# INEQUALITIES IN THE DISTRIBUTION OF WORLD INCOME: IMPLICATIONS FOR ECONOMIC GROWTH AND DEVELOPMENT

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#### Abstract

This paper examines the effects of income inequality (i.e disparities in wealth and income) on growth and development, The paper argues that a widening gap between the rich and the poor stows down economic growth and development. Worsening inequality engenders such negative consequences as frustration induced violence, migration, low capacity of LDCs to repay foreign debts, the marginalization of developing countries, etc. For these reasons, inequality in income poses challenges to policy makers at both national and international levels, and the great world at large. Thus, unpredictable government policies coupled with social and political conflict which are consequences of inequality may slow down economic activities and consequently impede economic growth. The strongest relationship between policy measure and growth is education and human capital formation. A country that cannot guarantee basic education for its citizens would have failed to develop their skills and knowledge to an optimum level and therefore, reduce their contribution to economic development. It has therefore, been suggested that national government should adopt policies that promote growth while global organizations like World Bank, IMF and WTO should re-orient international public policies to support the efforts of home governments especially those of LDCs. Thus international public policies to reduce world income inequality must include a basic change in the policy orientation of the World Bank. IMF and the WTO so as to allow them to sanction government effort to impact directional thrust and nourish home grown institutional innovations.

#### Introduction

This paper examines the subject of economic/income inequality and its correlation with" growth and development. One may well ask. Does inequality really matter?. The answer to this • question would be an unqualified yes because no matter on which stratum of the income hierarchy one belongs there is cause for concern. Those at the bottom rung of the income ladder are frustrated' and dissatisfied while those at the top are uneasy and troubled. According to a UNDP Human Development Report of 1997 "the share of the Poorest 20% of the worlds' people in global income now stands at a miserable 1.1% down from 1.4% in 1991 and 2.3% in 1960. It continues to shrink. And the ratio of the income of the top 20% to that of the poorest 20% rose from 30 to 1 in 1960. to 61 to 1 in 1991. and to a startling new high of 78 to lin 1994,". Such dramatic inequity is objectionable both on an intrinsic level i.e. moral grounds and a functional level i.e. its impact on economic development process. It is therefore no wonder that the issue of inequality has become a global source of concern to both the developed and less developed countries (LDC) of which Nigeria is one. Thus over the past few decades, world income appears to have become more unequal as the gap between the rich and the poor countries continues to widen. The motivation behind the study therefore is to examine the negative consequences of such inequality in world income. In addition to this introduction, this paper contains three other sections. Section two deals with the theory of inequality, in which an attempt is made, to define it, examine its mode of measurement and its causes and determinants. In section three, we examine the relationship between inequality in income, growth and development. Section four concludes the paper.

## Income Inequality: Some Conceptual and Measurement Issues

Economic Inequality according to Ray (1998:210), "is the fundamental disparity that permits one individual certain material choices while denying another individual those very same choices". Economic inequality is made up of a number of components but for the scope of this paper only wealth and income disparity will be discussed. There are three possible dimensions to inequality i.e.

inequality in current expenditure or income flows, inequality in the distribution of wealth or asset stocks and the distribution of lifetime. These according to Ray, are personal income distribution as opposed to functional income distribution which relates to returns on factors of production such as labour, capital, land, etc. There are, however, other dimensions to inequality such as size distribution of income i.e. what proportion of income is allocated to different proportions of the population, absolute income inequality as well as relative income inequality in the distribution of income.

In the view of Ray, a desirable inequality index must satisfy the anonymity, population, relative and the Dalton's principles. The anonymity principle states that 'income inequality is insensitive to the ordering of income'. In other words, it does not matter who earns what. While the population principle states that for every income distribution the population size is irrelevant and only proportions of the population that earn different levels of income count. The Relative Income Principle states that absolute value of income is irrelevant. In other words, income levels in themselves do not count except in relation to other income levels. The Relative Income Principle permits both population and income to be expressed as shares of the total which is very useful when comparing income distributions of two countries with different average income levels. The Dalton's principle stales that movement from one income distribution to another through the regressive transfers of resources from the relatively poor to the relatively rich would lead to a more unequal distribution than we started with.

The Lorenz Curve is one of the most widely used measures of income inequality. It plots cumulative percentages of national income on the vertical axis against a cumulative percentage of the population (in ascending order) on the horizontal axis. A 45° line, which represents the line of perfect equality, runs through the box diagram in a diagonal. All other combinations of population percentage and their corresponding percentage income fall to the right of the 45° line. Thus, the Lorenz curve is a locus of all combinations of percentage population and the corresponding percentage income it earns in a given income distribution. The problem with the Lorenz-Curve however, is that it presents only a pictorial view of inequality. It is therefore regarded as an incomplete measure. However, policy makers and researchers would rather prefer a quantifiable value of inequality for every income distribution. Consequently the following "complete" measures of inequality which lead to a quantifiable value of inequality are now more commonly used in surveys: the range, mean income, Kuznet ratio, mean absolute deviation, coefficient of variations, and the Gini coefficient,

The Range is obtained as the difference in the incomes of the richest and poorest divided by the mean income. The mean income,  $\mu$ , is the average income or total income divided by total population. The Kuznet ratio is measured by the ratio of the shares of income of the richest x% of the population to the poorest y% and is usually referred to as the 'pieces' of the Lorenz curve. The Mean Absolute Deviation" is measured by adding all income distances from the average income and dividing by the total income. The Coefficient of Variations attaches greater weight to large deviations from the mean by squaring all deviations from the mean. The Gini-Coefficient on the other hand calculates the difference between all pairs of income and totals the absolute difference. The Gini Coefficient is, in the literature, considered the best of the lot because it satisfies all the four principles of measurement and as such it is Lorenz consistent. Infact, it has been defined "as the ratio of the area between the Lorenz curve and the 45° line of perfect equality to the area of the triangle below the 45 line (Ahluwalia, 1963 and Jhingan, 2000).

Inequality exists both within a nation and between nations. Consequently, the causes of income inequality vary depending on whether comparism is between or within nations. According to Wade (2001), the rise in world income inequality is caused by differential population growth rate between poor and rich countries. Poor countries tend to have rapid population growth rates, above 2.5% as opposed to rich countries which is less than 2%. This largely affected the poorest countries which were largely dependent on primary commodity exports. Thus, a debt trap is created when fast growing middle-income developing countries seek to invest and consume more than could be covered by domestic incomes and therefore borrow from abroad on terms that are more favourable when their capacity to repay is high and less favourable when their capacity to repay is low. Eventually they get caught in a debt trap that pulls them down the world income hierarchy. Indeed, it has been argued in this regard that:

In 1997 the foreign debts of developing countries were more than two trillion US dollars and still growing. The result is a debt of \$400 for every man, woman and child in the developing world where average income in the very poorest countries is less than a dollar a day. (New Internationalist-issue 312 'Debt').

According to another data from Debt Channel.Org., developing countries end up paying nine times more in debt repayment to developed countries than they receive in aid. These unending transfers of resources from low income countries to high income countries perpetuate income inequality and confirm the Dalton principle of regressive transfers. It thus pushes one (LDCs) further down the world income hierarchy and the other (developed countries) further up. Technological change is another cause of inequality. With 90% of the research and development carried out to foster technological innovation taking place in developed countries, it is no wonder that high technical innovations with their attendant high velocity incomes tend to cluster in the developed countries rather than disperse to developing countries. Some of the causes of inequalities within countries are further highlighted.

Income inequalities within countries can similarly be accounted for by several factors. Frequently cited among these factors are Dualism-the existence of a large traditional agricultural sector alongside a small industrial sector which tends to encourage rural-urban inequality as workers migrate to higher paying jobs in the urban centres, as well as different levels of education which tends to promote income inequality since higher levels of education attract higher income levels. Uneven distribution of land ownership is another factor that explains income inequality in view of the .fact that, most of

the land ownership is in the hands of the elite, while the poor are excluded from sharing in ownership or the gains therefrom. Furthermore, Winberg (2000), has noted that the abundance of surplus unskilled labour in the rural areas serves to depress wages in contrast to wages of skilled workers in the industrial sectors.

#### **Inequality, Growth and Development**

One view that is widely accepted in the literature is that income inequality tends to be closely correlated with economic growth and development. The argument is that a widening gap between the rich and the poor slows down economic growth and development. Further controversies arise as to whether economic growth increases or decreases the size of distribution of income. The lack of adequate and reliable data from household surveys, however, makes most individual country time series analysis difficult. The tendency therefore is that most empirical work on the impact of income inequality on growth and development has been carried out within the context of cross country analysis. Simon Kuznets (1955, 1963), plotted per capita income of some countries against inequality level using the Gini Coefficient and came to the conclusion that an inverted -U relationship existed between per capita income and the extent of inequality. In other words inequality initially rises then falls as per capita income increase. Kuznets attributed this relationship to rural-urban migration and the income gap that exists between the urban and rural areas. Although, Kuznets used a small number of cross country (Sin the first instance and 18in the second) and time series data, other articles have corroborated the existence of this relationship using cross country data (see for example Wetnberg, 2000).

The validity of the inverted -U hypothesis in respect of individual LDCs has however been subjected to serious criticisms. For example, Foster, Greeer and Thorbecke, (1984), found that though it seemed to hold for a few developed countries, there was not enough evidence to support the hypothesis. Barro (1999), in his study concluded that in the long run per capita income did not account for much of the variation in inequality across country. While Kakwani (1990), concluded that the inverted -U relationship hold true for cross country data and developed countries with long data series but that there was no evidence to support it over time for LDCs. In his study of 13 LDCs, Todaro (1955) showed that "higher income levels can be accompanied by falling and not rising inequality". Empirical research in the past had indicated a negative relationship between inequality and growth in per capita income. However, Ravallion and Huppi (1991), observed that an increase of 0.07 (one standard deviation) in the income share held by the top quintile of the population lowers average annual growth rate by less than 0,5%. Kakwani (1990), introducing land distribution as a variable, found that "an increase of one standard deviation for their Gini coefficient of land distribution would lower average per capita growth rate by 0.8% per year." Llyod Ellis (1995), however, criticised the use of cross country evidence in these studies and found instead that by using panel data, for a cross section of countries, a positive relationship actually existed between inequality and growth". Also using Panel data over a 10 year per period and introducing a fertility rate variable, Barro (1999), found a weak relationship between inequality and growth but when the inequality variable was dropped, he obtained a result similar to that of Tanzi (1990:10). These empirical studies however have draw backs which lie in "their use of income inequality as a proxy for wealth inequality of capital dispersion" on the assumption that income distributions are usually less skewed than .distributions of wealth or capital. Besides, it is difficult to interpret the results because the relationships appear to vary considerably across countries. Furthermore, the time frames of comparisms vary as earlier studies focused on the impact over longer periods while later studies used panel data and focused on shorter time periods. These limitations notwithstanding, there is no doubt that a relationship exists between inequality and growth. The choice of data and methodology of research, however, determines the degree and scope of the relationship. The finding is that analysis for countries with long time series data tend to have a direct-a-while the relationship of inverted -U holds true for only about 20% of countries sampled. The opposite appears to be the case in cross country surveys as the inverted -U relationship holds for developed countries with considerably long data series as opposed to the LDCs which, in any case have no data series of appreciable length.

## **Inequality and Development**

The explanation is that in the early stage of development, when the traditional agricultural sector is very prominent as opposed to an industrial sector, large transfers of labour from agricultural to industrial sector push up the income in that sector. As the industrial sector grows, both the demand for labour and capital resources increases per capita output as well as profits. In the traditional sector-however, incomes are heavily depressed because of the unlimited number of unskilled labour which' basically exist at the subsistence level. With development and the migration of workers to the. industrial sector, increase in output will eventually mean increase in the demand for raw materials from the agricultural sector to feed the industrial machine. In other words, the standard of living in the. traditional sector would, according to Hunderaker et al (1980), be pulled by the "trickle down" effects: of expansion in the industrial sector. Another major factor that may contribute to this 'trickle down' effect or 'spread effect' as Myrdal calls it is remittances from people working in urban centres of industrialization to their relatives in the rural agricultural centers. This also works in the same way as foreign remittances made to the home country by people living in foreign counties.

Another contributor to increased per capita income is that with development, people tend to have fewer numbers

of children thereby reducing the growth rate of the population. This means that increased output would be spread over a relatively decreasing number of people thereby enhancing per capita income. Corey (1994) explains that the improvement in income distribution observed in later stages of development was a phenomenon of inter-sectoral shifts in the structure of production (i.e. from raw materials to manufactured goods and then to high technology services) and improved educational attainment and skills of the labour force.

At the final stages of development when emphasis has shifted from the agricultural sector and even from the manufacturing to high technological services, there is a corresponding shift in demand for workers with high intellectual ability as opposed to manual ability. People therefore realize that they need to acquire more education in order to improve their earning power. The concomitant increase in educational and skill acquisition will eventually reduce income inequality. Jafir and Khatlak (1995), in their article on "Income Distribution, Market Size and Industrialization" tried to show that share of profits in income must be sufficiently equal for industrialization to be sustained in response to increased agricultural productivity, which raises income and covers fixed costs of production.

Rodan, et al (1988), have similarly argued in line with the effect of the impact of the "big push" on industrialization that "an increase in agricultural productivity raises incomes, generating increased demand which unleashes even greater profits and hence further demand" The reasoning is that the higher the share distribution of income the higher would be the share of profits. According to Friedman (2001), the greatest source of global inequality is the disparity among countries in levels of economic development. In his opinion, the most important dimension of income inequality is the inequality that arises from differences in living standards among nations. These differences which are of staggering magnitude reveal that the average developed country per capita income is seven times that of the average LDC and that income levels in the USA are fifty times what they are in African countries like Angola, Tanzania and Ethiopia. Even among the developing world, inequality still exists. For instance "the average inhabitant of Botswana has a standard of living ten times higher than that of the average inhabitant of Angola" (Kanbur, 1987). These differences among countries would appear to render insignificant any inequalities within countries. This is not to say that attempts should not be made to redistribute income more equitably within a country. However, the most effective way to reduce inequality globally is to increase the rate of growth of the LDCs. Current differences in standards of living among nations are traceable to past differences in the rate of economic growth. In the views of Friedman (2001), "the principal determinant of global inequality therefore is the extent to which countries converge towards or diverge away from the income levels of the developed world" a sustainable growth rate of 5% a year, thus would guarantee raising standard of living of LDCs toward those of the developed countries.

Table 1, (see appendix) shows the Gross National Income (GNI) per capita, using the atlas method and the Purchasing Power Parity (PPP) for 241 World Bank Atlas Economies. The figures reveal that the top 10 highest income countries have a GNI per capita of between \$30,810 to \$43,940 while those of the 10 lowest income countries range between \$ 90 and \$200. The table also shows Purchasing Power Parity measured in international dollars, allocating \$ 54,430 to the country with the highest PPP and \$ 530 to the country with the lowest PPP. The income of some Asian Countries (The Asian Tigers Japan: South Korea, Taiwan, Hong Kong and China) have been converging dramatically on the income levels of the developed world. In fact, Japan according to Table I has actually over taken most of the high income countries ranking 7<sup>th</sup> on the world income hierarchy. Latin American States have not done so well but African states seem to remain at the bottom of the ladder.

# **Summary and Conclusion**

The issue of inequality has been with our society for a long time and would no doubt remain for yet a while because inequality tends to perpetuate itself, unless government intervenes with policies that reverse the trend. Thus unpredictable government policies coupled with social and political conflict which are consequences of inequality may slow down economic activities and consequently impede economic growth. The strongest relationship between policy measure and growth is education and human capital formation. A country that cannot guarantee basic education for its citizens would have failed to develop their skills and knowledge to an optimum level and therefore reduce their contribution to economic development. Most of the countries which recorded successful growth rates (Japan, China, South Korea, Ireland, Taiwan, etc) have invested substantially in education and human capital. Societies that are socially stable, economically open and invest heavily in education grow fastest. In other words national governments hold the key to future global inequality through the policies they adopt, especially LDCs which must provide opportunities for economic advancement to their peoples, improve social and educational conditions and manage economic integration with the rest of the word in order to close the gap between the rich and poor countries.

The question as to whether world income inequality has increased or decreased over the past few decades would depend on, the measure of inequality adopted (i.e. Gini-Coefficient, Quintile or Decile Ratios etc); the unit of inequality i.e. weighting attached to countries or individual households), the method of converting incomes in different countries to a common numeraire and the types of data used i.e. panel data, time series, etc. It is however clear that a relationship does

exist between income inequality and the growth process. Global comparison seems to confirm that countries with high growth rate usually have the highest per capita income. Empirical evidence in addition shows that the choice of data in the measure of inequality may or may not result in an invested U-relationship between income inequality and development. However, no matter the combination of measures, weightings and data used, there is reasonable evidence that world income distribution has become much more unequal over the last two decades. The consequence of worsening inequality, such as frustration induced violence, migration, low capacity of LDCs to repay foreign debts, the marginalization of developing countries in world policy, etc have combined to make inequality a great concern to the world at large.

As a fallout of the foregoing, it becomes imperative for national governments: to adopt policies that promote growth while global organization like *World Bank, IMF and WTO* should reorient international public policies to support the efforts of home governments, especially those of LDCs. Thus, international policies to reduce world income inequality must include a *basic change* in the policy orientation of the *World Bank, the IMF and the WTO* so as to allow them to sanction government efforts to give directional thrust and nourish home grown institutional innovations. At the national level, LDCs like Nigeria should create more job opportunities for school leavers, and therefore discourage the disaffection that may lead to violence and crimes against the societies. With the widely acknowledged relationship between education and poverty, the low level of literacy in most LDCs suggests that there is the need to strive to achieve a higher literacy level. This, for example, calls for proper taxation policies that will make it possible for the rich to be taxed to support the poor through social and welfare schemes. The government should also provide basic amenities like food, shelter and clothing for its teeming population of the poor (70% of who live below the poverty line). Such infrastructural facilities as electricity, good roads, transportation, health services and clean water, should also be made functional, grant short-term credit facilities to the teeming poor as this would tend to encourage self reliance and enterprise. The government of Nigeria for example, should do everything possible to raise the annual growth rate from a pathetic 3% to at least 5% for -sustainable growth and development.

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# APPENDIX

Table 1: GN1 Per Capita 2003, Atlas Method and PPP

	ng Economy	Capita 2003, Atlas Atlas		king Economy	Purchasing	
	- •	Methodology (US dollars)		·	Power Parity (International dollars)	
1	Bermuda	., a	1	Luxembourg	54,430	
2	Luxembourg	43,940	2	Bermuda	a	
3	Norway	43,350	3	United States	37,500	
4	Switzerland	39,880	4	Norway	37,300	
5	United States	37,610	5	Liechtenstein	a	
6	Liechtenstein	a	6	Channel Islands	37,500	
7	Japan	34,510	7	Switzerland	37,300	
8	Denmark	33,750	8	Denmark	a	
9	Channel Islands	a	9	Ireland	a	
10	Iceland	30,810	10	Iceland	32,030	
11	Sweden	28,840	11	Canada	31,210	
12	United Kingdom	28,350	12	Austria	30,450	
13	Finland	27,020	13	San Marino	30,140	
14	Ireland	26,960	14	Cayman Islands	30,140	
15	San Mario	a	15	Belgium	29,740	
16	Austria	26,720	16	Hong Kong, China	29,610	
17	Cayman Islands	a	17	Japan	a	
18	Netherlands	26,310	18	Netherlands	a	
19	Belgium	25,820	19	Monaco	28,930	
20	Monaco	a	20	Australia	28,810	
21	Hong Kong, China	25,430	21	United Kingdom	28,620	
22	Germany	25,250	22	France	28,600	
23	France	24,770 b	22	Germany	a	
24	Canada	23,930	24	Finland	28,290	
27	Australia	21,650	25	Italy	27,650	
28	Italy	21,560	26	Sweden	27,460	
29	Singapore	21,230	30	Singapore	27,460	
35	Spain		33	Macao, China	27,100	

	<u> </u>	1,0000			
37	Kuwait	1 6,990 16,340 a	35	Spain	26,760
38	Israel	16,020 a	36	United	26,620
30	israci	10,020 u	30	Arab Emirates	20,020
40	New Zealand	15,870	38	New Zealand	24,180
41	Bahamas, The	14,920 a	41	Greece	21,920a
43	Macao, China	14,600 a	42	Cyprus	22,020
45	Greece	13,720	43	Slovenia	21,040
47	Cyprus	12,320 a	45	Israel	21,120
49	Portugal	12,130	46	Malta	19,920
50	Korea, Rep.	12,030	47	Kuwait	19,530
51	Slovenia	11,830	49	Portugal	19,240
52	Puerto Rico	1 0,950 a	50	Korea, Rep.	19,200
53	Bahrain	10, 840 a	52	Bali rain	17,870a
54	Malta Barbados	9,260 a	53 54	Puerto Rico	17,870a
55 56		9,270 9,160	55	Bahamas, The	17,870a,c 17,930
30	Antigua and Barbuda	9,100	33	Seychelles	17,930
57	Saudi Arabia	8,530 a	56	Czech Republic	16,170a
59	Oman	7,830 a	57	Barbados	16,320a,c
61	Palau	7,500	58	Hungary	16,140a
62	Seychelles	7,480	60	Oman	15,960
63		7,260	61	Slovak Republic	15,650
	Tobago	1,	01		,
65	St. Kitts and Nevis	6,880	62	Saudi Arabia	15,060
66	Czech Republic	6,740	63	Estonia	13,780
67	Hungary	6,330	67	Pol an	13,420
68	Mexico	6,230	68	Mauritius	13,420
70	Croatia	5,350	69	Lithuania	11260
71	Poland	5,270	70	St. Khts and nevis	11,090
72	Estonia	4,960	71	Argentina	11,040
73	Slovak	4,920	73	Croatia	10,920
7.1	Republic	4.400	7.4	C 41- A f:	10.710
74	Lithuania	4,490	74	South Africa	10,710
75	Chile	4,390	75	Latvia	10,270
13	Cinc	7,370	75	Latvia	10,270
76	Costa Rica	4,280	76	Chile	9,810
, 0	Costa raca	1,200	, ,	Cinic	,,010
77	Panama	4,250	77	Antigua	9,590
				and Barbuda	,
78	Mauritius	4,090	78	Trinidad	9,450
				and Tobago	
79	Latvia	4,070	79	Costa Rice	9,040c
30	St. Lucia	4,050	80	Mexico	8,950
31	Lebanon	4,040	81	Malaysia	8,940
32	Uruguay	3,820	82	Russian Federation	8,920
33	Grenada	3,790	83	Uruguay	7,980
34	Malaysia	3,780	84	Botswana	7,960
35	Argentina	3,650	85	Bulgaria	7,610
36	Gabon	3,580	86	Brazil	7,480
37	Venezuela, RB	3,490	87	Thailand	7,450
38	Botswana	3,430	88	Iran. Islamic Rep.	7,190
39	Dominica	3,360	89	Romania	7,140
90	Belize	3,190 a	90	Tonga	6,890c
91	St.	3,300	91	Tunisia	6,840
92	Turkey	2,790	92	Macedonia, FYR	6,720
93	South Africa	2,780	93	Grenada	6,710

94	Jamaica	2,760	94	Turkey	6,690
95	Brazil	2,710	95	Namibia	6,620c
96	Marshall Island	2,710	96	St. Vincent and the	6,590
97	Russian	2,610	97	Colombia	6,520c
98	Fiji	2,360	98	Bosnia	6,320c
99	Romania	2,310	99	Panama	6,310
100	Maldives	2,300	100	Dominican Republic	6,2 lOc
101	Tunisia	2,240	101	Kazakhstan	5,170
102	El Salvador	2,200	102	Belize	5,840a
103	Thailand	2,190	103	Belarus	6,010
104	Peru	2,150	104	Algeria	5,940c
105	Jordan	2.130	105	Turkmenistan	5,840
106	Micronesia, Fed.	2,090	106	Gabon	5,700
107	Dominican	2,070	107	Samoa	5,700c
108	Suriname	1,940 a	108	Cape Verde	5,440c
109	Iran,	2,000	109	Fiji	5,410
110	Macedonia, FYR	1,980	110	Ukraine	5,410
111	Guatemala	1,910	111	St. Lucia	5,220
112	Serbia	1,910 d	112	Dominica	5,090
113	Algeria	1,890	113	Peru	5,090
114	Namibia	1,870	114	China	4,990e
115	Jordan	1,1850	115	El Salvador	4,890c
116	Colombia	1,810	116	Swaziland	4,850
117	Ecuador	1,790	117	Lebanon	4,840
118	Kazakhstan	1,780	118	Paraguay	4,740c
119	Albania	1,740	119	Venezuela, RB	4,740
120	Samoa	1,600	120	Albania	4,700
121	Belarus	1,590	121	Philippines	4,640
122	Bosnia	1,540	122	Jordan	4,290
123	Cape Verde	1,490	123	Guatemala	4,060c
124	Tonga	1,490	124	Guyana	3,950c
125	Egypt,	1,390	125	Morocco	3,950
126	Swaziland	1,350	126	Egypt. Arab Rep.	3,940
127	Morocco	1,320	127	Jamaica	3,790
128	Vanuatu	1,180	128	Armenia	3,770
129	Syria Arab	1,160	129	Sri Lanka	3,730

130	Republic Turkmenistan	1,120	130	Ecuador	3,440
131	West Bank and	1,110	131	Syrian	3,430
	Gaza	1,110		Arab Republic	2,123
132	China	1,100	132	Azerbaijan	3,380
133	Paraguay	1100	133	Indonesia	3,210
134	Philippines	1,080	134	Lesotho	3,120c
135	Honduras	970	135	India	2,880c
136	Ukraine	970	136	Vanuatu	2,880c
137	Armenia	950	137	Honduras	2,580c
138	Sri Lanka	930	138	Georgia	2,540
139	Djibouti	910	139	Vietnam	2,490
140	Sri Lanka	930	140		
141	Djibouti	910	141		
142	Guyana	900	150	Bolivia	2,450
143	Bolivia	890	152	Nicaragua	2,400c
144	Kiribati	880	153	Zimbabwe	2,1 SOc
145	Georgia	830	154	Papua New Guinea	2,240c
146	Azerbaijan	810	155	Djibouti	2,200c
147	Indonesia	810	156	Ghana	2,190c
148	Equatorial guinea	830a	157	Guinea	2,100
149	Angola	740	158	Cambodia	2,060c
150	Nicaragua	730	159	Pakistan	2,060
151	Bhutan	660	160	Mauritania	2,010c
152	Cote d 'Ivoire	660	161	Cameroon	1,980
153	Cameroon	640	162	Angola	1,890c
154	Congo, Rep.	640	163	Sudan	1,880
155	Solomon Islands	600	164	Bangladesh	1,870
156	Lesotho	590	165	Gambia, The	1,820c
157	Moldova	590	166	Mongolia	1,800
158	Senegal	550	167	Comoros	1,760c
159	India	530	168	Moldova	1,750
!60	Yemen, Rep.	520	169	Lao PDR	1,730
161	Papua New Guinea	510	170	Uzbekistan	1,720
162	Zimbabwe	480a	171	Kyrgyz Republic	1,660
163	Mongolia	480	172	Senegal	1,660
164	Vietnam	480	173	Haiti	1,630
165	Pakistan	470	174	Solomon Island	1,630c
166	Sudan	460	175	Togo	1,500
167	Comoros	450 ,	176	Uganda	1,440c
168	Benin	440	177	Nepal	1,420
169	Guinea	430	178	Coted'Ivoire	1,390
170	Mauritania	430	179	Rwanda	1,290
171	Timor-Leste	430	180	Burkina Faso	1,I80c
172	Uzbekistan	420	181	Benin	1,110
173	Bangladesh	400	182	Eritrea	1,1 lOc
174	Kenya	390	183	Chad	1,100c
175	Haiti	380	184	Central African Republic	1,080c
176	Zambia	380	185	Mozambique	1,070c
177	Kyrgyz Republic	330	186	Tajikistan	1,040
178	Ghana	320	187	Kenya	1,020
. / U	Onana	320	10/	ixciiya	1,020

Nigeria Sao Tome and Principe Cambodia Gambia, The Togo Burkina Faso Madagascar Mali Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi Sierra Leone	320 320 310 310 310 300 290 290 290f 260 250 240 240 220 210 200 190	190  191  192  193  194  195  196  197  198  199  200  201  202  203	Nigeria Zambia  Niger Yemen, Rep. Madagascar Congo, Rep Ethiopia Guinea-Bissau Congo, Dem. Rep. Burundi  Tanzania Malawi Sierra Leone Afghanistan	850 820c 820 800 710 710c 660c 640c 620c 610f 600 530
Cambodia Gambia, The Togo Burkina Faso Madagascar Mali Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	310 310 300 290 290 290f 260 250 240 220 210 200	192 193 194 195 196 197 198 199 200 201 202	Yemen, Rep.  Madagascar  Congo, Rep  Ethiopia  Guinea-Bissau  Congo, Dem. Rep.  Burundi  Tanzania  Malawi  Sierra Leone	820 800 710 710c 660c 640c 620c 610f 600
Gambia, The Togo Burkina Faso Madagascar Mali Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	310 310 300 290 290 290f 260 250 240 220 210 200	192 193 194 195 196 197 198 199 200 201 202	Yemen, Rep.  Madagascar  Congo, Rep  Ethiopia  Guinea-Bissau  Congo, Dem. Rep.  Burundi  Tanzania  Malawi  Sierra Leone	820 800 710 710c 660c 640c 620c 610f 600
Togo Burkina Faso Madagascar Mali Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	310 300 290 290 290f 260 250 240 240 220 210 200	193 194 195 196 197 198 199 200 201 202	Madagascar Congo, Rep Ethiopia Guinea-Bissau Congo, Dem. Rep. Burundi  Tanzania Malawi Sierra Leone	800 710 710c 660c 640c 620c 610f 600
Burkina Faso Madagascar Mali Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	300 290 290 290f 260 250 240 240 220 210 200	194 195 196 197 198 199 200 201 202	Congo, Rep Ethiopia Guinea-Bissau Congo, Dem. Rep. Burundi  Tanzania Malawi Sierra Leone	710 710c 660c 640c 620c 610f 600
Madagascar Mali Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	290 290 290f 260 250 240 240 220 210 200	195 196 197 198 199 200 201 202	Ethiopia Guinea-Bissau Congo, Dem. Rep. Burundi Tanzania Malawi Sierra Leone	710c 660c 640c 620c 610f 600
Mali Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	290 290f 260 250 240 240 220 210 200	196 197 198 199 200 201 202	Guinea-Bissau Congo, Dem. Rep. Burundi Tanzania Malawi Sierra Leone	660c 640c 620c 610f 600
Tanzania Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	290f 260 250 240 240 220 210 200	197 198 199 200 201 202	Congo, Dem. Rep. Burundi  Tanzania  Malawi Sierra Leone	640c 620c 610f 600
Central African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	250 240 240 220 210 200	198 199 200 201 202	Burundi Tanzania Malawi Sierra Leone	620c 610f 600
African Republic Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	250 240 240 220 210 200	199 200 201 202	Tanzania Malawi Sierra Leone	610f 600
Chad Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	240 240 220 210 200	200 201 202	Malawi Sierra Leone	600
Nepal Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	240 240 220 210 200	200 201 202	Malawi Sierra Leone	600
Uganda Rwanda Mozambique Niger Eritrea Tajikistan Malawi	240 220 210 200	201 202	Sierra Leone	
Rwanda Mozambique Niger Eritrea Tajikistan Malawi	220 210 200	202		530
Mozambique Niger Eritrea Tajikistan Malawi	210 200		Atghanistan	·
Niger Eritrea Tajikistan Malawi	200	203		
Eritrea Tajikistan Malawi			America Samoa	
Tajikistan Malawi	190	204	Andorra	
Malawi		205	Aruba	
	190	206	Bhutan	
Sierra Leone	170	207	Brunei	
	150	208	Cuba	
Guinea-B issau	140	209	Equatorial Guinea	
Liberia	130	210	Faeroe Islands	
Burundi	100	211		
Congo, Dem, Rep.	100	212	French Polynesia	-
Ethiopia	90	213	Greenland	
Afghanistan	g	214	Guam	_
American Samoa	h	215	Iraq	-
Andorra	I	216		-
Aruba	I	217	Kiribati	-
Brunei	I	218	Korea, Dem. Rep.	-
Cuba	Ι	219	Liberia	-
Faeroe Islands	Ι	220	Libya	-
French Polynesia	I	221	Maldives	-
Greenland	I	222	Marshall Island	-
Guam	I	223	Mayotte	-
Iraq	I	224	Micronesia, Fed	-
Isle of Man	I	225	Myanmar	-
Korea, Dem, Rep.	g	226	Netherlands Antilles	-
Libya	h	227	New Caledonia	_
Mayotte	h	228	Northern Mariana Islands	-
Myanmar	g	229	Palau	-
Netherlands Antilles	Ï	230	Qutr	-
New	I	231	Sao Tome and principe	-
	h	232	Serbia and montengro	-
	American amoa Andorra Aruba Brunei Cuba Gaeroe Islands French Folynesia Greenland Guam Fraq Sele of Man Gorea, Dem, Gep. Gibya Mayotte  Myanmar Jetherlands Antilles Gew Caledonia Gorthern	American Amoa Andorra I Aruba I Brunei I Cuba I Gaeroe Islands I Greenland I Greenland I Guam I Green, Dem, g Gep. Gibya I Mayotte I Myanmar I Jetherlands I	American amoa         h         215           Amoa         I         216           Aruba         I         217           Brunei         I         218           Cuba         I         219           Gaeroe Islands         I         220           Grench         I         221           Follynesia         I         222           Greenland         I         223           Greenland         I         223           Faq         I         224           Sele of Man         I         225           Gorea, Dem, g         226         226           Gep.         228         228           Myanmar         g         229           Jetherlands         I         230           Antilles         231         231           Galedonia         232	American h 215 Iraq Amoa Andorra I 216 Isle of Man Aruba I 217 Kiribati Aruba I 218 Korea, Dem. Rep. Abba I 219 Liberia Areroe Islands I 220 Libya Areroch I 221 Maldives Areroch I 222 Marshall Island Aruma I 223 Mayotte Araq I 224 Micronesia, Araq I 225 Myanmar Araq I 225 Myanmar Araq I 226 Netherlands Antilles Antilles Antilles Antilles Antilles Antilles Araq I 230 Qutr Arana I 230 Qutr Arana I 231 Sao Tome Arana I 232 Serbia

	Islands				
224	Qatar	I	233	Somalia	-
225	Somalia	g	234	Suriname	-
226	United Arab Emirates	Ī	235	Timor-Ieste	-
227	Virgin Islands (U.S)	Ι ,	236	Virgin Islands	-
228	World	5,500	237	West Bank and Gaza	-
229	Low income	450	238	World	-
230	Middle income	1,920	239	Low income	8,200
231	Low middle income	1,480	240	Middle income	2,190
232	Upper middle income	5,340	241	Lower middle income	6,000
233	Low & middle income	1,280	242	Upper middle income	5,510
234	East Asia & pacific	1,080	243	Low and middle income	9,900
235	Europe & Central Asia	2,570	244	East Asia and Pacific	4,320
236	Lattin America & Caribbean	3,260	245	Europe and Central Asia Latin America and Caribbean	4,320
237	Middle East & North Africa	2,250	246	Middle east and north Africa	4,680
238	South Asia	510	247	South Asia	2,660
239	Sub-Saharan Africa	490	248	Sub-Saharan Africa	1,7870
240	High income	28,550	249	High income	29,480
241	European Monetary union	22,850	250	European monetary union	26,260

Sources: World Development Indicators Database, World Bank, July 2004.

Not available. GNI is gross national income (gross national product, or GNP, in previous editions). PPP is purchasing power parity. Note: Rankings include at all 208 World Bank Atlas economies, but only those with confirmed Alas GNI per capita estimates or those that rank among the top twenty are shown in rank order. Figures in italics are for 2002 or 2001 a . 2003 data not available, ranking is approximate b Data include the French overseas departments of French Guiana Guadeloupe, Martinique, and Reunion, c. Estimate is based on regression, other PPP figures are extrapolated from the latest International Comparison Programme benchmark estimates d. Exclude: data for Kosovo e. Estimate is based on a bilateral comparison between China and the United State (Ruoen and Kai, 1995). f Data refer to mainland Tanzania only g. Estimated to be low income (\$765 or less) h Estimated to be upper middle income (\$3,036 to \$9,385). I Estimated to be high income (\$9,386 or more) j Estimated to be lower middle income (\$766 to \$3,035).