

## **II.B ECONOMIC INEQUALITY**

### **Summary**

In this section we review ways in which economic inequality, the rate of economic growth, the level of output and efforts to reduce inequality might affect one another. We evaluate proposals to reduce economic inequality and we discuss public opinion concerning inequality. We conclude by re-assessing the income distribution goals of our ideal scenario.

Section B.1 summarizes current data. For most of the last 40 years the distribution of incomes in most countries has been largely stable. Over the past 20 years inequality of incomes has increased, at varying rates, in most, although not all, of the mature industrial countries.

Section B.2 reviews theories of income distribution. Economic growth should reduce inequality in developing countries. A major part of the increase in income inequality in the industrial countries appears to be due to skills-biased technological change. A critical unresolved question is whether the continuing growth of economic output necessarily requires an increasingly skilled labor force. Expanded trade is expected to worsen the distribution of incomes in high income countries and improve it in low income countries, but these impacts may not be large and should lessen over time. Although the aggregate growth of inequality in developed countries has arguably been moderate, the growth of incomes realized by the very highest percentiles has been much greater, possibly as a result of “winner-take-all” dynamics. There is little evidence of any strictly economic mechanism that would necessarily cause higher levels of inequality in an industrial economy to have a seriously retarding effect on economic growth. However, if growing inequality generates political instability, then investment, and consequently growth, could suffer.

In Section B.3 nineteen sets of proposals for reducing the inequality of income and wealth in the mature industrial nations are evaluated. These proposals are broadly grouped into

one of four categories: Conservative, Liberal, Progressive and Green. Proposals to address inequality that are currently endorsed by important political constituencies are not likely to have a large impact.

In Section B.4 nearly 200 opinion survey results concerning economic inequality are reviewed. Although concern about economic inequality is shared by a large majority of Americans, concerted policy initiatives to reduce inequality are supported by much smaller minorities. Americans show far more support for measures to ensure equality of opportunity than for equality of outcomes. Europeans show higher levels of support for public policies that address economic inequality than do Americans.

Section B.5 evaluates the above findings with respect to our long run scenarios of global development. We conclude that it is difficult to make a credible case for reducing economic inequality to the level suggested in our ideal scenario, Scenario 5, which calls for an 80/20 ratio of 2.5. Provisionally, we adopt an alternative goal: inequality should not be allowed to be worse than the mean level currently found in the industrial social democracies, i.e., an 80/20 ratio of about 6.5. Achieving even this more modest goal will require major social and political commitment.

## **Section II.B. ECONOMIC INEQUALITY**

### **Introduction**

An important stated goal of this exercise is to fully and credibly incorporate values concerning the distribution of income into long run scenarios of global development, and to do so in a way that is consistent with concern for economic well-being in the aggregate, and with ecological integrity.

Over the past two decades economic inequality in the mature industrial countries has been growing. Is it possible that the distribution of income could become so unequal that it destroys the prospects for further economic growth? Conversely, could it be that attempts to *reduce* inequality of income could destroy prospects for further growth? If either or both of these are true, what might be the maximum and minimum sustainable levels of inequality and output? If continued growth tends to generate greater inequality then our goals of protecting the environment and ensuring distributional equity might reinforce one another. If continued growth tends to generate greater equality then these goals may be in conflict. Which is it? After we've exhausted the possibilities for analysis, we still need to decide: What is to be done? In the sections that follow we consider these and related questions.

We begin in Section II.B.1 by summarizing current data on the distribution of income and how these have changed over time. In Section II.B.2 we review theoretical and empirical studies that have sought to explain these levels and changes. In II.B.3 we review and assess nineteen proposals propounded from within four general ideological perspectives for addressing concerns about income inequality. In II.B.4 we review the results of nearly 200 public opinion survey questions concerning income inequality. In II.B.5 we bring the results of the four preceding sections to bear in helping decide on values concerning the distribution of income to provisionally include in our advocated scenario.

## **II.B.1. WHAT THE DATA SHOW**

### ***II.B.1.a. Income Distribution Within Countries***

**Box IIB-1** shows Gini coefficients and 80/20 ratios for 108 countries.<sup>1</sup> The mean of the Ginis is 39.9, with a standard deviation of 9.9. The median is 38.0. Latin American and Sub-Saharan African countries are the most unequal, with mean Ginis in the upper 40's. The Middle East/North African and East Asia/Pacific countries have mean Ginis in the upper 30's, while those of South Asia and the Industrialized Countries are in the low 30's. The countries of Eastern Europe are the most equal in the world, with Ginis in the upper 20's.

### ***II.B.1.b. Changes in Economic Inequality Within Countries***

#### **1. Aggregate estimates**

**Box IIB-2** shows changes in the distribution of income by decile among persons living in the non-socialist nations over the period 1950-1985. The amount of change has been small, although a slight increase in inequality since about 1970 can be seen. When the socialist world is included this increase vanishes.

**Box IIB-3** shows changes since 1960 in the unweighted averages of the Gini coefficients of countries within seven regions. In general these changes have been small. Sub-Saharan Africa improved during the 60's and 70's but lost ground during the 80's and 90's. Inequality in Eastern Europe has increased noticeably since the fall of the Soviet Union.

A careful analysis of 49 countries (Li, 1996) found that the distribution of income in 29 of these (59%) showed no statistically significant time trend. Of the 20 countries that did show a

---

<sup>1</sup> The Gini coefficient is a full-population measure of the inequality of an income distribution. It is usually shown as a number between 0.0, representing perfect equality, and 1.0, representing perfect inequality. Some authors show the Gini coefficient multiplied by 100 to make comparisons easier, in which case 0 still represents perfect equality but perfect inequality is represented by 100. Since there is effectively no overlap between the two scales there is little cause for confusion. The 80/20 ratio refers to the ratio of the total income received by those in the top and the bottom income quintiles of a population; that is, of the incomes of all those above 80% of the population and those equal to or below 20% of the population. Appendix 4 describes these and related statistical measures used in these notes in more detail.

**BOX IIB-1. Income Inequality, Selected Countries**

[source: Deininger and Squire, 1996a]

rank	Country	Gini	80/20	rank	Country	Gini	80/20
1	Slovak Rep.	21.50	2.87	56	Sudan	38.72	5.58
2	Czechoslovakia	24.51	3.25	57	Algeria	38.73	6.85
3	Ukraine	25.71	3.71	58	Morocco	39.20	7.05
4	Spain	25.91	4.21	59	Armenia	39.39	23.9
5	Finland	26.11	4.34	60	New Zealand	40.21	9.77
6	Belgium	26.92	4.31	61	Guyana	40.22	7.48
7	Latvia	26.98	3.83	62	Tunisia	40.24	7.91
8	Luxembourg	27.13	4.11	63	Jordan	40.66	7.37
9	Canada	27.65	4.54	64	Uganda	40.78	7.10
10	Hungary	27.94	3.92	65	Singapore	41.00	7.15
11	Slovenia	28.20	3.97	66	Australia	41.72	10.09
12	Czech Rep	28.26	3.94	67	Trinidad	41.72	13.08
13	Bangladesh	28.27	4.05	68	Bolivia	42.04	8.58
14	Belarus	28.53	4.30	69	Fiji	42.50	
15	Romania	28.66	4.29	70	Mauritania	42.53	13.12
16	Rwanda	28.90	4.01	71	Iran	42.90	
17	Netherlands	29.38	5.25	72	Ecuador	43.00	9.82
18	Nepal	30.06	4.34	73	Madagascar	43.44	8.52
19	Laos	30.40	4.21	74	Zambia	43.51	8.92
20	Soviet Union	30.53	5.08	75	Turkey	44.09	9.53
21	Taiwan	30.78	5.42	76	Peru	44.87	10.32
22	Pakistan	31.15	4.73	77	Hong Kong	45.00	10.10
23	Indonesia	31.69	4.69	78	Bahamas	45.29	13.22
24	Yugoslavia	31.88	5.32	79	Philippines	45.73	10.10
25	Egypt	32.00	4.72	80	Costa Rica	46.07	12.68
26	India	32.02	4.67	81	Sri Lanka	46.70	10.35
27	Italy	32.19	4.45	82	Seychelles	47.00	
28	Germany	32.20	5.90	83	Malaysia	48.35	11.73
29	UK	32.40	5.35	84	El Salvador	48.40	10.64
30	Sweden	32.44	5.84	85	Barbados	48.86	22.67
31	Kazakhstan	32.67	5.39	86	Cameroon	49.00	
32	Poland	33.06	6.29	87	Mexico	50.31	13.40
33	Denmark	33.20	6.90	88	Nicaragua	50.32	13.12
34	Norway	33.31	7.69	89	Dom. Rep.	50.46	13.26
35	Korea, R.	33.64	5.72	90	Puerto Rico	50.86	18.34
36	Lithuania	33.64	5.20	91	Colombia	51.32	15.10
37	Ghana	33.91	5.34	92	Thailand	51.50	15.81
38	Bulgaria	34.42	5.87	93	Honduras	52.63	14.67
39	Moldova	34.43	6.06	94	Venezuela	53.84	16.18
40	Ireland	34.60	9.05	95	Senegal	54.12	16.75
41	Japan	34.80	7.09	96	Botswana	54.21	16.36
42	France	34.91	6.38	97	Kenya	54.39	18.24
43	Greece	35.19	6.65	98	Cent. Afr. Rep.	55.00	
44	Kyrgyz Rep.	35.32	6.31	99	Lesotho	56.02	20.90
45	Portugal	35.63	6.58	100	Guinea Bissau	56.12	28.57
46	Vietnam	35.71	5.51	101	Panama	56.47	29.90
47	Niger	36.10	5.90	102	Chile	56.49	17.32
48	Estonia	36.63	6.33	103	Zimbabwe	56.83	15.66
49	Mauritius	36.69	6.48	104	Guatemala	59.06	30.00
50	Cote d'Ivoire	36.89	6.50	105	Brazil	59.60	26.28
51	Nigeria	37.47	12.36	106	Sierra Leone	60.79	22.45
52	China	37.80	6.92	107	South Africa	62.30	32.11
53	Jamaica	37.92	6.63	108	Gabon	63.18	22.86
54	USA	37.94	9.80				
55	Tanzania	38.10	6.63				

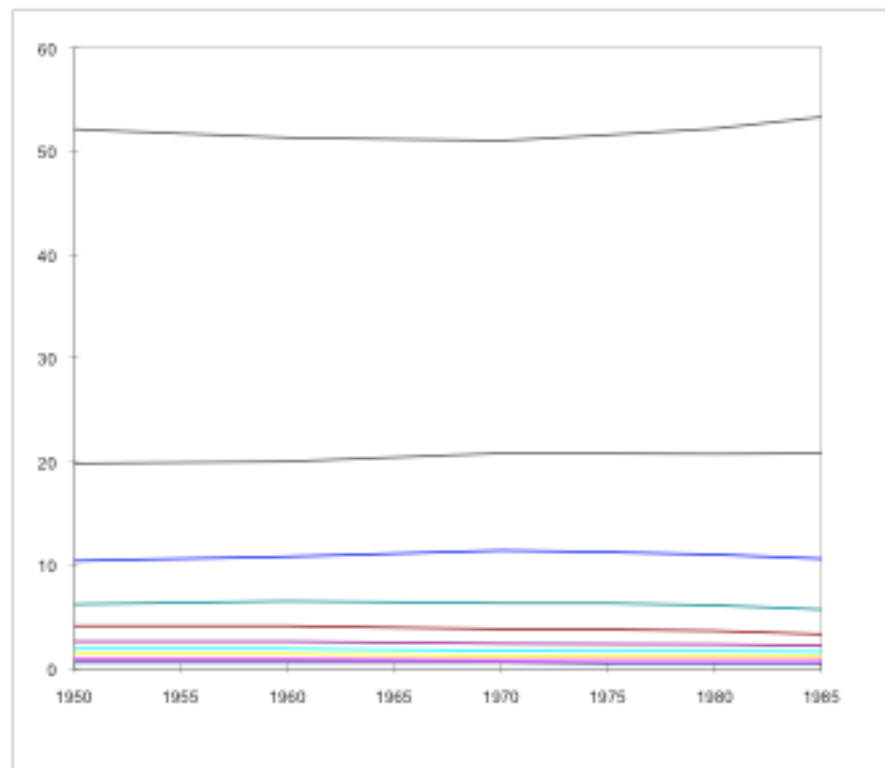
note: Values shown are most recent accepted as high-quality by Deininger and Squire; most are post-1990.

**BOX IIB-2. WORLD INCOME DISTRIBUTION**

**Table 1 World Income Distribution, Excluding Socialist Countries, by Decile**  
(source: Berry et al., 1991)

	1950	1955	1960	1965	1970	1975	1980	1985
1	0.6	0.8	0.8	0.6	0.6	0.5	0.5	0.5
2	0.9	0.9	0.9	0.85	0.8	0.8	0.8	0.8
3	1.4	1.4	1.4	1.3	1.2	1.2	1.2	1.2
4	1.9	1.9	1.9	1.8	1.7	1.66	1.67	1.6
5	2.6	2.6	2.6	2.5	2.4	2.36	2.33	2.2
6	4.1	4.1	4.1	3.95	3.8	3.76	3.63	3.3
7	6.2	6.35	6.5	6.4	6.3	6.3	6.1	5.7
8	10.4	10.6	10.8	11.1	11.4	11.24	11	10.6
9	19.8	19.9	20	20.4	20.8	20.78	20.73	20.8
10	52.1	51.7	51.3	51.15	51	51.56	52.17	53.3

**Figure 1 World Income Distribution, Excluding Socialist Countries, by Decile**  
(source: Table 1)



note: Berry et al. show decile values for 1950, 1960, 1970, 1972, 1977 and 1986. The additional values shown in Table 1 are linear interpolations of these.

**BOX IIB-3. CHANGES IN DECADAL INEQUALITY AVERAGES**

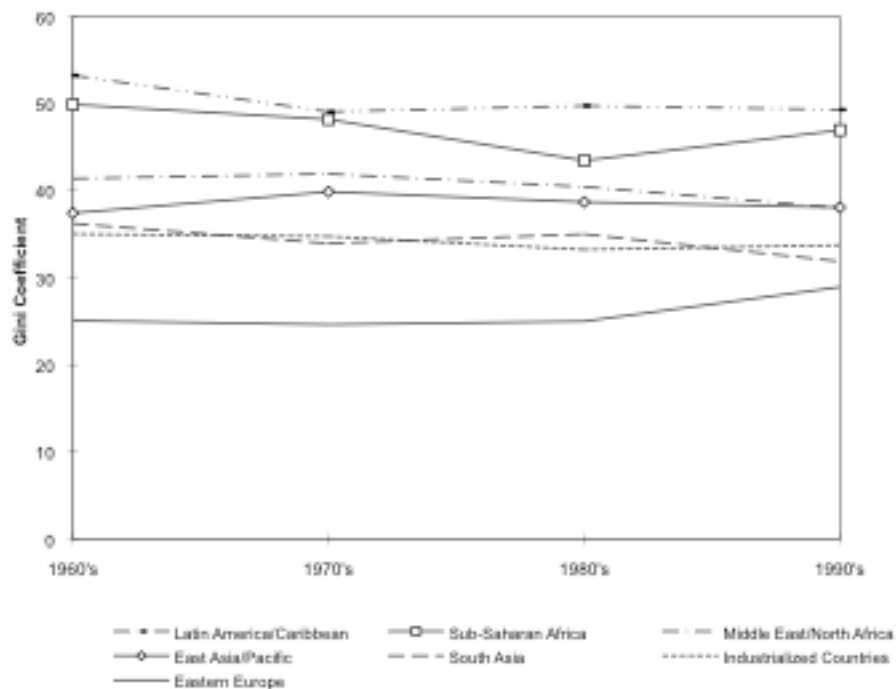
[source: Deininger and Squire, 1996a]

**Table 1** Changes in Decadal Averages of Inequality Indexes (Gini Coefficient), by Region

	1960's	1970's	1980's	1990's
Latin America/Caribbean	53.24	49.06	49.75	49.31
Sub-Saharan Africa	49.9	48.19	43.46	46.95
Middle East/North Africa	41.39	41.93	40.45	38.03
East Asia/Pacific	37.43	39.88	38.7	38.09
South Asia	36.23	33.95	35.01	31.88
Industrialized Countries	35.03	34.76	33.23	33.75
Eastern Europe	25.09	24.63	25.01	28.94

note: figures reported are unweighted averages of Gini coefficients for countries in each region.

**Figure 1** Graphic Display of Changes in Decadal Inequality Averages  
(source: Table 1)



significant trend, in 16 the changes were very small (less than 1% of the average Gini coefficient per year). In 11 of the 20 countries the trend was towards greater inequality and in 9 towards greater equality. Of the 4 countries in which inequality changed at a higher rate, China became less equal (its Gini increased at 2.9%/yr), while France, Italy and New Zealand became more equal.

On a global average basis the percentage of the world's people living in poverty is declining, but regionally the record is mixed. **IIB-4** shows decreasing poverty in East Asia, South Asia, the Middle East and North Africa, but increasing poverty in Latin America, Sub-Saharan Africa, and Eastern Europe/Central Asia. Whether these rates of change are small or large is a matter of judgment, except perhaps in the case of Eastern Europe/Central Asia, where the growth of poverty has been dramatic.

## **2. Increasing inequality in the industrial market economies**

**Box IIB-5** compares changes in the distribution of income and male earnings in 19 major industrial countries. Changes in male earnings are used to track changes in compensation to labor before the direct impacts of taxes and transfers, property income, and demographic and household adjustments are felt. In general, inequality of male earnings has been increasing at a greater rate than has inequality of income.

**Box IIB-6** and **IIB-7** show changes in the Gini coefficients for income in 12 major industrial countries. Perhaps half of these show an increase in inequality since the early 70's. The rest show mixed records.

**Box IIB-8** shows the relative contribution to overall inequality caused by changes in the upper and lower quintiles. The rich became richer and the poor became poorer in the United States, United Kingdom and Australia. In Germany, Taiwan and the Netherlands the rich held their own while the poor became poorer. In Sweden the rich became richer while the poor held their own.

**BOX IIB-4. Changes in Poverty Rates in Developing Countries**

[source: Ravallion and Chen, 1996]

Percentage of population consuming  
less than \$1/day (1985 PPP)

Region	1987	1990	1993
East Asia	29.7	28.5	26.0
Eastern Europe & Central Asia	0.6	n.a.	3.5
Latin America	22.0	23.0	23.5
Middle East & No. Africa	4.7	4.3	4.1
South Asia	45.4	43.0	43.1
Sub-Saharan Africa	38.5	39.3	39.1
Total	30.7	n.a.	29.4
Total excluding Eastern Europe & Central Asia	33.9	32.9	31.9

### BOX IIB-5. CHANGES IN MARKET INCOME AND MALE EARNINGS INEQUALITY

Table 1: CHANGES IN MARKET INCOME INEQUALITY, ~1980-92 (source: Smeeding & Gottschalk, 1996)				
small decrease	no change	small increase	medium increase	large increase
-5% or <	-4 to + 4%	5 to 10%	10 to 15%	16 to 29%
Italy	France Portugal Taiwan	New Zealand Japan Netherlands Norway Belgium Canada Israel Ireland West Germany	Australia Denmark	Sweden USA UK

Table 2: CHANGES IN MALE EARNINGS INEQUALITY, ~1980-90 (source: Gottschalk & Smeeding, 1996)				
decrease	no change	increase	large increase	very large increase
-10% or <	-10 to + 10% US	10 to 50% US	50 to 80% US	at least 80% US
	Germany Italy	Sweden Japan Netherlands Finland	Israel France Canada Australia	USA UK

Note: Table 2 shows the change in male earnings inequality as a percentage of the change that occurred in the United States.

BOX IIB-6. GINI COEFFICIENTS FOR INCOME, LARGE INDUSTRIAL COUNTRIES, 1946-1996												
[source: Deininger and Squire, 1996a]												
year	USA	UK	Sweden	Italy	Taiwan	Canada	Japan	Australia	France	Germany	Spain	Netherlands
1946												
1947	34.3											
1948	35.2											
1949	35.3											
1950	36.0											
1951	34.7					32.6						
1952	35.1											
1953	34.5											
1954	35.7											
1955	34.8											
1956	34.2								49.0			
1957	33.6					32.0						
1958	33.9											
1959	34.5											
1960	34.9											
1961	35.6	25.3				30.8						
1962	34.8	24.2					37.2		49.0			
1963	34.7	26.5					35.7			28.1		
1964	34.7	25.5			32.2		35.8					
1965	34.6	24.3			32.3	31.6	34.8		47.0		32.0	
1966	34.7	25.3			32.4	31.5	35.0					
1967	34.4	24.5	33.4		30.7	31.4	35.1					
1968	33.5	24.1			28.9	31.9	34.9					
1969	33.6	24.9			29.2	32.3	35.7	32.0		33.6		
1970	34.1	25.1			29.4	32.3	35.5		44.0			
1971	34.3	25.7			29.2	32.2	36.9					
1972	34.5	26.0			29.0	31.9	33.4					
1973	34.4	25.1				31.6	32.5			30.6	37.1	
1974	34.2	24.2		41.0	28.1	31.0	33.6					
1975	34.4	23.3	27.3	39.0		31.6	34.4		43.0			28.6
1976	34.4	23.2	33.1	35.0	28.4	31.8	33.9	34.3				28.5
1977	35.0	22.9		36.3	28.0	32.0	33.7	36.2				28.4
1978	35.0	23.1		36.0	28.4	31.5	32.9	38.1		32.1		28.3
1979	35.1	24.4		37.2	27.7	31.0	33.9	39.3	34.9	31.6		28.1
1980	35.2	24.9	32.4	34.3	28.0	31.4	33.4	39.6		31.1	26.8	27.4
1981	35.6	25.4	32.5	33.1	28.2	31.8	34.3	40.0		30.6		26.7
1982	36.5	25.2	30.7	32.0	28.5		34.8			31.0		27.6
1983	36.7	25.7	30.1	32.9	28.5	32.8	35.2			31.4		27.6
1984	36.9	25.8	31.8	33.2	28.8	33.0	35.5		34.9	32.2		28.3
1985	37.3	27.1	31.2	33.4	29.2	32.8	35.9	37.6			25.2	29.1
1986	37.6	27.8	31.7	33.6	29.3	32.5		40.6			26.0	29.7
1987	37.6	29.3	31.7	35.6	29.7	32.3		39.5			25.8	29.4
1988	37.8	30.8	32.2	34.2	30.0	31.9		38.4			24.4	29.0
1989	38.2	31.2	31.3	32.7	30.4	27.4	37.6	37.3			25.9	29.6
1990	37.8	32.3	32.5	32.5	30.1	27.6	35.0	41.7				29.5
1991	37.9	32.4	32.5	32.2	30.5	27.7						29.4
1992			32.4		30.8							
1993					30.8							
1994												
1995												
1996												

**BOX IIB-7. Changes in Income Inequality, 1947-1994**

Figure 1. Changes in Income Inequality, United States and Sweden, 1947-1994  
(source: Box IIB-6)

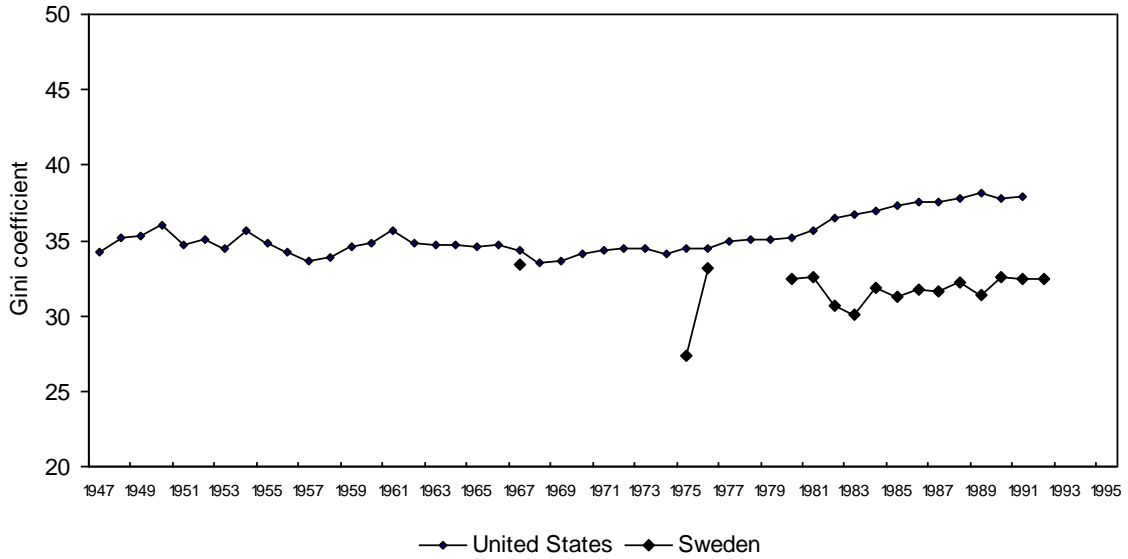
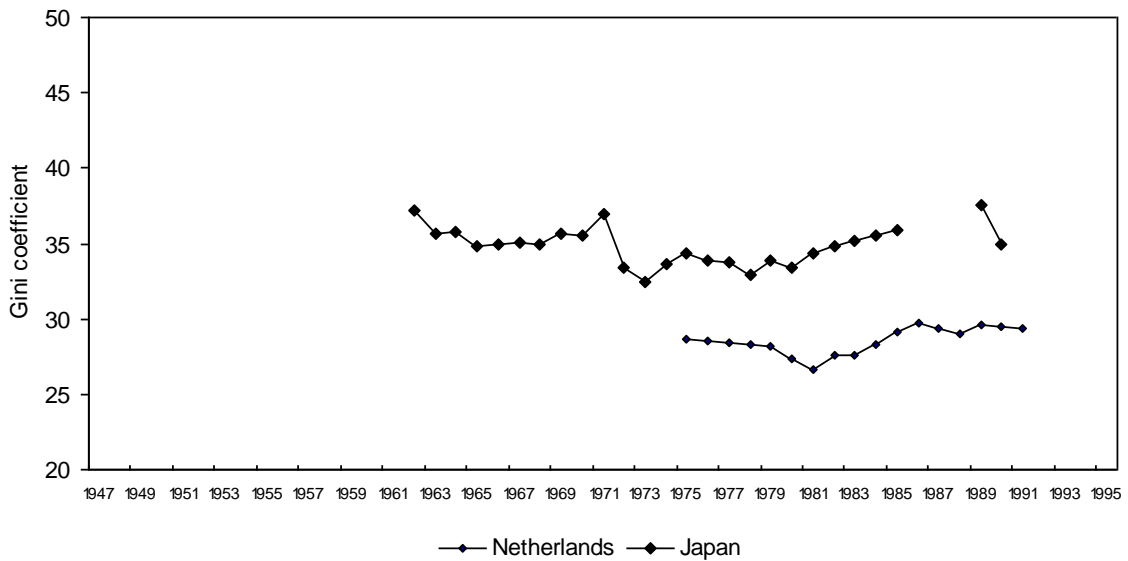


Figure 2. Changes in Income Inequality, Netherlands and Japan, 1947-1994  
(source: Box IIB-6)



**Box IIB-7. Changes in Income Inequality, 1947-1994 (cont.)**

Figure 3. Changes in Income Inequality, Italy and Spain, 1947-1994  
(source: Box IIB-6)

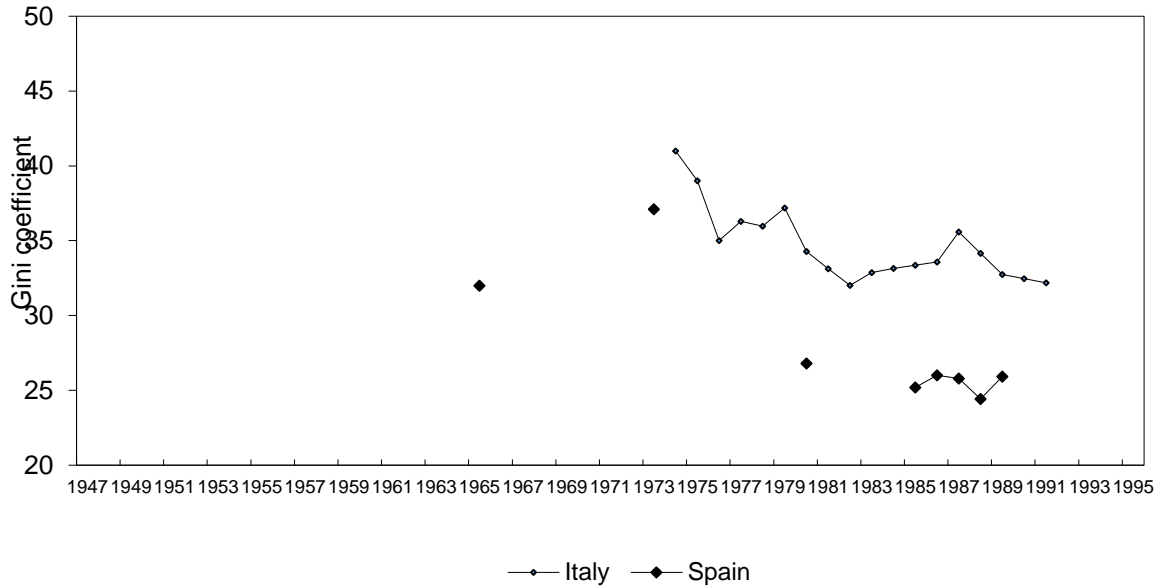
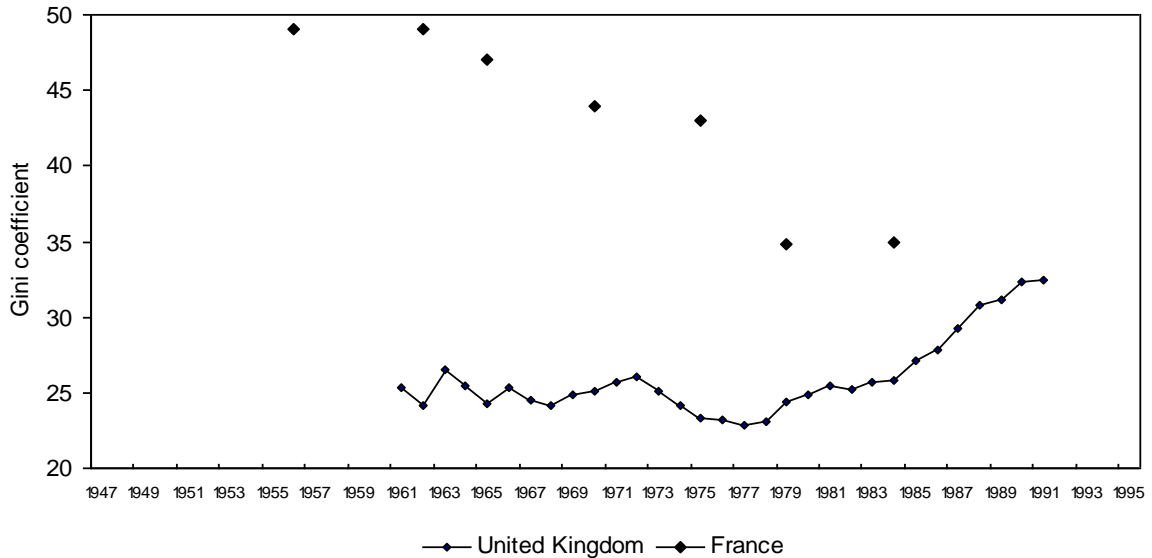


Figure 4. Changes in Income Inequality, United Kingdom and France, 1947-1994  
(source: Box IIB-6)



**Box IIB-7. Changes in Income Inequality, 1947-1994 (cont.)**

Figure 5. Changes in Income Inequality, Taiwan and Canada, 1947-1994  
(source: Box IIB-6)

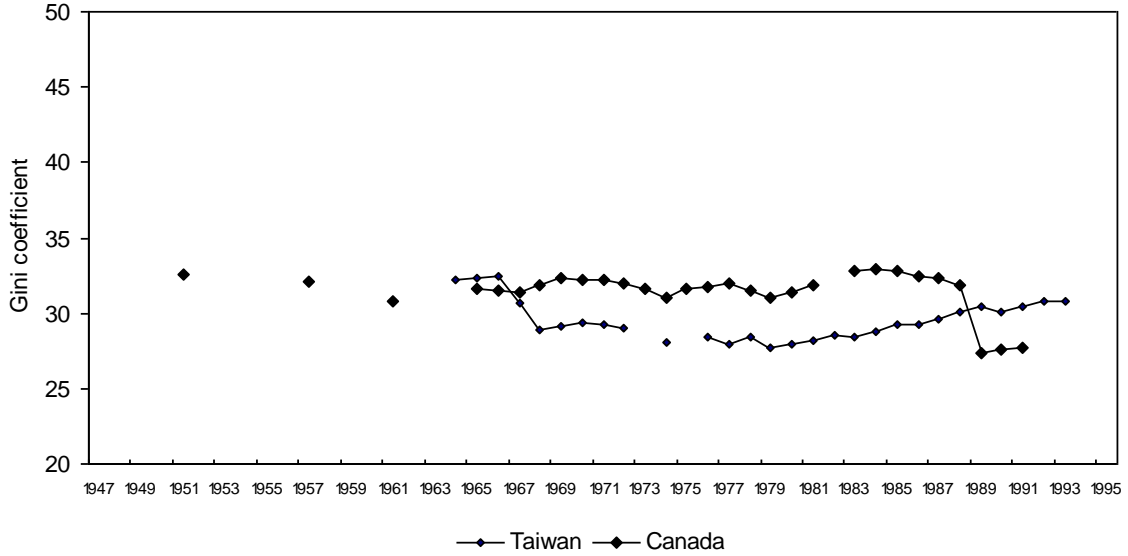
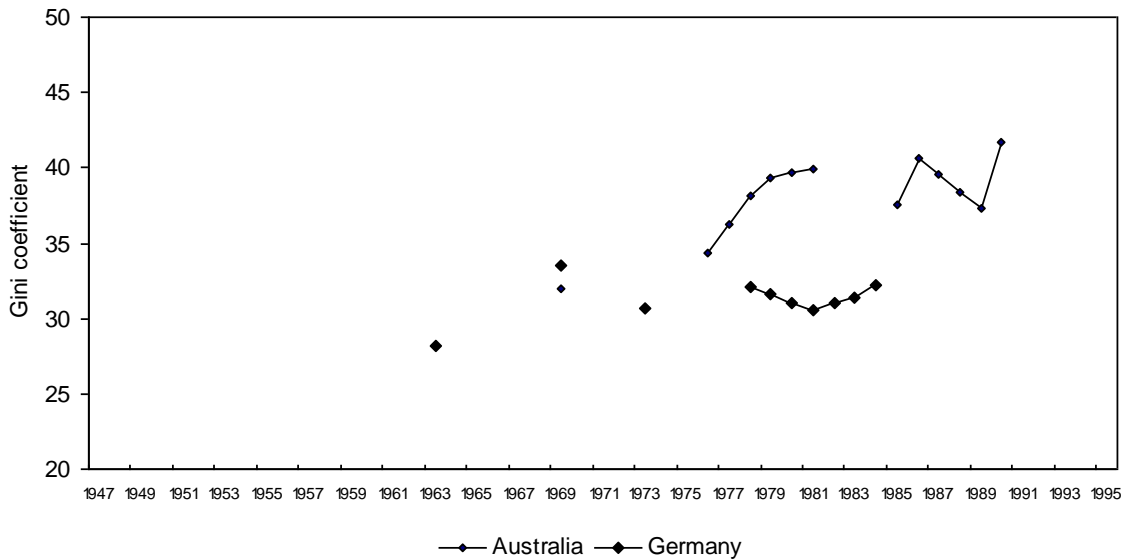


Figure 6. Changes in Income Inequality, Australia and Germany, 1947-1994  
(source: Box IIB-6)



**BOX IIB-8. CHANGES IN INCOME SHARES RECEIVED BY LOWEST AND HIGHEST 20% OF HOUSEHOLDS**

[source: Deininger and Squire, 1996a]

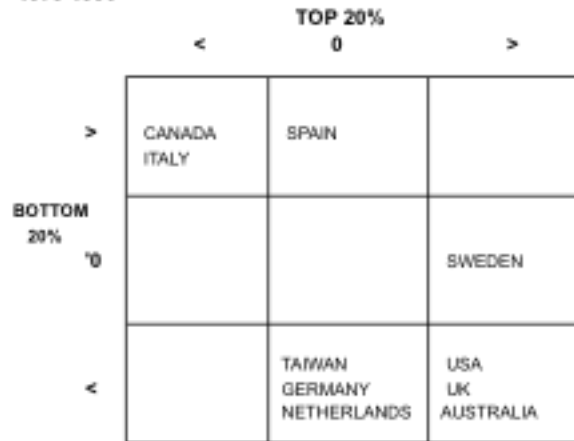
**Table 1. SHARES OF INCOME RECEIVED BY THE LOWEST 20% OF HOUSEHOLDS**

	USA	UK	Sweden	Italy	Taiwan	Canada	Japan	Australia	France	Germany	Spain	Netherlands	>	<	0	
1965	5.2	8.9	4.2		7.8	7.1	6.5				7.2					
1970	5.5	10			8.6	6.6	4.6	7		7.2						
1975	5.5	10.4	7.4	7	9	6.8	6	5.8		7	6.2	8.4				
1980	5.2	10.2	7	7.9	8.8	6.5	6.3	4.6	6.7	6.8	8.2	9				
1985	4.7	8.9	7	8.1	8.3	6.3		5.1	6.6	6.6	9.7	7.6				
1990	4.6	7.8	7.4	8.4	7.8	7.5		4.6			8.4	6.9				
trend, 65-	>	>	>	-	>	<	<	-	-	-	>	-	5	2	0	
trend, 75-	<	<	0	>	<	>	-	<	-	<	>	<	3	8	1	

**Table 2. SHARES OF INCOME RECEIVED BY THE TOP 20% OF HOUSEHOLDS**

	USA	UK	Sweden	Italy	Taiwan	Canada	Japan	Australia	France	Germany	Spain	Netherlands	>	<	0
1965	41.8	35.0	37.5		41.4	38.6	41.9				35.3				
1970	40.9	36.8			38.6	38.5	46.4	39.1		41.1					
1975	41.0	37.3	34.1	41.9	37.7	41.0	43.3	39.5		38.0	39.5	37.2			
1980	41.5	37.7	39.5	38.1	37.0	37.9	39.6	44.2	41.8	37.4	35.0	35.7			
1985	43.5	37.9	38.2	38.1	38.2	38.1		42.2	42.0	38.8	34.4	36.7			
1990	44.2	41.0	38.2	37.4	38.6	33.9		46.4			35.3	36.4			
trend, 65-	0	>	<	-	<	>	<	-	-	-	>	-	3	3	1
trend, 75-	>	>	>	<	0	<	-	>	-	0	0	0	4	2	4

**Figure 1. Changes in the Share of Income Received by Lowest and Highest 20% of Households, 1975-1990**



> = increased share    < = decreased share  
 0 = change in share of 1 Gini point or less

### **3. Increasing Inequality in the United States**

The United States is the world's leading economy and shows the greatest increase in the inequality of earnings among the industrial nations. Between the mid-1970's and the late 1990's,

- a) Median family real income changed little;
- b) Incomes of families in the higher income brackets increased, and incomes of families in the lower brackets decreased;
- c) Incomes of families in the very highest brackets increased dramatically;
- d) The percent of Americans living below the poverty level increased.

**Box IIB-9** shows the distribution of income in the United States in the early 1990's by income range. **IIB-10** shows the distribution of income by quintiles; the graph displays the corresponding Lorenz curve. **IIB-11** and **IIB-12** show the distribution of wealth by income range and wealth quintile. Wealth is far more unequally distributed than income.

Figure 1 in **IIB-13** shows the general stagnation of median family income that began around 1973. Median family income in the late 1990's was about \$31,000.

Figure 2 and Figure 3 show the growth in inequality of family incomes. Figure 2 uses the Gini coefficient and Figure 3 uses the 80-20 ratio. Both show that economic inequality in the US began to increase in the late 1970's, and has continued to grow since then.

Figure 4 shows that the percentage of families whose incomes are less than the poverty level increased from a low of about 11% in the early 1970's to about 15% in the early 1990's. This represents some 40 million Americans. The increase in poverty during 1980-83 was the result of the recession of that time. The poverty level for a family of four in 1994 was \$14,763.

Figure 5 and Figure 6 use quintile displays to show that the increase in the inequality of family income has occurred because the upper middle classes and the rich have gotten richer and the lower middle classes and poor people have gotten poorer. Note the especially wide gap that separates the top 1% from even the rest of the top 5%.

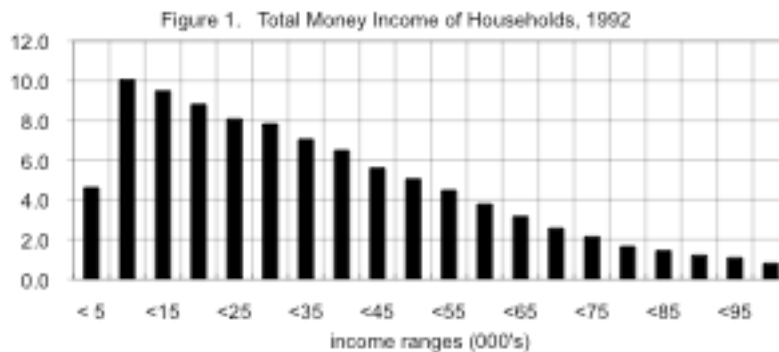
**Box IIB-14** gives some indication of how "upper" the upper income brackets really are. Table 1 in IIB-14 shows the 25 highest paid chief executive officers of American corporations in

**BOX IIB-9. TOTAL MONEY INCOME OF HOUSEHOLDS, 1992**

[source: U.S. Department of Commerce, Current Population Report, 1992, P60-184]

Table 1. Total Money Income of Households, 1992

Income Range	Number of Households (000's)	Percent
less than \$5000	4,437	4.6
\$5,000 to \$9,999	9,675	10.0
\$10,000 to \$14,999	9,120	9.5
\$15,000 to \$19,999	8,473	8.8
\$20,000 to \$24,999	7,763	8.1
\$25,000 to \$29,999	7,527	7.8
\$30,000 to \$34,999	6,778	7.0
\$35,000 to \$39,999	6,243	6.5
\$40,000 to \$44,999	5,384	5.6
\$45,000 to \$49,999	4,853	5.0
\$50,000 to \$54,999	4,306	4.5
\$55,000 to \$59,999	3,636	3.8
\$60,000 to \$64,999	3,036	3.1
\$65,000 to \$69,999	2,464	2.6
\$70,000 to \$74,999	2,048	2.1
\$75,000 to \$79,999	1,583	1.6
\$80,000 to \$84,999	1,376	1.4
\$85,000 to \$89,999	1,151	1.2
\$90,000 to \$94,999	1,034	1.1
\$95,000 to \$99,999	761	0.8
\$100,000 and greater	4,743	4.9
<b>Total households:</b>	<b>96,391</b>	<b>100</b>



The first polygon along the x axis represents those households with incomes of less than \$5,000. The second polygon represents those households with incomes from \$5,000 to \$9,999; and so on. The vertical axis shows the percent of total households in that income range. The 4.9% of households with incomes greater than \$100,000 are not shown.

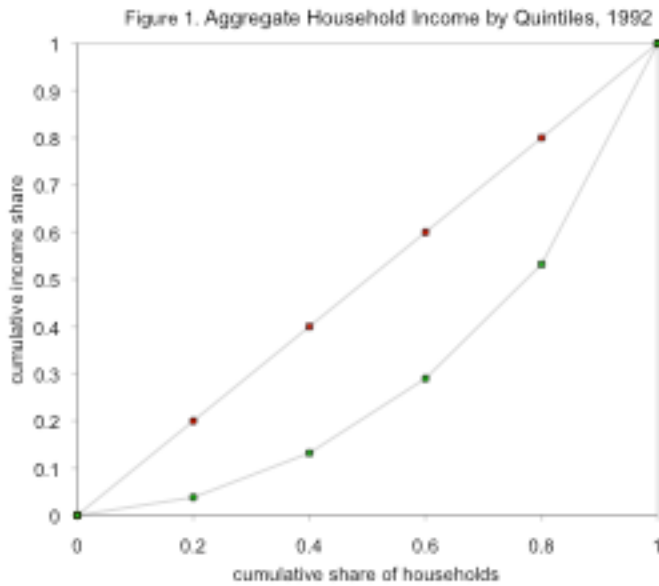
**BOX IIB-10. AGGREGATE HOUSEHOLD INCOME, BY QUINTILES**

[source: U.S. Dept. of Commerce, Current Population Reports. P60-184]

Table 1. Share of Aggregate Income by Quintiles and Top 5 Percent of Households, 1992

quintile	number of households	lower limit of household income	mean income	% distribution of aggregate income	cumulative percentage of aggregate income
lowest 20%	19,278	0	7,328	3.8	0.038
2nd 20%	19,278	12,664	18,281	9.4	0.132
3rd 20%	19,278	24,300	30,794	15.8	0.290
4th 20%	19,278	38,000	47,235	24.2	0.532
highest 20%	19,278	58,200	91,494	46.8	1.000
top 5%	4,820		145,244	18.6	

total households: 96,391  
 total income, all households: 3.76 trillion  
 mean income, all households: 39,020  
 Gini coefficient: 0.396



BOX IIB-11. Distribution of Wealth by Income Ranges, 1992 [source: Statistical Abstract of the United States, 1995]						
Income range	number of families (millions)	percent of families	mean wealth (\$ thousand)	median wealth (\$ thousand)	total wealth (\$ billion)	percent of total wealth
less than \$10,000	11.99	17.6	44.3	3.9	531.3	3.6
\$10 - \$24,999	19.08	28.0	73.0	23.4	1392.8	9.3
\$25 - \$49,999	18.94	27.8	144.3	58.3	2727.3	18.2
\$50 - \$99,999	13.15	19.3	283.8	139.6	3732.0	24.9
more than \$100,000	4.97	7.3	1324.2	569.0	6581.3	44.0
<b>totals:</b>	<b>68.13</b>	<b>100.0</b>	<b>220.0</b>	<b>52.2</b>	<b>14964.7</b>	<b>100.0</b>

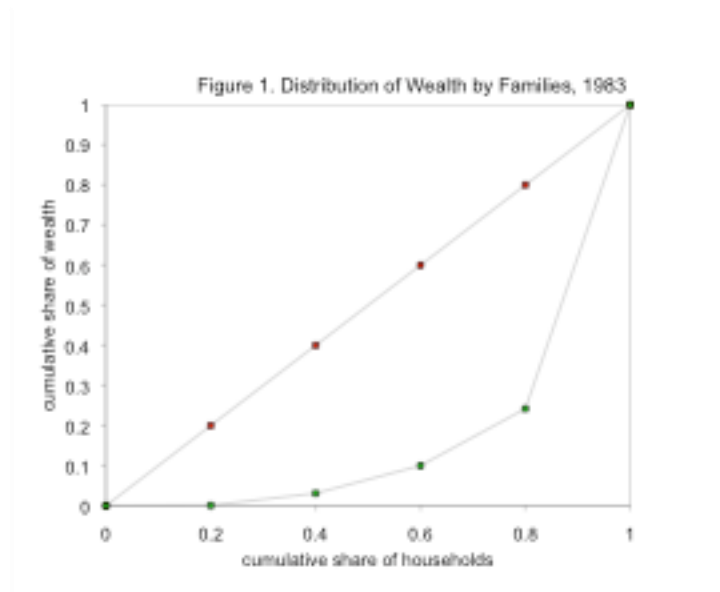
**BOX IIB-12. Distribution of Wealth among Families by Quintile, 1983.**

[source: Wolff, 1987]

Table1. Distribution of Wealth among Families by Quintile, 1983.

Wealth Percentile	fraction of wealth held	cumulative fraction
0	0	0
0.2	0.001	0.001
0.4	0.030	0.031
0.6	0.069	0.100
0.8	0.142	0.242
1.0	1.000	1.000

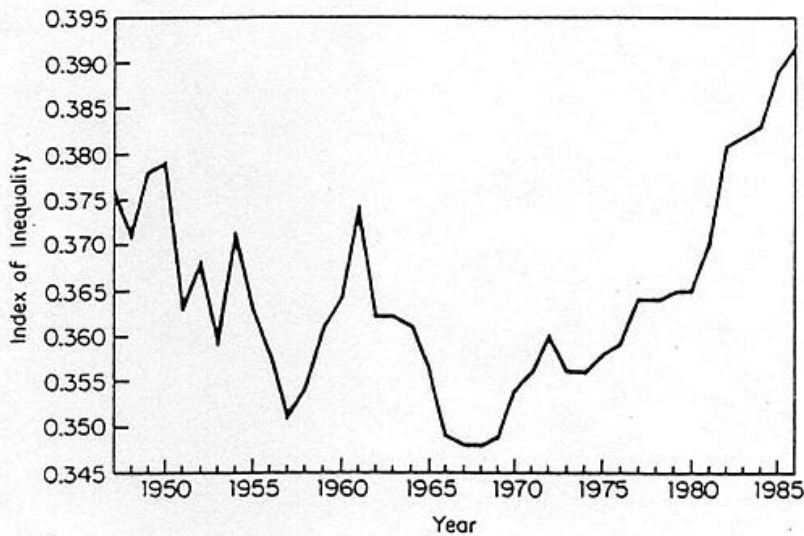
top 5% : 49.1 % of wealth  
top 1%: 28.3% of wealth  
Gini coefficient: .720



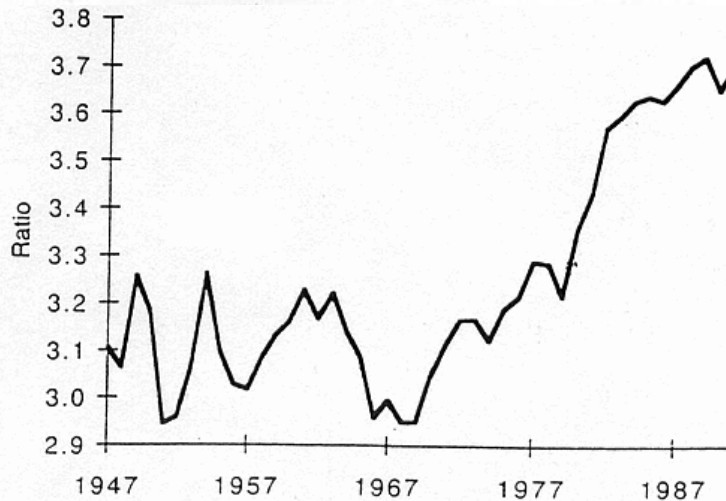
**BOX IIB-13. Income and Inequality Trends**



**Figure 1. Median family income, 1946-92**  
[Reprinted from Krugman, 1994]



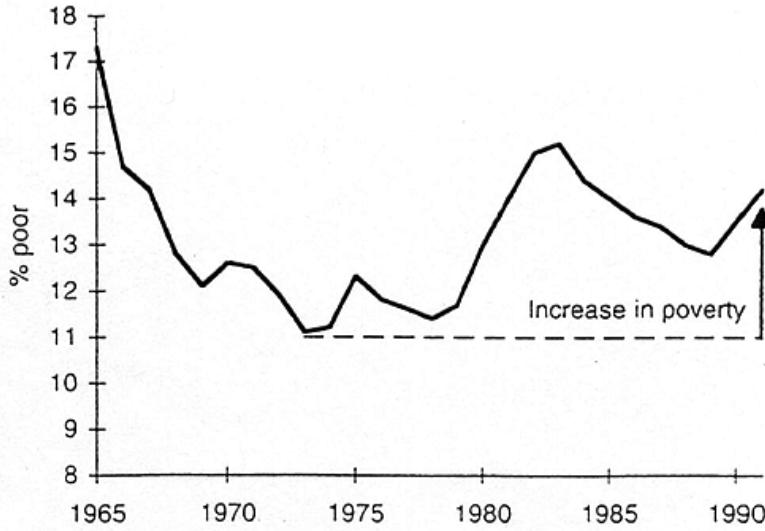
**Figure 2. Family Income Inequality, 1947-86 (Gini Index).** [Reprinted from Harrison & Bluestone, 1988]



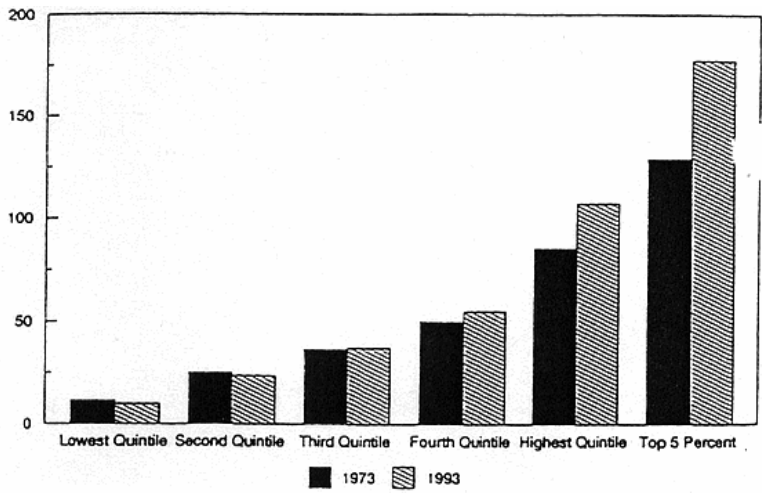
**Figure 3. Ratio of family income at 80<sup>th</sup> percentile to 20<sup>th</sup> percentile, 1947-91.**  
[Reprinted from Danziger and Gottschalk, 1995]

[more...]

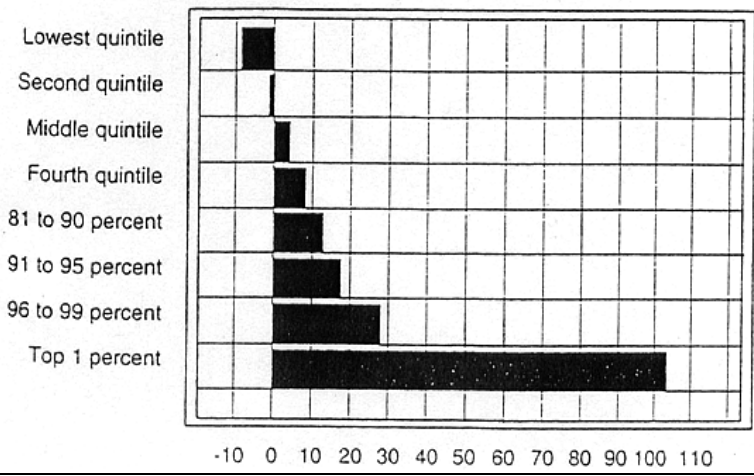
**BOX IIB-13. Income and Inequality Trends (cont'd.)**



**Figure 4. Poverty Rate, 1965-91**  
 [Reprinted from Danziger and Gottschalk, 1995]



**Fig. 5. Average family income by quintile (\$ 000's)**  
 [Reprinted from *Economic Report of the President, 1995*]



**Fig. 6. Change in real income (%).**  
 [Reprinted from Krugman, 1994]

**BOX IIB-14. Compensation of CEO's**

[source: Forbes, May 22, 1995]

**Table 1. The 25 best-paid chief executives, 1990-1994**

Chief Executive	Company	Annual Compensation (\$million; 5-year average)
Michael D. Eisner	Walt Disney	47.04
Sanford J. Weil	Travelers	30.43
Anthony J. F. O'Reilly	HJ Heinz	24.00
Stephen C. Hilbert	Conseco	17.81
Bernard L. Schwartz	Loral	13.15
Howard Solomon	Forest Labs	12.51
Lawrence M. Coss	Green Tree Financial	11.08
Roberto C. Goizueta	Coca-Cola	10.59
Walter J. Sanders III	Advanced Micro	10.14
Stephen A. Wynn	Mirage	9.01
James R. Mellor	General Dynamics	8.38
Ralph J. Roberts	Comcast	8.33
Patrick H. Thomas	First Financial Mgmt	8.26
Reuben Mark	Colgate-Palmolive	8.11
Richard A. Manoogian	Masco	7.60
Ronald K. Richey	Torchmark	7.44
James L. Donald	DSC Communications	7.41
John F. Welch Jr.	General Electric	7.29
Joseph R. Hyde III	AutoZone	7.23
Steven C. Walske	Parametric Tech	7.15
Kenneth L. Lay	Enron	7.12
Ran V. Araskog	ITT	6.83
David J. Fuente	Office Depot	6.74
Daniel P. Tully	Merrill Lynch	6.57
Charles S. Sanford Jr.	Bankers Trust	6.49

Median compensation for 800 top CEO's: 1.3

**Table 2. "Payday for America's 800 top chief executives"**

Industry	Number of firms	Median CEO Compensation (\$millions; 5-year average)
Consumer nondurables	23	2.49
Aerospace & defense	16	1.83
Entertainment & information	30	1.44
Business services & supplies	26	1.40
Food, Drink & Tobacco	33	1.75
Computers & communications	77	1.16
Energy	41	1.36
Capital goods	26	2.85
Metals	20	0.62
Chemicals	24	1.50
Insurance	53	2.17
Retailing	49	1.11
Consumer durables	32	1.17
Forest products & packaging	19	1.76
Health	51	1.27
Food distributors	23	1.18
Construction	11	1.38
Financial services	162	1.40
Travel	13	1.37
Transport	17	0.94
Electric utilities	56	0.96

1994. Table 2 suggests that the median income of the 800 top CEO's exceeds \$1,000,000 per year. Compare this with the fact that 50% of all American families have incomes of less than \$32,000 year. In 1993 the average incomes of the upper 20% and 5% of American families were about \$115,000 and \$175,000 respectively.

**Box IIB-15** shows changes in the income shares of quintiles since 1947. When depicted in this manner the growth of inequality may not appear to be as dramatic as it does in previous figures. The share of the top quintile has clearly increased since the 1970's, and the shares of the bottom two quintiles have decreased, but observers may differ as to whether these changes should be considered large or small.

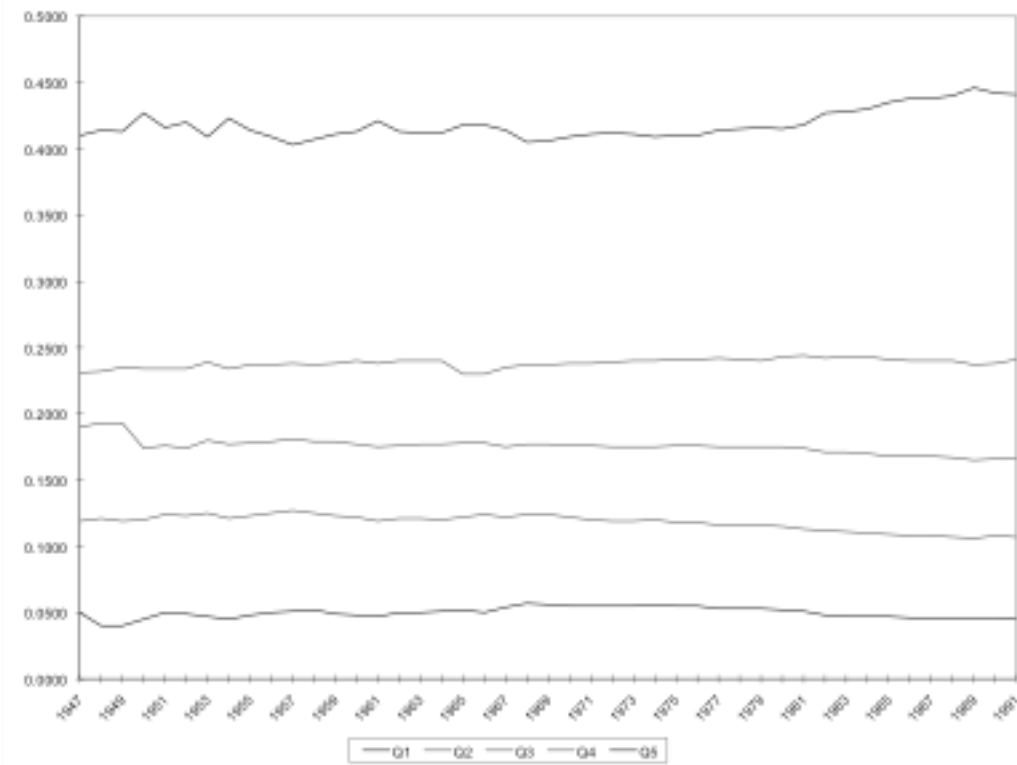
**Box IIB-16** shows the notable decline in the share of income received by the top 5% of families since the early years of this century. Some observers might conclude that the recent increase in inequality is by comparison small potatoes, and thus perhaps not deserving of great concern. The decrease in inequality prior to 1950 was likely in large part the result of a singular structural change from a rural agricultural economy to an urban industrial one. The recent increase in inequality is a departure from the experience of the post-WWII decades, and was not anticipated by analysts. Until we determine the causes of the current growth in inequality we can't say whether, and by how much, it is likely to grow, and what sort of challenges it might present.

To gain perspective on income distribution trend data it is important to appreciate the relation between life-time incomes and current incomes. A society with perfect equality of life-time incomes would still show considerable dispersion of annual incomes, simply because earnings differ with age. One economy might show a higher degree of annual income inequality than another but could have the same life-time distribution if mobility rates are greater. Some authors have claimed that the apparent increase in wage dispersion in the industrial countries has been balanced by an increase in mobility (Hinderaker and Johnson 1996). Danziger and

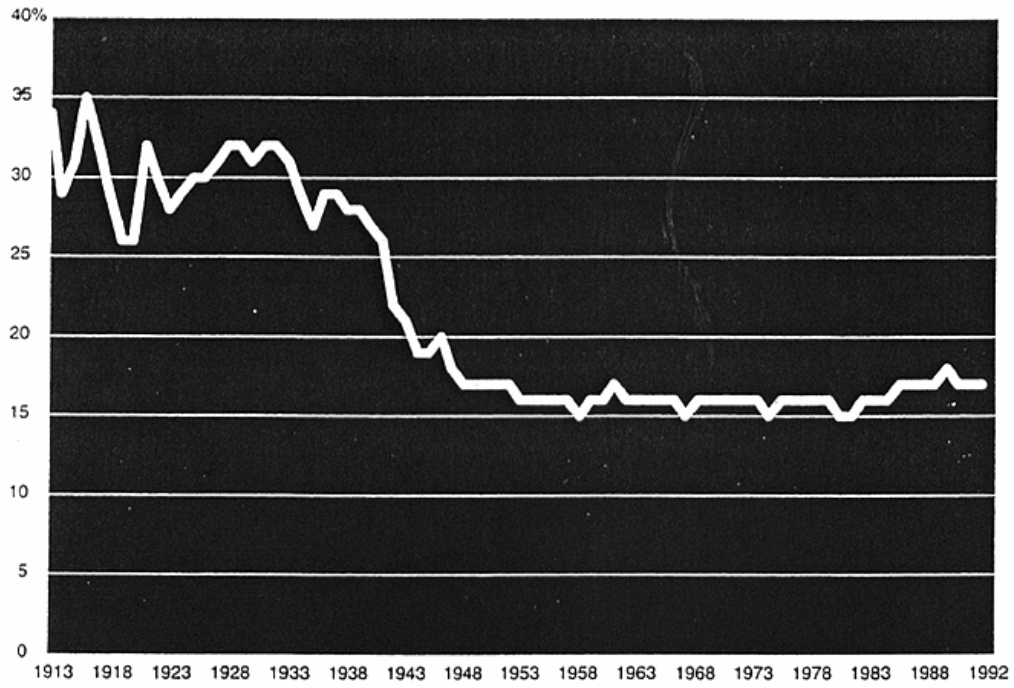
**BOX IIB-15. CHANGE IN INCOME SHARES, USA, BY QUINTILE, 1947-1991**

[source: Deininger and Squire, 1996a]

[vertical axis = share of total income]



**BOX IIB.16. Share of Total Family Income Received by the Top 5%, 1913-1992**  
[Reprinted from Hinderaker and Johnson, 1996]



Gottschalk (1995) studied this issue with respect to the United States and concluded that there is little evidence of an increase in mobility between income sectors over the period in question.

**Box IIB-17** shows how the distribution of income in the United States would change if the average growth rates of income and inequality of the 15-year period 1977-1992 continued unabated over the next century. Per capita income grows annually at 1%. The mean income of the highest quintile grows annually at 1.1%, while that of the bottom quintile declines by .58%. At these rates the US Gini grows from 37.6 in 1992 to 48.7 in 2075, which is approximately equal to the Ginis of the Philippines, Malaysia or Mexico today. The US 80/20 ratio would grow from 10.2 to 25, which is roughly that of Brazil today.<sup>2</sup>

---

<sup>2</sup> Absolute incomes for all quintiles would of course be higher than they are today in these developing countries.

**Box IIB-17 Projection of Inequality Trends, 2000-2100**

(Income values for 1977 and 1992 taken from Table B-7, Money Income of Households, Families, and Persons, 1992. U.S. Dept. of Commerce, Bureau of the Census, 1993.)

Table 1 - Data

	mean family income per quintile (1992 US\$)					mean income	Gini coefficient	80/20 ratio	aggregate annual growth rate
	Q1	Q2	Q3	Q4	Q5				
1977	10,591.00	23,554.00	35,521.00	49,021.00	84,040.00	40,545	34.0	7.94	
1992	9,708.00	23,337.00	36,777.00	53,365.00	99,252.00	44,488	37.6	10.22	
growth rate, 77-92	-0.005804	-0.000617	0.002317	0.00566	0.011091	0.00253			0.0101
	Q1	Q2	Q3	Q4	Q5				
2000	9,268	23,222	37,465	55,837	108,461	46,851	39.4	11.70	0.0101
2025	8,495	23,008	38,790	60,785	128,094	51,834	42.7	15.08	0.0101
2050	7,787	22,796	40,161	66,172	151,280	57,639	45.6	19.43	0.0101
2075	7,137	22,586	41,581	72,035	178,663	64,401	48.7	25.03	0.0101
2100	6,542	22,378	43,052	78,419	211,002	72,279	51.5	32.25	

**Figure 1: Projections of Inequality Trends, 2000-2100**

