5.7	2,350	-22	0.435
165 Gambia	0.439	58.8	2.8	8.7	1,731	-9	0.448
166 Benin	0.436	56.5	3.2	9.4	1,439	-5	0.459
167 Rwanda	0.434	55.7	3.3	10.9	1,147	0	0.476
168 Côte d'Ivoire	0.432	56.0	4.2	6.5	1,593	-9	0.444
169 Comoros	0.429	61.5	2.8 <sup>p</sup>	10.2	986	4	0.484
170 Malawi	0.418	54.8	4.2	10.4	774	10	0.492
171 Sudan	0.414	61.8	3.1	4.5	1,848	-19	0.405
172 Zimbabwe	0.397	52.7	7.2	10.1	424 <sup>t</sup>	14	0.542
173 Ethiopia	0.396	59.7	2.2 <sup>s</sup>	8.7	1,017	-2	0.425
174 Liberia	0.388	57.3	3.9	10.5 <sup>e</sup>	480	11	0.502
175 Afghanistan	0.374	49.1	3.1	8.1	1,000	-3	0.393
176 Guinea-Bissau	0.364	48.6	2.3 <sup>o</sup>	9.5	1,042	-6	0.373
177 Sierra Leone	0.359	48.1	3.3	7.3 <sup>e</sup>	881	0	0.380
178 Burundi	0.355	50.9	2.7	11.3	544	4	0.423
178 Guinea	0.355	54.5	1.6 <sup>s</sup>	8.8	941	-4	0.368
180 Central African Republic	0.352	49.1	3.5	6.8	722	1	0.386
181 Eritrea	0.351	62.0	3.4 <sup>e</sup>	4.6	531	3	0.418
182 Mali	0.344	51.9	2.0 <sup>c</sup>	7.5	853	-4	0.359
183 Burkina Faso	0.343	55.9	1.3 <sup>o</sup>	6.9	1,202	-18	0.332
184 Chad	0.340	49.9	1.5 <sup>p</sup>	7.4	1,258	-20	0.324
185 Mozambique	0.327	50.7	1.2	9.2	906	-9	0.327

	Human Development Index (HDI)	Life expectancy at birth	Mean years of schooling	Expected years of schooling	Gross national income (GNI) per capita	GNI per capita rank minus HDI rank	Nonincome HDI
	Value	(years)	(years)	(years)	(2005 PPP \$)		Value
<b>HDI rank</b>	2012	2012	2010 <sup>a</sup>	2011 <sup>b</sup>	2012	2012	2012
186 Congo, Democratic Republic of the	0.304	48.7	3.5	8.5	319	0	0.404
186 Niger	0.304	55.1	1.4	4.9	701	-4	0.313
<b>OTHER COUNTRIES OR TERRITORIES</b>							
Korea, Democratic People's Rep. of	..	69.0	..	..	..	..	..
Marshall Islands	..	72.3	..	11.7	..	..	..
Monaco	..	82.3	..	..	..	..	..
Nauru	..	80.0	..	9.3	..	..	..
San Marino	..	81.9	..	12.5	..	..	..
Somalia	..	51.5	..	2.4	..	..	..
South Sudan	..	..	..	..	..	..	..
Tuvalu	..	67.5	..	10.8	..	..	..
<b>Human Development Index groups</b>							
Very high human development	0.905	80.1	11.5	16.3	33,391	—	0.927
High human development	0.758	73.4	8.8	13.9	11,501	—	0.781
Medium human development	0.640	69.9	6.3	11.4	5,428	—	0.661
Low human development	0.466	59.1	4.2	8.5	1,633	—	0.487
<b>Regions</b>							
Arab States	0.652	71.0	6.0	10.6	8,317	—	0.658
East Asia and the Pacific	0.683	72.7	7.2	11.8	6,874	—	0.712
Europe and Central Asia	0.771	71.5	10.4	13.7	12,243	—	0.801
Latin America and the Caribbean	0.741	74.7	7.8	13.7	10,300	—	0.770
South Asia	0.558	66.2	4.7	10.2	3,343	—	0.577
Sub-Saharan Africa	0.475	54.9	4.7	9.3	2,010	—	0.479
<b>Least developed countries</b>	0.449	59.5	3.7	8.5	1,385	—	0.475
<b>Small island developing states</b>	0.648	69.8	7.3	10.7	5,397	—	0.673
<b>World</b>	<b>0.694</b>	<b>70.1</b>	<b>7.5</b>	<b>11.6</b>	<b>10,184</b>	<b>—</b>	<b>0.690</b>

## NOTES

- a** Data refer to 2010 or the most recent year available.
- b** Data refer to 2011 or the most recent year available.
- c** Updated by HDRO based on UNESCO Institute for Statistics (2012) data.
- d** For the HDI calculation this value is capped at 18 years.
- e** Based on cross-country regression.
- f** Calculated by the Singapore Ministry of Education.
- g** Assumes the same adult mean years of schooling as Switzerland before the most recent update.
- h** Estimated using the purchasing power parity (PPP) rate and the projected growth rate of Switzerland.
- i** Assumes the same adult mean years of schooling as Spain before the most recent update.
- j** Estimated using the PPP rate and the projected growth rate of Spain.
- k** Based on implied PPP conversion factors from IMF (2012).
- l** Based on the UNESCO Institute for Statistics (2012) estimate of educational attainment distribution.
- m** Based on projected growth rates by ADB (2012).

- n** PPP estimate based on cross-country regression; projected growth rate based on ECLAC (2012) and UNDESA (2012c) projected growth rates.
- o** Based on data from UNICEF Multiple Indicator Cluster Surveys for 2002–2012.
- p** Based on data on years of schooling of adults from household surveys in the World Bank's International Income Distribution Database.
- q** Based on an unpublished estimate of the PPP conversion rate from the World Bank and projected growth rates from UNESCWA (2012) and UNDESA (2012c).
- r** Based on projected growth rates from UNDESA (2012c).
- s** Based on data from ICF Macro (2012).
- t** Based on PPP data from IMF (2012).

## DEFINITIONS

**Human Development Index (HDI):** A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living. See *Technical note 1* at [http://hdr.undp.org/en/media/HDR\\_2013\\_EN\\_TechNotes.pdf](http://hdr.undp.org/en/media/HDR_2013_EN_TechNotes.pdf) for details on how the HDI is calculated.

**Life expectancy at birth:** Number of years a newborn infant could expect to live if prevailing patterns of age-specific mortality rates at the time of birth stay the same throughout the infant's life.

**Mean years of schooling:** Average number of years of education received by people ages 25 and older, converted from educational attainment levels using official durations of each level.

**Expected years of schooling:** Number of years of schooling that a child of school entrance age can expect to receive if prevailing patterns of age-specific enrolment rates persist throughout the child's life.

**Gross national income (GNI) per capita:** Aggregate income of an economy generated by its production and its ownership of factors of production, less the incomes paid for the use of factors of production owned by the rest of the world, converted to international dollars using PPP rates, divided by midyear population.

**GNI per capita rank minus HDI rank:** Difference in rankings by GNI per capita and by the HDI. A negative value means that the country is better ranked by GNI than by the HDI.

**Nonincome HDI:** Value of the HDI computed from the life expectancy and education indicators only.

## MAIN DATA SOURCES

- Column 1:** HDRO calculations based on data from UNDESA (2011), Barro and Lee (2011), UNESCO Institute for Statistics (2012), World Bank (2012a) and IMF (2012).
- Column 2:** UNDESA (2011).
- Column 3:** Barro and Lee (2011) and HDRO updates based on data on educational attainment from UNESCO Institute for Statistics (2012) and on methodology from Barro and Lee (2010).
- Column 4:** UNESCO Institute for Statistics (2012).
- Column 5:** HDRO calculations based on data from World Bank (2012a), IMF (2012) and UNSD (2012a).
- Column 6:** Calculated based on data in columns 1 and 5.
- Column 7:** Calculated based on data in columns 2, 3 and 4.

## Human Development Index trends, 1980–2012

HDI rank	Human Development Index (HDI)								HDI rank		Average annual HDI growth				
	Value								Change		(%)				
	1980	1990	2000	2005	2007	2010	2011	2012	2007–2012 <sup>a</sup>	2011–2012 <sup>a</sup>	1980/1990	1990/2000	2000/2010	2000/2012	
<b>VERY HIGH HUMAN DEVELOPMENT</b>															
1	Norway	0.804	0.852	0.922	0.948	0.952	0.952	0.953	0.955	0	0	0.59	0.79	0.32	0.29
2	Australia	0.857	0.880	0.914	0.927	0.931	0.935	0.936	0.938	0	0	0.27	0.37	0.23	0.22
3	United States	0.843	0.878	0.907	0.923	0.929	0.934	0.936	0.937	0	-1	0.40	0.33	0.29	0.27
4	Netherlands	0.799	0.842	0.891	0.899	0.911	0.919	0.921	0.921	2	0	0.52	0.56	0.31	0.28
5	Germany	0.738	0.803	0.870	0.901	0.907	0.916	0.919	0.920	5	0	0.85	0.81	0.53	0.47
6	New Zealand	0.807	0.835	0.887	0.908	0.912	0.917	0.918	0.919	-1	0	0.34	0.60	0.33	0.29
7	Ireland	0.745	0.793	0.879	0.907	0.918	0.916	0.915	0.916	-3	0	0.62	1.04	0.42	0.35
7	Sweden	0.792	0.823	0.903	0.905	0.909	0.913	0.915	0.916	0	0	0.38	0.93	0.11	0.12
9	Switzerland	0.818	0.840	0.882	0.898	0.901	0.912	0.912	0.913	3	0	0.27	0.49	0.33	0.29
10	Japan	0.788	0.837	0.878	0.896	0.903	0.909	0.910	0.912	1	0	0.61	0.48	0.35	0.32
11	Canada	0.825	0.865	0.887	0.906	0.909	0.909	0.910	0.911	-4	-1	0.48	0.25	0.24	0.22
12	Korea, Republic of	0.640	0.749	0.839	0.875	0.890	0.905	0.907	0.909	4	0	1.58	1.14	0.76	0.67
13	Hong Kong, China (SAR)	0.712	0.788	0.815	0.857	0.877	0.900	0.904	0.906	10	1	1.02	0.34	1.00	0.89
13	Iceland	0.769	0.815	0.871	0.901	0.908	0.901	0.905	0.906	-4	0	0.58	0.67	0.34	0.33
15	Denmark	0.790	0.816	0.869	0.893	0.898	0.899	0.901	0.901	-2	0	0.33	0.63	0.34	0.30
16	Israel	0.773	0.809	0.865	0.885	0.892	0.896	0.899	0.900	-2	0	0.45	0.68	0.34	0.33
17	Belgium	0.764	0.817	0.884	0.884	0.891	0.896	0.897	0.897	-2	0	0.67	0.79	0.14	0.12
18	Austria	0.747	0.797	0.848	0.867	0.879	0.892	0.894	0.895	2	0	0.66	0.62	0.51	0.46
18	Singapore	..	0.756	0.826	0.852	..	0.892	0.894	0.895	7	0	..	0.89	0.77	0.67
20	France	0.728	0.784	0.853	0.877	0.885	0.891	0.893	0.893	-1	0	0.75	0.85	0.44	0.38
21	Finland	0.766	0.801	0.845	0.882	0.890	0.890	0.892	0.892	-5	0	0.45	0.54	0.52	0.45
21	Slovenia	..	..	0.842	0.876	0.888	0.892	0.892	0.892	-3	0	..	..	0.58	0.48
23	Spain	0.698	0.756	0.847	0.865	0.874	0.884	0.885	0.885	1	0	0.80	1.15	0.43	0.37
24	Liechtenstein	..	..	..	..	..	0.882	0.883	0.883	..	0	..	..	..	..
25	Italy	0.723	0.771	0.833	0.869	0.878	0.881	0.881	0.881	-2	0	0.64	0.78	0.56	0.46
26	Luxembourg	0.735	0.796	0.861	0.875	0.879	0.875	0.875	0.875	-5	0	0.81	0.78	0.16	0.14
26	United Kingdom	0.748	0.784	0.841	0.865	0.867	0.874	0.875	0.875	2	0	0.47	0.70	0.39	0.33
28	Czech Republic	..	..	0.824	0.862	0.869	0.871	0.872	0.873	-1	0	..	..	0.56	0.48
29	Greece	0.726	0.772	0.810	0.862	0.865	0.866	0.862	0.860	0	0	0.62	0.48	0.67	0.50
30	Brunei Darussalam	0.765	0.782	0.830	0.848	0.853	0.854	0.854	0.855	0	0	0.22	0.59	0.28	0.25
31	Cyprus	0.715	0.779	0.808	0.817	0.827	0.849	0.849	0.848	4	0	0.86	0.36	0.50	0.41
32	Malta	0.713	0.757	0.801	0.827	0.829	0.844	0.846	0.847	2	1	0.59	0.57	0.52	0.46
33	Andorra	..	..	..	..	..	0.846	0.847	0.846	..	-1	..	..	..	..
33	Estonia	..	0.728	0.786	0.830	0.841	0.839	0.844	0.846	-2	1	..	0.76	0.65	0.62
35	Slovakia	..	0.754	0.785	0.814	0.830	0.836	0.838	0.840	-1	0	..	0.40	0.64	0.57
36	Qatar	0.729	0.743	0.801	0.828	0.833	0.827	0.832	0.834	-3	0	0.18	0.76	0.32	0.33
37	Hungary	0.709	0.714	0.790	0.820	0.826	0.829	0.830	0.831	1	0	0.07	1.02	0.48	0.42
38	Barbados	0.706	0.760	0.790	0.798	0.808	0.823	0.824	0.825	2	0	0.73	0.38	0.41	0.37
39	Poland	..	..	0.778	0.798	0.806	0.817	0.819	0.821	3	0	..	..	0.49	0.46
40	Chile	0.638	0.702	0.759	0.789	0.800	0.813	0.817	0.819	5	0	0.96	0.78	0.68	0.64
41	Lithuania	..	0.732	0.756	0.802	0.810	0.810	0.814	0.818	-2	2	..	0.32	0.68	0.65
41	United Arab Emirates	..	..	..	0.831	0.827	0.816	0.817	0.818	-5	-1	..	..	..	..
43	Portugal	0.644	0.714	0.783	0.796	0.806	0.817	0.817	0.816	-1	-3	1.04	0.93	0.43	0.35
44	Latvia	0.675	0.699	0.738	0.792	0.808	0.805	0.809	0.814	-4	1	0.35	0.55	0.87	0.82
45	Argentina	0.675	0.701	0.755	0.771	0.787	0.805	0.810	0.811	4	-1	0.38	0.74	0.64	0.60
46	Seychelles	..	..	0.774	0.781	0.792	0.799	0.804	0.806	1	0	..	..	0.31	0.33
47	Croatia	..	0.716	0.755	0.787	0.798	0.804	0.804	0.805	-1	-1	..	0.52	0.63	0.54
<b>HIGH HUMAN DEVELOPMENT</b>															
48	Bahrain	0.644	0.713	0.781	0.802	0.802	0.794	0.795	0.796	-4	0	1.02	0.92	0.16	0.15
49	Bahamas	..	..	..	..	..	0.791	0.792	0.794	..	0	..	..	..	..
50	Belarus	..	..	..	0.730	0.756	0.785	0.789	0.793	12	1	..	..	..	..
51	Uruguay	0.664	0.693	0.741	0.744	0.771	0.785	0.789	0.792	3	0	0.42	0.68	0.58	0.55
52	Montenegro	..	..	..	0.756	0.775	0.787	0.791	0.791	0	-2	..	..	..	..
52	Palau	..	..	0.765	0.786	0.792	0.779	0.786	0.791	-4	2	..	..	0.18	0.27
54	Kuwait	0.695	0.712	0.781	0.784	0.787	0.786	0.788	0.790	-4	-1	0.25	0.92	0.06	0.10
55	Russian Federation	..	0.730	0.713	0.753	0.770	0.782	0.784	0.788	0	0	..	-0.23	0.93	0.84
56	Romania	..	0.706	0.709	0.756	0.772	0.783	0.784	0.786	-3	-1	..	0.05	0.99	0.86
57	Bulgaria	0.673	0.704	0.721	0.756	0.766	0.778	0.780	0.782	0	0	0.45	0.24	0.77	0.67
57	Saudi Arabia	0.575	0.653	0.717	0.748	0.756	0.777	0.780	0.782	5	0	1.29	0.93	0.81	0.74
59	Cuba	0.626	0.681	0.690	0.735	0.770	0.775	0.777	0.780	-4	0	0.83	0.14	1.17	1.02
59	Panama	0.634	0.666	0.724	0.746	0.758	0.770	0.776	0.780	1	1	0.49	0.85	0.62	0.62
61	Mexico	0.598	0.654	0.723	0.745	0.758	0.770	0.773	0.775	-1	0	0.89	1.00	0.64	0.59
62	Costa Rica	0.621	0.663	0.705	0.732	0.744	0.768	0.770	0.773	4	0	0.65	0.62	0.85	0.76

HDI rank	Human Development Index (HDI)								HDI rank		Average annual HDI growth				
	Value								Change		(%)				
	1980	1990	2000	2005	2007	2010	2011	2012	2007–2012 <sup>a</sup>	2011–2012 <sup>a</sup>	1980/1990	1990/2000	2000/2010	2000/2012	
63	Grenada	..	..	..	..	..	0.768	0.770	0.770	..	-1	..	..	..	..
64	Libya	..	..	..	0.746	0.760	0.773	0.725	0.769	-5	23 <sup>b</sup>	..	..	..	..
64	Malaysia	0.563	0.635	0.712	0.742	0.753	0.763	0.766	0.769	1	1	1.21	1.15	0.69	0.64
64	Serbia	..	..	0.726	0.751	0.760	0.767	0.769	0.769	-5	0	..	..	0.56	0.49
67	Antigua and Barbuda	..	..	..	..	..	0.761	0.759	0.760	..	-1	..	..	..	..
67	Trinidad and Tobago	0.680	0.685	0.707	0.741	0.752	0.758	0.759	0.760	-1	-1	0.08	0.32	0.70	0.60
69	Kazakhstan	..	..	0.663	0.721	0.734	0.744	0.750	0.754	2	-1	..	..	1.15	1.08
70	Albania	..	0.661	0.698	0.729	0.737	0.746	0.748	0.749	0	-1	..	0.54	0.66	0.59
71	Venezuela, Bolivarian Republic of	0.629	0.635	0.662	0.694	0.712	0.744	0.746	0.748	9	-1	0.11	0.41	1.17	1.03
72	Dominica	..	..	0.722	0.732	0.739	0.743	0.744	0.745	-3	0	..	..	0.28	0.26
72	Georgia	..	..	..	0.713	0.732	0.735	0.740	0.745	0	3	..	..	..	..
72	Lebanon	..	..	..	0.714	0.728	0.743	0.744	0.745	3	0	..	..	..	..
72	Saint Kitts and Nevis	..	..	..	..	..	0.745	0.745	0.745	..	-1	..	..	..	..
76	Iran, Islamic Republic of	0.443	0.540	0.654	0.685	0.706	0.740	0.742	0.742	7	-2	1.99	1.94	1.25	1.05
77	Peru	0.580	0.619	0.679	0.699	0.716	0.733	0.738	0.741	3	-1	0.65	0.93	0.78	0.73
78	The former Yugoslav Republic of Macedonia	..	..	..	0.711	0.719	0.736	0.738	0.740	1	-2	..	..	..	..
78	Ukraine	..	0.714	0.673	0.718	0.732	0.733	0.737	0.740	-5	0	..	-0.58	0.85	0.80
80	Mauritius	0.551	0.626	0.676	0.708	0.720	0.732	0.735	0.737	-2	-1	1.28	0.77	0.81	0.73
81	Bosnia and Herzegovina	..	..	..	0.724	0.729	0.733	0.734	0.735	-6	-1	..	..	..	..
82	Azerbaijan	..	..	..	..	..	0.734	0.732	0.734	..	-1	..	..	..	..
83	Saint Vincent and the Grenadines	..	..	..	..	..	0.731	0.732	0.733	..	-2	..	..	..	..
84	Oman	..	..	..	..	..	0.728	0.729	0.731	..	-1	..	..	..	..
85	Brazil	0.522	0.590	0.669	0.699	0.710	0.726	0.728	0.730	0	0	1.23	1.26	0.82	0.73
85	Jamaica	0.612	0.642	0.679	0.695	0.701	0.727	0.729	0.730	4	-2	0.47	0.57	0.69	0.61
87	Armenia	..	0.628	0.648	0.695	0.723	0.722	0.726	0.729	-7	-1	..	0.33	1.08	0.98
88	Saint Lucia	..	..	..	..	..	0.723	0.724	0.725	..	0	..	..	..	..
89	Ecuador	0.596	0.635	0.659	0.682	0.688	0.719	0.722	0.724	10	0	0.63	0.37	0.89	0.79
90	Turkey	0.474	0.569	0.645	0.684	0.702	0.715	0.720	0.722	-1	0	1.85	1.26	1.04	0.95
91	Colombia	0.556	0.600	0.658	0.681	0.698	0.714	0.717	0.719	0	0	0.76	0.93	0.82	0.75
92	Sri Lanka	0.557	0.608	0.653	0.683	0.693	0.705	0.711	0.715	5	0	0.88	0.72	0.78	0.76
93	Algeria	0.461	0.562	0.625	0.680	0.691	0.710	0.711	0.713	5	-1	2.01	1.07	1.28	1.10
94	Tunisia	0.459	0.553	0.642	0.679	0.694	0.710	0.710	0.712	2	0	1.87	1.51	1.01	0.86
<b>MEDIUM HUMAN DEVELOPMENT</b>															
95	Tonga	..	0.656	0.689	0.704	0.705	0.709	0.710	0.710	-7	0	..	0.49	0.28	0.25
96	Belize	0.621	0.653	0.672	0.694	0.696	0.700	0.701	0.702	-4	0	0.51	0.29	0.40	0.35
96	Dominican Republic	0.525	0.584	0.641	0.669	0.683	0.697	0.700	0.702	4	2	1.07	0.93	0.85	0.76
96	Fiji	0.572	0.614	0.670	0.693	0.695	0.699	0.700	0.702	-3	2	0.71	0.87	0.43	0.39
96	Samoa	..	..	0.663	0.689	0.695	0.699	0.701	0.702	-3	0	..	..	0.52	0.48
100	Jordan	0.545	0.592	0.650	0.684	0.695	0.699	0.699	0.700	-7	0	0.83	0.95	0.72	0.62
101	China	0.407	0.495	0.590	0.637	0.662	0.689	0.695	0.699	4	0	1.96	1.78	1.55	1.42
102	Turkmenistan	..	..	..	..	..	0.688	0.693	0.698	..	0	..	..	..	..
103	Thailand	0.490	0.569	0.625	0.662	0.676	0.686	0.686	0.690	-1	1	1.50	0.94	0.93	0.82
104	Maldives	..	..	0.592	0.639	0.663	0.683	0.687	0.688	1	-1	..	..	1.43	1.26
105	Suriname	..	..	..	0.666	0.672	0.679	0.681	0.684	-2	0	..	..	..	..
106	Gabon	0.526	0.610	0.627	0.653	0.662	0.676	0.679	0.683	0	0	1.49	0.27	0.75	0.72
107	El Salvador	0.471	0.528	0.620	0.655	0.671	0.678	0.679	0.680	-3	-1	1.14	1.62	0.90	0.78
108	Bolivia, Plurinational State of	0.489	0.557	0.620	0.647	0.652	0.668	0.671	0.675	0	0	1.31	1.08	0.75	0.71
108	Mongolia	..	0.559	0.564	0.622	0.638	0.657	0.668	0.675	4	2	..	0.08	1.54	1.51
110	Palestine, State of	..	..	..	..	..	0.662	0.666	0.670	..	1	..	..	..	..
111	Paraguay	0.549	0.578	0.617	0.641	0.650	0.668	0.670	0.669	-1	-2	0.52	0.66	0.79	0.67
112	Egypt	0.407	0.502	0.593	0.625	0.640	0.661	0.661	0.662	0	0	2.12	1.68	1.08	0.92
113	Moldova, Republic of	..	0.650	0.592	0.636	0.644	0.652	0.657	0.660	-2	0	..	-0.93	0.96	0.91
114	Philippines	0.561	0.581	0.610	0.630	0.636	0.649	0.651	0.654	0	0	0.35	0.49	0.61	0.58
114	Uzbekistan	..	..	..	0.617	0.630	0.644	0.649	0.654	1	1	..	..	..	..
116	Syrian Arab Republic	0.501	0.557	0.596	0.618	0.623	0.646	0.646	0.648	0	0	1.07	0.67	0.80	0.70
117	Micronesia, Federated States of	..	..	..	..	..	0.639	0.640	0.645	..	0	..	..	..	..
118	Guyana	0.513	0.502	0.578	0.610	0.617	0.628	0.632	0.636	1	1	-0.21	1.41	0.83	0.79
119	Botswana	0.449	0.586	0.587	0.604	0.619	0.633	0.634	0.634	-1	-1	2.71	0.00	0.77	0.66
120	Honduras	0.456	0.520	0.563	0.582	0.594	0.629	0.630	0.632	3	0	1.33	0.79	1.12	0.97
121	Indonesia	0.422	0.479	0.540	0.575	0.595	0.620	0.624	0.629	1	3	1.26	1.21	1.39	1.28
121	Kiribati	..	..	..	..	..	0.628	0.627	0.629	..	0	..	..	..	..
121	South Africa	0.570	0.621	0.622	0.604	0.609	0.621	0.625	0.629	0	1	0.87	0.01	-0.01	0.11
124	Vanuatu	..	..	..	..	..	0.623	0.625	0.626	..	-2	..	..	..	..
125	Kyrgyzstan	..	0.609	0.582	0.601	0.612	0.615	0.621	0.622	-3	0	..	-0.45	0.54	0.56

TABLE 2 Human Development Index trends, 1980–2012 | 149

**TABLE 2 HUMAN DEVELOPMENT INDEX TRENDS, 1980–2012**

HDI rank	Human Development Index (HDI)								HDI rank		Average annual HDI growth				
	Value								Change		(%)				
	1980	1990	2000	2005	2007	2010	2011	2012	2007–2012 <sup>a</sup>	2011–2012 <sup>a</sup>	1980/1990	1990/2000	2000/2010	2000/2012	
125	Tajikistan	..	0.615	0.529	0.582	0.587	0.612	0.618	0.622	3	1	..	-1.50	1.47	1.36
127	Viet Nam	..	0.439	0.534	0.573	0.590	0.611	0.614	0.617	0	0	..	1.98	1.37	1.22
128	Namibia	..	0.569	0.564	0.579	0.592	0.604	0.606	0.608	-2	0	..	-0.10	0.69	0.64
129	Nicaragua	0.461	0.479	0.529	0.572	0.583	0.593	0.597	0.599	0	0	0.37	1.01	1.15	1.04
130	Morocco	0.371	0.440	0.512	0.558	0.571	0.586	0.589	0.591	0	0	1.71	1.54	1.35	1.20
131	Iraq	..	..	..	0.564	0.567	0.578	0.583	0.590	1	1	..	..	..	..
132	Cape Verde	..	..	0.532	..	..	0.581	0.584	0.586	..	-1	..	..	0.88	0.81
133	Guatemala	0.432	0.464	0.523	0.551	0.570	0.579	0.580	0.581	-1	0	0.72	1.20	1.02	0.89
134	Timor-Leste	..	..	0.418	0.461	0.519	0.565	0.571	0.576	5	0	..	..	3.06	2.71
135	Ghana	0.391	0.427	0.461	0.491	0.506	0.540	0.553	0.558	7	0	0.90	0.77	1.58	1.60
136	Equatorial Guinea	..	..	0.498	0.523	0.533	0.547	0.551	0.554	-2	0	..	..	0.96	0.90
136	India	0.345	0.410	0.463	0.507	0.525	0.547	0.551	0.554	-1	0	1.75	1.23	1.67	1.50
138	Cambodia	..	..	0.444	0.501	0.520	0.532	0.538	0.543	-1	0	..	..	1.82	1.68
138	Lao People's Democratic Republic	..	0.379	0.453	0.494	0.510	0.534	0.538	0.543	3	0	..	1.80	1.66	1.53
140	Bhutan	..	..	..	..	..	0.525	0.532	0.538	..	1	..	..	..	..
141	Swaziland	..	0.533	0.502	0.504	0.520	0.532	0.536	0.536	-3	-1	..	-0.59	0.58	0.55
<b>LOW HUMAN DEVELOPMENT</b>															
142	Congo	0.470	0.510	0.482	0.506	0.511	0.529	0.531	0.534	-1	0	0.82	-0.56	0.94	0.86
143	Solomon Islands	..	..	0.486	0.510	0.522	0.522	0.526	0.530	-6	0	..	..	0.70	0.71
144	Sao Tome and Principe	..	..	..	0.488	0.503	0.520	0.522	0.525	0	0	..	..	..	..
145	Kenya	0.424	0.463	0.447	0.472	0.491	0.511	0.515	0.519	1	0	0.88	-0.33	1.34	1.24
146	Bangladesh	0.312	0.361	0.433	0.472	0.488	0.508	0.511	0.515	1	1	1.49	1.83	1.61	1.46
146	Pakistan	0.337	0.383	0.419	0.485	0.498	0.512	0.513	0.515	-1	0	1.29	0.89	2.03	1.74
148	Angola	..	..	0.375	0.406	0.472	0.502	0.504	0.508	1	0	..	..	2.97	2.56
149	Myanmar	0.281	0.305	0.382	0.435	0.464	0.490	0.494	0.498	1	0	0.83	2.27	2.52	2.23
150	Cameroon	0.373	0.431	0.429	0.453	0.459	0.488	0.492	0.495	1	0	1.46	-0.05	1.29	1.20
151	Madagascar	..	..	0.428	0.467	0.478	0.484	0.483	0.483	-3	0	..	..	1.24	1.02
152	Tanzania, United Republic of	..	0.353	0.369	0.395	0.408	0.466	0.470	0.476	15	1	..	0.43	2.36	2.15
153	Nigeria	..	..	..	0.434	0.448	0.462	0.467	0.471	1	1	..	..	..	..
154	Senegal	0.322	0.368	0.405	0.441	0.454	0.470	0.471	0.470	-2	-2	1.32	0.97	1.50	1.25
155	Mauritania	0.340	0.357	0.418	0.441	0.454	0.464	0.464	0.467	-3	0	0.48	1.61	1.04	0.92
156	Papua New Guinea	0.324	0.368	0.415	0.429	..	0.458	0.462	0.466	1	0	1.29	1.22	0.99	0.96
157	Nepal	0.234	0.341	0.401	0.429	0.440	0.458	0.460	0.463	2	0	3.85	1.62	1.35	1.21
158	Lesotho	0.422	0.474	0.429	0.425	0.431	0.452	0.456	0.461	2	1	1.18	-0.99	0.53	0.61
159	Togo	0.357	0.382	0.426	0.436	0.442	0.452	0.455	0.459	-2	1	0.67	1.11	0.60	0.62
160	Yemen	..	0.286	0.376	0.428	0.444	0.466	0.459	0.458	-4	-2	..	2.78	2.16	1.66
161	Haiti	0.335	0.399	0.422	0.437	..	0.450	0.453	0.456	-6	1	1.77	0.56	0.64	0.65
161	Uganda	..	0.306	0.375	0.408	0.427	0.450	0.454	0.456	0	0	..	2.06	1.84	1.65
163	Zambia	0.405	0.398	0.376	0.399	0.411	0.438	0.443	0.448	3	0	-0.18	-0.56	1.52	1.46
164	Djibouti	..	..	..	0.405	0.419	0.431	0.442	0.445	0	0	..	..	..	..
165	Gambia	0.279	0.323	0.360	0.375	0.383	0.437	0.440	0.439	5	0	1.47	1.09	1.95	1.65
166	Benin	0.253	0.314	0.380	0.414	0.420	0.432	0.434	0.436	-3	0	2.16	1.95	1.28	1.14
167	Rwanda	0.277	0.233	0.314	0.377	0.400	0.425	0.429	0.434	2	0	-1.74	3.05	3.07	2.73
168	Côte d'Ivoire	0.348	0.360	0.392	0.405	0.412	0.427	0.426	0.432	-3	1	0.34	0.85	0.86	0.81
169	Comoros	..	..	..	0.425	0.425	0.426	0.428	0.429	-7	-1	..	..	..	..
170	Malawi	0.272	0.295	0.352	0.363	0.381	0.413	0.415	0.418	1	1	0.83	1.78	1.61	1.44
171	Sudan	0.269	0.301	0.364	0.390	0.401	0.411	0.419	0.414	-3	-1	1.15	1.89	1.22	1.08
172	Zimbabwe	0.367	0.427	0.376	0.352	0.355	0.374	0.387	0.397	0	1	1.53	-1.26	-0.04	0.46
173	Ethiopia	..	..	0.275	0.316	0.350	0.387	0.392	0.396	1	-1	..	..	3.49	3.09
174	Liberia	0.298	..	0.304	0.301	0.334	0.367	0.381	0.388	3	0	..	..	1.88	2.04
175	Afghanistan	0.209	0.246	0.236	0.322	0.346	0.368	0.371	0.374	0	0	1.63	-0.41	4.54	3.91
176	Guinea-Bissau	..	..	..	0.348	0.355	0.361	0.364	0.364	-4	0	..	..	..	..
177	Sierra Leone	0.255	0.247	0.244	0.315	0.331	0.346	0.348	0.359	1	2	-0.28	-0.15	3.58	3.29
178	Burundi	0.217	0.272	0.270	0.298	0.323	0.348	0.352	0.355	2	-1	2.26	-0.07	2.59	2.31
178	Guinea	..	..	..	0.331	0.342	0.349	0.352	0.355	-2	-1	..	..	..	..
180	Central African Republic	0.285	0.312	0.294	0.308	0.316	0.344	0.348	0.352	2	-1	0.94	-0.59	1.59	1.50
181	Eritrea	..	..	..	..	..	0.342	0.346	0.351	..	1	..	..	..	..
182	Mali	0.176	0.204	0.270	0.312	0.328	0.344	0.347	0.344	-2	-1	1.50	2.86	2.45	2.04
183	Burkina Faso	..	..	..	0.301	0.314	0.334	0.340	0.343	1	0	..	..	..	..
184	Chad	..	..	0.290	0.317	0.319	0.336	0.336	0.340	-2	0	..	..	1.47	1.32
185	Mozambique	0.217	0.202	0.247	0.287	0.301	0.318	0.322	0.327	0	0	-0.70	2.00	2.57	2.37
186	Congo, Democratic Republic of the	0.286	0.297	0.234	0.258	0.280	0.295	0.299	0.304	0	0	0.37	-2.34	2.35	2.19
186	Niger	0.179	0.198	0.234	0.269	0.278	0.298	0.297	0.304	1	1	0.98	1.72	2.42	2.20

HDI rank	Human Development Index (HDI)								HDI rank		Average annual HDI growth			
	Value								Change		(%)			
	1980	1990	2000	2005	2007	2010	2011	2012	2007–2012 <sup>a</sup>	2011–2012 <sup>a</sup>	1980/1990	1990/2000	2000/2010	2000/2012
<b>OTHER COUNTRIES OR TERRITORIES</b>														
Korea, Democratic People's Rep. of	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marshall Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monaco	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nauru	..	..	..	..	..	..	..	..	..	..	..	..	..	..
San Marino	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Sudan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuvalu	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Human Development Index groups</b>														
Very high human development	0.773	0.817	0.867	0.889	0.896	0.902	0.904	0.905	—	—	0.56	0.59	0.40	0.36
High human development	0.605 <sup>c</sup>	0.656 <sup>c</sup>	0.695	0.725	0.738	0.753	0.755	0.758	—	—	0.81	0.58	0.80	0.72
Medium human development	0.419 <sup>c</sup>	0.481	0.549	0.589	0.609	0.631	0.636	0.640	—	—	1.38	1.32	1.41	1.29
Low human development	0.315	0.350	0.385	0.424	0.442	0.461	0.464	0.466	—	—	1.05	0.95	1.82	1.62
<b>Regions</b>														
Arab States	0.443	0.517	0.583	0.622	0.633	0.648	0.650	0.652	—	—	1.56	1.21	1.07	0.94
East Asia and the Pacific	0.432 <sup>c</sup>	0.502 <sup>c</sup>	0.584	0.626	0.649	0.673	0.678	0.683	—	—	1.51	1.51	1.43	1.31
Europe and Central Asia	0.651 <sup>c</sup>	0.701 <sup>c</sup>	0.709	0.743	0.757	0.766	0.769	0.771	—	—	0.74	0.12	0.77	0.70
Latin America and the Caribbean	0.574	0.623	0.683	0.708	0.722	0.736	0.739	0.741	—	—	0.83	0.93	0.74	0.67
South Asia	0.357	0.418	0.470	0.514	0.531	0.552	0.555	0.558	—	—	1.58	1.19	1.60	1.43
Sub-Saharan Africa	0.366	0.387	0.405	0.432	0.449	0.468	0.472	0.475	—	—	0.58	0.44	1.47	1.34
<b>Least developed countries</b>														
	0.290 <sup>c</sup>	0.327 <sup>c</sup>	0.367	0.401	0.421	0.443	0.446	0.449	—	—	1.22	1.15	1.91	1.70
<b>Small island developing states</b>														
	0.530 <sup>c</sup>	0.571 <sup>c</sup>	0.600 <sup>c</sup>	0.623	0.658	0.645	0.647	0.648	—	—	0.75	0.50	0.73	0.65
<b>World</b>	<b>0.561<sup>c</sup></b>	<b>0.600</b>	<b>0.639</b>	<b>0.666</b>	<b>0.678</b>	<b>0.690</b>	<b>0.692</b>	<b>0.694</b>	—	—	<b>0.68</b>	<b>0.64</b>	<b>0.77</b>	<b>0.68</b>

#### NOTES

- a** A positive value indicates an improvement in rank.  
**b** The substantial change in rank is due to an updated International Monetary Fund estimate of Libya's GDP growth in 2011.  
**c** Based on fewer than half the countries in the group or region.

#### DEFINITIONS

**Human Development Index (HDI):** A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living. See *Technical note 1* at [http://hdr.undp.org/en/media/HDR\\_2013\\_EN\\_TechNotes.pdf](http://hdr.undp.org/en/media/HDR_2013_EN_TechNotes.pdf) for details on how the HDI is calculated.

**Average annual HDI growth:** A smoothed annualized growth of the HDI in a given period calculated as the annual compound growth rate.

#### MAIN DATA SOURCES

**Columns 1–8:** HDRO calculations based on data from UNDESA (2011), Barro and Lee (2011), UNESCO

Institute for Statistics (2012), World Bank (2012a) and IMF (2012).

**Columns 9–14:** Calculated based on HDI values in the relevant year.

# Inequality-adjusted Human Development Index

HDI rank	Human Development Index (HDI)		Inequality-adjusted HDI (IHDI)		Inequality-adjusted life expectancy index		Inequality-adjusted education index		Inequality-adjusted income index		Quintile income ratio	Income Gini coefficient
	Value	Value	Overall loss (%)	Difference from HDI rank <sup>a</sup>	Value	Loss (%)	Value	Loss (%)	Value	Loss (%)	2000–2010 <sup>c</sup>	2000–2010 <sup>c</sup>
	2012	2012	2012	2012	2012	2012	2012 <sup>b</sup>	2012	2012 <sup>b</sup>	2012	2000–2010 <sup>c</sup>	2000–2010 <sup>c</sup>
<b>VERY HIGH HUMAN DEVELOPMENT</b>												
1 Norway	0.955	0.894	6.4	0	0.928	3.7	0.968	2.2	0.797	12.8	3.9	25.8
2 Australia	0.938	0.864	7.9	0	0.930	4.7	0.965	1.7	0.719	16.6	..	..
3 United States	0.937	0.821	12.4	-13	0.863	6.6	0.941	5.3	0.681	24.1 <sup>d</sup>	8.4	40.8
4 Netherlands	0.921	0.857	6.9	0	0.916	4.3	0.897	3.9	0.766	12.3	..	..
5 Germany	0.920	0.856	6.9	0	0.915	4.0	0.927	1.8	0.741	14.5	4.3	28.3
6 New Zealand	0.919	..	..	..	0.907	5.2	..	..	..	..	..	..
7 Ireland	0.916	0.850	7.2	0	0.915	4.3	0.933	3.2	0.720	13.8	5.7	34.3
7 Sweden	0.916	0.859	6.2	3	0.937	3.3	0.878	3.8	0.772	11.2	4.0	25.0
9 Switzerland	0.913	0.849	7.0	1	0.942	4.1	0.856	2.0	0.760	14.3	5.5	33.7
10 Japan	0.912	..	..	..	0.965	3.5	..	..	..	..	..	..
11 Canada	0.911	0.832	8.7	-4	0.913	5.0	0.879	3.2	0.718	17.1	5.5	32.6
12 Korea, Republic of	0.909	0.758	16.5	-18	0.915	4.3	0.702	25.5	0.679	18.4	..	..
13 Hong Kong, China (SAR)	0.906	..	..	..	0.962	2.9	..	..	..	..	..	..
13 Iceland	0.906	0.848	6.4	3	0.945	3.0	0.889	2.5	0.727	13.2	..	..
15 Denmark	0.901	0.845	6.2	3	0.887	4.4	0.891	3.1	0.764	11.0	..	..
16 Israel	0.900	0.790	12.3	-8	0.935	3.9	0.840	7.9	0.627	23.7	7.9	39.2
17 Belgium	0.897	0.825	8.0	-1	0.903	4.4	0.822	7.6	0.756	11.9	4.9	33.0
18 Austria	0.895	0.837	6.6	3	0.919	4.2	0.838	2.5	0.760	12.7	4.4	29.2
18 Singapore	0.895	..	..	..	0.935	2.9	..	..	..	..	..	..
20 France	0.893	0.812	9.0	-2	0.930	4.2	0.788	9.4	0.732	13.3	..	..
21 Finland	0.892	0.839	6.0	6	0.909	3.9	0.859	2.4	0.757	11.3	3.8	26.9
21 Slovenia	0.892	0.840	5.8	7	0.898	4.1	0.905	3.3	0.729	9.9	4.8	31.2
23 Spain	0.885	0.796	10.1	-1	0.930	4.1	0.823	5.5	0.659	19.7	6.0	34.7
24 Liechtenstein	0.883	..	..	..	..	..	..	..	..	..	..	..
25 Italy	0.881	0.776	11.9	-4	0.937	3.9	0.740	13.1	0.673	18.1	6.5	36.0
26 Luxembourg	0.875	0.813	7.2	4	0.913	3.5	0.729	6.3	0.807	11.6	4.6	30.8
26 United Kingdom	0.875	0.802	8.3	2	0.903	4.8	0.806	2.6	0.709	16.9	..	..
28 Czech Republic	0.873	0.826	5.4	9	0.874	3.9	0.904	1.3	0.712	10.7	..	..
29 Greece	0.860	0.760	11.5	-3	0.899	4.8	0.759	11.3	0.644	18.1	6.2	34.3
30 Brunei Darussalam	0.855	..	..	..	0.862	5.8	..	..	..	..	..	..
31 Cyprus	0.848	0.751	11.5	-4	0.901	4.1	0.672	16.3	0.698	13.6	..	..
32 Malta	0.847	0.778	8.2	3	0.893	5.1	0.771	5.5	0.683	13.6	..	..
33 Andorra	0.846	..	..	..	..	..	..	..	..	..	..	..
33 Estonia	0.846	0.770	9.0	2	0.813	6.0	0.894	2.6	0.627	17.7	6.4	36.0
35 Slovakia	0.840	0.788	6.3	6	0.825	5.7	0.856	1.5	0.692	11.3	3.6	26.0
36 Qatar	0.834	..	..	..	0.854	7.2	..	..	..	..	13.3	41.1
37 Hungary	0.831	0.769	7.4	3	0.810	5.7	0.854	4.1	0.658	12.2	4.8	31.2
38 Barbados	0.825	..	..	..	0.814	9.2	..	..	..	..	..	..
39 Poland	0.821	0.740	9.9	0	0.834	5.8	0.767	6.3	0.634	17.1	5.5	34.1
40 Chile	0.819	0.664	19.0	-10	0.871	6.6	0.689	13.7	0.488	34.1	13.5	52.1
41 Lithuania	0.818	0.727	11.0	-1	0.767	7.2	0.830	5.0	0.605	20.1	6.7	37.6
41 United Arab Emirates	0.818	..	..	..	0.836	6.3	..	..	..	..	..	..
43 Portugal	0.816	0.729	10.8	1	0.893	4.9	0.700	5.6	0.619	20.8	..	..
44 Latvia	0.814	0.726	10.9	-1	0.784	7.1	0.837	3.6	0.583	20.9	6.6	36.6
45 Argentina	0.811	0.653	19.5	-8	0.796	9.7	0.716	12.1	0.487	34.4	11.3	44.5
46 Seychelles	0.806	..	..	..	..	..	..	..	..	..	18.8	65.8
47 Croatia	0.805	0.683	15.1	-3	0.845	5.5	0.703	10.4	0.537	27.8	5.2	33.7
<b>HIGH HUMAN DEVELOPMENT</b>												
48 Bahrain	0.796	..	..	..	0.815	6.2	..	..	..	..	..	..
49 Bahamas	0.794	..	..	..	0.783	10.9	..	..	..	..	..	..
50 Belarus	0.793	0.727	8.3	3	0.737	7.4	0.819	5.4	0.636	12.1	4.0	27.2
51 Uruguay	0.792	0.662	16.4	-4	0.815	9.3	0.682	10.8	0.521	27.9	10.3	45.3
52 Montenegro	0.791	0.733	7.4	8	0.803	6.8	0.817	2.5	0.600	12.6	4.6	30.0
52 Palau	0.791	..	..	..	..	..	..	..	..	..	..	..
54 Kuwait	0.790	..	..	..	0.803	6.7	..	..	..	..	..	..
55 Russian Federation	0.788	..	..	..	0.689	10.8	..	..	0.647	11.9	7.3	40.1
56 Romania	0.786	0.687	12.6	2	0.770	9.6	0.779	5.0	0.540	22.2	4.6	30.0
57 Bulgaria	0.782	0.704	9.9	5	0.776	7.8	0.760	6.1	0.592	15.4	4.3	28.2
57 Saudi Arabia	0.782	..	..	..	0.754	11.5	..	..	..	..	..	..
59 Cuba	0.780	..	..	..	0.882	5.4	..	..	..	..	..	..
59 Panama	0.780	0.588	24.6	-15	0.776	12.4	0.609	17.8	0.431	40.5	17.1	51.9

HDI rank	Human Development Index (HDI)	Inequality-adjusted HDI (IHDI)			Inequality-adjusted life expectancy index		Inequality-adjusted education index		Inequality-adjusted income index		Quintile income ratio	Income Gini coefficient
	Value	Value	Overall loss (%)	Difference from HDI rank*	Value	Loss (%)	Value	Loss (%)	Value	Loss (%)	2000–2010 <sup>c</sup>	2000–2010 <sup>c</sup>
	2012	2012	2012	2012	2012	2012	2012 <sup>b</sup>	2012	2012 <sup>b</sup>	2012	2000–2010 <sup>c</sup>	2000–2010 <sup>c</sup>
61 Mexico	0.775	0.593	23.4	-12	0.801	10.9	0.564	21.9	0.463	35.6	11.3	48.3
62 Costa Rica	0.773	0.606	21.5	-10	0.862	7.8	0.601	15.7	0.430	37.9	14.5	50.7
63 Grenada	0.770	..	..	..	0.798	9.6	..	..	..	..	..	..
64 Libya	0.769	..	..	..	0.782	9.7	..	..	..	..	..	..
64 Malaysia	0.769	..	..	..	0.799	6.7	..	..	..	..	11.3	46.2
64 Serbia	0.769	0.696	9.5	8	0.788	8.3	0.709	9.9	0.603	10.3	4.2	27.8
67 Antigua and Barbuda	0.760	..	..	..	..	..	..	..	..	..	..	..
67 Trinidad and Tobago	0.760	0.644	15.3	-3	0.660	16.6	0.652	6.6	0.621	21.9	..	..
69 Kazakhstan	0.754	0.652	13.6	3	0.624	16.2	0.781	6.9	0.567	17.3	4.2	29.0
70 Albania	0.749	0.645	13.9	0	0.797	11.2	0.640	11.9	0.526	18.3	5.3	34.5
71 Venezuela, Bolivarian Republic of	0.748	0.549	26.6	-17	0.754	12.2	0.571	18.1	0.385	44.9	11.5	44.8
72 Dominica	0.745	..	..	..	..	..	..	..	..	..	..	..
72 Georgia	0.745	0.631	15.3	-2	0.720	15.1	0.814	3.3	0.428	25.9	8.9	41.3
72 Lebanon	0.745	0.575	22.8	-9	0.718	13.5	0.531	24.1	0.498	30.0	..	..
72 Saint Kitts and Nevis	0.745	..	..	..	..	..	..	..	..	..	..	..
76 Iran, Islamic Republic of	0.742	..	..	..	0.703	16.1	..	..	..	..	7.0	38.3
77 Peru	0.741	0.561	24.3	-10	0.727	14.8	0.538	24.6	0.452	32.5	13.5	48.1
78 The former Yugoslav Republic of Macedonia	0.740	0.631	14.7	2	0.784	9.4	0.612	12.3	0.524	21.8	9.5	43.2
78 Ukraine	0.740	0.672	9.2	13	0.687	10.5	0.808	6.1	0.548	10.9	3.8	26.4
80 Mauritius	0.737	0.639	13.3	5	0.760	9.8	0.570	13.5	0.602	16.6	..	..
81 Bosnia and Herzegovina	0.735	0.650	11.5	11	0.794	9.6	0.668	5.2	0.518	19.2	6.5	36.2
82 Azerbaijan	0.734	0.650	11.4	11	0.636	20.6	0.697	8.3	0.620	4.5	5.3	33.7
83 Saint Vincent and the Grenadines	0.733	..	..	..	0.710	14.0	..	..	..	..	..	..
84 Oman	0.731	..	..	..	0.777	7.2	..	..	..	..	..	..
85 Brazil	0.730	0.531	27.2	-12	0.725	14.4	0.503	25.3	0.411	39.7	20.6	54.7
85 Jamaica	0.730	0.591	19.1	2	0.710	15.3	0.669	10.6	0.434	30.1	9.6	45.5
87 Armenia	0.729	0.649	10.9	13	0.728	14.9	0.735	3.7	0.510	13.9	4.5	30.9
88 Saint Lucia	0.725	..	..	..	0.773	10.4	..	..	..	..	..	..
89 Ecuador	0.724	0.537	25.8	-8	0.754	14.1	0.529	22.1	0.390	38.8	12.5	49.3
90 Turkey	0.722	0.560	22.5	-1	0.743	12.8	0.442	27.4	0.534	26.5	7.9	39.0
91 Colombia	0.719	0.519	27.8	-11	0.732	13.7	0.523	21.5	0.366	44.5	20.1	55.9
92 Sri Lanka	0.715	0.607	15.1	11	0.786	9.4	0.618	14.6	0.461	20.8	6.9	40.3
93 Algeria	0.713	..	..	..	0.717	14.5	..	..	..	..	..	..
94 Tunisia	0.712	..	..	..	0.752	12.6	..	..	..	..	8.1	41.4
<b>MEDIUM HUMAN DEVELOPMENT</b>												
95 Tonga	0.710	..	..	..	0.712	13.8	..	..	..	..	..	..
96 Belize	0.702	..	..	..	0.777	12.2	..	..	..	..	..	..
96 Dominican Republic	0.702	0.510	27.3	-15	0.708	16.0	0.458	26.8	0.410	37.6	11.3	47.2
96 Fiji	0.702	..	..	..	0.676	13.0	..	..	..	..	8.0	42.8
96 Samoa	0.702	..	..	..	0.718	13.4	..	..	..	..	..	..
100 Jordan	0.700	0.568	19.0	5	0.732	13.1	0.541	22.4	0.462	21.1	5.7	35.4
101 China	0.699	0.543	22.4	0	0.731	13.5	0.481	23.2	0.455	29.5	9.6	42.5
102 Turkmenistan	0.698	..	..	..	0.521	26.7	..	..	..	..	..	..
103 Thailand	0.690	0.543	21.3	0	0.768	10.1	0.491	18.0	0.424	34.0	7.1	40.0
104 Maldives	0.688	0.515	25.2	-8	0.834	7.3	0.335	41.2	0.489	23.2	6.8	37.4
105 Suriname	0.684	0.526	23.0	-2	0.680	15.0	0.504	20.1	0.426	32.8	..	..
106 Gabon	0.683	0.550	19.5	6	0.489	27.8	0.611	7.3	0.556	22.1	7.8	41.5
107 El Salvador	0.680	0.499	26.6	-11	0.699	15.2	0.429	32.4	0.415	31.1	14.3	48.3
108 Bolivia, Plurinational State of	0.675	0.444	34.2	-12	0.553	25.1	0.537	27.6	0.294	47.4	27.8	56.3
108 Mongolia	0.675	0.568	15.9	13	0.623	18.8	0.661	8.9	0.444	19.7	6.2	36.5
110 Palestine, State of	0.670	..	..	..	0.725	13.1	..	..	..	..	5.8	35.5
111 Paraguay	0.669	..	..	..	0.681	17.8	..	..	0.374	33.4	17.3	52.4
112 Egypt	0.662	0.503	24.1	-7	0.724	13.9	0.347	40.9	0.505	14.2	4.4	30.8
113 Moldova, Republic of	0.660	0.584	11.6	18	0.693	11.2	0.670	6.1	0.429	17.0	5.3	33.0
114 Philippines	0.654	0.524	19.9	4	0.654	15.2	0.587	13.5	0.375	30.0	8.3	43.0
114 Uzbekistan	0.654	0.551	15.8	13	0.578	24.3	0.706	1.4	0.409	20.1	6.2	36.7
116 Syrian Arab Republic	0.648	0.515	20.4	3	0.793	10.0	0.372	31.5	0.464	18.3	5.7	35.8
117 Micronesia, Federated States of	0.645	..	..	..	0.625	19.2	..	..	..	..	40.2	61.1
118 Guyana	0.636	0.514	19.1	2	0.618	21.7	0.559	10.5	0.393	24.4	..	..
119 Botswana	0.634	..	..	..	0.394	24.3	..	..	..	..	..	..
120 Honduras	0.632	0.458	27.5	-3	0.694	17.4	0.413	28.2	0.335	35.8	29.7	57.0
121 Indonesia	0.629	0.514	18.3	3	0.652	16.8	0.459	20.4	0.453	17.7	5.1	34.0

**TABLE 3 INEQUALITY-ADJUSTED HUMAN DEVELOPMENT INDEX**

HDI rank	Human Development Index (HDI)	Inequality-adjusted HDI (IHDI)			Inequality-adjusted life expectancy index		Inequality-adjusted education index		Inequality-adjusted income index		Quintile income ratio	Income Gini coefficient
	Value	Value	Overall loss (%)	Difference from HDI rank <sup>a</sup>	Value	Loss (%)	Value	Loss (%)	Value	Loss (%)	2000–2010 <sup>c</sup>	2000–2010 <sup>c</sup>
	2012	2012	2012	2012	2012	2012	2012 <sup>b</sup>	2012	2012 <sup>b</sup>	2012	2000–2010 <sup>c</sup>	2000–2010 <sup>c</sup>
121 Kiribati	0.629	..	..	..	..	..	..	..	..	..	..	..
121 South Africa	0.629	..	..	..	0.376	28.4	0.558	20.8	..	..	25.3	63.1
124 Vanuatu	0.626	..	..	..	0.681	15.6	..	..	..	..	..	..
125 Kyrgyzstan	0.622	0.516	17.1	8	0.606	19.8	0.674	6.5	0.336	24.1	6.4	36.2
125 Tajikistan	0.622	0.507	18.4	2	0.548	27.2	0.623	12.2	0.383	15.0	4.7	30.8
127 Viet Nam	0.617	0.531	14.0	14	0.755	13.4	0.447	17.1	0.444	11.4	5.9	35.6
128 Namibia	0.608	0.344	43.5	-16	0.528	21.1	0.402	27.8	0.191	68.3	21.8	63.9
129 Nicaragua	0.599	0.434	27.5	1	0.735	13.9	0.351	33.3	0.317	33.6	7.6	40.5
130 Morocco	0.591	0.415	29.7	0	0.686	16.7	0.243	45.8	0.430	23.0	7.3	40.9
131 Iraq	0.590	..	..	..	0.622	20.3	0.334	33.0	..	..	4.6	30.9
132 Cape Verde	0.586	..	..	..	0.746	12.7	..	..	..	..	12.3	50.5
133 Guatemala	0.581	0.389	33.1	-3	0.659	18.6	0.280	36.1	0.318	42.5	19.6	55.9
134 Timor-Leste	0.576	0.386	33.0	-3	0.471	30.2	0.251	47.6	0.485	17.8	4.6	31.9
135 Ghana	0.558	0.379	32.2	-3	0.508	27.5	0.352	40.9	0.303	27.2	9.3	42.8
136 Equatorial Guinea	0.554	..	..	..	0.270	45.4	..	..	..	..	..	..
136 India	0.554	0.392	29.3	1	0.525	27.1	0.264	42.4	0.434	15.8	4.9	33.4
138 Cambodia	0.543	0.402	25.9	3	0.488	28.8	0.372	28.3	0.358	20.3	6.1	37.9
138 Lao People's Democratic Republic	0.543	0.409	24.7	4	0.589	21.7	0.311	31.2	0.374	20.6	5.9	36.7
140 Bhutan	0.538	0.430	20.0	8	0.568	24.1	0.312	12.2	0.450	23.1	6.8	38.1
141 Swaziland	0.536	0.346	35.4	-3	0.296	35.0	0.409	29.8	0.343	40.9	14.0	51.5
<b>LOW HUMAN DEVELOPMENT</b>												
142 Congo	0.534	0.368	31.1	1	0.374	37.0	0.384	25.4	0.348	30.3	10.7	47.3
143 Solomon Islands	0.530	..	..	..	0.602	20.7	..	..	..	..	..	..
144 Sao Tome and Principe	0.525	0.358	31.7	1	0.503	28.8	0.379	20.0	0.241	44.2	10.8	50.8
145 Kenya	0.519	0.344	33.6	-2	0.390	34.1	0.405	30.7	0.259	36.0	11.0	47.7
146 Bangladesh	0.515	0.374	27.4	5	0.595	23.2	0.252	39.4	0.350	17.7	4.7	32.1
146 Pakistan	0.515	0.356	30.9	2	0.487	32.3	0.217	45.2	0.426	11.0	4.2	30.0
148 Angola	0.508	0.285	43.9	-12	0.267	46.1	0.303	34.6	0.286	50.0	30.9	58.6
149 Myanmar	0.498	..	..	..	0.537	25.3	..	..	..	..	..	..
150 Cameroon	0.495	0.330	33.4	-1	0.288	43.0	0.346	35.3	0.361	19.9	6.9	38.9
151 Madagascar	0.483	0.335	30.7	1	0.549	25.6	0.342	30.1	0.199	36.1	9.3	44.1
152 Tanzania, United Republic of	0.476	0.346	27.3	5	0.414	32.4	0.326	28.3	0.307	20.9	6.6	37.6
153 Nigeria	0.471	0.276	41.4	-13	0.286	43.8	0.250	45.2	0.295	34.5	12.2	48.8
154 Senegal	0.470	0.315	33.0	2	0.432	30.7	0.223	44.6	0.325	21.6	7.4	39.2
155 Mauritania	0.467	0.306	34.4	1	0.391	36.2	0.212	42.1	0.346	23.8	7.8	40.5
156 Papua New Guinea	0.466	..	..	..	0.508	25.2	..	..	..	..	..	..
157 Nepal	0.463	0.304	34.2	0	0.622	19.5	0.202	43.6	0.225	37.4	5.0	32.8
158 Lesotho	0.461	0.296	35.9	-1	0.297	34.3	0.379	24.3	0.229	47.0	19.0	52.5
159 Togo	0.459	0.305	33.5	3	0.371	37.2	0.291	41.5	0.263	20.0	5.6	34.4
160 Yemen	0.458	0.310	32.3	6	0.541	25.1	0.156	49.8	0.353	17.6	6.3	37.7
161 Haiti	0.456	0.273	40.2	-7	0.461	30.9	0.241	40.7	0.182	47.9	26.6	59.2
161 Uganda	0.456	0.303	33.6	3	0.331	39.1	0.327	32.2	0.257	29.1	8.7	44.3
163 Zambia	0.448	0.283	36.7	-2	0.269	41.9	0.383	23.8	0.221	42.6 <sup>e</sup>	16.6	54.6
164 Djibouti	0.445	0.285	36.0	1	0.380	36.9	0.166	47.0	0.365	21.7	7.7	40.0
165 Gambia	0.439	..	..	..	0.404	33.9	..	..	..	..	11.0	47.3
166 Benin	0.436	0.280	35.8	-1	0.343	40.3	0.213	42.0	0.301	23.6	6.6	38.6
167 Rwanda	0.434	0.287	33.9	6	0.330	41.3	0.285	29.4	0.251	30.2	12.7	53.1
168 Côte d'Ivoire	0.432	0.265	38.6	-3	0.352	37.8	0.197	43.2	0.268	34.4	8.5	41.5
169 Comoros	0.429	..	..	..	0.440	32.6	0.189	47.4	..	..	26.7	64.3
170 Malawi	0.418	0.287	31.4	7	0.329	39.9	0.309	30.2	0.232	23.1	6.6	39.0
171 Sudan	0.414	..	..	..	0.440	33.0	..	..	..	..	6.2	35.3
172 Zimbabwe	0.397	0.284	28.5	5	0.357	30.6	0.469	17.8	0.137	35.8	..	..
173 Ethiopia	0.396	0.269	31.9	1	0.404	35.4	0.179	38.3	0.271	20.8	4.3	29.8
174 Liberia	0.388	0.251	35.3	0	0.367	37.6	0.230	46.4	0.188	19.0	7.0	38.2
175 Afghanistan	0.374	..	..	..	0.225	50.9	0.205	39.3	..	..	4.0	27.8
176 Guinea-Bissau	0.364	0.213	41.4	-3	0.224	50.1	0.185	40.3	0.234	32.5	5.9	35.5
177 Sierra Leone	0.359	0.210	41.6	-3	0.242	45.3	0.171	47.4	0.222	31.0	8.1	42.5
178 Burundi	0.355	..	..	..	0.264	45.6	..	..	..	..	4.8	33.3
178 Guinea	0.355	0.217	38.8	0	0.311	42.7	0.145	42.0	0.228	31.1	7.3	39.4
180 Central African Republic	0.352	0.209	40.5	-2	0.247	46.0	0.176	45.9	0.210	28.1	18.0	56.3
181 Eritrea	0.351	..	..	..	0.485	26.6	..	..	..	..	..	..
182 Mali	0.344	..	..	..	0.269	46.3	0.162	36.9	..	..	5.2	33.0

	Human Development Index (HDI)	Inequality-adjusted HDI (IHDI)		Inequality-adjusted life expectancy index		Inequality-adjusted education index		Inequality-adjusted income index		Quintile income ratio	Income Gini coefficient	
	Value	Value	Overall loss (%)	Difference from HDI rank*	Value	Loss (%)	Value	Loss (%)	Value	Loss (%)	2000–2010 <sup>c</sup>	2000–2010 <sup>e</sup>
<b>HDI rank</b>	2012	2012	2012	2012	2012	2012	2012 <sup>b</sup>	2012	2012 <sup>b</sup>	2012	2000–2010 <sup>c</sup>	2000–2010 <sup>e</sup>
183 Burkina Faso	0.343	0.226	34.2	4	0.329	41.7	0.125	36.2	0.281	23.4	7.0	39.8
184 Chad	0.340	0.203	40.1	-1	0.226	52.0	0.126	43.4	0.295	21.0	7.4	39.8
185 Mozambique	0.327	0.220	32.7	5	0.286	40.8	0.182	18.2	0.205	37.0 <sup>f</sup>	9.8	45.7
186 Congo, Democratic Republic of the	0.304	0.183	39.9	-1	0.226	50.0	0.249	31.2	0.108	36.8	9.3	44.4
186 Niger	0.304	0.200	34.2	0	0.317	42.6	0.107	39.5	0.236	17.9	5.3	34.6
<b>OTHER COUNTRIES OR TERRITORIES</b>												
Korea, Democratic People's Rep. of	..	..	..	..	..	..	..	..	..	..	..	..
Marshall Islands	..	..	..	..	..	..	..	..	..	..	..	..
Monaco	..	..	..	..	..	..	..	..	..	..	..	..
Nauru	..	..	..	..	..	..	..	..	..	..	..	..
San Marino	..	..	..	..	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..
South Sudan	..	..	..	..	..	..	..	..	..	..	..	45.5
Tuvalu	..	..	..	..	..	..	..	..	..	..	..	..
<b>Human Development Index groups</b>												
Very high human development	0.905	0.807	10.8	—	0.897	5.2	0.851	6.8	0.688	19.8	—	—
High human development	0.758	0.602	20.6	—	0.736	12.4	0.592	19.9	0.500	28.6	—	—
Medium human development	0.640	0.485	24.2	—	0.633	19.3	0.395	30.2	0.456	22.7	—	—
Low human development	0.466	0.310	33.5	—	0.395	35.7	0.246	38.7	0.307	25.6	—	—
<b>Regions</b>												
Arab States	0.652	0.486	25.4	—	0.669	16.7	0.320	39.6	0.538	17.5	—	—
East Asia and the Pacific	0.683	0.537	21.3	—	0.711	14.2	0.480	21.9	0.455	27.2	—	—
Europe and Central Asia	0.771	0.672	12.9	—	0.716	11.7	0.713	10.5	0.594	16.3	—	—
Latin America and the Caribbean	0.741	0.550	25.7	—	0.744	13.4	0.532	23.0	0.421	38.5	—	—
South Asia	0.558	0.395	29.1	—	0.531	27.0	0.267	42.0	0.436	15.9	—	—
Sub-Saharan Africa	0.475	0.309	35.0	—	0.335	39.0	0.285	35.3	0.308	30.4	—	—
<b>Least developed countries</b>	0.449	0.303	32.5	—	0.406	34.6	0.240	36.2	0.287	26.1	—	—
<b>Small island developing states</b>	0.648	0.459	29.2	—	0.633	19.2	0.412	30.1	0.370	37.2	—	—
<b>World</b>	<b>0.694</b>	<b>0.532</b>	<b>23.3</b>	<b>—</b>	<b>0.638</b>	<b>19.0</b>	<b>0.453</b>	<b>27.0</b>	<b>0.522</b>	<b>23.5</b>	<b>—</b>	<b>—</b>

## NOTES

- a** Based on countries for which the Inequality-adjusted Human Development Index is calculated.
- b** The list of surveys used to estimate inequalities is available at <http://hdr.undp.org>.
- c** Data refer to the most recent year available during the period specified.
- d** Based on the 2010 Current Population Survey (from the Luxembourg Income Study database). In the 2011 *Human Development Report* income inequality was based on the 2005 American Community Survey (from the World Bank's International Income Distribution Database). The two sources seem to be inconsistent.
- e** Based on simulated income distribution from the 2007 Demographic and Health Survey. In the 2011 *Human Development Report* inequality in consumption was based on the 2002–2003 Living Conditions Monitoring Survey.
- f** Based on simulated income distribution from the 2009 Demographic and Health Survey. In the 2011 *Human Development Report* inequality in consumption was based on the 2003 National Household Survey of Living Conditions.

## DEFINITIONS

**Human Development Index (HDI):** A composite index measuring average achievement in three basic dimensions of human development—a long and healthy life, knowledge and a decent standard of living. See *Technical note 1* at [http://hdr.undp.org/en/media/HDR\\_2013\\_EN\\_TechNotes.pdf](http://hdr.undp.org/en/media/HDR_2013_EN_TechNotes.pdf) for details on how the HDI is calculated.

**Inequality-adjusted HDI (IHDI):** HDI value adjusted for inequalities in the three basic dimensions of human development. See *Technical note 2* at [http://hdr.undp.org/en/media/HDR\\_2013\\_EN\\_TechNotes.pdf](http://hdr.undp.org/en/media/HDR_2013_EN_TechNotes.pdf) for details on how the IHDI is calculated.

**Overall loss:** The loss in potential human development due to inequality, calculated as the percentage difference between the HDI and the IHDI.

**Inequality-adjusted life expectancy index:** The HDI life expectancy index adjusted for inequality in distribution of expected length of life based on data from life tables listed in *Main data sources*.

**Inequality-adjusted education index:** The HDI education index adjusted for inequality in

distribution of years of schooling based on data from household surveys listed in *Main data sources*.

**Inequality-adjusted income index:** The HDI income index adjusted for inequality in income distribution based on data from household surveys listed in *Main data sources*.

**Quintile income ratio:** Ratio of the average income of the richest 20% of the population to the average income of the poorest 20% of the population.

**Income Gini coefficient:** Measure of the deviation of the distribution of income (or consumption) among individuals or households within a country from a perfectly equal distribution. A value of 0 represents absolute equality, a value of 100 absolute inequality.

## MAIN DATA SOURCES

**Column 1:** HDRO calculations based on data from UNDESA (2011), Barro and Lee (2011), UNESCO Institute for Statistics (2012), World Bank (2012a) and IMF (2012).

**Column 2:** Calculated as the geometric mean of the values in columns 5, 7 and 9 using the methodology in *Technical note 2*.

**Column 3:** Calculated based on data in columns 1 and 2.

**Column 4:** Calculated based on data in column 2 and recalculated HDI ranks for countries with the IHDI.

**Column 5:** Calculated based on abridged life tables from UNDESA (2011).

**Column 6:** Calculated based on data in column 5 and the unadjusted life expectancy index.

**Columns 7 and 9:** Calculated based on data from LIS (2012), Eurostat (2012), World Bank (2012b), UNICEF Multiple Indicator Cluster Surveys for 2002–2012 and ICF Macro (2012) using the methodology in *Technical note 2*.

**Column 8:** Calculated based on data in column 7 and the unadjusted education index.

**Column 10:** Calculated based on data in column 9 and the unadjusted income index.

**Columns 11 and 12:** World Bank (2012a).

## Gender Inequality Index

HDI rank	Gender Inequality Index		Maternal mortality ratio <sup>a</sup>	Adolescent fertility rate <sup>b</sup>	Seats in national parliament <sup>c</sup>	Population with at least secondary education		Labour force participation rate		
	Rank	Value	(deaths per 100,000 live births)	(births per 1,000 women ages 15–19)	(% female)	(% ages 25 and older)		(% ages 15 and older)		
			2010	2012 <sup>d</sup>		2006–2010 <sup>e</sup>	2006–2010 <sup>e</sup>	2011	2011	
<b>VERY HIGH HUMAN DEVELOPMENT</b>										
1	Norway	5	0.065	7	7.4	39.6	95.6	94.7	61.7	70.1
2	Australia	17	0.115	7	12.5	29.2	92.2	92.2	58.8	72.3
3	United States	42	0.256	21	27.4	17.0 <sup>f</sup>	94.7	94.3	57.5	70.1
4	Netherlands	1	0.045	6	4.3	37.8	87.5	90.4	58.3	71.3
5	Germany	6	0.075	7	6.8	32.4	96.2	96.9	53.0	66.5
6	New Zealand	31	0.164	15	18.6	32.2	82.8	84.7	61.6	74.1
7	Ireland	19	0.121	6	8.8	19.0	74.8	73.0	52.6	68.5
7	Sweden	2	0.055	4	6.5	44.7	84.4	85.5	59.4	68.1
9	Switzerland	3	0.057	8	3.9	26.8	95.1	96.6	60.6	75.0
10	Japan	21	0.131	5	6.0	13.4	80.0 <sup>g</sup>	82.3 <sup>g</sup>	49.4	71.7
11	Canada	18	0.119	12	11.3	28.0	100.0	100.0	61.9	71.4
12	Korea, Republic of	27	0.153	16	5.8	15.7	79.4 <sup>g</sup>	91.7 <sup>g</sup>	49.2	71.4
13	Hong Kong, China (SAR)	..	..	..	4.2	..	68.7	76.4	51.0	68.1
13	Iceland	10	0.089	5	11.6	39.7	91.0	91.6	70.8	78.4
15	Denmark	3	0.057	12	5.1	39.1	99.3	99.4	59.8	69.1
16	Israel	25	0.144	7	14.0	20.0	82.7	85.5	52.5	62.4
17	Belgium	12	0.098	8	11.2	38.9	76.4	82.7	47.7	60.6
18	Austria	14	0.102	4	9.7	28.7	100.0	100.0	53.9	67.6
18	Singapore	13	0.101	3	6.7	23.5	71.3	78.9	56.5	76.6
20	France	9	0.083	8	6.0	25.1	75.9	81.3	51.1	61.9
21	Finland	6	0.075	5	9.3	42.5	100.0	100.0	55.9	64.2
21	Slovenia	8	0.080	12	4.5	23.1	94.2	97.1	53.1	65.1
23	Spain	15	0.103	6	10.7	34.9	63.3	69.7	51.6	67.4
24	Liechtenstein	..	..	..	6.0	24.0	..	..	..	..
25	Italy	11	0.094	4	4.0	20.7	68.0	78.1	37.9	59.6
26	Luxembourg	26	0.149	20	8.4	25.0	77.1	78.7	49.2	65.2
26	United Kingdom	34	0.205	12	29.7	22.1	99.6	99.8	55.6	68.5
28	Czech Republic	20	0.122	5	9.2	21.0	99.8	99.8	49.6	68.2
29	Greece	23	0.136	3	9.6	21.0	57.7	66.6	44.8	65.0
30	Brunei Darussalam	..	..	24	22.7	..	66.6 <sup>g</sup>	61.2 <sup>g</sup>	55.5	76.5
31	Cyprus	22	0.134	10	5.5	10.7	71.0	78.1	57.2	71.5
32	Malta	39	0.236	8	11.8	8.7	58.0	67.3	35.2	67.4
33	Andorra	..	..	..	7.3	50.0	49.5	49.3	..	..
33	Estonia	29	0.158	2	17.2	19.8	94.4 <sup>g</sup>	94.6 <sup>g</sup>	56.7	68.2
35	Slovakia	32	0.171	6	16.7	17.3	98.6	99.1	51.2	68.1
36	Qatar	117	0.546	7	15.5	0.1 <sup>h</sup>	70.1	62.1	51.8	95.2
37	Hungary	42	0.256	21	13.6	8.8	93.2 <sup>g</sup>	96.7 <sup>g</sup>	43.8	58.4
38	Barbados	61	0.343	51	40.8	19.6	89.5 <sup>g</sup>	87.6 <sup>g</sup>	64.8	76.2
39	Poland	24	0.140	5	12.2	21.8	76.9	83.5	48.2	64.3
40	Chile	66	0.360	25	56.0	13.9	72.1	75.9	47.1	74.2
41	Lithuania	28	0.157	8	16.1	19.1	87.9	93.1	54.1	63.9
41	United Arab Emirates	40	0.241	12	23.4	17.5	73.1 <sup>g</sup>	61.3 <sup>g</sup>	43.5	92.3
43	Portugal	16	0.114	8	12.5	28.7	40.9	40.2	56.5	68.0
44	Latvia	36	0.216	34	12.8	23.0	98.6	98.2	55.2	67.2
45	Argentina	71	0.380	77	54.2	37.7	57.0 <sup>g</sup>	54.9 <sup>g</sup>	47.3	74.9
46	Seychelles	..	..	..	47.6	43.8	66.9	66.6	..	..
47	Croatia	33	0.179	17	12.8	23.8	57.4 <sup>g</sup>	72.3 <sup>g</sup>	46.0	59.7
<b>HIGH HUMAN DEVELOPMENT</b>										
48	Bahrain	45	0.258	20	14.8	18.8	74.4 <sup>g</sup>	80.4 <sup>g</sup>	39.4	87.3
49	Bahamas	53	0.316	47	28.3	16.7	91.2	87.6	69.3	79.3
50	Belarus	..	..	4	20.5	29.7	..	..	50.2	62.6
51	Uruguay	69	0.367	29	59.0	12.3	50.6	48.8	55.6	76.5
52	Montenegro	..	..	8	14.8	12.3	97.5	98.8	..	..
52	Palau	..	..	..	12.7	6.9	..	..	..	..
54	Kuwait	47	0.274	14	14.4	6.3	53.7	46.6	43.4	82.3
55	Russian Federation	51	0.312	34	23.2	11.1	93.5 <sup>g</sup>	96.2 <sup>g</sup>	56.3	71.0
56	Romania	55	0.327	27	28.8	9.7	83.4	90.5	48.6	64.9
57	Bulgaria	38	0.219	11	36.2	20.8	90.9	94.4	48.6	60.3
57	Saudi Arabia	145	0.682	24	22.1	0.1 <sup>h</sup>	50.3 <sup>g</sup>	57.9 <sup>g</sup>	17.7	74.1
59	Cuba	63	0.356	73	43.9	45.2	73.9 <sup>g</sup>	80.4 <sup>g</sup>	43.3	69.9
59	Panama	108	0.503	92	75.9	8.5	63.5 <sup>g</sup>	60.7 <sup>g</sup>	49.6	82.5

HDI rank	Gender Inequality Index		Maternal mortality ratio <sup>a</sup>	Adolescent fertility rate <sup>b</sup>	Seats in national parliament <sup>c</sup>	Population with at least secondary education		Labour force participation rate	
	Rank	Value	(deaths per 100,000 live births)	(births per 1,000 women ages 15–19)	(% female)	(% ages 25 and older)		(% ages 15 and older)	
			2010	2012 <sup>d</sup>	2012	Female	Male	Female	Male
	2012	2012	2010	2012 <sup>d</sup>	2012	2006–2010 <sup>e</sup>	2006–2010 <sup>e</sup>	2011	2011
61 Mexico	72	0.382	50	65.5	36.0	51.2	57.0	44.3	80.5
62 Costa Rica	62	0.346	40	61.9	38.6	54.4 <sup>g</sup>	52.8 <sup>g</sup>	46.4	78.9
63 Grenada	..	..	24	35.4	17.9	..	..	..	..
64 Libya	36	0.216	58	2.6	16.5	55.6 <sup>g</sup>	44.0 <sup>g</sup>	30.1	76.8
64 Malaysia	42	0.256	29	9.8	13.2	66.0 <sup>g</sup>	72.8 <sup>g</sup>	43.8	76.9
64 Serbia	..	..	12	19.2	32.4	80.1	90.7	..	..
67 Antigua and Barbuda	..	..	..	49.1	19.4	..	..	..	..
67 Trinidad and Tobago	50	0.311	46	31.6	27.4	59.4	59.2	54.9	78.3
69 Kazakhstan	51	0.312	51	25.5	18.2	99.3	99.4	66.6	77.2
70 Albania	41	0.251	27	14.9	15.7	78.8	85.0	49.6	71.3
71 Venezuela, Bolivarian Republic of	93	0.466	92	87.3	17.0	55.1	49.8	52.1	80.2
72 Dominica	..	..	..	18.9	12.5	29.7	23.2	..	..
72 Georgia	81	0.438	67	39.5	6.6	89.7	92.7	55.8	74.2
72 Lebanon	78	0.433	25	15.4	3.1	53.0	55.4	22.6	70.8
72 Saint Kitts and Nevis	..	..	..	33.2	6.7	..	..	..	..
76 Iran, Islamic Republic of	107	0.496	21	25.0	3.1	62.1	69.1	16.4	72.5
77 Peru	73	0.387	67	48.7	21.5	47.3	59.1	67.8	84.7
78 The former Yugoslav Republic of Macedonia	30	0.162	10	17.8	30.9	72.0	85.3	42.9	68.9
78 Ukraine	57	0.338	32	26.1	8.0	91.5 <sup>g</sup>	96.1 <sup>g</sup>	53.3	66.6
80 Mauritius	70	0.377	60	31.8	18.8	45.2 <sup>g</sup>	52.9 <sup>g</sup>	44.1	75.5
81 Bosnia and Herzegovina	..	..	8	13.4	19.3	..	..	35.2	58.6
82 Azerbaijan	54	0.323	43	31.4	16.0	90.0	95.7	61.6	68.5
83 Saint Vincent and the Grenadines	..	..	48	54.1	17.4	..	..	55.7	78.4
84 Oman	59	0.340	32	9.3	9.6	47.2	57.1	28.3	81.6
85 Brazil	85	0.447	56	76.0	9.6	50.5	48.5	59.6	80.9
85 Jamaica	87	0.458	110	69.7	15.5	74.0 <sup>g</sup>	71.1 <sup>g</sup>	56.0	71.8
87 Armenia	59	0.340	30	33.2	10.7	94.1 <sup>g</sup>	94.8 <sup>g</sup>	49.4	70.2
88 Saint Lucia	..	..	35	55.9	17.2	..	..	64.2	77.3
89 Ecuador	83	0.442	110	80.6	32.3	36.6	36.6	54.3	82.7
90 Turkey	68	0.366	20	30.5	14.2	26.7	42.4	28.1	71.4
91 Colombia	88	0.459	92	68.1	13.6	43.8	42.4	55.8	79.7
92 Sri Lanka	75	0.402	35	22.1	5.8	72.6	75.5	34.7	76.3
93 Algeria	74	0.391	97	6.1	25.6	20.9	27.3	15.0	71.9
94 Tunisia	46	0.261	56	4.4	26.7	29.9	44.4	25.5	70.0
<b>MEDIUM HUMAN DEVELOPMENT</b>									
95 Tonga	90	0.462	110	18.0	3.6 <sup>l</sup>	71.6 <sup>g</sup>	76.7 <sup>g</sup>	53.6	75.0
96 Belize	79	0.435	53	70.8	13.3	35.2 <sup>g</sup>	32.8 <sup>g</sup>	48.3	81.8
96 Dominican Republic	109	0.508	150	103.6	19.1	43.3	41.7	51.0	78.6
96 Fiji	..	..	26	42.8	..	57.5	58.1	39.3	79.5
96 Samoa	..	..	..	25.5	4.1	64.3	60.0	42.8	77.8
100 Jordan	99	0.482	63	23.7	11.1	68.9	77.7	15.6	65.9
101 China	35	0.213	37	9.1	21.3	54.8 <sup>g</sup>	70.4 <sup>g</sup>	67.7	80.1
102 Turkmenistan	..	..	67	16.9	16.8	..	..	46.4	76.0
103 Thailand	66	0.360	48	37.0	15.7	29.0	35.6	63.8	80.0
104 Maldives	64	0.357	60	10.2	6.5	20.7	30.1	55.7	76.8
105 Suriname	94	0.467	130	34.9	11.8	40.5	47.1	40.5	68.7
106 Gabon	105	0.492	230	81.0	16.7	53.8 <sup>g</sup>	34.7 <sup>g</sup>	56.3	65.0
107 El Salvador	82	0.441	81	76.2	26.2	34.8	40.8	47.4	78.6
108 Bolivia, Plurinational State of	97	0.474	190	74.7	30.1	39.8	49.7	64.1	80.9
108 Mongolia	56	0.328	63	18.7	12.7	83.0 <sup>g</sup>	81.8 <sup>g</sup>	54.3	65.5
110 Palestine, State of	..	..	64	48.3	..	48.0	56.2	15.1	66.3
111 Paraguay	95	0.472	99	66.7	13.6	35.0	39.0	57.9	86.3
112 Egypt	126	0.590	66	40.6	2.2	43.4 <sup>g</sup>	59.3 <sup>g</sup>	23.7	74.3
113 Moldova, Republic of	49	0.303	41	29.1	19.8	91.6	95.3	38.4	45.1
114 Philippines	77	0.418	99	46.5	22.1	65.9 <sup>g</sup>	63.7 <sup>g</sup>	49.7	79.4
114 Uzbekistan	..	..	28	12.8	19.2	..	..	47.7	74.7
116 Syrian Arab Republic	118	0.551	70	36.5	12.0	27.4	38.2	13.1	71.6
117 Micronesia, Federated States of	..	..	100	18.5	0.1	..	..	..	..
118 Guyana	104	0.490	280	53.9	31.3	61.5 <sup>g</sup>	48.8 <sup>g</sup>	41.8	79.1
119 Botswana	102	0.485	160	43.8	7.9	73.6 <sup>g</sup>	77.5 <sup>g</sup>	71.7	81.6
120 Honduras	100	0.483	100	85.9	19.5	20.7	18.8	42.3	82.8
121 Indonesia	106	0.494	220	42.3	18.2	36.2	46.8	51.2	84.2

**TABLE 4 GENDER INEQUALITY INDEX**

	Gender Inequality Index		Maternal mortality ratio <sup>a</sup>	Adolescent fertility rate <sup>b</sup>	Seats in national parliament <sup>c</sup>	Population with at least secondary education		Labour force participation rate	
	Rank	Value	(deaths per 100,000 live births)	(births per 1,000 women ages 15–19)	(% female)	(% ages 25 and older)		(% ages 15 and older)	
			2010	2012 <sup>d</sup>	2012	Female	Male	Female	Male
HDI rank	2012	2012	2010	2012 <sup>d</sup>	2012	2006–2010 <sup>e</sup>	2006–2010 <sup>e</sup>	2011	2011
121 Kiribati	..	..	..	16.4	8.7	..	..	..	..
121 South Africa	90	0.462	300	50.4	41.1 <sup>i</sup>	68.9	72.2	44.0	60.8
124 Vanuatu	..	..	110	50.6	1.9	..	..	61.3	79.7
125 Kyrgyzstan	64	0.357	71	33.0	23.3	81.0 <sup>g</sup>	81.2 <sup>g</sup>	55.5	78.6
125 Tajikistan	57	0.338	65	25.7	17.5	93.2 <sup>g</sup>	85.8 <sup>g</sup>	57.4	75.1
127 Viet Nam	48	0.299	59	22.7	24.4	24.7 <sup>g</sup>	28.0 <sup>g</sup>	73.2	81.2
128 Namibia	86	0.455	200	54.4	25.0	33.0 <sup>g</sup>	34.0 <sup>g</sup>	58.6	69.9
129 Nicaragua	89	0.461	95	104.9	40.2	30.8 <sup>g</sup>	44.7 <sup>g</sup>	46.7	80.0
130 Morocco	84	0.444	100	10.8	11.0	20.1 <sup>g</sup>	36.3 <sup>g</sup>	26.2	74.7
131 Iraq	120	0.557	63	85.9	25.2	22.0 <sup>g</sup>	42.7 <sup>g</sup>	14.5	69.3
132 Cape Verde	..	..	79	69.2	20.8	..	..	50.8	83.3
133 Guatemala	114	0.539	120	102.4	13.3	12.6	17.4	49.0	88.3
134 Timor-Leste	..	..	300	52.3	38.5	..	..	38.4	74.1
135 Ghana	121	0.565	350	62.4	8.3	45.7 <sup>g</sup>	61.8 <sup>g</sup>	66.9	71.8
136 Equatorial Guinea	..	..	240	114.6	10.0	..	..	80.6	92.3
136 India	132	0.610	200	74.7	10.9	26.6 <sup>g</sup>	50.4 <sup>g</sup>	29.0	80.7
138 Cambodia	96	0.473	250	32.9	18.1	11.6	20.6	79.2	86.7
138 Lao People's Democratic Republic	100	0.483	470	30.1	25.0	22.9 <sup>g</sup>	36.8 <sup>g</sup>	76.5	79.5
140 Bhutan	92	0.464	180	44.9	13.9	34.0	34.5	65.8	76.5
141 Swaziland	112	0.525	320	67.9	21.9	49.9 <sup>g</sup>	46.1 <sup>g</sup>	43.6	70.8
<b>LOW HUMAN DEVELOPMENT</b>									
142 Congo	132	0.610	560	112.6	9.6	43.8 <sup>g</sup>	48.7 <sup>g</sup>	68.4	72.9
143 Solomon Islands	..	..	93	64.6	..	..	..	53.2	79.9
144 Sao Tome and Principe	..	..	70	55.4	18.2	..	..	43.7	76.6
145 Kenya	130	0.608	360	98.1	9.8	25.3	52.3	61.5	71.8
146 Bangladesh	111	0.518	240	68.2	19.7	30.8 <sup>g</sup>	39.3 <sup>g</sup>	57.2	84.3
146 Pakistan	123	0.567	260	28.1	21.1	18.3	43.1	22.7	83.3
148 Angola	..	..	450	148.1	38.2 <sup>k</sup>	..	..	62.9	77.1
149 Myanmar	80	0.437	200	12.0	4.6	18.0 <sup>g</sup>	17.6 <sup>g</sup>	75.0	82.1
150 Cameroon	137	0.628	690	115.1	13.9	21.1 <sup>g</sup>	34.9 <sup>g</sup>	64.2	77.4
151 Madagascar	..	..	240	122.7	15.9	..	..	83.4	88.7
152 Tanzania, United Republic of	119	0.556	460	128.7	36.0	5.6 <sup>g</sup>	9.2 <sup>g</sup>	88.2	90.3
153 Nigeria	..	..	630	111.3	6.7	..	..	47.9	63.3
154 Senegal	115	0.540	370	89.7	41.6	4.6	11.0	66.1	88.4
155 Mauritania	139	0.643	510	71.3	19.2	8.0 <sup>g</sup>	20.8 <sup>g</sup>	28.7	79.2
156 Papua New Guinea	134	0.617	230	62.0	2.7	6.8 <sup>g</sup>	14.1 <sup>g</sup>	70.6	74.1
157 Nepal	102	0.485	170	86.2	33.2	17.9 <sup>g</sup>	39.9 <sup>g</sup>	80.4	87.6
158 Lesotho	113	0.534	620	60.8	26.1	21.9	19.8	58.9	73.4
159 Togo	122	0.566	300	54.3	11.1	15.3 <sup>g</sup>	45.1 <sup>g</sup>	80.4	81.4
160 Yemen	148	0.747	200	66.1	0.7	7.6 <sup>g</sup>	24.4 <sup>g</sup>	25.2	72.0
161 Haiti	127	0.592	350	41.3	4.0	22.5 <sup>g</sup>	36.3 <sup>g</sup>	60.1	70.6
161 Uganda	110	0.517	310	126.4	35.0	23.0	23.9	76.0	79.5
163 Zambia	136	0.623	440	138.5	11.5	25.7	44.2	73.2	85.6
164 Djibouti	..	..	200	19.5	13.8	..	..	36.0	67.2
165 Gambia	128	0.594	360	66.9	7.5	16.9 <sup>g</sup>	31.4 <sup>g</sup>	72.4	83.1
166 Benin	135	0.618	350	97.0	8.4	11.2 <sup>g</sup>	25.6 <sup>g</sup>	67.4	78.2
167 Rwanda	76	0.414	340	35.5	51.9	7.4 <sup>g</sup>	8.0 <sup>g</sup>	86.4	85.4
168 Côte d'Ivoire	138	0.632	400	105.7	11.0	13.7 <sup>g</sup>	29.9 <sup>g</sup>	51.8	81.2
169 Comoros	..	..	280	51.1	3.0	..	..	35.1	80.4
170 Malawi	124	0.573	460	105.6	22.3	10.4 <sup>g</sup>	20.4 <sup>g</sup>	84.8	81.3
171 Sudan	129	0.604	730	53.0	24.1	12.8 <sup>g</sup>	18.2 <sup>g</sup>	30.9	76.5
172 Zimbabwe	116	0.544	570	53.4	17.9	48.8 <sup>g</sup>	62.0 <sup>g</sup>	83.0	89.5
173 Ethiopia	..	..	350	48.3	25.5	..	..	78.4	89.8
174 Liberia	143	0.658	770	123.0	11.7	15.7 <sup>g</sup>	39.2 <sup>g</sup>	57.9	64.4
175 Afghanistan	147	0.712	460	99.6	27.6	5.8 <sup>g</sup>	34.0 <sup>g</sup>	15.7	80.3
176 Guinea-Bissau	..	..	790	96.2	10.0	..	..	68.0	78.2
177 Sierra Leone	139	0.643	890	104.2	12.9	9.5 <sup>g</sup>	20.4 <sup>g</sup>	66.3	69.1
178 Burundi	98	0.476	800	20.9	34.9	5.2 <sup>g</sup>	9.2 <sup>g</sup>	83.7	82.1
178 Guinea	..	..	610	133.7	.. <sup>l</sup>	..	..	65.4	78.3
180 Central African Republic	142	0.654	890	98.6	12.5	10.3 <sup>g</sup>	26.2 <sup>g</sup>	72.5	85.1
181 Eritrea	..	..	240	53.7	22.0	..	..	79.8	90.0
182 Mali	141	0.649	540	168.9	10.2	11.3	9.2	36.8	70.0

	Gender Inequality Index		Maternal mortality ratio <sup>a</sup>	Adolescent fertility rate <sup>b</sup>	Seats in national parliament <sup>c</sup>	Population with at least secondary education		Labour force participation rate	
	Rank	Value	(deaths per 100,000 live births)	(births per 1,000 women ages 15–19)	(% female)	(% ages 25 and older)		(% ages 15 and older)	
						Female	Male	Female	Male
HDI rank	2012	2012	2010	2012 <sup>d</sup>	2012	2006–2010 <sup>e</sup>	2006–2010 <sup>e</sup>	2011	2011
183 Burkina Faso	131	0.609	300	117.4	15.3	0.9	3.2	77.5	90.4
184 Chad	..	..	1,100	138.1	12.8	..	..	64.4	80.2
185 Mozambique	125	0.582	490	124.4	39.2	1.5 <sup>g</sup>	6.0 <sup>g</sup>	86.0	82.9
186 Congo, Democratic Republic of the	144	0.681	540	170.6	8.2	10.7 <sup>g</sup>	36.2 <sup>g</sup>	70.2	72.5
186 Niger	146	0.707	590	193.6	13.3	2.5 <sup>g</sup>	7.6 <sup>g</sup>	39.9	89.9
<b>OTHER COUNTRIES OR TERRITORIES</b>									
Korea, Democratic People's Rep. of	..	..	81	0.6	15.6	..	..	71.6	83.7
Marshall Islands	..	..	..	37.7	3.0	..	..	..	..
Monaco	..	..	..	1.5	19.0	..	..	..	..
Nauru	..	..	..	23.0	0.1	..	..	..	..
San Marino	..	..	..	2.5	18.3	..	..	..	..
Somalia	..	..	1,000	68.0	13.8	..	..	37.7	76.8
South Sudan	..	..	..	..	24.3	..	..	..	..
Tuvalu	..	..	..	21.5	6.7	..	..	..	..
<b>Human Development Index groups</b>									
Very high human development	..	0.193	15	18.7	25.0	84.7	87.1	52.7	68.7
High human development	..	0.376	47	45.9	18.5	62.9	65.2	46.8	75.3
Medium human development	..	0.457	121	44.7	18.2	42.1	58.8	50.5	79.9
Low human development	..	0.578	405	86.0	19.2	18.0	32.0	56.4	79.9
<b>Regions</b>									
Arab States	..	0.555	176	39.2	13.0	31.8	44.7	22.8	74.1
East Asia and the Pacific	..	0.333	73	18.5	17.7	49.6	63.0	65.2	80.6
Europe and Central Asia	..	0.280	28	23.1	16.7	81.4	85.8	49.6	69.0
Latin America and the Caribbean	..	0.419	74	70.6	24.4	49.8	51.1	53.7	79.9
South Asia	..	0.568	203	66.9	18.5	28.3	49.7	31.3	81.0
Sub-Saharan Africa	..	0.577	475	105.2	20.9	23.7	35.1	64.7	76.2
<b>Least developed countries</b>	..	0.566	394	90.9	20.3	16.9	27.1	64.8	82.4
<b>Small island developing states</b>	..	0.481	193	61.1	22.0	48.0	53.0	53.0	73.9
<b>World</b>	..	<b>0.463</b>	<b>145</b>	<b>51.2</b>	<b>20.3</b>	<b>52.3</b>	<b>62.9</b>	<b>51.3</b>	<b>77.2</b>

## NOTES

- a** Data were computed to ensure comparability across countries and are thus not necessarily the same as official country statistics, which may be based on alternative rigorous methods. Data are rounded according to the following scheme: less than 100, no rounding; 100–999, rounded to the nearest 10; and greater than 1,000, rounded to the nearest 100.
- b** Based on medium-fertility variant.
- c** For countries with bicameral legislative systems the share of seats in national parliament is calculated based on both houses.
- d** Data are annual average of projected values for 2010–2015.
- e** Data refer to the most recent year available during the period specified.
- f** The denominator of the calculation refers to voting members of the House of Representatives only.

**g** Barro and Lee (2011) estimate for 2010.

**h** For calculating the Gender Inequality Index, a value of 0.1% was used.

**i** No women were elected in 2010; however, one woman was appointed to the cabinet.

**j** Does not include the 36 rotating delegates appointed on an ad hoc basis.

**k** Estimate is for prior to the 31 August 2012 elections.

**l** The parliament was dissolved following the December 2008 coup.

## DEFINITIONS

**Gender Inequality Index:** A composite measure reflecting inequality in achievements between women and men in three dimensions: reproductive health, empowerment and the labour market. See *Technical note 3* at <http://hdr.undp.org/en/media/>

HDR\_2013\_EN\_TechNotes.pdf for details on how the Gender Inequality Index is calculated.

**Maternal mortality ratio:** Ratio of the number of maternal deaths to the number of live births in a given year, expressed per 100,000 live births.

**Adolescent fertility rate:** Number of births to women ages 15–19 per 1,000 women ages 15–19.

**Seats in national parliament:** Proportion of seats held by women in a lower or single house or an upper house or senate, expressed as percentage of total seats.

**Population with at least secondary education:** Percentage of the population ages 25 and older that have reached secondary education.

**Labour force participation rate:** Proportion of a country's working-age population that engages in the labour market, either by working or actively

looking for work, expressed as a percentage of the working-age population.

## MAIN DATA SOURCES

**Columns 1 and 2:** HDRO calculations based on WHO and others (2012), UNDESA (2011), IPU (2012), Barro and Lee (2010), UNESCO Institute for Statistics (2012) and ILO (2012).

**Column 3:** WHO and others (2012).

**Column 4:** UNDESA (2011).

**Column 5:** IPU (2012).

**Columns 6 and 7:** UNESCO Institute for Statistics (2012).

**Columns 8 and 9:** ILO (2012).

## Multidimensional Poverty Index

	Year <sup>b</sup>	Multidimensional Poverty Index	Population in multidimensional poverty <sup>a</sup>					Population vulnerable to poverty	Population in severe poverty	Contribution of deprivation to overall poverty (%)			Population below income poverty line (%)	
			Value <sup>a</sup>	Headcount		Intensity of deprivation	Education			Health	Living standards	PPP \$1.25 a day	National poverty line	
				(%)	(thousands)									(%)
<b>ESTIMATES BASED ON SURVEYS FOR 2007–2011</b>														
Albania	2008/2009 (D)	0.005	1.4	45	37.7	7.4	0.1	32.0	44.9	23.0	0.6	12.4		
Armenia	2010 (D)	0.001	0.3	6	35.2	3.0	0.0	25.8	64.8	9.4	1.3	35.8		
Bangladesh	2007 (D)	0.292	57.8	83,207	50.4	21.2	26.2	18.7	34.5	46.8	43.3	31.5		
Bhutan	2010 (M)	0.119	27.2	198	43.9	17.2	8.5	40.4	21.2	38.4	10.2	23.2		
Bolivia, Plurinational State of	2008 (D)	0.089	20.5	1,972	43.7	18.7	5.8	19.8	27.5	52.6	15.6	60.1		
Burkina Faso	2010 (D)	0.535	84.0	13,834	63.7	7.1	65.7	36.2	27.9	35.9	44.6			
Cambodia	2010 (D)	0.212	45.9	6,415	46.1	21.4	17.0	22.1	32.7	45.1	22.8	30.1		
Colombia	2010 (D)	0.022	5.4	2,500	40.9	6.4	1.1	31.8	33.5	34.7	8.2	37.2		
Congo	2009 (D)	0.208	40.6	1,600	51.2	17.7	22.9	10.4	45.6	44.0	54.1	50.1		
Congo, Democratic Republic of the	2010 (M)	0.392	74.0	48,815	53.0	15.1	45.9	18.0	25.1	56.9	87.7	71.3		
Dominican Republic	2007 (D)	0.018	4.6	439	39.4	8.6	0.7	39.1	22.6	38.2	2.2	34.4		
Egypt	2008 (D)	0.024	6.0	4,699	40.7	7.2	1.0	48.1	37.3	14.5	1.7	22.0		
Ethiopia	2011 (D)	0.564	87.3	72,415	64.6	6.8	71.1	25.9	27.6	46.5	39.0	38.9		
Ghana	2008 (D)	0.144	31.2	7,258	46.2	21.6	11.4	32.1	19.5	48.4	28.6	28.5		
Guyana	2009 (D)	0.030	7.7	58	39.2	12.3	1.0	17.4	50.4	32.2	..	..		
Indonesia	2007 (D)	0.095	20.8	48,352	45.9	12.2	7.6	15.7	50.6	33.8	18.1	12.5		
Jordan	2009 (D)	0.008	2.4	145	34.4	1.3	0.1	49.6	47.4	3.1	0.1	13.3		
Kenya	2008/2009 (D)	0.229	47.8	18,863	48.0	27.4	19.8	12.7	30.1	57.2	43.4	45.9		
Lesotho	2009 (D)	0.156	35.3	759	44.1	26.7	11.1	21.9	18.9	59.2	43.4	56.6		
Liberia	2007 (D)	0.485	83.9	3,218	57.7	9.7	57.5	29.7	25.0	45.3	83.8	63.8		
Madagascar	2008/2009 (D)	0.357	66.9	13,463	53.3	17.9	35.4	34.3	16.7	49.1	81.3	68.7		
Malawi	2010 (D)	0.334	66.7	9,633	50.1	23.4	31.4	19.5	27.1	53.3	73.9	52.4		
Maldives	2009 (D)	0.018	5.2	16	35.6	4.8	0.3	13.6	81.1	5.3	..	..		
Mauritania	2007 (M)	0.352 <sup>d</sup>	61.7 <sup>d</sup>	1,982 <sup>d</sup>	57.1 <sup>d</sup>	15.1 <sup>d</sup>	40.7 <sup>d</sup>	32.0	21.6	46.5	23.4	42.0		
Morocco	2007 (N)	0.048 <sup>d</sup>	10.6 <sup>d</sup>	3,287 <sup>d</sup>	45.3 <sup>d</sup>	12.3 <sup>d</sup>	3.3 <sup>d</sup>	35.5	27.5	37.0	2.5	9.0		
Mozambique	2009 (D)	0.512	79.3	18,127	64.6	9.5	60.7	23.9	36.2	39.9	59.6	54.7		
Namibia	2006/2007 (D)	0.187	39.6	855	47.2	23.6	14.7	15.1	31.0	53.9	31.9	38.0		
Nepal	2011 (D)	0.217	44.2	13,242	49.0	17.4	20.8	21.8	33.7	44.4	24.8	25.2		
Nigeria	2008 (D)	0.310	54.1	83,578	57.3	17.8	33.9	27.0	32.2	40.8	68.0	54.7		
Pakistan	2006/2007 (D)	0.264 <sup>d</sup>	49.4 <sup>d</sup>	81,236 <sup>d</sup>	53.4 <sup>d</sup>	11.0 <sup>d</sup>	27.4 <sup>d</sup>	30.8	37.9	31.2	21.0	22.3		
Palestine, State of	2006/2007 (N)	0.005	1.4	52	37.3	8.8	0.1	33.9	55.3	10.8	0.0	21.9		
Peru	2008 (D)	0.066	15.7	4,422	42.2	14.9	3.9	18.6	20.8	60.6	4.9	31.3		
Philippines	2008 (D)	0.064	13.4	12,083	47.4	9.1	5.7	15.8	56.5	27.7	18.4	26.5		
Rwanda	2010 (D)	0.350	69.0	6,900	50.8	19.4	34.7	19.5	30.9	49.6	63.2	44.9		
Sao Tome and Principe	2008/2009 (D)	0.154	34.5	56	44.7	24.3	10.7	28.8	27.5	43.6	..	66.2		
Senegal	2010/2011 (D)	0.439	74.4	7,642	58.9	11.7	50.6	31.8	40.6	27.6	33.5	50.8		
Sierra Leone	2008 (D)	0.439	77.0	4,321	57.0	13.1	53.2	31.5	19.3	49.2	53.4	66.4		
South Africa	2008 (N)	0.057	13.4	6,609	42.3	22.2	2.4	7.5	50.5	42.0	13.8	23.0		
Swaziland	2010 (M)	0.086	20.4	242	41.9	23.1	3.3	16.7	29.9	53.4	40.6	69.2		
Tanzania, United Republic of	2010 (D)	0.332	65.6	28,552	50.7	21.0	33.4	18.3	26.4	55.3	67.9	33.4		
Timor-Leste	2009/2010 (D)	0.360	68.1	749	52.9	18.2	38.7	21.3	31.0	47.7	37.4	49.9		
Ukraine	2007 (D)	0.008	2.2	1,018	35.5	1.0	0.2	4.7	91.1	4.2	0.1	2.9		
Uganda	2011 (D)	0.367	69.9	24,122	52.5	19.0	31.2	15.6	34.1	50.4	51.5	31.1		
Vanuatu	2007 (M)	0.129	30.1	67	42.7	33.5	6.5	29.7	17.3	53.0	..	..		
Viet Nam	2010/2011 (M)	0.017	4.2	3,690	39.5	7.9	0.7	32.8	25.1	42.1	40.1	28.9		
Zambia	2007 (D)	0.328	64.2	7,740	51.2	17.2	34.8	17.5	27.9	54.7	68.5	59.3		
Zimbabwe	2010/2011 (D)	0.172	39.1	4,877	44.0	25.1	11.5	10.2	33.6	56.3	..	72.0		
<b>ESTIMATES BASED ON SURVEYS FOR 2002–2006</b>														
Argentina	2005 (N)	0.011 <sup>f</sup>	2.9 <sup>f</sup>	1,160 <sup>f</sup>	37.6 <sup>f</sup>	5.8 <sup>f</sup>	0.2 <sup>f</sup>	41.9	12.9	45.2	0.9	..		
Azerbaijan	2006 (D)	0.021	5.3	461	39.4	12.5	0.6	24.4	49.4	26.2	0.4	15.8		
Belarus	2005 (M)	0.000	0.0	0	35.1	0.8	0.0	16.6	61.8	21.7	0.1	5.4		
Belize	2006 (M)	0.024	5.6	16	42.6	7.6	1.1	22.8	35.8	41.4	..	33.5		
Benin	2006 (D)	0.412	71.8	5,652	57.4	13.2	47.2	33.6	25.1	41.3	47.3	39.0		
Bosnia and Herzegovina	2006 (M)	0.003	0.8	30	37.2	7.0	0.1	29.2	51.8	19.0	0.0	14.0		
Brazil	2006 (N)	0.011	2.7	5,075	39.3	7.0	0.2	39.0	40.2	20.7	6.1	21.4		
Burundi	2005 (M)	0.530	84.5	6,128	62.7	12.2	61.9	31.5	22.4	46.1	81.3	66.9		
Cameroon	2004 (D)	0.287	53.3	9,149	53.9	19.3	30.4	25.7	24.5	49.8	9.6	39.9		
Chad	2003 (W)	0.344	62.9	5,758	54.7	28.2	44.1	40.9	4.6	54.5	61.9	55.0		
China	2002 (W)	0.056	12.5	161,675	44.9	6.3	4.5	64.8	9.9	25.2	13.1	2.8		
Croatia	2003 (W)	0.016	4.4	196	36.3	0.1	0.3	45.0	46.7	8.3	0.1	11.1		
Czech Republic	2002/2003 (W)	0.010	3.1	316	33.4	0.0	0.0	0.0	99.9	0.1	..	..		

	Multidimensional Poverty Index	Population in multidimensional poverty <sup>a</sup>							Contribution of deprivation to overall poverty (%)			Population below income poverty line (%)	
		Headcount			Intensity of deprivation	Population vulnerable to poverty	Population in severe poverty	Education	Health	Living standards	PPP \$1.25 a day	National poverty line	
		Year <sup>b</sup>	Value <sup>a</sup>	(%)	(thousands)	(%)	(%)	(%)	(%)	(%)	2002–2011 <sup>c</sup>	2002–2012 <sup>c</sup>	
Côte d'Ivoire	2005 (D)	0.353	61.5	11,083	57.4	15.3	39.3	32.0	38.7	29.3	23.8	42.7	
Djibouti	2006 (M)	0.139	29.3	241	47.3	16.1	12.5	38.3	24.6	37.1	18.8	..	
Ecuador	2003 (W)	0.009	2.2	286	41.6	2.1	0.6	78.6	3.3	18.1	4.6	32.8	
Estonia	2003 (W)	0.026	7.2	97	36.5	1.3	0.2	91.2	1.2	7.6	0.5	..	
Gambia	2005/2006 (M)	0.324	60.4	935	53.6	17.6	35.5	33.5	30.7	35.8	33.6	48.4	
Georgia	2005 (M)	0.003	0.8	36	35.2	5.3	0.0	23.2	33.8	43.0	15.3	24.7	
Guatemala	2003 (W)	0.127 <sup>d</sup>	25.9 <sup>d</sup>	3,134 <sup>d</sup>	49.1 <sup>d</sup>	9.8 <sup>d</sup>	14.5 <sup>d</sup>	57.2	10.0	32.8	13.5	51.0	
Guinea	2005 (D)	0.506	82.5	7,459	61.3	9.3	62.3	35.5	23.0	41.5	43.3	53.0	
Haiti	2005/2006 (D)	0.299	56.4	5,346	53.0	18.8	32.3	27.0	21.5	51.5	..	..	
Honduras	2005/2006 (D)	0.159	32.5	2,281	48.9	22.0	11.3	38.0	18.5	43.6	17.9	60.0	
Hungary	2003 (W)	0.016	4.6	466	34.3	0.0	0.0	1.8	95.6	2.7	0.2	..	
India	2005/2006 (D)	0.283	53.7	612,203	52.7	16.4	28.6	21.8	35.7	42.5	32.7	29.8	
Iraq	2006 (M)	0.059	14.2	3,996	41.3	14.3	3.1	47.5	32.1	20.4	2.8	22.9	
Kazakhstan	2006 (M)	0.002	0.6	92	36.9	5.0	0.0	14.6	56.8	28.7	0.1	8.2	
Kyrgyzstan	2005/2006 (M)	0.019	4.9	249	38.8	9.2	0.9	36.6	36.9	26.4	6.2	33.7	
Lao People's Democratic Republic	2006 (M)	0.267	47.2	2,757	56.5	14.1	28.1	33.1	27.9	39.0	33.9	27.6	
Latvia	2003 (W)	0.006 <sup>d</sup>	1.6 <sup>d</sup>	37 <sup>d</sup>	37.9 <sup>d</sup>	0.0 <sup>d</sup>	0.0 <sup>d</sup>	0.0	88.0	12.0	0.1	5.9	
Mali	2006 (D)	0.558	86.6	11,771	64.4	7.6	68.4	34.5	26.2	39.3	50.4	47.4	
Mexico	2006 (N)	0.015	4.0	4,313	38.9	5.8	0.5	38.6	23.9	37.5	1.2	51.3	
Moldova, Republic of	2005 (D)	0.007	1.9	72	36.7	6.4	0.1	24.7	34.3	41.1	0.4	21.9	
Mongolia	2005 (M)	0.065	15.8	403	41.0	20.6	3.2	15.4	27.9	56.6	..	35.2	
Montenegro	2005/2006 (M)	0.006	1.5	9	41.6	1.9	0.3	37.5	47.6	14.9	0.1	6.6	
Nicaragua	2006/2007 (D)	0.128	28.0	1,538	45.7	17.4	11.2	27.9	13.6	58.5	11.9	46.2	
Niger	2006 (D)	0.642	92.4	12,437	69.4	4.0	81.8	35.4	21.5	43.2	43.6	59.5	
Paraguay	2002/2003 (W)	0.064	13.3	755	48.5	15.0	6.1	35.1	19.0	45.9	7.2	34.7	
Russian Federation	2003 (W)	0.005 <sup>d</sup>	1.3 <sup>d</sup>	1,883 <sup>d</sup>	38.9 <sup>d</sup>	0.8 <sup>d</sup>	0.2 <sup>d</sup>	84.2	2.5	13.3	0.0	11.1	
Serbia	2005/2006 (M)	0.003	0.8	79	40.0	3.6	0.1	30.5	40.1	29.4	0.3	9.2	
Slovakia	2003 (W)	0.000 <sup>e</sup>	0.0 <sup>e</sup>	0 <sup>e</sup>	0.0 <sup>e</sup>	0.0 <sup>e</sup>	0.0 <sup>e</sup>	0.0	0.0	0.0	0.1	..	
Slovenia	2003 (W)	0.000 <sup>e</sup>	0.0 <sup>e</sup>	0 <sup>e</sup>	0.0 <sup>e</sup>	0.4 <sup>e</sup>	0.0 <sup>e</sup>	0.0	0.0	0.0	0.1	..	
Somalia	2006 (M)	0.514	81.2	6,941	63.3	9.5	65.6	34.2	18.6	47.2	..	..	
Sri Lanka	2003 (W)	0.021 <sup>d</sup>	5.3 <sup>d</sup>	1,027 <sup>d</sup>	38.7 <sup>d</sup>	14.4 <sup>d</sup>	0.6 <sup>d</sup>	6.3	35.4	58.3	7.0	8.9	
Suriname	2006 (M)	0.039	8.2	41	47.2	6.7	3.3	36.1	18.8	45.1	..	..	
Syrian Arab Republic	2006 (M)	0.021 <sup>e</sup>	5.5 <sup>e</sup>	1,041 <sup>e</sup>	37.5 <sup>e</sup>	7.1 <sup>e</sup>	0.5 <sup>e</sup>	45.4	42.7	11.8	1.7	..	
Tajikistan	2005 (M)	0.068	17.1	1,104	40.0	23.0	3.1	18.7	45.0	36.3	6.6	46.7	
Thailand	2005/2006 (M)	0.006	1.6	1,067	38.5	9.9	0.2	40.7	31.2	28.1	0.4	8.1	
The former Yugoslav Republic of Macedonia	2005 (M)	0.008	1.9	39	40.9	6.7	0.3	59.9	12.8	27.3	0.0	19.0	
Togo	2006 (M)	0.284	54.3	3,003	52.4	21.6	28.7	28.3	25.4	46.3	38.7	61.7	
Trinidad and Tobago	2006 (M)	0.020	5.6	74	35.1	0.4	0.3	1.3	94.3	4.4	..	..	
Tunisia	2003 (W)	0.010 <sup>d</sup>	2.8 <sup>d</sup>	272 <sup>d</sup>	37.1 <sup>d</sup>	4.9 <sup>d</sup>	0.2 <sup>d</sup>	25.0	47.3	27.6	1.4	3.8	
Turkey	2003 (D)	0.028	6.6	4,378	42.0	7.3	1.3	42.3	38.4	19.2	0.0	18.1	
United Arab Emirates	2003 (W)	0.002	0.6	20	35.3	2.0	0.0	94.4	0.4	5.2	..	..	
Uruguay	2002/2003 (W)	0.006	1.7	57	34.7	0.1	0.0	96.0	0.6	3.4	0.2	18.6	
Uzbekistan	2006 (M)	0.008	2.3	603	36.2	8.1	0.1	23.2	55.7	21.1	..	..	
Yemen	2006 (M)	0.283	52.5	11,176	53.9	13.0	31.9	27.0	40.5	32.4	17.5	34.8	

**NOTES**

- a Not all indicators were available for all countries; caution should thus be used in cross-country comparisons. Where data are missing, indicator weights are adjusted to total 100%. For details on countries missing data, see Alkire and others (2011) and Alkire, Conconi and Roche (2012).
- b D indicates data are from Demographic and Health Surveys, M indicates data are from Multiple Indicator Cluster Surveys, W indicates data are from World Health Surveys and N indicates data are from national surveys.
- c Data refer to the most recent year available during the period specified.
- d Lower bound estimate.
- e Upper bound estimate.
- f Refers to only part of the country.

**DEFINITIONS**

**Multidimensional Poverty Index:** Percentage of the population that is multidimensionally poor adjusted by the intensity of the deprivations. See *Technical note 4* at [http://hdr.undp.org/en/media/HDR\\_2013\\_EN\\_TechNotes.pdf](http://hdr.undp.org/en/media/HDR_2013_EN_TechNotes.pdf) for details on how the Multidimensional Poverty Index is calculated.

**Multidimensional poverty headcount:** Percentage of the population with a weighted deprivation score of at least 33%.

**Intensity of deprivation of multidimensional poverty:** Average percentage of deprivation experienced by people in multidimensional poverty.

**Population vulnerable to poverty:** Percentage of the population at risk of suffering multiple deprivations—that is, those with a deprivation score of 20%–33%.

**Population in severe poverty:** Percentage of the population in severe multidimensional poverty—that is, those with a deprivation score of 50% or more.

**Contribution of deprivation to overall poverty:** Percentage of the Multidimensional Poverty Index attributed to deprivations in each dimension.

**Population below PPP \$1.25 a day:** Percentage of the population living below the international poverty line \$1.25 (in purchasing power parity terms) a day.

**Population below national poverty line:** Percentage of the population living below the national poverty line, which is the poverty line deemed appropriate for a country by its authorities. National estimates are based on population-weighted subgroup estimates from household surveys.

**MAIN DATA SOURCES**

- Columns 1 and 2:** Calculated from various household surveys, including ICF Macro Demographic and Health Surveys, United Nations Children's Fund Multiple Indicator Cluster Surveys and World Health Organization World Health Surveys conducted between 2000 and 2010.
- Columns 3–10:** Calculated based on data on household deprivations in education, health and living standards from various household surveys as listed in column 1.
- Columns 11 and 12:** World Bank (2012a).

## Command over resources

HDI rank	ECONOMY				PUBLIC SPENDING										
	GDP	GDP per capita	Gross fixed capital formation	Consumer Price Index	General government final consumption expenditure		Health		Education		Military <sup>a</sup>		Total debt service		
	(2005 PPP \$ billions)	(2005 PPP \$)	(% of GDP)	(2005 = 100)	(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)		
	2011	2011	2011	2010	2000	2011	2010	2010	2000	2005–2010 <sup>b</sup>	2000	2010	2000	2009	
<b>VERY HIGH HUMAN DEVELOPMENT</b>															
1	Norway	232.7	46,982	20.2	112	19.3	21.5	6.4	8.0	6.6	7.3	1.7	1.5	..	..
2	Australia	781.5	34,548	27.1	116	17.6	18.0	5.4	5.9	4.7	5.1	1.8	1.9	..	..
3	United States	13,238.3	42,486	14.7 <sup>c</sup>	112	14.3	17.5 <sup>c</sup>	5.8	9.5	..	5.4	3.0	4.8	..	..
4	Netherlands	621.9	37,251	18.6	108	22.0	28.1	5.0	9.4	5.0	5.9	1.5	1.4	..	..
5	Germany	2,814.4	34,437	18.2	108	19.0	19.5	8.2	9.0	..	4.6	1.5	1.4	..	..
6	New Zealand	108.4 <sup>c</sup>	24,818 <sup>c</sup>	18.9 <sup>c</sup>	115	17.3	20.3 <sup>c</sup>	6.0	8.4	..	7.2	1.2	1.2	..	..
7	Ireland	159.9	35,640	11.5 <sup>c</sup>	107	14.2	18.9 <sup>c</sup>	4.6	6.4	4.2	5.7	0.7	0.6	..	..
7	Sweden	331.3	35,048	18.4	108	25.8	26.6	7.0	7.8	7.2	7.3	2.0	1.3	..	..
9	Switzerland	300.3	37,979	20.9 <sup>c</sup>	104	11.1	11.5 <sup>c</sup>	5.6	6.8	5.2	5.4	1.1	0.8	..	..
10	Japan	3,918.9	30,660	20.1 <sup>c</sup>	100	16.9	19.8	6.2	7.8	3.7	3.8	1.0	1.0	..	..
11	Canada	1,231.6	35,716	22.1 <sup>c</sup>	109	18.6	21.8 <sup>c</sup>	6.2	8.0	5.6	4.8	1.1	1.5	..	..
12	Korea, Republic of	1,371.0	27,541	28.6 <sup>c</sup>	116	12.0	15.3 <sup>c</sup>	2.2	4.1	..	5.0	2.6	2.7	..	..
13	Hong Kong, China (SAR)	310.0	43,844	21.5 <sup>c</sup>	112	9.1	8.4 <sup>c</sup>	..	..	..	3.6	..	..	..	..
13	Iceland	10.7	33,618	14.1	149	23.4	25.2	7.7	7.6	6.7	7.8	0.0	0.1 <sup>d</sup>	..	..
15	Denmark	180.6	32,399	17.2	111	25.1	28.6	6.8	9.7	8.3	8.7	1.5	1.5	..	..
16	Israel	207.5	26,720	18.7	114	25.8	23.9	4.7	4.6	6.5	5.8	8.0	6.5	..	..
17	Belgium	364.7	33,127	20.9	111	21.3	24.1	6.1	8.0	..	6.4	1.4	1.1	..	..
18	Austria	306.1	36,353	21.1	109	19.0	19.3	7.6	8.5	5.7	5.5	1.0	0.9	..	..
18	Singapore	277.8	53,591	23.4	114	10.9	10.3	1.3	1.4	3.4	3.3	4.6	3.7	..	..
20	France	1,951.2	29,819	20.1	108	22.9	24.5	8.0	9.3	5.7	5.9	2.5	2.3	..	..
21	Finland	173.8	32,254	19.2	110	20.6	23.9	5.1	6.7	5.9	6.8	1.3	1.4	..	..
21	Slovenia	51.2	24,967	19.5	115	18.7	20.6	6.1	6.9	..	5.7	1.1	1.6	..	..
23	Spain	1,251.3	27,063	21.7	112	17.1	20.3	5.2	6.9	4.3	5.0	1.2	1.0	..	..
24	Liechtenstein	..	..	..	..	..	..	..	..	..	2.1	..	..	..	..
25	Italy	1,645.0	27,069	19.5	110	18.3	20.5	5.8	7.4	4.4	4.7	2.0	1.7	..	..
26	Luxembourg	35.4	68,459	19.0	111	15.1	16.5	5.2	6.6	..	..	0.6	0.6	..	..
26	United Kingdom	2,034.2	32,474	14.3	114	18.6	22.5	5.6	8.1	4.5	5.6	2.4	2.6	..	..
28	Czech Republic	252.8	23,967	23.9	115	20.3	20.9	5.9	6.6	4.0	4.5	2.0	1.3	..	..
29	Greece	255.0	22,558	14.0	117	18.9	17.5	4.7	6.1	3.4	4.1	3.6	2.3	..	..
30	Brunei Darussalam	18.2 <sup>c</sup>	45,507 <sup>c</sup>	15.9 <sup>c</sup>	105	25.8	22.4 <sup>c</sup>	2.6	2.4	3.7	2.0	5.7	3.2	..	..
31	Cyprus	21.0	26,045	18.4 <sup>c</sup>	113	16.0	19.7 <sup>c</sup>	2.4	2.5	5.3	7.9	3.0	2.1	..	..
32	Malta	9.6	23,007	15.0	112	18.2	21.1	4.9	5.7	..	5.8	0.7	0.7	..	..
33	Andorra	..	..	..	..	..	..	4.9	5.3	..	2.9	..	..	..	..
33	Estonia	24.0	17,885	21.5	126	19.8	19.5	4.1	4.7	5.4	5.7	1.4	1.7	..	..
35	Slovakia	112.9	20,757	22.4	115	20.1	18.1	5.6	5.8	3.9	4.1	1.7	1.3	..	..
36	Qatar	145.8	77,987	39.6 <sup>d</sup>	136	19.7	24.8 <sup>d</sup>	1.6	1.4	..	2.4	..	2.3 <sup>e</sup>	..	..
37	Hungary	172.5	17,295	16.7	130	21.5	10.0	5.0	5.1	5.0	5.1	1.7	1.0	..	..
38	Barbados	4.8 <sup>d</sup>	17,564 <sup>d</sup>	14.6 <sup>c</sup>	132	21.2	20.3 <sup>c</sup>	4.1	5.2	5.6	6.7	..	..	..	..
39	Poland	691.2	18,087	19.9 <sup>c</sup>	115	17.4	18.9 <sup>c</sup>	3.9	5.4	5.0	5.1	1.8	1.9	..	..
40	Chile	263.7	15,272	23.2	101	12.5	11.8	3.4	3.8	3.9	4.5	3.8	3.2	8.2	6.2
41	Lithuania	54.1	16,877	17.6	129	22.8	18.9	4.5	5.2	..	5.7	1.7	1.1	9.7	24.3
41	United Arab Emirates	333.7	42,293	23.8 <sup>c</sup>	115	..	8.2 <sup>c</sup>	2.5	2.7	1.3	1.0	9.4	6.9	..	..
43	Portugal	226.8	21,317	18.1	109	19.0	20.1	6.4	7.5	5.2	5.8	1.9	2.1	..	..
44	Latvia	30.6	13,773	22.4	139	20.8	15.6	3.2	4.1	5.4	5.6	0.9	1.1	7.7	43.9
45	Argentina	631.9	15,501	22.6	154	13.8	15.1	5.0	4.4	4.6	6.0	1.1	0.9	9.4	3.8
46	Seychelles	2.0	23,172	22.0 <sup>d</sup>	185	24.2	11.1 <sup>d</sup>	4.0	3.1	..	5.0	1.7	1.3	3.4	5.0
47	Croatia	71.2	16,162	21.9	117	23.8	21.2	6.7	6.6	..	4.3	3.1	1.7	..	..
<b>HIGH HUMAN DEVELOPMENT</b>															
48	Bahrain	26.9 <sup>c</sup>	21,345 <sup>c</sup>	26.6 <sup>d</sup>	114	17.6	15.5 <sup>d</sup>	2.7	3.6	..	2.9	4.0	3.4	..	..
49	Bahamas	9.8	28,239	26.0	113	10.8	15.0	2.8	3.6	2.8	..	..	..	..	..
50	Belarus	125.0	13,191	37.6	162	19.5	13.5	4.9	4.4	6.2	4.5	1.3	1.4	2.9	2.6
51	Uruguay	44.9	13,315	19.0	142	12.4	13.0	6.1	5.6	2.4	2.9	2.8	2.0	5.3	3.5
52	Montenegro	6.6	10,402	22.1	122	21.9	18.2	5.4	6.1	..	..	..	1.9	..	2.4
52	Palau	0.3	13,176	..	..	..	..	8.5	7.9	9.8	..	..	..	..	..
54	Kuwait	135.1	47,935	17.8 <sup>d</sup>	130	21.5	13.5	1.9	2.1	..	3.8	7.2	3.6	..	..
55	Russian Federation	2,101.8	14,808	23.1	163	15.1	16.9	3.2	3.2	2.9	4.1	3.7	3.9	4.6	4.2
56	Romania	233.3	10,905	32.2	135	7.2	15.8	3.5	4.4	2.9	4.3	2.5	1.3	6.7	11.5
57	Bulgaria	88.2	11,799	23.3	138	19.0	15.4	3.6	3.7	..	4.4	2.7	1.9	10.0	8.4
57	Saudi Arabia	601.8	21,430	19.0	129	26.0	19.8	3.1	2.7	5.9	5.6	10.6	10.1	..	..
59	Cuba	..	..	9.9 <sup>c</sup>	..	29.6	37.9 <sup>c</sup>	6.1	9.7	7.7	12.9	..	..	..	..

HDI rank	ECONOMY				PUBLIC SPENDING									
	GDP	GDP per capita	Gross fixed capital formation	Consumer Price Index	General government final consumption expenditure		Health		Education		Military <sup>a</sup>		Total debt service	
	(2005 PPP \$ billions)	(2005 PPP \$)	(% of GDP)	(2005 = 100)	(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)	
	2011	2011	2011	2010	2000	2011	2010	2010	2000	2005–2010 <sup>b</sup>	2000	2010	2000	2009
59 Panama	49.2	13,766	27.5 <sup>c</sup>	123	13.2	11.2 <sup>c</sup>	5.3	6.1	5.0	3.8	0.0	0.0	7.6	4.0
61 Mexico	1,466.6	12,776	20.4	124	11.1	12.0	2.4	3.1	4.9	5.3	0.6	0.5	10.1	3.0
62 Costa Rica	50.7	10,732	19.8	158	13.3	17.6 <sup>c</sup>	5.0	7.4	4.4	6.3	0.0	0.0	4.1	3.0
63 Grenada	1.0	9,806	23.1 <sup>d</sup>	121	11.7	15.6 <sup>d</sup>	4.2	2.6	..	..	..	..	2.8	3.3
64 Libya	96.2 <sup>d</sup>	15,361 <sup>d</sup>	..	125	20.8	..	1.9	2.7	..	..	3.1	1.2 <sup>e</sup>	..	..
64 Malaysia	394.6	13,672	20.3 <sup>c</sup>	114	10.2	12.7 <sup>c</sup>	1.7	2.4	6.0	5.8	1.6	1.6	6.9	5.6
64 Serbia	71.2	9,809	25.3	153	19.6	18.2	5.2	6.4	..	5.0	5.5	2.2	2.0	11.2
67 Antigua and Barbuda	1.3	14,139	18.3 <sup>d</sup>	112	19.0	17.6 <sup>d</sup>	3.3	4.3	..	2.5	..	..	..	..
67 Trinidad and Tobago	30.6	22,761	..	155	9.3	..	1.7	3.4	3.8	..	..	..	..	..
69 Kazakhstan	191.5	11,568	23.9	162	12.1	9.8	2.1	2.5	3.3	3.1	0.8	1.1	18.4	32.3
70 Albania	25.3	7,861	24.9	115	8.9	9.3	2.3	2.6	..	..	1.2	1.6	0.8	3.9
71 Venezuela, Bolivarian Republic of	329.6	11,258	17.0	163	12.4	10.4	2.4	1.7	..	3.7	1.5	0.9	5.4	1.5
72 Dominica	0.8	11,120	22.3 <sup>c</sup>	116	18.5	17.2 <sup>c</sup>	4.1	5.2	..	3.6	..	..	3.3	3.3
72 Georgia	21.6	4,826	17.2	143	8.5	9.4	1.2	2.4	2.2	3.2	0.6	3.9	3.9	7.0
72 Lebanon	54.9	12,900	30.0	105	17.3	12.3	3.2	2.8	1.9	1.8	5.4	4.2	8.6	10.9
72 Saint Kitts and Nevis	0.7	13,291	30.3 <sup>d</sup>	122	17.6	16.0 <sup>d</sup>	3.3	4.0	5.2	4.5	..	..	5.1	6.7
76 Iran, Islamic Republic of	765.2 <sup>d</sup>	10,462 <sup>d</sup>	..	206	13.9	..	1.9	2.2	4.4	4.7	3.7	1.8 <sup>e</sup>	2.9	..
77 Peru	266.0	9,049	23.8	115	10.6	9.8	2.8	2.7	..	2.7	1.8	1.3	4.8	4.4
78 The former Yugoslav Republic of Macedonia	19.5	9,451	21.5	115	18.2	18.0	4.9	4.5	..	..	1.9	1.4	3.9	7.3
78 Ukraine	290.6	6,359	19.3	195	20.9	18.8	2.9	4.4	4.2	5.3	3.6	2.7	11.7	22.1
80 Mauritius	16.4	12,737	24.4	137	14.1	14.0	2.0	2.5	3.8	3.1	0.2	0.1	9.9	1.3
81 Bosnia and Herzegovina	28.5	7,607	20.7	118	..	22.1	4.1	6.8	..	..	..	1.2	5.8	8.2
82 Azerbaijan	81.5	8,890	17.2	164	9.5	11.8	0.9	1.2	3.9	3.2	2.3	2.9	2.5	0.8
83 Saint Vincent and the Grenadines	1.0	9,482	23.5 <sup>d</sup>	124	16.4	19.5 <sup>d</sup>	3.6	3.9	7.9	4.9	..	..	3.3	4.7
84 Oman	72.1 <sup>c</sup>	25,330 <sup>d</sup>	..	131	20.7	19.9 <sup>d</sup>	2.5	2.2	3.1	4.3	10.8	8.5	..	..
85 Brazil	2,021.3	10,278	19.3	126	19.2	20.7	2.9	4.2	4.0	5.7	1.8	1.6	10.1	2.1
85 Jamaica	19.2	7,074	22.9	179	14.3	17.7	2.9	2.6	5.0	6.1	0.5	0.8	7.8	8.5
87 Armenia	15.8	5,112	30.9	131	11.8	11.8	1.1	1.8	2.8	3.2	3.6	4.2	2.4	10.3
88 Saint Lucia	1.4	8,231	33.5 <sup>c</sup>	115	18.2	16.0 <sup>c</sup>	3.2	5.3	7.1	4.4	..	..	4.2	3.6
89 Ecuador	109.2	7,443	24.2	124	9.8	15.8	1.3	3.0	1.3	..	1.6	3.6	11.8	3.2
90 Turkey	991.7	13,466	20.0	153	11.7	8.1	3.1	5.1	2.6	2.9	3.7	2.4	7.8	8.0
91 Colombia	415.8	8,861	21.9	126	16.7	10.6	5.5	5.5	3.5	4.8	3.0	3.6	5.1	3.4
92 Sri Lanka	102.9	4,929	34.6	172	10.5	7.5	1.8	1.3	..	2.1	5.0	3.0	4.8	2.9
93 Algeria	275.0	7,643	38.3 <sup>d</sup>	122	13.6	14.2 <sup>d</sup>	2.6	3.2	..	4.3	3.4	3.6	8.2	0.4
94 Tunisia	88.1	8,258	24.0	123	16.7	13.4	3.3	3.4	6.2	6.3	1.8	1.4	8.9	5.3
<b>MEDIUM HUMAN DEVELOPMENT</b>														
95 Tonga	0.4	4,092	24.3 <sup>c</sup>	131	18.2	18.9 <sup>c</sup>	4.0	4.1	4.9	..	..	..	2.4	1.4
96 Belize	2.1	5,896	..	113	12.9	..	2.2	3.3	5.0	6.1	0.9	1.1	9.2	7.2
96 Dominican Republic	87.0	8,651	16.7	136	7.8	5.2	2.2	2.7	1.9	2.2	1.0	0.7	2.2	2.6
96 Fiji	3.6	4,199	..	127	17.2	..	3.2	3.4	5.9	4.5	1.9	1.6	1.5	0.7
96 Samoa	0.7	4,008	..	131	..	..	4.0	5.7	4.0	5.3	..	..	2.2	1.8
100 Jordan	32.6	5,269	21.3	134	23.7	18.9	4.7	5.4	..	..	6.3	5.0	8.7	2.5
101 China	9,970.6	7,418	45.5	115	15.8	13.1	1.8	2.7	..	..	1.9	2.1	2.2	1.0
102 Turkmenistan	41.1	8,055	60.0	..	14.2	11.1	3.2	1.5	..	..	..	..	16.1	0.8
103 Thailand	530.6	7,633	25.8	116	11.3	13.3	1.9	2.9	5.4	3.8	1.5	1.5	11.4	3.5
104 Maldives	2.5	7,834	..	138	22.9	..	4.1	3.8	..	8.7	..	..	3.2	9.8
105 Suriname	3.7 <sup>c</sup>	7,110 <sup>c</sup>	..	145	37.5	..	3.9	3.4	..	..	..	..	..	..
106 Gabon	21.5	13,998	25.1	113	9.6	8.8	1.0	1.8	3.8	..	1.8	0.9	6.9	3.4
107 El Salvador	37.6	6,032	14.2	119	10.2	11.1	3.6	4.3	2.5	3.2	1.3	1.1	2.8	5.0
108 Bolivia, Plurinational State of	45.4	4,499	16.6 <sup>c</sup>	137	14.5	13.2	3.7	3.0	5.5	6.3	2.1	1.7	7.6	3.3
108 Mongolia	11.7	4,178	48.6	168	15.3	14.0	3.9	3.0	5.6	5.4	2.1	1.1	3.4	2.8
110 Palestine, State of	..	..	..	..	27.0	..	..	..	..	..	..	..	..	..
111 Paraguay	31.2	4,752	21.3	140	12.7	10.4	3.7	2.1	5.3	4.0	1.1	0.9	5.0	2.5
112 Egypt	457.8	5,547	19.4	173	11.2	11.3	2.2	1.7	..	3.8	3.2	2.0	1.8	1.4
113 Moldova, Republic of	10.6	2,975	23.9	153	10.3	22.7	3.2	5.4	4.5	9.1	0.4	0.3	11.6	6.7
114 Philippines	344.4	3,631	15.8	127	11.4	10.2	1.6	1.3	3.3	2.7	1.6	1.2	8.7	6.5
114 Uzbekistan	85.2	2,903	23.5	..	18.7	16.6	2.5	2.8	..	..	1.2	..	6.4	1.5
116 Syrian Arab Republic	96.9 <sup>c</sup>	4,741 <sup>c</sup>	18.8 <sup>c</sup>	142	12.4	10.1 <sup>c</sup>	2.0	1.6	..	4.9	5.5	4.1	2.5	1.1
117 Micronesia, Federated States of	0.3	3,017	..	..	..	..	7.7	12.9	6.7	..	..	..	..	..
118 Guyana	2.3 <sup>c</sup>	3,104 <sup>c</sup>	26.3 <sup>c</sup>	136	24.7	15.1 <sup>c</sup>	4.6	5.1	8.5	3.7	1.5	2.1	9.7	1.4
119 Botswana	26.3	12,939	27.9	156	25.4	19.9	2.9	6.0	..	7.8	3.3	2.4	1.2	0.5

**TABLE 6 COMMAND OVER RESOURCES**

HDI rank	ECONOMY				PUBLIC SPENDING										
	GDP	GDP per capita	Gross fixed capital formation	Consumer Price Index	General government final consumption expenditure		Health		Education		Military <sup>a</sup>		Total debt service		
	(2005 PPP \$ billions)	(2005 PPP \$)	(% of GDP)	(2005 = 100)	(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)		
	2011	2011	2011	2010	2000	2011	2010	2010	2000	2005–2010 <sup>b</sup>	2000	2010	2000	2009	
120	Honduras	27.7	3,566	22.2	139	13.4	17.1	3.0	4.4	..	..	0.7	1.1	5.5	3.4
121	Indonesia	992.1	4,094	32.4	146	6.5	4.5	0.7	1.3	..	3.0	..	0.7	10.1	4.1
121	Kiribati	0.2	2,220	..	..	..	..	7.5	9.3	11.0	..	..	..	..	..
121	South Africa	489.6	9,678	18.9	140	18.1	21.5	3.4	3.9	5.6	6.0	1.5	1.3	2.9	1.4
124	Vanuatu	1.0	4,062	..	119	20.8	..	2.7	4.8	7.0	5.2	..	..	0.7	0.9
125	Kyrgyzstan	11.7	2,126	24.8	167	20.0	19.1	2.1	3.5	3.5	6.2	2.9	4.4	12.6	11.6
125	Tajikistan	14.3	2,052	18.7	170	8.3	28.9	0.9	1.6	2.3	4.0	1.2	..	7.3	12.1
127	Viet Nam	264.6	3,013	31.9	167	6.4	5.7	1.6	2.6	..	5.3	..	2.5	4.2	1.3
128	Namibia	13.9	5,986	26.5	141	23.5	21.6	4.2	4.0	7.9	8.1	2.7	3.9	..	..
129	Nicaragua	15.1	2,579	29.7	159	12.2	10.1	3.7	4.9	3.9	..	0.8	0.7	7.3	7.9
130	Morocco	143.5	4,373	30.6	111	18.4	15.4	1.2	2.0	5.8	5.4	2.3	3.5	7.3	3.6
131	Iraq	112.5	3,412	..	171	..	..	0.4	6.8	..	..	..	2.4	..	..
132	Cape Verde	1.8	3,616	36.5	121	30.7	20.7	3.4	3.1	..	5.6	1.3	0.5	3.0	2.2
133	Guatemala	64.2	4,351	14.6	134	7.0	10.5	2.2	2.5	..	3.2	0.8	0.4	2.0	3.8
134	Timor-Leste	1.6	1,393	..	134	35.2	..	6.3	5.1	..	14.0	..	4.9	..	..
135	Ghana	41.3	1,652	21.8	189	10.2	8.5	3.0	3.1	..	5.5	0.7	0.4	7.8	1.0
136	Equatorial Guinea	23.1	32,026	60.1 <sup>d</sup>	129	4.6	3.9 <sup>d</sup>	1.0	3.4	0.7	..	..	..	..	..
136	India	3,976.5	3,203	29.5	152	12.6	11.7	1.3	1.2	4.4	3.1	3.1	2.7	2.3	1.2
138	Cambodia	29.8	2,080	16.2 <sup>c</sup>	148	5.2	6.3 <sup>c</sup>	1.3	2.1	1.7	2.6	2.2	1.6	0.9	0.6
138	Lao People's Democratic Republic	15.5	2,464	27.4	127	6.7	9.8	1.0	1.5	1.5	3.3	0.8	0.3	2.3	4.3
140	Bhutan	3.8	5,096	41.3 <sup>d</sup>	134	20.4	21.4 <sup>d</sup>	5.3	4.5	5.8	4.0	..	..	1.6	5.6
141	Swaziland	5.7	5,349	10.4	144	18.2	19.4	3.3	4.2	5.5	7.4	1.5	3.0	2.0	1.1
<b>LOW HUMAN DEVELOPMENT</b>															
142	Congo	16.1	3,885	23.4	130	11.6	9.7	1.2	1.1	..	6.2	..	1.1	1.4	1.6
143	Solomon Islands	1.4	2,581	..	152	25.2	..	4.8	8.0	..	6.1	..	..	2.1	3.0
144	Sao Tome and Principe	0.3	1,805	..	260	..	..	3.6	2.7	..	..	..	..	..	0.8
145	Kenya	62.7	1,507	24.3	180	15.1	13.3	1.9	2.1	5.2	6.7	1.3	1.9	4.7	1.2
146	Bangladesh	236.0	1,568	24.7	145	4.6	5.5	1.1	1.2	2.4	2.2	1.3	1.1	1.6	1.0
146	Pakistan	428.4	2,424	11.8	181	8.6	8.2	0.6	0.8	1.8	2.4	3.7	2.8	3.9	2.5
148	Angola	102.0	5,201	10.7	186	..	17.7	1.9	2.4	2.6	3.4	6.4	4.2	18.7	2.8
149	Myanmar	..	..	..	225	..	..	0.3	0.2	0.6	..	2.3	..	..	..
150	Cameroon	41.9	2,090	..	117	9.5	..	1.0	1.5	1.9	3.5	1.3	1.6	5.5	0.9
151	Madagascar	18.2	853	33.0 <sup>d</sup>	159	9.0	11.6 <sup>d</sup>	2.5	2.3	2.9	3.2	1.2	0.7	3.0	0.6
152	Tanzania, United Republic of	59.8	1,334	28.1	151	11.7	18.2	1.6	4.0	..	6.2	1.5	1.2	1.6	0.9
153	Nigeria	360.8	2,221	..	161	..	..	1.5	1.9	..	..	0.8	1.0	4.0	0.2
154	Senegal	22.2	1,737	30.7	115	12.8	8.8	1.6	3.1	3.2	5.6	1.3	1.6	4.8	2.3
155	Mauritania	8.0	2,255	25.9	133	20.2	12.3	3.1	2.3	..	4.3	3.5	3.8	6.4	3.0
156	Papua New Guinea	16.6	2,363	14.8	130	16.6	8.4	3.3	2.6	..	..	0.9	0.4	8.6	8.6
157	Nepal	33.6	1,102	21.2	155	8.9	9.6	1.3	1.8	3.0	4.7	0.8	1.4	1.9	1.2
158	Lesotho	3.3	1,504	34.9	141	41.7	32.6	3.4	8.5	11.8	13.0	4.0	3.1	8.2	1.6
159	Togo	5.6	914	19.4	116	10.5	..	1.4	3.4	4.4	4.5	..	1.7	2.3	1.1
160	Yemen	51.1	2,060	11.7 <sup>c</sup>	167	13.6	11.8 <sup>c</sup>	2.4	1.3	9.7	5.2	4.4	3.9 <sup>e</sup>	2.5	0.8
161	Haiti	10.5	1,034	..	150	7.8	..	1.7	1.5	..	..	0.0	0.0	..	2.0
161	Uganda	41.0	1,188	24.4	150	14.5	11.3	1.8	2.0	2.5	3.2	2.5	1.6	1.2	0.4
163	Zambia	19.2	1,423	21.3	167	9.5	11.6	2.9	3.6	2.0	1.3	..	1.7	5.7	0.9
164	Djibouti	..	2,087 <sup>d</sup>	..	129	29.7	..	3.9	4.7	9.7	8.4	5.1	3.7 <sup>e</sup>	2.4	..
165	Gambia	3.3	1,873	17.5	123	11.2	9.9	1.9	2.9	2.7	5.0	1.0	0.6	2.7	1.9
166	Benin	13.0	1,428	27.4	119	11.6	..	1.9	2.0	3.3	4.5	0.6	1.0 <sup>e</sup>	3.3	0.6
167	Rwanda	12.0	1,097	21.0 <sup>c</sup>	155	11.0	15.5 <sup>c</sup>	1.7	5.2	4.1	4.7	3.5	1.3	2.1	0.3
168	Côte d'Ivoire	31.9	1,581	16.4	114	7.2	9.1	1.3	1.1	3.8	4.6	..	1.6	9.8	1.7
169	Comoros	0.7	980	12.4 <sup>d</sup>	118	11.7	15.3 <sup>d</sup>	1.5	3.0	..	7.6	..	..	1.6	0.8
170	Malawi	12.4	805	20.8	156	14.6	15.7	2.8	4.0	5.2	5.7	0.7	1.1	3.6	0.4
171	Sudan	83.8	1,878	24.7	166	7.6	17.7	0.9	1.9	..	..	4.5	3.4	2.0	0.7
172	Zimbabwe	..	..	6.5	..	24.3	18.3	0.0	..	..	2.5	4.7	1.3	6.3	1.5
173	Ethiopia	83.0	979	19.0	223	17.9	9.0	2.3	2.6	3.9	4.7	7.5	0.9	1.7	0.6
174	Liberia	2.1	506	33.3	162	7.5	20.2	1.3	3.9	..	2.8	..	0.9	0.1	0.6
175	Afghanistan	37.2 <sup>c</sup>	1,083 <sup>c</sup>	16.3 <sup>c</sup>	141	..	10.7 <sup>c</sup>	2.3	0.9	..	..	..	3.8	..	0.1
176	Guinea-Bissau	1.7	1,097	..	119	14.0	..	1.0	0.9	..	..	4.4	..	2.4	2.1
177	Sierra Leone	4.6	769	14.9	163	14.3	11.1	1.1	1.5	4.9	4.3	3.7	1.2	7.3	0.6
178	Burundi	4.6	533	18.4	163	15.5	26.3	2.1	4.4	3.2	9.2	6.0	3.8 <sup>e</sup>	2.6	0.2
178	Guinea	10.1	990	20.0 <sup>c</sup>	237	6.8	7.5 <sup>c</sup>	0.7	0.6	2.5	2.4	1.5	..	5.0	1.8

HDI rank	ECONOMY				PUBLIC SPENDING										
	GDP	GDP per capita	Gross fixed capital formation	Consumer Price Index	General government final consumption expenditure		Health		Education		Military <sup>a</sup>		Total debt service		
	(2005 PPP \$ billions)	(2005 PPP \$)	(% of GDP)	(2005 = 100)	(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)		(% of GDP)		
	2011	2011	2011	2010	2000	2011	2010	2010	2000	2005–2010 <sup>b</sup>	2000	2010	2000	2009	
180	Central African Republic	3.2	716	10.8 <sup>d</sup>	124	14.0	4.5 <sup>d</sup>	1.6	1.4	1.5	1.2	..	2.6	1.5	0.1
181	Eritrea	2.8	516	..	..	63.8	..	2.5	1.3	3.2	2.1	32.7	..	0.5	1.1
182	Mali	15.3	964	..	116	8.6	..	2.1	2.3	3.6	4.5	2.2	1.9	3.8	0.6
183	Burkina Faso	19.5	1,149	..	115	20.8	..	2.0	3.4	..	4.0	1.2	1.3	1.8	0.6
184	Chad	15.5	1,343	31.8 <sup>c</sup>	117	7.7	13.2 <sup>c</sup>	2.7	1.1	2.6	2.8	1.9	2.7	1.8	0.9
185	Mozambique	20.6	861	24.3	157	9.0	12.3	4.2	3.7	..	5.0	1.3	0.9 <sup>d</sup>	2.3	1.0
186	Congo, Democratic Republic of the	22.3	329	28.7 <sup>d</sup>	..	7.5	7.6 <sup>d</sup>	0.1	3.4	..	2.5	1.0	1.3	0.6	2.0
186	Niger	10.3	642	..	117	13.0	..	1.8	2.6	3.2	3.8	1.2	0.9	1.4	0.5
<b>OTHER COUNTRIES OR TERRITORIES</b>															
..	Korea, Democratic People's Rep. of	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Marshall Islands	..	..	..	..	..	..	19.8	15.0	14.6	..	..	..	..	..
..	Monaco	..	..	..	..	..	..	2.8	3.8	1.3	1.2	..	..	..	..
..	Nauru	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	San Marino	..	..	..	114	..	..	6.5	6.1	..	..	..	..	..	..
..	Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	South Sudan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Tuvalu	..	..	..	..	..	..	12.3	14.2	..	..	..	..	..	..
<b>Human Development Index groups</b>															
..	Very high human development	37,231.3	32,931	18.4	—	16.7	19.4	6.0	8.2	4.5	5.1	2.2	2.7	..	..
..	High human development	11,740.8	11,572	21.4	—	15.5	15.8	2.9	3.6	..	4.7	2.8	2.7	8.1	4.7
..	Medium human development	18,095.7	5,203	38.4	—	13.9	12.4	1.8	2.4	..	3.6	2.2	2.0	3.7	1.6
..	Low human development	1,948.5	1,623	18.4	—	10.1	11.1	1.4	1.8	..	3.5	2.5	2.0	3.9	1.3
<b>Regions</b>															
..	Arab States	2,808.0	8,104	24.3	—	19.2	15.4	2.4	2.6	..	3.9	6.8	5.5	..	..
..	East Asia and the Pacific	12,580.2	6,616	..	—	..	..	1.7	2.5	..	..	..	..	..	..
..	Europe and Central Asia	5,946.1	12,458	22.5	—	15.7	15.4	3.7	4.3	..	4.1	2.8	2.7	6.8	8.3
..	Latin America and the Caribbean	6,046.4	10,429	20.1	—	14.7	16.1	3.2	3.8	4.3	5.3	1.4	1.4	8.9	2.8
..	South Asia	5,586.1	3,241	27.6	—	11.8	10.9	1.3	1.2	4.0	3.2	3.2	2.5	2.6	1.3
..	Sub-Saharan Africa	1,691.4	2,094	20.8	—	15.9	16.9	2.5	3.0	..	5.2	1.9	1.5	4.1	1.2
..	<b>Least developed countries</b>	1,065.9	1,346	..	—	9.7	..	1.7	2.2	..	3.7	..	2.2	3.1	1.3
..	<b>Small island developing states</b>	223.2	5,340	..	—	17.3	..	3.6	3.0	..	..	..	..	..	..
..	<b>World</b>	<b>69,016.4</b>	<b>10,103</b>	<b>22.3</b>	—	<b>16.3</b>	<b>17.5</b>	<b>5.3</b>	<b>6.5</b>	..	<b>4.9</b>	<b>2.3</b>	<b>2.6</b>	..	..

## NOTES

- a** For country-specific footnotes, see the Stockholm International Peace Research Institute's Military Expenditure database at [www.sipri.org/research/armaments/milex/milex\\_database](http://www.sipri.org/research/armaments/milex/milex_database).
- b** Data refer to the most recent year available during the period specified.
- c** Refers to 2010.
- d** Refers to 2009.
- e** Refers to 2008.

## DEFINITIONS

**Gross domestic product (GDP):** Sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products, expressed in 2005 international dollars using purchasing power parity rates.

**GDP per capita:** Sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products, expressed in international dollars using purchasing power parity rates and divided by total population during the same period.

**Gross fixed capital formation:** Value of acquisitions of new or existing fixed assets by the business sector, governments and households (excluding their unincorporated enterprises) less disposals of fixed assets, expressed as a percentage of GDP. No adjustment is made for depreciation of fixed assets.

**Consumer Price Index:** An index that reflects changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals, such as yearly.

**General government final consumption expenditure:** All government current expenditures

for purchases of goods and services (including compensation of employees and most expenditures on national defense and security but excluding government military expenditures that are part of government capital formation), expressed as a percentage of GDP.

**Public spending on health:** Current and capital spending from government (central and local) budgets, external borrowings and grants (including donations from international agencies and nongovernmental organizations), and social (or compulsory) health insurance funds, expressed as a percentage of GDP.

**Public spending on education:** Total public expenditure (current and capital) on education, expressed as a percentage of GDP.

**Public spending on the military:** All expenditures of the defense ministry and other ministries on

recruiting and training military personnel and on the construction and purchase of military supplies and equipment, expressed as a percentage of GDP.

**Total debt service:** Sum of principal repayments and interest actually paid in foreign currency, goods, or services on long-term debt, interest paid on short-term debt, and repayments (repurchases and charges) to the International Monetary Fund, expressed as a percentage of GDP.

## MAIN DATA SOURCES

**Columns 1–10:** World Bank (2012a).

**Columns 11 and 12:** SIPRI (2012).

**Columns 13 and 14:** HDRO calculations based on data on total debt service as a percentage of GNI from World Bank (2012a).

HDI rank	IMMUNIZATION COVERAGE			HIV PREVALENCE, YOUTH				MORTALITY RATES					HEALTH CARE QUALITY		
	DTP	Measles	Underweight children (moderate and severe)	Female	Male	Infant	Under-five	Adult		Cause-specific			Physicians	Satisfaction with health care quality	
								Female	Male	Due to malaria	Due to cholera	Due to cardiovascular diseases and diabetes <sup>a</sup>			
	(% of one-year-olds)	(% of children under age 5)	(% ages 15–24)	(deaths per 1,000 live births)	(per 1,000 adults)	(per 100,000 people per year)	(number)	(per 1,000 people)	(per 1,000 people)	(% satisfied)					
2010	2010	2006–2010 <sup>b</sup>	2009	2009	2010	2010	2009	2009	2008	2005–2010 <sup>b</sup>	2008	2005–2010 <sup>b</sup>	2007–2009 <sup>b</sup>		
<b>VERY HIGH HUMAN DEVELOPMENT</b>															
1	Norway	99	93	..	0.1	0.1	3	3	50	83	0.0	0	124	4.1	68
2	Australia	97	94	..	0.1	0.1	4	5	45	79	0.0	0	112	3.0	60
3	United States	99	92	..	0.2	0.3	7	8	78	134	0.0	0	156	2.7	56
4	Netherlands	99	96	..	0.1	0.1	4	4	56	75	0.0	0	122	3.9	77
5	Germany	97	96	..	0.1	0.1	3	4	53	99	0.0	0	170	3.5	47
6	New Zealand	95	91	..	0.1	0.1	5	6	57	86	0.0	0	138	2.4	64
7	Ireland	98	90	..	0.1	0.1	3	4	57	97	0.0	..	141	3.2	47
7	Sweden	99	96	..	0.1	0.1	2	3	47	74	0.0	0	141	3.6	81
9	Switzerland	98	90	..	0.1	0.2	4	5	43	74	0.0	0	114	4.1	81
10	Japan	99	94	..	0.1	0.1	2	3	42	86	0.0	0	91	2.1	54
11	Canada	92	93	..	0.1	0.1	5	6	53	87	0.0	0	121	1.9	73
12	Korea, Republic of	96	98	..	0.1	0.1	4	5	46	109	0.0	0	141	2.0	60
13	Hong Kong, China (SAR)	..	..	..	..	..	..	..	..	..	..	..	..	..	67
13	Iceland	98	93	..	0.1	0.1	2	2	43	65	0.0	..	121	3.9	87
15	Denmark	93	85	..	0.1	0.1	3	4	65	107	0.0	0	143	3.4	82
16	Israel	96	98	..	0.1	0.1	4	5	45	78	0.0	..	116	3.6	70
17	Belgium	99	94	..	0.1	0.1	4	4	59	105	0.0	0	131	3.0	88
18	Austria	93	76	..	0.2	0.3	4	4	50	102	0.0	0	155	4.7	89
18	Singapore	98	95	..	0.1	0.1	2	3	42	76	0.0	..	140	1.8	86
20	France	99	90	..	0.1	0.2	3	4	54	117	0.0	0	98	3.5	84
21	Finland	99	98	..	0.1	0.1	2	3	56	124	0.0	0	157	2.7	85
21	Slovenia	98	95	..	0.1	0.1	2	3	54	131	0.0	0	168	2.5	68
23	Spain	99	95	..	0.1	0.2	4	5	43	94	0.0	0	113	3.7	84
24	Liechtenstein	..	..	..	..	..	2	2	..	..	..	..	..	..	..
25	Italy	98	90	..	0.1	0.1	3	4	41	77	0.0	0	128	4.2	59
26	Luxembourg	99	96	..	0.1	0.1	2	3	57	95	0.0	..	150	2.9	90
26	United Kingdom	98	93	..	0.1	0.2	5	5	58	95	0.0	0	133	2.7	81
28	Czech Republic	99	98	..	0.1	0.1	3	4	63	138	0.0	..	258	3.6	63
29	Greece	99	99	..	0.1	0.1	3	4	44	106	0.0	..	186	6.0	45
30	Brunei Darussalam	98	94	..	..	..	6	7	82	105	0.0	..	284	1.4	..
31	Cyprus	99	87	..	..	..	3	4	41	81	0.0	..	188	2.3	60
32	Malta	97	73	..	0.1	0.1	5	6	44	76	0.0	..	175	3.1	81
33	Andorra	99	99	..	..	..	3	4	44	94	0.0	..	..	3.7	..
33	Estonia	96	95	..	0.2	0.3	4	5	77	234	0.0	..	342	3.4	47
35	Slovakia	99	98	..	0.1	0.1	7	8	74	184	0.0	..	343	3.0	..
36	Qatar	98	99	..	0.1	0.1	7	8	48	69	0.0	0	195	2.8	..
37	Hungary	99	99	..	0.1	0.1	5	6	99	229	0.0	..	324	3.1	50
38	Barbados	95	85	..	1.1	0.9	17	20	80	136	0.1	..	233	1.8	..
39	Poland	99	98	..	0.1	0.1	5	6	76	197	0.0	0	283	2.1	45
40	Chile	93	93	..	0.1	0.2	8	9	59	116	0.0	..	156	1.1	45
41	Lithuania	98	96	..	0.1	0.1	5	7	95	274	0.0	..	375	3.7	29
41	United Arab Emirates	94	94	..	..	..	6	7	66	84	0.0	..	277	1.9	..
43	Portugal	99	96	..	0.2	0.3	3	4	54	123	0.0	..	154	3.8	69
44	Latvia	97	93	..	0.1	0.2	8	10	105	284	0.0	..	420	3.0	42
45	Argentina	98	99	2.3 <sup>c</sup>	0.2	0.3	12	14	88	160	0.0	..	207	3.2	66
46	Seychelles	99	99	..	..	..	12	14	108	227	0.0	0	..	1.5	..
47	Croatia	98	95	..	0.1	0.1	5	6	60	153	0.0	..	294	2.6	..
<b>HIGH HUMAN DEVELOPMENT</b>															
48	Bahrain	99	99	..	..	..	9	10	87	127	0.1	..	339	1.4	..
49	Bahamas	99	94	..	3.1	1.4	14	16	126	202	0.0	..	239	..	..
50	Belarus	99	99	1.3	0.1	0.1	4	6	117	324	0.0	..	525	4.9	45
51	Uruguay	98	95	5.4	0.2	0.3	9	11	84	156	0.0	..	211	3.7	77
52	Montenegro	97	90	1.7	..	..	7	8	85	161	0.0	..	419	..	..
52	Palau	99	75	..	..	..	15	19	110	229	0.0	..	..	1.3	..
54	Kuwait	98	98	..	..	..	10	11	50	66	0.0	..	274	1.8	..
55	Russian Federation	99	98	..	0.3	0.2	9	12	144	391	0.0	0	580	4.3	35
56	Romania	99	95	3.5	0.1	0.1	11	14	90	219	0.0	..	398	1.9	44

HDI rank	IMMUNIZATION COVERAGE			HIV PREVALENCE, YOUTH				MORTALITY RATES					HEALTH CARE QUALITY	
	DTP	Measles	Underweight children (moderate and severe)	Female	Male	Infant	Under-five	Adult		Cause-specific			Physicians	Satisfaction with health care quality
								Female	Male	Due to malaria	Due to cholera	Due to cardiovascular diseases and diabetes*		
	(% of one-year-olds)	(% of children under age 5)	(% ages 15–24)	(deaths per 1,000 live births)	(per 1,000 adults)	(per 100,000 people per year)	(number)	(per 1,000 people)	(per 1,000 people)	(% satisfied)				
2010	2010	2006–2010 <sup>a</sup>	2009	2009	2010	2010	2009	2009	2008	2005–2010 <sup>b</sup>	2008	2005–2010 <sup>b</sup>	2007–2009 <sup>b</sup>	
57 Bulgaria	96	97	..	0.1	0.1	11	13	86	205	0.0	..	464	3.6	..
57 Saudi Arabia	98	98	..	..	..	15	18	102	186	0.0	..	456	0.9	69
59 Cuba	98	99	..	0.1	0.1	5	6	78	120	0.0	..	215	6.4	..
59 Panama	98	95	3.9	0.3	0.4	17	20	82	145	0.0	..	174	..	54
61 Mexico	96	95	3.4	0.1	0.2	14	17	88	157	0.0	0	237	2.9	69
62 Costa Rica	96	83	1.1	0.1	0.2	9	10	69	115	0.0	..	159	..	75
63 Grenada	99	95	..	..	..	9	11	143	248	0.0	..	299	..	..
64 Libya	98	98	..	..	..	13	17	101	175	0.0	..	396	1.9	..
64 Malaysia	98	96	12.9	0.1	0.1	5	6	95	175	0.1	2	278	0.9	89
64 Serbia	97	95	1.4	0.1	0.1	6	7	90	184	0.0	..	422	2.0	..
67 Antigua and Barbuda	99	98	..	..	..	7	8	158	197	0.0	..	..	..	..
67 Trinidad and Tobago	96	92	..	0.7	1.0	24	27	120	225	0.0	..	427	1.2	32
69 Kazakhstan	99	99	3.9	0.2	0.1	29	33	185	432	0.0	0	696	3.9	49
70 Albania	99	99	5.2	..	..	16	18	88	126	0.0	..	443	1.1	..
71 Venezuela, Bolivarian Republic of	90	79	3.7	..	..	16	18	92	196	0.1	..	237	..	75
72 Dominica	99	99	..	..	..	11	12	103	192	0.0	..	..	..	..
72 Georgia	99	94	1.1	0.1	0.1	20	22	97	235	0.0	..	505	4.5	61
72 Lebanon	83	53	..	0.1	0.1	19	22	85	166	0.0	0	332	3.5	50
72 Saint Kitts and Nevis	98	99	..	..	..	7	8	90	185	0.0	..	..	..	..
76 Iran, Islamic Republic of	99	99	..	0.1	0.1	22	26	90	144	0.0	11	385	0.9	73
77 Peru	97	94	4.2	0.1	0.2	15	19	96	123	0.1	..	135	0.9	48
78 The former Yugoslav Republic of Macedonia	98	98	1.5	..	..	10	12	79	144	0.0	..	465	2.5	..
78 Ukraine	96	94	..	0.3	0.2	11	13	148	395	0.0	0	593	3.1	23
80 Mauritius	99	99	..	0.2	0.3	13	15	99	219	0.0	0	444	1.1	..
81 Bosnia and Herzegovina	95	93	1.4	..	..	8	8	67	145	0.0	..	398	1.4	..
82 Azerbaijan	80	67	7.7	0.1	0.1	39	46	134	221	0.0	..	619	3.8	53
83 Saint Vincent and the Grenadines	99	99	..	..	..	19	21	110	204	0.0	..	340	..	..
84 Oman	99	97	8.6	0.1	0.1	8	9	85	157	0.0	..	455	1.9	..
85 Brazil	99	99	1.7	..	..	17	19	102	205	0.1	0	264	1.7	44
85 Jamaica	99	88	2.0	0.7	1.0	20	24	131	224	0.0	..	248	0.9	..
87 Armenia	98	97	4.7	0.1	0.1	18	20	103	246	0.0	..	537	3.7	61
88 Saint Lucia	98	95	..	..	..	14	16	90	188	0.0	..	278	0.5	..
89 Ecuador	99	98	6.2	0.2	0.2	18	20	96	173	0.0	..	167	..	64
90 Turkey	97	97	1.7	0.1	0.1	14	18	73	134	0.0	..	362	1.5	67
91 Colombia	96	88	3.4	0.1	0.2	17	19	80	166	0.3	..	186	1.4	63
92 Sri Lanka	99	99	21.1	0.1	0.1	14	17	82	275	0.0	..	312	0.5	83
93 Algeria	99	95	3.2	0.1	0.1	31	36	105	135	0.0	0	277	1.2	52
94 Tunisia	98	97	3.3	0.1	0.1	14	16	70	129	0.1	..	257	1.2	80
<b>MEDIUM HUMAN DEVELOPMENT</b>														
95 Tonga	99	99	..	..	..	13	16	233	135	0.8	..	396	0.3	..
96 Belize	99	98	4.3	1.8	0.7	14	17	129	202	0.0	..	256	0.8	50
96 Dominican Republic	96	79	7.1	0.7	0.3	22	27	149	172	0.1	0	320	..	58
96 Fiji	99	94	..	0.1	0.1	15	17	157	263	0.0	..	457	0.5	..
96 Samoa	97	61	..	..	..	17	20	167	198	0.9	..	427	0.3	..
100 Jordan	98	98	1.9	..	..	18	22	111	195	0.0	..	468	2.5	66
101 China	99	99	3.8 <sup>c</sup>	..	..	16	18	87	142	0.0	4	287	1.4	..
102 Turkmenistan	99	99	8.2	..	..	47	56	212	380	0.0	..	773	2.4	..
103 Thailand	99	98	7.0	..	..	11	13	139	270	0.4	0	311	0.3	85
104 Maldives	97	97	17.3	0.1	0.1	14	15	70	97	0.9	..	351	1.6	..
105 Suriname	99	89	7.2	0.4	0.6	27	31	124	217	2.5	..	351	..	..
106 Gabon	69	55	..	3.5	1.4	54	74	262	321	31.0	0	370	0.3	..
107 El Salvador	97	92	5.5	0.3	0.4	14	16	128	281	0.0	..	203	1.6	59
108 Bolivia, Plurinational State of	87	79	4.3	0.1	0.1	42	54	132	203	0.0	..	290	..	59
108 Mongolia	98	97	5.0	0.1	0.1	26	32	141	305	0.0	0	379	2.8	52
110 Palestine, State of	..	..	..	..	..	20	22	..	..	..	..	..	..	50
111 Paraguay	96	94	3.4	0.1	0.2	21	25	98	168	0.0	0	249	1.1	66
112 Egypt	97	96	6.0	0.1	0.1	19	22	130	215	0.2	..	406	2.8	53
113 Moldova, Republic of	93	97	3.2	0.1	0.1	16	19	134	309	0.0	..	525	2.7	41

**TABLE 7 HEALTH**

HDI rank	IMMUNIZATION COVERAGE			HIV PREVALENCE, YOUTH				MORTALITY RATES					HEALTH CARE QUALITY		
	DTP	Measles	Underweight children (moderate and severe)	Female	Male	Infant	Under-five	Adult		Cause-specific			Physicians	Satisfaction with health care quality	
								Female	Male	Due to malaria	Due to cholera	Due to cardiovascular diseases and diabetes <sup>a</sup>			
	(% of one-year-olds)	(% of children under age 5)	(% ages 15–24)	(deaths per 1,000 live births)	(per 1,000 adults)	(per 100,000 people per year)	(number)	(per 1,000 people)	(per 1,000 people)	(% satisfied)					
2010	2010	2006–2010 <sup>b</sup>	2009	2009	2010	2010	2009	2009	2008	2005–2010 <sup>b</sup>	2008	2005–2010 <sup>b</sup>	2007–2009 <sup>b</sup>		
114	Philippines	89	88	21.6 <sup>c</sup>	0.1	0.1	23	29	130	240	0.2	2	345	1.2	81
114	Uzbekistan	99	98	4.0	0.1	0.1	44	52	139	220	0.0	..	641	2.6	..
116	Syrian Arab Republic	89	82	10.1	..	..	14	16	95	159	0.0	..	400	1.5	56
117	Micronesia, Federated States of	90	80	..	..	..	34	42	161	183	0.3	0	412	0.6	..
118	Guyana	99	95	10.5	0.8	0.6	25	30	224	286	5.0	..	452	..	63
119	Botswana	98	94	11.2	11.8	5.2	36	48	324	372	1.0	0	346	0.3	72
120	Honduras	99	99	8.1	0.2	0.3	20	24	134	237	0.1	..	376	..	68
121	Indonesia	94	89	18.4	0.1	0.1	27	35	143	234	3.2	19	350	0.3	79
121	Kiribati	97	89	..	..	..	39	49	173	325	2.6	..	..	0.3	..
121	South Africa	73	65	8.7 <sup>c</sup>	13.6	4.5	41	57	479	521	0.2	28	321	0.8	63
124	Vanuatu	78	52	..	..	..	12	14	159	200	8.5	..	399	0.1	..
125	Kyrgyzstan	99	99	2.2	0.1	0.1	33	38	162	327	0.0	..	605	2.3	57
125	Tajikistan	95	94	15.0	0.1	0.1	52	63	160	183	0.0	..	523	2.0	64
127	Viet Nam	93	98	20.2	0.1	0.1	19	23	107	173	0.1	0	339	1.2	74
128	Namibia	87	75	16.6	5.8	2.3	29	40	357	540	29.0	0	495	0.4	68
129	Nicaragua	99	99	5.5	0.1	0.1	23	27	122	210	0.0	..	234	0.4	66
130	Morocco	99	98	8.6	0.1	0.1	30	36	87	126	0.0	..	355	0.6	..
131	Iraq	81	73	6.4	..	..	31	39	145	292	0.0	24	424	0.7	44
132	Cape Verde	99	96	..	..	..	29	36	111	272	0.2	0	300	0.6	..
133	Guatemala	96	93	13.0 <sup>c</sup>	0.3	0.5	25	32	151	280	0.1	..	190	..	60
134	Timor-Leste	75	66	44.7	..	..	46	55	154	233	83.0	..	318	0.1	..
135	Ghana	96	93	13.9	1.3	0.5	50	74	253	402	48.0	51	386	0.1	74
136	Equatorial Guinea	65	51	..	5.0	1.9	81	121	355	373	98.0	33	484	0.3	..
136	India	83	74	42.5	0.1	0.1	48	63	169	250	1.9	6	336	0.6	67
138	Cambodia	93	93	28.3	0.1	0.1	43	51	190	350	3.7	0	408	0.2	75
138	Lao People's Democratic Republic	81	64	31.1	0.2	0.1	42	54	251	289	2.9	3	430	0.3	69
140	Bhutan	94	95	12.7	0.1	0.1	44	56	194	256	0.2	..	425	0.0	..
141	Swaziland	95	94	5.8	15.6	6.5	55	78	560	674	0.3	0	499	0.2	..
<b>LOW HUMAN DEVELOPMENT</b>															
142	Congo	90	76	11.4	2.6	1.2	61	93	320	409	121.0	0	463	0.1	34
143	Solomon Islands	85	68	11.8	..	..	23	27	119	170	30.0	..	367	0.2	..
144	Sao Tome and Principe	98	92	13.1	..	..	53	80	104	161	9.2	33	308	0.5	..
145	Kenya	93	86	16.1	4.1	1.8	55	85	282	358	12.0	21	363	0.1	62
146	Bangladesh	98	94	41.0	0.1	0.1	38	48	222	246	1.8	..	418	0.3	69
146	Pakistan	90	86	31.3	0.1	0.1	70	87	189	225	0.6	0	422	0.8	41
148	Angola	97	93	15.6 <sup>c</sup>	1.6	0.6	98	161	353	377	89.0	0	483	0.1	62
149	Myanmar	93	88	22.6	0.3	0.3	50	66	188	275	34.0	1	369	0.5	..
150	Cameroon	92	79	16.0	3.9	1.6	84	136	409	420	121.0	110	498	0.2	54
151	Madagascar	78	67	..	0.1	0.1	43	62	198	273	8.5	0	376	0.2	82
152	Tanzania, United Republic of	98	92	15.8	3.9	1.7	50	76	311	456	87.0	94	427	0.0	30
153	Nigeria	77	71	23.1	2.9	1.2	88	143	365	377	146.0	174	456	0.4	55
154	Senegal	80	60	13.7	0.7	0.3	50	75	218	266	76.0	458	373	0.1	57
155	Mauritania	82	67	14.7 <sup>c</sup>	0.3	0.4	75	111	262	315	36.0	70	422	0.1	31
156	Papua New Guinea	80	55	18.4	0.8	0.3	47	61	221	274	45.0	0	428	0.1	..
157	Nepal	85	86	38.6	0.1	0.2	41	50	159	234	0.0	0	350	0.2	80
158	Lesotho	93	85	13.2	14.2	5.4	65	85	573	676	0.1	0	452	0.1	..
159	Togo	97	84	16.6	2.2	0.9	66	103	278	338	65.0	15	403	0.1	22
160	Yemen	94	73	43.1	..	..	57	77	180	237	4.9	3	494	0.3	..
161	Haiti	83	59	17.7	1.3	0.6	70	165	227	278	5.7	3,990	411	..	35
161	Uganda	83	55	15.9	4.8	2.3	63	99	348	539	103.0	98	473	0.1	48
163	Zambia	99	91	14.6	8.9	4.2	69	111	477	580	104.0	7	518	0.1	53
164	Djibouti	90	85	22.9	1.9	0.8	73	91	271	326	1.2	27	490	0.2	56
165	Gambia	99	97	18.1	2.4	0.9	57	98	246	296	93.0	13	417	0.0	..
166	Benin	94	69	18.4	0.7	0.3	73	115	246	385	105.0	11	454	0.1	52
167	Rwanda	92	82	11.4	1.9	1.3	59	91	258	304	15.0	0	408	0.0	78
168	Côte d'Ivoire	95	70	15.9	1.5	0.7	86	123	456	528	116.0	6	536	0.1	..
169	Comoros	81	72	..	0.1	0.1	63	86	229	284	58.0	0	450	0.2	..
170	Malawi	97	93	12.8	6.8	3.1	58	92	496	691	87.0	11	587	0.0	66

HDI rank	IMMUNIZATION COVERAGE			HIV PREVALENCE, YOUTH				MORTALITY RATES					HEALTH CARE QUALITY		
	DTP	Measles	Underweight children (moderate and severe)	Female	Male	Infant	Under-five	Adult		Cause-specific			Physicians	Satisfaction with health care quality	
								Female	Male	Due to malaria	Due to cholera	Due to cardiovascular diseases and diabetes <sup>a</sup>			
	(% of one-year-olds)	(% of children under age 5)	(% ages 15–24)	(deaths per 1,000 live births)	(per 1,000 adults)	(per 100,000 people per year)	(number)	(per 1,000 people)	(per 1,000 people)	(% satisfied)					
2010	2010	2006–2010 <sup>b</sup>	2009	2009	2010	2010	2009	2009	2008	2005–2010 <sup>b</sup>	2008	2005–2010 <sup>b</sup>	2007–2009 <sup>b</sup>		
171	Sudan	99	90	27.0	1.3	0.5	66	103	275	291	23.0	1,011	548	0.3	48
172	Zimbabwe	94	84	9.7	6.9	3.3	51	80	574	672	40.0	26	324	0.2	27
173	Ethiopia	90	81	33.2	..	..	68	106	379	445	10.0	0	508	0.0	19
174	Liberia	75	64	14.9 <sup>c</sup>	0.7	0.3	74	103	337	389	98.0	18	437	0.0	38
175	Afghanistan	86	62	32.9	..	..	103	149	352	440	0.3	0	675	0.2	46
176	Guinea-Bissau	92	61	18.1	2.0	0.8	92	150	369	431	203.0	399	513	0.0	..
177	Sierra Leone	96	82	21.1	1.5	0.6	114	174	363	414	239.0	0	440	0.0	46
178	Burundi	99	92	28.8	2.1	1.0	88	142	407	424	39.0	18	464	0.0	47
178	Guinea	75	51	20.8	0.9	0.4	81	130	337	474	165.0	107	520	0.1	31
180	Central African Republic	64	62	24.4	2.2	1.0	106	159	470	461	192.0	0	498	0.1	..
181	Eritrea	99	99	34.5	0.4	0.2	42	61	179	249	0.7	0	383	0.1	..
182	Mali	90	63	26.7	0.5	0.2	99	178	218	357	131.0	76	406	0.0	44
183	Burkina Faso	98	94	25.7	0.8	0.5	93	176	262	443	221.0	16	463	0.1	50
184	Chad	71	46	30.3	2.5	1.0	99	173	384	412	235.0	14	500	0.0	42
185	Mozambique	77	70	18.3	8.6	3.1	92	135	434	557	171.0	24	512	0.0	69
186	Congo, Democratic Republic of the	67	68	24.2	..	..	112	170	331	442	193.0	244	477	0.1	..
186	Niger	80	71	40.2 <sup>c</sup>	0.5	0.2	73	143	224	229	184.0	55	381	0.0	46
<b>OTHER COUNTRIES OR TERRITORIES</b>															
	Korea, Democratic People's Rep. of	94	99	18.8	..	..	26	33	126	207	0.0	..	303	3.3	..
	Marshall Islands	99	97	..	..	..	22	26	386	429	1.1	..	..	0.6	..
	Monaco	99	99	..	..	..	3	4	51	112	0.0	..	..	..	..
	Nauru	99	99	4.8	..	..	32	40	303	448	0.0	..	..	0.7	..
	San Marino	95	93	..	..	..	2	2	48	57	0.0	..	..	..	..
	Somalia	55	46	31.6	0.6	0.4	108	180	350	382	28.0	1,182	572	0.0	..
	South Sudan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
	Tuvalu	99	85	1.6	..	..	27	33	280	255	0.0	..	..	0.6	..
<b>Human Development Index groups</b>															
	Very high human development	98	94	..	..	..	5	6	60	114	0.0	..	150	2.9	62
	High human development	97	95	..	..	..	16	18	105	221	0.0	..	357	2.3	..
	Medium human development	90	85	22.7	..	..	33	42	132	204	1.3	..	324	1.0	..
	Low human development	87	78	26.1	..	..	73	110	287	346	65.4	138	450	0.3	50
<b>Regions</b>															
	Arab States	93	87	..	..	..	36	48	139	198	3.5	..	409	1.4	..
	East Asia and the Pacific	97	95	9.7	..	..	20	24	103	168	1.5	..	305	1.2	..
	Europe and Central Asia	98	96	..	..	..	17	21	118	281	0.0	..	492	3.1	45
	Latin America and the Caribbean	96	93	4.0	..	..	18	23	99	181	0.2	..	236	..	57
	South Asia	86	78	40.2	..	..	50	65	173	245	1.6	..	360	0.6	65
	Sub-Saharan Africa	84	75	21.2	..	..	76	120	355	430	98.1	86	447	0.2	..
	<b>Least developed countries</b>	88	78	27.3	..	..	71	108	282	357	62.1	190	459	0.2	..
	<b>Small island developing states</b>	89	72	..	..	..	41	70	155	207	15.6	..	342	2.6	..
	<b>World</b>	<b>91</b>	<b>85</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>40</b>	<b>55</b>	<b>137</b>	<b>211</b>	<b>12.2</b>	<b>..</b>	<b>323</b>	<b>1.4</b>	<b>..</b>

**NOTES**

- a Estimates are age-standardized and based on a combination of country life tables, cause of death models, regional cause of death patterns, and World Health Organization and Joint United Nations Programme on HIV/AIDS estimates for some major causes (not including chronic diseases).
- b Data are for the most recent year available during the period specified.
- c Data differ from standard definition or refer to only part of the country.

**DEFINITIONS**

**Immunization coverage for DTP:** Percentage of one-year-olds who have received three doses of the

combined diphtheria, tetanus toxoid and pertussis (DTP) vaccine.

**Immunization coverage for measles:** Percentage of one-year-olds who have received at least one dose of a measles vaccine.

**Underweight children:** Percentage of children under age 5 falling two standard deviations or more below the median weight-for-age of the reference population.

**HIV prevalence:** Percentage of the population ages 15–24 who are infected with HIV.

**Infant mortality rate:** Probability of dying between birth and exactly age 1, expressed per 1,000 live births.

**Under-five mortality rate:** Probability of dying between birth and exactly age 5, expressed per 1,000 live births.

**Adult mortality rate:** Probability that a 15-year-old person will die before reaching age 60, expressed per 1,000 adults.

**Cause-specific deaths:** Deaths attributable to a certain disease or cause.

**Physicians:** Number of physicians (both generalists and specialists), expressed per 1,000 people.

**Satisfaction with health care quality:** Percentage of respondents who answered “yes” to the Gallup World Poll question, “In this country, do you have confidence in the healthcare or medical systems?”

**MAIN DATA SOURCES**

**Columns 1, 2, 8 and 9:** WHO (2012a).

**Columns 3–5:** UNICEF (2012).

**Columns 6, 10, 11 and 13:** WHO (2012b).

**Column 7:** Inter-agency Group for Child Mortality Estimation (2012).

**Column 12:** HDRO calculations based on data on female deaths and male deaths due to cardiovascular diseases and diabetes from WHO (2012b) and population data from UNDESA (2011).

**Column 14:** Gallup (2012).

HDI rank	EDUCATIONAL ATTAINMENT		GROSS ENROLMENT RATIO				EDUCATION QUALITY								
	Adult literacy rate	Population with at least secondary education	Primary	Secondary	Tertiary	Primary school teachers trained to teach	Performance of 15-year-old students						Satisfaction with education quality	Primary school dropout rate	
							Mean score			Deviation from mean					
	(% ages 15 and older)	(% ages 25 and older)	(% )			(% )	Reading <sup>a</sup>	Mathematics <sup>b</sup>	Science <sup>c</sup>	Reading	Mathematics	Science	(% satisfied)	(% of primary school cohort)	
	2005–2010 <sup>d</sup>	2010	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2005–2011 <sup>d</sup>	2009	2009	2009	2009	2009	2009	2011	2002–2011 <sup>d</sup>	
<b>VERY HIGH HUMAN DEVELOPMENT</b>															
1	Norway	..	95.2	99.0	110.0	73.8	..	503	498	500	91	85	90	..	0.5
2	Australia	..	92.2	104.0	129.0	75.9	..	515	514	527	99	94	101	67.3	..
3	United States	..	94.5	102.0	96.0	94.8	..	500	487	502	97	91	98	62.8	6.9
4	Netherlands	..	88.9	108.0	120.0	62.7	..	508	526	522	89	89	96	60.3	..
5	Germany	..	96.5	102.0	103.0	..	..	497	513	520	95	98	101	65.6 <sup>e</sup>	4.4
6	New Zealand	..	83.7	101.0	119.0	82.6	..	521	519	532	103	96	107	69.9	..
7	Ireland	..	73.9	108.0	117.0	61.0	..	496	487	508	95	86	97	83.6	..
7	Sweden	..	85.0	100.0	100.0	70.8	..	497	494	495	99	94	100	61.6	1.0
9	Switzerland	..	95.8	102.0	95.0	51.5	..	501	534	517	93	99	96	..	..
10	Japan	..	81.1 <sup>f</sup>	103.0	102.0	59.0	..	520	529	539	100	94	100	54.6	0.0
11	Canada	..	100.0	99.0	101.0	60.0	..	524	527	529	90	88	90	75.4	..
12	Korea, Republic of	..	85.4 <sup>f</sup>	104.0	97.0	103.9	..	542	546	538	79	89	82	50.5	1.2
13	Hong Kong, China (SAR)	..	72.3	102.0	83.0	59.7	95.6	533	555	549	84	95	87	49.6	0.5
13	Iceland	..	91.3	99.0	107.0	74.1	..	500	507	496	96	91	95	..	2.5
15	Denmark	..	99.4	99.0	117.0	74.4	..	495	503	499	84	87	92	64.5	0.5
16	Israel	..	84.1	113.0	91.0	62.5	..	474	447	455	112	104	107	64.0	1.1
17	Belgium	..	79.4	105.0	111.0	67.5	..	506	515	507	102	104	105	62.1	6.6
18	Austria	..	100.0	100.0	100.0	60.2	..	470	496	494	100	96	102	63.7	2.3
18	Singapore	96.1 <sup>g</sup>	75.0	101.8	106.9	71.0	94.3	526	562	542	97	104	104	91.8	0.9
20	France	..	78.4	111.0	113.0	54.5	..	496	497	498	106	101	103	58.5	..
21	Finland	..	100.0	99.0	108.0	91.6	..	536	541	554	86	82	89	81.9	0.5
21	Slovenia	99.7 <sup>h</sup>	95.6	98.0	97.0	86.9	..	483	501	512	91	95	94	72.6	0.5
23	Spain	97.7	66.4	107.0	119.0	73.2	..	481	483	488	88	91	87	59.0	0.5
24	Liechtenstein	..	..	106.0	70.0	34.4	..	499	536	520	83	88	87	..	18.2
25	Italy	98.9 <sup>h</sup>	72.8	103.0	99.0	66.0	..	486	483	489	96	93	97	46.7	0.3
26	Luxembourg	..	77.9	100.0	98.0	10.5	..	472	489	484	104	98	104	64.8	..
26	United Kingdom	..	99.7	106.0	102.0	58.5	..	494	492	514	95	87	99	76.9 <sup>e</sup>	..
28	Czech Republic	..	99.8	106.0	90.0	60.7	..	478	493	500	92	93	97	71.4	0.4
29	Greece	97.2 <sup>h</sup>	62.0	100.0	101.0	89.4	..	483	466	470	95	89	92	47.9	2.6
30	Brunei Darussalam	95.2 <sup>h</sup>	63.8 <sup>f</sup>	108.0	110.0	17.2	87.1	..	..	..	..	..	..	..	3.9
31	Cyprus	98.3 <sup>h</sup>	74.5	105.0	98.0	52.0	..	..	..	..	..	..	..	65.6	4.7
32	Malta	92.4	62.5	95.0	105.0	33.4	..	..	..	..	..	..	..	58.5	20.3
33	Andorra	..	49.4	84.0	87.0	11.2	100.0	..	..	..	..	..	..	..	..
33	Estonia	99.8 <sup>h</sup>	94.5 <sup>f</sup>	99.0	104.0	62.7	..	501	512	528	83	81	84	49.5	1.6
35	Slovakia	..	98.8	102.0	89.0	54.2	..	477	497	490	90	96	95	58.4	2.3
36	Qatar	96.3	63.4	103.0	94.0	10.0	42.9	372	368	379	115	98	104	69.9	6.4
37	Hungary	99.0 <sup>i</sup>	94.8 <sup>f</sup>	102.0	98.0	61.7	..	494	490	503	90	92	86	56.4	2.3
38	Barbados	..	88.6 <sup>f</sup>	120.0	101.0	65.9	58.5	..	..	..	..	..	..	..	4.2
39	Poland	99.5 <sup>i</sup>	80.0	97.0	97.0	70.5	..	500	495	508	89	88	87	60.8	2.4
40	Chile	98.6	74.0	106.0	88.0	59.2	..	449	421	447	83	80	81	44.0	2.6
41	Lithuania	99.7 <sup>h</sup>	90.2	97.0	98.0	77.4	..	468	477	491	86	88	85	51.1	1.6
41	United Arab Emirates	90.0	64.3 <sup>f</sup>	104.0	92.0	22.5	100.0	459 <sup>j</sup>	453 <sup>j</sup>	466 <sup>j</sup>	107 <sup>j</sup>	99 <sup>j</sup>	106 <sup>j</sup>	80.6 <sup>e</sup>	3.3
43	Portugal	95.2 <sup>i</sup>	40.4	114.0	107.0	62.2	..	489	487	493	87	91	83	64.9	..
44	Latvia	99.8 <sup>h</sup>	98.4	101.0	95.0	60.1	..	484	482	494	80	79	78	51.0	5.4
45	Argentina	97.8 <sup>h</sup>	56.0 <sup>f</sup>	118.0	89.0	71.2	..	398	388	401	108	93	102	62.6	6.2
46	Seychelles	91.8	66.8	117.0	119.0	..	99.4	..	..	..	..	..	..	..	15.1
47	Croatia	98.8 <sup>h</sup>	64.4 <sup>f</sup>	93.0	95.0	49.2	..	476	460	486	88	88	85	63.7	1.0
<b>HIGH HUMAN DEVELOPMENT</b>															
48	Bahrain	91.9 <sup>h</sup>	78.0 <sup>f</sup>	107.0	103.0	..	..	..	..	..	..	..	..	80.5 <sup>e</sup>	1.8
49	Bahamas	..	89.6	114.0	96.0	..	91.5	..	..	..	..	..	..	..	10.5
50	Belarus	99.6	..	100.0	96.0	83.0	99.8	..	..	..	..	..	..	55.4	0.3
51	Uruguay	98.1	49.8	113.0	90.0	63.3	..	426	427	427	99	91	97	55.8	4.8
52	Montenegro	98.4 <sup>h</sup>	98.2	107.0	104.0	47.6	..	408	403	401	93	85	87	62.1	..
52	Palau	..	..	101.0	96.0	37.9	..	..	..	..	..	..	..	..	..
54	Kuwait	93.9	48.9	106.0	101.0	21.9	100.0	..	..	..	..	..	..	61.2 <sup>e</sup>	4.0
55	Russian Federation	99.6 <sup>h</sup>	94.7 <sup>f</sup>	99.0	89.0	75.9	..	459	468	478	90	85	90	38.0	3.9
56	Romania	97.7 <sup>h</sup>	86.8	96.0	95.0	63.8	..	424	427	428	90	79	79	45.3	4.9

HDI rank	EDUCATIONAL ATTAINMENT		GROSS ENROLMENT RATIO				EDUCATION QUALITY							
	Adult literacy rate	Population with at least secondary education	Primary	Secondary	Tertiary	Primary school teachers trained to teach	Performance of 15-year-old students						Satisfaction with education quality	Primary school dropout rate
							Mean score			Deviation from mean				
	(% ages 15 and older)	(% ages 25 and older)	(%)			(%)	Reading <sup>a</sup>	Mathematics <sup>b</sup>	Science <sup>c</sup>	Reading	Mathematics	Science	(% satisfied)	(% of primary school cohort)
2005–2010 <sup>d</sup>	2010	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2005–2011 <sup>d</sup>	2009	2009	2009	2009	2009	2009	2011	2002–2011 <sup>d</sup>	
57 Bulgaria	98.4	92.6	103.0	88.0	53.0	..	429	428	439	113	99	106	35.4	6.2
57 Saudi Arabia	86.6 <sup>h</sup>	54.6 <sup>f</sup>	106.0	101.0	36.8	91.5	..	..	..	..	..	..	61.8 <sup>e</sup>	6.7
59 Cuba	99.8 <sup>h</sup>	77.1 <sup>f</sup>	103.0	89.0	95.2	100.0	..	..	..	..	..	..	..	3.8
59 Panama	94.1	62.1 <sup>f</sup>	108.0	74.0	44.6	91.6	371	360	376	99	81	90	73.2	6.2
61 Mexico	93.1	53.9	115.0	87.0	27.0	95.6	425	419	416	85	79	77	64.5	6.0
62 Costa Rica	96.2 <sup>h</sup>	53.6 <sup>f</sup>	110.0	100.0	25.6	89.5	..	..	..	..	..	..	80.0	11.2
63 Grenada	..	..	103.0	108.0	52.8	65.3	..	..	..	..	..	..	..	..
64 Libya	89.2 <sup>i</sup>	49.6 <sup>f</sup>	114.0	110.0	54.4	..	..	..	..	..	..	..	..	..
64 Malaysia	93.1	69.4 <sup>f</sup>	96.0	68.0	40.2	..	..	..	..	..	..	..	91.4	2.3
64 Serbia	99.3 <sup>h</sup>	85.1	96.0	91.0	49.1	94.2	442	442	443	84	91	84	58.0	1.4
67 Antigua and Barbuda	99.0	..	102.0	105.0	16.4	54.8	..	..	..	..	..	..	..	..
67 Trinidad and Tobago	98.8 <sup>h</sup>	59.3	105.0	90.0	11.5	88.0	416	414	410	113	99	108	83.3	10.6
69 Kazakhstan	99.7 <sup>h</sup>	99.3	111.0	100.0	40.8	..	390	405	400	91	83	87	49.9	0.2
70 Albania	95.9	81.7	87.0	89.0	18.4	..	385	377	391	100	91	89	54.7	4.8
71 Venezuela, Bolivarian Republic of	95.5	52.4	103.0	83.0	78.1	88.4	..	..	..	..	..	..	81.2	7.9
72 Dominica	..	26.5	112.0	98.0	3.6	60.8	..	..	..	..	..	..	..	11.9
72 Georgia	99.7 <sup>h</sup>	91.0	109.0	86.0	28.2	94.6	..	..	..	..	..	..	65.7	3.8
72 Lebanon	89.6	54.2	105.0	81.0	54.0	..	..	..	..	..	..	..	67.6 <sup>e</sup>	8.2
72 Saint Kitts and Nevis	..	..	93.0	97.0	18.2	61.6	..	..	..	..	..	..	..	26.5
76 Iran, Islamic Republic of	85.0	66.0	108.0	84.0	42.8	98.4	..	..	..	..	..	..	67.9	5.7
77 Peru	89.6	52.9	109.0	92.0	35.0	..	370	365	369	98	90	89	49.1	..
78 The former Yugoslav Republic of Macedonia	97.3 <sup>h</sup>	78.6	89.0	83.0	40.4	..	..	..	..	..	..	..	61.6	2.5
78 Ukraine	99.7 <sup>h</sup>	93.5 <sup>f</sup>	99.0	96.0	79.5	99.9	..	..	..	..	..	..	50.1	2.3
80 Mauritius	88.5 <sup>h</sup>	49.0 <sup>f</sup>	99.0	89.0	24.9	100.0	..	..	..	..	..	..	83.5	2.2
81 Bosnia and Herzegovina	97.9 <sup>h</sup>	..	88.0	90.0	35.9	..	..	..	..	..	..	..	67.9	26.8
82 Azerbaijan	99.8	92.7	94.0	85.0	19.3	100.0	362	431	373	76	64	74	53.0	3.6
83 Saint Vincent and the Grenadines	..	..	105.0	107.0	..	84.1	..	..	..	..	..	..	..	..
84 Oman	86.6	53.9	105.0	100.0	24.5	100.0	..	..	..	..	..	..	70.0 <sup>e</sup>	2.7
85 Brazil	90.3	49.5	127.0	101.0	36.1	..	412	386	405	94	81	84	53.7	24.3
85 Jamaica	86.6 <sup>i</sup>	72.6 <sup>f</sup>	89.0	93.0	29.0	..	..	..	..	..	..	..	73.7	4.8
87 Armenia	99.6 <sup>h</sup>	94.4 <sup>f</sup>	103.0	92.0	51.5	77.5	..	..	..	..	..	..	45.7	2.3
88 Saint Lucia	..	..	94.0	96.0	11.3	86.8	..	..	..	..	..	..	..	7.9
89 Ecuador	91.9	36.6	114.0	80.0	39.8	82.6	..	..	..	..	..	..	74.5	19.4
90 Turkey	90.8	34.5	102.0	78.0	45.8	..	464	445	454	82	93	81	54.3	8.2
91 Colombia	93.4	43.1	115.0	96.0	39.1	100.0	413	381	402	87	75	81	71.7	15.5
92 Sri Lanka	91.2	73.9	99.0	87.0	15.5	..	..	..	..	..	..	..	77.9	1.4
93 Algeria	72.6	24.1	110.0	95.0	30.8	99.3	..	..	..	..	..	..	67.1 <sup>e</sup>	5.0
94 Tunisia	77.6	37.0	109.0	90.0	34.4	..	404	371	401	85	78	81	54.8 <sup>e</sup>	5.3
<b>MEDIUM HUMAN DEVELOPMENT</b>														
95 Tonga	99.0	74.0 <sup>f</sup>	110.0	101.0	6.5	..	..	..	..	..	..	..	..	9.6
96 Belize	..	34.0 <sup>f</sup>	121.0	75.0	21.5	45.2	..	..	..	..	..	..	..	9.7
96 Dominican Republic	89.5	42.5	108.0	76.0	34.0	84.9	..	..	..	..	..	..	68.9	..
96 Fiji	..	57.8	105.0	86.0	16.1	97.8	..	..	..	..	..	..	..	9.1
96 Samoa	98.8 <sup>h</sup>	62.1	108.0	85.0	7.5	..	..	..	..	..	..	..	..	..
100 Jordan	92.6	73.3	97.0	91.0	41.8	..	405	387	415	91	83	89	63.3 <sup>e</sup>	6.6
101 China	94.3 <sup>h</sup>	62.7 <sup>f</sup>	111.0	81.0	25.9	..	556 <sup>k</sup>	600 <sup>k</sup>	575 <sup>k</sup>	80 <sup>k</sup>	103 <sup>k</sup>	82 <sup>k</sup>	62.6	..
102 Turkmenistan	99.6 <sup>h</sup>	..	..	..	..	..	..	..	..	..	..	..	74.3	..
103 Thailand	93.5	32.2	91.0	79.0	47.7	..	421	419	425	72	79	80	88.7	..
104 Maldives	98.4	25.4	109.0	71.0	..	77.0	..	..	..	..	..	..	..	..
105 Suriname	94.7	43.7	113.0	75.0	12.1	100.0	..	..	..	..	..	..	..	9.7
106 Gabon	88.4 <sup>i</sup>	44.4 <sup>f</sup>	182.0	53.0	..	..	..	..	..	..	..	..	46.5	..
107 El Salvador	84.5	37.5	114.0	65.0	23.4	92.7	..	..	..	..	..	..	72.7	13.5
108 Bolivia, Plurinational State of	91.2	44.5	105.0	80.0	38.6	..	..	..	..	..	..	..	68.2	16.3
108 Mongolia	97.4 <sup>h</sup>	82.4 <sup>f</sup>	100.0	93.0	53.3	97.6	..	..	..	..	..	..	57.9	5.9
110 Palestine, State of	94.9	52.1	91.0	86.0	50.2	100.0	..	..	..	..	..	..	63.5 <sup>e</sup>	1.5
111 Paraguay	93.9	36.9	100.0	67.0	36.6	..	..	..	..	..	..	..	66.9	21.9
112 Egypt	72.0	51.2 <sup>f</sup>	106.0	85.0	30.4	..	..	..	..	..	..	..	42.6 <sup>e</sup>	..
113 Moldova, Republic of	98.5 <sup>h</sup>	93.3	94.0	88.0	38.1	..	..	..	..	..	..	..	53.7	4.8

**TABLE 8 EDUCATION**

HDI rank	EDUCATIONAL ATTAINMENT		GROSS ENROLMENT RATIO				EDUCATION QUALITY								
	Adult literacy rate	Population with at least secondary education	Primary	Secondary	Tertiary	Primary school teachers trained to teach	Performance of 15-year-old students						Satisfaction with education quality	Primary school dropout rate	
							Mean score			Deviation from mean					
	(% ages 15 and older)	(% ages 25 and older)	(% )			(% )	Reading <sup>a</sup>	Mathematics <sup>b</sup>	Science <sup>c</sup>	Reading	Mathematics	Science	(% satisfied)	(% of primary school cohort)	
2005–2010 <sup>d</sup>	2010	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2005–2011 <sup>d</sup>	2009	2009	2009	2009	2009	2009	2011	2002–2011 <sup>d</sup>		
114	Philippines	95.4	64.8 <sup>f</sup>	106.0	85.0	28.9	..	..	..	..	..	..	79.2	24.2	
114	Uzbekistan	99.4 <sup>h</sup>	..	95.0	106.0	8.9	100.0	..	..	..	..	..	85.0	1.9	
116	Syrian Arab Republic	83.4 <sup>h</sup>	32.8	118.0	72.0	..	..	..	..	..	..	..	59.1 <sup>e</sup>	5.4	
117	Micronesia, Federated States of	..	..	110.0	83.0	14.2	..	..	..	..	..	..	..	..	
118	Guyana	..	55.6 <sup>f</sup>	85.0	91.0	11.9	66.1	..	..	..	..	..	..	16.5	
119	Botswana	84.5	75.5 <sup>f</sup>	108.0	80.0	7.4	97.4	..	..	..	..	..	66.4	13.2	
120	Honduras	84.8	19.8	116.0	73.0	18.8	36.4	..	..	..	..	..	63.6	23.8	
121	Indonesia	92.6	41.4	118.0	77.0	23.1	..	402	371	383	66	70	69	80.1	20.0
121	Kiribati	..	..	113.0	86.0	..	85.4	..	..	..	..	..	..	21.1	
121	South Africa	88.7	70.4	102.0	94.0	..	87.4	..	..	..	..	..	69.3	23.0	
124	Vanuatu	82.6	..	117.0	55.0	4.7	100.0	..	..	..	..	..	..	28.5	
125	Kyrgyzstan	99.2	81.1 <sup>f</sup>	100.0	84.0	48.8	68.4	314	331	330	99	81	91	47.7	2.4
125	Tajikistan	99.7 <sup>h</sup>	89.7 <sup>f</sup>	102.0	87.0	19.7	92.9	..	..	..	..	..	..	76.4	1.1
127	Viet Nam	93.2	26.3 <sup>f</sup>	106.0	77.0	22.3	98.3	..	..	..	..	..	..	80.4	7.9
128	Namibia	88.8 <sup>h</sup>	33.5 <sup>f</sup>	107.0	64.0	9.0	95.6	..	..	..	..	..	..	17.4	
129	Nicaragua	78.0	37.6 <sup>f</sup>	118.0	69.0	18.0	74.9	..	..	..	..	..	..	81.0	51.6
130	Morocco	56.1	28.0 <sup>f</sup>	114.0	56.0	13.2	100.0	..	..	..	..	..	..	41.6 <sup>e</sup>	9.5
131	Iraq	78.2 <sup>h</sup>	32.4 <sup>f</sup>	105.0	53.0	16.4	..	..	..	..	..	..	..	38.0	33.3
132	Cape Verde	84.3 <sup>h</sup>	..	110.0	88.0	17.8	90.0	..	..	..	..	..	..	..	14.3
133	Guatemala	75.2 <sup>h</sup>	14.8	116.0	59.0	17.8	..	..	..	..	..	..	..	71.8	35.2
134	Timor-Leste	58.3	..	117.0	56.0	16.7	..	..	..	..	..	..	..	..	33.4
135	Ghana	67.3 <sup>h</sup>	53.8 <sup>f</sup>	107.0	58.0	8.8	50.6	..	..	..	..	..	..	57.2	27.8
136	Equatorial Guinea	93.9 <sup>h</sup>	..	87.0	27.0	3.3	45.3	..	..	..	..	..	..	..	38.1
136	India	62.8	38.7 <sup>f</sup>	118.0	60.0	16.2	..	..	..	..	..	..	..	74.8	34.2
138	Cambodia	77.6	15.7 <sup>f</sup>	127.0	46.0	7.8	99.1	..	..	..	..	..	..	94.1	45.5
138	Lao People's Democratic Republic	72.7	29.7 <sup>f</sup>	121.0	45.0	13.4	96.9	..	..	..	..	..	..	78.9	33.0
140	Bhutan	52.8	34.4	111.0	70.0	8.8	91.5	..	..	..	..	..	..	..	9.0
141	Swaziland	87.4 <sup>h</sup>	48.1 <sup>f</sup>	116.0	58.0	4.4	73.1	..	..	..	..	..	..	77.8	16.1
<b>LOW HUMAN DEVELOPMENT</b>															
142	Congo	..	46.2 <sup>f</sup>	115.0	45.0	5.5	86.8	..	..	..	..	..	..	46.6	29.7
143	Solomon Islands	..	..	109.0	36.0	..	..	..	..	..	..	..	..	..	..
144	Sao Tome and Principe	89.2 <sup>h</sup>	..	134.0	59.0	4.5	40.5	..	..	..	..	..	..	..	32.0
145	Kenya	87.4 <sup>h</sup>	41.9	113.0	60.0	4.0	96.8	..	..	..	..	..	..	59.6	27.2
146	Bangladesh	56.8 <sup>h</sup>	35.1 <sup>f</sup>	..	..	10.6	58.4	..	..	..	..	..	..	81.6	33.8
146	Pakistan	54.9	31.2	95.0	34.0	5.4	84.2	..	..	..	..	..	..	60.5	38.5
148	Angola	70.1 <sup>h</sup>	..	124.0	31.0	3.7	..	..	..	..	..	..	..	42.0	68.1
149	Myanmar	92.3 <sup>h</sup>	17.8 <sup>f</sup>	126.0	54.0	11.0	99.9	..	..	..	..	..	..	..	25.2
150	Cameroon	70.7	27.9 <sup>f</sup>	120.0	42.0	11.5	57.1	..	..	..	..	..	..	62.1	33.8
151	Madagascar	64.5	..	149.0	31.0	3.7	90.4	..	..	..	..	..	..	45.8	65.4
152	Tanzania, United Republic of	73.2 <sup>h</sup>	7.4 <sup>f</sup>	102.0	..	2.1	94.5	..	..	..	..	..	..	44.8	18.6
153	Nigeria	61.3 <sup>h</sup>	..	83.0	44.0	10.3	66.1	..	..	..	..	..	..	47.4	20.1
154	Senegal	49.7	7.5 <sup>f</sup>	87.0	37.0	7.9	47.9	..	..	..	..	..	..	38.0	40.4
155	Mauritania	58.0 <sup>h</sup>	14.2 <sup>f</sup>	102.0	24.0	4.4	100.0	..	..	..	..	..	..	39.2 <sup>e</sup>	29.3
156	Papua New Guinea	60.6 <sup>h</sup>	10.5 <sup>f</sup>	60.0	..	..	..	..	..	..	..	..	..	..	..
157	Nepal	60.3 <sup>h</sup>	28.3 <sup>f</sup>	115.0	44.0	5.6	80.7	..	..	..	..	..	..	73.0	38.3
158	Lesotho	89.6 <sup>h</sup>	20.9	103.0	46.0	3.5	63.4	..	..	..	..	..	..	43.2	30.7
159	Togo	57.1	29.8 <sup>f</sup>	140.0	46.0	5.9	76.7	..	..	..	..	..	..	45.4	40.6
160	Yemen	63.9	16.0 <sup>f</sup>	87.0	44.0	10.2	..	..	..	..	..	..	..	37.2 <sup>e</sup>	40.5
161	Haiti	48.7	29.1 <sup>f</sup>	..	..	..	..	..	..	..	..	..	..	39.9	..
161	Uganda	73.2	23.4	121.0	28.0	4.2	89.4	..	..	..	..	..	..	48.8	68.2
163	Zambia	71.2	35.0 <sup>f</sup>	115.0	..	2.4	..	..	..	..	..	..	..	68.0	46.9
164	Djibouti	..	..	59.0	36.0	4.9	100.0	..	..	..	..	..	..	66.6	35.7
165	Gambia	50.0 <sup>h</sup>	24.0 <sup>f</sup>	83.0	54.0	4.1	..	..	..	..	..	..	..	..	38.9
166	Benin	42.4 <sup>h</sup>	18.4 <sup>f</sup>	126.0	37.0	6.0	42.6	..	..	..	..	..	..	60.7	35.7
167	Rwanda	71.1 <sup>h</sup>	7.7 <sup>f</sup>	143.0	32.0	5.5	91.5	..	..	..	..	..	..	83.9	63.0
168	Côte d'Ivoire	56.2 <sup>h</sup>	22.1 <sup>f</sup>	88.0	27.0	8.9	100.0	..	..	..	..	..	..	..	39.2
169	Comoros	74.9 <sup>h</sup>	..	104.0	46.0	7.9	57.4	..	..	..	..	..	..	46.0 <sup>e</sup>	25.9
170	Malawi	74.8 <sup>h</sup>	15.3 <sup>f</sup>	135.0	32.0	0.7	95.9	..	..	..	..	..	..	65.2	47.2

HDI rank	EDUCATIONAL ATTAINMENT		GROSS ENROLMENT RATIO			EDUCATION QUALITY								
	Adult literacy rate	Population with at least secondary education	Primary	Secondary	Tertiary	Primary school teachers trained to teach	Performance of 15-year-old students						Satisfaction with education quality	Primary school dropout rate
							Mean score			Deviation from mean				
	(% ages 15 and older)	(% ages 25 and older)	(% )			(%)	Reading <sup>a</sup>	Mathematics <sup>b</sup>	Science <sup>c</sup>	Reading	Mathematics	Science	(% satisfied)	(% of primary school cohort)
2005–2010 <sup>d</sup>	2010	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2002–2011 <sup>d</sup>	2005–2011 <sup>d</sup>	2009	2009	2009	2009	2009	2009	2011	2002–2011 <sup>d</sup>	
171	Sudan	71.1 <sup>h</sup>	15.5 <sup>f</sup>	73.0	39.0	6.1	59.7	..	..	..	..	..	43.0	9.1
172	Zimbabwe	92.2 <sup>h</sup>	55.4 <sup>f</sup>	..	..	6.2	..	..	..	..	..	..	66.4	..
173	Ethiopia	39.0	..	102.0	36.0	5.5	39.4	..	..	..	..	..	..	52.5
174	Liberia	60.8 <sup>i</sup>	27.3 <sup>f</sup>	96.0	..	19.1	40.2	..	..	..	..	..	49.6	54.4
175	Afghanistan	..	20.3 <sup>f</sup>	97.0	46.0	3.3	..	..	..	..	..	..	58.5	..
176	Guinea-Bissau	54.2 <sup>h</sup>	..	123.0	36.0	2.7	38.9	..	..	..	..	..	..	..
177	Sierra Leone	42.1	14.8	125.0	..	2.1	48.0	..	..	..	..	..	35.3	..
178	Burundi	67.2 <sup>h</sup>	7.1 <sup>f</sup>	156.0	25.0	3.2	91.2	..	..	..	..	..	70.9	43.8
178	Guinea	41.0 <sup>h</sup>	..	94.0	38.0	9.5	65.2	..	..	..	..	..	39.0	34.3
180	Central African Republic	56.0 <sup>h</sup>	17.9 <sup>f</sup>	93.0	13.0	2.6	..	..	..	..	..	..	40.7	53.1
181	Eritrea	67.8 <sup>h</sup>	..	45.0	32.0	2.0	93.8	..	..	..	..	..	..	31.0
182	Mali	31.1	10.3	82.0	39.0	5.8	50.0	..	..	..	..	..	34.6	24.5
183	Burkina Faso	28.7	2.0	79.0	23.0	3.3	85.7	..	..	..	..	..	53.0	36.4
184	Chad	34.5 <sup>h</sup>	..	90.0	26.0	2.2	45.3	..	..	..	..	..	60.1	76.7
185	Mozambique	56.1 <sup>h</sup>	3.6 <sup>f</sup>	115.0	25.0	1.5	75.9	..	..	..	..	..	63.2	64.6
186	Congo, Democratic Republic of the	66.8 <sup>h</sup>	23.2 <sup>f</sup>	94.0	38.0	6.2	91.7	..	..	..	..	..	39.3	45.2
186	Niger	28.7	5.1 <sup>f</sup>	71.0	13.0	1.5	96.4	..	..	..	..	..	55.3	30.7
<b>OTHER COUNTRIES OR TERRITORIES</b>														
..	Korea, Democratic People's Rep. of	100.0	..	..	..	..	..	539	..	..	..	..	..	..
..	Marshall Islands	..	..	102.0	99.0	16.2	..	..	..	..	..	..	..	16.5
..	Monaco	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Nauru	..	..	93.0	63.0	..	74.2	..	..	..	..	..	..	..
..	San Marino	..	..	94.0	97.0	..	..	..	..	..	..	..	..	..
..	Somalia	..	..	32.0	8.0	..	..	..	..	..	..	..	..	..
..	South Sudan	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Tuvalu	..	..	100.0	..	..	..	..	..	..	..	..	..	..
<b>Human Development Index groups</b>														
..	Very high human development	..	85.9	104.2	100.4	75.8	..	—	—	—	—	—	61.3	3.8
..	High human development	92.7	64.2	110.5	91.0	48.7	..	—	—	—	—	—	58.0	7.3
..	Medium human development	82.3	50.5	113.4	70.7	22.1	..	—	—	—	—	—	69.2	18.8
..	Low human development	60.8	25.2	98.2	37.4	6.8	73.8	—	—	—	—	—	56.5	41.7
<b>Regions</b>														
..	Arab States	74.5	38.4	97.7	71.1	24.1	..	—	—	—	—	—	50.0	9.9
..	East Asia and the Pacific	93.8	..	111.0	78.8	26.1	..	—	—	—	—	—	..	..
..	Europe and Central Asia	98.1	83.5	99.9	91.2	57.5	..	—	—	—	—	—	51.8	4.2
..	Latin America and the Caribbean	91.3	50.4	115.9	90.9	42.5	92.3	—	—	—	—	—	..	14.3
..	South Asia	62.8	39.2	113.6	57.6	15.7	77.2	—	—	—	—	—	73.3	21.4
..	Sub-Saharan Africa	63.0	29.7	100.3	40.3	6.2	73.9	—	—	—	—	—	52.0	37.8
..	<b>Least developed countries</b>	60.7	..	101.8	36.0	6.6	71.9	—	—	—	—	—	58.2	40.9
..	<b>Small island developing states</b>	..	..	97.0	77.0	45.2	89.4	—	—	—	—	—	..	..
..	<b>World</b>	<b>81.3</b>	<b>57.7</b>	<b>107.9</b>	<b>71.2</b>	<b>28.7</b>	..	—	—	—	—	—	<b>64.2</b>	<b>18.0</b>

**NOTES**

- a Average score in reading for Organisation for Economic Co-operation and Development (OECD) countries is 493.
- b Average score in mathematics for OECD countries is 495.
- c Average score in science for OECD countries is 501.
- d Data refer to the most recent year available during the period specified.
- e Average of two or more surveys during the period.
- f Barro and Lee (2011) estimates for 2010.
- g Refers to 2011.
- h United Nations Educational, Scientific and Cultural Organization Institute for Statistics (UIS) estimate derived from its Global Age-specific Literacy Projections Model, which is based on national data since 2000.

- i UIS estimate derived from its Global Age-specific Literacy Projections Model, which is based on national data from before 2000.
- j Refers to Dubai only.
- k Refers to Shanghai only.

**DEFINITIONS**

**Adult literacy rate:** Percentage of the population ages 15 and older who can, with understanding, both read and write a short simple statement on their everyday life.

**Population with at least secondary education:** Percentage of the population ages 25 and older that reached at least secondary education.

**Gross enrolment ratio:** Total enrolment in a given level of education (primary, secondary or tertiary),

regardless of age, expressed as a percentage of the official school-age population for the same level of education.

**School teachers trained to teach:** Percentage of primary school teachers that have received the minimum organized teacher training (pre-service or in-service) required for teaching at the primary level.

**Performance in reading, mathematics and science:** Score obtained in testing of skills and knowledge of 15-year-old students in these subjects essential for participation in society.

**Deviation from mean:** Spread of scores in reading, mathematics and science relative to the average scores.

**Satisfaction with education quality:** Percentage of respondents who answered "satisfied" to the

Gallup World Poll question, "Are you satisfied or dissatisfied with the education system?"

**Primary school dropout rate:** Percentage of students from a given cohort that have enrolled in primary school but that drop out before reaching the last grade of primary education. It is calculated as 100 minus the survival rate to the last grade of primary education and assumes that observed flow rates remain unchanged throughout the cohort life and that dropouts do not re-enter school.

**MAIN DATA SOURCES**

- Columns 1, 2–6 and 14:** UNESCO Institute for Statistics (2012).
- Columns 7–12:** OECD (2010).
- Column 13:** Gallup (2012).

HDI rank	EMPLOYMENT, VULNERABILITY AND EQUITY				PERCEPTIONS OF INDIVIDUAL WELL-BEING			PERCEPTIONS OF SOCIETY			HUMAN SAFETY				
	Employment to population ratio	Youth unemployment	Child labour	Overall loss in Human Development Index due to inequality	Overall life satisfaction	Satisfaction with freedom of choice	Satisfaction with job	Trust in people	Satisfaction with community <sup>a</sup>	Trust in national government	Perception of safety	Homicide rate		Suicide rate (per 100,000 people)	
												Female	Male		
	(% ages 25 and older)	(% ages 15–24)	(% ages 5–14)	(%)	(0, least satisfied, 10, most satisfied)	(% satisfied)	(% answering "yes")	(% answering "yes")	(per 100,000 people)	2004–2010 <sup>b</sup>	2001–2010 <sup>b</sup>	2001–2010 <sup>b</sup>			
2011	2005–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2012	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2011	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2004–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2001–2010 <sup>b</sup>		
<b>VERY HIGH HUMAN DEVELOPMENT</b>															
1	Norway	65.9	9.3	..	6.4	7.6	93.0	..	..	92.8	54.0	81.0	0.6	6.5	17.3
2	Australia	62.4	11.9	..	7.9	7.4	94.0	87.4	..	91.9	53.0	64.0	1.0	3.6	12.8
3	United States	61.2	18.7	..	12.4	7.1	85.0	87.4	37.0	83.8	38.0	75.0	4.2	4.5	17.7
4	Netherlands	61.5	7.8	..	6.9	7.6	91.0	94.5	46.0	94.5	60.0	79.0	1.1	5.5	13.1
5	Germany	57.2	9.1	..	6.9	6.7	89.0	89.0	31.0	93.9	43.0	78.0	0.8	6.0	17.9
6	New Zealand	66.2	18.2	..	..	7.2	93.0	89.0	..	88.1	64.0	67.0	0.9	5.5	18.1
7	Ireland	55.8	35.3	..	7.2	7.0	95.0	89.1	30.0	93.6	53.0	70.0	1.2	4.7	19.0
7	Sweden	62.5	23.8	..	6.2	7.5	93.0	91.8	55.0	92.5	64.0	78.0	1.0	6.8	18.7
9	Switzerland	65.5	7.9	..	7.0	7.5	88.0	..	44.0	93.5	58.0	76.0	0.7	11.4	24.8
10	Japan	59.7	8.9	..	..	6.1	78.0	76.2	33.0	84.6	23.0	69.0	0.4	13.2	36.2
11	Canada	62.7	15.9	..	8.7	7.4	94.0	91.5	42.0	91.7	55.0	79.0	1.6	5.4	17.3
12	Korea, Republic of	64.8	12.1	..	16.5	6.9	66.0	71.1	26.0	78.5	28.0	54.0	2.6	22.1	39.9
13	Hong Kong, China (SAR)	61.2	11.0	..	..	5.5	89.0	84.4	29.0	84.1	58.0	88.0	0.2	10.7	19.0
13	Iceland	71.9	18.4	..	6.4	6.9	86.0	..	..	81.8	24.0	77.0	0.3	7.0	16.5
15	Denmark	59.8	15.7	..	6.2	7.8	93.0	94.0	60.0	93.4	47.0	79.0	0.9	6.4	17.5
16	Israel	60.9	11.8	..	12.3	7.4	52.0	84.0	26.0	82.3	45.0	59.0	2.1	1.5	7.0
17	Belgium	54.0	18.7	..	8.0	6.9	86.0	90.3	30.0	91.2	29.0	64.0	1.7	10.3	28.8
18	Austria	58.6	8.8	..	6.6	7.5	92.0	94.1	29.0	94.4	41.0	82.0	0.6	7.1	23.8
18	Singapore	69.2	6.7	..	..	6.5	82.0	86.5	33.0	92.9	83.0	89.0	0.3	7.7	12.9
20	France	54.4	23.2	..	9.0	7.0	90.0	87.4	20.0	89.4	38.0	63.0	1.1	8.5	24.7
21	Finland	57.8	19.3	..	6.0	7.4	93.0	87.7	58.0	91.2	57.0	78.0	2.2	10.0	29.0
21	Slovenia	57.2	16.8	..	5.8	6.0	90.0	85.0	15.0	90.6	18.0	84.0	0.7	9.4	34.6
23	Spain	49.5	48.2	..	10.1	6.5	80.0	85.7	22.0	87.8	31.0	68.0	0.8	3.4	11.9
24	Liechtenstein	..	..	..	..	..	..	..	..	..	..	..	2.8	..	..
25	Italy	47.5	32.0	..	11.9	6.1	55.0	81.0	20.0	75.7	26.0	52.0	0.9	2.8	10.0
26	Luxembourg	59.9	20.8	..	7.2	7.1	95.0	93.5	26.0	94.7	77.0	77.0	2.5	3.2	16.1
26	United Kingdom	58.8	22.0	..	8.3	6.9	90.0	88.3	35.0	86.6	49.0	70.0	1.2	3.0	10.9
28	Czech Republic	59.7	18.1	..	5.4	6.3	73.0	79.9	24.0	88.1	21.0	59.0	1.7	4.4	23.9
29	Greece	49.1	51.5	..	11.5	5.4	52.0	70.3	16.0	74.2	18.0	53.0	1.5	1.0	6.0
30	Brunei Darussalam	69.3	..	..	..	..	..	..	..	..	..	..	0.5	..	..
31	Cyprus	66.2	23.1	..	11.5	6.7	73.0	87.1	11.0	88.7	40.0	70.0	1.7	1.7	7.4
32	Malta	48.3	14.0	..	8.2	6.2	86.0	86.0	16.0	84.1	49.0	64.0	1.0	1.0	5.9
33	Andorra	..	..	..	..	..	..	..	..	..	..	..	1.3	..	..
33	Estonia	58.4	23.8	..	9.0	5.5	69.0	81.1	33.0	86.3	42.0	56.0	5.2	7.3	30.6
35	Slovakia	57.5	33.6	..	6.3	5.9	68.0	78.6	21.0	86.6	28.0	59.0	1.5	3.4	22.3
36	Qatar	89.9	8.9	..	..	6.6	90.0	86.0	23.0	90.4	89.0	87.0	0.9	..	..
37	Hungary	49.6	27.2	..	7.4	4.9	61.0	80.5	13.0	74.2	36.0	57.0	1.3	10.6	40.0
38	Barbados	66.9	..	..	..	..	..	..	..	..	..	..	11.3	0.0	7.3
39	Poland	55.1	28.9	..	9.9	5.6	80.0	77.0	25.0	88.2	27.0	59.0	1.1	4.1	26.4
40	Chile	62.9	21.1	3.0	19.0	6.6	77.0	78.2	15.0	78.4	48.0	46.0	3.2	4.2	18.2
41	Lithuania	55.6	34.6	..	11.0	5.4	52.0	78.2	25.0	84.2	18.0	39.0	6.6	10.4	61.3
41	United Arab Emirates	83.4	21.8	..	..	7.2	87.0	88.7	18.0	93.8	..	90.0	0.8	..	..
43	Portugal	58.0	31.7	3.0	10.8	5.2	79.0	88.7	27.0	90.1	21.0	63.0	1.2	4.0	15.6
44	Latvia	55.1	29.6	..	10.9	5.0	54.0	80.6	13.0	84.8	11.0	48.0	3.1	8.2	40.0
45	Argentina	62.6	22.2	7.0	19.5	6.4	79.0	80.7	23.0	89.0	61.0	50.0	3.4	3.0	12.6
46	Seychelles	..	..	..	..	..	..	..	..	..	..	..	8.3	0.0	8.9
47	Croatia	49.1	36.8	..	15.1	5.6	46.0	..	16.0	66.0	..	64.0	1.4	7.5	28.9
<b>HIGH HUMAN DEVELOPMENT</b>															
48	Bahrain	72.2	..	5.0	..	4.5	73.0	79.3	11.0	88.2	..	60.0	0.6	3.5	4.0
49	Bahamas	71.9	21.7	..	..	..	..	..	..	..	..	..	27.4	0.6	1.9
50	Belarus	54.4	..	5.0	8.3	5.2	57.0	65.7	34.0	76.6	59.0	60.0	4.9	8.8	48.7
51	Uruguay	65.9	21.7	8.0	16.4	6.1	78.0	78.0	27.0	83.8	73.0	48.0	5.9	6.3	26.0
52	Montenegro	..	40.0	10.0	7.4	5.5	50.0	..	21.0	68.3	..	78.0	3.5	..	..
52	Palau	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
54	Kuwait	75.5	11.8	..	..	6.6	75.0	84.9	11.0	81.5	..	..	2.2	1.7	1.9
55	Russian Federation	62.8	15.7	..	..	5.4	54.0	67.9	24.0	69.4	48.0	40.0	10.2	9.5	53.9

HDI rank	EMPLOYMENT, VULNERABILITY AND EQUITY				PERCEPTIONS OF INDIVIDUAL WELL-BEING			PERCEPTIONS OF SOCIETY			HUMAN SAFETY				
	Employment to population ratio	Youth unemployment	Child labour	Overall loss in Human Development Index due to inequality	Overall life satisfaction	Satisfaction with freedom of choice	Satisfaction with job	Trust in people	Satisfaction with community <sup>a</sup>	Trust in national government	Perception of safety	Homicide rate	Suicide rate (per 100,000 people)		
	(% ages 25 and older)	(% ages 15–24)	(% ages 5–14)	(%)	(0, least satisfied, 10, most satisfied)	(% satisfied)		(% answering "yes")			(% answering "yes")	(per 100,000 people)	Female	Male	
	2011	2005–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2012	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2011	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2004–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2001–2010 <sup>b</sup>	
56	Romania	57.3	23.8	1.0	12.6	5.0	60.0	69.5	15.0	78.1	12.0	55.0	2.0	3.5	21.0
57	Bulgaria	52.0	27.6	..	9.9	3.9	60.0	73.3	20.0	74.0	27.0	52.0	2.0	6.2	18.8
57	Saudi Arabia	59.7	45.8	..	..	6.7	57.0	81.8	36.0	85.9	..	77.0	1.0	..	..
59	Cuba	58.7	3.5	..	..	..	..	..	..	..	..	..	5.0	5.5	19.0
59	Panama	68.3	14.6	7.0	24.6	7.3	80.0	88.5	21.0	86.6	46.0	47.0	21.6	1.9	9.0
61	Mexico	63.9	10.4	5.0	23.4	6.8	80.0	74.4	29.0	73.7	38.0	42.0	22.7	1.5	7.0
62	Costa Rica	65.6	21.6	5.0	21.5	7.3	92.0	87.4	14.0	82.5	32.0	41.0	11.3	1.9	10.2
63	Grenada	..	..	..	..	..	..	..	..	..	..	..	11.5	0.0	0.0
64	Libya	53.6	..	..	..	4.9	41.0	64.3	..	68.7	..	91.0	2.9	..	..
64	Malaysia	66.6	11.3	..	..	5.8	79.0	85.6	14.0	87.3	79.0	46.0	2.3	..	..
64	Serbia	..	46.1	4.0	9.5	4.5	41.0	..	17.0	60.0	..	68.0	1.2	10.0	28.1
67	Antigua and Barbuda	..	..	..	..	..	..	..	..	..	..	..	6.8	..	..
67	Trinidad and Tobago	66.6	12.9	1.0	15.3	6.7	81.0	89.9	..	87.3	29.0	42.0	35.2	3.8	17.9
69	Kazakhstan	75.0	5.0	2.0	13.6	5.5	76.0	77.9	33.0	79.7	72.0	56.0	8.8	9.4	43.0
70	Albania	56.5	28.3	12.0	13.9	5.3	46.0	..	7.0	67.7	..	67.0	4.0	3.3	4.7
71	Venezuela, Bolivarian Republic of	68.1	22.0	8.0	26.6	7.5	75.0	85.1	13.0	79.0	59.0	31.0	45.1	1.2	5.3
72	Dominica	..	..	..	..	..	..	..	..	..	..	..	22.1	..	..
72	Georgia	62.8	35.6	18.0	15.3	4.2	58.0	55.0	16.0	78.3	66.0	91.0	4.3	1.7	7.1
72	Lebanon	47.6	22.3	7.0	22.8	5.2	65.0	70.8	7.0	74.1	37.0	69.0	2.2	..	..
72	Saint Kitts and Nevis	..	..	..	..	..	..	..	..	..	..	..	38.2	..	..
76	Iran, Islamic Republic of	46.1	33.9	..	..	4.8	57.0	65.0	..	76.3	56.0	55.0	3.0	..	..
77	Peru	77.4	16.2	34.0	24.3	5.6	72.0	74.1	12.0	75.3	19.0	46.0	10.3	1.0	1.9
78	The former Yugoslav Republic of Macedonia	43.4	55.7	6.0	14.7	4.2	56.0	..	11.0	66.7	..	63.0	1.9	4.0	9.5
78	Ukraine	58.3	18.7	7.0	9.2	5.1	53.0	61.4	29.0	71.4	24.0	48.0	5.2	7.0	37.8
80	Mauritius	60.8	28.0	..	13.3	5.5	83.0	84.6	..	90.5	67.0	55.0	2.5	1.9	11.8
81	Bosnia and Herzegovina	37.2	60.0	5.0	11.5	4.7	33.0	..	18.0	61.7	..	67.0	1.5	..	..
82	Azerbaijan	70.8	15.2	7.0	11.4	4.7	49.0	57.8	27.0	73.4	74.0	74.0	2.2	0.3	1.0
83	Saint Vincent and the Grenadines	..	..	..	..	..	..	..	..	..	..	..	22.9	1.9	5.4
84	Oman	65.7	..	..	..	6.9	91.0	85.3	..	89.9	..	..	0.7	..	..
85	Brazil	68.2	23.1	3.0	27.2	6.8	80.0	81.3	15.0	78.5	51.0	40.0	21.0	2.0	7.7
85	Jamaica	65.9	37.9	6.0	19.1	..	..	68.3	..	72.2	..	..	52.2	..	..
87	Armenia	47.3	54.7	4.0	10.9	4.4	41.0	45.4	15.0	52.7	34.0	75.0	1.4	1.1	2.8
88	Saint Lucia	..	..	..	..	..	..	..	..	..	..	..	25.2	0.0	4.9
89	Ecuador	71.5	18.1	8.0	25.8	5.8	78.0	79.8	9.0	86.0	59.0	49.0	18.2	3.6	10.5
90	Turkey	48.8	20.7	3.0	22.5	5.3	44.0	71.2	8.0	78.9	60.0	51.0	3.3	..	..
91	Colombia	68.3	29.9	9.0	27.8	6.4	81.0	81.5	14.0	82.9	55.0	43.0	33.4	2.0	7.9
92	Sri Lanka	58.2	24.7	..	15.1	4.2	81.0	84.7	17.0	89.7	86.0	77.0	3.6	..	..
93	Algeria	43.9	37.5	5.0	..	5.2	53.0	58.7	16.0	73.9	53.0	49.0	1.5	..	..
94	Tunisia	46.3	31.4	..	..	4.7	58.0	59.4	15.0	66.0	47.0	47.0	1.1	..	..
<b>MEDIUM HUMAN DEVELOPMENT</b>															
95	Tonga	..	..	..	..	..	..	..	..	..	..	..	1.0	..	..
96	Belize	66.3	28.8	40.0	..	6.5	62.0	..	..	67.1	26.0	43.0	41.4	0.7	6.6
96	Dominican Republic	62.4	44.5	10.0	27.3	4.7	82.0	76.3	15.0	79.2	45.0	38.0	25.0	0.7	3.9
96	Fiji	62.7	..	..	..	..	..	..	..	..	..	..	2.8	..	..
96	Samoa	..	..	..	..	..	..	..	..	..	..	..	1.1	..	..
100	Jordan	44.9	46.8	..	19.0	5.7	72.0	74.9	9.0	75.6	77.0	81.0	1.8	0.0	0.2
101	China	74.6	..	..	22.4	5.0	77.0	69.9	57.0	77.1	..	80.0	1.1	..	..
102	Turkmenistan	62.6	..	..	..	5.8	..	93.6	27.0	97.5	..	83.0	4.2	..	..
103	Thailand	76.9	3.0	8.0	21.3	6.7	92.0	96.3	27.0	95.2	54.0	74.0	4.8	3.8	12.0
104	Maldives	64.7	30.5	..	25.2	..	..	..	..	..	..	..	1.6	0.0	0.7
105	Suriname	56.4	..	6.0	23.0	..	..	..	..	..	..	..	4.6	4.8	23.9
106	Gabon	68.2	..	..	19.5	..	77.0	53.7	..	54.8	53.0	39.0	13.8	..	..
107	El Salvador	64.5	13.0	5.0	26.6	6.7	74.0	77.3	18.0	81.9	49.0	42.0	69.2	3.6	12.9
108	Bolivia, Plurinational State of	77.4	..	26.0	34.2	5.8	67.0	83.9	10.0	84.8	38.0	44.0	8.9	..	..
108	Mongolia	67.9	..	18.0	15.9	5.0	64.0	82.1	14.0	80.6	29.0	47.0	8.7	..	..
110	Palestine, State of	41.2	49.6	..	..	4.8	51.0	70.8	9.0	71.5	49.0	59.0	4.1	..	..
111	Paraguay	73.4	17.8	15.0	..	5.8	71.0	85.6	12.0	85.5	48.0	38.0	11.5	2.0	5.1

**TABLE 9 SOCIAL INTEGRATION**

HDI rank	EMPLOYMENT, VULNERABILITY AND EQUITY			PERCEPTIONS OF INDIVIDUAL WELL-BEING			PERCEPTIONS OF SOCIETY			HUMAN SAFETY					
	Employment to population ratio	Youth unemployment	Child labour	Overall loss in Human Development Index due to inequality	Overall life satisfaction	Satisfaction with freedom of choice	Satisfaction with job	Trust in people	Satisfaction with community <sup>a</sup>	Trust in national government	Perception of safety	Homicide rate	Suicide rate (per 100,000 people)		
	(% ages 25 and older)	(% ages 15–24)	(% ages 5–14)	(%)	(0, least satisfied, 10, most satisfied)	(% satisfied)	(% answering "yes")	(% answering "yes")	(% answering "yes")	(% answering "yes")	(per 100,000 people)	Female	Male		
	2011	2005–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2012	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2011	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2004–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2001–2010 <sup>b</sup>	
112	Egypt	51.3	54.1	7.0	24.1	4.1	57.0	64.7	22.0	61.0	63.0	58.0	1.2	0.0	0.1
113	Moldova, Republic of	43.9	15.8	16.0	11.6	5.8	58.0	66.1	12.0	70.6	24.0	50.0	7.5	5.6	30.1
114	Philippines	68.8	19.3	..	19.9	5.0	88.0	81.1	14.0	85.6	72.0	62.0	5.4	..	..
114	Uzbekistan	62.8	..	..	15.8	5.1	90.0	87.3	26.0	93.8	..	80.0	3.1	2.3	7.0
116	Syrian Arab Republic	45.8	40.2	4.0	20.4	4.1	47.0	55.5	9.0	44.8	..	65.0	2.3	..	..
117	Micronesia, Federated States of	..	..	..	..	..	..	..	..	..	..	..	0.9	..	..
118	Guyana	61.0	50.0	16.0	19.1	6.0	66.0	..	..	74.8	46.0	47.0	18.6	13.4	39.0
119	Botswana	73.8	..	9.0	..	3.6	82.0	45.9	9.0	56.5	74.0	31.0	14.5	..	..
120	Honduras	67.3	11.2	16.0	27.5	5.9	77.0	79.4	13.0	82.8	29.0	45.0	91.6	..	..
121	Indonesia	70.1	23.0	7.0	18.3	5.2	86.0	74.1	21.0	92.3	74.0	88.0	8.1	..	..
121	Kiribati	..	..	..	..	..	..	..	..	..	..	..	7.3	..	..
121	South Africa	49.6	55.0	..	..	4.7	84.0	56.5	17.0	62.0	63.0	38.0	31.8	0.4	1.4
124	Vanuatu	..	..	..	..	..	..	..	..	..	..	..	0.9	..	..
125	Kyrgyzstan	70.4	16.2	4.0	17.1	4.9	71.0	75.2	34.0	84.8	44.0	62.0	20.1	3.6	14.1
125	Tajikistan	70.3	..	10.0	18.4	4.3	70.0	82.7	31.0	89.9	89.0	85.0	2.1	2.3	2.9
127	Viet Nam	81.3	..	16.0	14.0	5.8	61.0	71.8	26.0	70.1	77.0	67.0	1.6	..	..
128	Namibia	57.4	63.8	..	43.5	4.9	76.0	..	..	76.5	82.0	33.0	17.2	..	..
129	Nicaragua	66.3	9.7	15.0	27.5	5.7	75.0	79.8	11.0	86.0	54.0	51.0	13.6	2.6	9.0
130	Morocco	50.9	18.1	8.0	29.7	5.1	54.0	65.4	58.0	69.4	60.0	67.0	1.4	..	..
131	Iraq	41.9	..	11.0	..	5.0	30.0	64.2	15.0	66.7	37.0	41.0	2.0	..	..
132	Cape Verde	66.7	..	3.0	..	..	..	..	..	..	..	..	11.6	..	..
133	Guatemala	69.7	7.1	21.0	33.1	6.3	74.0	79.8	15.0	85.7	36.0	41.0	38.5	1.7	5.6
134	Timor-Leste	62.8	..	4.0	33.0	..	..	..	..	..	..	..	6.9	..	..
135	Ghana	81.3	..	34.0	32.2	5.6	85.0	63.8	19.0	68.9	68.0	78.0	15.7	..	..
136	Equatorial Guinea	86.5	..	28.0	..	..	..	..	..	..	..	..	20.7	..	..
136	India	61.0	11.5	12.0	29.3	4.6	80.0	71.2	20.0	82.6	58.0	70.0	3.4	7.8	13.0
138	Cambodia	86.7	3.5	39.0	25.9	4.2	92.0	77.6	9.0	90.2	90.0	68.0	3.4	..	..
138	Lao People's Democratic Republic	85.1	..	11.0	24.7	5.0	87.0	87.9	..	94.3	98.0	84.0	4.6	..	..
140	Bhutan	80.3	10.9	18.0	20.0	..	..	..	..	..	..	..	1.0	..	..
141	Swaziland	55.9	..	9.0	35.4	..	..	55.1	..	62.3	..	..	12.9	..	..
<b>LOW HUMAN DEVELOPMENT</b>															
142	Congo	78.8	..	25.0	31.1	4.5	76.0	56.4	..	67.1	48.0	58.0	30.8	..	..
143	Solomon Islands	73.8	..	..	..	..	..	..	..	..	..	..	3.7	..	..
144	Sao Tome and Principe	..	..	8.0	31.7	..	..	..	..	..	..	..	1.9	..	..
145	Kenya	75.9	..	26.0	33.6	4.4	71.0	50.0	10.0	69.3	46.0	50.0	20.1	..	..
146	Bangladesh	74.0	13.6	13.0	27.4	5.0	78.0	76.4	15.0	91.3	79.0	80.0	2.7	..	..
146	Pakistan	55.4	10.5	..	30.9	5.3	34.0	73.2	20.0	83.6	28.0	46.0	7.8	..	..
148	Angola	75.8	..	24.0	43.9	4.2	69.0	65.2	..	49.8	61.0	53.0	19.0	..	..
149	Myanmar	83.4	..	..	..	..	..	..	..	80.4	..	..	10.2	..	..
150	Cameroon	80.3	..	31.0	33.4	4.4	82.0	62.2	13.0	69.4	65.0	56.0	19.7	..	..
151	Madagascar	90.5	2.8	28.0	30.7	4.4	54.0	38.0	..	72.0	65.0	53.0	8.1	..	..
152	Tanzania, United Republic of	84.2	10.1	21.0	27.3	4.1	74.0	63.0	26.0	67.4	56.0	61.0	24.5	..	..
153	Nigeria	61.7	..	29.0	41.4	4.8	77.0	58.6	13.0	67.4	55.0	69.0	12.2	..	..
154	Senegal	76.3	20.1	22.0	33.0	3.8	64.0	42.2	28.0	52.1	30.0	55.0	8.7	..	..
155	Mauritania	44.7	..	16.0	34.4	5.0	56.0	55.3	30.0	62.2	43.0	62.0	14.7	..	..
156	Papua New Guinea	78.0	..	..	..	..	..	..	..	..	..	..	13.0	..	..
157	Nepal	86.4	..	34.0	34.2	3.8	43.0	87.3	17.0	86.7	33.0	61.0	2.8	..	..
158	Lesotho	59.7	41.9	23.0	35.9	..	..	46.9	..	52.4	..	..	35.2	..	..
159	Togo	84.1	..	47.0	33.5	2.8	56.0	42.4	..	57.7	51.0	52.0	10.9	..	..
160	Yemen	50.9	..	23.0	32.3	3.7	59.0	54.3	27.0	51.9	39.0	67.0	4.2	..	..
161	Haiti	74.6	..	21.0	40.2	3.8	37.0	43.4	30.0	57.9	46.0	42.0	6.9	0.0	0.0
161	Uganda	86.9	5.4	25.0	33.6	4.2	73.0	50.1	17.0	69.7	52.0	42.0	36.3	..	..
163	Zambia	76.6	23.4	41.0	36.7	5.0	65.0	47.3	31.0	62.6	40.0	54.0	38.0	..	..
164	Djibouti	..	..	8.0	36.0	4.4	74.0	70.0	55.0	75.3	68.0	72.0	3.4	..	..
165	Gambia	81.1	..	25.0	..	..	..	..	..	..	..	..	10.8	..	..
166	Benin	80.6	..	46.0	35.8	3.7	76.0	46.7	..	66.8	78.0	58.0	15.1	..	..
167	Rwanda	92.3	..	35.0	33.9	4.0	82.0	58.6	30.0	74.3	95.0	92.0	17.1	..	..
168	Côte d'Ivoire	72.8	..	35.0	38.6	4.2	76.0	..	13.0	40.6	42.0	47.0	56.9	..	..

HDI rank	EMPLOYMENT, VULNERABILITY AND EQUITY				PERCEPTIONS OF INDIVIDUAL WELL-BEING			PERCEPTIONS OF SOCIETY			HUMAN SAFETY				
	Employment to population ratio	Youth unemployment	Child labour	Overall loss in Human Development Index due to inequality	Overall life satisfaction	Satisfaction with freedom of choice	Satisfaction with job	Trust in people	Satisfaction with community <sup>a</sup>	Trust in national government	Perception of safety	Homicide rate	Suicide rate (per 100,000 people)		
	(% ages 25 and older)	(% ages 15–24)	(% ages 5–14)	(%)	(0, least satisfied, 10, most satisfied)	(% satisfied)			(% answering “yes”)		(% answering “yes”)	(per 100,000 people)	Female	Male	
	2011	2005–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2012	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2011	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2007–2011 <sup>b</sup>	2004–2011 <sup>b</sup>	2001–2010 <sup>b</sup>	2001–2010 <sup>b</sup>	
169	Comoros	62.7	..	27.0	..	3.9	50.0	49.8	35.0	77.2	44.0	78.0	12.2	..	..
170	Malawi	92.0	..	26.0	31.4	5.1	88.0	50.9	33.0	80.8	83.0	55.0	36.0	..	..
171	Sudan	59.4	..	..	..	4.4	56.0	48.8	31.0	72.7	54.0	75.0	24.2	..	..
172	Zimbabwe	89.0	..	..	28.5	4.8	63.0	58.6	15.0	68.4	43.0	39.0	14.3	..	..
173	Ethiopia	84.0	29.4	53.0	31.9	4.4	39.0	..	..	52.1	32.0	49.0	25.5	..	..
174	Liberia	72.1	6.6	21.0	35.3	4.2	82.0	63.0	12.0	63.4	54.0	38.0	10.1	..	..
175	Afghanistan	53.8	..	13.0	..	3.8	47.0	82.0	25.0	71.7	31.0	29.0	2.4	..	..
176	Guinea-Bissau	78.1	..	57.0	41.4	..	..	..	..	..	..	..	20.2	..	..
177	Sierra Leone	77.4	..	48.0	41.6	4.1	77.0	61.3	16.0	52.3	58.0	50.0	14.9	..	..
178	Burundi	88.5	..	19.0	..	3.8	49.0	64.7	38.0	76.0	85.0	65.0	21.7	..	..
178	Guinea	79.1	..	25.0	38.8	4.0	79.0	58.9	..	75.3	77.0	62.0	22.5	..	..
180	Central African Republic	82.8	..	47.0	40.5	3.6	68.0	66.5	37.0	75.8	75.0	62.0	29.3	..	..
181	Eritrea	84.1	..	..	..	..	..	..	..	..	..	..	17.8	..	..
182	Mali	56.0	..	36.0	..	3.8	75.0	54.9	45.0	63.9	71.0	80.0	8.0	..	..
183	Burkina Faso	86.0	4.6	38.0	34.2	4.0	58.0	60.1	26.0	78.2	55.0	62.0	18.0	..	..
184	Chad	77.0	..	48.0	40.1	3.7	54.0	72.0	21.0	70.1	39.0	30.0	15.8	..	..
185	Mozambique	90.1	..	22.0	32.7	5.0	64.0	63.1	..	83.1	63.0	42.0	8.8	..	..
186	Congo, Democratic Republic of the	82.8	..	42.0	39.9	4.0	62.0	45.6	39.0	60.2	35.0	38.0	21.7	..	..
186	Niger	66.2	..	43.0	34.2	4.1	82.0	69.7	40.0	85.2	78.0	81.0	3.8	..	..
<b>OTHER COUNTRIES OR TERRITORIES</b>															
..	Korea, Democratic People's Rep. of	78.7	..	..	..	..	..	..	..	..	..	..	15.2	..	..
..	Marshall Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Monaco	..	..	..	..	..	..	..	..	..	..	..	0.0	..	..
..	Nauru	..	..	..	..	..	..	..	..	..	..	..	9.8	..	..
..	San Marino	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Somalia	59.9	..	49.0	..	..	..	..	..	..	..	..	1.5	..	..
..	South Sudan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Tuvalu	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Human Development Index groups</b>															
..	Very high human development	58.8	19.5	..	10.8	6.7	81.5	84.3	30.9	85.9	38.1	68.4	2.1	6.6	20.6
..	High human development	61.2	22.4	..	20.6	5.9	66.3	73.4	19.3	76.4	..	47.6	13.0	..	..
..	Medium human development	68.4	..	..	24.2	4.9	77.8	71.4	..	79.9	..	73.4	3.9	..	..
..	Low human development	72.2	..	29.7	33.5	4.5	61.8	63.4	..	72.2	50.8	57.7	14.6	..	..
<b>Regions</b>															
..	Arab States	52.6	..	..	25.4	4.8	54.6	63.9	24.9	67.6	..	62.9	4.5	..	..
..	East Asia and the Pacific	74.5	..	..	21.3	..	..	..	..	..	..	..	2.8	..	..
..	Europe and Central Asia	58.4	20.9	..	12.9	5.3	58.5	71.0	21.5	76.5	43.9	53.5	5.5	6.9	35.4
..	Latin America and the Caribbean	67.2	19.6	8.5	25.7	6.5	77.9	..	..	79.0	47.1	42.0	22.2	2.1	8.1
..	South Asia	61.2	12.9	..	29.1	4.7	72.9	72.1	19.5	83.2	56.1	66.9	3.7	..	..
..	Sub-Saharan Africa	74.5	..	33.5	35.0	4.4	69.1	56.2	..	65.2	53.6	55.3	20.4	..	..
<b>Least developed countries</b>															
..	Least developed countries	77.4	..	30.2	32.5	4.3	64.2	63.2	..	72.3	56.4	59.5	14.6	..	..
<b>Small island developing states</b>															
..	Small island developing states	65.9	..	..	29.2	..	..	..	..	..	..	..	14.6	..	..
<b>World</b>															
..	World	65.8	..	..	23.3	5.3	73.9	73.1	29.8	79.0	52.0	66.0	6.9	..	..

**NOTES**

- a Based on the Gallup survey question on overall satisfaction with city.
- b Data refer to the most recent year available during the period specified.

**DEFINITIONS**

**Employment to population ratio:** Percentage of the population ages 25 years or older that is employed.

**Youth unemployment:** Percentage of the labour force population ages 15–24 that is not in paid employment or self-employed but is available for work and has taken steps to seek paid employment or self-employment.

**Child labour:** Percentage of children ages 5–11 who, during the reference week, did at least one hour of economic activity or at least 28 hours of household chores, or children ages 12–14 who, during the reference week, did at least 14 hours of economic activity or at least 28 hours of household chores.

**Overall loss in Human Development Index (HDI) due to inequality:** Loss in potential human development due to inequality, calculated as the percentage difference between the HDI and Inequality-adjusted HDI. See *Technical note 2* for details on how the Inequality-adjusted HDI is calculated.

**Overall life satisfaction:** Average response to the Gallup World Poll Question: Please imagine a ladder, with steps numbered from zero at the bottom to ten at the top. Suppose we say that the top of the ladder represents the best possible life for you, and the bottom of the ladder represents the worst possible life for you. On which step of the ladder would you say you personally feel you stand at this time, assuming that the higher the step the better you feel about your life, and the lower the step the worse you feel about it? Which step comes closest to the way you feel?

**Satisfaction with freedom of choice:** Percentage of respondents answering “yes” to the Gallup World Poll question, “In this country, are you satisfied or dissatisfied with your freedom to choose what you do with your life?”

**Satisfaction with job:** Percentage of respondents answering “satisfied” to the Gallup World Poll question, “Are you satisfied or dissatisfied with your job?”

**Trust in people:** Percentage of respondents answering “yes” to the Gallup World Poll question, “Generally speaking, would you say that most people can be trusted or that you have to be careful in dealing with people?”

**Satisfaction with community:** Percentage of respondents answering “yes” to the Gallup World Poll question, “Right now, do you think that economic conditions in the city or area where you live, as a whole, are getting better or getting worse?”

**Trust in national government:** Percentage of respondents answering “yes” to the Gallup World Poll question, “In this country, do you have confidence in the national government?”

**Perception of safety:** Percentage of respondents answering “yes” to the Gallup World Poll question, “Do you feel safe walking alone at night in the city or area where you live?”

**Homicide rate:** Number of intentional homicides—that is, unlawful deaths purposefully inflicted on a person by another person—expressed per 100,000 people.

**Suicide rate:** Estimated total number of deaths from purposely self-inflicted injuries, in the total population or of a given sex or age, divided by the total number of the reference population, expressed per 100,000 people.

**MAIN DATA SOURCES**

- Columns 1 and 2: ILO (2012).
- Column 3: UNICEF (2012).
- Column 4: Calculated based on HDI and Inequality-adjusted HDI values from tables 1 and 3.
- Columns 5–11: Gallup (2012).
- Column 12: UNODC (2012).
- Columns 13 and 14: WHO (2012c).

# TABLE 10 International trade flows of goods and services

HDI rank	TRADE OF GOODS <sup>a</sup>				TRADE OF SERVICES				COMPOSITION OF MERCHANDISE GOODS					
	Exports of merchandise goods		Imports of merchandise goods		Exports of services		Imports of services		Share of merchandise exports (%)		Share of merchandise imports (%)		Parts and components <sup>b</sup>	
	(\$ billions)	(% of GDP) <sup>f</sup>	(\$ billions)	(% of GDP) <sup>f</sup>	(\$ billions)	(% of GDP) <sup>f</sup>	(\$ billions)	(% of GDP) <sup>f</sup>	Agricultural exports	Manufactured exports	Agricultural imports	Manufactured imports	(% of manufactured exports)	(% of manufactured imports)
	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
<b>VERY HIGH HUMAN DEVELOPMENT</b>														
1 Norway	130.7	33.0	77.3	19.5	39.7	10.0	42.8	10.8	7.8	18.6	9.4	75.1	37.0	21.5
2 Australia	206.7	20.1	187.9	18.3	48.5	4.7	51.5	5.0	13.1	12.8	5.9	72.4	24.2	21.6
3 United States	1,121.8	7.9	1,966.5	13.9	544.4	3.9	402.0	2.8	12.3	65.2	5.9	68.8	30.3	28.8
4 Netherlands	492.6	62.9	440.0	56.2	95.4	12.2	85.2	10.9	16.2	56.5	11.4	56.5	26.0	28.9
5 Germany	1,271.1	38.8	1,066.8	32.5	237.6	7.2	263.2	8.0	6.0	81.8	8.6	67.4	28.1	32.0
6 New Zealand	29.7	22.9	30.2	23.3	8.7	6.7	9.1	7.1	65.6	20.3	11.2	70.0	16.0	18.6
7 Ireland	118.3	55.3	60.5	28.3	97.1	45.4	108.4	50.7	9.7	84.2	13.0	66.4	13.5	22.6
7 Sweden	158.4	36.5	148.8	34.3	64.4	14.8	48.5	11.2	8.8	74.5	10.2	69.2	28.6	31.1
9 Switzerland	195.6	38.3	176.3	34.5	83.6	16.4	39.6	7.8	4.1	87.6	6.8	79.6	15.9	16.9
10 Japan	769.8	14.6	692.6	13.2	141.5	2.7	157.6	3.0	1.3	88.3	11.2	50.0	36.0	31.8
11 Canada	362.1	24.8	388.3	26.6	69.2	4.7	91.3	6.3	14.2	46.7	8.2	74.7	22.7	29.5
12 Korea, Republic of	466.4	50.6	425.2	46.1	..	..	..	..	2.0	88.3	6.3	56.4	36.8	35.3
13 Hong Kong, China (SAR)	14.8	6.8	441.4	203.9	..	..	..	..	5.7	46.3	4.7	84.7	18.1	56.9
13 Iceland	4.6	37.3	3.9	31.9	2.5	20.0	2.2	17.7	41.9	14.6	12.2	58.8	8.9	29.0
15 Denmark	96.5	31.0	84.5	27.1	59.9	19.2	50.7	16.3	21.3	60.4	16.0	72.7	22.1	22.8
16 Israel	58.4	28.4	59.2	28.7	24.7	12.0	18.1	8.8	4.0	65.4	8.5	57.4	28.7	24.1
17 Belgium	411.1	87.5	389.5	82.9	83.3	17.7	78.5	16.7	10.3	70.7	9.8	66.9	13.5	17.6
18 Austria	144.9	38.2	150.6	39.7	54.5	14.4	36.9	9.7	8.7	79.5	9.5	72.5	30.2	27.0
18 Singapore	351.9	180.9	310.8	159.8	112.3	57.7	96.5	49.6	2.2	72.1	3.5	64.7	64.5	61.4
20 France	511.7	19.8	592.1	22.9	143.7	5.6	129.8	5.0	12.9	78.2	9.9	73.1	26.5	25.8
21 Finland	70.1	29.5	68.8	28.9	24.6	10.3	21.7	9.1	8.5	76.5	9.6	60.5	23.1	26.2
21 Slovenia	24.4	50.9	26.5	55.2	5.8	12.0	4.4	9.1	6.0	84.8	11.2	69.1	25.6	26.4
23 Spain	246.3	17.3	315.5	22.2	124.1	8.7	87.1	6.1	16.2	71.9	11.8	65.3	21.3	26.7
24 Liechtenstein	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25 Italy	446.8	21.5	487.0	23.5	98.3	4.7	110.1	5.3	8.6	81.7	11.3	63.0	24.2	23.0
26 Luxembourg	13.8	26.4	20.3	38.8	67.5	128.6	37.3	71.2	11.3	79.3	12.3	63.3	19.0	17.7
26 United Kingdom	405.9	18.4	559.3	25.3	237.9	10.8	168.8	7.6	7.0	68.2	10.9	67.1	26.0	26.1
28 Czech Republic	132.1	67.1	125.7	63.8	21.7	11.0	18.2	9.2	5.3	86.4	6.7	76.9	40.6	43.2
29 Greece	21.7	7.0	63.9	20.6	37.5	12.1	20.2	6.5	27.5	49.1	13.4	59.2	14.7	12.5
30 Brunei Darussalam	..	..	..	..	1.1 <sup>d</sup>	7.9	1.4 <sup>d</sup>	12.4	..	..	..	..	..	..
31 Cyprus	0.8	3.2	8.6	37.0	11.5	49.5	4.2	17.9	36.1	50.2	15.6	61.6	34.2	14.6
32 Malta	3.7	45.7	5.7	70.5	4.0	49.0	2.6	31.6	5.3	67.6	11.3	62.6	60.4	37.1
33 Andorra	..	..	..	..	..	..	..	..	..	..	..	..	..	..
33 Estonia	12.8	67.3	13.2	69.4	4.5	23.7	2.8	14.6	15.2	62.2	13.6	63.8	24.9	27.1
35 Slovakia	64.0	73.4	64.0	73.5	..	..	..	..	5.6	86.3	7.7	75.5	26.6	43.9
36 Qatar	48.3	43.0	..	..	2.3	2.0	6.2	5.5	0.1	6.8	..	..	0.9	..
37 Hungary	94.7	74.0	87.4	68.3	19.1	14.9	15.9	12.4	8.1	81.7	5.8	71.8	50.1	51.6
38 Barbados	0.2	6.1	1.2	31.1	1.5	38.1	0.8	19.6	33.5	63.9	26.7	70.0	15.7	16.7
39 Poland	157.1	34.9	174.1	38.7	32.5	7.2	29.0	6.4	12.0	79.1	9.4	74.2	30.6	29.2
40 Chile	70.9	36.5	59.4	30.5	10.8	5.6	11.8	6.1	22.2	12.0	7.7	68.7	9.7	19.3
41 Lithuania	20.8	56.9	23.4	63.9	4.1	11.3	2.8	7.7	19.7	54.0	14.2	49.9	13.4	16.4
41 United Arab Emirates	..	..	..	..	11.7	4.1	41.7	14.7	..	..	..	..	..	..
43 Portugal	48.7	21.2	75.6	32.8	23.3	10.1	14.4	6.2	13.9	73.1	15.1	66.7	24.8	22.1
44 Latvia	8.9	35.5	11.1	44.7	3.7	14.7	2.2	8.8	30.0	57.6	16.3	59.1	13.7	16.0
45 Argentina	68.2	20.2	56.8	16.8	13.2	3.9	14.1	4.2	50.8	32.2	3.7	84.4	13.1	29.1
46 Seychelles	..	..	..	..	0.4	47.7	0.3	36.8	..	..	..	..	..	..
47 Croatia	11.8	19.0	20.1	32.3	11.0	17.7	3.5	5.6	15.0	68.0	11.5	67.2	24.6	17.2
<b>HIGH HUMAN DEVELOPMENT</b>														
48 Bahrain	15.5	73.3	16.0	75.7	4.0	19.2	1.9	9.0	1.9	5.6	8.1	38.8	1.4	25.1
49 Bahamas	0.3	3.9	2.9	37.0	..	..	..	..	25.6	63.4	19.3	52.9	0.0	14.1
50 Belarus	25.2	48.3	34.9	66.7	4.5	8.6	2.9	5.5	14.7	52.9	9.4	47.5	10.7	20.2
51 Uruguay	5.4 <sup>d</sup>	15.4	6.9 <sup>d</sup>	19.8	2.5	7.1	1.4	4.1	73.5	23.7	12.2	62.5	10.5	15.6
52 Montenegro	..	..	..	..	1.0	24.0	0.4	9.7	..	..	..	..	..	..
52 Palau	..	..	..	..	..	..	..	..	..	..	..	..	..	..
54 Kuwait	50.3	43.8	..	..	7.7	6.7	13.6	11.8	0.4	6.2	..	..	3.4	..
55 Russian Federation	400.1	29.5	248.7	18.4	44.3	3.3	73.5	5.4	4.1	14.1	14.0	68.6	9.7	21.7
56 Romania	49.4	30.6	62.0	38.4	8.6	5.3	9.4	5.8	10.1	78.5	9.1	75.3	37.0	32.6
57 Bulgaria	20.6	42.8	25.4	52.7	7.0	14.5	4.5	9.3	17.5	49.3	10.6	54.9	22.1	20.4
57 Saudi Arabia	245.9	59.4	106.9	25.8	10.7	2.6	76.8	18.5	1.2	11.0	16.5	76.1	2.7	23.0

HDI rank	TRADE OF GOODS <sup>a</sup>				TRADE OF SERVICES				COMPOSITION OF MERCHANDISE GOODS					
	Exports of merchandise goods		Imports of merchandise goods		Exports of services		Imports of services		Share of merchandise exports (%)		Share of merchandise imports (%)		Parts and components <sup>b</sup>	
	(\$ billions)	(% of GDP) <sup>c</sup>	(\$ billions)	(% of GDP) <sup>c</sup>	(\$ billions)	(% of GDP) <sup>c</sup>	(\$ billions)	(% of GDP) <sup>c</sup>	Agricultural exports	Manufactured exports	Agricultural imports	Manufactured imports	(% of manufactured exports)	(% of manufactured imports)
	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
59 Cuba	..	..	..	..	8.0 <sup>d</sup>	..	1.4 <sup>d</sup>	..	..	..	..	..	..	..
59 Panama	0.7	2.8	16.7	65.8	6.1	24.0	2.8	10.9	67.6	11.9	8.2	89.7	0.1	11.8
61 Mexico	298.3	31.0	301.5	31.4	15.4	1.6	25.6	2.7	6.3	74.5	7.8	79.5	40.3	46.2
62 Costa Rica	9.0	27.6	13.9	42.4	4.2	12.7	1.8	5.4	37.3	60.7	10.1	73.0	43.9	31.8
63 Grenada	..	..	0.3 <sup>d</sup>	36.2	0.1	17.7	0.1	13.0	..	..	25.8	58.8	..	14.1
64 Libya	..	..	..	..	..	..	..	..	..	..	..	..	..	..
64 Malaysia	198.8	92.3	164.5	76.3	34.0	15.8	33.7	15.6	14.5	67.0	9.8	73.2	54.5	54.5
64 Serbia	..	..	..	..	3.5	9.0	3.5	9.0	..	..	..	..	..	..
67 Antigua and Barbuda	0.0	0.2	0.5	42.3	0.5	43.2	0.2	18.8	50.7	47.6	22.5	48.3	0.0	23.1
67 Trinidad and Tobago	10.0	49.1	6.5	31.9	0.9	4.2	0.4	2.1	2.6	31.0	11.9	49.9	1.0	20.0
69 Kazakhstan	..	..	..	..	4.2	3.2	11.3	8.6	..	..	..	..	..	..
70 Albania	1.5	12.9	4.6	38.4	2.2	18.7	2.0	16.8	6.9	62.0	19.0	63.6	5.7	12.5
71 Venezuela, Bolivarian Republic of	67.0	18.5	32.3	9.0	..	..	..	..	0.2	4.0	16.7	80.8	7.2	25.0
72 Dominica	0.0	5.9	0.2	47.1	0.1	24.7	0.1	13.2	27.1	66.0	25.1	57.1	0.9	16.2
72 Georgia	1.3	11.5	5.1	45.5	1.6	14.3	1.1	9.7	21.5	46.3	18.9	60.2	6.0	13.3
72 Lebanon	4.3	11.5	18.0	48.6	15.3	41.3	13.0	35.2	12.6	54.6	16.7	54.8	18.4	11.7
72 Saint Kitts and Nevis	0.0	3.9	0.3	39.6	..	..	..	..	12.7	87.2	21.6	73.7	87.8	17.5
76 Iran, Islamic Republic of	83.8	25.3	54.7	16.5	..	..	..	..	6.5	15.6	17.6	70.0	4.3	21.3
77 Peru	35.2	25.1	30.0	21.4	4.0	2.8	6.0	4.3	16.9	10.9	12.0	72.5	4.5	17.9
78 The former Yugoslav Republic of Macedonia	2.7 <sup>d</sup>	29.2	5.0 <sup>d</sup>	54.7	..	..	..	..	25.4	69.0	17.4	74.8	7.0	11.8
78 Ukraine	51.4	40.7	60.7	48.0	17.1	13.5	12.2	9.7	20.4	63.7	10.3	52.9	13.9	16.9
80 Mauritius	1.5	16.1	4.4	47.5	2.7	29.1	2.0	21.4	39.5	56.3	23.1	54.6	1.6	15.6
81 Bosnia and Herzegovina	4.8	28.5	9.2	54.7	1.3	7.6	0.6	3.5	13.2	54.7	19.7	57.8	27.6	15.6
82 Azerbaijan	21.3	43.8	6.6	13.6	2.1	4.3	3.8	7.8	2.8	2.5	20.2	76.3	6.0	23.1
83 Saint Vincent and the Grenadines	0.0	5.2	0.4	56.3	..	..	..	..	82.4	15.7	24.0	53.3	0.2	15.1
84 Oman	31.6	60.4	19.8	37.8	1.8	3.4	6.5	12.5	2.6	10.5	12.7	73.3	8.6	21.9
85 Brazil	197.4	10.5	179.7	9.6	31.8	1.7	62.6	3.3	34.8	35.8	6.0	73.9	22.8	30.7
85 Jamaica	1.2	9.5	5.2	39.7	2.6	20.0	1.8	13.9	24.8	7.9	18.7	48.7	1.5	14.5
87 Armenia	0.9	9.6	3.7	41.5	0.8	8.5	1.0	11.1	17.3	21.2	18.6	52.5	10.4	17.1
88 Saint Lucia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
89 Ecuador	17.5	31.8	20.6	37.4	1.4	2.5	3.0	5.4	34.1	9.6	9.4	67.8	12.9	17.4
90 Turkey	114.0	16.9	185.5	27.6	34.4	5.1	19.7	2.9	10.9	77.7	6.9	62.5	14.8	21.3
91 Colombia	39.5	15.0	40.5	15.4	4.4	1.7	8.0	3.0	14.6	21.0	11.1	80.9	8.4	17.3
92 Sri Lanka	8.3	18.1	12.4	27.0	2.5	5.4	3.1	6.8	30.8	61.2	16.7	61.8	5.5	13.7
93 Algeria	57.1	38.0	41.0	27.3	3.6	2.4	11.9	7.9	0.6	0.8	17.9	78.4	2.9	20.5
94 Tunisia	16.4	37.4	22.2	50.6	5.8	13.2	3.3	7.6	8.2	76.0	11.5	72.3	28.9	26.8
<b>MEDIUM HUMAN DEVELOPMENT</b>														
95 Tonga	0.0	2.4	0.2	47.0	0.0	12.2	0.0	13.5	90.6	7.6	31.3	44.8	0.2	16.3
96 Belize	0.3	20.5	0.7	50.9	0.4	25.7	0.2	11.8	62.3	1.3	17.4	60.9	0.3	12.3
96 Dominican Republic	4.8	9.7	15.1	30.8	5.1	10.3	2.1	4.4	28.5	67.6	14.6	59.4	10.4	18.7
96 Fiji	0.6	18.6	1.8	60.2	0.7 <sup>d</sup>	23.3	0.5 <sup>d</sup>	14.9	62.2	22.1	18.7	48.1	5.7	19.1
96 Samoa	0.1	10.6	0.3	55.3	0.2	28.3	0.1	15.5	21.5	78.2	26.9	54.0	97.8	17.4
100 Jordan	5.9	23.6	15.3	60.8	5.2	20.5	4.3	17.0	16.5	72.0	17.6	56.3	5.4	18.4
101 China	1,577.8	28.9	1,289.1	23.6	171.2	3.1	193.3	3.5	3.3	93.4	8.4	60.9	28.7	44.8
102 Turkmenistan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
103 Thailand	195.3	67.0	180.1	61.8	34.0	11.7	45.9	15.7	18.0	71.6	6.6	66.2	38.1	40.9
104 Maldives	0.1	3.7	1.1	54.5	0.8	38.3	0.3	15.3	96.2	0.1	24.6	50.2	0.0	21.1
105 Suriname	2.0	49.2	1.4	33.9	0.2	5.9	0.3	6.3	2.9	1.9	15.3	63.7	27.8	18.3
106 Gabon	5.4 <sup>d</sup>	44.4	2.5 <sup>d</sup>	20.7	0.4	3.3	1.9	15.9	9.6	4.2	17.6	74.1	30.3	26.1
107 El Salvador	4.5	21.4	8.5	40.3	1.0	4.6	1.1	5.1	21.9	71.5	18.5	63.8	7.8	14.1
108 Bolivia, Plurinational State of	7.0	37.7	5.6	30.3	..	..	..	..	16.1	6.3	8.4	78.1	2.6	12.3
108 Mongolia	..	..	..	..	0.5	9.0	0.8	14.5	..	..	..	..	..	..
110 Palestine, State of	0.4 <sup>d</sup>	..	4.0 <sup>d</sup>	..	..	..	..	..	17.2	66.9	22.9	43.8	1.5	10.1
111 Paraguay	4.5	27.8	10.0	61.6	1.5	9.2	0.7	4.4	88.5	10.7	8.1	79.4	7.4	20.1
112 Egypt	26.3	12.9	53.0	26.0	..	..	..	..	19.5	41.7	22.4	59.9	8.4	18.1
113 Moldova, Republic of	0.9	16.6	3.9	68.5	..	..	..	..	73.0	22.6	16.2	62.4	8.2	15.6
114 Philippines	51.5	28.0	58.5	31.8	13.2	7.2	11.3	6.1	8.0	85.1	11.7	66.8	72.8	58.4
114 Uzbekistan	..	..	..	..	1.1	3.1	0.6	1.7	..	..	..	..	..	..
116 Syrian Arab Republic	11.4	20.1	17.6	31.1	5.2	8.5	..	..	22.7	24.7	23.4	54.1	6.6	16.0
117 Micronesia, Federated States of	..	..	..	..	..	..	..	..	..	..	..	..	..	..

**TABLE 10 INTERNATIONAL TRADE FLOWS OF GOODS AND SERVICES**

HDI rank	TRADE OF GOODS <sup>a</sup>				TRADE OF SERVICES				COMPOSITION OF MERCHANDISE GOODS						
	Exports of merchandise goods		Imports of merchandise goods		Exports of services		Imports of services		Share of merchandise exports (%)		Share of merchandise imports (%)		Parts and components <sup>b</sup>		
	(\$ billions)	(% of GDP) <sup>f</sup>	(\$ billions)	(% of GDP) <sup>f</sup>	(\$ billions)	(% of GDP) <sup>f</sup>	(\$ billions)	(% of GDP) <sup>f</sup>	Agricultural exports	Manufactured exports	Agricultural imports	Manufactured imports	(% of manufactured exports)	(% of manufactured imports)	
	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	
118	Guyana	0.9	43.2	1.4	67.6	0.3	12.7	0.3	16.3	49.0	3.8	15.3	54.8	2.1	15.5
119	Botswana	4.7	35.5	5.7	42.8	0.8	6.1	1.2	9.3	5.2	10.5	13.2	57.2	16.3	21.8
120	Honduras	2.6 <sup>d</sup>	17.8	6.0 <sup>d</sup>	40.4	1.0	6.9	1.3	9.0	53.1	33.8	20.1	59.9	18.3	15.0
121	Indonesia	157.8	25.3	135.5	21.7	16.8	2.7	26.1	4.2	22.8	37.0	11.5	63.4	18.8	32.9
121	Kiribati	0.0	2.8	0.1	52.4	..	..	..	..	68.3	27.6	41.7	32.0	0.1	18.3
121	South Africa	71.5	22.1	79.9	24.7	14.0	4.3	18.5	5.7	11.0	43.2	6.8	64.1	15.0	27.3
124	Vanuatu	..	..	..	..	0.2 <sup>d</sup>	38.2	0.1 <sup>d</sup>	16.8	..	..	..	..	..	..
125	Kyrgyzstan	1.3	27.4	3.2	68.0	..	..	..	..	17.1	18.6	18.1	53.9	14.6	12.8
125	Tajikistan	..	..	..	..	0.2	3.9	0.4	7.4	..	..	..	..	..	..
127	Viet Nam	72.2 <sup>d</sup>	71.1	84.8 <sup>d</sup>	83.5	..	..	..	..	23.3	64.0	12.1	71.9	19.0	23.6
128	Namibia	5.8	58.3	6.0	59.6	0.9	8.5	0.7	7.0	25.5	23.3	15.5	69.6	6.7	16.4
129	Nicaragua	1.8	28.9	4.2	65.5	0.5	7.4	0.7	10.8	78.7	6.3	17.1	60.8	5.7	14.5
130	Morocco	17.8	19.6	35.4	38.9	12.5	13.8	7.4	8.2	20.6	63.4	13.6	59.9	28.2	21.5
131	Iraq	..	..	..	..	..	..	..	..	..	..	..	..	..	..
132	Cape Verde	0.0	2.9	0.7	44.8	0.5	31.3	0.4	23.2	81.6	17.5	29.1	57.8	0.0	18.2
133	Guatemala	8.5	21.4	13.8	35.0	2.2	5.6	2.4	6.0	46.3	42.6	14.6	66.0	3.0	15.7
134	Timor-Leste	..	..	..	..	..	..	..	..	..	..	..	..	..	..
135	Ghana	5.2	18.0	8.1	27.7	1.5	5.1	3.0	10.3	24.2	7.3	16.4	81.3	8.9	19.0
136	Equatorial Guinea	..	..	..	..	0.1	0.5	2.2	16.7	..	..	..	..	..	..
136	India	220.4	14.5	350.0	23.0	123.8	8.1	116.8	7.7	10.5	52.4	5.1	36.9	14.5	29.8
138	Cambodia	5.6	51.7	4.9	45.3	1.8	17.0	1.2	10.8	3.7	96.1	8.6	79.4	0.2	7.3
138	Lao People's Democratic Republic	..	..	..	..	..	..	..	..	..	..	..	..	..	..
140	Bhutan	0.4	29.7	0.9	61.4	0.1 <sup>d</sup>	4.2	0.1 <sup>d</sup>	5.3	7.4	69.5	13.7	60.8	0.0	19.1
141	Swaziland	..	..	..	..	0.2	7.2	0.6	17.6	..	..	..	..	..	..
<b>LOW HUMAN DEVELOPMENT</b>															
142	Congo	6.9	64.1	4.4	40.5	..	..	..	..	2.1	30.2	7.4	86.7	2.5	9.1
143	Solomon Islands	0.2	32.9	0.4	65.6	0.1	14.7	0.2	28.8	29.2	0.1	18.7	20.1	14.5	21.6
144	Sao Tome and Principe	0.0	3.2	0.1	56.4	0.0 <sup>d</sup>	5.3 <sup>d</sup>	0.0 <sup>d</sup>	9.6 <sup>d</sup>	95.3	4.7	30.6	52.0	20.1	13.5
145	Kenya	5.2	16.5	12.1	38.5	3.7	11.7	2.0	6.4	57.6	33.9	13.6	62.8	6.3	16.1
146	Bangladesh	..	..	..	..	2.4	2.6	4.4	4.6	..	..	..	..	..	..
146	Pakistan	21.0	12.4	37.5	22.1	6.4	3.8	7.1	4.2	18.8	74.0	18.0	48.4	0.6	17.1
148	Angola	..	..	..	..	0.6	0.8	17.3	22.0	..	..	..	..	..	..
149	Myanmar	7.6	..	4.2	..	0.3	..	0.7	..	30.2	5.5	8.7	67.9	2.3	14.3
150	Cameroon	3.9	17.4	5.1	22.9	1.2	5.2	1.7	7.8	39.2	6.9	19.3	51.3	18.6	17.5
151	Madagascar	0.9	11.0	2.5	29.6	1.0 <sup>d</sup>	9.9	1.2 <sup>d</sup>	14.2	29.9	46.7	14.6	69.6	1.5	22.5
152	Tanzania, United Republic of	3.9	17.7	8.0	36.2	..	..	..	..	29.6	17.2	10.8	60.5	8.0	15.0
153	Nigeria	86.6	47.3	44.2	24.2	3.1	1.7	22.3	12.2	5.0	6.7	11.0	86.5	8.0	24.0
154	Senegal	2.2	16.9	4.8	37.3	1.1	8.9	1.1	8.9	27.2	36.4	23.9	44.4	3.2	15.9
155	Mauritania	0.7	21.9	1.7	52.0	0.2	4.8	0.8	23.2	38.4	0.0	19.9	52.8	0.0	30.7
156	Papua New Guinea	..	..	..	..	0.2	2.4	2.8	32.7	..	..	..	..	..	..
157	Nepal	0.8	5.8	5.1	35.5	0.7	4.7	0.9	6.0	23.0	72.3	13.4	56.5	3.0	15.5
158	Lesotho	0.6	32.3	1.4	69.7	0.0	2.5	0.5	26.5	12.9	84.7	30.4	57.8	8.4	16.2
159	Togo	0.4	13.9	1.0	31.3	0.3	8.6	0.3	11.0	18.8	70.2	17.0	67.2	0.3	12.1
160	Yemen	6.2 <sup>d</sup>	22.1	9.3 <sup>d</sup>	33.0	..	..	..	..	6.8	1.1	31.6	46.7	5.3	13.7
161	Haiti	..	..	..	..	0.4	5.8	0.9	13.6	..	..	..	..	..	..
161	Uganda	1.2	7.0	4.7	28.3	1.3	7.9	1.8	11.1	74.0	22.8	13.5	65.3	2.7	18.0
163	Zambia	7.2	49.7	5.3	36.7	0.3	2.2	0.9	6.5	6.8	8.7	5.3	61.7	14.0	18.5
164	Djibouti	0.2 <sup>d</sup>	15.0	0.6 <sup>d</sup>	61.7	0.3 <sup>d</sup>	30.7	0.1 <sup>d</sup>	12.2	0.5	92.7	30.1	62.7	47.0	19.0
165	Gambia	0.0	3.4	0.3	28.0	..	..	..	..	79.0	10.5	35.9	42.9	5.7	22.2
166	Benin	0.4	6.6	1.5	22.7	0.3	5.3	0.4	6.6	84.4	14.7	35.5	43.1	4.8	8.0
167	Rwanda	0.2 <sup>d</sup>	4.4	1.1 <sup>d</sup>	20.5	0.4	6.9	0.6	11.0	52.9	20.8	14.9	75.8	3.0	17.5
168	Côte d'Ivoire	10.3	44.8	7.8	34.2	..	..	..	..	58.1	16.1	20.1	54.9	5.8	11.7
169	Comoros	..	..	..	..	0.1	11.3	0.1	17.9	..	..	..	..	..	..
170	Malawi	1.1	21.8	2.2	44.4	0.1	1.7	0.4	7.7	79.8	9.0	14.8	74.1	11.6	10.1
171	Sudan	9.0 <sup>d</sup>	14.9	8.6 <sup>d</sup>	14.1	0.3	0.4	2.9	4.8	6.2	0.4	16.1	78.9	4.4	16.8
172	Zimbabwe	3.2	48.1	9.1	136.0	0.2	3.6	0.4	6.6	24.7	29.5	20.7	49.2	1.9	11.3
173	Ethiopia	2.3	7.4	8.6	27.9	2.4	7.6	2.5	8.2	82.7	8.2	11.5	68.8	17.7	18.8
174	Liberia	..	..	..	..	0.2	16.9	1.1	115.7	..	..	..	..	..	..
175	Afghanistan	0.4	2.5	5.2	32.8	..	..	..	..	50.8	19.6	13.7	19.1	0.0	27.1
176	Guinea-Bissau	..	..	..	..	..	..	..	..	..	..	..	..	..	..

HDI rank	TRADE OF GOODS <sup>a</sup>				TRADE OF SERVICES				COMPOSITION OF MERCHANDISE GOODS					
	Exports of merchandise goods		Imports of merchandise goods		Exports of services		Imports of services		Share of merchandise exports (%)		Share of merchandise imports (%)		Parts and components <sup>b</sup>	
	(\$ billions)	(% of GDP) <sup>c</sup>	(\$ billions)	(% of GDP) <sup>c</sup>	(\$ billions)	(% of GDP) <sup>c</sup>	(\$ billions)	(% of GDP) <sup>c</sup>	Agricultural exports	Manufactured exports	Agricultural imports	Manufactured imports	(% of manufactured exports)	(% of manufactured imports)
	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010	2010
177 Sierra Leone	..	..	..	..	0.1	3.2	0.1	7.6	..	..	..	..	..	..
178 Burundi	0.1	6.2	0.4	21.0	0.1	4.1	0.2	8.8	76.8	5.3	15.1	81.7	16.1	13.9
178 Guinea	..	..	..	..	0.1	1.4	0.4	8.9	..	..	..	..	..	..
180 Central African Republic	0.1 <sup>d</sup>	4.5	0.2 <sup>d</sup>	10.6	0.1	3.3	0.2	8.7	37.4	3.1	30.2	67.2	13.2	18.4
181 Eritrea	..	..	..	..	..	..	..	..	..	..	..	..	..	..
182 Mali	1.9	21.0	4.7	51.2	0.4	3.8	0.9	9.8	14.2	3.7	12.1	61.3	11.0	21.3
183 Burkina Faso	1.3	15.0	2.0	23.9	0.1	1.4	0.6	7.1	28.0	2.9	15.9	61.3	13.3	15.7
184 Chad	..	..	..	..	0.2	2.0	2.4	30.4	..	..	..	..	..	..
185 Mozambique	2.2	23.3	3.6	37.7	0.6	6.9	1.1	12.1	20.1	2.0	12.6	49.6	20.9	17.4
186 Congo, Democratic Republic of the	..	..	..	..	..	..	..	..	..	..	..	..	..	..
186 Niger	0.5	9.1	2.3	43.0	0.1	2.5	1.1	19.8	20.7	11.9	17.3	69.3	2.6	18.3
<b>OTHER COUNTRIES OR TERRITORIES</b>														
Korea, Democratic People's Rep. of	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Marshall Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Monaco	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Nauru	..	..	..	..	..	..	..	..	..	..	..	..	..	..
San Marino	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Somalia	..	..	..	..	..	..	..	..	..	..	..	..	..	..
South Sudan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tuvalu	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>Human Development Index groups</b>														
Very high human development	8,889.2	21.6	9,960.0	24.2	2,682.8	6.6	2,333.0	5.8	9.4	70.1	8.5	67.4	29.5	30.6
High human development	2,088.2	26.8	1,769.7	23.2	302.6	4.0	426.9	5.9	10.5	37.4	11.3	71.6	30.0	30.4
Medium human development	2,475.3	27.0	2,409.2	26.2	418.1	4.7	446.8	5.1	7.9	79.9	8.7	59.0	28.5	38.8
Low human development	188.8	24.9	210.0	27.9	29.1	3.3	82.6	9.8	18.0	19.4	14.1	66.9	3.8	18.9
<b>Regions</b>														
Arab States	546.6	38.9	367.5	..	86.4	5.8	..	..	4.4	17.8	16.7	70.5	12.5	21.0
East Asia and the Pacific	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Europe and Central Asia	1,226.6	33.5	1,218.4	33.1	251.7	6.6	232.3	6.2	8.5	54.9	10.3	68.3	28.7	29.1
Latin America and the Caribbean	857.8	18.9	842.6	18.5	120.0	2.7	151.8	3.6	21.0	42.0	8.5	76.3	31.5	32.3
South Asia	335.2	14.2	466.8	23.3	136.6	7.4	132.7	7.2	10.6	44.8	8.7	44.2	11.8	26.1
Sub-Saharan Africa	237.5	28.3	246.3	29.1	39.6	4.3	93.5	10.3	15.7	21.5	11.4	69.1	12.4	22.2
<b>Least developed countries</b>	..	..	..	..	16.8	3.5	49.9	11.0	..	..	..	..	..	..
<b>Small island developing states</b>	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>World</b>	<b>13,641.6</b>	<b>23.2</b>	<b>14,348.9</b>	<b>24.5</b>	<b>3,432.6</b>	<b>5.9</b>	<b>3,289.3</b>	<b>5.7</b>	<b>9.4</b>	<b>66.5</b>	<b>9.0</b>	<b>66.6</b>	<b>29.2</b>	<b>31.6</b>

#### NOTES

- a** All data on merchandise trade are extracted at the six-digit level of the 1996 Harmonized System nomenclature; for definitional purposes, they are concorded with the Standard International Trade Classification using concordance tables.
- b** For methodology of classification of parts and components, see Athukorala (2012) and its discussion paper version cited therein.
- c** GDP in current dollars is averaged for 2009 and 2010.
- d** Refers to 2009.

#### DEFINITIONS

**Exports of merchandise goods:** Goods that subtract from the stock of material resources of a country by leaving its economic territory.

**Imports of merchandise goods:** Goods that add to the stock of material resources of a country by entering its economic territory.

**Exports of services:** Exports of a heterogeneous range of intangible products and activities that changes the conditions of the consuming units or facilitates the exchange of products or financial assets.

**Imports of services:** Imports of a heterogeneous range of intangible products and activities that changes the conditions of the consuming units or facilitates the exchange of products or financial assets.

**Agricultural or manufactured goods as share of merchandise exports:** Exports of agricultural or manufactured goods, expressed as a percentage of total merchandise exports.

**Agricultural or manufactured goods as share of merchandise imports:** Imports of agricultural or manufactured goods, expressed as a percentage of total merchandise imports.

**Parts and components:** Intermediate goods used as an input in the production of manufactures for final consumption, expressed as a percentage of manufactured exports or imports.

#### MAIN DATA SOURCES

- Columns 1, 3, and 9–14:** UNSD (2012b).
- Columns 2 and 4:** HDRO calculations based on UNSD (2012b) and World Bank (2012a).
- Columns 5 and 7:** UNCTAD (2012).
- Columns 6 and 8:** HDRO calculations based on UNCTAD (2012) and World Bank (2012a).

## International capital flows and migration

HDI rank	FINANCIAL FLOWS						HUMAN MOBILITY					
	Foreign direct investment, net inflows	Net official development assistance received <sup>a</sup>	Private capital flows	Remittances (% of GDP)		Total reserves minus gold	Migration			International inbound tourism	International telephone traffic (minutes per person)	
				Inflows	Outflows		Stock of emigrants <sup>b</sup>	Stock of immigrants	Net migration rate		Incoming	Outgoing
	(% of GDP)	(% of GNI)	(% of GDP)			(% of GDP)	(% of population)	(per 1,000 people)	(thousands)	2005–2010 <sup>c</sup>	2005–2010 <sup>c</sup>	
2007–2011 <sup>c</sup>	2010	2007–2011 <sup>c</sup>	2010	2010	2007–2011 <sup>c</sup>	2010	2010	2005/2010 <sup>d</sup>	2010	2005–2010 <sup>c</sup>	2005–2010 <sup>c</sup>	
<b>VERY HIGH HUMAN DEVELOPMENT</b>												
1 Norway	2.8	-1.1	-4.9	0.16	0.97	10.2	3.8	10.0	7.2	4,767	..	241.9
2 Australia	2.7	-0.3	6.5	0.43	0.33	3.1	2.1	25.7	10.5	5,885	..	..
3 United States	1.5	-0.2	-0.2	0.04	0.36	0.9	0.8	13.5	3.3	59,791	82.5	237.1
4 Netherlands	1.9	-0.8	1.1	0.50	1.67	2.4	6.0	10.5	0.6	10,883	..	96.5
5 Germany	1.1	-0.4	1.2	0.35	0.49	1.9	4.3	13.1	1.3	26,875	..	182.5
6 New Zealand	0.5	-0.3	1.7	0.59 <sup>e</sup>	0.82 <sup>e</sup>	11.7	14.5	22.4	3.1	2,492	..	173.3
7 Ireland	6.4	-0.5	25.3	0.29	0.85	0.6	16.1	19.6	4.6	7,189	..	441.8
7 Sweden	2.3	-1.0	2.2	0.15	0.15	8.2	3.4	14.1	5.8	4,951	..	160.5
9 Switzerland	0.4	-0.4	-9.0	0.49	4.09	44.0	5.4	23.2	4.8	8,628	..	409.3
10 Japan	0.0	-0.2	0.7	0.03	0.08	21.4	0.6	1.7	0.4	8,611	13.8	..
11 Canada	2.4	-0.3	4.1	..	..	3.8	3.5	21.3	6.6	16,097	..	..
12 Korea, Republic of	0.4	-0.1	-0.5	0.86	1.12	27.3	4.3	1.1	-0.1	8,798	22.2	47.7
13 Hong Kong, China (SAR)	34.1	..	-0.8	0.15	0.19	117.1	10.2	38.8	5.1	20,085	524.3	1,446.9
13 Iceland	7.2	-0.3	-55.2	0.20	0.10	60.1	13.0	11.3	6.8	1,213	233.1	148.0
15 Denmark	4.6	-0.9	-1.6	0.20	1.02	24.6	4.7	8.8	3.3	8,744	183.9	190.6
16 Israel	4.7	..	-0.2	0.65	1.72	30.8	14.0	40.4	7.8	2,803	..	..
17 Belgium	18.0	-0.6	-0.2	2.18	0.87	3.5	4.2	13.7	3.8	7,186	..	255.0
18 Austria	3.3	-0.3	0.6	0.86	0.92	2.6	7.1	15.6	3.8	22,004	..	171.6
18 Singapore	18.1	..	-1.4	..	..	99.1	6.1	40.7	30.9	9,161	447.5	1,525.2
20 France	1.5	-0.5	10.8	0.61	0.21	1.8	2.8	10.7	1.6	77,148	182.1	192.1
21 Finland	0.0	-0.6	2.9	0.35	0.18	3.0	6.2	4.2	2.7	3,670	..	..
21 Slovenia	2.2	..	6.8	0.66	0.34	1.7	6.5	8.1	2.2	1,869 <sup>f</sup>	88.2	112.0
23 Spain	1.7	..	-3.2	0.76	0.88	2.2	3.0	15.2	10.1	52,677	..	118.9
24 Liechtenstein	..	..	..	..	..	..	17.1	34.6	..	52	..	..
25 Italy	1.5	-0.2	-3.4	0.33	0.60	2.2	5.8	7.4	6.7	43,626	..	152.0
26 Luxembourg	542.9	-1.1	214.8	2.99	19.69	1.5	11.8	35.2	17.6	849	810.6	822.5
26 United Kingdom	2.2	-0.6	-4.9	0.33	0.16	3.3	7.5	11.2	3.3	28,295	..	147.5
28 Czech Republic	2.5	..	2.1	0.57	0.92	18.4	3.6	4.4	4.6	8,185	120.1	50.5
29 Greece	0.6	..	-7.8	0.50	0.65	0.4	10.8	10.1	2.7	15,007 <sup>g</sup>	96.1	201.3
30 Brunei Darussalam	4.0	..	4.3	..	3.60	12.6	6.0	36.4	1.8	157 <sup>f</sup>	..	..
31 Cyprus	1.0	..	35.1	0.63	1.75	2.0	17.0	17.5	8.3	2,173	314.7	555.4
32 Malta	12.2	..	-42.2	0.58	0.56	5.6	26.2	3.8	2.4	1,332	..	144.0
33 Andorra	..	..	..	..	..	..	10.7	64.4	..	1,830	638.6	708.3
33 Estonia	0.8	..	15.0	1.71	0.50	0.9	12.6	13.6	0.0	2,120	102.9	80.8
35 Slovakia	0.6	..	1.4	1.83	0.08	0.9	9.6	2.4	1.3	1,298 <sup>h</sup>	137.2	140.6
36 Qatar	4.3	..	..	..	..	9.4	0.7	86.5	132.9	1,866	422.7	484.8
37 Hungary	17.1	..	6.5	1.76	0.98	34.8	4.6	3.7	1.5	9,510	116.2	48.2
38 Barbados	16.3	0.3 <sup>e</sup>	10.4	2.99	0.97	22.1	41.0	10.9	0.0	532	..	..
39 Poland	2.8	..	4.9	1.62	0.34	18.0	8.3	2.2	0.3	12,470	..	24.9
40 Chile	7.0	0.1	-0.3	0.00	0.00	16.9	3.7	1.9	0.4	2,766	26.2	12.2
41 Lithuania	2.9	..	6.1	4.34	1.48	18.5	13.2	4.0	-2.1	1,507	75.1	34.4
41 United Arab Emirates	1.3	..	..	..	..	10.3	1.2	70.0	106.3	7,126	..	643.1
43 Portugal	4.3	-0.3	-3.8	1.56	0.62	0.8	20.8	8.6	2.8	6,756 <sup>f</sup>	173.9	111.2
44 Latvia	5.5	..	2.9	2.56	0.18	21.2	12.3	15.0	-0.9	1,373	..	94.1
45 Argentina	1.6	0.0	0.9	0.17	0.27	9.7	2.4	3.6	-1.0	5,325	..	18.4
46 Seychelles	17.4	6.3	19.3	1.13	2.72	25.1	14.6	12.8	..	175	64.7	111.3
47 Croatia	2.3	0.3	3.8	2.16	0.27	22.7	17.1	15.9	0.5	9,111	224.1	90.9
<b>HIGH HUMAN DEVELOPMENT</b>												
48 Bahrain	0.7	..	19.9	..	7.16 <sup>e</sup>	22.2	3.7	39.1	90.2	4,935	..	..
49 Bahamas	7.6	..	7.1	..	1.18	13.7	12.8	9.7	3.9	1,370	..	..
50 Belarus	7.2	0.3	8.7	0.68	0.19	10.9	18.4	11.4	-1.0	119	69.6	52.2
51 Uruguay	4.1	0.1	9.0	0.26	0.02	22.0	10.5	2.4	-3.0	2,353	76.2	46.3
52 Montenegro	18.5	2.0	..	7.32	0.67	8.6	0.0	6.8	-0.8	1,088	..	..
52 Palau	1.4	19.5	..	..	..	..	38.8	28.1	..	84	179.9	205.1
54 Kuwait	0.1	..	-7.8	..	9.47 <sup>e</sup>	14.6	8.5	68.8	22.2	207	..	..
55 Russian Federation	2.8	..	-1.7	0.35	1.26	24.4	7.9	8.7	1.6	22,281	..	..
56 Romania	1.5	..	3.0	2.40	0.22	23.9	13.1	0.6	-0.9	7,575	105.4	..
57 Bulgaria	3.4	..	2.2	2.91	0.05	28.5	16.0	1.4	-1.3	6,047	107.1	47.4
57 Saudi Arabia	2.8	..	-0.5	0.05	6.00	93.7	0.7	27.8	8.2	10,850	..	..

HDI rank	FINANCIAL FLOWS					HUMAN MOBILITY						
	Foreign direct investment, net inflows	Net official development assistance received <sup>a</sup>	Private capital flows	Remittances (% of GDP)		Total reserves minus gold	Migration			International inbound tourism	International telephone traffic (minutes per person)	
				Inflows	Outflows		Stock of emigrants <sup>b</sup>	Stock of immigrants	Net migration rate		Incoming	Outgoing
	(% of GDP)	(% of GNI)	(% of GDP)			(% of GDP)	(% of population)	(per 1,000 people)	(thousands)	2005–2010 <sup>c</sup>	2005–2010 <sup>c</sup>	
2007–2011 <sup>c</sup>	2010	2007–2011 <sup>c</sup>	2010	2010	2007–2011 <sup>c</sup>	2010	2010	2005/2010 <sup>d</sup>	2010	2005–2010 <sup>c</sup>	2005–2010 <sup>c</sup>	
59 Cuba	0.0	0.2	..	..	..	8.1	10.9	0.1	-3.4	2,507	32.7	2.5
59 Panama	8.8	0.5	7.5	0.86	0.93	7.5	4.0	3.4	0.7	1,324	54.4	75.5
61 Mexico	1.7	0.0	4.5	2.13	..	12.5	10.7	0.7	-3.3	22,260	..	..
62 Costa Rica	5.1	0.3	5.8	1.52	0.75	11.6	2.7	10.5	3.4	2,100	85.7	43.1
63 Grenada	7.7	4.6	6.0	6.96	0.47	14.8	65.5	12.1	-9.7	114	488.1	315.8
64 Libya	2.2	0.1 <sup>e</sup>	-5.0	0.03 <sup>e</sup>	..	..	1.7	10.4	-0.7	34 <sup>h</sup>	..	..
64 Malaysia	3.9	0.0	-1.4	0.55	2.75	47.3	5.3	8.4	0.6	24,577 <sup>e</sup>	..	..
64 Serbia	6.0	1.8	10.6	8.72	0.18	33.0	2.0	5.3	0.0	683	104.4	32.1
67 Antigua and Barbuda	8.4	1.7	5.2	2.15	0.19	13.1	47.6	23.6	..	230	487.3	247.8
67 Trinidad and Tobago	2.6	0.0	2.6	0.57	..	46.3	26.7	2.6	-3.0	413	243.7	200.6
69 Kazakhstan	6.9	0.2	-2.7	0.20	2.04	13.5	23.6	19.5	0.1	3,393	40.1	38.9
70 Albania	9.4	2.9	6.7	9.75	0.20	18.5	45.4	2.8	-3.0	2,417	224.3	23.6
71 Venezuela, Bolivarian Republic of	1.7	0.0	2.4	0.04	0.20	3.1	1.8	3.5	0.3	615	..	20.1
72 Dominica	5.2	7.0	6.6	5.56	0.04	16.8	104.8	8.3	..	77	140.8	172.6
72 Georgia	6.8	5.5	6.7	6.93	0.43	19.6	25.1	4.0	-6.8	2,033	125.6	36.4
72 Lebanon	11.0	1.2	2.1	19.38	9.58	80.0	15.6	17.8	-0.6	2,168	318.4	87.3
72 Saint Kitts and Nevis	17.9	1.8	14.4	6.52	0.85	34.5	61.1	9.6	..	92	820.6	629.7
76 Iran, Islamic Republic of	0.9	0.0	..	0.32 <sup>e</sup>	..	16.3	1.7	2.8	-0.5	2,034	3.5	10.9
77 Peru	4.8	-0.2	7.8	1.65	0.08	26.7	3.7	0.1	-5.1	2,299	92.7	19.6
78 The former Yugoslav Republic of Macedonia	4.0	2.1	3.4	4.25	0.25	22.9	21.9	6.3	0.2	262	..	23.3
78 Ukraine	4.4	0.5	5.2	4.11	0.02	18.4	14.4	11.6	-0.2	21,203	..	..
80 Mauritius	4.4	1.3	19.9	2.33	0.14	22.8	10.9	3.3	0.0	935	140.8	108.5
81 Bosnia and Herzegovina	2.4	3.0	2.4	11.44	0.33	22.9	38.9	0.7	-0.5	365	213.8	49.6
82 Azerbaijan	2.3	0.3	1.0	2.71	1.82	16.2	16.0	3.0	1.2	1,280	74.8	17.5
83 Saint Vincent and the Grenadines	15.3	2.6	15.5	4.54	1.05	13.0	37.7	7.9	-9.2	72	..	..
84 Oman	1.1	-0.1	-0.8	0.07 <sup>e</sup>	9.86 <sup>e</sup>	20.0	0.5	28.4	11.7	1,048 <sup>e</sup>	223.1	206.9
85 Brazil	2.7	0.0	4.1	0.19	0.06	14.1	0.7	0.4	-0.5	5,161	..	2.3
85 Jamaica	1.6	1.1	-1.5	14.50	2.26	15.1	36.1	1.1	-7.4	1,922	252.4	828.6
87 Armenia	6.5	3.5	4.3	10.63	1.67	18.9	28.2	10.5	-4.9	575	174.9	243.8
88 Saint Lucia	9.2	3.6	9.7	2.62	0.37	17.3	23.3	5.9	-1.2	306	292.7	203.6
89 Ecuador	0.3	0.3	0.9	4.43	0.14	2.5	8.3	2.9	-1.7	1,047	62.7	11.7
90 Turkey	2.1	0.1	4.6	0.12	0.02	10.1	5.6	1.9	-0.1	27,000	57.8	43.4
91 Colombia	4.0	0.3	3.7	1.41	0.04	9.5	4.6	0.2	-0.5	2,147	..	..
92 Sri Lanka	1.0	1.2	3.3	8.38	1.10	10.6	9.1	1.7	-2.5	654	28.6	..
93 Algeria	1.4	0.1	1.1	1.26	0.03	96.9	3.4	0.7	-0.8	1,912	36.5	17.1
94 Tunisia	3.2	1.3	3.0	4.45	0.03	21.4	6.3	0.3	-0.4	6,903	58.0	16.1
<b>MEDIUM HUMAN DEVELOPMENT</b>												
95 Tonga	4.5	19.5	0.0	23.65	2.60	32.9	45.4	0.8	-16.0	45	..	..
96 Belize	6.2	2.0	5.2	5.68	1.65	16.1	16.1	15.0	-0.7	239	135.8	178.5
96 Dominican Republic	3.2	0.4	5.6	6.53	0.06	7.4	10.1	4.2	-2.9	4,125	309.4	52.2
96 Fiji	6.2	2.5	6.0	5.78	0.69	21.8	21.3	2.2	-6.8	632	..	..
96 Samoa	0.1	25.5	1.8	24.11	1.21	25.7	67.3	5.0	-17.3	130	..	..
100 Jordan	6.4	3.6	6.0	13.78	1.87	39.8	11.3	45.9	7.0	4,557	95.8	6.8
101 China	3.1	0.0	2.6	0.89	0.03	43.8	0.6	0.1	-0.3	55,664	9.2	2.9
102 Turkmenistan	10.4	0.2	..	..	..	..	5.0	4.0	-2.2	8	..	..
103 Thailand	3.0	0.0	4.2	0.55	..	48.4	1.2	1.7	1.5	15,936	20.5	..
104 Maldives	7.9	5.6	7.9	0.20	5.31	17.0	0.6	1.0	0.0	792	..	428.6
105 Suriname	-5.9	2.4	-6.2	0.10 <sup>e</sup>	0.03 <sup>e</sup>	13.8	39.0	7.5	-2.0	205	..	..
106 Gabon	1.3	0.9	..	..	..	12.7	1.7	18.9	0.7	358	..	..
107 El Salvador	1.5	1.4	2.1	16.10	0.11	9.3	20.5	0.7	-9.5	1,150	223.3	175.7
108 Bolivia, Plurinational State of	3.2	3.6	4.2	5.54	0.53	40.6	6.8	1.5	-3.5	807	85.6	11.4
108 Mongolia	23.5	5.4	54.9	4.46	2.73	26.6	1.2	0.4	-1.1	457	35.2	17.2
110 Palestine, State of	..	..	..	..	..	..	68.4	43.6	-4.7	522	..	..
111 Paraguay	2.1	0.6	2.0	3.67	..	20.7	7.9	2.5	-1.3	465	37.6	19.4
112 Egypt	2.9	0.3	7.2	3.53	0.12	6.5	4.4	0.3	-0.9	14,051	55.4	7.8
113 Moldova, Republic of	3.9	7.5	3.7	23.57	2.01	28.1	21.5	11.4	-9.4	8	198.1	59.8
114 Philippines	0.6	0.3	3.0	10.73	0.03	29.9	4.6	0.5	-2.8	3,520	..	..
114 Uzbekistan	2.1	0.6	..	..	..	..	7.0	4.2	-3.9	975	..	..
116 Syrian Arab Republic	2.5	0.2	2.2	2.78	0.36	32.9	4.2	9.8	-0.6	8,546	..	23.4
117 Micronesia, Federated States of	3.4	40.2	..	..	..	23.6	19.7	2.4	-16.3	26	..	..

**TABLE 11 INTERNATIONAL CAPITAL FLOWS AND MIGRATION**

HDI rank	FINANCIAL FLOWS						HUMAN MOBILITY					
	Foreign direct investment, net inflows	Net official development assistance received <sup>a</sup>	Private capital flows	Remittances (% of GDP)		Total reserves minus gold	Migration			International inbound tourism	International telephone traffic (minutes per person)	
				Inflows	Outflows		Stock of emigrants <sup>b</sup>	Stock of immigrants	Net migration rate		Incoming	Outgoing
	(% of GDP)	(% of GNI)	(% of GDP)			(% of GDP)	(% of population)	(per 1,000 people)	(thousands)	2005–2010 <sup>c</sup>	2005–2010 <sup>e</sup>	
2007–2011 <sup>c</sup>	2010	2007–2011 <sup>c</sup>	2010	2010	2007–2011 <sup>c</sup>	2010	2010	2005/2010 <sup>d</sup>	2010	2005–2010 <sup>c</sup>	2005–2010 <sup>e</sup>	
118 Guyana	11.9	6.7	11.8	13.65	3.41	34.6	56.9	1.5	-10.7	150	103.4	26.8
119 Botswana	1.8	1.1	4.6	0.67	0.68	45.8	3.2	5.8	1.9	2,145	..	26.3
120 Honduras	5.9	3.9	5.8	17.27	0.08	15.9	7.5	0.3	-2.8	896	96.0	139.9
121 Indonesia	2.1	0.2	1.7	0.98	0.40	12.6	1.1	0.1	-1.1	7,003	..	..
121 Kiribati	2.4	10.5	..	..	..	..	6.5	2.0	..	5 <sup>f</sup>	..	..
121 South Africa	1.4	0.3	1.6	0.31	0.38	10.4	1.7	3.7	2.9	8,074	..	..
124 Vanuatu	5.6	16.2	7.1	0.93	0.38	21.2	1.6	0.3	0.0	97	..	..
125 Kyrgyzstan	6.6	8.5	3.9	26.60	6.19	28.8	11.2	4.0	-5.1	1,316	23.6	50.0
125 Tajikistan	0.3	7.8	0.4	39.96	15.17	4.4	11.2	4.0	-8.9	325	..	..
127 Viet Nam	7.5	2.9	6.4	7.76	..	10.9	2.5	0.1	-1.0	3,747	..	..
128 Namibia	7.1	2.4	4.5	0.13	0.14	14.5	0.7	6.3	-0.1	984	..	..
129 Nicaragua	13.3	9.8	13.3	12.48	..	25.9	12.5	0.7	-7.1	1,011	..	..
130 Morocco	2.5	1.1	2.0	7.07	0.07	19.5	9.3	0.2	-4.3	9,288	114.1	14.5
131 Iraq	1.8	2.8	-1.1	0.09	0.04	52.6	4.9	0.3	-1.0	1,518	..	..
132 Cape Verde	6.7	20.7	4.8	8.36	0.71	17.8	37.6	2.4	-7.1	382	110.4	28.5
133 Guatemala	2.2	1.0	1.5	10.23	0.05	12.4	6.1	0.4	-3.0	1,876	119.6	50.0
134 Timor-Leste	32.0	9.2	..	..	..	43.8	1.4	1.2	-9.4	40	6.9	11.4
135 Ghana	7.9	5.3	9.8	0.42	..	14.0	3.4	7.6	-0.4	803	45.3	24.5
136 Equatorial Guinea	4.8	0.9	..	..	..	15.4	14.9	1.1	6.1	..	..	..
136 India	1.4	0.2	3.0	3.21	0.23	14.7	0.9	0.4	-0.5	5,776	20.1	7.5
138 Cambodia	7.0	6.9	6.5	3.29	1.91	26.8	2.3	2.2	-3.7	2,399	..	..
138 Lao People's Democratic Republic	3.9	6.2	4.6	0.57	0.11	9.8	5.7	0.3	-2.5	1,670	..	..
140 Bhutan	1.3	9.2	..	0.32	5.41	46.8	6.3	5.7	4.9	27	..	..
141 Swaziland	3.7	2.6	5.0	2.95	0.30	15.1	13.4	3.4	-1.0	868	38.2	3.7
<b>LOW HUMAN DEVELOPMENT</b>												
142 Congo	23.5	14.5	..	0.12	0.85	38.3	5.6	3.8	2.6	85	..	..
143 Solomon Islands	35.1	61.4	34.3	0.43	0.65	49.2	1.0	1.3	0.0	21	..	..
144 Sao Tome and Principe	12.3	24.2	12.2	0.99	0.27	20.7	21.9	3.2	-8.2	8	40.7	14.6
145 Kenya	0.6	5.1	0.8	5.52	0.19	12.7	1.1	2.0	-1.0	1,469	16.5	7.6
146 Bangladesh	0.7	1.3	0.8	10.81	0.01	7.7	3.3	0.7	-4.0	267	..	..
146 Pakistan	1.1	1.6	0.6	5.48	0.01	6.9	2.5	2.3	-2.4	855	24.8	13.1
148 Angola	-3.9	0.3	-5.9	0.10 <sup>h</sup>	0.87	28.5	2.8	0.3	0.9	425	..	..
149 Myanmar	..	..	..	..	..	..	1.0	0.2	-2.1	311	2.9	0.2
150 Cameroon	0.0	2.4	0.5	0.87	0.24	12.6	1.4	1.0	-0.2	298	23.2	5.4
151 Madagascar	9.9	5.4	..	..	..	12.9	0.4	0.2	-0.1	196	5.5	2.1
152 Tanzania, United Republic of	1.9	13.0	4.6	0.11	0.55	15.7	0.7	1.5	-1.4	783	3.8	3.2
153 Nigeria	3.1	1.2	4.9	5.10	0.02	14.9	0.6	0.7	-0.4	1,414	18.7	11.8
154 Senegal	1.8	7.3	3.1	10.47	1.12	13.6	5.0	1.6	-2.3	875	86.5	26.9
155 Mauritania	0.4	10.6	..	..	..	11.9	3.5	2.9	0.6	..	39.9	15.8
156 Papua New Guinea	0.3	5.5	-0.8	0.16	3.41	32.9	0.9	0.4	0.0	114 <sup>h</sup>	..	..
157 Nepal	0.5	5.1	0.5	21.66	0.20	19.2	3.3	3.2	-0.7	603	12.9	..
158 Lesotho	5.4	9.5	5.5	34.23	0.88	..	20.5	0.3	-1.9	414	..	..
159 Togo	1.3	13.3	-0.6	10.49	2.27	21.5	5.4	2.7	-0.2	150	34.9	10.2
160 Yemen	0.2	2.3	-1.8	3.99	1.09	13.2	4.7	2.1	-1.2	536	76.6	4.6
161 Haiti	2.3	45.5	2.3	22.59	2.03	16.3	9.9	0.3	-5.0	423	..	..
161 Uganda	4.7	10.2	6.3	5.32	3.50	15.6	2.2	1.9	-0.9	946	..	4.9
163 Zambia	10.3	6.4	4.6	0.27	0.42	12.1	1.4	1.8	-1.4	815	..	..
164 Djibouti	9.2	14.9 <sup>e</sup>	9.2	3.09 <sup>e</sup>	..	..	1.5	13.0	0.0	53	41.1	209.2
165 Gambia	3.2	11.9	3.2	11.02	5.53	20.1	3.7	16.6	-1.7	91 <sup>h</sup>	..	..
166 Benin	1.7	10.5	1.1	3.78	1.34	12.2	5.8	2.5	1.2	199 <sup>h</sup>	40.8	23.9
167 Rwanda	0.8	18.5	1.1	1.63	1.27	16.5	2.6	4.5	0.3	666	9.2	3.0
168 Côte d'Ivoire	1.8	3.9	1.4	0.78	3.29	17.9	5.4	11.2	-3.8	..	..	..
169 Comoros	1.7	12.5	..	..	..	25.4	5.6	2.0	-2.9	15	..	..
170 Malawi	2.8	20.8	1.4	..	..	3.5	1.4	1.8	-0.3	746	..	0.9
171 Sudan	3.1	3.4	3.1	2.95	0.00	0.3	2.2	1.7	0.7	420	10.4	16.0
172 Zimbabwe	1.4	10.1	..	..	..	..	9.9	2.9	-14.3	2,239	16.0	21.8
173 Ethiopia	1.0	11.9	2.0	0.76	0.09	..	0.7	0.6	-0.8	330	5.7	0.4
174 Liberia	45.8	175.5	45.8	2.71	0.10	..	10.5	2.3	16.7	..	24.5	28.0
175 Afghanistan	0.4	42.4	..	..	..	25.9	8.1	0.3	-2.6	..	4.9	2.5
176 Guinea-Bissau	1.1	16.7	1.4	5.76	2.03	22.6	6.8	1.2	-1.4	30	..	..

HDI rank	FINANCIAL FLOWS					HUMAN MOBILITY						
	Foreign direct investment, net inflows	Net official development assistance received <sup>a</sup>	Private capital flows	Remittances (% of GDP)		Total reserves minus gold	Migration			International inbound tourism	International telephone traffic (minutes per person)	
				Inflows	Outflows		Stock of emigrants <sup>b</sup>	Stock of immigrants	Net migration rate		Incoming	Outgoing
	(% of GDP)	(% of GNI)	(% of GDP)			(% of GDP)	(% of population)	(per 1,000 people)	(thousands)	2005–2010 <sup>c</sup>	2005–2010 <sup>c</sup>	
2007–2011 <sup>c</sup>	2010	2007–2011 <sup>c</sup>	2010	2010	2007–2011 <sup>c</sup>	2010	2010	2005/2010 <sup>d</sup>	2010	2005–2010 <sup>e</sup>	2005–2010 <sup>e</sup>	
177 Sierra Leone	4.5	24.4	36.9	3.01	0.31	19.6	4.6	1.8	2.2	39	..	..
178 Burundi	0.0	31.0	0.1	1.39	0.06	12.6	4.2	0.7	9.5	201	..	..
178 Guinea	2.1	5.1	22.7	1.28	0.92	..	5.2	3.8	-6.3	30 <sup>f</sup>	..	..
180 Central African Republic	3.6	13.2	..	..	..	7.1	2.9	1.8	0.2	52	5.5	6.6
181 Eritrea	2.6	7.7	..	..	..	4.4	18.0	0.3	2.3	84	22.9	1.7
182 Mali	1.6	12.1	-0.6	4.63	1.77	13.0	7.6	1.2	-1.4	169	8.8	14.1
183 Burkina Faso	0.4	12.0	0.4	1.08	1.13	9.4	9.7	6.4	-1.6	274	..	..
184 Chad	9.1	6.2	..	..	..	10.0	2.1	3.4	-1.4	31	..	..
185 Mozambique	8.6	21.4	16.1	1.43	0.87	19.3	5.0	1.9	-0.2	2,224	5.9	2.6
186 Congo, Democratic Republic of the	22.4	29.0	..	..	..	8.1	1.3	0.7	-0.1	53	3.9	3.1
186 Niger	17.5	13.8	13.4	1.63	0.41	11.2	2.4	1.3	-0.4	66	..	..
<b>OTHER COUNTRIES OR TERRITORIES</b>												
Korea, Democratic People's Rep. of	..	..	..	..	..	..	1.3	0.2	0.0	..	..	..
Marshall Islands	5.3	45.9	..	..	..	..	16.6	2.7	..	5	..	..
Monaco	..	..	..	..	..	..	56.3	71.6	..	279	..	..
Nauru	..	..	..	..	..	..	..	..	..	..	..	..
San Marino	..	..	..	..	..	1.2	9.9	37.0	..	120	..	..
Somalia	..	..	..	..	..	20.7	8.7	0.2	-6.8	..	..	..
South Sudan	..	..	..	..	..	..	..	..	..	..	..	..
Tuvalu	4.8	26.2	..	..	..	..	..	..	..	2	..	..
<b>Human Development Index groups</b>												
Very high human development	2.7	..	0.9	0.31	0.50	7.8	3.6	11.3	4.0	534,968	..	189.8
High human development	2.7	0.2	2.2	0.99	1.25	23.2	6.7	4.5	-0.3	199,071	62.5	24.9
Medium human development	2.8	0.2	2.8	1.81	0.13	33.8	1.6	0.7	-0.6	163,618	..	..
Low human development	2.3	5.5	1.9	4.91	0.46	13.6	2.8	1.6	-1.5	19,020	..	..
<b>Regions</b>												
Arab States	2.4	..	0.5	2.29	3.76	43.7	5.4	8.0	3.3	76,540	..	..
East Asia and the Pacific	3.1	0.1	..	..	..	40.3	1.1	0.3	-0.5	116,484	..	..
Europe and Central Asia	3.4	..	1.8	1.22	0.81	19.4	10.3	6.5	-0.1	149,901	90.3	49.2
Latin America and the Caribbean	2.7	0.2	3.7	1.15	0.12	13.1	5.3	1.1	-1.8	66,379	101.7	23.9
South Asia	1.3	0.7	2.6	3.60	0.23	14.0	1.6	0.8	-1.1	11,008	19.5	..
Sub-Saharan Africa	2.7	3.8	2.8	1.99	0.52	15.0	2.5	2.1	-0.5	30,141	..	..
<b>Least developed countries</b>	2.4	8.3	1.5	5.09	..	14.8	3.3	1.4	-1.4	16,915	..	..
<b>Small island developing states</b>	2.7	3.4	5.0	6.13	1.05	16.7	12.5	1.8	-3.5	15,782	..	..
<b>World</b>	<b>2.7</b>	<b>0.0</b>	<b>1.4</b>	<b>0.76</b>	<b>0.53</b>	<b>14.7</b>	<b>2.9</b>	<b>3.1</b>	<b>0.0</b>	<b>917,082</b>	<b>..</b>	<b>..</b>

## NOTES

- a** A negative value refers to net official development assistance disbursed by donor countries.
- b** Some values may exceed 100% (see *Definitions*).
- c** Data refer to the most recent year available during the period specified.
- d** Data are average annual estimates for 2005–2010.
- e** Refers to 2009.
- f** Refers to 2007.
- g** Refers to 2006.
- h** Refers to 2008.

## DEFINITIONS

**Foreign direct investment, net inflows:** Sum of equity capital, reinvestment of earnings, other long-term capital and short-term capital, expressed as a percentage of GDP.

**Net official development assistance received:** Disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies to promote economic development and welfare in countries and territories in part I of the Development Assistance Committee list of aid recipients, expressed as a percentage of the recipient country's GNI.

**Private capital flows:** Net foreign direct investment and portfolio investment, expressed as a percentage of GDP.

**Remittances, inflows:** Earnings and material resources transferred by international migrants or refugees to recipients in their country of origin or countries where they formerly resided.

**Remittances, outflows:** Current transfers by migrant workers and wages and salaries earned by nonresident workers. Remittances are classified as current private transfers from migrant workers resident in the host country for more than a year, irrespective of their immigration status, to recipients in their country of origin. Migrants' transfers are defined as the net worth of migrants who are expected to remain in the host country for more than one year that is transferred from one country to another at the time of migration. Compensation of employees is the income of migrants who have lived in the host country for less than a year. Data are expressed as a share of GDP.

**Total reserves minus gold:** Sum of special drawing rights, reserves of International Monetary Fund (IMF) members held by the IMF and holdings of foreign exchange under the control of monetary authorities, excluding gold holdings, expressed as a percentage of GDP.

**Stock of emigrants:** Ratio of the stock of emigrants from a country to the population (not to the sum of population and emigrants), expressed as a percentage of the country's population. The definition of emigrant varies across countries but generally refers to residents that left the country with the intention to remain abroad for more than a year.

**Stock of immigrants:** Ratio of the stock of immigrants into a country, expressed as a percentage of the country's population. The definition of immigrant varies across countries but generally includes the stock of foreign-born people or the stock of foreign people (according to citizenship) or the combination of the two.

**Net migration rate:** Ratio of the difference between the number of in-migrants and out-migrants from a country during a specified period to the average population during the period, expressed per 1,000 people.

**International inbound tourism:** Arrivals of nonresident visitors (overnight visitors, tourists, same-day visitors, excursionists) at national borders.

**International telephone traffic, incoming:** Effective (completed) telephone calls (fixed and mobile) originating outside a given country with a

destination inside the country, expressed in minutes of traffic per person.

**International telephone traffic, outgoing:** Effective (completed) telephone calls (fixed and mobile) originating in a given country with a destination outside the country, expressed in minutes of traffic per person.

## MAIN DATA SOURCES

**Columns 1 and 3–6:** World Bank (2012a).

**Column 2:** World Bank (2012a) and OECD–DAC (2012).

**Column 7:** HDRO calculations based on data from World Bank (2011) and UNDESA (2011).

**Column 8:** HDRO calculations based on data from World Bank (2011) and population data from World Bank (2012a).

**Column 9:** UNDESA (2011).

**Column 10:** UN WTO (2012).

**Columns 11 and 12:** HDRO calculations based on incoming and outgoing total telephone traffic data from ITU (2012).

# TABLE 12 Innovation and technology

HDI rank	RESEARCH AND DEVELOPMENT			INNOVATION		TECHNOLOGY ADOPTION					
	Expenditure	Researchers	Graduates in science and engineering <sup>a</sup>	Patents granted to residents and nonresidents	Royalty and licence fees receipts	Electrification rate	Personal computers	Internet users	Fixed broadband Internet subscriptions	Fixed and mobile telephone subscribers	
	(% of GDP)	(per million people)	(% of total)	(per million people)	(\$ per capita)	(% of population)			(per 100 people)		
	2005–2010 <sup>b</sup>	2002–2010 <sup>b</sup>	2002–2011 <sup>b</sup>	2005–2010 <sup>b</sup>	2005–2011 <sup>b</sup>	2009	2002–2009 <sup>b</sup>	2010	2010	2010	
<b>VERY HIGH HUMAN DEVELOPMENT</b>											
1	Norway	1.8	5,503.7	15.3	334.0	101.9	99.7 <sup>c</sup>	62.9	93.3	35.3	149.3
2	Australia	2.3	4,258.5	18.1	653.7	32.7	99.7 <sup>c</sup>	60.3	75.9	24.2	139.7
3	United States	2.8	4,673.2	15.5	707.6	387.1	99.7 <sup>c</sup>	80.6	74.2	27.6	139.0
4	Netherlands	1.8	2,817.6	14.0	117.6	320.8	99.7 <sup>c</sup>	91.2	90.7	38.1	158.9
5	Germany	2.8	3,780.1	28.6	166.2	174.9	99.7 <sup>c</sup>	65.6	82.5	31.7	183.7
6	New Zealand	1.2	4,323.7	20.5	995.2	53.5	99.7 <sup>c</sup>	52.6	83.0	24.9	157.7
7	Ireland	1.8	3,372.5	21.6	54.4	574.2	99.7 <sup>c</sup>	58.2	69.8	21.1	151.5
7	Sweden	3.6	5,017.6	25.0	147.1	619.4	99.7 <sup>c</sup>	88.1	90.0	31.8	168.6
9	Switzerland	3.0	3,319.8	21.6	96.7	..	99.7 <sup>c</sup>	96.2	82.2	37.9	177.7
10	Japan	3.4	5,189.3	20.6	1,759.9	226.8	99.7 <sup>c</sup>	40.7	77.6	26.9	126.4
11	Canada	2.0	4,334.7	21.1	562.1	114.4	99.7 <sup>c</sup>	94.5	81.3	29.8	120.3
12	Korea, Republic of	3.4	4,946.9	31.5	1,428.8	86.8	99.7 <sup>c</sup>	57.6	82.5	35.7	162.3
13	Hong Kong, China (SAR)	0.8	2,759.5	34.7	758.9	56.6	99.7 <sup>c</sup>	69.3	71.8	29.9	256.9
13	Iceland	2.6	7,428.1	14.5	434.2	0.1	99.7 <sup>c</sup>	52.7	95.6	34.1	168.1
15	Denmark	3.0	6,390.3	19.6	27.9	..	99.7 <sup>c</sup>	54.9	88.8	37.7	172.2
16	Israel	4.3	..	..	502.0	137.3	99.7	24.2	65.4	25.1	172.5
17	Belgium	2.0	3,490.7	16.3	49.7	232.1	99.7 <sup>c</sup>	37.7	73.7	31.5	154.1
18	Austria	2.7	4,122.1	28.8	134.6	92.6	99.7 <sup>c</sup>	60.7	72.7	23.9	184.6
18	Singapore	2.7	5,834.0	..	873.3	367.7	100.0	74.3	71.1	24.9	184.8
20	France	2.2	3,689.8	26.2	157.7	240.0	99.7 <sup>c</sup>	63.1	77.5	34.0	151.8
21	Finland	3.8	7,647.4	29.4	172.1	556.5	99.7 <sup>c</sup>	50.0	86.9	28.6	179.7
21	Slovenia	1.9	3,678.8	18.2	123.2	42.7	99.7 <sup>c</sup>	42.5	69.3	24.2	148.0
23	Spain	1.4	2,931.8	25.3	60.2	23.0	99.7 <sup>c</sup>	39.3	65.8	22.9	155.9
24	Liechtenstein	..	..	19.8	..	..	99.7 <sup>c</sup>	..	80.0	63.8	152.9
25	Italy	1.3	1,690.0	20.5	303.4	59.8	99.7 <sup>c</sup>	36.7	53.7	21.9	185.3
26	Luxembourg	1.7	4,824.8	32.5	171.4	890.0	99.7 <sup>c</sup>	67.3	90.1	33.2	197.1
26	United Kingdom	1.8	3,794.2	21.7	90.2	226.3	99.7 <sup>c</sup>	80.2	84.7	31.6	184.0
28	Czech Republic	1.5	2,754.8	23.8	86.8	10.2	99.7 <sup>c</sup>	27.4	68.6	14.5	159.7
29	Greece	0.6	1,849.5	24.9	42.2	6.1	99.7 <sup>c</sup>	9.4	44.6	19.9	154.6
30	Brunei Darussalam	..	286.3	21.9	107.2	..	99.7 <sup>c</sup>	9.1	50.0	5.4	129.1
31	Cyprus	0.5	752.0	13.7	17.2	2.1	99.7 <sup>c</sup>	30.9	53.0	17.6	131.2
32	Malta	0.6	1,168.1	15.0	9.6	81.0	..	..	63.1	28.0	169.2
33	Andorra	..	..	..	..	..	99.7 <sup>c</sup>	..	81.0	28.9	122.2
33	Estonia	1.4	3,210.3	19.4	89.5	16.9	99.7 <sup>c</sup>	25.5	74.2	25.1	159.3
35	Slovakia	0.5	2,437.7	20.6	68.8	0.7	99.7 <sup>c</sup>	58.1	79.9	12.7	129.4
36	Qatar	..	..	24.0	..	..	98.7	16.0	81.6	8.2	149.4
37	Hungary	1.1	2,005.9	15.1	6.5	102.8	99.7 <sup>c</sup>	25.6	65.2	19.6	149.9
38	Barbados	..	..	8.7	..	12.6	99.7 <sup>c</sup>	14.8	70.0	20.6	177.9
39	Poland	0.7	1,597.5	15.7	78.5	7.1	99.7 <sup>c</sup>	16.9	62.5	13.0	143.0
40	Chile	0.4	354.8	20.4	59.6	3.7	98.5	14.1	45.0	10.5	136.2
41	Lithuania	0.8	2,541.1	21.0	25.3	0.2	99.7 <sup>c</sup>	24.2	62.8	20.6	171.1
41	United Arab Emirates	..	..	27.3	..	..	100.0	30.0	78.0	10.5	165.1
43	Portugal	1.7	4,307.8	33.8	13.1	5.7	99.7 <sup>c</sup>	18.2	51.3	19.2	185.0
44	Latvia	0.5	1,601.2	14.3	81.7	4.5	99.7 <sup>c</sup>	32.7	71.5	19.3	126.8
45	Argentina	0.5	1,045.5	14.3	30.6	4.7	97.2	9.0	36.0	9.6	166.5
46	Seychelles	0.3	155.7	..	..	21.6	99.7 <sup>c</sup>	21.2	40.8	7.3	160.5
47	Croatia	0.8	1,571.3	24.4	18.6	5.3	99.7 <sup>c</sup>	18.0	60.1	18.3	186.2
<b>HIGH HUMAN DEVELOPMENT</b>											
48	Bahrain	..	..	..	..	..	99.4	55.0	55.0	5.4	142.2
49	Bahamas	..	..	..	..	..	..	12.5	43.0	7.2	162.6
50	Belarus	0.6	..	26.6	127.4	2.1	..	..	32.1	17.4	152.5
51	Uruguay	0.7	346.1	13.6	8.6	0.1	98.3	13.6	47.9	10.9	160.8
52	Montenegro	1.1	..	..	418.1	..	..	..	52.0	8.3	211.9
52	Palau	..	..	..	..	..	..	..	..	1.2	105.0
54	Kuwait	0.1	151.9	..	..	..	100.0	26.5	38.3	1.7	181.5
55	Russian Federation	1.3	3,091.4	28.1	212.1	6.1	..	13.3	43.4	11.0	199.4
56	Romania	0.5	894.8	21.7	20.8	13.7	..	19.2	40.0	13.9	135.9
57	Bulgaria	0.5	1,586.7	18.8	33.5	2.5	..	11.0	46.0	14.5	164.9
57	Saudi Arabia	0.1	..	35.8	7.1	..	99.0	65.7	41.0	5.5	203.0

HDI rank	RESEARCH AND DEVELOPMENT			INNOVATION			TECHNOLOGY ADOPTION			
	Expenditure	Researchers	Graduates in science and engineering <sup>a</sup>	Patents granted to residents and nonresidents	Royalty and licence fees receipts	Electrification rate	Personal computers	Internet users	Fixed broadband Internet subscriptions	Fixed and mobile telephone subscribers
	(% of GDP)	(per million people)	(% of total)	(per million people)	(\$ per capita)	(% of population)			(per 100 people)	
	2005–2010 <sup>b</sup>	2002–2010 <sup>a</sup>	2002–2011 <sup>b</sup>	2005–2010 <sup>b</sup>	2005–2011 <sup>b</sup>	2009	2002–2009 <sup>b</sup>	2010	2010	2010
59 Cuba	0.5	..	3.3	12.4	..	97.0	5.6	15.9	0.0	19.2
59 Panama	0.2	111.3	19.2	107.5	..	88.1	6.3	42.7	7.8	200.4
61 Mexico	0.4	347.3	25.6	82.9	..	..	13.9	31.1	10.0	98.1
62 Costa Rica	0.4	257.4	11.9	9.7	0.9	99.3	23.2	36.5	6.2	96.9
63 Grenada	..	..	..	..	0.7	..	15.6	33.6	13.8	144.5
64 Libya	..	..	..	..	..	99.8	2.3	14.0	1.1	190.8
64 Malaysia	0.6	364.6	37.7	76.7	9.5	99.4	22.7	56.3	7.3	135.3
64 Serbia	0.9	1,060.1	23.7	43.3	7.8	..	17.6	43.1	11.2	178.7
67 Antigua and Barbuda	..	..	..	104.7	..	..	20.6	80.6	8.0	232.2
67 Trinidad and Tobago	0.0	..	30.4	67.6	..	99.0	13.2	48.5	10.8	163.1
69 Kazakhstan	0.2	..	..	10.9	0.0	..	..	33.4	8.9	143.7
70 Albania	0.2	146.8	6.1	108.9	4.1	..	4.6	45.0	3.3	152.3
71 Venezuela, Bolivarian Republic of	..	182.6	..	..	..	99.0	9.3	35.9	5.4	121.3
72 Dominica	..	..	..	..	0.2	..	18.8	47.3	13.9	178.0
72 Georgia	0.2	..	8.2	59.3	1.0	..	5.4	26.3	5.8	114.2
72 Lebanon	..	..	25.0	..	1.7	99.9	10.3	31.0	4.7	89.0
72 Saint Kitts and Nevis	..	..	..	..	..	..	22.7	76.6	27.9	191.9
76 Iran, Islamic Republic of	0.8	750.7	44.4	63.9	..	98.4	10.5	13.0	0.7	127.5
77 Peru	..	..	..	12.6	0.1	85.7	10.2	34.3	3.1	111.0
78 The former Yugoslav Republic of Macedonia	0.2	471.6	21.4	163.7	4.7	..	36.6	51.9	12.5	124.6
78 Ukraine	0.9	1,353.1	26.3	85.2	2.3	..	4.5	44.6	6.5	145.8
80 Mauritius	0.4	..	..	6.2	1.7	99.4	17.6	28.7	6.1	123.2
81 Bosnia and Herzegovina	0.0	197.2	..	46.0	3.4	..	6.4	52.0	8.2	109.3
82 Azerbaijan	0.3	..	16.6	22.9	0.0	..	8.0	46.7	5.0	117.1
83 Saint Vincent and the Grenadines	..	..	..	..	..	..	15.2	..	11.4	140.8
84 Oman	..	..	38.9	..	..	98.0	18.0	62.0	1.6	175.6
85 Brazil	1.1	695.7	12.2	16.7	3.0	98.3	16.1	40.7	6.8	125.7
85 Jamaica	..	..	..	15.9	1.8	92.0	6.8	26.5	4.3	127.5
87 Armenia	0.3	..	15.9	40.1	..	..	9.7	44.0	2.8	144.2
88 Saint Lucia	..	..	..	203.6	..	..	16.0	40.1	11.6	135.9
89 Ecuador	0.3	106.1	12.8	1.9	..	92.2	12.5	29.0	1.4	116.6
90 Turkey	0.8	803.9	20.9	9.0	..	..	6.4	39.8	9.7	107.2
91 Colombia	0.2	157.2	23.2	13.8	1.3	93.6	11.2	36.5	5.6	111.6
92 Sri Lanka	0.1	96.3	..	24.2	..	76.6	3.7	12.0	1.1	100.4
93 Algeria	0.1	170.1	28.0	6.3	0.1	99.3	1.1	12.5	2.5	100.7
94 Tunisia	1.1	1,862.5	..	..	2.4	99.5	9.7	36.6	4.6	117.6
<b>MEDIUM HUMAN DEVELOPMENT</b>										
95 Tonga	..	..	..	..	..	..	5.9	12.0	1.0	82.0
96 Belize	..	..	..	24.4	7.0	..	14.4	12.6	2.9	65.1
96 Dominican Republic	..	..	..	..	..	95.9	2.2	39.5	3.6	99.8
96 Fiji	..	..	..	..	0.6	..	6.1	14.8	2.7	96.3
96 Samoa	..	..	..	60.7	..	..	2.3	7.0	0.1	110.2
100 Jordan	0.4	..	25.1	10.3	..	99.9	7.6	38.9	3.2	117.5
101 China	1.5	1,198.9	..	100.7	0.6	99.4	5.7	34.4	9.4	86.2
102 Turkmenistan	..	..	..	..	..	..	7.3	2.2	0.0	73.7
103 Thailand	0.2	315.5	..	11.2	2.2	99.3	6.6	21.2	4.6	113.6
104 Maldives	..	..	..	..	26.5	..	20.0	28.3	4.8	171.6
105 Suriname	..	..	..	..	1.3	..	4.0	31.6	3.0	185.7
106 Gabon	0.6	..	..	..	..	36.7	3.4	7.2	0.3	109.0
107 El Salvador	0.1	..	26.4	..	0.0	86.4	5.8	15.9	2.8	140.5
108 Bolivia, Plurinational State of	..	120.3	..	..	0.7	77.5	2.4	20.0	1.0	80.8
108 Mongolia	0.2	..	17.1	34.8	0.8	67.0	25.8	12.9	2.6	98.1
110 Palestine, State of	..	144.3	16.5	..	1.4	..	5.5	36.4	..	..
111 Paraguay	0.1	74.8	..	..	45.2	96.7	7.8	19.8	0.4	97.3
112 Egypt	0.2	420.4	..	4.0	1.6	99.6	4.1	26.7	1.8	99.0
113 Moldova, Republic of	0.5	794.1	..	36.9	1.5	..	11.8	40.1	7.5	121.5
114 Philippines	0.1	78.5	23.8	3.8	0.1	89.7	7.2	25.0	1.8	92.9
114 Uzbekistan	..	..	21.1	7.0	..	..	3.1	19.4	0.3	80.8
116 Syrian Arab Republic	..	..	..	2.4	0.1	92.7	9.4	20.7	0.3	77.6
117 Micronesia, Federated States of	..	..	..	..	..	..	5.5	20.0	0.9	32.4

**TABLE 12 INNOVATION AND TECHNOLOGY**

HDI rank	RESEARCH AND DEVELOPMENT			INNOVATION		TECHNOLOGY ADOPTION					
	Expenditure	Researchers	Graduates in science and engineering <sup>a</sup>	Patents granted to residents and nonresidents	Royalty and licence fees receipts	Electrification rate	Personal computers	Internet users	Fixed broadband Internet subscriptions	Fixed and mobile telephone subscribers	
	(% of GDP)	(per million people)	(% of total)	(per million people)	(\$ per capita)	(% of population)			(per 100 people)		
	2005–2010 <sup>b</sup>	2002–2010 <sup>b</sup>	2002–2011 <sup>b</sup>	2005–2010 <sup>b</sup>	2005–2011 <sup>b</sup>	2009	2002–2009 <sup>b</sup>	2010	2010	2010	
118	Guyana	..	..	14.4	..	62.2	..	3.6	29.9	1.5	93.4
119	Botswana	0.5	..	13.0	..	0.1	45.4	6.1	6.0	0.6	124.6
120	Honduras	..	..	6.8	..	..	70.3	2.5	11.1	1.0	133.9
121	Indonesia	0.1	89.6	22.8	..	0.3	64.5	2.0	9.9	0.8	107.5
121	Kiribati	..	..	..	..	..	..	1.1	9.0	0.9	14.1
121	South Africa	0.9	395.6	..	106.3	1.3	75.0	8.4	12.3	1.5	109.2
124	Vanuatu	..	..	..	..	0.7	..	1.4	8.0	0.2	121.0
125	Kyrgyzstan	0.2	..	15.2	20.4	0.3	..	1.9	19.6	0.3	105.8
125	Tajikistan	0.1	..	26.0	0.4	0.1	..	1.3	11.5	0.1	91.7
127	Viet Nam	..	115.9	..	9.4	..	97.6	9.7	27.9	4.1	196.0
128	Namibia	..	..	2.6	..	0.0	34.0	23.2	6.5	0.4	73.9
129	Nicaragua	..	..	..	..	..	72.1	4.1	10.0	0.8	69.6
130	Morocco	0.6	661.0	34.9	25.3	0.2	97.0	5.7	49.0	1.6	111.8
131	Iraq	..	49.5	29.4	..	43.5	86.0	0.8	2.5	0.0	79.9
132	Cape Verde	..	132.5	..	..	0.0	..	14.3	30.0	3.2	89.5
133	Guatemala	0.1	39.4	16.8	7.2	1.0	80.5	2.1	10.5	1.8	136.0
134	Timor-Leste	..	..	..	..	..	22.0	..	0.2	0.0	53.7
135	Ghana	0.2	17.3	16.7	..	..	60.5	1.1	9.5	0.2	72.6
136	Equatorial Guinea	..	..	..	..	..	..	1.5	6.0	0.2	59.0
136	India	0.8	135.8	..	5.1	0.1	75.0	3.2	7.5	0.9	64.3
138	Cambodia	..	17.4	12.5	..	0.0	24.0	0.4	1.3	0.3	60.2
138	Lao People's Democratic Republic	..	15.8	12.8	..	..	55.0	1.7	7.0	0.2	66.2
140	Bhutan	..	..	..	..	..	..	1.9	13.6	1.2	57.9
141	Swaziland	..	..	2.7	..	0.2	..	4.1	9.0	0.1	73.6
<b>LOW HUMAN DEVELOPMENT</b>											
142	Congo	..	..	..	..	..	37.1	0.5	5.0	0.0	94.2
143	Solomon Islands	..	..	..	..	0.0	..	4.7	5.0	0.4	7.1
144	Sao Tome and Principe	..	..	..	..	..	..	3.9	18.8	0.4	66.8
145	Kenya	0.4	56.2	..	0.5	1.3	16.1	1.4	25.9	0.0	62.6
146	Bangladesh	..	..	10.6	0.6	0.0	41.0	2.5	3.7	0.0	46.8
146	Pakistan	0.5	161.9	..	1.0	0.0	62.4	0.5	16.8	0.3	59.1
148	Angola	..	..	11.9	..	0.7	26.2	0.7	10.0	0.1	48.3
149	Myanmar	..	18.4	..	..	..	13.0	1.0	..	0.0	2.5
150	Cameroon	..	..	21.0	..	0.0	48.7	1.1	4.0	0.0	46.8
151	Madagascar	0.1	46.2	18.2	2.7	0.1	19.0	0.6	1.7	0.0	37.9
152	Tanzania, United Republic of	0.4	..	21.1	..	0.0	13.9	0.9	11.0	0.0	47.2
153	Nigeria	0.2	38.6	..	..	..	50.6	0.9	28.4	0.1	55.8
154	Senegal	0.4	384.1	..	..	0.1	42.0	2.3	16.0	0.6	69.9
155	Mauritania	..	..	..	..	..	..	4.4	3.0	0.2	81.4
156	Papua New Guinea	..	..	..	0.2	..	..	6.4	1.3	0.1	29.6
157	Nepal	..	58.7	23.2	0.0	..	43.6	0.5	7.9	0.2	33.5
158	Lesotho	0.0	21.3	..	..	..	16.0	0.2	3.9	0.0	47.3
159	Togo	..	38.2	..	..	0.0	20.0	3.4	5.4	0.1	44.2
160	Yemen	..	..	..	..	1.4	39.6	2.8	12.3	0.3	50.4
161	Haiti	..	..	..	..	..	38.5	5.2	8.4	..	40.5
161	Uganda	0.4	..	9.5	..	0.8	9.0	1.7	12.5	0.2	39.4
163	Zambia	0.3	43.3	..	..	..	18.8	1.1	10.1	0.1	42.8
164	Djibouti	..	..	46.5	..	..	..	4.2	6.5	0.9	20.7
165	Gambia	0.0	..	..	4.4	..	..	3.6	9.2	0.0	88.3
166	Benin	..	..	..	..	0.0	24.8	0.7	3.1	0.0	81.5
167	Rwanda	..	11.9	..	2.1	0.0	..	0.3	13.0	0.0	33.8
168	Côte d'Ivoire	..	70.4	..	..	0.0	47.3	1.8	2.6	0.0	77.6
169	Comoros	..	..	12.0	..	..	..	0.8	5.1	0.0	25.3
170	Malawi	..	29.9	..	..	..	9.0	0.2	2.3	0.0	21.5
171	Sudan	0.3	..	..	4.4	0.1	35.9	10.8	..	0.4	41.4
172	Zimbabwe	..	..	24.8	..	..	41.5	7.6	11.5	0.3	64.3
173	Ethiopia	0.2	20.8	20.9	0.2	0.0	17.0	0.7	0.7	0.0	9.4
174	Liberia	..	..	..	..	..	..	..	7.0	0.0	39.5
175	Afghanistan	..	..	..	..	..	15.5	0.3	3.7	0.0	38.2
176	Guinea-Bissau	..	..	..	..	..	..	0.2	2.5	..	39.5
177	Sierra Leone	..	..	..	..	0.2	..	..	..	..	34.3

HDI rank	RESEARCH AND DEVELOPMENT			INNOVATION			TECHNOLOGY ADOPTION			
	Expenditure	Researchers	Graduates in science and engineering <sup>a</sup>	Patents granted to residents and nonresidents	Royalty and licence fees receipts	Electrification rate	Personal computers	Internet users	Fixed broadband Internet subscriptions	Fixed and mobile telephone subscribers
	(% of GDP)	(per million people)	(% of total)	(per million people)	(\$ per capita)	(% of population)			(per 100 people)	
	2005–2010 <sup>b</sup>	2002–2010 <sup>b</sup>	2002–2011 <sup>b</sup>	2005–2010 <sup>b</sup>	2005–2011 <sup>b</sup>	2009	2002–2009 <sup>b</sup>	2010	2010	2010
178 Burundi	..	..	9.6	..	0.0	..	0.9	2.1	0.0	14.1
178 Guinea	..	..	..	..	0.0	..	0.5	1.0	0.0	40.3
180 Central African Republic	..	..	..	..	..	..	0.3	2.3	..	22.4
181 Eritrea	..	..	7.9	..	..	32.0	1.0	5.4	0.0	4.6
182 Mali	0.2	37.7	..	..	0.0	..	0.7	2.7	0.0	49.2
183 Burkina Faso	0.2	45.1	23.3	..	0.0	14.6	0.6	1.4	0.1	35.5
184 Chad	..	..	..	..	..	..	0.2	1.7	0.0	24.3
185 Mozambique	0.2	15.8	12.1	1.8	0.0	11.7	1.4	4.2	0.1	31.3
186 Congo, Democratic Republic of the	0.5	..	..	..	..	11.1	0.0	0.7	0.0	18.0
186 Niger	..	7.8	..	..	0.0	..	0.1	0.8	0.0	25.1
<b>OTHER COUNTRIES OR TERRITORIES</b>										
Korea, Democratic People's Rep. of	..	..	..	258.4	..	26.0	..	..	..	6.6
Marshall Islands	..	..	..	..	..	..	9.6	..	..	15.2
Monaco	0.0	308.1	..	141.2	..	..	..	..	..	..
Nauru	..	..	..	..	..	..	..	..	3.9	..
San Marino	..	..	..	..	..	..	78.9	..	32.0	144.9
Somalia	..	..	..	..	..	..	0.9	..	..	8.0
South Sudan	..	..	..	..	..	..	..	..	..	..
Tuvalu	..	..	..	..	..	..	8.7	25.0	3.3	41.9
<b>Human Development Index groups</b>										
Very high human development	2.5	3,854.0	20.3	566.2	210.9	99.6	58.3	72.8	26.5	153.2
High human development	0.8	..	..	63.4	..	..	13.6	35.8	7.1	133.5
Medium human development	..	..	..	..	..	..	4.6	20.8	4.4	84.5
Low human development	..	..	..	..	..	..	1.5	10.7	0.1	42.7
<b>Regions</b>										
Arab States	..	..	..	..	..	86.7	10.8	27.2	2.0	99.6
East Asia and the Pacific	..	..	..	..	..	..	5.6	29.8	7.2	92.2
Europe and Central Asia	1.0	1,948.2	23.9	93.8	8.2	..	12.3	43.4	10.0	150.0
Latin America and the Caribbean	..	..	..	..	..	93.4	12.2	34.1	6.6	116.7
South Asia	..	..	..	7.0	..	70.1	3.0	8.4	0.7	64.4
Sub-Saharan Africa	..	..	..	..	..	..	1.6	11.3	0.2	47.1
<b>Least developed countries</b>										
Small island developing states	..	..	..	..	..	..	1.7	4.8	0.1	34.5
World	..	..	..	..	..	..	14.1	30.0	7.7	95.2

#### NOTES

- a Includes graduates in manufacturing and construction.
- b Data refer to the most recent year available during the period specified.
- c In the absence of data on electrification rate, 99.7% is assumed.

#### DEFINITIONS

**Research and development expenditure:** Current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge and the use of knowledge for new applications. It covers basic research, applied research and experimental development.

**Researchers in research and development:** Professionals engaged in the conception or creation of new knowledge, products, processes, methods or systems and in the management of the projects

concerned. Postgraduate doctoral students (ISCED97 level 6) engaged in research and development are included.

**Graduates in science and engineering:** People who have successfully completed the final year of a level or sublevel of education in science and engineering.

**Patents granted to residents and nonresidents:** Number of exclusive rights granted for an invention, which is a product or a process that provides a new way of doing something or offers a new technical solution to a problem, expressed per 1 million people.

**Royalty and licence fee receipts:** Payments and receipts between residents and nonresidents for the authorized use of intangible, nonproduced, nonfinancial assets and proprietary rights (such as patents, copyrights, trademarks, industrial processes and franchises) and for the use, through licensing agreements, of produced originals of prototypes (such as films and manuscripts).

**Electrification rate:** Number of people with access to electricity, expressed as a percentage of total population. It includes electricity sold commercially (both on-grid and off-grid) and self-generated electricity but not unauthorized connections.

**Personal computers:** Number of self-contained computers designed for use by a single individual, expressed per 100 people.

**Internet users:** People with access to the worldwide network, expressed per 100 people.

**Fixed broadband Internet subscriptions:** Broadband high-speed access to the public Internet (a TCP/IP connection), at speeds equal to or greater than 256 kilobits per second, in one or both directions, expressed per 100 people

**Fixed and mobile telephone subscribers:** Sum of telephone lines and mobile subscribers, expressed per 100 people.

#### MAIN DATA SOURCES

**Columns 1 and 2:** World Bank (2012a).

**Column 3:** UNESCO Institute for Statistics (2012).

**Column 4:** HDRO calculation based on data from WIPO (2012) and population data from UNDESA (2011).

**Column 5:** HDRO calculations based on data on royalty and licence fee receipts from World Bank (2012b).

**Column 6:** IEA (2012).

**Column 7:** World Bank (2012c).

**Columns 8 and 9:** ITU (2012).

**Column 10:** HDRO calculations based on data on cellular subscribers and telephone lines from ITU (2012) and population data from UNDESA (2011).

# TABLE 13 Environment

HDI rank	PRIMARY ENERGY SUPPLY		EMISSIONS				NATURAL RESOURCES					IMPACTS			
	Fossil fuels	Renewables	Carbon dioxide		Greenhouse gas	Natural resource depletion	Forest area	Fresh water withdrawals	Endangered species	Agricultural land	Number of deaths due to natural disasters	Population living on degraded land			
			Total	Per capita	Per capita										
	(% of total)	(% of total)	(megatonnes)	(tonnes)	(average annual % growth)	(tonnes of carbon dioxide equivalent)	(% of GNI)	(% of land area)	(% change)	(% of total renewable water resources)	(% of all species)	(% of land area)	(annual average per million people)	(%)	
2009	2009	2008	2008	1970/2008	2005	2010	2010	1990/2010	2003–2012*	2011	2009	2005/2011	2010		
<b>VERY HIGH HUMAN DEVELOPMENT</b>															
1	Norway	58.8	43.3	50	10.5	1.0	5.8	10.2	33.1	10.2	0.8	6.9	3.3	0	..
2	Australia	94.4	5.6	399	18.6	1.2	9.6	6.5	19.4	-3.4	4.6	18.5	53.2	3	9.0
3	United States	84.1	5.4	5,461	18.0	-0.4	3.7	0.9	33.2	2.6	15.6	19.9	44.1	1	1.0
4	Netherlands	93.1	4.0	174	10.6	-0.1	2.4	0.8	10.8	5.8	11.7	5.4	56.8	12	5.0
5	Germany	79.5	8.7	787	9.6	..	1.9	0.1	31.8	3.1	21.0	10.5	48.4	12	8.0
6	New Zealand	63.7	36.1	33	7.8	1.1	10.0	..	30.9	7.1	1.5	20.4	43.6	0	5.0
7	Ireland	95.0	4.5	44	9.9	1.1	5.8	0.2	10.7	58.9	1.5	7.3	60.8	0	..
7	Sweden	32.7	34.8	49	5.3	-2.0	2.1	0.4	68.7	3.4	1.5	4.9	7.5	0	..
9	Switzerland	53.3	17.7	40	5.3	-0.6	1.2	0.0	31.0	7.7	4.9	6.6	38.1	14	..
10	Japan	81.0	3.3	1,208	9.5	0.7	1.0	0.0	68.5	0.1	20.9	13.7	12.6	1	..
11	Canada	74.9	16.9	544	16.3	0.1	4.7	2.3	34.1	0.0	1.6	7.2	7.4	0	3.0
12	Korea, Republic of	..	..	509	10.5	4.9	1.2	0.0	63.0	-2.3	36.5	9.5	19.1	1	3.0
13	Hong Kong, China (SAR)	95.1	0.4	39	5.5	2.6	0.5	0.0	..	..	..	8.3	..	0	..
13	Iceland	15.7	84.2	2	7.0	0.1	3.3	0.0	0.3	243.7	0.1	8.4	22.8	..	..
15	Denmark	80.4	17.4	46	8.4	-1.1	2.9	1.7	12.8	22.3	10.8	6.3	62.1	0	9.0
16	Israel	96.5	5.0	38	5.2	-0.2	1.1	0.2	7.1	16.7	101.9	11.2	24.1	1	13.0
17	Belgium	73.6	3.9	105	9.8	-0.7	1.8	0.0	22.4	0.1	34.0	5.5	45.0	20	10.0
18	Austria	70.2	27.8	68	8.1	0.5	1.9	0.2	47.1	2.9	4.7	11.6	38.4	4	3.0
18	Singapore	99.8	0.1	32	6.7	-0.7	1.4	0.0	3.3	0.0	31.7	13.7	1.0	..	..
20	France	51.0	7.7	377	5.9	-1.0	2.3	0.0	29.0	9.8	15.0	12.8	53.4	33	4.0
21	Finland	54.0	23.8	57	10.6	0.5	3.4	0.1	72.9	1.2	1.5	4.4	7.6	0	..
21	Slovenia	69.3	12.7	17	8.5	..	2.6	0.3	62.2	5.5	3.0	11.8	23.2	15	8.0
23	Spain	79.9	9.6	329	7.2	2.0	1.7	0.0	36.4	31.5	29.0	17.7	55.5	33	1.0
24	Liechtenstein	..	..	..	..	..	..	..	43.1	6.2	..	1.1	40.6	..	..
25	Italy	87.5	9.7	445	7.4	0.8	1.4	0.1	31.1	20.5	23.7	13.5	47.3	33	2.0
26	Luxembourg	88.8	3.1	11	21.5	-1.7	3.5	0.0	33.5	1.1	1.9	2.8	50.6	33	..
26	United Kingdom	87.3	3.2	523	8.5	-0.8	1.8	1.3	11.9	10.3	8.8	10.1	71.6	1	3.0
28	Czech Republic	79.6	5.8	117	11.2	..	2.1	0.5	34.4	1.1	14.8	5.0	54.9	5	4.0
29	Greece	92.4	6.4	98	8.7	3.1	1.4	0.3	30.3	18.3	12.7	16.3	63.6	1	1.0
30	Brunei Darussalam	100.0	0.0	11	27.5	-2.3	17.9	..	72.1	-8.0	1.1	8.4	2.2	..	..
31	Cyprus	95.7	3.9	9	7.9	2.8	1.3	0.0	18.7	7.5	19.3	7.7	13.5	0	11.0
32	Malta	99.9	0.1	3	6.2	2.8	0.9	..	1.1	0.0	71.3	6.8	29.1	..	..
33	Andorra	..	..	1	6.5	..	..	..	35.6	0.0	..	3.7	38.3	..	..
33	Estonia	84.8	15.1	18	13.6	..	2.3	1.6	52.3	6.1	14.0	3.5	22.0	0	5.0
35	Slovakia	69.5	7.3	38	6.9	..	1.4	0.4	40.2	0.6	1.4	5.2	40.1	2	9.0
36	Qatar	100.0	0.0	68	49.1	-0.9	18.0	..	0.0	0.0	455.2	7.3	5.6	..	..
37	Hungary	74.2	7.4	55	5.4	-0.6	1.6	0.5	22.6	12.7	5.4	8.0	63.9	7	17.0
38	Barbados	..	..	1	5.0	2.7	..	..	19.4	0.0	76.1	8.7	44.2	0	..
39	Poland	92.8	6.7	316	8.3	-0.3	2.7	1.4	30.5	5.1	19.4	5.7	53.0	3	13.0
40	Chile	74.5	25.1	73	4.4	1.4	1.6	12.4	21.7	6.3	1.2	9.9	21.2	1	1.0
41	Lithuania	55.8	10.4	15	4.5	..	2.5	0.6	34.5	11.1	9.6	4.1	42.9	1	5.0
41	United Arab Emirates	100.0	0.0	155	25.0	-2.5	6.2	..	3.8	29.5	2,032.0	7.7	6.8	..	2.0
43	Portugal	78.0	19.7	56	5.3	2.9	1.8	0.1	38.1	3.9	12.3	17.0	40.3	26	2.0
44	Latvia	59.5	37.1	8	3.3	..	2.3	0.5	53.8	5.7	1.2	4.6	29.5	4	2.0
45	Argentina	89.4	7.0	192	4.8	0.9	3.9	4.9	10.7	-15.5	4.0	9.0	51.3	0	2.0
46	Seychelles	..	..	1	7.8	7.3	..	0.0	88.5	0.0	..	16.1	6.5	0	..
47	Croatia	83.4	10.9	23	5.3	..	1.5	0.9	34.3	3.8	0.6	14.3	23.2	18	18.0
<b>HIGH HUMAN DEVELOPMENT</b>															
48	Bahrain	99.9	0.0	22	21.4	1.5	4.3	..	0.7	143.5	219.8	7.2	10.3	..	..
49	Bahamas	..	..	2	6.5	-2.2	..	..	51.5	0.0	..	10.0	1.4	3	..
50	Belarus	92.5	5.0	63	6.5	..	2.4	1.0	41.6	10.9	7.5	4.2	44.0	0	5.0
51	Uruguay	60.3	37.1	8	2.5	0.5	8.1	0.6	10.0	89.6	2.6	10.8	84.6	1	6.0
52	Montenegro	..	..	2	3.1	..	..	..	40.4	0.0	..	10.5	38.2	0	8.0
52	Palau	..	..	0	10.5	-0.3	..	..	87.6	5.6	..	11.4	10.9	..	..
54	Kuwait	100.0	0.0	77	30.1	-0.3	6.3	..	0.4	81.2	2,465.0	7.4	8.5	..	1.0
55	Russian Federation	90.2	2.8	1,709	12.0	..	4.9	14.3	49.4	0.0	1.5	10.2	13.2	40	3.0
56	Romania	76.3	15.3	95	4.4	-0.8	1.7	1.6	28.6	3.2	3.2	9.4	58.8	3	13.0
57	Bulgaria	73.1	6.2	51	6.6	-0.2	2.0	2.0	36.1	18.0	28.7	9.3	46.3	1	8.0

HDI rank	PRIMARY ENERGY SUPPLY		EMISSIONS					NATURAL RESOURCES					IMPACTS	
	Fossil fuels	Renewables	Carbon dioxide		Greenhouse gas	Natural resource depletion	Forest area	Fresh water withdrawals	Endangered species	Agricultural land	Number of deaths due to natural disasters	Population living on degraded land		
			Total	Per capita									Per capita	
	(% of total)	(megatonnes)	(tonnes)	(average annual % growth)	(tonnes of carbon dioxide equivalent)	(% of GNI)	(% of land area)	(% change)	(% of total renewable water resources)	(% of all species)	(% of land area)	(annual average per million people)	(%)	
2009	2009	2008	2008	1970/2008	2005	2010	2010	1990/2010	2003–2012 <sup>a</sup>	2011	2009	2005/2011	2010	
57 Saudi Arabia	100.0	0.0	434	16.6	2.0	2.5	..	0.5	0.0	943.3	8.8	80.7	1	4.0
59 Cuba	84.1	15.9	31	2.8	0.7	1.4	..	26.1	39.5	19.8	18.1	62.5	0	17.0
59 Panama	78.6	21.5	7	2.0	0.9	1.4	0.0	43.7	-14.3	0.3	7.2	30.0	2	4.0
61 Mexico	88.9	9.6	476	4.3	1.8	1.7	5.7	33.3	-7.8	17.5	17.3	52.9	1	4.0
62 Costa Rica	44.7	55.3	8	1.8	2.5	0.9	0.1	51.0	1.6	2.4	8.0	35.3	2	1.0
63 Grenada	..	..	0	2.4	4.4	..	..	50.0	0.0	..	10.5	36.8	38	..
64 Libya	99.2	0.8	58	9.5	-1.4	2.7	..	0.1	0.0	718.0	8.7	8.8	..	8.0
64 Malaysia	94.7	5.3	208	7.6	4.7	2.4	6.9	62.3	-8.6	2.3	15.4	24.0	0	1.0
64 Serbia	92.4	8.1	50	6.8	..	2.3	..	31.0	17.3	..	7.2	57.8	0	19.0
67 Antigua and Barbuda	..	..	0	5.1	-0.8	..	..	22.3	-4.9	3.3	8.3	29.5	0	..
67 Trinidad and Tobago	99.9	0.1	50	37.4	3.7	7.8	32.0	44.1	-5.9	6.0	6.8	10.5	0	..
69 Kazakhstan	99.0	1.1	237	15.1	..	4.3	23.4	1.2	-3.3	28.9	8.4	77.2	1	24.0
70 Albania	54.0	38.8	4	1.3	-0.8	1.1	2.5	28.3	-1.6	4.4	12.7	44.0	1	6.0
71 Venezuela, Bolivarian Republic of	87.7	12.4	170	6.1	-0.4	3.0	12.4	52.5	-11.1	0.7	8.3	24.3	1	2.0
72 Dominica	..	..	0	1.9	4.4	..	0.0	59.5	-10.7	..	8.6	32.7	15	..
72 Georgia	68.0	33.3	5	1.2	..	1.4	0.6	39.5	-1.3	2.6	9.3	36.1	0	2.0
72 Lebanon	95.9	2.6	17	4.1	2.5	0.4	0.0	13.4	4.5	28.1	10.0	67.3	0	1.0
72 Saint Kitts and Nevis	..	..	0	4.9	..	..	..	42.3	0.0	..	8.6	21.2	..	..
76 Iran, Islamic Republic of	99.5	0.5	538	7.4	2.2	2.1	..	6.8	0.0	67.7	8.8	29.8	1	25.0
77 Peru	73.5	26.5	41	1.4	0.1	0.9	8.1	53.1	-3.1	1.0	8.4	16.8	6	1.0
78 The former Yugoslav Republic of Macedonia	84.3	11.3	12	5.8	..	1.0	5.9	39.2	9.4	16.1	13.3	40.2	1	7.0
78 Ukraine	80.0	1.6	324	7.0	..	2.1	3.7	16.8	4.7	27.6	8.2	71.2	2	6.0
80 Mauritius	..	..	4	3.1	4.4	..	0.0	17.3	-9.8	26.4	15.2	48.3	1	..
81 Bosnia and Herzegovina	92.2	12.1	31	8.3	..	1.2	..	42.7	-1.1	0.9	9.8	41.7	0	6.0
82 Azerbaijan	98.2	1.7	47	5.4	..	4.7	34.5	11.3	0.0	35.2	8.2	57.6	0	4.0
83 Saint Vincent and the Grenadines	..	..	0	1.8	4.7	..	0.0	68.5	5.5	..	9.0	25.6	0	..
84 Oman	100.0	0.0	46	17.3	11.1	7.1	..	0.0	0.0	86.6	8.5	5.9	5	6.0
85 Brazil	51.3	45.8	393	2.1	2.0	4.0	3.4	62.4	-9.6	0.7	10.0	31.3	1	8.0
85 Jamaica	83.7	16.3	12	4.5	1.4	0.7	0.6	31.1	-2.2	6.2	15.2	41.5	3	3.0
87 Armenia	68.4	6.7	6	1.8	..	1.3	1.0	9.3	-24.5	36.4	7.9	61.6	0	10.0
88 Saint Lucia	..	..	0	2.3	3.4	..	..	77.0	7.3	..	9.4	18.0	6	..
89 Ecuador	86.7	12.4	27	1.9	2.6	1.7	12.9	35.6	-28.6	3.6	12.7	30.3	1	2.0
90 Turkey	89.9	10.2	284	4.0	3.2	1.4	0.4	14.7	17.1	18.8	15.3	50.6	0	5.0
91 Colombia	75.2	25.1	68	1.5	0.3	1.8	7.8	54.5	-3.2	0.6	11.5	38.3	4	2.0
92 Sri Lanka	45.3	54.7	12	0.6	1.8	0.6	0.3	28.8	-20.9	24.5	17.8	41.6	2	21.0
93 Algeria	99.8	0.2	111	3.2	2.9	1.8	18.1	0.6	-10.5	52.7	12.2	17.4	4	29.0
94 Tunisia	85.7	14.2	25	2.4	3.2	1.0	5.1	6.5	56.5	61.7	11.2	63.0	0	37.0
<b>MEDIUM HUMAN DEVELOPMENT</b>														
95 Tonga	..	..	0	1.7	4.6	..	0.0	12.5	0.0	..	8.5	43.1	0	..
96 Belize	..	..	0	1.3	0.7	..	0.0	61.1	-12.2	0.8	6.4	6.7	13	1.0
96 Dominican Republic	76.6	23.4	22	2.2	3.1	0.9	0.2	40.8	0.0	16.6	16.1	51.1	9	7.0
96 Fiji	..	..	1	1.5	1.0	..	0.0	55.5	6.4	0.3	13.1	22.9	8	..
96 Samoa	..	..	0	0.9	3.9	..	0.3	60.4	31.5	..	10.8	23.7	5	..
100 Jordan	98.0	1.8	21	3.7	3.4	0.5	1.0	1.1	0.0	99.4	9.1	11.5	0	22.0
101 China	87.4	11.9	7,032	5.3	4.7	1.5	5.1	21.9	31.6	19.5	12.1	56.2	1	9.0
102 Turkmenistan	100.7	0.0	48	9.7	..	6.7	..	8.8	0.0	100.8	8.4	69.4	..	11.0
103 Thailand	79.4	20.5	286	4.2	6.3	1.6	2.4	37.1	-3.0	13.1	12.5	38.7	2	17.0
104 Maldives	..	..	1	3.0	..	..	0.0	3.0	0.0	15.7	9.1	26.7	0	..
105 Suriname	..	..	2	4.7	0.2	..	..	94.6	-0.1	0.5	3.5	0.5	2	..
106 Gabon	33.9	66.1	2	1.7	-2.2	6.4	33.1	85.4	0.0	0.1	5.9	19.9	0	..
107 El Salvador	37.8	62.0	6	1.0	2.6	0.8	0.4	13.9	-23.9	5.5	3.8	74.5	7	6.0
108 Bolivia, Plurinational State of	79.1	20.9	13	1.3	2.2	4.9	12.3	52.7	-8.9	0.3	4.7	34.1	5	2.0
108 Mongolia	96.4	3.2	11	4.1	1.6	3.7	32.3	7.0	-13.1	1.4	6.4	74.5	4	31.0
110 Palestine, State of	..	..	2	0.5	..	..	..	1.5	1.0	49.9	6.2	61.0	0	..
111 Paraguay	28.5	153.2	4	0.7	2.1	4.1	0.0	44.3	-16.9	0.1	3.9	52.6	0	1.0
112 Egypt	96.3	3.8	210	2.7	4.0	0.9	7.1	0.1	59.1	119.0	8.9	3.7	0	25.0
113 Moldova, Republic of	91.3	3.1	5	1.3	..	1.1	0.2	11.7	21.0	16.4	6.7	75.2	1	22.0
114 Philippines	57.0	43.0	83	0.9	0.7	0.8	2.1	25.7	16.7	17.0	16.8	40.1	9	2.0
114 Uzbekistan	98.4	1.6	125	4.6	..	1.9	19.2	7.7	7.6	118.3	7.9	62.6	0	27.0

**TABLE 13 ENVIRONMENT**

HDI rank	PRIMARY ENERGY SUPPLY		EMISSIONS				NATURAL RESOURCES					IMPACTS		
	Fossil fuels	Renewables	Carbon dioxide		Greenhouse gas	Natural resource depletion	Forest area	Fresh water withdrawals	Endangered species	Agricultural land	Number of deaths due to natural disasters	Population living on degraded land		
			Total	Per capita	Per capita									
	(% of total)	(megatonnes)	(tonnes)	(average annual % growth)	(tonnes of carbon dioxide equivalent)	(% of GNI)	(% of land area)	(% change)	(% of total renewable water resources)	(% of all species)	(% of land area)	(annual average per million people)	(%)	
2009	2009	2008	2008	1970/2008	2005	2010	2010	1990/2010	2003–2012*	2011	2009	2005/2011	2010	
116 Syrian Arab Republic	99.3	0.7	72	3.6	3.3	0.9	11.9	2.7	32.0	99.8	10.9	75.7	1	33.0
117 Micronesia, Federated States of	..	..	0	0.6	..	..	..	91.7	0.9	..	13.7	31.4	45	..
118 Guyana	..	..	2	2.0	-0.2	..	6.0	77.2	0.0	0.7	3.8	8.5	4	..
119 Botswana	64.3	23.6	5	2.5	..	4.1	3.4	20.0	-17.3	1.6	2.0	45.6	0	22.0
120 Honduras	50.3	49.8	9	1.2	2.2	1.2	0.5	46.4	-36.2	1.2	8.3	28.5	4	15.0
121 Indonesia	65.6	34.4	406	1.7	4.7	1.5	6.6	52.1	-20.3	5.6	14.3	29.6	2	3.0
121 Kiribati	..	..	0	0.3	-1.0	..	..	15.0	0.0	..	12.4	42.0	0	..
121 South Africa	87.8	10.0	436	8.9	0.7	1.9	6.1	7.6	0.0	25.0	14.1	81.7	1	17.0
124 Vanuatu	..	..	0	0.4	-0.4	..	0.0	36.1	0.0	..	12.0	15.3	0	..
125 Kyrgyzstan	72.5	28.4	6	1.2	..	1.0	6.9	5.0	14.0	43.7	5.9	55.4	2	10.0
125 Tajikistan	41.2	58.6	3	0.5	..	0.9	0.8	2.9	0.5	74.8	6.4	33.9	3	10.0
127 Viet Nam	56.2	43.3	127	1.5	2.2	1.3	9.4	44.5	47.4	9.3	12.1	33.1	3	8.0
128 Namibia	70.5	19.2	4	1.8	..	4.4	0.7	8.9	-16.8	1.7	5.6	47.1	7	28.0
129 Nicaragua	44.7	55.3	4	0.8	0.7	1.7	1.6	25.7	-31.0	0.7	4.8	42.8	7	14.0
130 Morocco	92.5	4.9	48	1.5	3.1	0.5	1.6	11.5	1.6	43.4	15.2	67.3	1	39.0
131 Iraq	97.6	0.9	103	3.4	0.9	0.7	45.7	1.9	2.6	87.3	8.2	20.1	0	5.0
132 Cape Verde	..	..	0	0.6	4.2	..	0.1	21.1	47.3	6.8	12.5	21.8	0	..
133 Guatemala	46.1	53.9	12	0.9	1.9	1.1	1.7	33.7	-23.0	2.6	9.3	41.0	14	9.0
134 Timor-Leste	..	..	0	0.2	..	..	..	49.9	-23.2	..	5.2	25.2	1	..
135 Ghana	24.3	76.2	9	0.4	0.5	0.6	8.0	21.7	-33.7	1.8	5.7	68.1	1	1.0
136 Equatorial Guinea	..	..	5	7.3	11.3	..	49.4	58.0	-12.6	0.1	6.4	10.9	..	..
136 India	73.0	26.1	1,743	1.5	3.8	0.7	4.4	23.0	7.0	39.8	14.0	60.5	2	10.0
138 Cambodia	27.8	70.8	5	0.3	1.8	1.9	0.1	57.2	-22.0	0.5	12.1	31.5	1	39.0
138 Lao People's Democratic Republic	..	..	2	0.3	0.5	..	8.3	68.2	-9.0	1.3	10.5	10.2	0	4.0
140 Bhutan	..	..	1	1.0	12.4	..	3.6	69.1	7.1	0.4	6.8	13.2	1	..
141 Swaziland	..	..	1	1.1	0.7	..	0.1	32.7	19.3	23.1	2.7	71.0	0	..
<b>LOW HUMAN DEVELOPMENT</b>														
142 Congo	44.2	53.1	2	0.5	0.4	2.7	59.6	65.6	-1.4	0.0	4.4	30.9	0	..
143 Solomon Islands	..	..	0	0.4	1.1	..	15.6	79.1	-4.8	..	14.8	3.0	4	..
144 Sao Tome and Principe	..	..	0	0.8	3.7	..	0.8	28.1	0.0	0.3	14.9	58.3	..	..
145 Kenya	16.8	83.2	10	0.3	0.0	0.9	1.1	6.1	-6.5	8.9	8.4	48.1	2	31.0
146 Bangladesh	69.8	30.2	47	0.3	..	0.7	2.3	11.1	-3.5	2.9	8.6	70.3	6	11.0
146 Pakistan	61.8	37.4	163	1.0	2.3	1.1	2.8	2.2	-33.2	79.5	8.6	34.1	3	4.0
148 Angola	37.6	62.4	24	1.4	2.1	5.1	35.1	46.9	-4.1	0.4	4.6	46.8	2	3.0
149 Myanmar	27.7	72.3	13	0.3	1.1	2.2	..	48.3	-19.0	2.8	7.9	19.0	287	19.0
150 Cameroon	30.9	69.1	5	0.3	3.0	1.6	4.8	42.1	-18.1	0.3	10.9	19.8	0	15.0
151 Madagascar	..	..	2	0.1	-1.1	..	1.0	21.6	-8.3	4.4	21.0	70.2	5	..
152 Tanzania, United Republic of	11.1	88.9	6	0.2	0.4	1.4	3.2	37.7	-19.4	5.4	12.3	40.1	0	25.0
153 Nigeria	14.7	85.3	96	0.6	1.4	1.1	22.0	9.9	-47.5	3.6	6.6	81.8	0	12.0
154 Senegal	57.8	41.8	5	0.4	0.7	1.0	0.8	44.0	-9.4	5.7	6.9	49.4	0	16.0
155 Mauritania	..	..	2	0.6	1.2	..	34.3	0.2	-41.7	14.0	8.1	38.5	1	24.0
156 Papua New Guinea	..	..	2	0.3	0.3	..	22.2	63.4	-8.9	0.0	11.4	2.5	4	..
157 Nepal	11.1	88.5	4	0.1	5.0	1.0	2.5	25.4	-24.5	4.7	6.1	29.6	6	2.0
158 Lesotho	..	..	..	..	..	..	1.0	1.4	10.0	1.7	3.0	77.0	0	64.0
159 Togo	14.4	83.4	1	0.2	1.7	0.8	3.4	5.3	-58.1	1.2	4.2	62.1	1	5.0
160 Yemen	98.7	1.3	23	1.0	2.5	0.5	14.5	1.0	0.0	168.6	9.3	44.4	2	32.0
161 Haiti	28.1	71.9	2	0.3	3.0	0.6	..	3.7	-12.9	8.6	19.4	66.8	65	15.0
161 Uganda	..	..	4	0.1	-0.6	..	4.5	15.2	-37.1	0.5	7.6	69.9	2	23.0
163 Zambia	7.6	92.2	2	0.2	-4.6	3.8	18.9	66.5	-6.3	1.7	3.3	31.5	1	5.0
164 Djibouti	..	..	1	0.6	-0.9	..	..	0.2	0.0	6.3	8.2	73.4	6	8.0
165 Gambia	..	..	0	0.3	2.3	..	0.8	48.0	8.6	0.9	4.9	66.5	1	18.0
166 Benin	40.4	57.4	4	0.5	4.3	0.9	0.3	41.2	-20.8	0.5	4.5	29.8	1	2.0
167 Rwanda	..	..	1	0.1	4.0	..	3.1	17.6	36.8	1.6	5.7	81.1	1	10.0
168 Côte d'Ivoire	23.5	76.9	7	0.4	-0.5	1.0	3.9	32.7	1.8	1.7	6.7	63.8	0	1.0
169 Comoros	..	..	0	0.2	1.0	..	1.1	1.6	-75.0	0.8	11.7	83.3	0	..
170 Malawi	..	..	1	0.1	-0.4	..	1.8	34.4	-16.9	5.6	8.6	59.1	4	19.0
171 Sudan	30.2	69.8	14	0.3	0.1	3.0	12.9	29.4	-8.4	57.6	4.8	57.5	1	40.0
172 Zimbabwe	25.7	69.4	9	0.7	-2.0	1.3	2.7	40.4	-29.5	21.0	3.3	42.4	0	29.0
173 Ethiopia	7.1	92.9	7	0.1	1.2	1.1	4.2	11.2	-18.6	4.6	6.7	35.0	2	72.0
174 Liberia	..	..	1	0.2	-4.6	..	6.4	44.9	-12.2	0.1	8.4	27.1	0	..

HDI rank	PRIMARY ENERGY SUPPLY		EMISSIONS				NATURAL RESOURCES					IMPACTS			
	Fossil fuels	Renewables	Carbon dioxide		Greenhouse gas	Natural resource depletion	Forest area	Fresh water withdrawals	Endangered species	Agricultural land	Number of deaths due to natural disasters	Population living on degraded land			
			Total	Per capita	Per capita										
	(% of total)	(megatonnes)	(tonnes)	(average annual % growth)	(tonnes of carbon dioxide equivalent)	(% of GNI)	(% of land area)	(% change)	(% of total renewable water resources)	(% of all species)	(% of land area)	(annual average per million people)	(%)		
2009	2009	2008	2008	1970/2008	2005	2010	2010	1990/2010	2003–2012 <sup>a</sup>	2011	2009	2005/2011	2010		
175	Afghanistan	..	..	1	0.0	-4.4	..	2.6	2.1	0.0	35.6	5.8	58.1	11	11.0
176	Guinea-Bissau	..	..	0	0.2	1.4	..	0.5	71.9	-8.8	0.6	5.7	58.0	1	1.0
177	Sierra Leone	..	..	1	0.2	-0.9	..	2.1	38.1	-12.6	0.3	6.5	47.7	3	..
178	Burundi	..	..	0	0.0	0.6	..	12.7	6.7	-40.5	2.3	4.5	83.7	2	19.0
178	Guinea	..	..	1	0.1	-0.7	..	14.3	26.6	-9.9	0.7	7.3	58.0	0	1.0
180	Central African Republic	..	..	0	0.1	-1.6	..	0.0	36.3	-2.6	0.0	1.6	8.4	0	..
181	Eritrea	22.6	77.4	0	0.1	..	0.8	0.0	15.2	-5.5	9.2	7.4	75.2	0	59.0
182	Mali	..	..	1	0.0	0.5	..	9.8	10.2	-11.2	6.5	2.8	33.7	0	60.0
183	Burkina Faso	..	..	2	0.1	4.2	..	4.3	20.6	-17.5	7.9	2.7	43.7	0	73.0
184	Chad	..	..	0	0.0	0.8	..	29.0	9.2	-12.1	0.9	3.7	39.2	2	45.0
185	Mozambique	7.7	96.7	2	0.1	-2.9	1.1	3.3	49.6	-10.0	0.3	7.0	62.7	1	2.0
186	Congo, Democratic Republic of the	3.7	96.6	3	0.0	-2.8	1.9	13.7	68.0	-3.9	0.0	6.4	9.9	0	..
186	Niger	..	..	1	0.1	0.5	..	2.4	1.0	-38.1	7.0	3.6	34.6	0	25.0
<b>OTHER COUNTRIES OR TERRITORIES</b>															
..	Korea, Democratic People's Rep. of	81.7	0.7	78	3.2	..	1.0	..	47.1	-30.9	11.2	8.6	24.1	5	3.0
..	Marshall Islands	..	..	0	1.9	..	..	..	70.2	0.0	..	11.0	72.2	0	..
..	Monaco	..	..	..	..	..	..	..	0.0	0.0	..	6.8	..	..	..
..	Nauru	..	..	..	3.9	..	..	..	0.0	0.0	..	12.1	20.0	..	..
..	San Marino	..	..	..	..	..	..	..	0.0	0.0	..	0.0	16.7	..	..
..	Somalia	..	..	1	0.1	0.5	..	..	10.8	-18.5	22.4	6.8	70.2	2	26.0
..	South Sudan	..	..	..	..	..	..	..	..	..	..	..	..	..	..
..	Tuvalu	..	..	..	..	..	..	..	33.3	0.0	..	13.0	60.0	..	..
<b>Human Development Index groups</b>															
..	Very high human development	81.0	7.5	12,643	11.4	-0.2	2.7	0.9	29.1	1.1	8.2	13.6	42.6	8	..
..	High human development	86.7	9.5	5,765	5.8	1.0	2.8	..	38.0	-4.1	2.8	11.4	26.5	7	8.4
..	Medium human development	..	..	10,877	3.2	3.8	..	5.3	24.6	1.3	16.4	12.8	60.9	2	..
..	Low human development	..	..	473	0.4	0.5	..	9.5	28.8	-10.6	4.4	7.6	45.8	14	20.2
<b>Regions</b>															
..	Arab States	96.7	3.1	1,509	4.6	1.1	1.5	..	7.1	-7.8	87.4	9.4	63.1	1	24.9
..	East Asia and the Pacific	..	..	8,255	4.3	4.5	..	..	29.4	2.1	..	12.5	44.9	9	..
..	Europe and Central Asia	88.3	4.7	3,723	7.9	..	3.0	7.3	38.5	0.7	5.8	9.6	20.5	13	8.5
..	Latin America and the Caribbean	72.6	26.3	1,637	2.9	1.2	2.7	5.7	47.2	-8.9	1.5	11.5	37.5	3	5.4
..	South Asia	76.7	22.6	2,509	1.5	3.2	0.8	4.0	14.5	2.4	28.6	12.5	33.9	2	10.1
..	Sub-Saharan Africa	..	..	670	0.9	0.4	..	11.6	28.4	-10.2	1.6	7.5	54.7	1	25.0
..	<b>Least developed countries</b>	..	..	191	0.2	-0.5	..	9.0	29.6	-9.4	2.8	7.6	47.1	20	26.0
..	<b>Small island developing states</b>	..	..	137	2.7	1.4	..	..	63.1	-3.5	..	14.9	3.3	16	..
..	<b>World</b>	<b>80.7</b>	<b>13.1</b>	<b>29,837</b>	<b>4.5</b>	<b>0.4</b>	<b>1.7</b>	<b>3.3</b>	<b>31.1</b>	<b>-3.3</b>	<b>7.3</b>	<b>11.7</b>	<b>38.6</b>	<b>6</b>	<b>10.6</b>

**NOTE**

a Data refer to the most recent year available during the period specified.

**DEFINITIONS**

**Fossil fuels:** Percentage of total energy supply that comes from natural resources formed from biomass in the geological past (such as coal, oil and natural gas).

**Renewables:** Percentage of total energy supply that comes from constantly replenished natural processes, including solar, wind, biomass, geothermal, hydropower and ocean resources and some waste. Nuclear energy is not included.

**Carbon dioxide emissions:** Human-originated carbon dioxide emissions stemming from the burning of fossil fuels, gas flaring and the production of cement, including carbon dioxide emitted by forest biomass through depletion of forest areas.

**Carbon dioxide emissions per capita:** Carbon dioxide emissions divided by midyear population.

**Greenhouse gas emissions per capita:** Emissions from methane, nitrous oxide and other greenhouse gases, including hydrofluorocarbons,

per fluorocarbons and sulfur hexafluoride, divided by midyear population. Carbon dioxide emissions are not included.

**Natural resource depletion:** Monetary expression of energy, mineral and forest depletion, expressed as a percentage of total gross national income (GNI).

**Forest area:** Land spanning more than 0.5 hectare with trees taller than 5 metres and a canopy cover of more than 10%, or trees able to reach these thresholds in situ. It excludes land predominantly under agricultural or urban land use, tree stands in agricultural production systems (for example, in fruit plantations and agroforestry systems) and trees in urban parks and gardens. Areas under reforestation that have not yet reached but are expected to reach a canopy cover of 10% and a tree height of 5 meters are included, as are temporarily unstocked areas, resulting from human intervention or natural causes, which are expected to regenerate.

**Fresh water withdrawals:** Total fresh water withdrawn in a given year, expressed as a percentage of total renewable water resources.

**Endangered species:** Percentage of animal species (including mammals, birds, reptiles,

amphibians, fish and invertebrates) classified as critically endangered, endangered or vulnerable by the International Union for the Conservation of Nature.

**Agricultural land:** The sum of areas under arable land (land under temporary agricultural crops; multiple-cropped areas are counted only once), temporary meadows for mowing or pasture, land under market and kitchen gardens and land temporarily fallow (less than five years), expressed as a percentage of total land. Abandoned land resulting from shifting cultivation is excluded.

**Number of deaths due to natural disasters:** Number of people confirmed as dead and missing and presumed dead as a result of a natural disaster. Natural disasters are classified as climatological, hydrological and meteorological disasters, which include drought, extreme temperature, flood, mass movement, wet storm and wildfire.

**Population living on degraded land:** Percentage of the population living on severely or very severely degraded land. Land degradation estimates consider biomass, soil health, water quantity and biodiversity and range in severity.

**MAIN DATA SOURCES**

**Columns 1 and 2:** HDRO calculations based on data on total primary energy supply from IEA (2012).

**Columns 3 and 4:** World Bank (2012a).

**Columns 5 and 7:** HDRO calculations based on data from World Bank (2012a).

**Column 6:** HDRO calculations based on data from World Bank (2012a) and UNDESA (2011).

**Columns 8 and 9:** HDRO calculations based on data on forest and total land area from FAO (2012).

**Column 10:** FAO (2011).

**Column 11:** IUCN (2012).

**Column 12:** HDRO calculations based on data from FAO (2012).

**Column 13:** CRED EM-DAT (2012) and UNDESA (2011).

**Column 14:** FAO (2012).

# TABLE 14 Population trends

HDI rank	Population														
	Total <sup>a</sup>		Annual growth		Urban		Median age		Total dependency ratio		Total fertility rate		Sex ratio at birth <sup>b</sup>		
	(millions)		(% )		(% of total)		(years)		(per 100 people ages 15–64)		(births per woman)		(male to female births)		
	2012	2030	2000/2005	2010/2015 <sup>a,c</sup>	2000	2012	2000	2010	2000	2012	2000	2012 <sup>a,c</sup>	2000 <sup>d</sup>	2012 <sup>e</sup>	
<b>VERY HIGH HUMAN DEVELOPMENT</b>															
1	Norway	5.0 <sup>e</sup>	5.6 <sup>e</sup>	0.6 <sup>e</sup>	0.7 <sup>e</sup>	76.1	79.7	36.9	38.7	54.2	51.5	1.8	2.0	1.05	1.06
2	Australia	22.9 <sup>f</sup>	27.8 <sup>f</sup>	1.3 <sup>f</sup>	1.3 <sup>f</sup>	87.2	89.4	35.4	36.9	49.6	49.3	1.7	2.0	1.06	1.06
3	United States	315.8	361.7	1.0	0.9	79.1	82.6	35.3	36.9	51.0	50.7	2.0	2.1	1.05	1.05
4	Netherlands	16.7	17.3	0.6	0.3	76.8	83.6	37.3	40.7	47.3	50.6	1.7	1.8	1.06	1.06
5	Germany	82.0	79.5	0.0	-0.2	73.1	74.1	39.9	44.3	47.0	51.7	1.3	1.4	1.06	1.06
6	New Zealand	4.5	5.2	1.4	1.0	85.7	86.3	34.3	36.6	52.7	51.4	1.9	2.1	1.05	1.06
7	Ireland	4.6	5.4	1.8	1.1	59.1	62.5	32.5	34.7	49.2	50.8	1.9	2.1	1.07	1.07
7	Sweden	9.5	10.4	0.4	0.6	84.0	85.4	39.4	40.7	55.3	55.5	1.6	1.9	1.06	1.06
9	Switzerland	7.7	8.1	0.7	0.4	73.3	73.8	38.6	41.4	48.7	47.9	1.4	1.5	1.05	1.05
10	Japan	126.4	120.2	0.1	-0.1	78.6	91.9	41.3	44.7	46.6	59.6	1.3	1.4	1.06	1.06
11	Canada	34.7	39.8	1.0	0.9	79.5	80.8	36.8	39.9	46.3	45.1	1.5	1.7	1.05	1.06
12	Korea, Republic of	48.6	50.3	0.5	0.4	79.6	83.5	32.1	37.9	39.5	38.0	1.3	1.4	1.10	1.10
13	Hong Kong, China (SAR)	7.2	8.5	0.1	1.0	100.0	100.0	36.5	41.8	39.3	32.3	0.8	1.1	1.07	1.07
13	Iceland	0.3	0.4	1.1	1.2	92.4	93.8	32.8	34.8	53.5	49.6	2.0	2.1	1.04	1.05
15	Denmark	5.6	5.9	0.3	0.3	85.1	87.1	38.4	40.6	50.0	54.1	1.8	1.9	1.06	1.06
16	Israel	7.7	9.8	1.9	1.7	91.2	91.9	28.0	30.1	61.6	61.6	2.9	2.9	1.05	1.05
17	Belgium	10.8	11.2	0.5	0.3	97.1	97.5	39.1	41.2	51.6	53.3	1.6	1.8	1.05	1.05
18	Austria	8.4	8.6	0.6	0.2	65.8	67.9	38.2	41.8	48.0	48.1	1.4	1.3	1.06	1.06
18	Singapore	5.3	6.0	1.7	1.1	100.0	100.0	34.1	37.6	40.5	35.4	1.4	1.3	1.07	1.07
20	France	63.5	68.5	0.6	0.5	76.9	86.4	37.7	39.9	53.6	55.7	1.8	2.0	1.05	1.05
21	Finland	5.4	5.6	0.3	0.3	82.2	83.8	39.3	42.0	49.3	53.5	1.7	1.9	1.05	1.05
21	Slovenia	2.0	2.1	0.2	0.2	50.8	49.8	38.0	41.7	42.7	45.0	1.2	1.5	1.05	1.05
23	Spain	46.8 <sup>g</sup>	50.0 <sup>g</sup>	1.5 <sup>g</sup>	0.6 <sup>g</sup>	76.3	77.6	37.6	40.1	46.3	48.4	1.2	1.5	1.06	1.06
24	Liechtenstein	0.0	0.0	1.1	0.8	15.1	14.3	..	..	..	..	..	..	..	..
25	Italy	61.0	60.9	0.6	0.2	67.2	68.5	40.2	43.2	48.3	53.8	1.2	1.5	1.06	1.06
26	Luxembourg	0.5	0.6	1.0	1.4	83.8	85.7	37.3	38.9	49.1	46.1	1.7	1.7	1.06	1.06
26	United Kingdom	62.8	69.3	0.4	0.6	78.7	79.7	37.7	39.8	53.4	52.7	1.7	1.9	1.05	1.05
28	Czech Republic	10.6	10.8	0.0	0.3	74.0	73.4	37.4	39.4	43.7	42.9	1.1	1.5	1.06	1.06
29	Greece	11.4	11.6	0.4	0.2	59.7	61.7	38.3	41.4	47.1	50.6	1.3	1.5	1.07	1.07
30	Brunei Darussalam	0.4	0.5	2.1	1.7	71.2	76.4	25.8	28.9	49.8	41.6	2.4	2.0	1.06	1.06
31	Cyprus	1.1	1.3	1.8	1.1	68.6	70.7	31.8	34.2	48.4	41.4	1.7	1.5	1.07	1.07
32	Malta	0.4	0.4	0.6	0.3	92.4	95.0	36.1	39.5	46.6	42.1	1.6	1.3	1.06	1.06
33	Andorra	0.1	0.1	3.7	1.5	92.4	86.7	..	..	..	..	..	..	..	..
33	Estonia	1.3	1.3	-0.4	-0.1	69.4	69.5	37.9	39.7	49.8	50.0	1.3	1.7	1.06	1.06
35	Slovakia	5.5	5.5	0.0	0.2	56.2	54.7	33.6	36.9	45.4	37.9	1.3	1.4	1.05	1.05
36	Qatar	1.9	2.4	6.6	2.9	96.3	98.9	30.3	31.6	38.4	18.3	3.1	2.2	1.05	1.04
37	Hungary	9.9	9.6	-0.2	-0.2	64.6	69.9	38.5	39.8	46.8	46.2	1.3	1.4	1.06	1.06
38	Barbados	0.3	0.3	0.2	0.2	38.3	44.9	33.6	37.5	50.3	40.0	1.6	1.6	1.04	1.04
39	Poland	38.3	37.8	-0.1	0.0	61.7	60.8	35.3	38.0	46.3	40.5	1.3	1.4	1.06	1.06
40	Chile	17.4	19.5	1.1	0.9	85.9	89.4	28.8	32.1	54.0	45.2	2.1	1.8	1.04	1.04
41	Lithuania	3.3	3.1	-0.5	-0.4	67.0	67.2	35.9	39.3	51.2	44.9	1.3	1.5	1.06	1.05
41	United Arab Emirates	8.1	10.5	5.9	2.2	80.2	84.7	28.1	30.1	36.3	20.9	2.6	1.7	1.05	1.05
43	Portugal	10.7	10.3	0.4	0.0	54.4	61.6	37.7	41.0	47.8	50.0	1.5	1.3	1.06	1.06
44	Latvia	2.2	2.1	-0.7	-0.4	68.1	67.7	38.1	40.2	49.9	47.3	1.2	1.5	1.05	1.06
45	Argentina	41.1	46.8	0.9	0.9	90.1	92.7	27.9	30.4	60.7	54.4	2.5	2.2	1.04	1.04
46	Seychelles	0.1	0.1	1.2	0.3	50.4	54.0	..	..	..	..	..	..	..	..
47	Croatia	4.4	4.2	-0.3	-0.2	55.6	58.1	39.1	41.5	48.4	47.9	1.4	1.5	1.06	1.06
<b>HIGH HUMAN DEVELOPMENT</b>															
48	Bahrain	1.4	1.7	2.5	2.1	88.4	88.7	27.4	30.1	44.1	29.2	2.7	2.5	1.05	1.05
49	Bahamas	0.4	0.4	1.4	1.1	82.0	84.5	27.0	30.9	52.9	40.9	2.1	1.9	1.06	1.06
50	Belarus	9.5	8.9	-0.5	-0.3	70.0	75.5	36.3	38.3	47.5	40.5	1.2	1.5	1.06	1.06
51	Uruguay	3.4	3.6	0.0	0.3	91.3	92.6	31.6	33.7	60.2	56.2	2.2	2.0	1.05	1.05
52	Montenegro	0.6	0.6	-0.2	0.1	58.5	63.5	33.5	35.9	47.1	46.5	1.8	1.6	1.08	1.08
52	Palau	0.0	0.0	0.8	0.8	70.0	85.1	..	..	..	..	..	..	..	..
54	Kuwait	2.9	4.0	3.1	2.4	98.1	98.3	28.3	28.2	42.3	41.1	2.6	2.3	1.03	1.03
55	Russian Federation	142.7	136.4	-0.4	-0.1	73.4	74.0	36.5	37.9	44.1	39.8	1.2	1.5	1.06	1.06
56	Romania	21.4	20.3	-0.4	-0.2	53.0	52.8	34.7	38.5	46.7	43.6	1.3	1.4	1.06	1.06
57	Bulgaria	7.4	6.5	-0.7	-0.7	68.9	73.7	39.7	41.6	47.7	47.3	1.2	1.5	1.06	1.06
57	Saudi Arabia	28.7	38.5	3.6	2.1	79.8	82.5	20.9	25.9	72.5	49.0	4.0	2.7	1.03	1.03
59	Cuba	11.2	11.0	0.3	0.0	75.6	75.1	32.8	38.4	45.8	41.8	1.6	1.4	1.06	1.06
59	Panama	3.6	4.5	1.8	1.5	65.8	75.9	24.8	27.3	59.6	54.3	2.7	2.4	1.05	1.05

HDI rank	Population													
	Total <sup>a</sup>		Annual growth		Urban		Median age		Total dependency ratio		Total fertility rate		Sex ratio at birth <sup>b</sup>	
	(millions)		(%)		(% of total)		(years)		(per 100 people ages 15–64)		(births per woman)		(male to female births)	
	2012	2030	2000/2005	2010/2015 <sup>c</sup>	2000	2012	2000	2010	2000	2012	2000	2012 <sup>d</sup>	2000 <sup>d</sup>	2012 <sup>e</sup>
61 Mexico	116.1	135.4	1.3	1.1	74.7	78.4	23.4	26.6	62.5	53.5	2.6	2.2	1.05	1.05
62 Costa Rica	4.8	5.7	1.9	1.4	59.0	65.1	24.8	28.4	58.5	44.5	2.4	1.8	1.05	1.05
63 Grenada	0.1	0.1	0.2	0.4	35.9	39.5	21.8	25.0	74.9	51.9	2.6	2.2	1.05	1.05
64 Libya	6.5	7.8	2.0	0.8	76.3	77.9	21.9	25.9	55.6	55.0	3.1	2.4	1.06	1.06
64 Malaysia	29.3	37.3	2.2	1.6	62.0	73.5	23.8	26.0	59.1	52.8	3.1	2.6	1.06	1.06
64 Serbia	9.8 <sup>h</sup>	9.5 <sup>h</sup>	-0.6 <sup>h</sup>	-0.1 <sup>h</sup>	53.0	56.7	35.7	37.6	50.5	46.7	1.7	1.6	1.08	1.08
67 Antigua and Barbuda	0.1	0.1	1.6	1.0	32.1	29.8	..	..	..	..	..	..	..	..
67 Trinidad and Tobago	1.4	1.4	0.4	0.3	10.8	14.0	26.9	30.8	47.3	38.6	1.6	1.6	1.04	1.04
69 Kazakhstan	16.4	18.9	0.3	1.0	55.7	53.5	27.7	29.0	52.6	47.2	1.9	2.5	1.07	1.07
70 Albania	3.2	3.3	0.5	0.3	41.7	54.5	27.4	30.0	59.6	46.1	2.2	1.5	1.07	1.07
71 Venezuela, Bolivarian Republic of	29.9	37.0	1.8	1.5	89.9	93.7	23.3	26.1	62.0	53.3	2.8	2.4	1.05	1.05
72 Dominica	0.1	0.1	-0.2	0.0	67.2	67.2	..	..	..	..	..	..	..	..
72 Georgia	4.3	3.8	-1.2	-0.6	52.6	52.9	34.4	37.3	52.5	44.8	1.6	1.5	1.11	1.11
72 Lebanon	4.3	4.7	1.6	0.7	86.0	87.4	25.6	29.1	59.4	45.1	2.4	1.8	1.05	1.05
72 Saint Kitts and Nevis	0.1	0.1	1.3	1.2	32.8	32.0	..	..	..	..	..	..	..	..
76 Iran, Islamic Republic of	75.6	84.4	1.3	1.0	64.0	69.2	20.8	27.1	65.2	38.7	2.2	1.6	1.05	1.05
77 Peru	29.7	35.5	1.3	1.1	73.0	77.6	23.0	25.6	63.8	54.9	2.9	2.4	1.05	1.05
78 The former Yugoslav Republic of Macedonia	2.1	2.0	0.3	0.1	59.4	59.4	32.5	35.9	47.7	41.2	1.7	1.4	1.08	1.08
78 Ukraine	44.9	40.5	-0.8	-0.5	67.1	69.1	37.7	39.3	46.0	42.8	1.1	1.5	1.06	1.06
80 Mauritius	1.3	1.4	1.0	0.5	42.7	41.8	28.6	32.4	48.0	39.6	2.0	1.6	1.04	1.04
81 Bosnia and Herzegovina	3.7	3.5	0.5	-0.2	43.0	48.8	35.1	39.4	44.5	40.5	1.4	1.1	1.07	1.07
82 Azerbaijan	9.4	10.8	1.1	1.2	51.4	53.9	25.6	29.5	58.1	38.3	2.0	2.2	1.17	1.15
83 Saint Vincent and the Grenadines	0.1	0.1	0.2	0.0	45.2	49.7	24.2	27.9	62.3	48.3	2.4	2.0	1.03	1.03
84 Oman	2.9	3.6	1.4	1.9	71.6	73.7	21.0	25.3	64.5	42.8	3.6	2.2	1.05	1.05
85 Brazil	198.4	220.5	1.3	0.8	81.2	84.9	25.4	29.1	54.0	46.8	2.4	1.8	1.05	1.05
85 Jamaica	2.8	2.8	0.8	0.4	51.8	52.1	24.5	27.0	67.0	55.9	2.6	2.3	1.05	1.05
87 Armenia	3.1	3.1	-0.1	0.3	64.7	64.1	30.3	32.1	55.9	45.3	1.7	1.7	1.18	1.14
88 Saint Lucia	0.2	0.2	1.0	1.0	28.0	16.8	24.0	27.4	66.5	46.9	2.3	1.9	1.03	1.03
89 Ecuador	14.9	17.9	1.7	1.3	60.3	68.0	22.6	25.5	65.1	56.3	3.0	2.4	1.05	1.05
90 Turkey	74.5	86.7	1.4	1.1	64.7	72.5	24.5	28.3	56.0	46.8	2.4	2.0	1.05	1.05
91 Colombia	47.6	56.9	1.6	1.3	72.1	75.6	23.8	26.8	60.1	51.5	2.6	2.3	1.05	1.05
92 Sri Lanka	21.2	23.1	1.1	0.8	15.7	15.2	27.8	30.7	48.9	50.6	2.2	2.3	1.04	1.04
93 Algeria	36.5	43.5	1.5	1.4	60.8	73.8	21.7	26.2	62.2	45.6	2.6	2.2	1.05	1.05
94 Tunisia	10.7	12.2	0.9	1.0	63.4	66.5	24.7	28.9	57.2	43.2	2.1	1.9	1.05	1.05
<b>MEDIUM HUMAN DEVELOPMENT</b>														
95 Tonga	0.1	0.1	0.6	0.4	23.0	23.5	19.9	21.3	78.9	76.1	4.3	3.8	1.05	1.05
96 Belize	0.3	0.4	2.3	2.0	47.7	44.5	18.8	21.8	83.4	60.8	3.6	2.7	1.03	1.03
96 Dominican Republic	10.2	12.1	1.5	1.2	61.7	70.3	22.7	25.1	67.1	58.3	2.9	2.5	1.05	1.05
96 Fiji	0.9	1.0	0.3	0.8	47.9	52.6	22.1	26.4	62.6	51.7	3.1	2.6	1.06	1.06
96 Samoa	0.2	0.2	0.4	0.5	22.0	19.6	19.7	20.9	81.6	72.7	4.6	3.8	1.08	1.08
100 Jordan	6.5	8.4	2.0	1.9	79.8	83.0	19.4	20.7	75.8	66.9	3.9	2.9	1.05	1.05
101 China	1,353.6 <sup>ij</sup>	1,393.1 <sup>ij</sup>	0.6 <sup>ij</sup>	0.4 <sup>ij</sup>	35.9 <sup>j</sup>	51.9	29.7	34.5	48.1	37.6	1.7	1.6	1.21	1.18
102 Turkmenistan	5.2	6.2	1.1	1.2	45.9	49.0	21.6	24.5	68.4	48.4	2.8	2.3	1.05	1.05
103 Thailand	69.9	73.3	1.1	0.5	31.1	34.4	30.2	34.2	44.7	41.1	1.7	1.5	1.06	1.06
104 Maldives	0.3	0.4	1.5	1.3	27.7	42.3	18.8	24.6	79.2	43.6	2.9	1.7	1.06	1.06
105 Suriname	0.5	0.6	1.3	0.9	64.9	70.1	25.7	27.6	57.1	52.3	2.7	2.3	1.08	1.08
106 Gabon	1.6	2.1	2.1	1.9	80.1	86.5	19.3	21.6	84.2	64.0	4.1	3.2	1.03	1.03
107 El Salvador	6.3	7.1	0.4	0.6	58.9	65.3	20.7	23.2	78.2	60.6	2.9	2.2	1.05	1.05
108 Bolivia, Plurinational State of	10.2	13.4	1.9	1.6	61.8	67.2	20.0	21.7	78.1	66.9	4.1	3.2	1.05	1.05
108 Mongolia	2.8	3.5	1.1	1.5	57.1	69.5	21.8	25.4	63.9	46.8	2.2	2.5	1.03	1.03
110 Palestine, State of	4.3	6.8	2.1	2.8	72.0	74.6	16.2	18.1	98.7	79.5	5.4	4.3	1.05	1.05
111 Paraguay	6.7	8.7	2.0	1.7	55.3	62.5	20.4	23.1	74.0	61.4	3.7	2.9	1.05	1.05
112 Egypt	84.0	106.5	1.9	1.7	42.8	43.6	21.4	24.4	67.9	57.2	3.3	2.7	1.05	1.05
113 Moldova, Republic of	3.5	3.1	-1.7	-0.7	44.6	48.4	32.3	35.2	50.8	38.8	1.6	1.5	1.06	1.06
114 Philippines	96.5	126.3	2.0	1.7	48.0	49.1	20.4	22.2	71.5	62.4	3.8	3.1	1.06	1.06
114 Uzbekistan	28.1	33.4	0.9	1.1	37.4	36.2	20.9	24.2	71.4	48.7	2.7	2.3	1.05	1.05
116 Syrian Arab Republic	21.1	27.9	2.9	1.7	51.9	56.5	19.1	21.1	77.7	65.2	3.6	2.8	1.05	1.05
117 Micronesia, Federated States of	0.1	0.1	0.4	0.5	22.3	22.7	18.9	20.8	78.2	65.1	4.3	3.3	1.07	1.07
118 Guyana	0.8	0.8	0.4	0.2	28.7	28.4	23.0	23.8	66.7	55.8	2.5	2.2	1.05	1.05
119 Botswana	2.1	2.3	1.3	1.1	53.2	62.3	20.0	22.9	69.5	56.7	3.4	2.6	1.03	1.03
120 Honduras	7.9	10.7	2.0	2.0	45.5	52.7	18.4	21.0	86.0	66.9	4.0	3.0	1.05	1.05
121 Indonesia	244.8	279.7	1.3	1.0	42.0	51.5	24.4	27.8	54.7	47.3	2.5	2.1	1.05	1.05

**TABLE 14 POPULATION TRENDS**

HDI rank	Population													
	Total <sup>a</sup>		Annual growth		Urban		Median age		Total dependency ratio		Total fertility rate		Sex ratio at birth <sup>b</sup>	
	(millions)		(% )		(% of total)		(years)		(per 100 people ages 15–64)		(births per woman)		(male to female births)	
	2012	2030	2000/2005	2010/2015 <sup>a,c</sup>	2000	2012	2000	2010	2000	2012	2000	2012 <sup>a,c</sup>	2000 <sup>d</sup>	2012 <sup>e</sup>
121 Kiribati	0.1	0.1	1.8	1.5	43.0	44.0	..	..	..	..	..	..	..	..
121 South Africa	50.7	54.7	1.3	0.5	56.9	62.4	22.9	24.9	59.6	52.9	2.9	2.4	1.03	1.03
124 Vanuatu	0.3	0.4	2.6	2.4	21.7	25.2	18.9	20.6	81.3	70.0	4.4	3.8	1.07	1.07
125 Kyrgyzstan	5.4	6.7	0.4	1.1	35.3	35.4	22.5	23.8	67.9	51.9	2.7	2.6	1.05	1.06
125 Tajikistan	7.1	9.0	0.9	1.5	26.5	26.5	18.5	20.4	84.9	65.3	4.0	3.2	1.05	1.05
127 Viet Nam	89.7	101.5	1.1	1.0	24.4	31.7	23.8	28.2	60.5	40.9	2.0	1.8	1.05	1.05
128 Namibia	2.4	3.0	1.9	1.7	32.4	39.0	19.5	21.2	77.6	64.8	4.0	3.1	1.03	1.03
129 Nicaragua	6.0	7.2	1.3	1.4	54.7	57.8	18.9	22.1	80.4	61.2	3.3	2.5	1.05	1.05
130 Morocco	32.6	37.5	1.1	1.0	53.3	57.4	22.6	26.3	62.0	49.2	2.7	2.2	1.06	1.06
131 Iraq	33.7	55.3	2.7	3.1	67.8	66.4	18.0	18.3	89.5	84.3	5.3	4.6	1.07	1.07
132 Cape Verde	0.5	0.6	1.6	0.9	53.4	63.4	18.5	22.8	88.9	55.8	3.7	2.3	1.03	1.03
133 Guatemala	15.1	22.7	2.5	2.5	45.1	50.2	17.7	18.9	92.4	82.4	4.8	3.9	1.05	1.05
134 Timor-Leste	1.2	2.0	3.9	2.9	24.3	28.7	15.3	16.6	106.8	93.0	7.1	6.0	1.05	1.05
135 Ghana	25.5	36.5	2.4	2.3	44.0	52.6	19.1	20.5	79.9	73.0	4.7	4.0	1.06	1.06
136 Equatorial Guinea	0.7	1.1	3.1	2.7	38.8	39.6	19.5	20.3	85.9	72.0	5.8	5.0	1.03	1.03
136 India	1,258.4	1,523.5	1.6	1.3	27.7	31.6	22.7	25.1	63.8	53.8	3.1	2.6	1.08	1.08
138 Cambodia	14.5	17.4	1.4	1.2	18.6	20.1	18.1	22.9	80.5	53.2	3.8	2.4	1.05	1.05
138 Lao People's Democratic Republic	6.4	7.8	1.6	1.3	22.0	35.4	18.6	21.5	85.0	58.4	4.2	2.6	1.05	1.05
140 Bhutan	0.8	0.9	2.9	1.5	25.4	36.4	19.4	24.6	79.2	49.7	3.7	2.3	1.04	1.04
141 Swaziland	1.2	1.5	0.8	1.4	22.6	21.2	17.2	19.5	90.8	69.4	4.2	3.2	1.03	1.03
<b>LOW HUMAN DEVELOPMENT</b>														
142 Congo	4.2	6.2	2.4	2.2	58.7	64.1	18.9	19.6	82.7	79.3	4.9	4.5	1.03	1.03
143 Solomon Islands	0.6	0.8	2.8	2.5	15.8	20.9	18.8	19.9	80.6	74.1	4.7	4.1	1.09	1.09
144 Sao Tome and Principe	0.2	0.2	1.6	2.0	53.4	63.4	17.8	19.3	88.3	75.8	4.6	3.5	1.03	1.03
145 Kenya	42.7	65.9	2.6	2.7	19.9	24.4	17.4	18.5	89.0	82.1	5.0	4.6	1.03	1.03
146 Bangladesh	152.4	181.9	1.6	1.3	23.6	28.9	20.8	24.2	70.4	53.0	3.1	2.2	1.05	1.05
146 Pakistan	180.0	234.4	1.9	1.8	33.1	36.5	19.0	21.7	82.8	63.4	4.5	3.2	1.05	1.05
148 Angola	20.2	30.8	3.4	2.7	49.0	60.0	16.1	16.6	100.5	93.9	6.8	5.2	1.03	1.03
149 Myanmar	48.7	54.3	0.6	0.8	27.2	33.2	24.7	28.2	55.2	43.0	2.4	2.0	1.03	1.03
150 Cameroon	20.5	28.8	2.3	2.1	45.5	52.7	18.2	19.3	86.3	78.3	5.0	4.3	1.03	1.03
151 Madagascar	21.9	35.3	3.0	2.8	27.1	33.2	17.4	18.2	93.8	83.7	5.5	4.5	1.02	1.03
152 Tanzania, United Republic of	47.7	81.9	2.6	3.1	22.3	27.2	17.4	17.5	91.0	92.6	5.7	5.5	1.03	1.03
153 Nigeria	166.6	257.8	2.5	2.5	42.4	50.3	18.1	18.5	86.4	86.1	5.9	5.5	1.06	1.06
154 Senegal	13.1	20.0	2.7	2.6	40.3	42.8	17.0	17.8	92.1	84.3	5.5	4.7	1.03	1.03
155 Mauritania	3.6	5.2	2.8	2.2	40.0	41.7	18.4	19.8	83.0	73.1	5.2	4.4	1.05	1.05
156 Papua New Guinea	7.2	10.2	2.5	2.2	13.2	12.5	19.6	20.4	74.7	70.3	4.5	3.8	1.08	1.08
157 Nepal	31.0	39.9	2.2	1.7	13.4	17.3	19.2	21.4	80.5	64.1	4.1	2.6	1.05	1.05
158 Lesotho	2.2	2.6	1.0	1.0	20.0	28.3	18.6	20.3	84.1	69.1	4.1	3.1	1.03	1.03
159 Togo	6.3	8.7	2.4	2.0	32.9	38.5	18.0	19.7	86.4	73.6	5.1	3.9	1.02	1.02
160 Yemen	25.6	41.3	3.1	3.0	26.3	32.9	15.5	17.4	105.6	86.4	6.5	5.0	1.05	1.05
161 Haiti	10.3	12.5	1.6	1.3	35.6	54.8	19.1	21.5	79.2	65.5	4.3	3.2	1.05	1.05
161 Uganda	35.6	59.8	3.2	3.1	12.1	16.0	15.6	15.7	106.0	103.1	6.9	6.0	1.03	1.03
163 Zambia	13.9	24.5	2.3	3.0	34.8	39.6	17.1	16.7	93.2	99.0	6.1	6.3	1.03	1.03
164 Djibouti	0.9	1.3	2.0	1.9	76.5	77.1	18.9	21.4	78.8	62.8	4.8	3.6	1.04	1.04
165 Gambia	1.8	2.8	3.0	2.7	48.8	57.9	16.9	17.8	92.1	83.8	5.6	4.7	1.03	1.03
166 Benin	9.4	14.6	3.2	2.7	38.3	45.6	17.1	17.9	94.5	86.9	6.0	5.1	1.04	1.04
167 Rwanda	11.3	17.6	2.6	2.9	13.8	19.4	16.9	18.7	92.4	84.2	5.8	5.3	1.01	1.01
168 Côte d'Ivoire	20.6	29.8	1.7	2.2	43.5	52.0	18.7	19.2	81.6	79.3	5.2	4.3	1.02	1.02
169 Comoros	0.8	1.2	2.7	2.5	28.1	28.1	18.5	18.9	79.2	82.8	5.3	4.8	1.05	1.05
170 Malawi	15.9	28.2	2.7	3.2	14.6	15.8	17.0	16.9	95.6	96.3	6.1	6.0	1.03	1.03
171 Sudan	35.0	50.8	2.3	2.4	32.5	33.3	18.6 <sup>k</sup>	19.7 <sup>k</sup>	83.7 <sup>k</sup>	76.0 <sup>k</sup>	5.5 <sup>k</sup>	..	1.05 <sup>k</sup>	1.05 <sup>k</sup>
172 Zimbabwe	13.0	17.6	0.1	2.2	33.8	39.1	18.2	19.3	82.3	71.6	3.9	3.1	1.02	1.02
173 Ethiopia	86.5	118.5	2.5	2.1	14.7	17.2	17.0	18.7	95.7	77.3	6.1	3.9	1.03	1.03
174 Liberia	4.2	6.5	2.2	2.6	44.3	48.5	17.9	18.2	85.9	86.0	5.8	5.1	1.06	1.06
175 Afghanistan	33.4	53.3	3.8	3.1	20.6	23.8	15.9	16.6	101.3	92.6	7.7	6.0	1.06	1.06
176 Guinea-Bissau	1.6	2.3	2.0	2.1	35.9	44.6	18.2	19.0	86.7	79.7	5.8	4.9	1.03	1.03
177 Sierra Leone	6.1	8.5	4.4	2.1	35.8	39.6	18.5	18.4	80.2	80.8	5.7	4.8	1.02	1.02
178 Burundi	8.7	11.4	2.6	1.9	8.2	11.2	16.7	20.2	96.5	67.7	5.8	4.1	1.03	1.03
178 Guinea	10.5	15.9	1.6	2.5	31.0	35.9	17.7	18.3	90.7	85.0	6.0	5.1	1.06	1.06
180 Central African Republic	4.6	6.4	1.6	2.0	37.6	39.3	18.7	19.4	85.1	78.0	5.4	4.5	1.03	1.03
181 Eritrea	5.6	8.4	4.0	2.9	17.6	21.8	17.1	19.0	89.7	78.9	5.4	4.3	1.03	1.03
182 Mali	16.3	26.8	3.1	3.0	28.1	35.6	16.3	16.3	98.8	97.3	6.8	6.2	1.05	1.05

HDI rank	Population												Sex ratio at birth <sup>b</sup>	
	Total <sup>a</sup>		Annual growth		Urban		Median age		Total dependency ratio		Total fertility rate		Sex ratio at birth <sup>b</sup>	
	(millions)		(%)		(% of total)		(years)		(per 100 people ages 15–64)		(births per woman)		(male to female births)	
	2012	2030	2000/2005	2010/2015 <sup>c,e</sup>	2000	2012	2000	2010	2000	2012	2000	2012 <sup>d,f</sup>	2000 <sup>g</sup>	2012 <sup>h</sup>
183 Burkina Faso	17.5	29.1	2.9	3.0	17.8	27.4	16.5	17.1	95.3	90.5	6.3	5.8	1.05	1.05
184 Chad	11.8	18.4	3.5	2.6	21.5	21.9	16.9	17.1	96.2	92.6	6.6	5.8	1.03	1.03
185 Mozambique	24.5	35.9	2.6	2.2	29.1	31.4	17.9	17.8	88.8	89.1	5.7	4.8	1.03	1.03
186 Congo, Democratic Republic of the	69.6	106.0	2.9	2.6	29.3	34.8	16.0	16.7	102.6	94.0	6.9	5.5	1.03	1.03
186 Niger	16.6	30.8	3.5	3.5	16.2	18.1	15.8	15.5	102.3	104.8	7.5	7.0	1.05	1.05
<b>OTHER COUNTRIES OR TERRITORIES</b>														
Korea, Democratic People's Rep. of	24.6	26.2	0.7	0.4	59.4	60.4	29.9	32.9	49.5	47.0	2.1	2.0	1.05	1.05
Marshall Islands	0.1	0.1	0.0	1.6	68.4	72.2	..	..	..	..	..	..	..	..
Monaco	0.0	0.0	0.1	0.0	100.0	100.0	..	..	..	..	..	..	..	..
Nauru	0.0	0.0	0.1	0.6	100.0	100.0	..	..	..	..	..	..	..	..
San Marino	0.0	0.0	2.3	0.6	93.4	94.1	..	..	..	..	..	..	..	..
Somalia	9.8	16.4	2.4	2.6	33.2	38.2	18.0	17.5	88.3	91.0	6.5	6.3	1.03	1.03
South Sudan	10.7	16.1	2.8 <sup>i</sup>	3.2 <sup>i</sup>	16.5	18.2	..	..	..	..	..	..	..	..
Tuvalu	0.0	0.0	0.6	0.2	46.0	51.0	..	..	..	..	..	..	..	..
<b>Human Development Index groups</b>														
Very high human development	1,134.3	1,216.9	0.7	0.5	77.0	81.2	36.8	39.3	49.1	50.3	1.6	1.8	1.05	1.06
High human development	1,039.2	1,150.1	0.9	0.8	70.1	74.1	27.6	30.4	54.7	46.4	2.2	1.9	1.05	1.05
Medium human development	3,520.5	4,017.4	1.2	1.0	34.8	43.7	25.6	28.9	56.8	47.0	2.5	2.1	1.10	1.10
Low human development	1,280.7	1,845.3	2.3	2.2	28.6	33.6	18.4	19.8	85.2	75.5	5.1	4.2	1.04	1.04
<b>Regions</b>														
Arab States	357.3	480.8	2.2	2.0	53.2	57.2	20.6	23.3	72.3	59.7	3.9	3.0	1.05	1.05
East Asia and the Pacific	1,991.4	2,135.3	0.8	0.6	36.7	49.7	28.1	32.3	50.8	40.9	2.0	1.8	1.14	1.12
Europe and Central Asia	481.6	491.3	0.0	0.2	63.2	64.8	32.9	34.9	49.5	43.4	1.6	1.7	1.06	1.06
Latin America and the Caribbean	597.7	696.0	1.3	1.1	75.3	79.3	24.4	27.5	60.3	52.1	2.6	2.2	1.05	1.05
South Asia	1,753.0	2,141.8	1.6	1.4	29.0	32.9	22.0	24.6	66.7	54.6	3.3	2.6	1.07	1.07
Sub-Saharan Africa	852.5	1,284.0	2.5	2.5	32.0	37.0	17.8	18.5	88.6	83.4	5.6	4.8	1.04	1.04
<b>Least developed countries</b>	870.4 <sup>T</sup>	1,256.8 <sup>T</sup>	2.2 <sup>T</sup>	2.2 <sup>T</sup>	24.3 <sup>T</sup>	28.9 <sup>T</sup>	18.3 <sup>T</sup>	19.7 <sup>T</sup>	85.5 <sup>T</sup>	75.5 <sup>T</sup>	5.1 <sup>T</sup>	4.1 <sup>T</sup>	1.04 <sup>T</sup>	1.04 <sup>T</sup>
<b>Small island developing states</b>	53.8	63.8	1.3	1.1	48.2	52.6	24.0	26.6	64.6	57.3	3.1	2.7	1.06	1.06
<b>World</b>	<b>7,052.1<sup>T</sup></b>	<b>8,321.3<sup>T</sup></b>	<b>1.2<sup>T</sup></b>	<b>1.2<sup>T</sup></b>	<b>46.7<sup>T</sup></b>	<b>52.6<sup>T</sup></b>	<b>26.7<sup>T</sup></b>	<b>29.2<sup>T</sup></b>	<b>59.0<sup>T</sup></b>	<b>52.0<sup>T</sup></b>	<b>2.7<sup>T</sup></b>	<b>2.5<sup>T</sup></b>	<b>1.07<sup>T</sup></b>	<b>1.07<sup>T</sup></b>

## NOTES

- a** Projections based on medium-fertility variant.
- b** The natural sex ratio at birth is commonly assumed and empirically confirmed to be 105 male births to 100 female births.
- c** Data are annual average of projected values for 2010–2015.
- d** Data are average annual estimates for 2000–2005.
- e** Includes Svalbard and Jan Mayen Islands.
- f** Includes Christmas Island, Cocos (Keeling) Islands and Norfolk Island.
- g** Includes Canary Islands, Ceuta and Melilla.
- h** Includes Kosovo.

- i** Includes Taiwan, China, and excludes Hong Kong Special Administrative Region and Macao Special Administrative Region.
- j** Excludes Hong Kong Special Administrative Region and Macao Special Administrative Region.
- k** Estimates are for Sudan only and do not include South Sudan.
- l** HDRO calculations based on population data from UNDESA (2012b).
- T** Aggregate from original data source.

## DEFINITIONS

**Population:** De facto population in a country, area or region as of 1 July.

**Annual population growth rate:** Average annual exponential growth rate for the period specified.

**Urban population:** De facto population living in areas classified as urban according to the criteria used by each area or country as of 1 July.

**Median age:** Age that divides the population distribution into two equal parts—that is, 50% of the population is above that age and 50% is below it.

**Total dependency ratio:** Ratio of the sum of the population ages 0–14 and ages 65 and older to the population ages 15–64.

**Total fertility rate:** Number of children that would be born to each woman if she were to live to the

end of her child-bearing years and bear children at each age in accordance with prevailing age-specific fertility rates.

**Sex ratio at birth:** Number of male births per female birth.

## MAIN DATA SOURCES

**Columns 1, 2, 13 and 14:** UNDESA (2012b).

**Columns 3, 4 and 7–12:** UNDESA (2011).

**Columns 5 and 6:** UNDESA (2012a).

# Regions

## **Arab States (20 countries or territories)**

Algeria, Bahrain, Djibouti, Egypt, Iraq, Jordan, Kuwait, Lebanon, Libya, Morocco, Oman, State of Palestine, Qatar, Saudi Arabia, Somalia, Sudan, Syrian Arab Republic, Tunisia, United Arab Emirates, Yemen

## **East Asia and the Pacific (24 countries)**

Cambodia, China, Fiji, Indonesia, Kiribati, Democratic People's Republic of Korea, Lao People's Democratic Republic, Malaysia, Marshall Islands, Federated States of Micronesia, Mongolia, Myanmar, Nauru, Palau, Papua New Guinea, Philippines, Samoa, Solomon Islands, Thailand, Timor-Leste, Tonga, Tuvalu, Vanuatu, Viet Nam

## **Europe and Central Asia<sup>1</sup> (31 countries)**

Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Malta, Republic of Moldova, Montenegro, Poland, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Tajikistan, The former Yugoslav Republic of Macedonia, Turkey, Turkmenistan, Ukraine, Uzbekistan

## **Latin America and the Caribbean (33 countries)**

Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Plurinational State of Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Bolivarian Republic of Venezuela

## **South Asia (9 countries)**

Afghanistan, Bangladesh, Bhutan, India, Islamic Republic of Iran, Maldives, Nepal, Pakistan, Sri Lanka

## **Sub-Saharan Africa (46 countries)**

Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Democratic Republic of the Congo, Côte d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Sao Tome and Principe, Senegal, Seychelles, Sierra Leone, South Africa, South Sudan, Swaziland, United Republic of Tanzania, Togo, Uganda, Zambia, Zimbabwe

Note: Countries included in aggregates for Least Developed Countries and Small Island Developing States follow UN classifications, which are available at [www.unohrrls.org](http://www.unohrrls.org).  
1. The former socialist countries of Europe and Central Asia that have undergone a political and economic transformation since 1989–1991 as well as Cyprus, Malta and Turkey.

# Statistical references

- ADB (Asian Development Bank). 2012.** *Asian Development Outlook 2012: Confronting Rising Inequality in Asia*. [www.adb.org/sites/default/files/pub/2012/ado2012.pdf](http://www.adb.org/sites/default/files/pub/2012/ado2012.pdf). Accessed 30 April 2012.
- Aguna, C., and M. Kovacevic 2011.** "Uncertainty and Sensitivity Analysis of the Human Development Index." Human Development Research Paper 2010/11. UNDP–HDRO, New York. [http://hdr.undp.org/en/reports/global/hdr2010/papers/HDRP\\_2010\\_47.pdf](http://hdr.undp.org/en/reports/global/hdr2010/papers/HDRP_2010_47.pdf).
- Alkire, S., A. Conconi, and J.M. Roche. 2012.** "Multidimensional Poverty Index 2012: Brief Methodological Note and Results." University of Oxford, Department of International Development, Oxford Poverty and Human Development Initiative, Oxford, UK.
- Alkire, S., J.M. Roche, M.E. Santos, and S. Seth. 2011.** "Multidimensional Poverty Index 2011: Brief Methodological Note." University of Oxford, Department of International Development, Oxford Poverty and Human Development Initiative, Oxford, UK. [www.ophi.org.uk/multidimensional-poverty-index-2011-brief-methodological-note/](http://www.ophi.org.uk/multidimensional-poverty-index-2011-brief-methodological-note/). Accessed 15 February 2012.
- Alkire, S., and J. Foster. 2010.** "Designing the Inequality-Adjusted Human Development Index (HDI)." Human Development Research Paper 2010/28. UNDP–HDRO, New York. [http://hdr.undp.org/en/reports/global/hdr2010/papers/HDRP\\_2010\\_28.pdf](http://hdr.undp.org/en/reports/global/hdr2010/papers/HDRP_2010_28.pdf).
- Anand, S., and A. Sen. 2000.** "The Income Component of the Human Development Index." *Journal of Human Development and Capabilities* 1(1): 83–106.
- Athukorala, Prema-chandra. 2012.** "Asian Trade Flows: Trends, Patterns and Prospects." *Japan and the World Economy* 24: 150–62.
- Barro, R. J., and J. W. Lee. 2010.** *A New Data Set of Educational Attainment in the World, 1950–2010*. Working Paper 15902. Cambridge, MA: National Bureau of Economic Research. [www.nber.org/papers/w15902](http://www.nber.org/papers/w15902). Accessed 15 April 2012.
- . 2011. Dataset of educational attainment. [www.barrolee.com](http://barrolee.com). Accessed 15 April 2012.
- CRED EM-DAT (Centre for Research on the Epidemiology of Disasters). 2012.** The International Disaster Database. [www.emdat.be](http://www.emdat.be). Accessed 30 March 2012.
- ECLAC (Economic Commission for Latin America and the Caribbean). 2012.** *Preliminary Overview of the Economies of Latin America and the Caribbean*. Santiago. [www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/4/41974/P41974.xml&xsl=/](http://www.eclac.org/cgi-bin/getProd.asp?xml=/publicaciones/xml/4/41974/P41974.xml&xsl=/). Accessed 30 April 2012.
- Eurostat. 2012.** "European Union Statistics on Income and Living Conditions (EUSILC)." Brussels. [http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/eu\\_silc](http://epp.eurostat.ec.europa.eu/portal/page/portal/microdata/eu_silc). Accessed 15 April 2012.
- FAO (Food and Agriculture Organization). 2011.** AQUASTAT database. [www.fao.org/nr/water/aquastat/data](http://www.fao.org/nr/water/aquastat/data). Accessed 15 April 2012.
- . 2012. Statistics Division Database. [www.fao.org/corp/statistics/en/](http://www.fao.org/corp/statistics/en/). Accessed 15 April 2012.
- Gallup. 2012.** Gallup World Poll database. <https://worldview.gallup.com>. Accessed 30 April 2012.
- Høyland, B., K. Moene, and F. Willumsen. 2011.** "The Tyranny of International Rankings." *Journal of Development Economics* 97(1): 1–14.
- ICF Macro. 2012.** Measure DHS (Demographic and Health Survey). [www.measuredhs.com](http://www.measuredhs.com).
- IEA (International Energy Agency). 2012.** *World Energy Outlook 2011*. Paris. [www.iea.org/weo/electricity.asp](http://www.iea.org/weo/electricity.asp). Accessed 30 March 2012.
- ILO (International Labour Organization). 2012.** *Key Indicators of the Labour Market*. 7th edition. Geneva. [www.ilo.org/empelm/what/WCMS\\_114240/lang-en/index.htm](http://www.ilo.org/empelm/what/WCMS_114240/lang-en/index.htm). Accessed 15 October 2012.
- IMF (International Monetary Fund). 2012.** World Economic Outlook database, October 2012. [www.imf.org/external/pubs/ft/weo/2012/01/weodata/index.aspx](http://www.imf.org/external/pubs/ft/weo/2012/01/weodata/index.aspx). Accessed 15 October 2012.
- Inter-agency Group for Child Mortality Estimation. 2012.** Database on child mortality. [www.childinfo.org/mortality\\_igme.html](http://www.childinfo.org/mortality_igme.html). Accessed 15 October 2012.
- IPU (Inter-Parliamentary Union). 2012.** PARLINE database. [www.ipu.org/wmn-e/classif.htm](http://www.ipu.org/wmn-e/classif.htm). Accessed 15 May 2012.
- ITU (International Telecommunication Union). 2012.** World Telecommunication/ICT Indicators database. [www.itu.int/ITU-D/ict/statistics/](http://www.itu.int/ITU-D/ict/statistics/). Accessed 15 October 2012.
- IUCN (International Union for Conservation of Nature and Natural Resources). 2012.** IUCN Red List of Threatened Species. Version 2011.2. [www.iucnredlist.org](http://www.iucnredlist.org). Accessed 15 April 2012.
- LIS (Luxembourg Income Study). 2012.** "Luxembourg Income Study Project." [www.lisproject.org/techdoc.htm](http://www.lisproject.org/techdoc.htm). Accessed 15 May 2012.
- OECD (Organisation for Economic Co-operation and Development). 2010.** Programme for International Student Assessment. [www.oecd.org/edu/pisa/2009](http://www.oecd.org/edu/pisa/2009). Accessed 30 March 2012.
- OECD-DAC (Organisation for Economic Co-operation and Development–Development Assistance Committee). 2012.** Aid statistics database. [www.oecd.org/dac/aidstatistics/](http://www.oecd.org/dac/aidstatistics/). Accessed 15 October 2012.
- SIPRI (Stockholm International Peace Research Institute). 2012.** SIPRI Military Expenditure Database. [www.sipri.org](http://www.sipri.org). Accessed 30 March 2012.
- UNCTAD (United Nations Conference on Trade and Development). 2012.** Statistics. [http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx?sCS\\_referer=&sCS\\_ChosenLang=en](http://unctadstat.unctad.org/ReportFolders/reportFolders.aspx?sCS_referer=&sCS_ChosenLang=en). Accessed 1 May 2012.
- UNDESA (United Nations Department of Economic and Social Affairs). 2011.** *World Population Prospects: The 2010 Revision*. New York. <http://esa.un.org/unpd/wpp/index.htm>. Accessed 15 April 2012.
- . 2012a. *World Urbanization Prospects: The 2011 Revision*. New York. <http://esa.un.org/unpd/wup/index.htm>. Accessed 30 April 2012.
- . 2012b. Population Division Database. Detailed Indicators. <http://esa.un.org/unpd/wpp/unpp/>. Accessed 1 May 2012.
- . 2012c. *World Economic Situation and Prospects: Mid-2012 Update*. New York. [www.un.org/en/development/desa/policy/wesp/](http://www.un.org/en/development/desa/policy/wesp/). Accessed 30 April 2012.
- UNESCO (United Nations Educational, Scientific and Cultural Organization) Institute for Statistics. 2012.** Data Centre. <http://stats.uis.unesco.org>. Accessed 15 October 2012.
- UNESCAP (United Nations Economic and Social Commission for Western Asia). 2012.** "Summary of the Survey of Economic and Social Developments in Western Asia, 2011–2012." Beirut. [www.escwa.un.org/information/publications/edit/upload/E\\_ESCWA\\_EDGD\\_12\\_1\\_e.pdf](http://www.escwa.un.org/information/publications/edit/upload/E_ESCWA_EDGD_12_1_e.pdf). Accessed 30 April 2012.
- UNICEF (United Nations Children's Fund). 2012.** *The State of the World's Children 2012*. New York. [www.unicef.org/sowc2012/](http://www.unicef.org/sowc2012/). Accessed 30 March 2012.
- . Various years. Multiple Indicator Cluster Surveys. New York. [www.unicef.org/statistics/index\\_24302.html](http://www.unicef.org/statistics/index_24302.html). Accessed 15 October 2012.
- UNODC (United Nations Office on Drug and Crime). 2012.** *2011 Global Study on Homicide: Trends, Contexts, Data*. [www.unodc.org/documents/data-and-analysis/statistics/Homicide/Globa\\_study\\_on\\_homicide\\_2011\\_web.pdf](http://www.unodc.org/documents/data-and-analysis/statistics/Homicide/Globa_study_on_homicide_2011_web.pdf). Accessed 30 May 2012.
- UNSD (United Nations Statistics Division). 2012a.** National Accounts Main Aggregate Database. <http://unstats.un.org/unsd/snaama>. Accessed 1 May 2012.
- . 2012b. International Merchandise Trade Statistics. Comtrade Database. <http://comtrade.un.org/>. Accessed 15 October 2012.
- UN WTO (World Tourism Organization). 2012.** Compendium of Tourism Statistics database. <http://statistics.unwto.org/en/content/compendium-tourism-statistics>. Accessed 30 April 2012.
- WHO (World Health Organization). 2012a.** *World Health Statistics 2011*. Geneva. [www.who.int/gho/publications/world\\_health\\_statistics/EN\\_WHS2011\\_Full.pdf](http://www.who.int/gho/publications/world_health_statistics/EN_WHS2011_Full.pdf). Accessed 30 March 2012.
- . 2012b. Global Health Observatory. [www.apps.who.int/ghodata](http://www.apps.who.int/ghodata). Accessed 30 March 2012.
- . 2012c. Mental Health. [www.who.int/mental\\_health/en](http://www.who.int/mental_health/en). Accessed 30 April 2012.
- WHO (World Health Organization), UNICEF (United Nations Children's Fund), UNFPA (United Nations Population Fund) and World Bank. 2012.** "Trends in Estimates of Maternal Mortality Ratio." [www.childinfo.org/maternal\\_mortality\\_ratio.php](http://www.childinfo.org/maternal_mortality_ratio.php). Accessed 15 May 2012.
- WIPO (World Intellectual Property Organization). 2012.** Intellectual Property Statistics. [www.wipo.int/ipstats/en/](http://www.wipo.int/ipstats/en/). Accessed 22 March 2012.
- World Bank. 2011.** *Migration and Remittances Factbook*. 2nd Edition. Washington, DC. <http://siteresources.worldbank.org/INTLAC/Resources/Factbook2011-Ebook.pdf>. Accessed 15 April 2012.
- . 2012a. *World Development Indicators 2012*. Washington, DC. <http://data.worldbank.org>. Accessed 15 October 2012.
- . 2012b. International Income Distribution Database. [Not publicly available]. 15 April 2012.
- . 2012c. Correspondence on personal computers data. 15 April 2012.

# Technical appendix: explanatory note for projections exercise

This technical appendix summarizes the two projection models discussed in chapter 4.

## Lutz and KC (2013) Model for demography, education and human development

---

The Lutz and KC (2013) Model is used to project demographic trends through to 2050. It is based on the premise that trends in population growth are affected by improvements in education quality and quantity. This Report employs a dataset covering 120 countries, with their populations disaggregated by age, sex and education level.

Lutz and KC's multistate population modelling approach was developed in the 1970s at the International Institute for Applied Systems Analysis in Austria and is well accepted among technical demographers. The idea behind the projection is straightforward: with a baseline year of 2000 (the latest year for which internationally comparable data are available for most countries) and assuming that education level remains invariant after a certain age, the proportion of women ages 50–54 without any formal education in 2005 can be derived directly from the proportion of women ages 45–49 without any formal education in 2000.

Given that the size of a birth cohort as it ages over time can change only through mortality and migration, these proportions would be constant only if no individual moved up to the primary education category after age 15 and if mortality and migration did not differ by education level. However, strong links exist between education level and mortality, fertility and migration behaviour, so the approach must be adjusted to correct for these effects. The size of a birth cohort depends on the education level of women of childbearing age, where a negative relationship is traditionally observed. In projecting these cohorts forward, differential survival rates, based on a comprehensive literature review and modelling exercises using past data, are applied to the education groups.

In reality, the likelihood of an individual transitioning from one education level to the next highest strongly depends on the education level of his or her parents. But this educational inheritance mechanism is not explicitly modelled here. Instead, assumptions regarding transition rates and their future development are statistically derived from the aggregate behaviour of education systems in the past. Since this expansion is partly the result of the inheritance mechanism—the fact that many parents desire that their children reach an education level at least as high as their own—inheritance is implicitly reflected in the projection, even though it is not formally part of the model. Such an approach appears preferable because data on

the aggregate growth patterns of education systems, on which assumptions for the future can be based, are much more readily available than robust data on the microprocess of educational inheritance.

The procedure for each country can be summarized as follows:

- A baseline population distribution by five-year age group cohorts, sex and education level is derived for 2000.
- For each five-year time step, cohorts move to the next five-year age group.
- Mortality rates specific to each age cohort, sex and education group and to each period are applied.
- Age- and sex-specific education transition rates are applied.
- Age-, sex- and education-specific net migrants are added to or removed from the population. In the projections presented here the migration assumptions correspond to those used in the UN population projections.
- Fertility rates, specific to each age, sex and education group and to each period, are applied to determine the size of the new 0–5 age group.
- The new population distribution by age, sex and education level is noted, and the above steps are repeated for the next five-year time step.

The projection aims to yield a dataset with the population distributed by five-year age groups (from ages 15–20 to ages 100 and older), by sex, and by four education levels over 50 years from 2000 (the base year) to 2050 in five-year intervals.

## Pardee Center for International Futures (2013) Model for prospects of human development and policy scenarios

---

This Report uses the International Futures Model for long-term human development projections based on closely interacting policy-related issues, including income, health, education, poverty, gender, social change (instability and risk) and environmental sustainability. For more detailed information on how the model was developed, see Pardee Center for International Futures (2013) and the University of Denver Korbel School website ([www.ifs.du.edu/introduction](http://www.ifs.du.edu/introduction)).

The International Futures Model is a large-scale, long-term, integrated global modelling system that incorporates demographic, economic, education, health, energy, agricultural, sociopolitical, infrastructural, technological and environmental submodels for 183 countries interacting in the global system.

The model was used in the 2011 *Human Development Report* to project long-term environmental trend scenarios and evaluate their impact on human development.

Core features of the model pertinent to human development analysis include:

- A production function that sets parameters of productivity in four major categories: human resources, social capital, physical capital and knowledge.
- A population model containing 22 age-sex cohorts in a structure representing changes in fertility rates, with an extensive health model to compute mortality (and morbidity) across 13 cause categories.
- An equilibrium-seeking economic model across six sectors. It does not assume that exact equilibrium will exist in any given year; rather, it uses inventories as buffer stocks and to provide price signals so that the model converges to equilibrium over time.
- An education model representing formal education across primary, secondary (separating lower and upper secondary levels) and tertiary levels.
- A health model drawing on both the World Health Organization’s Global Burden of Disease project for major causes of death and disability and the Comparative Risk Assessment approach on relative risk to represent key drivers of health such as malnutrition, obesity and smoking.

- A sociopolitical model representing fiscal policy through taxing and spending decisions and other governance variables, including corruption levels and regime types.

There are also models for international politics (focusing on trade, foreign investment, intergovernmental transfers and technology upgrade), infrastructure (focusing on level of access to major infrastructure systems) and the environment (focusing on resource use, such as water and land, and carbon production). The agricultural and energy models are partial equilibrium systems at the physical level, and their dynamics shape the financial sector representations in the economic model.

The projection identifies aggressive but reasonable policy interventions to construct an accelerated progress scenario, which combines interventions in a dozen clusters of policy initiatives (see table A1) and analyses their impact relative to the forecasts under the base case scenario. The cost of inaction is the difference in outcomes between the two scenarios. The definition of “aggressive but reasonable” builds on the analysis of the Pardee Center for International Futures series Patterns of Potential Human Progress and relies on cross-sectional functions relating the target variable to development level and using the function itself or some number of standard deviations above it.

TABLE A1

**Twelve clusters of policy intervention levers for comparative analysis**

Primarily domestic levers	Primarily international levers
<b>1. Demographics</b> Fertility rates Female labour force participation rates	<b>7. Social capital and governance</b> Probability of internal conflict Government revenues and corruption Democracy and inclusion
<b>2. Savings and investment</b> Savings and investment rates	<b>8. Trade</b> Trade barriers Export promotion
<b>3. Domestic transfers</b> Transfers to unskilled households	<b>9. Foreign investment</b> Foreign direct investment Portfolio flows
<b>4. Human capital</b> Education participation targets and education spending Health spending targets and targets on selected health risk factors	<b>10. Household transfers</b> Remittances
<b>5. Infrastructure capital</b> Infrastructure access	<b>11. Intergovernmental transfers</b> Foreign aid Flows from international financial institutions
<b>6. Knowledge capital</b> Research and development	<b>12. Technology</b> Technology upgrade

Source: Adapted from Pardee Center for International Futures (2013).

## The base case scenario

The base case scenario implies continuity with historical patterns (including development policies pursued in recent decades). However, the model's complex dynamics—including a wide range of nonlinear relationships—provide a structure that can also generate nonlinear future patterns that differ considerably from historical trajectories.

## The accelerated progress scenario

Under the accelerated progress scenario, resources and policy ambition increase substantially compared with the base case. Table A2 lists choices and targets for appropriate (aggressive but reasonable) magnitudes of intervention in poverty reduction, infrastructure and governance, among others. Changes are relative to the underlying values for each country in the base case scenario and therefore take into account different national starting points and patterns.

TABLE A2

Targets for appropriate magnitudes of intervention, relative to the base case scenario

Policy area	Over 10 years	Over 20 years	Over 30 years	Over 40 years
<b>Global level</b>				
Poverty reduction	<ul style="list-style-type: none"> <li>• Doubling of lending by international financial institutions</li> <li>• Foreign aid donations from developed countries increased to at least 0.5% of GDP</li> </ul>	<ul style="list-style-type: none"> <li>• 30% increase in foreign direct investment</li> <li>• 50% increase in portfolio investment flows</li> <li>• 20% increase in expenditure on research and development</li> <li>• 50% increase in migration</li> </ul>		
Infrastructure <sup>a</sup>		<ul style="list-style-type: none"> <li>• Rural population living more than 2 kilometres from an all-season road reduced by half or to below 10% (whichever comes first)</li> <li>• Universal access to electricity</li> <li>• Elimination of solid fuels as the primary source for heating and cooking in the home</li> </ul>	<ul style="list-style-type: none"> <li>• 20% improvement in infrastructure</li> <li>• Universal access to an improved source of water and sanitation (after having been halved from 1990 levels by 2015)</li> <li>• Universal access to mobile telephone and broadband service</li> </ul>	<ul style="list-style-type: none"> <li>• 50% increase in renewable energy production</li> </ul>
Governance <sup>b</sup>	<ul style="list-style-type: none"> <li>• Corruption reduced and governance effectiveness and regulatory quality increased globally to one standard error above typical values for each country's GDP per capita</li> <li>• Measures of democracy and gender empowerment increased to one standard error above typical values for each country's GDP per capita</li> </ul>	<ul style="list-style-type: none"> <li>• Probability of internal conflict reduced to 0</li> <li>• 10% increase (about 3 percentage points of GDP) in government revenue in non-Organisation for Economic Co-operation and Development countries</li> </ul>		
Regional and domestic levels <sup>c</sup>	<ul style="list-style-type: none"> <li>• For developing countries: 20% increase in health spending, 20% improvement in governance effectiveness on the World Bank scale, 20% increase in economic freedom on Fraser Institute scale, and 0.2% increase in technologically based productivity growth</li> </ul>	<ul style="list-style-type: none"> <li>• 30% decrease in corruption on the Transparency International scale</li> </ul>		

a. Includes transportation, energy, water and sanitation, and information and communication technology. The global targets are a combination of normative targets (such as aspirational targets from the Millennium Development Goals) and, considering the possibility of goal fulfilment by all countries, 97.5% level of truly universal goals.

b. Governance is conceptualized in three dimensions—security, capacity and inclusion. The security dimension is operationalized with two generally complementary measures of the probability of domestic conflict and of the vulnerability to conflict. The capacity dimension is operationalized as the governments' ability to mobilize revenue (up to 30% of GDP) and to use it effectively (looking especially to lower levels of corruption). The inclusion dimension is operationalized as the democratic character of institutions and also as broader inclusiveness, as represented by the Human Development Report's Gender Empowerment Measure.

c. Regional specific targets are available in Pardee Center for International Futures (2013).

## Countries and HDI ranks in 2012 and change in rank from 2011 to 2012

Afghanistan	175		
Albania	70	-1	
Algeria	93	-1	
Andorra	33	-1	
Angola	148		
Antigua and Barbuda	67	-1	
Argentina	45	-1	
Armenia	87	-1	
Australia	2		
Austria	18		
Azerbaijan	82	-1	
Bahamas	49		
Bahrain	48		
Bangladesh	146	1	
Barbados	38		
Belarus	50	1	
Belgium	17		
Belize	96		
Benin	166		
Bhutan	140	1	
Bolivia, Plurinational State of	108		
Bosnia and Herzegovina	81	-1	
Botswana	119	-1	
Brazil	85		
Brunei Darussalam	30		
Bulgaria	57		
Burkina Faso	183		
Burundi	178	-1	
Cambodia	138		
Cameroon	150		
Canada	11	-1	
Cape Verde	132	-1	
Central African Republic	180	-1	
Chad	184		
Chile	40		
China	101		
Colombia	91		
Comoros	169	-1	
Congo	142		
Congo, Democratic Republic of the	186		
Costa Rica	62		
Côte d'Ivoire	168	1	
Croatia	47	-1	
Cuba	59		
Cyprus	31		
Czech Republic	28		
Denmark	15		
Djibouti	164		
Dominica	72		
Dominican Republic	96	2	
Ecuador	89		
Egypt	112		
El Salvador	107	-1	
Equatorial Guinea	136		
Eritrea	181	1	
Estonia	33	1	
Ethiopia	173	-1	
Fiji	96	2	
Finland	21		
France	20		
Gabon	106		
Gambia	165		
Georgia	72	3	
Germany	5		
Ghana	135		
Greece	29		
Grenada	63	-1	
Guatemala	133		
Guinea	178	-1	
Guinea-Bissau	176		
Guyana	118	1	
Haiti	161	1	
Honduras	120		
Hong Kong, China (SAR)	13	1	
Hungary	37		
Iceland	13		
India	136		
Indonesia	121	3	
Iran, Islamic Republic of	76	-2	
Iraq	131	1	
Ireland	7		
Israel	16		
Italy	25		
Jamaica	85	-2	
Japan	10		
Jordan	100		
Kazakhstan	69	-1	
Kenya	145		
Kiribati	121		
Korea, Republic of	12		
Kuwait	54	-1	
Kyrgyzstan	125		
Lao People's Democratic Republic	138		
Latvia	44	1	
Lebanon	72		
Lesotho	158	1	
Liberia	174		
Libya	64	23	
Liechtenstein	24		
Lithuania	41	2	
Luxembourg	26		
Madagascar	151		
Malawi	170	1	
Malaysia	64	1	
Maldives	104	-1	
Mali	182	-1	
Malta	32	1	
Mauritania	155		
Mauritius	80	-1	
Mexico	61		
Micronesia, Federated States of	117		
Moldova, Republic of	113		
Mongolia	108	2	
Montenegro	52	-2	
Morocco	130		
Mozambique	185		
Myanmar	149		
Namibia	128		
Nepal	157		
Netherlands	4		
New Zealand	6		
Nicaragua	129		
Niger	186	1	
Nigeria	153	1	
Norway	1		
Oman	84	-1	
Pakistan	146		
Palau	52	2	
Palestine, State of	110	1	
Panama	59	1	
Papua New Guinea	156		
Paraguay	111	-2	
Peru	77	-1	
Philippines	114		
Poland	39		
Portugal	43	-3	
Qatar	36		
Romania	56	-1	
Russian Federation	55		
Rwanda	167		
Saint Kitts and Nevis	72	-1	
Saint Lucia	88		
Saint Vincent and the Grenadines	83	-2	
Samoa	96		
Sao Tome and Principe	144		
Saudi Arabia	57		
Senegal	154	-2	
Serbia	64		
Seychelles	46		
Sierra Leone	177	2	
Singapore	18		
Slovakia	35		
Slovenia	21		
Solomon Islands	143		
South Africa	121	1	
Spain	23		
Sri Lanka	92		
Sudan	171	-1	
Suriname	105		
Swaziland	141	-1	
Sweden	7		
Switzerland	9		
Syrian Arab Republic	116		
Tajikistan	125	1	
Tanzania, United Republic of	152	1	
Thailand	103	1	
The former Yugoslav Republic of Macedonia	78	-2	
Timor-Leste	134		
Togo	159	1	
Tonga	95		
Trinidad and Tobago	67	-1	
Tunisia	94		
Turkey	90		
Turkmenistan	102		
Uganda	161		
Ukraine	78		
United Arab Emirates	41	-1	
United Kingdom	26		
United States	3	-1	
Uruguay	51		
Uzbekistan	114	1	
Vanuatu	124	-2	
Venezuela, Bolivarian Republic of	71	-1	
Viet Nam	127		
Yemen	160	-2	
Zambia	163		
Zimbabwe	172	1	

Note: Positive or negative values in the rightmost column indicate the number of positions upward or downward in the country's ranking over 2011–2012 using consistent data and methodology; a blank indicates no change.



United Nations Development Programme  
One United Nations Plaza  
New York, NY 10017  
[www.undp.org](http://www.undp.org)

USD 30  
ISBN 978-92-1-126340-4



The 21st century is witnessing a profound shift in global dynamics, driven by the fast-rising new powers of the developing world. China has overtaken Japan as the world's second biggest economy, lifting hundreds of millions of people out of poverty in the process. India is reshaping its future with new entrepreneurial creativity and social policy innovation. Brazil is raising its living standards by expanding international relationships and antipoverty programmes that are emulated worldwide.

But the "Rise of the South" is a much larger phenomenon. Indonesia, Mexico, South Africa, Thailand, Turkey and other developing countries are becoming leading actors on the world stage. The 2013 *Human Development Report* identifies more than 40 developing countries that have done better than expected in human development in recent decades, with their progress accelerating markedly over the past 10 years.

Each of these countries has its own unique history and has chosen its own distinct development pathway.

Yet they share important characteristics and face many of the same challenges. They are also becoming more interconnected and interdependent. And people throughout the developing world are increasingly demanding to be heard, as they share ideas through new communications channels and seek greater accountability from governments and international institutions.

The 2013 *Human Development Report* analyses the causes and consequences of the continuing "Rise of the South" and identifies policies rooted in this new reality that could promote greater progress throughout the world for decades to come. The Report calls for far better representation of the South in global governance systems and points to potential new sources of financing within the South for essential public goods. With fresh analytical insights and clear proposals for policy reforms, the Report charts a course for people in all regions to face shared human development challenges together, fairly and effectively.

*"The Report refreshes our understanding of the current state of global development, and demonstrates how much can be learned from the experiences of fast development progress in so many countries in the South."*

—UNDP Administrator Helen Clark, from the Foreword

*"The human development approach is a major advance in the difficult exercise of understanding the successes and deprivations of human lives, and in appreciating the importance of reflection and dialogue, and through that advancing fairness and justice in the world."*

—Nobel Laureate Amartya Sen, from chapter 1

*"No one has a monopoly on good ideas, which is why New York will continue to learn from the best practices of other cities and countries."*

—New York City Mayor Michael Bloomberg, from chapter 3

*"A close look at the diverse pathways that successful developing countries have pursued enriches the menu of policy options for all countries and regions."*

—Report lead author Khalid Malik, from the Introduction