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Developing Countries: Definitions, Concepts and Comparisons

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Summary

What is a developing country? How does one know whether a country is actually developing or not? This report looks at this issue from several perspectives. Using a series of reports by various organizations, it shows how countries rank in their levels of development according to different criteria. Countries ranking high according to one measure may rank lower according to another. It was once commonly believed that raising a country's average per capita income level would lead to improvements in most other areas. Time and experience have shown, however, that social conditions and the general well-being of people may not necessarily improve when a country's average income level increases. Countries with relatively high levels of per capita income may rank lower in their social and structural development. By contrast, some poor countries rank with the advanced countries in their governance and levels of individual and economic freedom.

This report examines four criteria which are often used today to rank and assess countries' levels of development. They are: (1) per capita income; (2) economic and social structure; (3) social conditions; and (4) the prevailing level of economic and political freedom. Specific indices or quantitative studies are explained and applied to each criteria and the differences among the various measures are explained.

Jan Tinbergen, the Dutch economist and Nobel laureate (1969), argued that a separate tool or instrument is needed to achieve individual economic objectives. Two goals cannot be achieved effectively with the same policy tool. When applied to the field of development, the Tinbergen rule suggests that one needs a separate program or procedure for each objective if one wants to achieve multiple goals. There is little evidence, despite the claims of some authors, economic growth will lead by itself to improvements in social indicators, economic freedom, governance, or political and civil liberty. Likewise, though many argue that strong emphasis needs be placed on improving social indicators and basic human needs, there is little evidence that improvements in these areas will lead necessarily to increased economic growth or improved governance. According to Tinbergen's rule, one likely needs a variety of programs, each targeting a particular objective, if one wants to successfully pursue a variety of different goals.

Balancing the costs of achieving these various goals – maintaining or increasing expenditures for programs targeting social goals, conserving and improving infrastructure and capital facilities and avoiding macroeconomic instability through prudent monetary, fiscal and foreign exchange policies – is one of the great challenges facing developing countries today.

Congress will consider major bills dealing with development issues in the coming year. Some of the controversy on these issues comes from different views about U.S. interests and goals. However, much of the debate about the goals and effectiveness of development aid stems from different concepts about the development process itself. This report seeks to provide background and information which may be of use to Congress in that context.

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What is a "developing country?" How does one know whether a country is actually developing? How can we measure the progress countries are making in development? There are many measures used which seek to identify and rank countries in terms of their levels of development. Most focus on income levels, due to the premise that countries are more developed when their annual levels of per capita income rise. Others examine social, structural and other criteria, due to the premise that these are also important attributes of development. In general, development is a multi-dimensional concept that encompasses economic, social and political criteria. This report seeks to clarify how some of the major criteria are measured and defined.

This is not merely a theoretical issue. The 108th Congress will be considering legislation relating to this issue. This will include, among other things, foreign aid appropriations, authorizations for U.S. contributions to multilateral development banks and the proposed Millennium Challenge Account (MCA). Typically, there has been much debate about the goals and priorities to be emphasized and the criteria to be used for determining whether development aid programs have been effective in accomplishing desired goals. Some of the disagreement appears to stem from differing concepts about development and the development process.

Every country is unique. Nevertheless, countries often can be grouped according to their economic, social and political situation. In some cases, it is important to rank countries in order to see which are eligible for benefits established by law or international agreement. For example, some less developed countries are eligible for trade or foreign aid benefits which are not available to countries at higher levels of development. These include access to grants and low-cost concessional aid from international financial institutions and some bilateral aid programs and tariff exemptions under the World Trade Organization's General Schedule of Preferences (GSP). Likewise, analysts often group countries according to their levels of development in order to study their internal dynamics and determine which development policies or methods might be most appropriate for a given country.

This report evaluates development from several different perspectives. Using a series of reports which are issued periodically by various organizations, it shows how countries rank in their levels of development according to diverse criteria. Countries that rank high according to one measure may rank lower according to another. At one time, it was commonly believed that raising a country's average per capita income level would lead to improvements in most other areas. Time and experience have shown, however, that social conditions and the general well-being of people may not necessarily improve when a country's average income level increases. The link between countries' levels of per capita income and their levels of social development (measured by health and educational criteria) is not necessarily strong. Countries with relatively high levels of per capita income may rank lower in their social and structural development. By contrast, some poor countries rank with the advanced countries in their systems of governance and their levels of individual and economic freedom.

This report examines four criteria which are often used today to rank and assess countries' levels of development. These are: (1) per capita income; (2) economic and social structure; (3) social conditions; (4) the prevailing level of governance and freedom. Specific studies or annual reports relevant for each category are cited and discussed. At the end of the discussion, a few comments are made about the possible relationship of these concepts. A series of statistics and tables are provided at the end of the report.

Congress and Development

Since the onset of the Marshall Plan in 1948, there has been much congressional debate concerning the best way that growth and development can be stimulated and sustained. Large amounts of foreign aid have been provided to developing nations (though not nearly as much in real dollar terms or as a share of the donor countries' economy as in the decade starting in 1948).[1] The persistence of poverty, malnutrition, disease and illiteracy in developing countries has been a continuing source of concern to many donor and recipient countries.

In recent decades, Congress and the Executive Branch have proposed a variety of new programs which many thought would be effective in promoting development. The programs specified a wide variety of different goals which ought to be pursued. In 1989, a task force of the House Foreign Affairs Committee found that the basic law undergirding the U.S. bilateral foreign aid program (the Foreign Assistance Act of 1961) contained 33 different goals for the U.S. bilateral aid program and the U.S. aid program identified 75 priority areas which should be emphasized.[2] Others have been enacted since that time. Similarly, a broad variety of goals and policy concerns have been written into the two basic laws (the International Financial Institutions Act of 1977 and the Bretton Woods Agreements Act) which govern U.S. participation in the International Monetary Fund and the multilateral development banks. The variety of U.S. goals in these bilateral and multilateral programs has sometimes blurred the focus and encouraged confusion about the priorities, design and evaluation of the development aid programs funded by these agencies. The strong arguments which often occur during discussions about foreign aid and development policy often seem rooted in differences over goals and priorities and much of the disagreement stems from conflicting views about the nature of development and the best way it can be measured and achieved.

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[1]For a discussion of U.S. foreign aid programs over the years, see CRS Report 98-916 F, *Foreign Aid: An Introductory Overview of U.S. Programs and Policy*, by Curt Tarnoff and Larry Nowels, updated April 6, 2001 and CRS Report 97-62 F, *The Marshall Plan: Design, Accomplishments and Relevance to the Present*, by Curt Tarnoff, January 6, 1997.

[2]U.S. Congress. House of Representatives. Committee on Foreign Affairs. *Report of the Task Force on Foreign Assistance.* 101st Congress, 1st Session, Document 101-32. February 1989, p. 27.

In 2003, Congress will consider legislation authorizing U.S. participation in new multilateral funding plans for the International Development Association (IDA) – the concessional aid window of the World Bank – and other multilateral aid programs. This includes contributions of $2.85 billion over three years to IDA and roughly $1 billion over several years to the other multilateral programs. Questions about the effectiveness, priorities and goals for IDA and the other MDB programs are likely to be important considerations in those deliberations. There has been considerable controversy, over the years, about the policies, priorities and relative success of multilateral bank programs.

In 2003, Congress will also likely consider legislation which would change some key elements of the U.S. bilateral assistance program. President Bush is expected to propose that the United States should provide an additional $5 billion in targeted foreign aid in 2006 – over and above the regular U.S. aid program – to promote economic growth and fight poverty in the world's poorest countries. A limited number of countries which meet strict eligibility and performance requirements would be targeted. To qualify, countries will need to be promoting good governance, fighting corruption, respecting human rights and adhering to the rule of law. They should be investing in people, through adequate health and education programs that meet the needs of their population. They should also be pursuing policies aimed at fostering private enterprise and entrepreneurship, promoting open markets and maintaining sustainable budgets. Under the MCA program, aid would be targeted to countries that are "good performers," apparently without regard to other U.S. foreign policy or strategic objectives.[3]

Many expect that, when the MCA proposal is submitted to Congress, efforts will likely be made by the House and Senate to reconsider some of its basic criteria. Some say more emphasis should be given to social factors (see below) and to poverty alleviation. Others argue that more attention should be given to the needs of people in poor countries which fall short of the MCA eligibility requirements.

Disagreement about U.S. foreign policy goals and U.S. interests will likely be an underlying factor in the debates about the multilateral banks, the MCA and other development programs. However, disagreement about the appropriate standards and criteria for assessing the effectiveness of development aid programs will also likely be an important consideration. This report seeks to provide background and information which may be of use to Congress in that context.

Income as a Measure of Development

Comparing countries in terms of their levels of per capita income is the most common method used for assessing relative levels of development. This has the advantage of being straightforward and – unlike some of other measures – the necessary numbers are usually available. As discussed below, however, there are important omissions built into this methodology.

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[3] See CRS Report RS21209, *The Millennium Challenge Account: Bush Administration Foreign Aid Initiative*, by Larry Nowels, June 21, 2002.

Measuring Per Capita Income

Foreign Exchange Conversion Method. There are two basic ways that per capita income can be measured. The first calculates a country's per capita income in local currency – dividing the value of its total income or its total output by its population – and then converts that figure into U.S. dollars or another world currency using the prevailing exchange rate. This facilitates the comparison of countries at similar stages of development and provides a rough measure of the gross disparities between rich and poor countries. In many countries, though, determination of an accurate figure for the gross domestic product is difficult, particularly when much economic activity is outside the money or formal economy. In such situations, inter-country comparisons can be only approximate.

For most countries, the dollar GDP figure is simple to calculate. However, it provides little information about living standards in most countries. Nobody can live on a dollar a day in a dollar-based economy, but people often do survive in poor countries on the daily local currency equivalent of a dollar, since the cost of most of the items they purchase with local currency are comparatively low. The foreign exchange value of a currency is set in the international sector of a country's economy. However, most of the things which people buy locally (particularly in developing countries) are not traded in world markets (housing, local food, local services, etc.) Imported goods or other traded goods, whose prices reflect the foreign exchange value of the local currency, generally comprise only a small share of their purchases.[4]

Purchasing Power Parity. The second method seeks instead to measure the income people receive in their local currencies in terms of a common standard of purchasing power. The purchasing power parity (PPP) method converts the prices of common items in different countries into a common standard price, regardless of their stated cost in local markets. An international dollar in a PPP comparison has the same purchasing value in a country that a dollar would have when spent in the United States. Thus, people with a per capita PPP income of $4,000 in a developing country would have roughly the same standard of living they would have if they lived in the United States with that income and they bought that basket of goods.

The PPP method allows analysts to compare more accurately the standards of living that people in different countries can purchase with their local income. While the conceptual case for using PPP rates of exchange is clear, practical issues remain. The PPP method does not accurately reflect the actual dollar value of the income people receive in developing countries. An item in the market basket might be valued at $1, under the PPP system, for example, even though it may cost 50 Indian rupees

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[4]An additional complication stems from the fact that the dollar itself may change in value relative to other currencies because of changes in the American economy or in the its major commercial partners. In real terms, measured in local currency, a foreign country might be experiencing rapid economic growth but the dollar equivalent of its income may fall because the dollar declined in value compared to other currencies. Trend data calculated on this basis can be particularly misleading. The problem remains no matter what currency one uses to convert local figures to an international standard. The World Bank and other sources seek to smooth out fluctuations by using three-year averages and other devices. Still, exchange rate fluctuations remain a problem for international comparisons.

in the local marketplace. Those rupees would not likely be worth the equivalent of $1 if the purchaser tried to spend them on a product which is not in the PPP market basket. PPP data also take much time to calculate. From a practical perspective, all countries cannot be surveyed annually. Therefore, it is difficult to use them for inter-country comparisons or to monitor ongoing changes in income levels.

Discussion. The PPP method and the foreign exchange method are both useful for comparing the income levels that people receive in different developing countries. They cannot be used interchangeably, however. Income levels measured by one procedure cannot be accurately compared to the income levels determined by the other methodology.[5] The World Bank and United Nations publish annual data calculating per capita income levels for most countries using the foreign exchange and the PPP methods. Reference might be made, for example, to the World Bank's annual publication, *World Development Indicators* and the *Human Development Report* issued annually by the U.N. Development Programme (UNDP). The income numbers in the *Human Development Report* are calculated annually for the UNDP by the World Bank. However, for data and procedural reasons, they are often not directly comparable. [6]

Grouping Countries by Income Levels

Developed *vs*. Developing? Several systems have been devised to group countries according to their levels of per capita income. The United Nations *Statistical Yearbook* notes that there is no "common agreement in the United Nations system concerning the terms 'developed' and 'developing', when referring to the stage of development reached by any given country or area and its corresponding classification in one or the other grouping."[7] The yearbook divides the world into two groups. Countries in North America, Europe and the former U.S.S.R., Japan, Australia and New Zealand are said to be "developed." All others are "developing."

By dividing the world into two large blocks, the above system tends to obscure the differences within each group and to emphasize differences between them. In its

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[5]This can be observed in Table 1. Table 1 shows per capita national income by both the exchange rate and PPP calculation, ranking countries by income groups. Normally, the PPP figure is larger. In a few instances, though, a country's PPP income is less than the exchange rate total. This is true for many high income countries. In some developing countries with similar income levels by the exchange rate method, the PPP disparities are very great. Compare, for example, Poland and Lebanon, Tajikistan and Niger, Uzbekistan and Kenya, Panama and South Africa, or Nigeria and Cambodia.

[6] The World Bank emphasizes data showing countries' Gross National Income (GNI) per capita using both the foreign exchange and the PPP method. By contrast, the UNDP report shows PPP data for countries' Gross Domestic Product (GDP) per capita. The GDP figure shows the value added or produced by the residents of a country plus any taxes (less subsidies) not included in the total. The GNI figure includes both the GDP and the net value of any income derived from work or property abroad. GDP shows the productive capacity of an economy whereas GNI measures the total income available to the its residents. The World Bank and UNDP also often use different base years for their calculations.

[7]United Nations. *Statistical Yearbook, Forty-fifth Issue*. New York: U.N., 2001, p. 3.

annual global economic and social survey, the U.N. uses a somewhat different classification system. It separates the former Soviet republics and the former communist countries of Eastern Europe into a third group called "economies in transition."[8] In effect, these countries are grouped together – despite wide disparities among them – on the basis of their history rather than their level of development.

Income Categories. The U.N. also uses a number of other systems for categorization. To help identify the countries most affected by the world oil crisis, the U.N. divided them into three groups – 44 "least developed" countries, 88 non-oil exporting "developing nations" and 13 members of the Organization of Petroleum Exporting Countries (OPEC). This showed generally which countries were likely to be helped or hurt by increases in world oil prices.

For other purposes, the U.N. has grouped the developing countries into five categories. (1) The Least Developed Countries ("LLDC") are 29 low-income countries with per capita GNP levels below $761 (in 1998 U.S. dollars) and have major problems in terms of their economic diversification and social development. This group of countries is different from the 44 "least developed" countries mentioned above. (2) Low-Income Countries (LICs) are poor countries which meet the prior income test but do not have the same severe local conditions. (3) Lower Middle-Income Countries (LMICs) have GNP per capita levels between $761 and $3,030. (4) Upper Middle-Income Countries (UMICs) have annual GNP per capita levels between $3,031 and $9,360. (5) High-Income Countries (HIC) have GNP per capita levels greater than $9,360.

The World Bank uses the same basic framework, though it pegs the threshold for each category lower than does the U.N.[9] Using the foreign exchange method of calculating income, the World Bank divides countries into five groups. Low-income countries are those with per-capita income levels below $755 (in 2000 U.S. dollars). Lower middle-income countries have incomes between $756 and $2,995. Upper middle-income countries have income levels between $2,996 and $9,265 annually, while high-income countries have per capita income levels above the latter amount.[10] The average PPP per capita income for countries in the low income group was $1,990 annually in 2000, while those for countries in the lower-middle group was $4,580 and the upper-middle group was $9,170. By comparison, the average PPP income levels for countries in the upper income group was $27,450. The PPP income level for the United States was $34,260 in 2000. The average person in the low-income group has a standard of living comparable to that which could be purchased in the United States with an annual $1,990 net income. Table 1, in the Appendix, organizes countries according to the World Bank framework, adjusted to show those countries with very low income levels.

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[8]United Nations. *World Economic and Social Survey, 1999.* New York: U.N., 1999. See, for instance the table on output and per capita income on p. 256.

[9]The thresholds and ceilings for the U.N. categories would be higher they were expressed in U.S. dollars for 2000.

[10]Source: World Bank, *World Development Report*, 2002, p. 241.

Other Categories. Some analysts have grouped countries further according to certain dynamic qualities of their economies. Newly Industrializing Countries (NICs) are those where the industrial and manufacturing sector is growing rapidly and where these products comprise a growing portion of their foreign sales. At different times, countries at various levels of per-capita income – Mexico, Greece, Singapore, Portugal and Spain – have been included in this group. Emerging Market Countries (EMC) are those whose participation in world trade is growing rapidly. They are successful in attracting foreign investment and in establishing their creditworthiness for private commercial loans. Middle-income countries comprise most of the participants in this group, but China is also generally included as well.

In some cases, countries may be dropped from the list of NICs or emerging market countries for reasons not necessarily linked to their economic performance. This suggests that their level of "development" according to that system of categorization is less a function of their own condition and more a function of their relationship with foreign markets or other countries. For example, countries in Eastern Europe would likely no longer be considered developing countries or NICs if (like Spain and Portugal in the past) they joined the European Union. Likewise, countries may find their status as successful emerging market economies may be reduced for reasons not entirely of their own making. These include recessions in the developed countries which cut their export markets or financial crises where events in one emerging market country have a "contagion" effect. In the latter situation, investors or lenders may reduce their exposure in emerging market countries generally, seemingly without much regard for the situation in particular countries.

Income Distribution

The income measures discussed above all report *average* per capita income levels for the different groups of countries. However, the way that income is distributed within a country may have a very substantial impact on overall living standards. People living in a low-income country where income is relatively well distributed may have a better quality of life overall than those living in a higher-income country where much of the income goes to a small segment of the population and where most people have income levels below those available to people living in countries with lower average per capita incomes.

Individuals have different skills, aptitudes, histories and conditions; these may have a substantial impact on income distribution patterns. Nevertheless, social and political relationships can also have an effect – directly or indirectly – on income distribution. Arguably, income patterns can be influenced by public policy, including efforts to improve skills and productivity and to expand opportunities for a population. Many analysts would view steps taken in those direction to have a positive effect on development.[11]

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[11]For example, see: P. Dasgupta, *An Enquiry into Well-being and Destitution.* Oxford (UK): Oxford University Press, 1999, chapters 4 and 5.

Gini Index. To measure the overall pattern of income within a country, economists use a statistical measure called a "Gini index."[12] According to this measure, a country would have a Gini index of zero if income were distributed with perfect equality; it would have a Gini index of 100 if income were distributed with perfect inequality. Starting with the lowest income individuals or households, the analysis determines what share of the overall national income accrues to the bottom 10% (decile) of the population. The same assessment is done for the other nine deciles of the population. Much attention is often paid to the share of total national income accruing to the top and bottom 10% of the population. However, the distribution pattern for the middle portions of the population is also very important. Table 1 in the Appendix shows the Gini index for many countries. Many analysts believe that the distribution pattern is an important indicator of real income levels as well as indicator of the country's overall stability and cohesion. [13]

Discussion. Many popular discussions tend to mix together the issues of poverty reduction and inequality reduction. They are related but distinct concepts. Many analysts contend that income inequality will increase during the earlier stages of the growth process but will diminish as countries achieve higher levels of per capita income.[14] Poverty levels, by contrast, tend to fall as national income levels rise.[15] Many economists believe that growing inequality may be a function of the development process, as rewards accrue unevenly to individuals based on their socio-economic situation, their skills and functions and their degree of participation. Income distribution seems to broaden as countries become more wealthy. There is disagreement, though, whether this is due more to economic or to public policy considerations. Many believe that economic growth can be enhanced and sustained (as seen in many middle- and higher-income countries) when income is distributed more broadly and more people participate and benefit from the process.[16] [17]

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[12]It is also called the Gini coefficient or Gini ratio.

[13] For example, see Amartya Sen, "The Concept of Development," in Hollis Chenery and T.N. Srinivasan (eds.) *Handbook of Development Economics*, vol. 1. Amsterdam: North-Holland, 1986, chapter 2. However, some others believe that income distribution is not an important concern. See, for instance: Danny Quah and S. Durlauf, *The New Empirics of Economic Growth*. London: London School of Economics and Political Science, Center for Economic Performance, 1998.

[14]The principal focus here is on income and consumption equality. However, when discussing the relationship between inequality and growth, two other types – asset inequality and social/political inequality have also been found to have significant consequences. Political inequality is discussed below. A common example of changes in asset inequality is the redistribution of land which took place in East Asia following independence from collonialism and its major contribution to that region's good economic performance.

[15] See, for example: N. Heston and R. Summers, "The PennWorld Table (Mark 5): An Extended Set of International Comparisons, 1950-88." *Quarterly Journal of Economics*, v. 106 (1991), pp 327-68.

[16]See, for example: G. Mankiw, D. Romer and David Weil, "A Contribution to the Empirics of Economic Growth." *Quarterly Journal of Economics*, v. 107 (1992), pp. 407-38.

[17]There is a substantial literature supporting both views. Nevertheless, it should be noted (continued...)

It is difficult to discern a direct relationship between income distribution and countries' levels of per capita income. For example, as seen in **Table 1**, the United States, China, Turkmenistan, Ghana, Cambodia and Ethiopia all have essentially the same Gini score, despite major differences in their levels of development. The relationships between economic growth, average per capita income and income distribution are subtle. In the long run, economic growth will improve average levels of per capita income. However, the relationship between growth and income distribution is less clear. By itself, growth does not seem to have a clear positive impact on income distribution patterns.

Economic and Social Structure as a Measure of Development

Few reports encapsulate in a single index the changes in economic and social conditions which accompany development. Nevertheless, the many connotations which surround the concept of "modernization" demonstrate that changes in these areas are often intrinsic to the development process. Few countries have been able to raise their income level, their productive capacity and their standard of living without experiencing some major changes in social patterns and the underlying structure of their economy.

Changes in the Structure of the Economy

Generally, as economic development occurs, the structure of the economy changes. Capital and skilled labor are substituted for unskilled labor and an increased share of the work force is concentrated in manufacturing and skilled services.[18] There seems to be a tendency in most countries that, as income levels and social conditions improve, the locus of economic activity shifts from rural to urban areas. Total output from agriculture may expand, as productivity levels in agriculture increase. However, the share of the workforce involved in agriculture tends to shrink and agriculture's share of national output declines.

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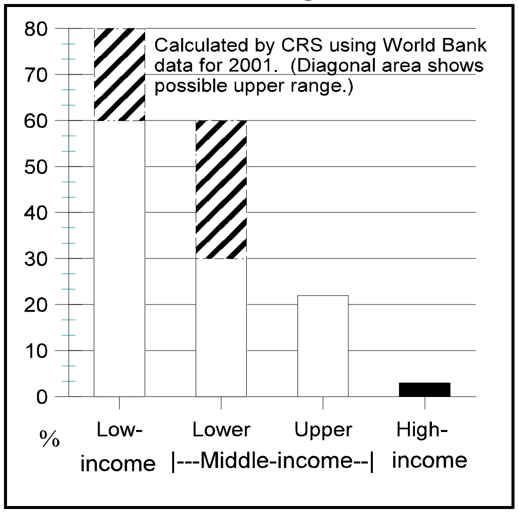
[17](...continued)
that the data in **Table 1** cast doubt on both propositions. Overall, as suggested above, middle-income countries seem to have higher levels of income disparity than do countries above or below them on the income ladder. (The data are not adjusted for population growth.) However, the disparities among the countries in each group are greater than the differences among the groups, so it is hard to discern a cross-national trend. Likewise, as proposed above, it appears that many middle-income countries experienced faster rates of growth during the 1990s than did low-income countries. Some low-income countries grew faster, though, than did some middle- or high-income countries. Growth occurred in countries with both high and low levels of income disparity. Growth rates were not higher for countries at the top end of the income scale as income distribution patterns widened. The relationships discussed in the literature may be true within countries and among some countries over time. They are less evident, however, in the current inter-country data.

[18] See, for example: A. Banerjee and A. Newman, "Occupational Choice and the Process of Development." *Journal of Political Economy*, v. 101 (1993), pp. 274-298.

This can be seen in **Figure 1.** According to World Bank statistics, about 4% of men and 2% of women in high income countries were employed in agricultures, while the ratios in upper middle-income countries were 22% for men and 21% for

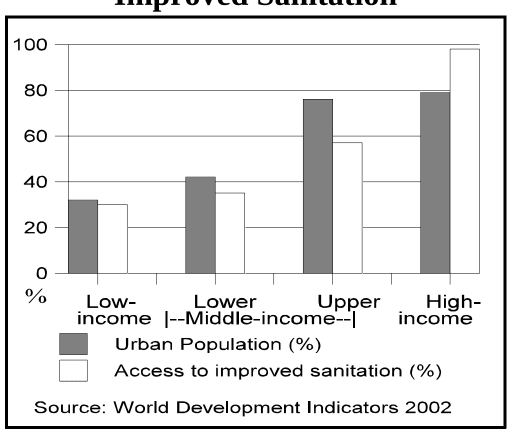
Figure 1. Percent of Workforce in Agriculture



women. Data for lower income countries are more sketchy. However, Bank data show that portion for lower middle-income countries ranges between 30% and 60% and the percentages for lower-income countries is likely much higher.[19]

Urbanization

Figure 2. Urbanization and Improved Sanitation



[19] Data for most low-income countries are lacking. Data for many from the early 1980s show that 70% to 80% of the population or more was employed in agriculture. More recent data are available for only a few countries. These suggest, however, that the shares for many countries have not changed greatly. Sri Lanka moved from 49% male and 51% female in agriculture to 38%/49% during the past two decades. Madagascar went from 73%/93% to 77%/76% during the same period, the male agricultural rate being higher in the end.

Likewise, there seems to be a tendency for people to move towards urban areas as development occurs. The share of the population in urban areas and in large cities generally increases as income levels increase for middle-income and higher-income countries. This is shown in **Figure 2.** Among other things, urbanization increases the efficiency of infrastructure expenditures, it reduces transaction costs and it generates positive externalities. Upper middle-income countries often have a larger share of their population in their largest city than do high income countries, perhaps because the latter have infrastructure and commercial bases which facilitate simultaneous growth in several major urban areas.[20]

An important consideration is the degree to which urban growth outstrips the capacity of developing countries to cope with the needs of their growing urban areas. One example is the share of the urban population which has access to improved sanitation facilities. As shown on **Figure 2**, the rate of urbanization often exceeds the construction of adequate sanitation in the middle ranges of development. In low-income countries, the share of the population in urban areas and the share with adequate sanitation are about the same. As income levels increase for developing countries, however, the gap between the size of the urban population and the share of the population with access to adequate sanitation increases. It is particularly pronounced for upper middle-income countries. The gap disappears for high-income countries.[21] This suggests that the pressures of urbanization tend to outstrip the resources available in developing countries to cope with basic urban needs. Though adequate data are not available, it would appear that similar relationships also exist for public access to adequate housing and for transport congestion and pollution in countries experiencing rapid urban growth.

Demographic Changes

A wide range of social changes also occur as countries become more developed. It is difficult to capture in statistics the altered patterns of social relationships and the shifts in institutional behavior which often accompany the development process. However, some data on population changes might be cited. Changes in birth dynamics and the age structure of the population reflect shifts which are going on within the family and in society generally.

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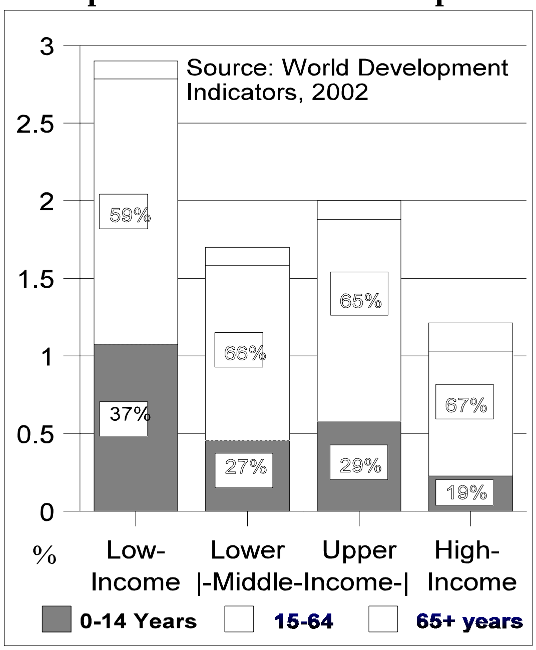
[20] Henderson observes that the costs of urban concentration increase substantially after a point because the costs of excessive concentration (congestion, pollution) outstrip the city's capacity to deal with them. Economic activity is more spread out, he says, in a mature system of cities. This implies that the development trend in this area moves beyond massive agglomerations towards a more diffused pattern. Vernon Henderson. "Urbanization in Developing Countries." *The World Bank Research Observer* 17:1 (Spring 2002), pp. 89-112.

[21] The figure for access to sanitation in high-income countries is based on data for "developed countries" published by the U.N. Department of Economic and Social Affairs. See: [http://unstats.un.org/unsd/mi/mi_results.asp?row_id=668].

Overall, birth rates decline as country per capita income levels increase. Likewise, the average age of the population increases as one goes from low- to high-income countries, as young people comprise a smaller and older people a larger share of the population. **Figure 3** shows both the crude birth rates for groups of countries and also the age distribution for those groups. The height of each bar shows average birth rates for each income group. The drop from low-income to lower middle-income countries is pronounced, as is the further decline for high-income states. The average birth rate for all middle-income countries was 1.8% (18 births per 1,000 residents.) Many countries in the lower middle-income group are nations making the transition from communism to market economics. For historical reasons, their birth rates are more similar to those for high-income rather than developing countries. This considerably reduces the averages for that income group. As these countries pass into the upper middle-income group, one may expect to see the average for that group decline and the average for the lower middle-income country rise.

Figure 3. Birth Rate and Population Composition for Income Groups



The subdivisions within each column in **Figure 3** show the age composition of the population for each income group. The subdivisions within each column show, from bottom to top, the share of the population composed of young people, working-age people and older people.[22] Generally, as countries develop, their average population becomes older. People under 15 years of age comprise a smaller share

[22]The shares are not measured by the percentage figures at the left of the chart. Rather, the numbers in each column show the percentage of the population in each category whose age falls within certain ranges. The relative height of the four columns is not relevant to this presentation. Due to space constraints, no figure is shown for the portion of the population in the oldest age group. Those portions can be determined, however, by subtraction.

and people over 65 a larger share of the population. Again, the pattern is somewhat different for countries in the lower middle-income group, as a major body of the countries in that group have low birth rates and a smaller share of children in their population than is normal for the group.

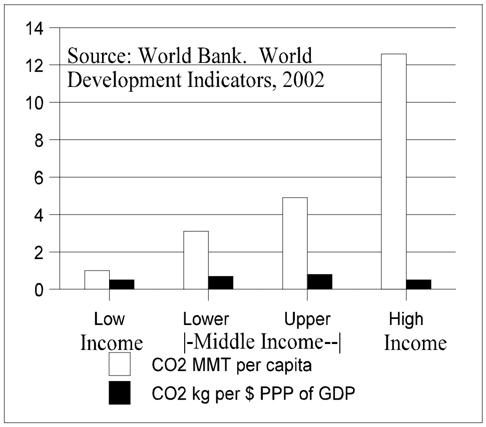
Environmental Change

Increased levels of pollution and environmental damage also are often associated with increased levels of per capita income. The concept of sustainable development suggests that it might be possible to reduce or eliminate the link between pollution and growth. However, there appears to be no specific index which ranks countries in their levels of sustainable development, though some efforts are being made in that direction.[23] The data indicate that environmental damage seems to be linked to income growth. **Table 4** shows that carbon dioxide (CO_2) emissions increase per capita as country income levels increase. High income countries created nearly 13 times the CO_2 output (million metric tons) per capita in 1998 as did low-income countries. However, increased levels of country wealth also may help limit

[23] The United Nations is seeking to create an index for measuring sustainable development. However, it is currently in the conceptual stage of development. As conceived, it would encompass a wide variety of social, environmental, economic, and institutional variables. Some might argue that the scope of the effort is too broad and that – because the underlying data are so disparate – a single index number based on this data would be of limited use. See: United Nations. Division of Sustainable Development. *Indicators of Sustainable Development: Guidelines and Methodologies.* 2001. Available (via the link to indicators) from the Division web site (at [http://www.un.org/esa/sustdev/]. The World Bank's Environmentally and Socially Sustainable Development network promotes sustainable development in a range of areas. No effort seems to be underway, however, to create a general index. See the link to sustainable development on the Bank's web page titled "Topics in Development: [http://www.worldbank.org/html/extdr/thematic.htm]. See also the discussion of "Sustainable Development" at The World Bank Institute's web page at [http://www.worldbank.org/wbi/sustainabledevelopment/].

this phenomenon. **Table 4** also shows that, when the CO_2 emissions (in kilograms) for low- and middle-income countries are assessed, the output was higher for each income group as the size of its gross domestic product (GDP) increased in PPP dollar

Figure 4. Carbon Dioxide Emissions and Country Income Levels



terms.[24] However, the emission rate for high-income countries was the same (per PPP dollar of GDP) as that for low-income countries. This suggests that economic growth need not lead to higher pollution when countries are able to use some of their national wealth to hold their rates of undesirable emissions in check.

Other areas of environmental damage seem less tied to income growth. The World Bank shows, in its 2002 *World Development Indicators* report, for instance, that China is the world leader in the emission of organic water pollutants, with 7 million kilograms (Mkg) a day. The United States is second, with 2.5 (Mkg), followed in decreasing levels by India, Japan, Indonesia, and Brazil. This largely reflects population size. When kilograms per day per worker are assessed, China, the United States and Japan all had the same level (0.14 kg), while India, Indonesia and Brazil had progressively higher daily levels. Other areas, such as impact on biodiversity and deforestation are also important factors but ones where country scores are likewise heterogeneous. In some respects, these might be treated more as social conditions (see below) than as structural aspects of the development process.

[24]The rates are 0.5 kg. per dollar of GDP (computed by the PPP method) for low-income countries, 0.7 kg. for lower middle-income countries, 0.8 kg. for upper middle-income countries, and 0.5 kg. for high-income countries.

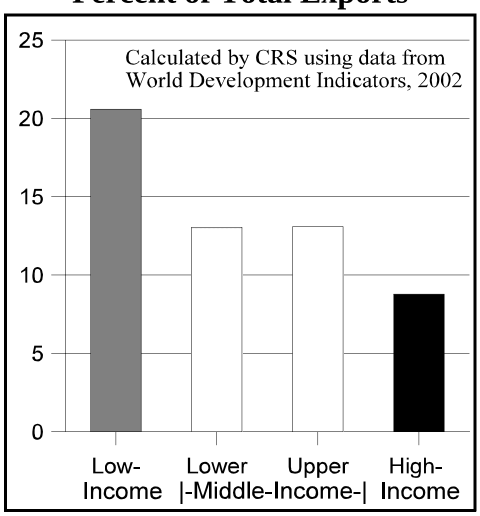
Export Composition

In addition to the structure of the work force and population and the degree of urbanization, countries also can be ranked according to the degree to which they rely on the sale of primary products for export income. Many developing countries find that primary products comprise a considerable share of their exports. As development proceeds and income levels rise, these goods generally comprise a declining share of countries' output and their export sales. Countries whose income is vulnerable to the unstable prices for non-fuel primary product are less able to fund development programs, raise their income level and improve their standard of living.

Primary products are goods, usually agricultural or mineral, which have been processed or refined only marginally. According to calculations based on World Bank data, exports of non-fuel primary products account for over 20% of foreign sales for low-income countries and 13% for lower and upper middle-income countries. By comparison, as **Figure 5** shows, sales of comparable products from high-income countries provide only about 8% of total export income. Overall, during the 20th century, the price of non-oil primary products fell by about 1% each year compared to the price of manufactured goods. With this continued slippage in their terms of trade, producers of primary products have to produce more each year, by volume, in order to purchase the same quantity of manufactured products as before.

The prices of non-fuel primary products are particularly unstable and producers have few alternatives but to accept the prices they are offered. As a whole, between 1998 and 2001, prices for non-fuel commodities fell by over 17%. In particular, the

Figure 5. Primary Products as a Percent of Total Exports



price for robusta coffee fell to less than one-third its earlier value.[25] This had a devastating effect on coffee exporters, including many low-income countries in

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[25]Robusta and arabica are the two main types of coffee bean. Prices for arabica beans also fell substantially, but not as much.

Africa. Countries exporting non-fuel primary products may find that they must sometimes sell near or even below their costs of production. This is not a situation which generally prevails for countries exporting services or manufactured goods.

When primary products account for a substantial share of countries' export income, their ability to meet their external obligations and fund development programs may be severely constrained. Often, for very poor countries, the burden of servicing their foreign debt in the face of downturns in export income may be nearly insurmountable. Recently, the World Bank announced that, despite earlier expectations to the contrary, some countries which had received substantial debt forgiveness through the program to help heavily indebted poor countries (HIPCs) would still not be able to sustain the costs of their remaining debts because the price of their exports had deteriorated further.

Physical Quality of Life as a Measure of Development

Per capita income and structural factors are useful measures for assessing levels of economic development. However, many specialists believe they are insufficient or perhaps even misleading, as they ignore other kinds of societal well-being. Indeed, many analysts believe that focusing on income levels tends to obscure the real purpose of poverty-alleviation programs. Raising income levels is merely an instrumental goal, they argue. The real objective is improving the physical quality of life and the basic standard of living for people in developing countries. To assess a country's progress towards development, they say, one needs to measure improvements towards those goals.[26]

Social Indicators

Countries vary quite widely in their performance on social indicators. See, for example, the wide disparities among countries with similar levels of per capita income on **Table 2** in the Appendix. Illiteracy generally declines as income levels increase in most developing countries. However, many countries have rates that are far outside the normal range for their income group. Saudi Arabia, Botswana and Brazil have illiteracy rates much higher than those normally expected for most upper middle-income countries. Likewise, Iraq, Morocco and Guatemala have illiteracy rates well above those for most lower middle-income countries. By contrast, Cuba, Armenia and Bulgaria have illiteracy rates well below the norm for their group. Among the low-income countries, most in sub-Saharan Africa have illiteracy rates much higher than the norm for low-income countries. By contrast, several poor countries – Mongolia and Vietnam in particular – have illiteracy rates below those seen in some high-income nations. Many analysts believe that income-distribution patterns can have a strong influence on country performance in this area.

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[26] See, for example: Dasgupta, "An Enquiry into Wellbeing...." (Note 6) and Sen, "The Concept of Development" (note 7).

Infant mortality and life expectancy are two other types of social indicators which are often used to assess countries' relative levels of development. As **Table 2** shows, most countries in sub-Saharan Africa have rates which are well below the norm for their income group. By contrast, other poor countries – Nicaragua, Vietnam, Tajikistan, Mongolia, Kazakhstan and India have indicators which "outperform" the averages for their group. Similar examples can be found in the middle-income group. These variations suggest that income may be an insufficient gauge for judging the progress being made towards improving the quality of life in developing countries. Country patterns may also be influenced by social, cultural and political factors, including peoples' preferences and the amount of public funds and attention which are allocated towards improving performance in these areas.

Physical Quality of Life Index

An early effort to rank countries solely on the basis of the physical and social well-being of their population was the Physical Quality of Life Index (PQLI).[27] This ranked three factors – life expectancy at age 1, infant mortality and literacy – on a single index, without any direct reference to income levels. There was a loose correlation between income levels and PQLI performance, but the disparities in some instances were striking. Some countries with high income levels had PQLI rankings at levels below the average for the poorest countries, while some very low-income countries had PQLI levels comparable to those for many upper middle-income states. Particularly noteworthy were the contrasts between Saudi Arabia and Sri Lanka; health and education rankings were much higher at the time in the latter country despite its lower average income. The procedure found that there were often wide disparities in PQLI rankings for countries with similar or comparable levels of per capita annual income. Among other things, the PQLI demonstrated that the living standards and quality of life in poor countries were not mere functions of their prevailing income levels, but were also linked to policy and social considerations.

Human Development Index

The PQLI ceased to be published in the early 1980s, as the focus of development studies shifted.[28] In the early 1990s, however, the U.N. Development Programme (UNDP) began publishing a similar index in its annual *Human Development Report*.[29] The Human Development Index (HDI) seeks to measure the

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[27] The PQLI index was created under the sponsorship of the Overseas Development Council. ODC included the PQLI in its annual publication, *The United States and World Development*, during the 1970s.

[28]The creator of the PQLI index, Morris David Morris, continued to update it but it was not broadly distributed. See: Morris David Morris, *Measuring the Condition of the World's Poor; the Physical Quality of Life Index*. Pergamon, 1979; *Measuring the Changing Condition of the World's Poor: the Physical Quality of Life Index, 1960-1990*. Working paper 23/23. Providence: Brown University; "Light in the Tunnel: The Changing Condition of the World's Poor." The Brown University Op-Ed Service, August 1996. Available at [http://www.brown.edu/Administration/News_Bureau/Op-Eds/Morris.html].

[29]United Nations Development Programme. *Human Development Report 2002, Deepening*

(continued...)

overall income and social/physical situation in each country. It condenses data from four categories into a single index number. These are: life expectancy at birth, adult literacy, combined gross school enrollment at all levels and GDP per capita (PPP calculation). In this way, longevity, knowledge and standard of living are combined in a single figure. The highest and lowest ranking for the index are set by the highest and lowest ranking countries in each category. The UNDP groups countries in three categories. Countries with low human development have HDI rankings below 0.5, middle-ranking countries have HDI scores below 0.8 and high ranking countries have numbers above the latter score.

The HDI demonstrates that living standards are not necessarily linked to levels of per capita income. On the average, low-income countries (PPP income of $2,002 in 2000 dollars) ranked at 0.58 and the least developed countries (PPP income of $1,216) had an average rank of 0.45. However, many countries (a few in Asia but most in Africa) had HDI scores well below the average for their income group. The HDI scores for countries are shown on **Table 1** alongside the per capita income data.

The HDI method has several major limitations. First, the HDI method does not distinguish improvements in conditions of life from increases in income, since the latter is a component of the index. Therefore, improvements in income levels can mask weakness in country performance in the other areas. UNDP does not publish a separate index figure measuring the quality if life in countries without reference to income. It tries to adjust its measure for this concern, though, by ranking countries separately according to their relative HDI status and their per capita income levels. When countries' relative income rankings are subtracted from their rank on the HDI list, one can see whether countries rank higher or lower in their levels of education and health than their income levels might otherwise suggest. For example, looking at the extremes, Equatorial Guinea ranked 73 places higher and Botswana ranked 62 places higher on the GDP per capita list than it did on the HDI list. By contrast, Armenia ranked 44 places lower and Tajikistan ranked 39 places lower on the GDP list than it did on the HDI list.

Second, by its very nature, the Human Development Index shows countries' *relative* status compared to other countries. Half the countries in the world will always rank at the 0.5 level or below, no matter how hard they strive to improve standards. Hence, if development is a process of moving towards a goal, the HDI method is of limited use. Still, despite these limitations, the HDI scores – when used in conjunction with other measures – help show whether countries are making progress towards enjoying the fruits of the development process.

Other Measures

Other contemporary measures also stress that improvements in the physical and social quality of life must be assessed separately. Prominent among these are the Millennium Development Goals which were approved and announced by the United

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[29](...continued)
Democracy in a Fragmented World. New York: Oxford University Press, 2002.

Nations in September 2000.[30] This is a collection of 8 objectives whose achievement is sought by the year 2015. These are:

- Eradicating extreme poverty and reducing by half (to 14.5%) the proportion of the world's population living on less than $1 a day.
- Achieving universal primary education so that all children everywhere will be able to complete a full course of primary schooling;
- Promoting gender equality and the empowerment of women, in particular by eliminating the gender disparity in education, raising female literacy levels, expanding female employment in nonagricultural work and increasing the proportion of seats held in parliaments by women;
- Reducing child mortality by two-thirds by 2015;
- Reducing by three-quarters the overall world level of maternal mortality;
- Halting by 2015 the spread of HIV/AIDS and malaria and beginning the process of reducing world infection rates for these and other major diseases;
- Ensuring environmental sustainability in several specific ways, halving by 2015 the proportion of people without sustainable access to safe drinking water and improving by 2020 the lives of at least 100 million slum dwellers; and
- Establishing an open, rule-based non-discriminatory world trade and finance system, including national commitments to good governance and poverty reduction.

From a development perspective, some of these goals seem desirable on their own terms while others are desirable because they facilitate the achievement of broader development goals. Nevertheless, by packaging them together, the United Nations has endorsed the view that development is a complex phenomenon which involves improvements in the quality of life as well as increases in income and reductions in poverty.

Freedom as a Measure of Development

Freedom as a Goal and Means

Amartya Sen argues that freedom is both the ultimate goal of development and the most effective means for achieving it. "The expansion of freedom is viewed, in this approach," he writes, "both as the primary end and as the principal means of development."[31] From his perspective, development consists of the "removal of various types of unfreedoms that leave people with little choice and little opportunity for exercising their reasoned agency." The removal of substantial unfreedoms, he argues "is constitutive of development." He cites in particular a need for expanding economic opportunities, political freedoms, social opportunities, transparency

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[30] For further information, see: [http://www.developmentgoals.org].

[31] Amartya Sen. *Development as Freedom*. New York: Anchor, 1999, p. xii. Sen is Master of Trinity College at Cambridge University and winner of the Nobel prize for Economics in 1998.

guarantees and measures for protective security such as social safety nets to reduce abject poverty, famine relief and unemployment benefits.

Milton Friedman likewise argues that economic freedom and political freedom are both vital goals.[32] Economic freedom is an end in itself, he writes and it is also an indispensable means towards the achievement of political freedom. Likewise, he agrees that political freedom, reductions in the arbitrary power of the state and civil liberties for individuals are also valid ends in themselves and necessary for the preservation of economic freedom. An opponent of central planning and coercive means for coordinating economic activity, Friedman argues that a free private enterprise exchange economy is the only effective means for sustaining economic and political freedom. He says that economic and political freedom are both characterized by an absence of coercion. From a development perspective, Friedman's argument supports the view that countries are more developed as they replace coercion and compulsion with economic and political liberty.

In the mid-1990s, former Prime Minister Lee Kuan Yew from Singapore and others advocated an "Asian values" approach to development. They argued that restrictions on dissent and democracy were necessary if countries are to focus their attention and marshal their resources for development. The leaders of China, Malaysia, Burma and some other countries still openly adhere to this view.[33] Sen and Friedman both argue, by contrast, that efforts to organize the economy under a strict regime or to limit political and civil liberties in order to concentrate resources and expand output are mistakes. Not only do such actions put the ultimate goal of freedom at risk, but they add inefficiencies and slow the process of achieving that goal. Sen believes that economic and political freedoms help to reinforce one another. He argues, in effect, that a market economy will not function adequately in the absence of democracy and civil and political rights.[34] He believes that these not only give people more freedom to live their lives and use their capacities more effectively, but that they also provide people with a stronger voice for assuring that their core interests are not ignored. He notes that demands for democracy and for civil and political rights have become much stronger in East and Southeast Asia in the wake of the 1997 economic crisis.[35]

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[32]Milton Friedman. *Capitalism and Freedom*. Chicago: University of Chicago Press, 1962. Friedman is an Emeritus Professor of economics at the University of Chicago and Senior Fellow at the Hoover Institution. He was awarded the Nobel prize for Economics in 1976. Though Friedman's argument focuses more on the struggle between collectivist and market economic principles, it is also relevant to the development issues discussed in this report.

[33] For a supporting argument, see Anthony Milner. *What's Happened to Asian Values?* Available from [http://www.anu.edu/asianstudies/values.htm]. For a contrary view, see Amartya Sen. "Human Rights and Asian Values: What Lee Kuan Yew and Le Peng don't understand about Asia." *The New Republic* 217:2-3, July 14, 1997.

[34]Friedman would largely agree with this view, though his argument puts more stress on the idea that political liberty and civil rights are not sustainable absent a free market economy.

[35]Lant Pritchett and Daniel Kaufmann concur. They found that countries with higher levels of civil liberties had a greater success rate and an 8% to 20% higher rate of return for World Bank projects. The relationship also held for broader country performance issues. They

(continued...)

Not everyone agrees with the view that political and economic freedom work together to promote development. In part, the question depends on the way one defines political and economic freedom. Many would argue that some kinds of political freedom conflict with economic liberty – for example laws passed by democratic governments which confiscate wealth or limit severely the way property may be used or transferred. Others argue that limits on political freedom are compatible with individual and economic freedom – for example, a bill of rights which protects individuals and economic actors against misguided applications of the popular will. On the other side of the coin, many will argue that some types of economic freedom are incompatible with free government. Government may need to be vigilant, they argue, to protect the public from injury, to limit improper or exploitative practices by self-interested economic actors and to keep major economic actors from using their economic position to dominate political affairs.

There is no comprehensive index which reflects the progress countries have made towards achieving the levels of economic and political freedom which Sen and Friedman seem to believe are necessary for development. Their concepts are multi-dimensional concept; they do not yield itself easily to a single calculation. However, there are several studies which seek to rank countries in terms of their degrees of economic or political freedom.

Economic Freedom

There has been strong emphasis in the development literature in the last three decades about the presumed need for economic policy reform in developing countries. The international financial institutions and many bilateral foreign aid agencies have sponsored programs aimed at improving the economic environment in developing countries, strengthening the economic policy process and enhancing economic freedom. No specific indices seem to have been created by the aid organizations, however, for measuring and ranking the progress countries are making in that regard.[36]

There are two major studies which rank countries according to their levels of economic freedom. One, the *Index of Economic Freedom*, published annually by the Heritage Foundation and the *Wall Street Journal*, seeks to assess the progress countries are making towards the elimination of legal and institutional restrictions

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[35](...continued)
concluded that "civil liberties, along with other forms of expression and incorporation of citizens voice, do appear to have an instrumental value for improving a country's economic performance and for designing the mechanisms for delivering government services of all types, from roads to schools." See their "Civil liberties, democracy and the performance of government projects." *Finance and Development* 35:1 (March 1998), p. 26.

[36]However, aid agencies seem to be using the existing standards to help shape their programs. The U.S. Agency for International Development (USAID) used country scores on the Heritage Foundation *Index of Economic Freedom* and on the Freedom House publication *Freedom in the World* to help identify countries where their programs to promote economic growth and democracy might best undertake programs. See U.S. Agency for International Development. 2002 Agency Performance Plan , pp. 11 and 30.

which the authors believe are barriers to higher incomes and economic growth.[37] The other, the annual report on *Economic Freedom of the World*, published by the Fraser Institute in Canada, examines many of the same issues.[38] Both studies base their assessments on many of the same factors. The Heritage Foundation study covers 155 countries. The study published by the Fraser Institute covers 123 countries.

In the main, the findings of the two studies are similar. Countries vary somewhat on their placement on the list, top to bottom, of countries with the most and least economic freedom, but the differences are generally not substantial. Countries generally seem to be within 10 or 15 places in one list of their placement on the other. Some notable variances exist, however. Egypt ranked 51st on the Fraser Institute list but 121st on the Heritage list. Jamaica ranked 38th in the former but 60th in the latter list. India ranked behind China and Pakistan on the Heritage Foundation list but well ahead of them in the Fraser Institute Study. Perhaps most remarkable, Estonia was ranked the fourth most free country in the Heritage study but the 35th in the Fraser report. Some of the difference between the two reports may be due to methodology, though their basic criteria are largely the same. Perhaps more likely, though, are discrepancies in their data or their evaluation of data. This may be taken as a cautionary note that even reports which seek to use similar objective measures may be subject in their findings to data or procedural error.

The *Index of Economic Freedom* ranks countries (using World Bank data) according to 50 objective measures organized into 10 equally weighted categories. Countries are ranked as being free, mostly free, mostly unfree and repressed, depending on their overall performance in those 10 areas. The ten categories are: trade policy (open or closed), fiscal burden of government, government intervention in the economy, monetary policy, banking and finance, wages and prices, property rights, regulation and black market activity. The authors point out that countries which rank highly on the *Index of Economic Freedom* also have higher incomes than other countries. Per capita income levels for free countries are double those for mostly free countries and income levels in the latter countries are triple those in the mostly unfree group. Interestingly, countries with repressed economies have income levels slightly higher than the mostly unfree group.

In the ranking system used by the *Index of Economic Freedom*, Hong Kong and Singapore are the two countries with the highest levels of economic freedom, while Iraq and North Korea are the lowest. (See Table 3.) Among G-7 countries, only the United States and United Kingdom are listed as being free, while Canada, Germany,

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[37] Gerald P. O'Driscoll, Jr., Kim R. Holmes and Mary Anastasia O'Grady, *2002 Index of Economic Freedom*, NP: The Heritage Foundation and *The Wall Street Journal*, 2002. Available from [http://www.heritage.org/research/features/index/2002].

[38] James Gwartney and Robert Lawson, *Economic Freedom of the World, 2002 Annual Report.* Vancouver, B.C.: The Fraser Institute, 2002. Preface by Milton Friedman. Friedman is a participant and sponsor of the study. It uses 37 variables to assess countries' levels of freedom in five areas: (1) size of government expenditures, taxes and enterprises, (2) legal structure and security of property rights, (3) sound money, (4) freedom to trade with foreigners and regulation of credit, labor and business. Available from [http://www.freetheworld.com/release.html].

Italy, Japan and France are deemed mostly free. France ranks alongside Armenia, Belize, Bolivia, Jordan, Malta, Panama and Poland in the lower end of this group.

The *Index of Economic Freedom* ranks countries more highly when they limit the size and role of government and enhance property rights. "The protection of property rights is the driving force behind wealth generation and higher living standards," say the authors of the *Index of Economic Freedom*.[39] Countries are deemed to be more free when the tax burden is low, government regulatory activity is small and property rights are assured. Property rights include a capacity for owners to use their assets as they see fit, as long as they do not violate someone else's rights and the ability of individuals to transfer or exchange their property rights on a voluntary basis. Countries also receive higher marks for economic freedom when they impose fewer mandates requiring that businesses comply with equipment standards or meet labor standards such as hourly limits on the work week and minimum standards for pay or vacation time.

Other analysts might question the conceptual views which underlie the two indices of economic freedom. While the statistics they use are standard data, very different results might be obtained if other assumptions and methods of calculation were used. For example, some analysts might argue that countries have more economic freedom when steps are taken to assure economic security, limit the arbitrary exercise of property rights and protect the environment and other stakeholders in the economy. There seem to be no current studies which rank countries according to other economic criteria. There is considerable disagreement among specialists and the public as to which economic standards are most desirable and how they should be linked to social, philosophical or institutional values. Nevertheless, there seems to be a presumption in most contemporary economic literature that, however it may be defined, economic freedom is desirable and fundamental to the development process.

Some analysts question whether the economic freedom indices adequately measure countries' relative levels of economic freedom and whether their conclusions are actually supported by their data. De Mello and Sab report that increased government spending and enforcement of rights and civil liberties enhances a country's "legal capital" and boosts its economic and human development.[40] Carlsson and Lundström[41] found, for example, that, contrary to the conclusion in the Gwartney study, reductions in the size of government and increases in the freedom to trade with foreigners were negatively correlated with economic growth, while increased monetary policy and price stability had an insignificant effect. Of the other factors, they found, legal structure and the security of private ownership had a robust

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[39]O'Driscoll *et al.*, p. 38.

[40]Luiz de Mello and Randa Sab. "Government Spending, Rights and Civil Liberties." *International Review of Law and Economics* 22:3 (September 2002), pp. 257-276. Also published as IMF working paper WP/00/205 (December 2000).

[41]Fredrik Carlsson and Susanna Lundström. "Economic Freedom and Growth: Decomposing the Effects." *Working Paper in Economics* 33, January 2001. Department of Economics, Göteborg University. Available from [http://swopec.hhs.se/gunwpe/papers/gunwpe0033.pdf.]

positive impact on growth. Many studies report that economic freedom has a significant and sizeable effect on economic growth, they reported. However, in light of the unreliability of the data, they concluded, "using an index of economic freedom might therefore be misleading."

Political Freedom

Some analysts believe that protections for political rights and civil liberties are also important characteristics both of developed countries and for those likely to move successfully on the path towards development. Two prominent efforts have been made to measure countries' standing in this regard. Freedom House measures the relative levels of political and civil liberty in countries while the World Bank publishes an index that compares countries in terms of their achievements in the area of "good governance."

Good Governance. Though political freedom is a value endorsed by most scholars and foreign aid donors, there has been considerable reluctance in the past about directly linking development and democracy. In part, the Cold War was to blame as foreign aid was often provided for reasons other than development and donors were reluctant to alienate aid recipients by specifically acknowledging the repressive and corrupt nature of their regimes. The international agencies and bilateral donors did not wish to be seen as interfering in countries internal political affairs. Likewise, in a world where many repressive governments claimed they were democracies or peoples' democracies, they were reluctant to openly challenge those claims or to show overt preference for one form of government over another. These reservations still persist. The State Department reportedly has been very slow in launching its Mid-East Democracy Initiative.

Nevertheless, it was clear to most observers that the way countries governed themselves had a major impact on their development prospects. Thus, the standard of "good governance" was raised in the past two decades in order to emphasize the importance of certain characteristics, such as the rule of law, reductions in arbitrary official action, policy and financial accountability and transparency in the decision making process, which were deemed important. Aid programs were instituted, by the international agencies and by bilateral donors, to help strengthen the legal process and official institutions in developing countries ("capacity building") in order to facilitate improvements in governance and general operational effectiveness.

Previously, the concept "good governance" was relatively constrained in its reach. More recently, however, the concept has become more extensive. The World Bank publishes an index currently which ranks the countries of the world in terms of governance.[42] Country performance on democratic principles – elections,

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[42] See: World Bank. "Web Interactive Access to Governance Indicators" and the accompanying paper "Governance Matters II." Country performance in six categories is assessed: (1) voice and accountability [including elections and civil liberties]; political stability/no violence; government effectiveness; regulatory quality; rule of law; and control of corruption.. Some 194 measures are used from 15 major sources in devising the data. (continued...)

freedom to express opposition views and contest office, civil liberties, etc. – is now one of the factors assessed as countries are evaluated and ranked. Six general categories of governance are assessed. As a group, the OECD countries rank highest on all six measures, while the former Soviet republics, sub-Saharan Africa and South Asia usually rank lowest. However, individual country rankings differed considerably. Some countries with relatively high levels of per capita income are ranked relatively low on some measures of governance while some low-income countries rank much higher on the governance lists. In 2002, the U.N. Development Program further endorsed the view that democracy was a relevant consideration for development when (as cited earlier) it appended the subtitle "Deepening Democracy in a Fragmented World" to its 2002 Human Development Report.

Political and Civil Liberties. Freedom House publishes an annual study which ranks countries on an index according to their levels of political rights and their protection of civil liberties[43]. In its most recent report, Freedom House wrote that 87 countries (including 2.5 billion people) were"free," though some ranked higher than others in this group. It said another 59 (with 1.46 billion people) were "partly free," though again some had much better scores than others. Freedom House reported that 45 countries and three territories (with 2.17 billion people) were "Not Free." At the end of 2001, more people lived in "free" countries than at any time since Freedom House began publishing statistics in 1981. Moreover, it reported, more countries (121) had democratically elected governments than ever before. Freedom in many of the world's 192 governments deteriorated, however and major gaps opened up between the levels of freedom and democracy is some countries. This is particularly notable, the report said, when one compares some countries in the Islamic world with those in the rest of the world.

The Freedom House index judges separately, on a seven point scale, the level of political rights and civil liberties in each country.[44] These scores are then averaged

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[42](...continued)
Available from [http://www.worldbank.org/wbi/governance/govdata2001.htm]. The Bank does not publish a single number which summarizes country performance in each of the six areas. However, the index allows inter-country comparisons and comparisons to regional or income-level norms.

[43]Freedom House. *Freedom in the World, 2001-2002.* Transaction Publishers, 2002. Available from [http://www.freedomhouse.org/research/index.htm].

[44]Eight factors go into the measurement of political rights, including free and fair elections for political leaders, fair elections, opposition rights, participation by minorities and the absence of domination by the military or by religious or economic oligarchies. Civil liberties look at four categories – freedom of expression and belief, association and organizational rights, rule of law and human rights and personal autonomy and economic rights – with a variety of factors in each category. These include items such as freedom of religion, assembly, speech, movement and media, the rule of law, no excessive corruption and an independent judiciary and rule of law. They also include other standards, such as gender equality and marriage rights, free trade unions and collective bargaining, protection for property rights and freedom of opportunity, including freedom from dependency or exploitation by landlords, employers, union leaders, bureaucrats and others. Some of these latter factors appear to be subjective, perhaps reflecting cultural or social views which may (continued...)

to establish the overall rank, with the lowest number being the most free and the highest being the least free. "In a free society," the report says, "political rights enable people to participate freely in the political process, enjoying the right to vote and compete for public office and to elect representatives who have a decisive vote on public policies." Civil liberties include "the freedom to develop views, institutions and personal autonomy without interference from the state."

Freedom House ranked 27 countries as being most "free" in 2001 (See **Table 4** in the Appendix.) The highest tier of these countries include, besides the United States, Canada and some other developed countries, several small developing countries. France, Britain and the other G-7 countries ranked in the second tier of the most "free" countries, due to civil liberty issues in those countries. Ten countries and two territories were ranked as the most "not free." These included Afghanistan, Burma, Cuba, Iraq, North Korea, Libya, Saudi Arabia, Syria, Turkmenistan, Tibet and Chechnya.

There appears to be some correspondence between countries' rank on the Freedom House index and their level of governance. However, the relationship between countries' political situation and their economic performance is more difficult to establish. It may be that improvements in governance and increases in political liberty have a positive association with improvements in economic growth and social indicators. However, on a country-to-country basis, there are considerable differences. Moreover, many countries have seen their political and governance scores improve or deteriorate in recent years. Consequently, because change in these areas can happen more rapidly than do changes in the economic data and social indicators, it is difficult to establish clear analytical relationships among them.

Conclusion

Development is a complex process with many different facets. A variety of studies seek to measure countries' levels of development according to different criteria. Improvements in some of these indices or standards appear to be only distantly linked to increases in growth or average income.

Jan Tinbergen coined a famous analytic rule which states that a separate independent tool is needed to achieve individual objectives. He showed in his work, for example, that the three policy objectives of full employment, price stability and balance of payment equilibrium could not be achieved without the use of three specific instruments. As one reviewer noted, his theory of economic policy is "a standard tool in the economist's toolbox."[45]

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[44](...continued)
not be universal. Judging the difference between protection of property rights and freedom from exploitation may be difficult. In that respect, there may be some disagreement on the margin between observers about the relative ranking of individual states. However, this is not an important determinant of country scores.

[45]Hendrik P. Van Dalen. "Tinbergen, Jan" in R.J. Barry Jones (ed.) *Routledge Encyclopedia*
(continued...)

When applied to the field of development, the Tinbergen rule suggests that a separate program or procedure is needed for each objective if one wants to achieve several goals during the development process. Fewer instruments are likely to force policy makers to sacrifice one of their objectives, as Tinbergen found in his macroeconomic work, when funds are scarce or the requirements for the various goals conflict. Unless there are clear indications that the issues are linked, there are few reasons to believe that changes or improvements in one area of development will necessarily lead to similar changes or improvements in other areas. It is unlikely, for example, that increased rates of economic growth will necessarily lead – in the absence of programs targeting those concerns – to broader income distribution, improvements in literacy rates, or improvements in the health of people on the periphery of the economy and society. Likewise, strong efforts to improve the health and education levels in a country will not necessarily stimulate economic growth absent changes in economic policy and new investments in capital equipment and infrastructure. Higher levels of political liberty will not necessarily produce higher rates of economic growth or better social conditions if the funds needed to implement programs in those areas are lacking.

Some policy makers and economic writers have expressed strong support recently for the proposition that greater efforts need to be made to stimulate and sustain economic growth in developing countries. In general, most analysts would agree that higher levels of growth, increased levels of productivity and broad economic policy reform are very important considerations, when it comes to promoting development in poor countries. Most, however, disagree with the idea that growth can be the "magic bullet" that will begin to set all things right.

Some proponents of growth claim that a rising tide lifts all ships and a rising economy will be a benefit to all.[46] This may or may not be true. The growth process in countries is often uneven. Those who benefit most directly from growth may be unwilling or unable to channel those benefits more broadly. Conscious efforts may

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[45](...continued)
of International Political Economy, vol 3. London: Routledge, 2001, pp. 1566-7. A Dutch economist, Tinbergen shared with one other the first Nobel prize for Economics in 1969. The Nobel committee praised him for having "developed and applied dynamic models for the analysis of economic processes."

[46]For instance, Lant Pritchett and Lawrence Summers argued in 1996 that "gains from rapid economic growth flow into health gains" and that increases in country income levels cause improvements in infant mortality and life expectancy in developing countries. Holding all other factors constant, they concluded, improvements in income "will produce improved health." Therefore growth should be a high priority. Nevertheless, they conceded that the effect is not direct but consequential. Improvements in income lead, they said, to poverty reduction and increased public spending on health. These in turn lead to better health conditions. Likewise, higher levels of education are highly correlated with reduced infant mortality. By that reasoning, improvements in health could be realized equally if income did not grow but a larger share of the existing resources were channeled towards poverty reduction , education and better health programs. See "Wealthier is healthier." Journal of Human Resources 31:4 (Fall 1996), pp. 850, 860, 861.

be needed to bring people from the periphery into fuller participation in their national economy, they argue, if the benefits of the rising tide are to be felt more widely.[47]

Some critics doubt that a strong emphasis on economic growth and policy reform will be truly beneficial to the majority of the people in affected countries. They believe more emphasis should be placed on programs aimed at improving social conditions and meeting basic human needs. Most observers agree that major improvements in these areas are desirable. However, many doubt that improvements in health and education will lead, by themselves, to higher levels of productivity and growth unless resources are invested for that purpose. Similarly, efforts to improve social conditions and increase economic growth may have only limited success if the basic structural conditions of the country are not improved. Countries that achieve major increases in their average income levels as a result of new discoveries of oil or other mineral resources may achieve little real development, many analysts believe, if they fail to link these gains to income to improvements in governance and social conditions and better structural conditions.

Balancing the costs of achieving these various goals – maintaining or increasing expenditures for programs targeting social goals, conserving and improving infrastructure and capital facilities and avoiding macroeconomic instability through prudent monetary, fiscal and foreign exchange policies – is one of the great challenges facing developing countries today. The negative effects of shortfalls in some dimensions of the development process may not be readily apparent from a short-term perspective but many analysts believe that long-term consequences of such shortfalls can be considerable.

This paper began with an observation that a country's progress on development may be measured on four dimensions – improvements in per capita income, changes in economic and social structure, better performance on a range of education, health and other social measures and greater economic and political freedom. There is no consensus on which of these areas deserves the most attention or whether improvements in one area will lead to improvements in other areas. However, there appears to be an emerging consensus that improvement must be seen in most of these areas if development is to occur and if development aid programs are to be deemed successful. Programs which achieve success in one area without encouraging positive effects in other areas may not be considered successes overall. As the relationship among the several components of development are unclear and often strongly debated, the case for multiple indicators and a variety of programs may be enhanced.

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[47] Andrew Berg and Anne Krueger report that countries with more open international trade relations experience more rapid growth and greater improvements in per capita income than countries with less open trade regimes. They conclude, however, that such growth had no impact on income distribution. Poor people benefit from such growth only at the same rate that everyone else in their country benefits. Other programs, in addition to increased growth, would be needed to reduce relative poverty. See their "Trade, Growth and Poverty." *2002 Annual World Bank Conference on Development Economics*. April 24, 2002. Available from [http://econ.worldbank.org/files/13377_Berg_and_Krueger.pdf]. See also their "Lifting all boats: why openness helps curb poverty." *Finance and Development* 39:3 (September 2002), p. 16.

Table 1. Ranking Selected Country by Levels of Per Capita Income

Country	Gross National Income per capita (2000)	PPP gross national Income per capita (2000)	Gini Index (various years)	Human Develop-ment Index (HDI)	GDP Economic Growth 1990-2000
High Income Countries					
Switzerland	$38,140	$30,450	33.1	0.928	0.8%
Japan	$35,620	$27,080	24.9	0.933	1.3%
Norway	$34,530	$29,630	25.8	0.942	3.6%
United States	$34,100	$34,100	40.8	0.939	3.5%
Denmark	$32,280	$27,250	24.7	0.926	2.5%
Austria	$25,220	$26,330	31.0	0.926	2.1%
Finland	$25,130	$24,570	25.6	0.93	2.8%
Germany	$25,120	$24,920	30.0	0.925	1.5%
Netherlands	$24,970	$25,850	32.6	0.935	2.8%
Belgium	$24,540	$27,470	28.7	0.939	2.0%
United Kingdom	$24,430	$23,550	36.8	0.928	2.5%
France	$24,090	$24,420	32.7	0.928	1.7%
Ireland	$22,660	$25,520	35.9	0.925	7.3%
Canada	$21,130	$27,170	31.5	0.94	2.9%
Australia	$20,240	$24,970	35.2	0.939	4.1%
Italy	$20,160	$23,470	27.3	0.913	1.6%
Kuwait	$18,030	$18,690		0.813	3.2%
Israel	$16,710	$19,330	38.1	0.896	5.1%
Spain	$15,080	$19,260	32.5	0.913	2.5%
Portugal	$11,120	$16,990	35.6	0.88	2.7%
Greece	$11,960	$16,860	32.7	0.885	2.1%
Upper Middle Income Countries					
Korea, Rep.	$8,910	$17,300	31.6	0.882	5.7%
Argentina	$7,460	$12,050		0.844	4.3%
Saudi Arabia	$7,230	$11,390		0.759	1.5%
Uruguay	$6,000	$8,880	42.3	0.831	3.4%
Czech Republic	$5,250	$13,780	25.4	0.849	0.9%
Mexico	$5,070	$8,790	53.1	0.796	3.1%
Hungary	$4,710	$11,990	24.4	0.835	1.5%
Croatia	$4,620	$7,960	29.0	0.809	0.6%
Chile	$4,590	$9,100	56.7	0.831	6.8%
Venezuela, RB	$4,310	$5,740	49.5	0.77	1.6%
Poland	$4,190	$9,000	31.6	0.833	4.6%
Lebanon	$4,010	$4,550		0.755	6.0%
Costa Rica	$3,810	$7,980	45.7	0.82	5.3%
Brazil	$3,580	$7,300	60.7	0.757	2.9%
Estonia	$3,580	$9,340	37.6	0.826	-0.5%
Malaysia	$3,380	$8,330	49.2	0.782	7.0%
Botswana	$3,300	$7,170		0.572	4.7%
Panama	$3,260	$5,680	48.5	0.787	4.1%
South Africa	$3,020	$9,160	59.3	0.695	2.0%
Lower Middle Income Countries					
Latvia	$2,920	$7,070	32.4	0.8	-3.4%
Belarus	$2,870	$7,550	21.7	0.788	-1.6%
Jamaica	$2,610	$3,440	37.9	0.742	0.5%
Dominican Republic	$2,130	$5,710	47.4	0.727	6.0%
Namibia	$2,030	$6,410		0.61	4.1%
Colombia	$2,020	$6,060	57.1	0.772	3.0%

Country	Gross National Income per capita (2000)	PPP gross national Income per capita (2000)	Gini Index (various years)	Human Develop-ment Index (HDI)	GDP Economic Growth 1990-2000
El Salvador	$2,000	$4,410	52.2	0.706	4.7%
Thailand	$2,000	$6,320	41.4	0.762	4.2%
Jordan	$1,710	$3,950	36.4	0.717	5.0%
Iran, Islamic Rep.	$1,680	$5,910		0.721	3.5%
Romania	$1,670	$6,360	31.1	0.775	-0.7%
Russia Federation	$1,660	$8,010	48.7	0.781	-4.8%
Algeria	$1,580	$5,040	35.3	0.697	1.9%
Bulgaria	$1,520	$5,560	26.4	0.779	-2.1%
Egypt, Arab Rep.	$1,490	$3,670	28.9	0.642	4.6%
Swaziland	$1,390	$4,600	60.9	0.577	3.3%
Kazakhstan	$1,260	$5,490	35.4	0.75	-4.1%
Ecuador	$1,210	$2,910	43.9	0.732	1.8%
Bolivia	$990	$2,360	44.7	0.653	4.0%
Sri Lanka	$850	$3,460	34.4	0.741	5.3%
China	$840	$3,920	40.3	0.726	10.3%
Low Income Countries					
Turkmenistan	$750	$3,800	40.8	0.741	-4.8%
Ukraine	$700	$3,700	29.0	0.748	-9.3%
Azerbaijan	$600	$2,740	36.0	0.741	-6.3%
Indonesia	$570	$2,830	35.7	0.684	4.2%
Armenia	$520	$2,580	44.4	0.754	-1.9%
Haiti	$510	$1,470		0.471	-0.6%
Senegal	$490	$1,480	41.3	0.431	3.6%
Zimbabwe	$460	$2,550	50.1	0.551	2.5%
India	$450	$2,340	37.8	0.577	6.0%
Pakistan	$440	$1,860	31.2	0.499	3.7%
Mongolia	$390	$1,760	33.2	0.655	1.0%
Vietnam	$390	$2,000	36.1	0.688	4.1%
Low Income--Less than $1 a Day					
Benin	$370	$980		0.42	4.7%
Bangladesh	$370	$1,590	33.6	0.478	4.8%
Uzbekistan	$360	$2,360	44.7	0.727	-0.5%
Kenya	$350	$1,010	44.9	0.513	4.2%
Ghana	$340	$1,910	40.7	0.548	4.3%
Sudan	$310	$1,520		0.499	8.1%
Zambia	$300	$750	52.6	0.433	0.5%
Uganda	$300	$1,210	37.4	0.444	7.0%
Angola	$290	$1,180		0.403	1.3%
Tanzania	$270	$520	38.2	0.44	2.9%
Cambodia	$260	$1,440	40.4	0.543	4.8%
Nigeria	$260	$800	50.6	0.462	2.4%
Madagascar	$250	$820	38.1	0.469	2.0%
Nepal	$240	$1,370	36.7	0.49	4.9%
Rwanda	$230	$930	28.9	0.403	-0.2%
Mozambique	$210	$800	39.6	0.322	6.4%
Chad	$200	$870		0.365	2.2%
Niger	$180	$740	50.5	0.277	2.4%
Tajikistan	$180	$1,090	34.7	0.667	-10.4%
Eritrea	$170	$960		0.421	3.9%
Malawi	$170	$600		0.4	3.8%
Sierra Leone	$130	$480	62.9	0.275	-4.3%
Burundi	$110	$580	42.5	0.313	-2.6%
Ethiopia	$100	$660	40.0	0.327	4.7%

Source: World Bank. *World Development Indicators, 2002.* Derived from Table 1.1, 2.8, 2.14. Gini index: lower number denotes broader income distribution pattern. Blank: no data.

Table 2. Ranking Selected Countries by Physical Standards and Quality of Life

Country	Under-nourishmt rates* (1998)	Life Expectancy at birth* (2000)	Infant and Maternal mortality*		Illiteracy rates* (2001)		Gross National Income per capita* (2000)
			M	I	M	F	
High Income Countries							
Switzerland		80	8	4			$38,140
Japan		81	12	4			$35,620
Norway		79	9	4			$34,530
United States		77	12	7			$34,100
Austria		78	11	5			$25,220
Finland		77	6	4			$25,130
Germany		77	12	4			$25,120
Netherlands		78	10	5			$24,970
Belgium		78	8	5			$24,540
United Kingdom		77	10	6			$24,430
France		79	20	4			$24,090
Ireland		76	9	6			$22,660
Canada		79	6	5			$21,130
Australia		78	6	5			$20,240
Italy		79	11	5	1%	2%	$20,160
Kuwait	4%	71	25	9	16%	20%	$18,030
Israel		78	8	6	3%	8%	$16,710
Spain		78	8	4	1%	3%	$15,080
Portugal		76	12	6	5%	10%	$11,120
Greece		78	2	5	1%	4%	$11,960
Upper Middle Income Countries							
Korea, Rep.		73	20	8	1%	4%	$8,910
Argentina		74	85	17	3%	3%	$7,460
Saudi Arabia	3%	73	23	18	17%	33%	$7,230
Uruguay	4%	74	50	14	3%	2%	$6,000
Czech Republic		75	14	4			$5,250
Mexico	5%	73	65	29	7%	10%	$5,070
Hungary		71	23	9	1%	1%	$4,710
Croatia	12%	73	18	8	1%	3%	$4,620
Chile	4%	76	33	10	4%	4%	$4,590
Venezuela, RB	16%	73	43	19	7%	8%	$4,310
Poland		73	12	9	0%	0%	$4,190
Lebanon		70	13	26	0%	0%	$4,010
Costa Rica	6%	77	35	10	4%	4%	$3,810
Brazil	10%	68	26	32	15%	15%	$3,580
Estonia	6%	71	80	8			$3,580
Malaysia		73	39	8	9%	17%	$3,380
Botswana	27%	39	48	58	25%	20%	$3,300
Panama	16%	75	10	20	7%	9%	$3,260
South Africa		48	34	63	14%	15%	$3,020
Lower Middle Income Countries							
Latvia	4%	70	70	10	36%	67%	$2,920
Belarus		68	33	11	0%	1%	$2,870
Jamaica	10%	75	12	20	17%	9%	$2,610
Dominican Rep	28%	67	11	39	16%	16%	$2,130
Namibia	31%	53	37	62	17%	19%	$2,030
Colombia	13%	72	12	20	8%	8%	$2,020
El Salvador	11%	70	18	29	18%	24%	$2,000
Thailand	21%	69	44	28	3%	6%	$2,000

Country	Under-nourishmt rates* (1998)	Life Expectancy at birth * (2000)	Infant and Maternal mortality*		Illiteracy rates * (2001)		Gross National Income per capita * (2000)
			M	I	M	F	
Jordan	5%	72	41	25	5%	16%	$1,710
Iran, Islamic	6%	69	13	33	17%	31%	$1,680
Romania		70	60	19	1%	3%	$1,670
Russian Fed	6%	65	75	16	0%	1%	$1,660
Algeria	5%	71	15	33	24%	43%	$1,580
Bulgaria	13%	72	23	13	1%	2%	$1,520
Egypt, Arab	4%	67	17	42	33%	56%	$1,490
Swaziland	14%	46	37	89	19%	21%	$1,390
Kazakhstan	5%	65	80	21			$1,260
Ecuador	5%	70	21	28	7%	10%	$1,210
Bolivia	23%	63	55	57	8%	21%	$990
Sri Lanka	25%	73	60	15	6%	11%	$850
China	11%	70	60	32	8%	24%	$840
Cuba	19%	76	24	6	3%	3%	LMIC
Low Income Countries							
Turkmenistan	10%	66	65	27			$750
Ukraine	5%	68	45	13	0%	1%	$700
Azerbaijan	32%	72	37	13			$600
Indonesia	6%	66	47	41	8%	18%	$570
Armenia	21%	74	29	15	1%	2%	$520
Haiti	62%	53	11	73	48%	52%	$510
Senegal	23%	52	12	60	53%	72%	$490
Zimbabwe	37%	40	61	69	7%	15%	$460
India	21%	63	44	69	32%	55%	$450
Pakistan	20%	63	20	83	43%	72%	$440
Mongolia	45%	67	65	56	1%	1%	$390
Vietnam	22%	69	95	27	4%	9%	$390
Low Income - - Less than $1 a Day							
Benin	14%	53	88	87	48%	76%	$370
Bangladesh	38%	61	60	60	48%	70%	$370
Uzbekistan	11%	70	60	22	0%	1%	$360
Kenya	43%	47	13	78	11%	24%	$350
Sudan	18%	56	15	81	31%	54%	$310
Zambia	45%	38	87	115	15%	29%	$300
Uganda	30%	42	11	83	22%	43%	$300
Angola	43%	47	13	128			$290
Tanzania	41%	44		93	16%	33%	$270
Madagascar	40%	55	58	88	8%	20%	$250
Nepal	28%	59	83	74	40%	76%	$240
Cambodia	33%	54	59	88	20%	43%	$260
Rwanda	39%	40	23	123	26%	40%	$230
Mozambique	58%	42	98	129	40%	71%	$210
Chad	38%	48	15	101	48%	65%	$200
Niger	46%	46	92	114	76%	92%	$180
Tajikistan	32%	69	12	21	0%	1%	$180
Eritrea	65%	52	11	60	33%	55%	$170
Malawi	32%	39	58	103	26%	53%	$170
Sierra Leone	43%	39	21	154			$130
Burundi	68%	42	19	102	44%	60%	$110
Ethiopia	49%	42	18	98	53%	69%	$100

[a] Nutrition: share of the population with inadequate nutrition. Maternal mortality: per 10,000 live births. Infant mortality: per 1,000 live births. Source: World Bank. *World Development Indicators, 2002.* Derived from tables 1.1, 2.18, 2.20, 2.14 and 2.20.

Table 3. Comparing Country Ranks for Economic Freedom

Country	H*	F*	Country	H	F	Country	H	F
Free 1			Peru	53	45	Moldova	105	
Hong Kong	1	1	Greece	55	45	Turkey	105	82
Singapore	2	2	Guatemala	55	66	Bulgaria	108	97
New Zealand	3	5	Sri Lanka	55	77	Croatia	108	92
Estonia	4	35	Colombia	58	92	Fiji	108	70
Ireland	4	7	Tunisia	58	73	Georgia	108	
Luxembourg	4	13	Botswana	60	38	Ghana	108	89
Netherlands	4	8	Ivory Coast	60	80	Lesotho	108	
United States	4	3	Jamaica	60	38	Nepal	108	
Australia	9	8	Mali	60	92	Rwanda	108	101
Chile	9	15	Mexico	60	66	Tanzania	108	77
United Kingdom	9	4	Mongolia	60		Ecuador	117	101
Denmark	12	13	Namibia	60				
Switzerland	12	5	Oman	60	19	**Mostly Unfree 3.5**		
Finland	14	11	Slovak Republic	60	82	Azerbaijan		
			South Africa	60	47	Malawi	118	
Mostly Free 2			Philippines	70	38	Niger	118	97
Bahrain	15	24	Qatar	70		China	118	101
Canada	15	8				Egypt	121	51
Bahamas	17	35	**Mostly Unfree 3**			Ethiopia	121	
El Salvador	17	30	Dominican Rep	72	51	India	121	73
Sweden	17	19	Mauritius	72	30	Chad	121	92
Austria	20	15	Saudi Arabia	72		Kazakhstan	125	
Belgium	20	15	Uganda	72	60	Kyrgyz Republic	125	
Germany	20	15	Cent African Rep	76	109	Nigeria	125	101
Cyprus	23	70	Morocco	76	73	Togo	125	116
Iceland	23	11	Mozambique	76		Venezuela	125	82
United Arab Em	23	19	Algeria	79		Bangladesh	130	107
Barbados	26	82	Brazil	79	82	Romania	131	114
Portugal	26	19	Papua N Guinea		82	Russia	131	116
Spain	26	24	Djibouti	79		Congo Republic	131	113
Italy	29	35	The Gambia	79		Yemen	134	
Lithuania	29	60	Madagascar	79		Haiti	134	60
Taiwan	29	30	Malaysia	79	51	Sierra Leone		109
Czech Republic	32	38	Paraguay	79	66	Tajikistan	136	
Hungary	32	51	Slovenia	79	73	Ukraine	137	116
Thailand	32	56	Swaziland	79		Vietnam	137	
Japan	35	24	Benin	88	82	Bosnia	137	
Norway	35	24	Cape Verde	88		Equatorial Guinea	140	
Trinidad&Tobago	35	30	Honduras	88	66	Guinea Bissau	142	121
			Lebanon	88		Suriname	142	
Mostly Free 2.5			Nicaragua	88	60			
Argentina	38	30	Burkina Faso	93		**Repressed 4**		
Korea, South	38	38	Guyana	93	56	Yugoslavia	144	
Latvia	38	47	Kenya	93	56	Burma	145	122
Uruguay	41	47	Senegal	93	89	Syria	145	109
Costa Rica	42	24	Burundi		92	Zimbabwe	147	114
Israel	43	47	Chad		92	Belarus	148	
Armenia	43		Cameroon	97	97	Uzbekistan	148	
Belize	45	70	Gabon	97	105	Turkmenistan	150	
Bolivia	45	51	Macedonia	97		Iran	151	109
France	45	38	Zambia	97	60	Laos	151	
Jordan	45	24	Albania	101	97	Cuba	153	
Malta	45	60	Guinea	101		Libya	153	
Panama	45	19	Mauritania	101		Iraq	155	
Poland	45	89	Pakistan	101	107	Korea, North	155	
Kuwait	53	38	Indonesia	105	77	Congo, Dem Rep		123

* Heritage Foundation Study and Fraser Institute Study. The categories are from the Heritage study. Data from Gerald P. O'Driscoll, Jr. et al. *2002 Index of Economic Freedom* and James Gwartney and Robert Lawson, *Economic Freedom of the World, 2002* Annual Report. Numbers show country rank, with lower numbers having more economic freedom.

Table 4. Ranking Countries by Political Freedom

FREE

1

Andorra
Australia
Austria
Bahamas
Barbados
Canada
Cyprus (G)
Denmark
Dominica
Finland
Iceland
Ireland
Kiribali
Liechienstein
Luxembourg
Malta
Marshal Islands
Netherlands
New Zealand
Norway
Portugal
San Marino
Sweden
Switzerland
Tuvalu
United States
Uruguay

1.5

Belgium
Belize
Cape Verde
Costa Rica
Czech Republic
Estonia
France
Germany
Grenada
Hungary
Italy
Japan
Latvia
Lithuania
Mauritius
Micronesia
Monaco
Palau
Panama
Poland
St. Kitts & Nevis
St. Lucia
St. Vincent & the Grenadines
Sao Tome & Principe
Slovakia
Slovenia
South Africa
Spain
Suriname
Taiwan
United Kingdom

2

Bolivia
Botswana
Bulgaria
Chile\Croatia
Dominican Republic
Greece
Guyana
Israel
Korea, South
Nauru
Peru
Romania
Samoa
Vanuatu

2.5

Benin
El Salvador
Ghana
India
Jamaica
Mali
Mexico
Mongolia
Namibia
Papua New Guinea
Philippines
Thailand

PARTLY FREE

3

Antigua & Barbuda
Argentina
Brazil
Ecuador
Honduras
Madagascar
Moldova
Nicaragua
Seychelles
Trinidad and Tobago
Yugoslavia

3.5

Albania
Bangladesh
Fiji
Guatemala
Indonesia
Malawi
Mozambique
Nepal
Paraguay
Senegal
Sri Lanka

4

Armenia
Burkina Faso
Colombia
East Timor
Georgia
Lesotho
Macedonia
Niger
Solomon Islands
Tanzania
Tonga
Ukraine
Venezuela

4.5

Bosnia-Herzegovina
Congo (Brazzaville)
Cote d'Ivoire
Djibouti
Gabon
Guinea-Bissau
Kuwait
Nigeria
Sierra Leone
Turkey
Zambia

5

Central African Rep.
Comoros
Ethiopia
The Gambia
Jordan
Malaysia
Mauritania
Morocco
Russia
Singapore
Togo

5.5

Azerbaijan
Uganda

NOT FREE

5.5

Algeria
Bahrain
Cambodia
Chad
Guinea
Kazakhstan
Kenya
Kyrgyz Republic
Lebanon
Maldives
Oman
Pakistan
Swaziland
Tunisia
United Arab Emirates

6

Angola
Belarus
Brunei
Burundi
Cameroon
Congo (Kinshasa)
Egypt
Equatorial Guinea
Haiti
Iran
Liberia
Qatar
Tajikistan
Yemen
Zimbabwe

6.5

Bhutan
China (PRC)
Eritrea
Laos
Rwanda
Somalia
Uzbekistan
Vietnam

7

Afghanistan
Burma
Cuba
Iraq
Korea, North
Libya
Saudi Arabia
Sudan
Syria
Turkmenistan

Source: Freedom House. *Freedom in the World 2001-2002.* Lower numbers show more freedom.