PATTERNS OF INCOME DISTRIBUTION AMONG WORLD REGIONS
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Introduction

The elimination of widespread poverty and the promotion of a more equitable distribution of income are at the core of development concerns and a principal objective of all countries. This note looks at patterns of income distribution across the world economy during the past two decades with the view to identifying some of the relationships between key economic variables and broad patterns of inequality. Its focus is exploratory rather than analytical, and it presents a survey of patterns of income distribution prevalent in the world today rather than the historical and structural reasons for them.

The first section briefly discusses the relationship between poverty and inequality. The next section points to some problems inherent when examining patterns of income distribution across the world. The following sections look at the available country data and relate country patterns of income distribution to some key indicators of the level of development and growth in economic activity, in the religious orientation of different countries, and in different geographic regions of the world. An Annex addresses problems of measuring the distribution of income and discusses the sets of data on the size distribution of income and macroeconomic aggregates assembled as part of this study.

Poverty, growth and inequality

Implicitly or explicitly, most discussions about the importance of economic growth to development are concerned not simply with raising the incomes and living standards of the population but also with inequalities in the distribution of income and assets and the effects that growth may have on the relative position of the poor in society. [1] These discussions, it should be emphasized, often extend beyond inequalities in the distribution of income and wealth, and note that economic inequalities are only a small part of much broader questions of equity. Indeed, some non-monetary dimensions of equality, such as land ownership, conditions of work, job satisfaction, degree of

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[1] Much of the emphasis in the setting of international goals for eradicating poverty, such as the Millennium Development Goals of the United Nations, focus on the reduction of absolute poverty measured in terms of achieving some minimum level of income for each person in society. It is recognized, however, that poverty entails more than a lack of income, and the question of relative poverty – that is, inequalities of income within and between countries regardless of level of income – is as important as the question of absolute poverty. See United Nations, *Report on the World Social Situation, 2005*, for a discussion of the economic and non-economic aspects of poverty and inequality.

participation in decision-making on the job and in the community, and the influences of racial and other types of discrimination on income, employment and other aspects of life may have an even more profound effect on the quality of life of the poor than economic inequality measured in terms of the relative amount of income people have compared to others.

While all aspects of inequality — economic, political and social — are important determinants of the quality of life and reinforce one another in a complex and interrelated process of cause and effect, the question of the impact of overall economic growth on income distribution remains central to discussions of development strategies and policy. In principle, human traits – intelligence, diligence, physical attributes and commercial involvement – are distributed normally among the population, and consequently the growth of income over the population should also be symmetric. But in fact the distribution of income of all countries tends to be skewed to greater or lesser degree, and factors other than human characteristics would seem to be determining.

In the standard paradigm of income distribution, the size distribution of income — and hence the degree of inequality of incomes — arises out of a functional distribution of income paid to different types of factors of production in the form of wages and salaries, rents and royalties, and interest and profits. [2] In turn, the supply, attributes and ownership of factors of production — e.g., participation in the labor force, its educational and skills profile, the concentration of ownership of and investment in financial and physical assets, claims on rents derived from land and natural resources — are all highly affected by institutional factors peculiar to each country and rooted in its history. Since observed differences in patterns of income distribution among countries seem too vast to be explained simply by differences in factor endowments or factor attributes, and can not be accounted for by such influences as market imperfections, economies of scale or effects from the external sector, the influence of institutional factors on income distribution is likely to be large. For this reason, any effect economic growth or any other economic influence may have on the pattern of income distribution may be secondary to that of public policies designed to affect that distribution.

A major problem when attempting to ascertain the effect of economic growth on income inequality is that the relationships involved are complex and uncertain. Simply disentangling the proximate effect of a change in output or some other variable on the pattern of income distribution is difficult. Over the economic cycle or in response to upturns and downturns in the economy, for example, inequality may be temporarily affected by variations in the growth rate, increasing during a recession and decreasing during an expansion. Over a somewhat longer term, income distribution and economic growth will both be affected by the degree of geographic, sectoral and social mobility, by changes in the age structure of the population, by the size and change in the informal sector of the economy, and by the influence of international trade and factor movements on domestic resource

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[2] The standard – or marginal productivity – theory of the functional distribution of income can be traced back to Ricardo's "marginal principle" introduced in his theory of rent but generalized by neo-classical economists to all factors of production. The idea is that each factor of production will receive, under competitive conditions of free exchange, an income corresponding to the value of its marginal product, that is, to the increase in output attributable to an unit of the factor times the price of the product. There are of course many qualifications to this idea. The development of the marginal productivity theory of income distribution is summarized by John Maurice Clark, "Distribution", *Encyclopedia of the Social Sciences*, Vol. V (1931), pp. 167-173. The size distribution of income is the distribution of income between groups earning incomes of different sizes, and depends on ownership of assets as well as personal contribution to production reflected by the individual's marginal productivity.

allocation as well as other factors. These influences do not necessarily operate in a systematic fashion, and could increase or decrease inequality depending on particular circumstances of a country.

Over the very long term, however, the economist Simon Kuznets pointed out that the vast bulk of poor people in developing countries at the early stages of development reside in rural areas and that the urban sector often includes higher income groups with no counterpart in the countryside. [3] In this situation, rising average incomes could have a systematic effect on the pattern of income distribution and the relative position of the poor through a transfer of labor from the countryside to the city. This proposition has become known as the Kuznets Hypothesis, and has been the subject of considerable research both by academic researchers and international organizations. Kuznets' argument is important because it points out that the pattern of income distribution may be systematically affected by the process of economic growth and that both low-income and high-income countries may have lower inequality because of the greater homogeneity of their labor forces. It should be noted that Kuznets himself only sketched the basic ideas involved and was tentative about the hypothesis as a description of the actual experience of developing countries.

In more formal terms, the Kuznets Hypothesis states that the relationship between the level of per capita income and degree of equality in the distribution of income could be described as an inverted **U**: specifically, as per capita income (measured on the horizontal axis) begins to rise from a low base, income inequality (measured on the vertical axis) may initially rise, reach a maximum at some intermediate level of income, and then decline as income levels characteristic of a modern economy are attained. The relationship between growth and inequality in this model traces out an inverted **U** because the pattern of income distribution in the early years of economic development is characterized by a rural sector where almost everyone is poor and an urban sector where average incomes are higher but greater income inequality prevails. As migration to the urban sector starts in response to mainly urban economic growth and its higher average income, average inequality will at first increase, even if income distribution remains unchanged within each sector. As more and more migration takes place and the country becomes more urbanized, however, the degree of income inequality will eventually decline. [4]

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[3] S. Kuznets (1955). In a 1963 paper, Kuznets noted that "the shape of the income distribution curve is different in underdeveloped and developed countries. The low income groups of the former receive income shares in total income as high as those of the low income groups in the developed countries; but the upper income brackets in the underdeveloped countries receive appreciably higher shares in total income than they do in developed countries". This hypothesis is consistent with the fact that economic activity in the poorest developing countries is mainly traditional agriculture, which will tend to have a more even distribution of income than that of a non-agricultural sector where a low-income informal sector exists side-by-side with a higher income, more modern sector, where wages are a greater share in income and are initially distributed more unequally. Over time, however, as development proceeds productivity gains spread over the economy, and a larger and larger share of the population received wage and salary incomes centered around a rising median, and inequality will lessen. See Campano and Salvatore (2006), pp. 107ff for a discussion of the Kuznets Hypothesis.

[4] There are a large number of studies of the Kuznets Hypothesis using different data sets, different inequality measures, and different estimation techniques. There is little consensus, however, on the strength of the relationship, with some studies concluding that "results offer virtually no support for an increase of inequality at low levels of income and a decrease at higher levels as suggested by the

A related view has been expressed by others, namely, that greater inequalities in income distribution, at least as economic development begins, might lead to a more rapid rate of long-term economic growth. In this view, economic growth in low-income countries will necessarily be inequitable because wide personal income inequalities are required for generating the large volumes of saving required for investment and faster economic growth. Since the rich save and invest a higher proportion of their incomes, and the poor tend to spend most of their income on consumption goods, it was thought that an economy characterized by a highly unequal distribution of income would grow faster than one with a more equitable distribution of income. The importance of the Kuznets Hypothesis and the view that inequalities are essential to rapid growth for policy-making is that they imply the possibility of a conflict, at least over the short- to intermediate-term, between the objective of economic growth and that of lower income inequality. [5]

Finally, patterns of income distribution may be affected by a wide array of institutional and social factors which, while related to and affecting economic trends and developments, stand apart from them. Includes in this are political arrangements and structures, aspects of social development such as literacy, and cultural attributes such as religion.

Problems when looking at patterns of income distribution

This paper looks at some of the relationships between economic, social and political trends and structures on the one hand and cross-country patterns of domestic income distribution on the other. It must be understood that the patterns and changes in these relationships depend on how they are measured, and there is no necessarily correct way of measuring income distribution or any other economic or social variable. In the case of income distribution data, different indicators summarize the distribution in different ways, for example, as Gini coefficients [6] or as ratios of the income or consumption of highest to lowest deciles or quintiles of the population. [7]

Kuznets' inverted **U** relationship". (Deininger, K. and Squire, L., "Does inequality matter? Reexamining the links between growth and inequality", Mimeo (World Bank, Washington D. C., 1996)). On the other hand, Ogwang finds support for the hypothesis. (Ogwang, T., "Economic development and income inequality: A nonparametric investigation of Kuznets' U-curve Hypothesis", *Journal of Quantitative Economics*, (1994), 10:139-153.)

[5] Because of its initial differential impact over the economy no doubt the process of accelerating the pace of economic growth, at least in the short-term, worsens inequality, and perhaps it also does over the medium- to longer-run. The real question is whether policy measures can offset any negative impact that more rapid growth might have on the distribution of income.

[6] A Gini coefficient is a measure of income distribution where 0 corresponds to perfect equality in incomes (everyone has the same income) and 1 corresponds to perfect inequality (one person has all income). It is computed as the area defined by the Lorenz curve for the distribution divided by the area under the uniform distribution line in an income distribution chart.

[7] In this paper, the measure of income inequality is the ratio of the percentage of all income (or consumption) received by the highest 20 per cent of income recipients to the percentage of all income received by the lowest 20 per cent of income recipients.

When estimating worldwide patterns of income observations for individual countries must be compared with one another. It is important, therefore, that data compiled for this purpose be representative of the country as a whole and comprehensive in terms of the types of income included. Such consistency, however, is especially difficult to attain in the case of income distribution data, where different methods and kinds of data are used to estimate the pattern of income distribution – national income accounts or household income and expenditure surveys. In addition, even when the same statistical approach is used in two countries compilation methods and quality and comprehensiveness of underlying data may differ markedly between them.

In the case of the data relating to GDP per capita used to classify countries by level of income or rate of economic growth different methods of converting national currencies to a common currency – current market exchange rates or translations into purchasing power parity – also yield different results.

Finally, as summarized in Table 1, there are marked differences in level and distribution of income and population across the world, with most of the world's income generated in the more economically advanced countries and most of the world's population residing in the developing countries. Given these differences, even if incomes were to be distributed equally within each and every country, the world distribution of income would still be highly unequal over countries.

For these reasons, there is no single answer to the question of the degree of income inequality in a country or over the world, and patterns presented here should be seen as indicative of income inequality differences among countries but not determinative. Other sets of data and other methods for summarizing results might yield different conclusions. Some of the problems involved in compiling and analyzing income distribution data are mentioned in the Annex.

As noted in the Annex, data on the distribution of consumption or income have been taken from the data set compiled by the World Bank's Development Research Group and published in the Bank's *World Development Indicators*. Data on gross domestic product and population are those of the World Data Program carried out at Regent University. The source of statistics relating to political, religion, and social variables are also discussed in the Annex.

Patterns of distributional inequality and world development

As mentioned above, the expectation that there would be a tendency toward greater income concentration in the early stages of economic development, which would later taper off and eventually reverse, has been the subject of considerable research for many years. Early studies of the relationship between development and inequality, carried out on the basis of cross-country data sets, initially lent support to the hypothesis that the process of development would worsen the position of the poor, at least in relative terms in its initial stages. [8] However, as new studies based on panel and individual country time-series data have became available, the evidence is more consistent with the

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[8] The hypothesis was deemed "fully confirmed" by Assume (1970), a "stylized fact" by Ahluwalia (1976) and an economic law by Robinson (1976), although the usefulness of these studies for other countries has been questioned [Saith (1983) and Anand and Kandur (1993)]. A recent example in support of the hypothesis is Ram (1995). Studies on the hypothesis are summarized in Campano and Salvatore (2006).

conclusion that income distribution patterns vary significantly at the same level of per capita income and a rapid pace of economic growth does not necessarily worsen income distribution.[9]

This general conclusion is supported by two recent studies of income distribution trends discussed in a recent survey of equity and growth in developing countries. The first is a detailed study of India, which has one of the most extensive and reliable data series. [10] In this study, only 6 per cent of the increase in the log of total consumption between 1970 and 1990 was accounted for by rural to urban population shifts, while 20 and 74 per cent of the growth of consumption was attributable to growth within the urban and rural sectors, respectively. Moreover, there was no systematic relationship between growth and income distribution for India as a whole. It would appear from this study that even high rates of growth do not necessarily lead to greater inequality in the distribution of income. In a second study undertaken at a more aggregative level, a sample of panel data covering 45 developed and developing countries for the years from 1947 to 1993 was used to analyze the pattern of inequality among countries. The results indicated that there is substantially greater variation in inequality across countries at a given time than for a given country over time. Indeed, 92 per cent of the variance in Gini indices by country and date was accounted for by cross-country variation whereas only 7 per cent was accounted for by variation over time. [11]

The conclusion that income concentration is not related to income levels or rates of economic growth is also supported by an examination of the data assembled in Table 2, given at the end of the paper. This table provides individual country data for the 1990s and 2000s on the percentage of income or consumption by quintile of the population, sorted by the level of per capital income in 2000. From the quintile data, the ratio of the income share of the highest 20 per cent of income recipients to that of the income share of the lowest 20 per cent is derived, and used as the key measure of income inequality in this paper.

When ranked by per capita GDP, the data indicate that the degree of income inequality, as reflected by the ratio of the first to the fifth quintiles of income, varies significantly across the income spectrum, and hence there is no systematic relationship between the pattern of income distribution and the average level of per capita income (see Figure 1). Both relatively even and highly skewed income distributions can be seen at low and middle income levels, and, although there may be some weak tendency toward more equal distributions of income at the very highest income levels, considerable variations in income distribution patterns can nonetheless be noted among high income countries.

Similarly, ranking country observations by rate of growth of per capita GDP indicates little relationship between income inequality and the long-term pace of economic growth, as measured by the percentage increase in GDP per capita (see Figure 2). It would appear that countries can grow rapidly or slowly irrespective of the domestic pattern of income distribution.

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[9] In addition to the studies summarized below, the following studies report that inequality is just as likely to decrease as increase: Saith (1983), Fields (1989), World Bank (1990, Chapter 3), and Squire (1993).

[10] See Bruno, Ravallion and Squire (1996), p. 7ff.

[11] See Bruno, Ravallion and Squire, (1996), 4f.

Figure 1

Relationship Between Income Inequality and Per Capita Gross Domestic Product
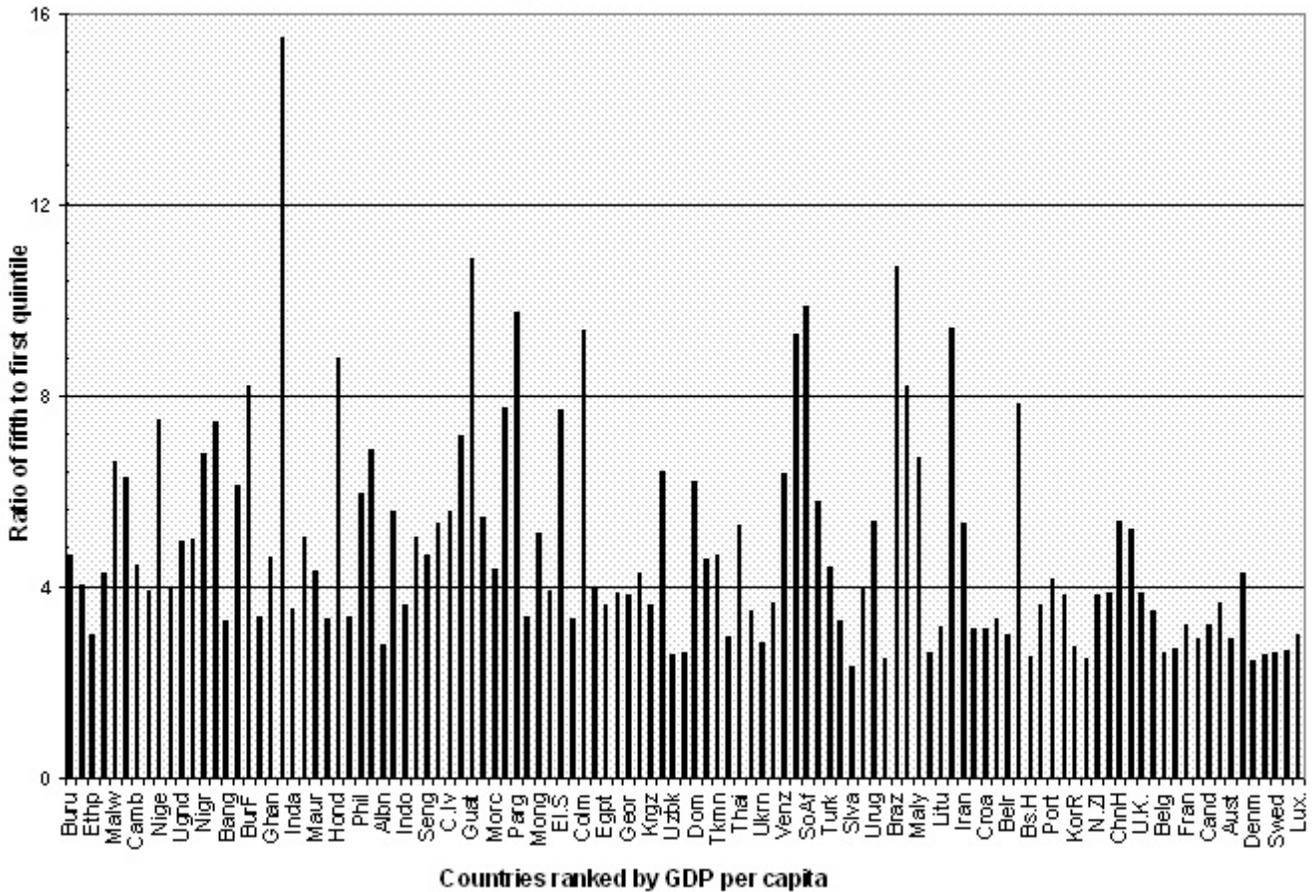
Figures 1 and 2 lend support to the view that failure to allow for country circumstances when assessing the relationship between growth and inequality could lead to inappropriate conclusions and policies.

In summary, a host of factors influence the effects of growth on inequality, including the initial distribution of physical and human assets, the pattern of investment and technological change, preferences of consumers, the degree of openness of the economy to the rest of the world, and the effectiveness of government redistributive policies. With regard to this latter point, it should be noted that many most studies do not explicitly consider the reality of substantial intervention in the economic system by government, which could account for why recent results differ from those found on the basis of data for the 1950s and 1960s. Active policies designed to modify the size distribution of income at the upper levels through, for example, progressive taxation on incomes and/or at the lower levels through by refocusing assets on the poor may overcome any inherent tendency for economic growth to lead to greater income inequality.

Figure 2

Relationship Between Income Inequality and Long-term Growth of Per Capita GDP
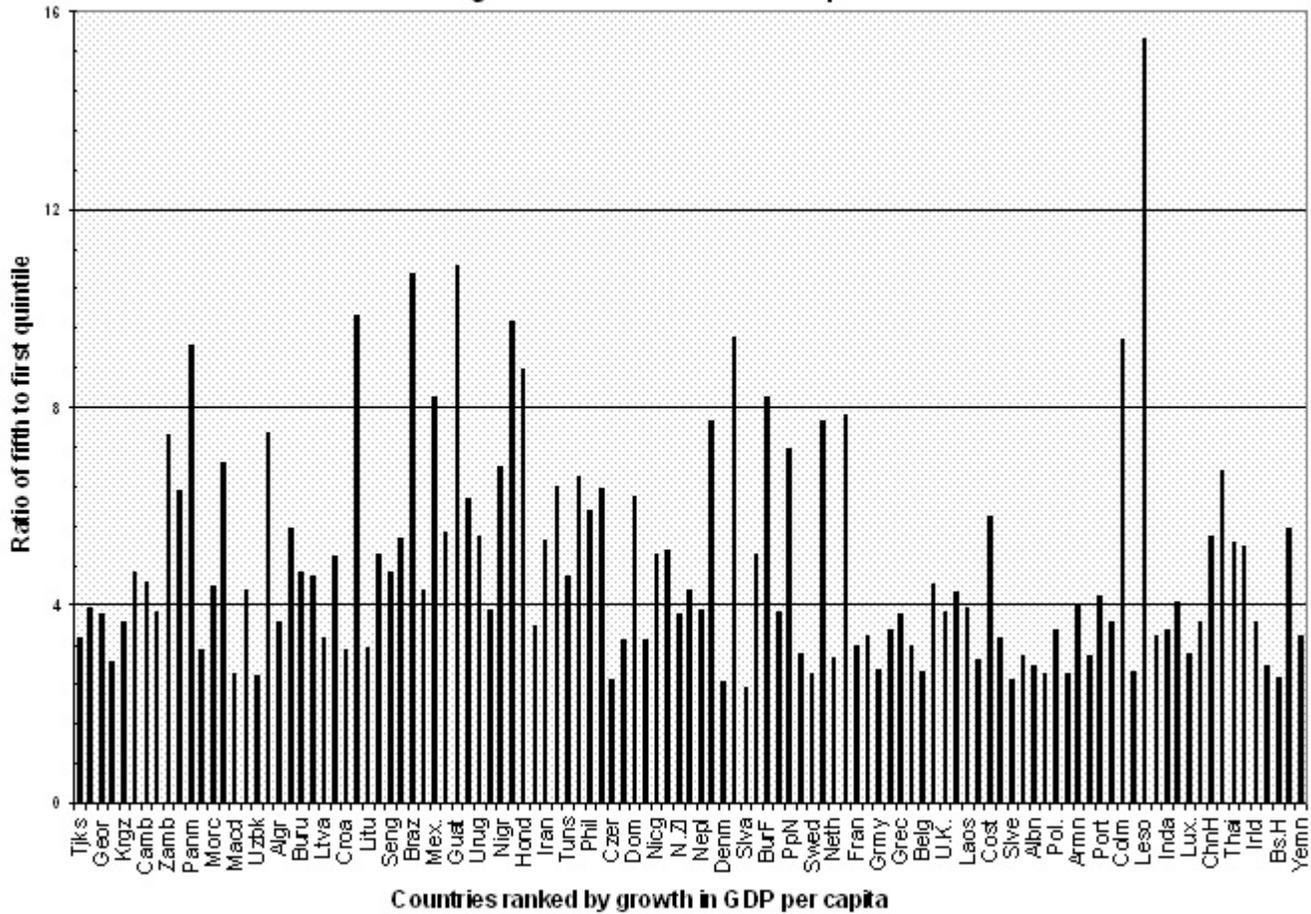
Patterns of distributional inequality of different religions

Religion affects society and the economy in many ways. In the first instance, people participate in religion activities in their personal lives through prayer, church attendance, and activities related to their identity as a religious person. This affects their beliefs and values, and in doing so shapes such personal attributes as thrift, honesty and attitudes toward work, which in turn shape societal norms. In the second instance, the effects of religion are felt in the economic, political and social system of a country. It affects the time people spend on the ordinary activities of life, including economic activities, and how the society and its polity is organized and consequently economic outcomes such as the level, composition and pace of increase in economic activity. Beliefs and values affect attitudes toward the role of the state in society and the economy, and the economic productivity of the work force and the possibilities for income generation.

Religious ideas can affect economic behavior and economic activity in many ways, from attitudes and beliefs about the nature of the world through its impact on the very structure of society to the way in which individuals relate to one another and how they see their ultimate purpose and

destiny. [12] It is not possible in a short survey such as this to do more than note that different religions have different attitudes toward work and commercially-oriented activities, and these differences are likely to affect economic performance and the level and pattern of incomes arising in a country. Given these differences, religions that are more amenable to the rational pursuit of economic gain and worldly affairs are likely to have different patterns of income distribution than religions that place greater emphasis on the individual's place in society and/or personal piety.

Reliable information on the religious orientation of different countries vary from source to source and do not provide important details such as the strength of religious commitment and the underlying values of adherents. Data on the broad percentage distribution of major faiths within countries is, however, available and has been used to classify each country by its main religious orientation: Christianity, Jewish, Muslim, Hindu, Buddhist, and "Other". [13]

A very mixed picture emerges when the possible influence of religion on income distribution is considered. Figure 3 provides a broad idea of the relationship between income inequality and religious orientation derived from the classification scheme mentioned above. No discernable pattern of immediate significance can be seen in the data.   Perhaps this is because classifying countries in terms of their religious orientation simply on the basis of percentage shares of different religious groups in the country is too crude an approach to the question to gain a reliable picture of what must be a very complex relationship.

Patterns of distributional inequality across world regions

Further drawing upon the data of Table 2, some principal conclusions regarding patterns of distributional inequality across world regions can be made when the ratios of income inequality of individual countries are arranged in relation to their classification by major economic region and geographic area. (See Figure 4.)

Some important conclusions are apparent from the pattern that emerges. First, income distribution patterns vary markedly across the globe. At the one extreme are high and middle income countries of North and East Europe in which poverty is negligible and in which great priority is given to maintaining full employment and a minimum income for all members of society. Despite a high relative degree of equality, differences between the average level of per capita income of the richest 20 per cent of the population may be 3 to 4 times greater than the average per capita of the poorest 20 per cent. At the other extreme are middle-income countries in Latin America with long-standing historical inequalities between the rich and poor and low-income countries in Africa with a significant subsistence sector where low levels of income prevail next to an emerging modern sector with much higher economic productivity. In some of these countries, the relative share of the richest quintile may

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[12] The importance of religion on economic and political institutions and on growth and development was, of course, emphasized by Weber in this studies of the sociology of different religions.

[13] Data on religious orientation for this study have been taken from the Information Please "Fact Monster" web site (www.factmonster.com). As shown in the Annex Tables, the country data were classified by main religious orientation on the basis of the country's predominant religion and, in the case of Christianity and Islam, its main religious branch. Further information of the classification scheme is given in the Annex.

Figure 3

Relationship Between Income Inequality and Religious Orientation

Countries listed by religious orientation and ranked by GDP per capita

Christian — Jewish — Muslim — Hindu — Buddhist
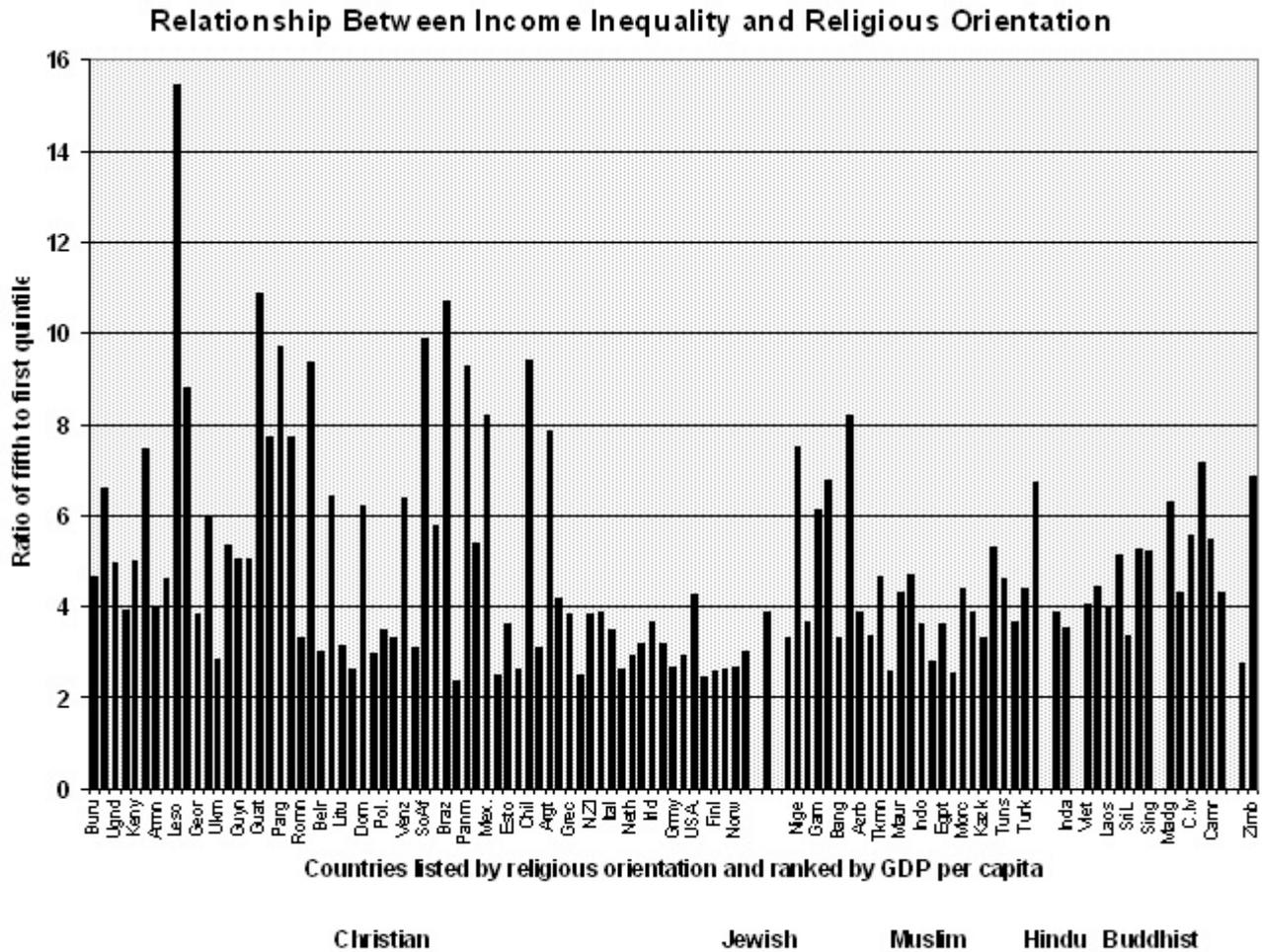
be 20 or more times that of the poorest quintile. Between these two extremes, in order of degree of uniformity, are the high income countries of North America and Western Europe with their technologically complex and diversified economies and their emphasis on efficiency and productivity, the large low income economies of Asia with their extensive traditional agricultural sectors yielding relatively even if low incomes, the sophisticated entrepôt economies of Hong Kong and Singapore with vigorous export industries based on skilled and semi-skilled labor with limited wage differentials, the small yet diversified and rapidly growing upper middle-income economies centered in East Asia that have a strong export orientation, and the resource rich and commercially-oriented economies of North Africa and West Asia. The tremendous contrasts among countries in their circumstances and history and in their organization of production and in the availability of capital and technology to combine with

Figure 4

Income Distribution Across World Regions

Countries ranked by region and per capita GDP

Developed economies	Transition economies	Latin America & Caribbean	North and Sub-Saharan Africa	Western, South and Other Asia and the Pacific
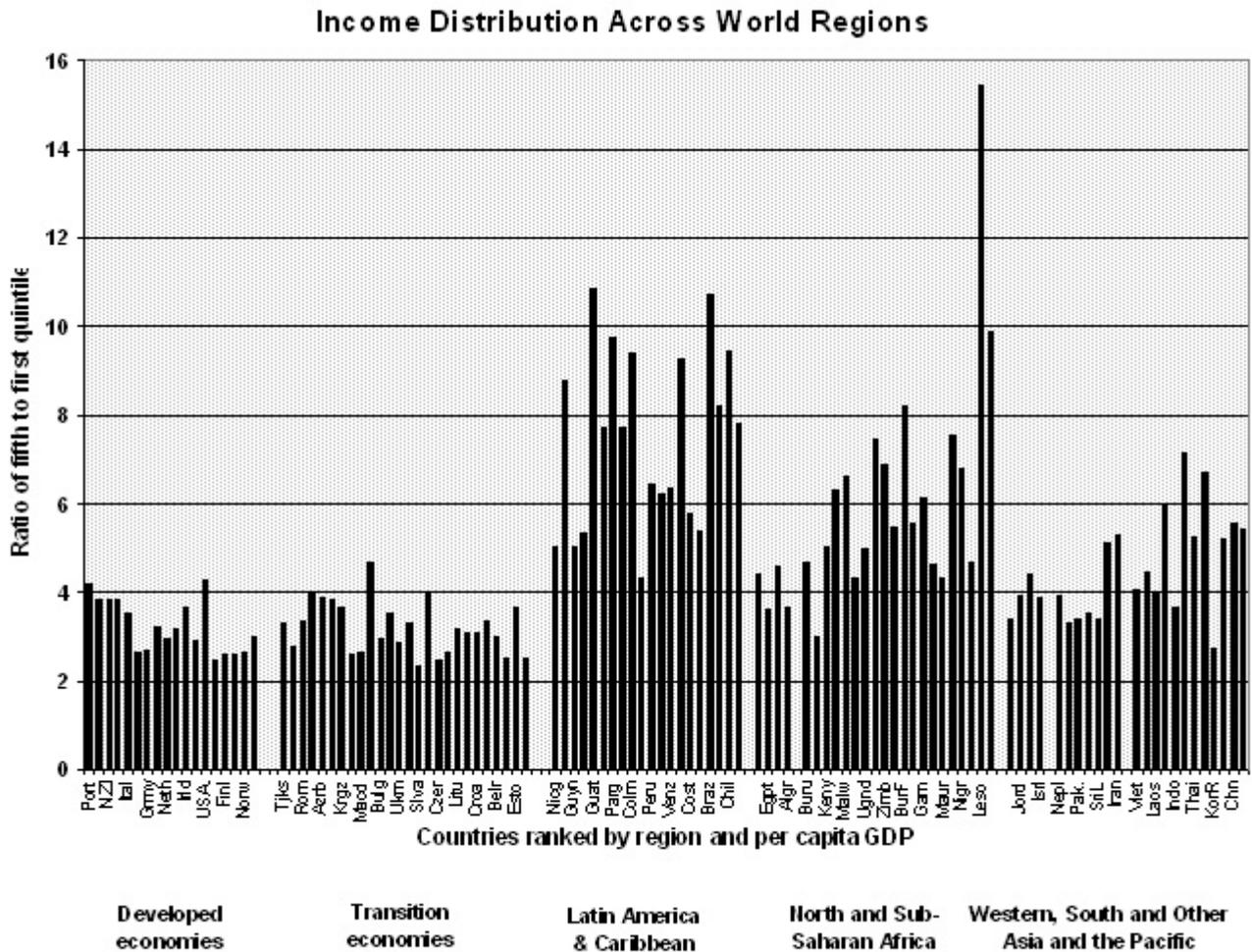
their labor and natural resources generates marked contrasts in the pattern of income distribution across countries. [14]

Second, while income distribution patterns vary markedly between major world regions and geographic areas, there is also substantial diversity even within the same region or area at approximately the same level of GDP per capita. While the developed economies have a relatively high level of GDP per capita and greater equality in the pattern of their income distribution than countries at lower levels of income per person, the range in the degree of income inequality nonetheless remains rather wide. The United States and Switzerland, for example, with the highest level of average per capita GDP, have inequality coefficients on the order of 2 to 3 times larger than

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[14] Factors affecting the pattern of income distribution in different world regions are discussed in United Nations (1993), Chapter VII, "Income Distribution and Poverty".

those of Sweden and Finland, countries with higher per capita incomes slightly lower on the income spectrum.

The economies in transition, with an income level equivalent to that of upper middle-income developing countries, nonetheless reflect a more equal distribution of income than the developed economies, indeed, the lowest degree of inequality in the available sample of countries. Similarly, the overall average level of GDP per capita in the middle-income countries of North Africa and West Asia is approximately that of the middle-income countries of Latin America, yet there are marked contrasts in the income distribution patterns of these two groups of countries, with Latin America reflecting the greatest degree of income concentration in the sample.

Finally, the low income countries of Asia exhibit a much more uniform distribution of income than the low income countries of Sub-Saharan Africa, where marked differences can be seen in the distribution of different countries. Because the share of income accruing to the lowest percentiles of the population is not dependent on the level of per capita income, it is possible for a country with a high average per capita income to have a larger percentage of its population below an international poverty line than a country with a low average per capita income.

Third, as noted above, income distribution patterns vary markedly at the same pace of economic growth, but also even within the same region at approximately the same rate of growth. Countries which have registered a rapid long-term increase in their per capita gross domestic product of more than 3 per cent a year include both Indonesia and Sri Lanka, with relatively equal distributions of income, and Botswana, Mauritania and Malaysia, with a much higher degree of inequality than most other countries. Similarly, among those countries that grew at a slow pace over the course of the last quarter century -- or even registered a decline in per capita GDP -- are both countries with only a relatively small gap between rich and poor and countries with large income disparities. Indeed, countries at high, moderate and low degrees of inequality as measured by the ratio of share of income of the top quintile to the share of income of the bottom quintile correspond to the entire range of high, moderate and low rates of economic growth and, as discussed above, high, middle and low levels of income.

From the sample of data assembled for this study, then, there would seem to be no apparent relationship between the degree of inequality in income distribution and the rate of growth of the economy in either developed or developing countries. Consequently, given these data, there is no reason to conclude that an increase in the pace of economic growth to a higher rate should worsen income disparities. Conversely, slower rates of growth can not be expected to improve income distribution but could, as above, slow down progress toward poverty reduction.

Fourth, compared to differences across regions, income distribution patterns are broadly similar within major economic regions and geographic areas. While all groups of countries show some degree of income inequality, the highest degree of equality in the distribution of income was in the former planned economies of East Europe, where many aspects of the income generation and transfer process were highly affected by state policy which had as one of its objectives an egalitarian distribution of income. In addition to a wide variety of measures intended to support at least modest levels of living, these countries maintained restrictions on private ownership of land and capital facilities, assets whose ownership is very unequally distributed in many other countries. However, the distribution of income has become less equal and the number of people living in poverty has increased

in East Europe and the states of the former USSR in recent years as these countries began a transition to a more market-oriented economic system.

In North Europe, and to a lesser extent elsewhere in the group of developed economy countries, patterns of the size distribution of income reflect greater uniformity than those of developing countries. Personal income distributions in these countries are strongly affected, as a matter of policy, by progressive income tax rates, public spending programs for health, housing and education, and transfer payments for social security and social assistance. In general, these mechanisms for transferring some proportion of the income of higher income strata to those with lower relative incomes have limited the degree of inequality of income within the economically advanced countries. Greater equality in income distribution in these countries is also supported by relatively high enrolment rates in primary and secondary schools leading to a wide distribution of skills and training among the population and a high degree of mobility along the income scale. Nonetheless, there is considerable country-to-country variation within this group in patterns of income distribution with ratios of average high and low quintile incomes ranging from 3 to over 8 ½.

Income transfer mechanisms and the provision of social services affecting the distribution of income are either largely non-existent or carried out on a smaller relative scale in developing countries and the distribution of ownership of assets is often highly unequal among members of the population. For these and other reasons, data for developing countries reflect a concentration of incomes at the higher level and a more significant variation in their degree of inequality across countries as it is reflected by the ratio of the income share of the lowest 20 per cent to the highest 20 per cent of the population. Among the developing countries, those situated in South and East Asia tend to exhibit greater equality than those of other developing country regions. Many countries in this region initiated policies directed toward the generation of incomes among small-scale producers in both agriculture and industry, the progressive taxation of incomes and the improvement of human resources through social welfare expenditures, often directed at low income groups. These efforts, rapid and stable economic growth and limited macroeconomic disequilibria also contributed to a steady expansion of employment which contributed to lessening aggregate income inequality. Many low-skilled jobs were created in labor intensive export oriented manufacturing industries while employment also expanded in the fast-growing financial, business services and construction sectors paying higher wages to large numbers of personnel. While introducing a degree of income inequality, the extremes of income divisions between those with high paying employment and those with no job or an income at the subsistence level have been avoided.

In Africa and West Asia, two patterns of income distribution can be discerned. Income distribution patterns in North Africa and West Asia are more even than those of Sub-Saharan Africa. While the causes of high inequality in Sub-Saharan Africa are not apparent, and the available data do not permit strong conclusions, on the one hand many of the economies of countries in this region are dominated by small scale, often subsistence, agriculture while on the other hand there are pockets of large farms and mines which generate substantial production but employ relatively few workers. There is some evidence that agricultural wages declined in real terms during the 1980s and 1990s. In urban areas, wage earners in the formal sector, while only a small minority of the population, tend to receive much more income than those in the informal sector, leading to inequalities. Even in the modern sector, the demand for labor in many of these countries has been constrained and, while employment in the public sector has not been substantially reduced, average real wages have declined significantly. Economic performance in the Sub-Saharan region has also been characterized by

declining exports, food production per capita, terms of trade and overall output per capita, which has, as discussed above, increased poverty and therefore generated inequality in the region.

Although Latin America has a lower proportion of the population living below I$1 a day, its income distribution is significantly more skewed on average than that of other developing country regions. The ownership of land and other income producing assets is much more concentrated in Latin America than in other regions, and in most of Latin America, the rural population is mostly landless. The poor in Latin America include a disproportionate number of single mothers, parents with little or no education, and young people for whom there are insufficient jobs. The very poorest among the population are in the rural areas, however, where agricultural productivity is low and there are few non-farm jobs.

In sum, patterns of within country inequality across the world show what would appear to be systematic differences between regions of the world, with the highest levels of equality in the more economically advanced countries and the highest levels of inequality in Latin America and Sub-Saharan Africa. Within each region, however, patterns of income distribution tend to be similar. This would support the conclusion that cultural and historical circumstances and trends have a strong influence on the distribution of income in a country.

Conclusion

In conclusion, a significant degree of variation in the degree of inequality in the distribution of income can be seen across the globe but there would seem to be no systematic relationship between inequality and standard economic indicators such as the level of income and the rate of growth. In all groups of countries, marked contrasts exist in the degree of income concentration between different areas of the world, pointing to a large role for institutional factors in determining the size distribution of income.

On the other hand, it would also seem that, although the transformation of economies from low levels of income can create inherent tendencies toward greater inequality, as Kuznets suggested, little evidence is seen that economic growth necessarily worsens the distribution of income of a developing country; rather, aggregate growth seems to be neutral in its impact or supportive of a more equal distribution of income over the longer-term. Therefore, there would seem to be no inherent conflict between the objective of faster economic growth and that of a more even distribution of income between the poor and the non-poor, and government policies would seem to have sufficient scope to avert tendencies toward inequality.

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Annex

Measuring the distribution of income and consumption

A cross-country appraisal of patterns of income distribution within countries and changes in income inequality over time faces four immediate constraints: 1) The absence of information for many countries on personal income distribution, that is, on the income received by a given percentage of recipients, arranged in order of size of income; 2) The complexity of concepts and definitions involved in defining income relevant for assessing the position of recipients within the spectrum of income, and, given a set of concepts and definitions, the problems of compiling comparable data in terms of coverage, reliability and quality; 3) The difficulty of taking into consideration the effects of such factors as income mobility, the age structure of the population and dissimilarities in household formation when measuring differences in human welfare; and 4) The lack of a single indicator which can summarize uniquely the degree of distributional inequality in income or expenditure patterns.

With regard to the first point, efforts by the United Nations and the World Bank have improved data quality, country coverage and timeliness of the available data on the size distribution of income and consumption, especially over the last 10 years. Estimates of average income levels by cohort of the domestic population are now available for over 50 developing countries, and unlike previous estimates, these data are based on nationally representative household surveys rather than synthetic estimates built up from other kinds of data that often focused on only a small segment of the population such as wage earners in the modern sector or families in urban areas. The time lag between when a survey is completed and when income distribution data become available has also been reduced. Nonetheless, reliable data are still absent for a majority of developing countries, especially low income and least developed countries. For this reason, the available data provide only an incomplete picture of patterns of the distribution of income among households in different areas of the world.

With regard to the concepts and definitions used when estimating distributional data, survey-based measures of income and expenditure such as those used below can differ significantly among countries in underlying definitions, in the distinct categories of income and expenditure they identify, in the treatment of the local market value of non-market consumption, in the adjustments made for taxes paid by recipients, and in the degree to which they provide a complete and accurate accounting of revenues and costs in a household enterprise. For the same country, strict comparability between household surveys carried out in different years is difficult to maintain even when income concepts and definitions remain similar because household incomes and living standards are affected by changes in the structure of the economy, by changes in relative prices of consumer goods and services and by movements between rural and urban areas. Problems of identifying precisely who owns property and who receives income derived from property -- and the more general problem of obtaining accurate data on very high incomes -- may limit the usefulness of data collected on incomes. Consequently, comparisons of differences in income distribution between countries and changes in income distribution over time for the same country tend to suffer from the heterogeneous nature of income generation, differences in consumption patterns, changes in sources of income and relative prices, and practical problems of compilation.

It should also be noted that distributional data provide no information about the degree of social and occupational mobility (especially between generations), about differences in age-structures

of the population that may affect the size distribution of income, or about marked contrasts in household characteristics between countries or groups of individuals at different income levels that may affect the extent or nature of poverty. While available data on income distribution show shares of income accruing to groups of income recipients which remain fixed in relative size, over time the composition of these groups may vary significantly and an income recipient observed at one end of the income spectrum may move significantly along that spectrum from one period to the next. In many occupations, an individual's earnings tends to rise with age and experience and then fall off during retirement; for this reason, differences in income distributions may reflect differences in age structures rather than fundamental differences in patterns of income generation and distribution. Similarly, the relative income position of households comprising an extended family structure of many individuals has much different implications for poverty and welfare than a nuclear family of a few individuals. Since mobility, age-structures and traditional systems of household formation differ among countries, measures of inequality in income among countries based on income distribution data alone may not adequately summarize the full implications of income distribution for poverty and welfare.

In addition to overall disparities in incomes among all households, an analysis of trends and patterns in income distribution should also focus on contrasts in incomes between men and women, between rural and urban areas and between different ethnic and racial minority groups relevant for the assessment of poverty and welfare. Systematic information on which income strata benefit from public spending on services such as education, health, housing and social welfare and on the distribution of wealth are also relevant for assessing poverty and access by different groups to resources and opportunities. Where available, these data should be consulted as part of an assessment of income distribution and poverty. However, data relating to these aspects of the distribution of earnings, spending and wealth are not available for a sufficient number of countries to identify distinct patterns corresponding to different groups of countries, and for this reason attention is directed to broad patterns and differences in the overall distribution of income and consumption.

Finally, because there are many distinct dimensions to inequality in incomes and expenditures among households or individuals, there can be no single measure of inequality in a distribution of income nor a unique ranking of income distributions by degree of inequality. [15] Simple measures of a ranking of households by size of income such as the interquintile (or interdecile) range or quintile division, the interquintile range as a percentage of the median, or selected percentiles as a percentage of the median provide only summary information on the dispersion or concentration of incomes. Moreover, the same index may refer to more than one distribution, creating ambiguities of interpretation. More refined measures such as the coefficient of variation of income (that is, the standard deviation of incomes expressed as a percentage of the mean) require more accurate data to yield meaningful results, and in any event remain a summary measure of the entire distribution wherein two empirically different distributions may obtain the same index. The Lorenze curve, which traces out on a graph ranked percentages of all income receivers along the horizontal axis and ranked percentages of all incomes received along the vertical axis, provides a representation of the entire distribution but remain an ambiguous summary of inequality for purposes of cross-country and different period comparisons because they necessarily involve interpersonal comparisons; similarly, the Gini

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[15] Some of the problems entailed in comparing income distributions are discussed in S. P. Jenkins and P. J. Lambert (1993), pp. 337-356. Data requirements for studying trends in income distribution are discussed in Fields (1994).

coefficient of inequality and Theil's entropy coefficient of inequality can yield the same coefficient when summarizing two different empirical distributions.

Source of data on the size distribution of income and consumption [16]

Data on the distribution of income or expenditures are not systematically collected by international agencies in accordance with a statistical framework conforming to international standards and recommendations. The World Bank has, however, attempted to prepare standardized estimates for a large number of countries for the 1990s and early 2000s. These estimates have been assembled from the World Bank's World Development Indicators data base and supplemented in the case of a few countries with data from other sources to yield a sample 111 countries (see Table 2).

When using these data to assess differences in patterns of income distribution between countries and over time within the same country the degree of inequality in distributions will be measured by the ratio of the share of highest 20 per cent of income recipients to the share of the lowest 20 per cent of income recipients. Although this inequality coefficient is only one of many possible measures of income concentration, it focuses attention on the relative difference between the lowest and highest income strata and is therefore most relevant for assessing the relative income of the poor and those in poverty.

It must be noted that because of the many pitfalls involved in the preparation of distributional data and difficulties of interpretation of the complex phenomena involved in the generation and distribution of income, overall assessments of the distribution of income and consumption and its change across countries and over time are inherently difficult and subjective. As mentioned above, income-based measures of inequality often do not take into account the distribution of consumption, non-cash income, or the effect of taxes. Even where data relate to the distribution of consumption, the aging of populations, changes in age-earnings profiles, and increases in mobility may contribute to changes in measures of inequality even though the distribution of life-time earnings has not changed. For these reasons, it is well to recognize that in any cross-country comparison of income distributions no importance should be attached to precise figures for any country or any year, and attention should rather focus on broad magnitudes and marked contrasts between different regions and on directions of change over time rather than numerical estimates of the change in the degree of inequality as reflected by any single coefficient.

Source of gross domestic product and population data

The historical data on gross domestic product and population have been drawn from original data reported by national and international statistical and research units. The national accounts data conform in general with the United Nations System of National Accounts as presented in the publication System of National Accounts 1993, as collected on a United Nations Statistics Division questionnaire and published in its annual National Accounts Statistics publication. Data collected by

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[16] Although the term "income distribution" is used in this and similar studies, data on patterns of income distribution in the World Bank's World Development Indicators usually refer to the distribution of consumption or expenditures rather than income.

the Statistics Division on its questionnaire have been supplemented by the Statistics Division , where possible, by estimates reported by United Nations regional commissions, the World Bank, the International Monetary Fund, and other sources so as to arrive at a more complete set of country data.

The population data are based on those reported by the Population Division of the United Nations for its 2002 assessment of the world population situation.

Official and market exchange rates as reported by the Statistics Division were used as the basic set of exchange rates to convert the national currency GDP estimates into U.S. dollar figures. In general, the Statistics Division used rates reported by the International Monetary Fund. For countries with multiple exchange rates, an effective exchange rate was derived from trade data in national currency and United States dollars published in International Financial Statistics of the International Monetary FundIn a few countries in a few years national exchange rates based on United Nations operational rates were used because foreign trade exchange rates were not available.

Further information on the underlying data is given in "Charts and Tables on World Economic Activity, Population and Labor Force, and International Trade", which may be obtained from the author.

Source of religion data

Data relating to the religious orientation of 200 countries and territories have been taken from the Information Please Almanac. These data show the percentage distribution of main seven religious orientations, broken down my main subgroup (e.g., Protestant, Catholic, Orthodox and Other in the case of Christianity and Sunni, Shi'ite, and Other in the case of Islam).   The percentage distributions were reviewed by country and used to classify the main religious orientation of each country as shown in the Annex tables. This method of classification is only approximate and indicates little about the depth of the religious commitment of the people of the country.

Tables

Table 1. Level and distribution of gross world product and population in 2000

	Gross Domestic Product		Population		GDP per capita	
	Millions of 2000 U.S. dollars	Percent of world total	Thousands	Percent of world total	2000 US dollars per person	Ratio to world average
World	31,273,420	100	6,029,067	100	5,187	1.00
Developed economies	24,066,236	77.0	856,178	14.2	28,109	5.42
Major developed economies	20,966,483	67.0	700,611	11.6	29,926	5.77
Other developed economies	3,099,753	9.9	155,567	2.6	19,926	3.84
Economies in transition	788,037	2.5	410,620	6.8	1,919	0.37
East Europe	399,134	1.3	121,027	2.0	3,298	0.64
Baltics	36,690	0.1	7,240	0.1	5,068	0.98
Commonwealth of Independent States	352,213	1.1	282,353	4.7	1,247	0.24
Developing countries	6,419,147	20.5	4,762,269	79.0	1,348	0.26
Latin America and the Caribbean	2,013,277	6.4	515,110	8.5	3,908	0.75
Caribbean	89,560	0.3	32,721	0.5	2,737	0.53
Central America	650,997	2.1	135,213	2.2	4,815	0.93
South America	1,272,720	4.1	347,176	5.8	3,666	0.71
North Africa	256,062	0.8	173,330	2.9	1,477	0.28
Sub-Saharan Africa	327,075	1.0	622,051	10.3	526	0.10
East Africa	63,131	0.2	252,515	4.2	250	0.05
Central Africa	35,039	0.1	92,960	1.5	377	0.07
West Africa	85,432	0.3	226,128	3.8	378	0.07
Other Africa	143,473	0.5	50,448	0.8	2,844	0.55
West Asia	840,069	2.7	238,160	4.0	3,527	0.68
South Asia	610,656	2.0	1,365,902	22.7	447	0.09
South-East and East Asia	1,101,914	3.5	588,757	9.8	1,872	0.36
China [a]	1,263,378	4.0	1,251,703	20.8	1,009	0.19
Pacific	6,716	0.0	7,256	0.1	926	0.18

Table 2. Distribution of income or consumption, by country and year, ranked by level of GDP per capita in 2000 U.S. dollars

	Survey year	Note	Percentage of income or consumption by quintile of the population					Ratio of Highest to Lowest 20%	Per capita GDP in 2000	Growth of GDP per capita, 1971-2004	Failed state Rank	Religious orientation
			Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%					
1 Burundi	1998		5.1	10.3	15.1	21.5	48.0	4.7	155	-0.24	15	1.2
2 Vietnam	2002		7.5	11.2	14.8	21.1	45.4	4.1	172	3.28	70	5
3 Ethiopia	1999-00		9.1	13.2	16.8	21.5	39.4	3.0	192	2.31	26	
4 Mozambique	1996-97		6.5	10.8	15.1	21.1	46.5	4.3	194	1.46	80	6
5 Malawi	1997		4.9	8.5	12.3	18.3	56.1	6.6	225	1.11	29	1.1
6 Madagascar	2001		4.9	8.5	12.7	20.4	53.5	6.3	229	-1.72		6
7 Cambodia	1997		6.9	10.7	14.7	20.1	47.6	4.4	231	-3.04	47	5
8 Nepal	1995-96		7.6	11.5	15.1	21.0	44.8	3.9	242	1.46	20	4
9 Niger	1995		2.6	7.1	13.9	23.1	53.3	7.5	289	-0.72	44	3
10 Lao PDR	1997		7.6	11.4	15.3	20.8	45.0	3.9	302	2.17	40	5
11 Uganda	1999		5.9	10.0	14.0	20.3	49.7	5.0	309	0.11	21	1
12 Kenya	1997		6.0	9.8	14.3	20.8	49.1	5.0	330	0.19	34	1.1
13 Nigeria	1996-97		4.4	8.2	12.5	19.3	55.7	6.8	367	0.74	22	3
14 Zambia	1998		3.3	7.6	12.5	20.0	56.6	7.4	372	-1.85	66	1
15 Bangladesh	2000		9.0	12.5	15.9	21.2	41.3	3.3	373	1.37	19	3.3
16 Gambia, The	1998		4.8	8.7	12.8	20.3	53.4	6.1	377	0.69	83	3
17 Burkina Faso	1998		4.5	7.4	10.6	16.7	60.7	8.2	395	1.68	30	3
18 Pakistan	1998-99		8.8	12.5	15.9	20.6	42.3	3.4	475	1.92	9	3.1
19 Ghana	1998-99		5.6	10.1	14.9	22.9	46.6	4.6	484	0.02	106	1
20 Lesotho	1995		1.5	4.3	8.9	18.8	66.5	15.5	486	2.98		1
21 India	1999-00		8.9	12.3	16.0	21.2	43.3	3.5	542	3.22	93	4
22 Nicaragua	2001		5.6	9.8	14.2	21.1	49.3	5.0	593	1.37	59	1.2
23 Mauritania	2000		6.2	10.6	15.2	22.3	45.7	4.3	598	0.49	41	3
24 Tajikistan	2003		7.9	12.3	16.5	22.4	40.8	3.3	645	-8.04	42	3.1
25 Honduras	1999		2.7	6.7	11.8	19.9	58.9	8.8	648	0.88	75	1.2
26 Sri Lanka	1999-00		8.3	12.5	16.0	21.0	42.2	3.4	717	3.12	25	5
27 Philippines	2000		5.4	8.8	13.1	20.5	52.3	5.9	778	1.18	68	1.2
28 Zimbabwe	1998		4.6	8.1	12.2	19.3	55.7	6.9	785	-1.20	5	7
29 Albania	2002		9.1	13.5	17.3	22.8	37.4	2.8	793	2.32	94	3.1
30 China	2001		4.7	9.0	14.2	22.1	50.0	5.6	813	7.68		
31 Indonesia	2002		8.4	11.9	15.4	21.0	43.3	3.6	818	3.55	32	3
32 Guyana	1999		4.5	9.9	14.5	21.4	49.7	5.0	843	1.67		1
33 Senegal	1995		6.4	10.3	14.5	20.6	48.2	4.7	846	0.26	99	3
34 Bolivia	1999		4.0	9.2	14.8	22.9	49.1	5.3	846	0.28	56	1.2
35 Côte d'Ivoire	2002		5.2	9.1	13.7	21.3	50.7	5.6	867	-0.29	3	6
36 Papua New Guinea	1996		4.5	7.9	11.9	19.2	56.5	7.2	967	1.72	49	6
37 Guatemala	2000		2.6	5.9	9.8	17.6	64.1	10.9	999	0.64	51	1
38 Cameroon	2001		5.6	9.3	13.7	20.4	50.9	5.5	1103	0.63	36	6
39 Morocco	1998-99		6.5	10.6	14.8	21.3	46.6	4.4	1108	-1.21	76	3
40 Ecuador	1998		3.3	7.5	11.7	19.4	58.0	7.7	1122	1.51	63	1.2
41 Paraguay	2002		2.2	6.3	11.3	18.8	61.3	9.7	1169	0.81		1.2
42 Yemen, Rep.	1998		7.4	12.2	16.7	22.5	41.2	3.4	1195		16	
43 Mongolia	1998		5.6	10.0	13.8	19.4	51.2	5.1	1240	1.39	108	5
44 Jordan	1997		7.6	11.4	15.5	21.1	44.4	3.9	1245	0.71	74	3.1
45 El Salvador	2000		2.9	7.4	12.4	20.2	57.1	7.7	1346	1.75	77	1.2

Table 2. Distribution of income or consumption, by country and year, ranked by level of GDP per capita in 2000 U.S. dollars

	Survey year	Note	Percentage of income or consumption by quintile of the population					Ratio of Highest to Lowest 20%	Per capita GDP in 2000	Growth of GDP per capita, 1971-2004	Failed state Rank	Religious orientation
			Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%					
46 Romania	2002		7.9	12.3	16.5	22.3	41.0	3.3	1429	2.26	102	1.3
47 Colombia	1999		2.7	6.6	10.8	18.0	61.8	9.4	1470	2.68	27	1.2
48 Moldova	2002		6.8	11.2	15.6	22.3	44.1	3.9	1528	-8.04	58	1
49 Egypt, Arab Rep.	1999-00		8.6	12.1	15.4	20.4	43.6	3.6	1528	0.92	31	3.1
50 Azerbaijan	2001		7.4	11.5	15.3	21.2	44.5	3.9	1589	-3.03	61	3.1
51 Georgia	2001		6.4	11.4	16.1	22.6	43.6	3.8	1601	-5.94	60	1.3
52 Jamaica	2000		6.7	10.7	15.0	21.7	46.0	4.3	1688	-0.82		6
53 Kyrgyz Republic	2002		7.7	11.8	15.7	21.8	43.0	3.6	1739	-3.67	28	3
54 Peru	2000		2.9	8.3	14.1	21.5	53.2	6.4	1768	1.06	69	1.2
55 Uzbekistan	2000		9.2	14.1	17.9	22.6	36.3	2.6	1929	-0.73	23	3.1
56 Macedonia, FYR	1998		8.4	14.0	17.7	23.1	36.7	2.6	1986	-1.06	78	1.3
57 Dominican Republic	1998		5.1	8.6	13.0	20.0	53.3	6.2	2033	1.35	48	1.2
58 Tunisia	2000		6.0	10.3	14.8	21.7	47.3	4.6	2055	1.07	100	3.1
59 Turkmenistan	1998		6.1	10.2	14.7	21.5	47.5	4.7	2100	-3.32	45	3
60 Bulgaria	2001		6.7	13.1	17.9	23.4	38.9	3.0	2106	2.44	103	1.3
61 Thailand	2000		6.1	9.5	13.5	20.9	50.0	5.3	2164	4.24	79	5
62 Poland	2002		7.6	12.0	16.2	22.3	41.9	3.5	2182	2.34	115	1.2
63 Ukraine	1999		8.8	13.3	17.4	22.7	37.8	2.8	2185	-4.36	86	1.3
64 Algeria	1995		7.0	11.6	16.1	22.7	42.6	3.7	2399	-0.60	72	3.1
65 Venezuela, RB	1998		3.0	8.4	13.7	21.6	53.4	6.4	2445	1.24	64	1.2
66 Panama	2000		2.4	6.5	11.2	19.6	60.3	9.3	2789	-1.69	107	1.2
67 South Africa	2000		3.5	6.3	10.0	18.0	62.2	9.9	3026	0.16	110	1
68 Costa Rica	2000		4.2	8.9	13.7	21.7	51.5	5.8	3064	2.25	114	1.2
69 Turkey	2000		6.1	10.6	14.9	21.8	46.7	4.4	3136	2.11	82	3.1
70 Kazakhstan	2003		7.8	12.1	16.8	23.3	40.0	3.3	3168	1.34	88	3
71 Slovak Republic	1996		8.8	14.9	18.7	22.8	34.8	2.3	3279	1.66	112	1.2
72 Armenia	1998		6.7	11.3	15.4	21.6	45.1	4.0	3291	2.42	89	1.3
73 Uruguay e	2000		4.8	9.3	14.2	21.6	50.1	5.4	3394	0.71	120	1.2
74 Czech Republic	1996		10.3	14.5	17.7	21.7	35.9	2.5	3439	1.31	119	1.2
75 Brazil	2001		2.4	5.9	10.4	18.1	63.2	10.7	3535	0.32	101	1.2
76 Mexico	2000		3.1	7.2	11.7	19.0	59.1	8.2	3733	0.62	85	1.2
77 Malaysia	1997		4.4	8.1	12.9	20.3	54.3	6.7	3784	3.96	98	3
78 Hungary	2002		9.5	13.9	17.6	22.4	36.5	2.6	3896	2.32	116	1.2
79 Lithuania	2000		7.9	12.7	16.9	22.6	40.0	3.1	3946	0.19	113	1.2
80 Chile	2000		3.3	6.6	10.5	17.4	62.2	9.4	4079	1.63	132	1.2
81 Iran, Islamic Rep.	1998		5.1	9.4	14.1	21.5	49.9	5.3	4278	0.92	53	3.2
82 Russian Federation	2002		8.2	12.7	16.9	23.0	39.3	3.1	4394	-1.21	43	1.3
83 Croatia	2001		8.3	12.8	16.8	22.6	39.6	3.1	4768	0.12	104	1.2
84 Latvia	1998		7.3	12.3	16.7	22.5	41.1	3.3	5070	0.11	109	1
85 Belarus	2000		8.4	13.0	17.0	22.5	39.1	3.0	5737	1.73	50	1.3
86 Argentina	2001		3.1	7.2	12.3	21.0	56.4	7.8	6550	1.84	122	1.2
87 Bosnia & Herzegovina	2001		9.5	14.2	17.9	22.6	35.8	2.5	6766	6.98	35	3.3
88 Estonia	2000		6.1	12.1	15.9	22.0	44.0	3.6	7633	2.61	111	1.3
89 Portugal	1997		5.8	11.0	15.5	21.9	45.9	4.2	9408	2.48	131	1.2
90 Greece	1998		7.1	11.4	15.8	22.0	43.6	3.8	9709	2.01	121	1.3

Table 2. Distribution of income or consumption, by country and year, ranked by level of GDP per capita in 2000 U.S. dollars

	Survey year	Note	Percentage of income or consumption by quintile of the population					Ratio of Highest to Lowest 20%	Per capita GDP in 2000	Growth of GDP per capita, 1971-2004	Failed state Rank	Religious orientation
			Lowest 20%	Second 20%	Third 20%	Fourth 20%	Highest 20%					
91 Korea, Rep.	1998		7.9	13.6	18.0	23.1	37.5	2.8	9798	5.37	123	7
92 Slovenia	1998-99		9.1	14.2	18.1	22.9	35.7	2.5	10492	2.29	126	1.2
93 New Zealand	1997		6.4	11.4	15.8	22.6	43.8	3.8	15256	1.41	141	1.1
94 Israel	1997		6.9	11.4	16.3	22.9	44.3	3.9	16063	1.69	67	2
95 Hong Kong, China	1996		5.3	9.4	13.9	20.7	50.7	5.4	17220	3.87		
96 Singapore	1998		5.0	9.4	14.6	22.0	49.0	5.2	19447	4.37	133	5
97 United Kingdom	1999		6.1	11.4	16.0	22.5	44.0	3.9	21218	2.13	130	1
98 Italy	2000		6.5	12.0	16.8	22.8	42.0	3.5	22394	1.95	127	1.2
99 Belgium	1996		8.3	14.1	17.7	22.7	37.3	2.6	23819	2.08	138	1.2
100 Germany	2000		8.5	13.7	17.8	23.1	36.9	2.7	24575	1.92	124	1
101 France	1995		7.2	12.6	17.2	22.8	40.2	3.2	24672	1.88	129	1.2
102 Netherlands	1999		7.6	13.2	17.2	23.3	38.7	2.9	24672	1.76	134	1
103 Canada	1998		7.0	12.7	17.0	22.9	40.4	3.2	24693	2.02	139	1.2
104 Ireland	1996		7.1	11.8	15.8	22.0	43.3	3.7	24819	4.61	143	1.2
105 Austria	1997		8.1	13.2	17.3	22.9	38.5	2.9	25303	2.24	136	1.2
106 United States	2000		5.4	10.7	15.7	22.4	45.8	4.3	27712	2.13	128	1.1
107 Denmark	1997		8.3	14.7	18.2	22.9	35.8	2.4	31557	1.57	137	1.1
108 Finland	2000		9.6	14.1	17.5	22.1	36.7	2.6	32422	2.39	144	1.1
109 Sweden	2000		9.1	14.0	17.6	22.7	36.6	2.6	33696	1.74	145	1.1
110 Norway	2000		9.6	14.0	17.2	22.0	37.2	2.7	37417	2.76	146	1.1
111 Luxembourg	2000		8.4	12.9	17.1	22.7	38.9	3.0	43767	3.37		1.2

Source: Income distribution data is from World Bank, *World Development Indicators*, 2005 and GDP per capita is from Douglas O. Walker,
"Charts and Statistical Tables on World Economic Activity", Data 2006/1/Version 1 (June 2006).

Notes on data:

    a. Refers to expenditure shares by percentiles of population.
    b. Ranked by per capita expenditure.
    c. Refers to income shares by percentiles of population.
    d. Ranked by per capita income.
    e. Urban data

Classification of religions:

  1. Christian

    1.1 Protestant
    1.2 Catholic
    1.3 Other Christian

  2. Jewish

  3. Muslim

    3.1 Sunni
    3.2 Shi'ite

  4. Hindu

  5. Other

About the data

Inequality in the distribution of income is reflected in the percentage shares of income or consumption accruing to segments of the population ranked by income or consumption levels. The segments ranked lowest by personal income receive the smallest share

Data on personal or household income or consumption come from nationally representative household surveys. The data in the table refer to different years between 1983–85 and 2003. Footnotes to the survey year indicate whether the rankings are based on per

Where the original data from the household survey were available, they have been used to directly calculate the income (or consumption) shares by quintile. Otherwise shares have been estimated from the best available grouped data.

The distribution data have been adjusted for household size, providing a more consistent measure of per capita income or consumption. No adjustment has been made for spatial differences in cost of living within countries, because the data needed for such

Because the underlying household surveys differ in method and type of data collected, the distribution data are not strictly comparable across countries. These problems are diminishing as survey methods improve and become more standardized, but achieving

Two sources of noncomparability should be noted in particular. First, the surveys can differ in many respects, including whether they use income or consumption expenditure as the living standard indicator. The distribution of income is typically more uneq

World Bank staff have made an effort to ensure that the data are as comparable as possible. Wherever possible, consumption has been used rather than income. Income distribution and Gini indexes for high-income countries are calculated directly from the Lu

Definitions

▪ Survey year is the year in which the underlying data were collected.

▪ Percentage share of income or consumption is the share that accrues to subgroups of population indicated by deciles or quintiles. Percentage shares by quintile may not sum to 100 because of rounding.

Data sources

The data on distribution are compiled by the World Bank's Development Research Group using primary household survey data obtained from government statistical agencies and World Bank country departments. The data for high-income economies are from the Luxe