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#### INCOME INEQUALITY IN THE UNITED STATES, 1913-1998

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#### **ABSTRACT**

This paper presents new homogeneous series on top shares of income and wages from 1913 to 1998 in the US using individual tax returns data. Top income and wages shares display a U-shaped pattern over the century. Our series suggest that the "technical change" view of inequality dynamics cannot fully account for the observed facts. The large shocks that capital owners experienced during the Great Depression and World War II seem to have had a permanent effect: top capital incomes are still lower in the late 1990s than before World War I. A plausible explanation is that steep progressive taxation, by reducing drastically the rate of wealth accumulation at the top of the distribution, has prevented large fortunes to recover fully yet from these shocks. The evidence on wage inequality shows that top wage shares were flat before WWII and dropped precipitously during the war. Top wage shares have started recovering from this shock since the 1960s-1970s and are now higher than before WWII. We emphasize the role of social norms as a potential explanation for the pattern of wage shares.

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#### 1. Introduction

According to Kuznets' influential hypothesis, income inequality should follow an inverse-U shape along the development process, first rising with industrialization and then declining, as more and more workers join the high-productivity sectors of the economy (Kuznets (1955)). Today, the Kuznets curve is widely held to have doubled back on itself, especially in the United States, with the period of falling inequality observed during the first half of the 20<sup>th</sup> century being succeeded by a very sharp reversal of the trend since the 1970s. This does not imply however that Kuznets' hypothesis is no longer of interest. One could indeed argue that what has been happening since the 1970s is just a remake of the previous inverse-U curve: a new industrial revolution has taken place, thereby leading to increasing inequality, and inequality will decline again at some point, as more and more workers benefit from the new innovations.

In order to cast light on this central issue, we build in this paper new homogeneous series on top shares of pre-tax income and wages in the United States covering the 1913-1998 period. These new series are based primarily on tax returns data published by the Internal Revenue Service (IRS) since the income tax was instituted in 1913, as well as on the large micro-files of tax returns released by the IRS since 1960. First, we have constructed annual 1913-1998 series of shares of total income accruing to various upper income groups fractiles within the top decile of the income distribution. For each of these fractiles, we also present the shares of each source of income such as wages, business income, and capital income. Kuznets (1953) did produce in the 1950s a number of top income shares series covering the 1913-1948 period. However, these series are not fully satisfactory from a technical viewpoint (Kuznets tends to underestimate top income shares), and they do not allow the analysis of very high incomes as the top group analyzed by Kuznets is the top percentile. Most importantly, nobody has attempted since the time of Kuznets to estimate homogeneous series covering the entire century, and our series are unique in

this respect.<sup>2</sup> Second, we have constructed annual 1927-1998 series of top shares of salaries for the top fractiles of the salary distribution, based on tax returns tabulations by size of salaries compiled by the IRS since 1927, and which have apparently never been used before.<sup>3</sup> To our knowledge, this is the first time that a homogeneous annual series of top wage shares for the US is produced starting before the 1950s.<sup>4</sup> Finally, in order to complete our analysis of top capital income earners, we have also used tax returns tabulations by size of dividends to construct annual 1927-1995 series of top dividends and estate tax returns tabulations to construct quasi-annual 1916-1997 series of top estates.

Our estimated series show that the "technical change" view of inequality dynamics described above is not the whole story: politics seems to matter much more than what the mechanical theory tends to suggest. More specifically, we show that top capital incomes were severely hit by major shocks during the 1914-1945 period. The large depressions on the first part of the century destroyed many businesses and thus reduced significantly top capital incomes. The wars generated large fiscal shocks, especially in the corporate sector, which mechanically reduced distributions to stock owners. We argue that top capital incomes were never able to fully recover from these shocks, probably because of the dynamic effects of progressive taxation on capital accumulation and wealth inequality. We also show that top wage shares were flat before WWII and dropped precipitously during the war. This evidence suggests that, contrarily to a widely held view, no "spontaneous" decline of wage inequality was taking place in the U.S. during the first half of the 20<sup>th</sup> century. Top wage shares have started recovering from the WWII shock since the 1960s and 1970s, and they are now higher than before WWII. We argue that both the downturn and the upturn of top

<sup>1</sup> Analyzing smaller fractiles within the top percentile is critical because capital income is extremely concentrated.

<sup>&</sup>lt;sup>2</sup> Feenberg and Poterba (1993, 2000) have constructed top income share series covering the 1951-1995 period, but their series are not homogeneous with those of Kuznets. Moreover, they provide income shares series only for the top 0.5%, and not for other fractiles.

<sup>&</sup>lt;sup>3</sup> Kuznets and subsequent researchers have focused on tabulations by size of total income.

<sup>&</sup>lt;sup>4</sup> Previous studies on wage inequality before 1945 in the U.S. rely for the most part on occupational pay ratios (see Williamson and Lindert (1980), Goldin and Margo (1992), and Goldin and Katz (1999)).

wage shares seem too sudden to be accounted for by technical change alone, and we emphasize the role of changing social norms as a potential explanation for the observed patterns.

Although our proposed interpretation for the observed trends seems plausible to us, we stress that we cannot prove that progressive taxation and social norms have indeed played the role we attribute to them. In our view, the primary contribution of this paper is to provide new series on income and wage inequality. Hopefully, other researchers will use our series and complement them with new empirical sources in order to formulate their own hypotheses and explanations.

One additional motivation for constructing long series is to be able to tell apart the trends in inequality that are the consequence of "real" economic change from those that are due to fiscal manipulation. The issue of fiscal manipulation has recently received a lot of attention. For instance, a number of studies analyzing the effects of the Tax Reform Act of 1986 (TRA86) have emphasized that a large part of the response observable in tax returns was due to income shifting between the corporate sector and the individual sector (Slemrod (1996), Gordon and Slemrod (2000)). We do not deny that fiscal manipulation can have substantial short-run effects (especially in 1986-1988), but we argue that most long-run inequality trends are the consequence of "real" economic change, and that a short-run perspective might lead to attribute improperly some of these trends to fiscal manipulation. For instance, the decline of top capital incomes is a phenomenon which dates back to the interwar period, and that, as we will see, can be evidenced from various independent tax return sources. This is certainly evidence of "real" changes in the distribution of incomes and cannot be accounted only with fiscal manipulation explanations.

The paper is organized as follows. Section 2 describes our data sources and outlines our estimation methods. In Section 3, we present and analyze the trends in top income shares, with particular attention to the issue of top capital incomes. Section 4 focuses on trends in top wages shares. Section 5 compares our US findings to other countries experiences, and especially to the French and

U.K. series recently constructed by Piketty (2001a, 2001b) and Atkinson (2001). Section 6 offers concluding comments. All series and complete technical details about our methodology are gathered in appendices at the end of the paper.

### 2. Data and Methodology

In this section, we describe briefly the data we use and the broad steps of our estimation methodology. Readers interested in the complete details of our estimations are referred to the extensive appendices at the end of the paper.

Our estimations rely on tax returns statistics compiled annually by the Internal Revenue Service since the beginning of the modern US income tax in 1913. Before 1944, because of large exemptions levels, only a small fraction of households had to file tax returns and therefore, by necessity, we must restrict our analysis to the top decile of the income distribution. As the tax statistics we use are based on tax returns, they never provide information of the distribution of individual incomes within a tax unit. As a result, all our series are based on tax units and not on individuals. At ax unit is defined as a married couple living together (with dependents) or a single adult (with dependents), as in the current tax law. The average number of individuals per tax unit has decreased over the century but, fortunately, this decrease has been roughly uniform across income groups. Therefore, assuming that income is evenly allocated to individuals within tax units, patterns of top shares based on individuals instead of tax units, if they could be estimated, would probably be very similar. Tax units within the top decile form a very heterogeneous group, from the solid middle class families

<sup>6</sup> From 1913 to 1916, because of higher exemption levels, we can only provide estimates within the top percentile.

<sup>&</sup>lt;sup>5</sup> In 1913, a constitutional amendment allowed the US government to raise revenue with an individual income tax.

<sup>&</sup>lt;sup>7</sup> Kuznets (1953) decided nevertheless to estimate series based on individuals and not tax units. We explain in appendix why his method produced a downward bias in the levels (but fortunately not in the pattern) of top shares.

<sup>&</sup>lt;sup>8</sup> Obviously, income is not earned evenly across individuals within tax units, and, because of increasing female labor force participation, the share of income earned by the primary earner has certainly declined over the century. Therefore, inequality series based on income earned at the

deriving most of their income from wages, and up to the super-rich living off very large fortunes. More precisely, we will see that the composition of income varies substantially by income level within the top decile. Therefore, it is critical to divide the top decile into finer fractiles. Following Piketty (2001a, 2001b), in addition to the top decile (denoted by P90-100), we have constructed series for a number of higher fractiles within the top decile: the top 5% (P95-100), the top 1% (P99-100), the top 0.5% (P99.5-100), the top 0.1% (P99.9-100), and the top 0.01% (P99.99-100). This also allows us to analyze the five intermediate fractiles within the top decile: P90-95, P95-99, P99-99.5, P99.5-99.9, P99.9-99.99. Each fractile is defined relative to the total number of tax units in the US population had everybody been required to file a tax return. This number is computed using population and family census statistics and should not be confused with the actual number of tax returns filed. For example, as there are about 130 million tax units in the US population in 1998,9 the top decile is defined as the top 13 million tax returns, and the top percentile as the top 1.3 million tax returns, etc. In order to get a more concrete sense of size of income by fractiles, Table 1 displays the thresholds P90, P95,... the average income level in each fractile P90-95,..., along with the number of tax units in each fractile for year 1998.

#### Insert Table 1: Top Fractiles in 1998

The income definition we use is a gross income definition including all the income items reported on tax returns and before all deductions: salaries and wages, small business and farm income, partnership and fiduciary income, dividends, interest, rents, royalties, and other small items reported as other income. Realized capital gains are not an annual flow of income (in general, capital gains are realized by individuals in a lumpy way only once in a while) and form a very volatile component of income with large aggregate variations from year to year depending on stock price variations. Therefore, we focus mainly on series

excluding completely capital gains.<sup>10</sup> It is important to note that our income definition is computed before individual income taxes and individual payroll taxes but after employers' payroll taxes and corporate income taxes.<sup>11</sup>

Our raw data consists in tables displaying the number of tax returns, the amounts reported, and the income composition, for a large number of income brackets. As the top tail of the income distribution is very well approximated by Pareto distributions, we can use simple parametric interpolation methods to estimate the thresholds and average income levels for each of our fractiles. We then estimate shares of income by dividing the income amounts accruing to each fractiles by total personal income computed from National Accounts. <sup>12</sup> Using the published information on composition of income by brackets and a simple linear interpolation method, we decompose the amount of income for each fractile into five components: salaries and wages, dividends, interest income, rents and royalties, and business income.

We use the same methodology to compute top wage shares using published tables classifying tax returns by size of salaries and wages. In this case, fractiles are defined relative to the total number of tax units with positive wages and salaries (which is also computed from census population and work force statistics).

There are variations in the presentation of published data from year to year and a number of changes in tax law over the period 1913-1998.<sup>13</sup> Therefore,

<sup>10</sup>In the appendix, in order to assess the sensitivity of our results with the treatment of capital gains, we present two additional sets of series corresponding to two additional ways of treating capital gains. In the first alternative, we rank tax units by income excluding capital gains but we add back average capital gains for each fractile when computing income levels and shares. In the second alternative, we fully include capital gains in income (both for the ranking and the levels and shares computations).

<sup>12</sup> This methodology using tax returns to compute the level of top incomes, and using national accounts to compute the total income denominator is standard in historical studies of income inequality. Kuznets (1953), for instance, adopted this method.

<sup>13</sup> The most important example is the treatment of capital gains and the percentage of these gains that are included in the statistics tables.

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<sup>&</sup>lt;sup>9</sup> The number of returns actually filed is smaller, around 125 million.

We discuss later how computing pre-corporate income tax series by inflating dividends to account for reduced distributions due to corporate income taxes would affect our results. Computing series after individual income taxes is beyond the scope of the present paper but is certainly worth being investigated to analyze the redistributive power of the income tax over time, as well as behavioral responses to individual income taxation.

in order to construct homogeneous series, we are lead to make a number of adjustments and corrections. The micro-files available from 1960 to 1995 allow us to do exact computations of all our statistics for that period and are a precious source to check the validity of our adjustments for the other periods. Kuznets (1953) did not have the possibility to use micro-files to assess the extent of the biases in his estimates due to his methodological assumptions. 14 Relying on micro-files to test our methods allows us to obtain far more complete statistical series than Kuznets. First, we analyze much finer top fractiles than Kuznets who did not go above the top percentile. Second, we derive full composition series and obtain series for specific sources of income such as salaries and dividends. Finally, we are able to give an extensive treatment of capital gains which were completely ignored by Kuznets.

Our method also differs from the recent important studies by Feenberg and Poterba (1993, 2000) who derive series of the income share of the top 0.5%<sup>15</sup> for the period 1951 to 1995. They simply use total income reported on tax returns as their denominator and the total adult population as their base to obtain the number of tax units corresponding to the top fractiles. 16 Their method is obviously far simpler than ours but cannot be used for years before 1945 when only a small fraction of the population was filing tax returns.

#### 3. Top Capital Incomes: The Role of Shocks and Progressive Taxation

## 3.1. Trends in Top Income Shares

We start by presenting our basic top income shares series estimated from individual tax return data from 1913 to 1998. The basic series presented in the text exclude capital gains from the definition of personal income (supplemental series including capital gains are presented in appendix).

<sup>&</sup>lt;sup>14</sup> The two main sources of (downward) bias in Kuznets series come from his choice to estimate shares based on individuals instead of tax units and from his treatment of capital gains. <sup>15</sup> They also present incomplete series for the top 1%.

We present on Figure 1 the income share of the top decile of tax units from 1917 to 1998. The overall pattern of the top decile share over the century is U-shaped. The share of the top decile fluctuates around 40-45% during the interwar period. It declines substantially to just above 30% in four years during WWII. It stays flat at 31-32% until the 1970s when it starts increasing again. In the mid-1990s, the share has crossed the 40% level and is now at a level close to the before WWII level, although still a bit lower. Therefore, the evidence suggests that the decline in inequality took place in a very specific and short period of time. Such an abrupt decline cannot easily be reconciled with a Kuznets type process. The smooth increase in inequality in the last three decades is more consistent with slow underlying changes in the demand and supply of factors, even though it should be noted that a significant part of the gain is concentrated in two years, 1987 and 1988 just after the Tax Reform Act of 1986 which cut dramatically the top marginal income tax rates (we will come back on this issue later on).

Looking at the bottom fractiles within the top decile (P90-95 and P95-99) on Figure 2 displays interesting new evidence. One can see that these fractiles account for a relatively small fraction of the total fluctuations of the top decile income share. First, the drop in the shares of fractiles P90-95 and P95-99 during WWII is far less dramatic than for the top decile as a whole. Second, they start recovering from the WWII shock right after the war. Third, the shares for these groups do not increase much during the 1980s-1990s: the P90-95 share was fairly stable, and the P95-99 share increased by about 2 percentage points while the top decile share increased by about 10 percentage points. Finally, it is interesting to note that the groups P90-95 and P95-99 did relatively better during the post WWI depression and the great depression, and relatively worse during the WWI boom and the late 1920s boom. This can easily be accounted for by the fact that income in these fractiles is predominantly wage income, and that wages are to a large extent nominally rigid in the short run. In particular, high

<sup>&</sup>lt;sup>16</sup> This method is not fully satisfying for a long-run study as the average number of adults per tax unit has decreased significantly since WWII.

middle-class wage earners are the big winners of the deflationary years of the great depression.

In contrast to the fractiles P90-95 and P95-99, the top percentile (depicted on Figure 3) has gone through enormous fluctuations along the course of the 20<sup>th</sup> century, with a drop by more than 50% from 1913 to the 1950s: the share of total income received by the top 1% was about 18% before WWI, and it was only about 8% during the 1960s-1970s. Figure 3 shows clearly that the top percentile share declined during WWI, recovered during the 1920s boom, and declined again during the great depression and WWII. This very specific timing, together with the fact that very high incomes account for a disproportionate share of the total decline in inequality, strongly suggests that the shocks incurred by capital owners during 1914 to 1945 (depression and wars) have played a key role. The depressions of the inter-war period were far more profound than the post-WWII recessions. They destroyed many businesses and had a stronger impact on capital income than labor income. As a result, it is not surprising that the fluctuations in top shares are far wider during the inter-war period than in the decades after the war. 17 It is interesting to note that the pattern of shares for P90-95 and P95-99 is exactly symmetrical to the pattern for P99-100 from 1917 to 1939 (in comparison and as a result, the pattern for the full top decile is flatter). This is explained by the fact that, as we will see, P90-99 is mostly composed of wage income while P99-100 is mostly composed of capital income. During the large downturns of the inter-war period in the U.S. (1921, and 1930-1933, 1938-1939), capital income drops dramatically while wages (and especially high wages) are rigid nominally and thus the position of the upper middle class groups P90-99 improves relative to the top percentile. On the other hand, during the booms (1923-1929) and the recovery (1934-1937), capital income increases quickly, inflation increases and high wages loose in relative terms. 18 The negative effect of the wars on top incomes can be explained in part by the large tax

<sup>&</sup>lt;sup>17</sup> The fact that top shares are very smooth after 1945 and bumpy before is therefore not an artifact of an increase in the accuracy of the data (in fact, the data is more detailed before WWII than after), but reflects real changes in the economic conditions.

increases enacted to finance the wars. During both wars, the corporate income tax (as well as the individual income tax) was drastically increased and this reduced mechanically the distributions to stockholders (see our discussion below and appendix A4). <sup>19</sup>

The decline in top incomes during the first part of the century is even more pronounced for higher fractiles within the top percentile, i.e. for fractiles which one expects to rely more heavily on capital income. As depicted on Figure 4, the income share of the top 0.01% has gone through enormous fluctuations during the 20<sup>th</sup> century. In 1915, the top 0.01% earned incomes 400 times larger than the average income; in 1970, their incomes were "only" 50 times larger than average. They have not yet fully recovered today, as they earned in 1998 about 250 times the average income.

Insert Figure 1: The top decile income share in the U.S., 1917-1998

Insert Figure 2: The income share of fractiles P90-95 and P95-99 in the U.S., 1917-1998

Insert Figure 3: The top percentile income share in the U.S., 1913-1998

Insert Figure 4: The top 0.01% income share in the U.S., 1913-1998

Our long-term series allow us to analyze the TRA 1986 episode from a new perspective. Feenberg and Poterba (1993, 2000) looking at the top 0.5% income shares series ending in 1992 (and 1995 respectively) argue that the surge after TRA86 looks permanent. However, completing the series up to 1998 shows very clearly that top shares can increase even in the absence of tax cuts.<sup>20</sup> From that perspective, looking at Figures 3 and 4, the average increase in

<sup>18</sup> Piketty (2001a, 2001b) shows that exactly the same phenomenon is taking place in France at the same period.

<sup>&</sup>lt;sup>19</sup> During WWI, top income tax rates reached "modern" levels above 60% in less than two years. As was forcefully argued at that time by Mellon (1924), it is conceivable that large incomes found temporary ways to avoid taxation at a time where the administration of the Internal Revenue Service was still in its infancy.

<sup>&</sup>lt;sup>20</sup> Slemrod and Bakija (2000) pointed out that top incomes have surged in recent years. They note that tax payments by taxpayers with AGI above \$200,000 increased significantly from 1995 to 1997.

top shares from 1985 to 1994 is not significantly higher than the increase from 1994 to 1998 or from 1978 to 1984. This transitory effect of TRA 1986 is even more striking when looking at our appendix series including capital gains as in Figure 4B. The series with full capital gains included both in the ranking of tax units and when computing shares shows indeed a much smaller increase in the top percentile share from 1985 to 1994 than from 1994 to 1998 or from 1978 to 1984. As a result, it is possible to argue that TRA86 produced no permanent surge in top income shares, but only a transitory blip. The analysis of top wage shares in Section 4 will reinforce this interpretation. Figure 4B also shows that including capital gains does not modify our main conclusion that very top income shares dropped enormously during the 1914-1945 period before increasing steadily in the last three decades. <sup>21</sup>

Insert Figure 4B: the top percentile with and without capital gains, 1913-1998.

#### 3.2. The secular decline of top capital incomes

In order to confirm our intuition on the decline of top capital incomes over the century, it is useful to look at the composition of income within the top fractiles. Figure 5 displays the composition of income for each fractile in 1929. As expected, one can see that the share of wage income is a declining function of income and that the share of capital income (dividends, interest, rents and royalties) is an increasing function of income. The share of entrepreneurial income (business, farm and partnerships) is fairly flat. High middle-class fractiles (P90-95 and P95-99) rely mostly on labor income: wage and entrepreneurial income make about 80% of their resources, and capital income brings a 20% income supplement. The pattern is basically reversed for very top fractiles: more than 70% of the resources of fractile P99.99-100 are made of capital income, and

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<sup>&</sup>lt;sup>21</sup> It is interesting to note, however, that during the 1960s, when dividends were strongly tax disadvantaged relative to capital gains, capital gains do seem to represent a larger share in top incomes than during other periods such as the 1920s or late 1990s that also witnessed large increases in stock prices.

wage and entrepreneurial income brings a bare 30% income supplement. Note also that the sharply increasing pattern of capital income is entirely due to dividends: the share of interest, rents and royalties is fairly flat, while the share of dividends in total income goes from about 5% at the level of fractile P90-95 to more than 55% at the level of fractile P99.99-100. These numbers confirm that the very large decline of top incomes observed during the 1914-1945 period is to a large extent a capital income phenomenon: wages make a small fraction of very top incomes, and trends in wage inequality can only explain a small fraction of the trends in very top income shares.<sup>22</sup>

Insert Figure 5: The income composition of the top decile in the U.S. in 1929 Insert Figure 6: The income composition of the top decile in the U.S. in 1998

One might also be tempted to interpret the large upturn in top income shares observed since the 1970s as a revival of very high capital incomes. The interesting point, however, is that it is not so. In fact, as shown in Figure 6, the income composition pattern has changed considerably between 1929 and 1998. In 1998, salary income and business income form the vast majority of the largest incomes. Wage and entrepreneurial income make about 80% of the resources of fractile P99.99-100, and capital income brings a mere 20% income supplement. Therefore, highest incomes at the end of the 20<sup>th</sup> century are very different from the highest incomes in the early part of the century. Before WWII, the highest incomes were overwhelmingly composed of rentiers deriving most of their incomes from their wealth holdings (mainly in the form of dividends). Today, the "working rich" celebrated by Forbes magazine seem to have overtaken the "coupon-clippers".

The IRS published in *Statistics of Income* for the year 1916, statistics classifying tax returns into 36 different occupations by brackets of income. We have combined these 36 occupations into four groups: salaried professions;

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<sup>&</sup>lt;sup>22</sup> We will come back on this issue later on when we look at wage inequality series.

independent professions; business owners; and capitalists and rentiers. The salaried professions are those who receive salaries such as teachers, civil servants, engineers, corporation managers and officials. These individuals presumably derive an important part of their income in the form of wages and salaries. Independent professions are self-employed individuals or individuals working in partnerships such as lawyers, doctors, etc. Business owners are merchants, hotel proprietors, manufacturers, etc. These two groups presumably derive most of their incomes in the form of business income. Finally capitalists and rentiers are bankers, brokers, and those who classify themselves as "capitalists: investors and speculators", 23 and presumably derive most of their income in the form of capital income. It is possible, especially at the very top, for some individuals to be classified in more than one group. We present in Table 2 the distribution of these four occupation groups by fractiles within the top percentile.<sup>24</sup> This table confirms our previous results: the share of the salaried occupation declines steadily within the top percentile from 28% to less than 10% at the very top. The share of independent professions also declines from 20% to 5%. The share of business owners is first increasing (from 30% to 40%) and declining slightly at the very top. The share of capitalists increases sharply especially at the very top where 95% of the top 400 taxpayers fall into this category. This table shows clearly that top corporate executives at the beginning of the century were only a tiny minority within the top taxpayers. In contrast, in 1998, more than half of the very top taxpayers derive a substantial fraction of their income in the form of salary.

Insert Table 2: Occupations by income level within the top percentile, 1916.

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<sup>&</sup>lt;sup>23</sup> At the very top, "capitalists: investors and speculators" form the overwhelming majority of our capitalists and rentiers group.
<sup>24</sup> We have added a fractile for the top 0.001% (top 400 taxpayers in 1916) to emphasize how the

We have added a fractile for the top 0.001% (top 400 taxpayers in 1916) to emphasize how the very top is composed overwhelmingly of "capitalists".

The dramatic evolution of the composition of top incomes seems extremely robust. First, it is totally independent from the erratic evolution of capital gains, which were excluded from Figures 5 and 6, as well as from the income shares series depicted on Figures 1 to 4. As a matter of fact, both 1929 and 1998 were excellent years for the stock market and the share of capital gains in the top fractiles is very large and strikingly close in both years (see appendix series).

Next, it is important to note that the decline of the capital income share is a very long-term phenomenon and is not limited to a few years and a few thousands tax units. Figure 7 shows a gradual secular decline of the share of capital income (excluding again capital gains realizations) in the top 0.5% fractile from the 1920s to the 1990s: capital income made about 55% of total income in the 1920s, 35% in the 1950s-1960s, and 15% in the 1990s. Unsurprisingly, drastic declines occurred during WWI, the great depression, and WWII. But the point is that the share of capital income recovered only partially for these shocks in the late 1940s and started a steady decline in the mid-1960s. Note also that this secular decline is entirely due to dividends: the share of interest, rent and royalties has been roughly flat for the top 0.5% incomes in the long run (note however the upsurge of interest income around 1980 due to high nominal interest rates), while the dividend share has dropped from about 40% in the 1920s to about 25% in the 1950s-1960s and less than 10% in the 1990s.

Insert Figure 7: The capital income share within the top 0.5% in the U.S., 1916-1998

We have also used the tabulations by size of dividends produced by the IRS from 1927 on in order to make sure that the amount of dividends reported by the top dividend earners is indeed characterized by a secular decline. Figure 8 displays the levels of dividends (expressed in 1998 dollars) reported by the top 0.1% tax units (including tax units with no dividends) ranked by size of reported dividends. While average incomes have been multiplied by a factor 3 from 1927 to 1995, the top 0.1% dividends earners reported on average about \$500,000 in

1927-1929 but less than \$240,000 in 1995. The figure shows clearly that top dividend levels were very sensitive to the business cycle, with a sharp decline during the great depression and a quick but short-lived recovery before WWII. But the key point is that high dividend earners never recovered from the shocks of the first half of the century and that their secular decline (relative to average income) became even larger during the second half of the century.

Insert Figure 8: Average real dividends of top 0.1% dividend earners in the U.S., 1927-1995 (in 1998 dollars)

Next, and most importantly, the secular decline of top capital incomes is the consequence of a decreased concentration of capital income and not of a decline in the share of capital income in the economy as a whole. The national accounts series show that the aggregate capital income share has not declined over the century. First, it is well known that factor shares in the corporate sector are fairly flat in the long-run: the labor share has always been around 70-75%, and the capital share has always been around 25-30% (see Figure 9). Next, the share of capital income in aggregate personal income is about 20% both in the 1920s and in the 1990s (see Figure 10). The aggregate capital income share was substantially lower during the 1950s-1960s (about 10-15%), which can be explained by the following two factors. First, retained earnings were particularly low during the late 1920s and even more so during the Great Depression, and they became very important during WWII, before gradually returning to "normal" levels. Second, corporate income tax rates were significantly increased during WWI and WWII, which mechanically reduced distributions to stockholders and thus amplified the "retained earnings" effect. This explains why capital income dropped so sharply during WWI and WWII (see figure 10B).<sup>25</sup> Corporate taxation

<sup>&</sup>lt;sup>25</sup> One can see on figure 10B that the rise of corporate taxation accounts for about 80% of the fall in the dividend share during WWII, while retained earnings account for about 20% of the fall: real corporate profits increased by about 100 billions (in 1998 dollars) between 1940 and 1944 (from 120 billions to 220 billions), real corporate tax liability increased by about 80 billions 1998 \$ (from less than 40 billions to almost 120 billions), real retained earnings increased by about 20 billions 1998 \$ (from 40 billions to 60 billions) and real dividends did not increase at all (around 40 billions

also explains why the dividend share in aggregate personal income is still a bit lower in the late 1990s (about 5%) than what it used to be in the late 1920s (about 6-7%), although factor shares in corporate value-added and retained earnings are approximately the same. In any case, the key point is that these aggregate fluctuations (6-7% in the late 1920s, 5% in the late 1990s) are very small as compared to the enormous decline of top capital incomes. Contrarily to a widely held view, dividends as a whole are still well and alive.<sup>26</sup>

It should be noted, however, that the ratio of total dividends reported on individual tax returns to personal dividends in National Accounts has declined continuously over the period 1927 to 1995, starting from a level close to 90% in 1927, declining slowly to 60% in 1988, and dropping precipitously to less than 40% in 1995. But the point is that this decline is due mostly to the growth of funded pension plans and retirement saving accounts through which individuals receive dividends that are never reported as dividends on income tax returns. For the highest income earners, this additional source of dividends is likely to be very small relative to dividends directly reported on tax returns. When shares are held "directly" (i.e. not through pensions plans or retirement savings accounts), it seems fairly difficult not to report the corresponding dividends on tax returns.<sup>27</sup>

Insert Figure 9: Factor shares in the U.S. corporate sector, 1929-1999 Insert Figure 10: The capital income share in U.S. personal income, 1929-1998 Insert Figure 10B: Dividends, retained earnings and corporate tax in the U.S., 1929-1998

1998 \$ both in 1940 and in 1944). Goldsmith et al. (1954) and Brittain (1966) have already pointed out the important role played by retained earnings and corporate taxation during this period. We have also attempted to construct pre-corporate tax top income shares series, and these series do confirm that the rise of corporate taxation does explain a significant part of the WWIlecline in top income shares (see appendix A4, and appendix Table A9).

the 1930s, basically forces personal holding companies to distribute their dividends.

<sup>&</sup>lt;sup>26</sup> As documented by Fama and French (2000), a growing fraction of firms never pay dividends (especially in the new technology industries, where firms often make no profit at all), but the point is that total dividend payments continue to grow at the same rate as aggregate corporate profits. In particular, note that the "personal holding company surtax", which has been in place since

Estate tax return statistics are an alternative precious source of data to analyze whether there has been a secular decline of large fortunes. The US started imposing an estate tax in 1916. Estate tax returns have been analyzed previously to construct top wealth holding shares (Lampman (1962)). Here, we look only at the real average levels of gross estates by fractiles of decedents aged 25 or above in the U.S. population (ranked by size of estate). We can construct these series for all the years for which the IRS has produced statistics on Estate tax returns by size of estates.<sup>28</sup> This allows us to construct an almost continuous annual series from 1916 to 1997, the latest year available. Figure 11 displays the average level (in 1998 dollars) of gross estates for the top 0.01% of decedents from 1916 to 1997. This represents the largest 225 estates in 1997. Strikingly, the real value of the top estates in the pre-great depression period was similar to the level of the 1990s, namely around \$70 million. As a first approximation, it is reasonable to assume that average wealth of decedents has grown at a comparable pace as GDP per capita which has been multiplied by 3.5 between 1916 and 1997.<sup>29</sup> Therefore, the biggest fortunes have in fact substantially declined in relative terms.<sup>30</sup> To emphasize this point, Figure 12 displays the evolution of average estates in lower fractiles. The average estate in P98-99 has grown continuously and has been multiplied by about 3 between 1916 and 1997. Similarly the average estate in P99-99.5 has been multiplied by about 2.5. Series for other fractiles provided in appendix show that the higher the fractiles, the smaller the growth between 1916 and 1997. This evidence is consistent with our previous results, and strongly suggests that there has been a strong trend of deconcentration of wealth over the 20<sup>th</sup> century.

Insert Figure 11: Average Estate for top 0.01% decedents: 1916-1997 Insert Figure 12: Average Estate P98-99 and P99-99.5, 1916-1997

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<sup>&</sup>lt;sup>28</sup> Lampman (1962) constructed top 1% wealth shares only for a few years between 1922 and 1956 because estimating wealth shares from estate data requires age distributions of wealth decedents that have been tabulated only for a few years by the IRS.

<sup>&</sup>lt;sup>29</sup> Changes in life expectancy, retirement behavior, etc. could have modified life-cycle savings patterns over the century.

The estate tax returns evidence truly reflects a decrease in the concentration of large fortunes only if gross estates accurately reflect the wealth levels of the richest individuals in the economy. Fortunately, the definition of gross estates has changed very little from 1916 to today (see appendix for the details). Another potential source of bias is tax evasion. Whether or not estate tax evasion is as large as what a number of popular accounts tend to suggest is still a controversial issue.<sup>31</sup> In any case, even a substantial level of tax evasion does not necessarily invalidate our findings. Our results would be biased only if the extent of tax evasion had increased drastically over time. There is no a-priori reason to think that tax evasion has increased overtime. First, the levels of estate tax rates, presumably strongly correlated with tax evasion,<sup>32</sup> have been continuously high since 1932 and have in fact been decreasing since the 1940s. Second, many provisions of the estate tax reform of 1976, such as taxation of generation skipping trusts, were devised to close loopholes in the tax law.

## 3.3 Proposed interpretation: the role of progressive taxation

How can we explain the steep secular decline in capital income concentration? It is easy to understand how the macro-economic shocks of the great depression and the temporary fiscal shocks of WWI and WWII have had a negative impact on capital concentration. The difficult question is to explain why large fortunes have not recovered from these shocks. The most natural and realistic candidate for an explanation seems to be the creation and the development of the progressive income tax (and of the progressive estate tax

<sup>30</sup> It is important to keep in mind that estate data reflects the wealth distribution of decedents and thus introduces probably a long lag relative to the current wealth distribution.

<sup>32</sup> See the recent study of Slemrod and Kopczuk (2000).

Wolff (1996) and Poterba (2000) have estimated the extent of estate tax avoidance by comparing the estate tax base to an estimate of what the base should be using the survey of wealth from the 1992 Survey of Consumer Finances. Wolff estimates that the extent of tax avoidance is very large while Poterba finds a small level of tax avoidance. Eller et al. (2001) show that this type of computations is very sensitive to mortality rates assumptions and bequest behavior between spouses.

and corporate income tax). The very large fortunes that generate the top 0.01% incomes observed at the beginning of the 20th century were accumulated during the 19<sup>th</sup> century, at a time where progressive taxes hardly existed and capitalists could dispose of almost 100% of their income to consume and to accumulate.<sup>33</sup> The conditions faced by 20<sup>th</sup> century capitalists to recover from the shocks incurred during the 1914-1945 period were substantially different. Top tax rates have been very high from the end of WWI to the early 1920s but were decreased to mild levels from 1924 to 1932. However, starting in 1933, and continuously until the 1980s, top rates have been set at very high levels. Moreover, starting in 1916, the U.S. has imposed a substantial estate tax. These very high marginal rates applied only to a very small fraction of taxpayers, but the point is that they were to a large extent designed to hit the incomes of the top 0.1% and 0.01% of the income distribution, i.e. the incomes that depend primarily on capital income and capital accumulation. In contrast to progressive labor income taxation which simply produces a level effect on earnings through labor supply responses, it is important to note that progressive capital income taxation has cumulative or dynamic effects because it reduces the net-return on wealth which generates tomorrow's wealth.

It is obviously very difficult to prove in a rigorous way that the dynamic effects of progressive taxation on capital accumulation and pre-tax income inequality have the "right" quantitative magnitude and account for the observed facts. One would need to know more about the savings rates of capitalists, how their accumulation strategies have changed since 1945, etc. Note however that the orders of magnitude do not seem unrealistic, especially if one assumes that the owners of large fortunes, whose pre-tax incomes and lifestyles were already severely hit by the 1914-1945 shocks, were not willing to reduce their consumption down to very low levels. Standard models of capital accumulation indeed predict that capital income taxation has a negative impact on wealth concentration. In the presence of progressive capital income taxation, individuals

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<sup>&</sup>lt;sup>33</sup> During the 19<sup>th</sup> century, the only progressive tax was the property tax, but its level was low (see Brownlee (2000) for a detailed description).

with large wealth levels need to increase their savings rates much more than lower wealth holders to maintain their relative wealth position. Moreover, savings rates for high wealth holders are likely to decrease due to a reduced after-tax rate of return. This behavioral response will exacerbate the decrease in wealth inequality. Piketty (2001a, 2001b) provides simple numerical simulations showing that for fixed saving rates, introducing substantial capital income taxation has a tremendous effect on the time needed to reconstitute large wealth holdings after negative shocks (the effect would still be very large even if the capitalists increase their savings rates somewhat). Piketty (2001b) shows that in the classic dynastic model with infinite horizon, any positive capital income tax rate above a given high threshold of wealth will eventually eliminate all large wealth holdings without affecting, however, the total capital stock in the economy.

Note also that we are not the first to propose progressive taxation as an explanation for the decrease in top shares of income and wealth. Lampman (1962) also favored progressive taxation as one important factor explaining the reduction in top wealth shares. Kuznets (1955) himself explicitly mentioned this mechanism (together with the shocks incurred by capital owners during the 1913-1948 period) before presenting the theory of the Kuznets' curve (based on the idea of a spontaneous downturn in inequality).

Our results suggest that the shocks of the inter-war period and of the wars are the main causes of the reduction in capital income concentration. Large fortunes have not been able to recover yet from these shocks probably because of the high levels of taxation. Obviously, explanations based on technical changes that point out that periods of industrial revolutions such as the end of the 19<sup>th</sup> century or the end of the 20<sup>th</sup> century are more favorable to the making of fortunes than other periods, might also be relevant.<sup>34</sup> Unfortunately, there are not yet rigorous studies trying to quantify the relative contribution of the technological effect versus the fiscal effect on the pattern of top incomes in the US.

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<sup>&</sup>lt;sup>34</sup> DeLong (1998) also points out the potential role of anti-trust law (according to DeLong, anti-trust law was enforced more loosely before 1929 and since 1980 than during the 1929-1980, which might contribute to explain why the U.S. economy was generating fewer billionaires during the 1929-1980 period than before 1929 and since 1980).

We have shown that the share of labor income in the top fractiles has grown continuously over the century. Next section will look specifically at wage income inequality and show that wage inequality has increased substantially in the last three decades and is today as high as in the inter-war period. This suggests that with the decline in tax progressivity since the early 1980s, and furthermore if the estate tax is repealed, the US might experience again in a few decades levels of wealth concentration similar to those of the beginning of the century.

## 4. Top Wages: The Role of Social Norms

We present in Figures 13 to 16 the wage shares for various fractiles of the wage distribution from 1927 to 1998 that we constructed using IRS tabulations by size of wages. There are two caveats to note about these long-term wage inequality series. First, self-employment income is not included in wages and therefore our series focus only on wage income inequality which is not necessarily equivalent to total labor income inequality. As self-employment income has been a decreasing share of labor income over the century, it is conceivable that the pool of wage and salary earners has substantially evolved overtime. Similarly, large changes in the wage force due to the business cycle or wars might affect our series through compositional effects.<sup>35</sup> We discuss in appendix under what conditions these entry effects do or do not affect top shares and we show why the major entry effect of military personnel during WWII does not affect our results. Second, our wage income series are based on the tax unit and not the individual. As a result, an increase in the correlation of earnings across spouses, as documented in Karoly (1993), with no change in individual wage inequality, would generate an increase in tax unit wage inequality.<sup>36</sup>

<sup>35</sup> We explain in appendix why the major entry effect of military personnel during WWII, in fact does not affect our results.

This point can be analyzed using the Current Population Surveys available since 1961 which allows to compute wage inequality series both at the individual and tax unit level. A systematic analysis of this issue is left for future research.

Similarly to the figures for overall income, the pattern of top wage shares over the century is also U-shaped. There are, however, important differences that we describe below. It is useful to divide the period 1927-1998 into three subperiods: the pre-WWII period (1927-1940), the war and post-war period (1941-1969), and the last three decades (1970-1998). We analyse each of these periods in turn.

Insert Figure 13: share of top 10% wage earners.

Insert Figure 14: share of P90-95, P95-99 wage earners

Insert Figure 15: share of top 1% wage earners

Insert Figure 16: shares of P99-99.5, P99.5-99.9, P99.9-100 wage earners

#### 4.1 Wage inequality stability before World War II

Top wage shares show a striking stability in the pre-WWII period. In contrast to capital income, the great depression has not produced a contraction in top wage shares. On the contrary, the high middle class fractiles have benefited in relative terms from the Great Depression. Unfortunately, the IRS has not published tables on wage income over the period 1913 to 1926. However, we can use an indirect source of evidence to document trends in top wage shares in that earlier period. Corporation tax returns require each corporation to report separately the sum of salaries paid to its officers. This statistic, compensation of officers, is reported annually in IRS publications starting in 1917. We report on Figure 17, the total compensation of officers reported divided by the total wage bill in the economy from 1916 to 1960 along with the share of the top 0.5% and P99-99.9 wage earners which are close in level to the share of officer compensation. From 1927 to 1960, officer compensation share and the top 0.5%, and P99-99.9 track each other relatively closely. Therefore, the share of officer compensation from 1917 to 1927 might be a good proxy as well for these top wage shares. This indirect evidence suggests that the top share of wages was also roughly constant, or even slightly increasing from WWI to 1926.

Insert Figure 17: share of officer compensation in total wages and share P99.5-100 or P99-99.9, 1916-1960.

Previous studies have suggested that wage inequality has been gradually decreasing during the first half of the 20<sup>th</sup> century (and in particular during the inter-war period) using series of wage ratios between skilled and unskilled occupations (see e.g., Keat (1960), Williamson and Lindert (1980)). However, it is important to recognize that a decrease in the ratio of skilled over unskilled wages does not necessarily imply an overall compression of wage income inequality, let alone a reduction in the very top wage shares. Given the continuous rise in the numerical importance of high-skill jobs, it is natural to expect ratios such as (high-skill wages)/(low-skill wages) to decline continuously over time, even if wage inequality (measured in terms of fractiles of the whole distribution) does not change.<sup>37</sup> It seems to us that, to cast light on potential compositional biases in occupational ratios, it would be useful to supplement any occupational ratio series with series on the number of workers in the corresponding occupations. From occupational ratios series and number of workers series, it might be possible to construct proxies for P90/P10 type ratios that would be unbiased even in the long-run. With this important caveat in mind, we note however that Goldin and Katz (1999) present new series of white-collar to blue-collar earnings ratios from the beginning of the 20<sup>th</sup> century to 1960 and find that the decrease in pay ratio is concentrated only in the short periods of the two world wars. Their results on occupational pay ratios are thus fully consistent with our top share results.

## 4.2 Sharp drop in inequality during World War II with no recovery

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<sup>&</sup>lt;sup>37</sup> For instance, Piketty (2001a, 2001b) reports a long-run compression from 1950 to 1990 of the ratio of the average wage of managers over the average wage of production workers in France even though wage inequality (measured both in terms of top fractiles wage shares and in terms of P90/P10-type ratios) was constant over that period. On the other hand, the time-series evidence presented by Katz and Autor (1999) on college premium in the U.S. since 1950 appears to be consistent with the pattern of U.S. top wage shares decade by decade.

All wage shares figures display a sharp drop during the four years of WWII from 1941 to 1945.<sup>38</sup> The drop is sharpest, the higher the fractile. The share of P90-95 declines by 16% between 1940 and 1945, but the share of the top 1% declines by more than 30%, and the top 0.1% by almost 35% during the same period. This sharp compression of high wages can fairly easily be explained by the wage controls of the war economy. The National War Labor Board, established in January 1942 and dissolved in 1945, was responsible for approving all wage changes and made any wage increase illegal without its approval. Exceptions to controls were more frequently granted to employees receiving low wages.<sup>39</sup> Lewellen (1968) has studied the evolution of executive compensation from 1940 to 1963 and his results show strikingly that executive salaries were frozen in nominal terms from 1941 to 1945 consistent with the sharp drop in top wage shares that we find.

The surprising fact, however, is that top wage shares did not recover after the war. A partial and short-lived recovery can be seen for all groups, except the very top. But the shares never recover more than one third of the loss incurred during WWII. Moreover, after a short period of stability in the late 1940s, a second phase of compression takes place in the top percentile. It is important to note that this compression phase is longer and most pronounced the higher the fractile. While the fractiles P90-95 and P95-99 hardly suffer from a second compression phase and start recovering just after the war, the top groups shares experience a substantial loss from 1950 to the mid-1960s. The top 0.1% share for example declines from 1.6% in 1950 to 1.1% in 1964. Unfortunately, our tax return evidence, does not allow us to study top wage shares during the inflationary episode of WWI.<sup>40</sup>

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<sup>39</sup> See Goldin and Margo (1992) for a more detailed description.

<sup>&</sup>lt;sup>38</sup> Note that for fractiles below the top percentile, the drop starts from 1940 to 1941.

Occupational ratios evidence presented by Goldin and Katz (1999) suggests that this was also a period of sharp wage compression but that most of that compression was reversed after a few years. From this evidence alone, as discussed above, it is difficult to assess whether top wage shares where higher in the first decade of the 20<sup>th</sup> century than during the inter-war period.

Note also that the overall drop in top wage shares, although very substantial, is significantly lower than the overall drop in top income shares. The top 1% income share dropped from about 18-19% before WWI and in the late 1920s to about 8% in the late 1950s (see Figure 3), while the top 1% wage share dropped from about 8% in the 1920s to about 5% in the late 1950s (see Figure 15). This confirms that capital income has played a key role in the decline of top income shares during the first half of the 20<sup>th</sup> century.

### 4.3 The increase in top shares since the 1970s

Many studies have documented the increase in inequality in the US since the 1970s (see e.g., Katz and Murphy (1992)). Our evidence on top shares is consistent with this evidence. After the WWII compression, the high middle class fractiles below the top percentile recovered slowly and continuously from the 1950s to the 1990s. They reached the pre-WWII level in the beginning of the 1980s. As described above, the recovery process for the top groups did not begin until the 1970s and was much faster than for lower fractiles. In accordance with results obtained from the March Current Population Surveys (see e.g. Katz and Murphy (1992), Katz and Autor (1999)), we find that wage inequality starts to increase in the early 1970s. This is in contrast with results from the May Current Population Surveys (see DiNardo et al. (1996)) suggesting that the surge in wage inequality is limited to the 1980s.

From 1970 to 1984 the share of the top 0.1% doubled from 1% to 2%. From 1986 to 1988, the top shares of wage earners increased sharply, especially at the very top. This sharp increase has been documented by Feenberg and Poterba (1993) and is certainly attributable at least in part to fiscal manipulation following the large top marginal tax rate cuts of the Tax Reform Act of 1986 (see the discussion in Section 3 above). However, from 1988 to 1994, top wage shares stay on average constant, 41 but increase very sharply from 1994 to

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<sup>&</sup>lt;sup>41</sup> One can note the surge in high wages in 1992 and the dip in 1993 and 1994 due to retiming of labor compensation in order to escape the higher rates enacted in 1993 (see Goolsbee (2000)).

1998.<sup>42</sup> While everybody acknowledges that tax reforms can have large short-term effects on reported incomes due to retiming, there is a controversial debate on whether changing tax rates can have permanent effects on the level of reported incomes. As discussed in Section 3 above, Poterba and Feenberg (1993, 2000) looking at top income shares series ending in 1995 argue that the surge after TRA of 1986 looks permanent. However, completing the series up to 1998 casts doubts on the interpretation that tax cuts can have lasting effects on reported wages.<sup>43</sup>

Insert Figure 18: top 100 CEOs' average pay versus average wage from 1970 to 1999.

To cast additional light on this issue, we look at CEO compensation from 1970 to 1999 using tables published by Forbes magazine since 1971 and providing compensation levels and composition for CEOs in the 800 largest publicly traded US corporations. Figure 18 displays the average real compensation level (including stock-option exercised) for the top 100 CEOs from the Forbes list, along with the compensation of the 50<sup>th</sup> and 100<sup>th</sup> ranked CEO, and the salary plus bonus level of the top 10<sup>th</sup> salary and bonus earner among the top 100 CEOs. As a comparison, we also report the average wage of a full-time worker in the economy. This figure provides two interesting results. First and consistent with the evolution of top wage shares, average CEO compensation has increased faster than average wage since the early 1970s. This suggests that the increase in pay gap between top executives and the average worker cannot be attributed only to the tax episodes of the 1980s. Second, the timing of the increase in CEO pay is different from the evidence from tax returns. Contrary to tax return evidence, CEO pay does not seem to increase sharply between

<sup>42</sup> Part of the recent increase in top wages is due to the development of stock-options that are often exercised in a lumpy way. This phenomenon introduces some upward bias in our annual shares at the very top (top 0.1% and above).

shares at the very top (top 0.1% and above).

A rigorous proof of our short-term effect interpretation would require a panel to top wage earners to analyse whether the surge in wages from 1986 to 1988 was mainly the consequence of retiming by a fraction of individuals.

1986 and 1988. Large increases took place in the early 1980s and later in the 1990s.

By the end of the 20<sup>th</sup> century, top wage shares are higher than in the inter-war period. These results confirm our previous findings on overall income. Labor income inequality after a period of compression from 1940 to 1960 has recovered the pre-war level in the 1980s. The current top wage earners should be able to accumulate amounts of wealth much larger than in the earlier decades. If progressive taxation of income and estates does not counteract this new phenomenon, inequality in wealth and capital income should also start to increase sharply during the next few decades.

#### 4.4. Proposed interpretation: the role of social norms

The pattern of top shares over the century is striking: most of the decline from 1927 to 1960 took place during the four years of World War II. The extent of that decline is large, especially for very high wages. More surprisingly, there is no recovery after the war. We are of course not the first ones to document compression in wages during the 1940s. The social security administration in the *Handbook of Old-age and Survivors Insurance statistics* (1949) has shown that the Lorenz curve of wages in 1949 displays much more equality than the 1938 Lorenz curve. In a widely cited paper, Goldin and Margo (1992), using Census micro data for 1939 and 1949, have also noted that the ratios P90/P10 and P50/P10 have declined sharply during that decade. However, our annual series allow us to conclude that most of the decline took place during the key years of the war with no previous decline in inequality before and no recovery afterwards. 44

This evidence cannot be immediately reconciled with explanations of the reduction of inequality based on technical change (Williamson and Lindert (1980)) or changes in the relative supply of educated workers put forward by

Goldin and Margo (1992) and Goldin and Katz (1999). 45 The compression of wages during the war can be explained by the wage controls of the war economy, but how can we explain the fact that high wage earners did not recover after the wage controls were removed? We think that this pattern of evolution of inequality is indirect evidence that non-market mechanisms such as social norms regarding inequality play an important role in the setting of the level of the high salaries. The Great depression and the war have without doubt had a profound effect on social norms regarding inequality. Starting in 1932, during the worst part of the Great depression, the Roosevelt administration decided to increase substantially the top rates of the income tax from 20% to 55%, and then to 75% in 1936. During the war, top rates were increased again to 82% in 1942, and 91% in 1944. During the same period, large redistributive programs such as Social Security, and Aid for Families with Dependent Children were initiated. These strongly redistributive policy reforms show that American society's views on income inequality and redistribution had changed dramatically from 1930 to 1945. It is also important to note that unionisation increased substantially from 1929 to 1950 and that unions have been traditionally in favor of wage compression. In that context, it is perhaps not surprising that the high wages earners which were the most severely hit by the war wage controls were simply not able, because of social and union pressure, to increase their salaries back to the pre-war levels in relative terms. 46 47 Similarly, the huge increase in top wage shares since the 1970s is hard to interpret as the consequence of technical change. First, the increase is very large, and concentrated among the highest

<sup>44</sup> As discussed above, our evidence is consistent with the new occupational ratios series constructed by Goldin and Katz (1999).

<sup>&</sup>lt;sup>45</sup> Goldin and Margo (1992) and Goldin and Katz (1999) also note that WWII had a very strong wage equalization effect. Goldin and Margo (1992) conclude however that much of the compression is due to an increased demand for unskilled labor when educated labor was greatly expanding rather than the direct effects of WWII labor regulations. Goldin and Katz (1999) put more emphasis of the two World War episodes and conclude that most of the narrowing of the wage structure in the first part the century occurred in WWI and WWII.

<sup>&</sup>lt;sup>46</sup> Emphasizing the role of social norms and unionization is of course not new and has been pointed out as important elements explaining the wage compression of the 1940s and 1950s by several studies (see Goldin and Margo (1992) and Goldin and Katz (1999)).

income earners. The fractiles P90-95 and P95-99 experienced a much smaller increase than the very top shares since the 1970s. Second, such a large change in the very top wage earners has not taken place in most European countries which experienced the same technical change as the US. For example, Piketty (2001a, 2001b) documents no change in top wage shares in the last decades in France.<sup>48</sup>

There is a large literature on the determinants of executive and CEO compensation (see Murphy (1999) for a survey). In the standard neo-classical model, executive pay should be determined by marginal productivity. It is obviously very difficult, if not impossible, to measure executive productivity. Therefore, most of the literature focuses not on explaining the absolute levels of executive pay but rather how executive pay varies with observable firm and individual characteristics and outcomes. A recent study by Bertrand and Mullainathan (2000) has shown that CEOs' pay reacts to shocks outside of CEOs control, such as oil price shocks, which suggests that the standard model where compensation equals marginal productivity is excessively naï ve. Many studies have pointed out the role of social norms in wage determination (see e.g. Brown (1977)). Recently, Rotemberg (1996) and Atkinson (1999) have proposed models where individual productivity is imperfectly observed which generate a positive connection between employees' perception of fairness or firms' horizon and income equality.

If social norms play indeed a key role in the determination of top salaries, this suggests that the top wage shares evolution cannot be easily predictable and might experience new large fluctuations in the future. Even though top salary shares may have reached today levels higher than ever before in the American

<sup>&</sup>lt;sup>47</sup> Moreover, as emphasized by Goldin and Margo (1992) and Goldin and Katz (1999), it is possible that the large increase in the supply of college graduates contributed to make the drop in top wage shares persistent.

<sup>&</sup>lt;sup>48</sup> DiNardo et al. (1996) argue that changes in institutions such as the minimum wage and unionization account for a large part of the increase in wage inequality in the U.S. from 1973 to 1992. As emphasized by Acemoglu et al. (2001), it is possible that these changes in institutions have been triggered by previous technological changes which made it impossible to sustain previous labor market arrangements.

history, a public outcry against these high inequality levels does not seem perceptible for the time being.

#### 5. Comparison with Other Countries

To what extent is the U.S. experience representative of other developed countries' long run inequality dynamics? Existing inequality series are unfortunately very scarce and incomplete for most countries, and it is therefore very difficult to provide a fully satisfactory answer to this question. In this section, we concentrate for the most part on the France, U.S, and U.K. comparison, using the French and U.K. inequality series recently constructed by Piketty (2001a, 2001b) and Atkinson (2001). Available evidence suggests that the French experience is fairly representative of other continental European countries.<sup>49</sup>

Insert Figure 19: Top decile in France and the US, 1913-1998

Insert Figure 20: Top percentile in France and the US, 1913-1998

Insert Figure 21: Top 0.1% in France, the U.K. and the US, 1913-1998

There are important similarities between the French, the British, and the American experience displayed on Figures 19, 20, and 21.<sup>50</sup> In all three countries, top capital incomes fell considerably during the 1914-1945 period, and they were never able to come back to the very high levels observed at the eve of WWI or during the 1920s. The timing of the fall, together with the fact that the very top incomes account in all countries for a disproportionate share of the total decline in inequality, suggest that the same basic mechanism has been at work.

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<sup>&</sup>lt;sup>49</sup> One important exception is worth mentioning: the very quick recovery of wage inequality observed in France during the 1950s-1960s seems to be a French specificity (this apparently did not happen in Germany and in Scandinavian countries).

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<sup>&</sup>lt;sup>50</sup> The UK super-tax was characterized by very large exemption levels prior to WWII, and the number of super-tax taxpayers was extremely small. This explains why Atkinson (2001) was not able to construct top decile and top percentile series covering the entire century (only the top 0.1% and higher fractiles series covers the entire century). Consequently, the UK only appears on figure 21 (Atkinson's top 0.1% series ends in 1994, and the 1998 value was extrapolated using Atkinson's top 1% and 0.5% series).

In France, the U.K., and in the U.S., and probably in other developed countries as well, top capital incomes have been hit by very strong shocks during the 1914-1945 period (depression, wars, inflation), and the dynamic effects of progressive taxation on capital accumulation and wealth concentration probably explain to a large extent why large fortunes never recovered from these shocks.

The French experience also shows in a very clear way that there was no spontaneous decline of wage inequality during the first half of the 20<sup>th</sup> century. In France, wage inequality declined during WWI, but it quickly recovered during the 1920s and was pretty stable until WWII. Our U.S. wage inequality series, though starting later than the French wage inequality series constructed by Piketty, <sup>51</sup> are consistent with these findings. <sup>52</sup>

Some important differences between the three countries need however to be emphasized. First, the shocks incurred by top capital incomes during the 1914-1945 period were more pronounced in the U.K. and especially in France than in the United States. This explains why the top percentile income shares dropped from about 20% in 1913 to 7.5% in 1945 in France and from about 18% in 1913 to 11% in 1945 in the United States. This is consistent with the fact that capital owners suffered from physical capital loss during the war in France (and to a lesser extent in the U.K.), while there was no destruction on U.S. soil. <sup>53</sup>

Next, the WWII wage compression was very short-lived in France, while it had long lasting effects in the United States. This explains why the top decile income share was larger in France than in the U.S. during the 1950s-1960s (cf. Figure 19). In France, wage inequality, measured both in terms of top decile wage share, top percentile wage share, etc., and in terms of interdecile ratios P90/P10, P90/P50, P50/P10, etc., appears to have been extremely stable over the course of the twentieth century: the WWI and WWII compressions were very short-lived, and the "over-shooting" widening of the 1950s-1960s was

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<sup>&</sup>lt;sup>51</sup> Another advantage of the French wage data is that it is always based upon individual wages (rather than total tax unit wages): the data comes from employers' wage tax returns (rather than employees' income tax returns), and the wage tax was a separate tax computed at the level of individual wages.

<sup>&</sup>lt;sup>2</sup> Atkinson did not attempt to compute comparable wage series for the UK.

counterbalanced by the minimum-wage-driven compression that took place between 1968 and 1982-1983 (since 1983, wage inequality is pretty stable). The U.S. history of wage inequality looks very different: the WWII compression had long-lasting effects, and then wage inequality increased considerably during the 1980s-1990s, which explains the U.S. upturn of top income shares since the 1970s. The fact that France and the U.S. display such diverging trends seems consistent with the social norms explanation. Note also these diverging trends of the past 30 years explain why the income composition patterns of the rich look so different in France and in the U.S. at the beginning of the 21st century. In France, income composition patterns still look very much like what they did during the interwar period: although wealth concentration is much lower than what it was one century ago, very top incomes are mostly made of dividends. In the US, due to the very large rise of top wages since the 1970s, the coupon-clippers have been overtaken by the CEOs. Such a pattern might not last for very long, however.

# **6. Concluding Comments**

This paper has presented new homogeneous series on top shares of income and wages from 1913 to 1998. Perhaps surprisingly, nobody had tried to extend the pioneering work of Kuznets (1953) to more recent years. Moreover, important wage income statistics from tax returns had never been exploited before. The large shocks that capital owners experienced during the Great Depression and World War II seem to have had a permanent effect: top capital incomes are still lower in the late 1990s than before World War I. We have

<sup>&</sup>lt;sup>53</sup> Note however that the Great Depression was more severe in the US (the WWII fiscal shock was also more severe in the US).

The recent U.K. inequality pattern appears to be increasing and intermediate between the U.S. and France.

<sup>&</sup>lt;sup>55</sup> Unfortunately, Atkinson (2001) does not provide estimates of the composition of income by fractiles in the U.K. However, it is likely that the composition of top incomes before WWII was also similar to France or the U.S., and that the recent increase in top shares in the U.K. is a wage income phenomenon as in the U.S. These points clearly deserve to be analyzed using the British tax statistics.

tentatively suggested that steep progressive taxation, by reducing the rate of wealth accumulation, has prevented the large fortunes to recover fully yet from these shocks. The evidence for wage series shows that top wage shares were flat before WWII and dropped precipitously during the war. Top wage shares have started recovering from this shock since the 1960s-1970s and are now higher than before WWII. We have emphasized the role of social norms to explain the pattern of wage shares.

International comparisons show that, although there exists some important cross-country variations (in particular, the sharp inequality upturn observed in the U.S. since the 1970s did not occur in Continental Europe), a number of key conclusions regarding long-run inequality dynamics do hold for all developed countries. In particular, the evidence presented in this paper, together with the evidence on France by Piketty (2001a, 2001b) and the U.K. by Atkinson (2001), strongly suggest that there was no such thing as a "spontaneous", Kuznets-like decline of inequality in developed countries during the first half of the 20<sup>th</sup> century. The inequality decline was to a large extent accidental (depression, inflation, wars) and amplified by political factors (progressive taxation). This does not mean that the current rise of inequality will not be followed by a mechanical downturn during the first few decades of the 21st century: this is simply saying that such a mechanical downturn apparently never occurred in the past. Our proposed interpretation also suggests that the decline of progressive taxation observed since the early 1980s (especially in the U.S. and in the U.K.) could very well spur a revival of high wealth concentration and top capital incomes during the next few decades.

Finally, we stress that more research is needed to provide a fully rigorous account of long-run inequality dynamics. We hope that our attempt to construct homogeneous long time series will help researchers to formulate other hypotheses or explanations. We also think that there are still important sources of empirical evidence that could fruitfully be used to cast light on the evolution of income and wage inequality in the United States and other developed countries.

### **APPENDIX**

#### Appendix A: Income Inequality Series

This appendix describes the series of shares of top income fractiles that we have constructed using tax return data. The U.S. income tax started in 1913 and 1998 is the most recent year for which data is available. Starting in 1916, the Internal Revenue Service (IRS) has published detailed statistical tables on tax returns in *Statistics of Income: Individual Income Tax Returns* (the tables for 1913-1915 were published in the *Annual Reports of the Commissioner of Internal Revenue*). These annual 1913-1998 tables provide information on the number of tax returns, and the amounts reported for each source of income, for a large number of income brackets. Starting in 1960, the IRS has constructed large micro-files of tax returns oversampling high incomes. These micro-files were constructed annually since 1966, and they are publicly available until 1995. These annual 1966-1995 micro-files allow us to check that our methods using published tables provide accurate results.

#### A1. Computing total number of tax units and total income

The total number of tax units in the U.S. population (had everybody been required to file a tax return), displayed in col. (1) of table A0, has been computed using census data on the marital structure of the population: it is defined as the sum of the total number of married men; the total number of widowed and divorced men and women; and the total number of single men and women aged 20 or over.<sup>58</sup> Income fractiles are defined with respect to this total number of tax

<sup>57</sup> No micro-file is available for 1961, 1963 and 1965, and the micro-files for 1960, 1962 and 1964 do not include as many tax return variables as the files for the following years (this applies in particular to the 1960 file). Therefore we have mostly relied on published tables for the 1960-1965 period (the 1960, 1962 and 1964 have been used for consistency checks only).

For 1913-1915, the tables only provide information on the number of tax returns for a large number of income brackets.

57 No migra file in available for 1001, 1002

The marital structure data for pre-1970 censuses was taken from *Historical Statistics of the U.S. – Colonial Times to 1970* (1975); the marital structure data for 1980, 1990, 1995 and 1998 was taken from *Statistical Abstract of the U.S.* (1996 and 1999) and from *Current Population Reports P20-514* (1998). Intercensal years were interpolated by assuming that the average size of tax units follows linear intercensal trends. We checked the accuracy of our procedure by computing the total number of individuals represented on tax returns and by dividing this number by total U.S. population, and we found virtually the same pattern for this ratio as for the (total number of tax returns)/(total number of tax units) ratio.

units. For instance, in 1998, with a total number of tax units equal to 130.945 million, there are 13.0945 million tax units in the top decile, 1.30945 million tax units in the top percentile, etc. Our theoretical definition of tax units implicitly assumes that married women never file separate returns (in practice, the number of married women filing separate returns is positive but fairly small (about 1% of all returns in 1998)). Before 1948, however, married couples with two earners had interest in filing separately because there was a single schedule that applied to all tax units (married filing jointly, married filing separately, or singles). As a result, the number of returns for married women filing separately was higher (around 5-6%). We did correct for this in our income series so as to make sure that there is no discontinuity between 1947 to 1948.<sup>59</sup>

Table A0 also indicates the total number of tax returns actually filed (col. (2)), as well as the fraction of tax units filing a tax return (col. (3)). Since 1944, the vast majority of tax units have been filing tax returns, and the fraction of tax units actually filing has generally been around 90-95%. But before WWII, due to large exemption levels, this fraction was usually around 10-15%. The top decile is therefore the biggest fraction for which we can construct homogeneous estimates for the entire period, and this is why we limit our analysis to the top decile of the income distribution. In the early years of the income tax, from 1913 to 1916, the exemptions were even higher and we have to restrict the estimates to the top percentile.

Total income for the entire population has been computed by using national accounts. We call tax return gross income the gross income definition reported on tax returns less capital gains realizations. Tax return gross income is defined as Adjusted Gross Income (AGI) plus adjustments less capital gains included in AGI. During the post-WWII period, the ratio between total tax return gross income reported on tax returns and total personal income estimated in national accounts has been trending downward (from about 75-80% in the late 1940s to about 65-70% in the 1990s). This trend is due for the most part to the growth of non-taxable government transfers (non-taxable health care benefits. non-taxable and partially non-taxable social security benefits, etc.) because the ratio between total tax return gross income reported on tax returns and total personal income minus transfers estimated in national accounts has been fairly stable since the late 1940s (around 75-80%). The total income series (excluding capital gains) reported on table A0 (col. (4)) was constructed as follows. For the 1944-1998 period, we have adjusted upwards the total tax return gross income series so as to take into account the fact that a small fraction of tax

<sup>59</sup> The magnitude of the correction was computed by using IRS tables by filling status. In effect, our 1913-1947 top income levels and top shares series were adjusted upwards by about 2.5% in order to correct for this "married women" bias. We made a similar correction for our wage series.

<sup>&</sup>lt;sup>60</sup> In addition to non-taxable government transfers, non-taxable personal income includes imputed rent; interest and dividends received by pension plans, life insurance carriers and non-profit institutions; non-taxable employer and employee contributions to pension plans, health insurance, day care, etc.; capital and inventory adjustments (NIPA capital consumption is generally smaller than IRS capital consumption, so that NIPA entrepreneurial income is generally larger than IRS entrepreneurial income); etc. See Park (2000) for a detailed description of the differences between NIPA personal income and individual tax return income.

units did not file tax returns. We have imputed to non-filers a fixed fraction of filers' average income (50% in 1944-1945, and 30% thereafter). The resulting series fluctuates between 77% and 83% of total personal income (minus transfers), and is about 2-3% higher than total tax return gross income. For the 1913-1943 period, our total income series (excluding capital gains) is equal to exactly 80% of total personal income (minus transfers).

Average income per tax unit (table A0, col. (5)) was computed by dividing our total income series (table A0, col. (4)) by the total number of tax units (table A0, col. (1)). We have also computed a total income series (including capital gains) (table A0, col.(6)) by adding to col. (4) the total, pre-exclusion amount of all capital gains reported on tax returns. <sup>64</sup> The corresponding average income series is reported on col. (7). Note that all money amounts in current dollars were converted in 1998 dollars by using the CPI series reported on col. (8) of table A0 (this series was used to convert all current dollars series computed in this paper into 1998 dollars series, so that interested readers can easily compute current dollars series). <sup>65</sup>

### Insert Table A0

We have made no adjustment for changes in the size of tax units. This is unlikely to affect our results in a significant way. The average size of tax units was much larger in the 1910s (nearly 2.6) than in the 1990s (less than 2.1), <sup>66</sup> but published IRS tables and IRS micro-files show that this secular decline had approximately the same magnitude for all income brackets. Note that Kuznets (1953) did attempt to make adjustments for tax unit size: Kuznets' 1913-1948 top

Except in 1944-1945, where it is about 11-13% higher (because of the lower fraction of tax units actually filing).
We chose not to take a fixed fraction of 1944-1998 personal income (minus transfers) for the

We chose not to take a fixed fraction of 1944-1998 personal income (minus transfers) for the following reason: although our resulting series is about 80% of personal income (minus transfers) all along the 1944-1998 period (with no trend), there exists a number of short-run fluctuations that cannot be fully accounted for by changes in the fraction of tax units actually filing (for instance, tax return gross income grows less than personal income in the mid-1980s, and catches up in the late 1980s).

<sup>63</sup>Official NIPA personal income series start in 1929 (we have used the latest NIPA series released on www.bea.doc.gov), and we have completed the NIPA series by linking it to the 1913-1929 personal income series published by Kuznets (1941, 1945). Note that the total income series used by Kuznets (1953) to compute top income shares over the 1913-1948 period is higher than ours: his only adjustment to personal income is imputed rent (see Kuznets (1953, pp. 570-577)), which seems insufficient to us. For instance, in 1948, Kuznets' total income denominator is equal to 202 billions current dollars, although total 1948 tax return gross income is equal to 161 billions current dollars (about 80% of 202 billions), which seems implausible: this would imply that non-filers have higher average incomes than filers.

<sup>64</sup> We did not try to estimate the amount of capital gains received by non-filers. Note also that we

We did not try to estimate the amount of capital gains received by non-filers. Note also that we have no capital gains estimates for 1913-1915.

<sup>65</sup> This CPI series was constructed by linking the 1913-1970 CPI series (all items) published in *Historical Statistics of the U.S. – Colonial Times to 1970* (1976) and the 1970-1998 CPI series (all items) published in the *Economic Report of the President* (2000).

<sup>66</sup> Average tax unit size declined between the 1910s and the 1940s (from 2.6 to 2.3), increased between the 1940s and the 1960s (from 2.3 to 2.6), and declined between the 1960s and the 1990s (from 2.6 to 2.1).

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income shares series are based on individuals and not tax units. As the published IRS tables are based on tax units and not individuals, Kuznets divided the total income reported in each income bracket by the total number of individuals represented by all tax returns in that bracket. This process would generate substantial re-ranking, as a tax return of a widow with no dependents reporting \$10,000 would be replaced by an individual with \$10,000 of income while a family of four with \$10,000 of income would be replaced by four identical individuals with \$2,500 of income each. However, Kuznets did not correct for the reranking and thus misclassified in the top shares large families with high total income but moderate income per capita. As a result, the shares estimated by Kuznets are lower than ours in levels. <sup>67</sup> Note however that the pattern over years is reassuringly almost identical.

Finally, it is important to keep in mind that tax units are smaller than households. In 1998, there were approximately 1.3 tax units per household (on average), i.e. 131 millions tax units vs. 101 millions households. <sup>69</sup> This means that incomes per household are in 1998 about 30% larger than incomes per tax units (on average). For instance, average income per tax unit was less than \$39,000 in 1998 (see table A0, col.(5)), while average household income was about \$51,000. Note however that this is unlikely to affect top shares in a significant way (assuming that the average number of households per tax units is approximately the same for all income brackets).

## A2. Computing top fractiles income shares

We have constructed 3 sets of top income shares series that treat differently realized capital gains.

In variant 1 (Table A1), we exclude completely capital gains: tax returns are ranked by income excluding capital gains, and top fractiles incomes exclude capital gains. Income shares were computed by using the total income (excluding capital gains series) series (table A0, col. (4) and (5)).

<sup>67</sup>This is amplified by the fact that Kuznets' total income denominator is slightly higher than ours (see above), and by the way Kuznets treated capital gains (see below).

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Our methodology also differs from that used by Feenberg and Poterba (1993, 2000) to compute their 1951-1995 top income shares series: Feenberg and Poterba choose as base year 1989, and then compute the number of tax returns who are in the top 0.5% of the tax return distribution for that year, and use the U.S. adult population series to compute the number of "top income recipients" tax returns for other years. This methodology is innocuous in the short run, but can produce important biases in the long run because the average tax unit size declines over time, and this is also true if one looks at the average number of adults per tax unit. Note also that Feenberg and Poterba simply use total AGI as their total income denominator.

<sup>&</sup>lt;sup>69</sup> The average number of tax units per household declined from about 1.7 in the 1910s to about 1.2-1.3 in the early 1980s, and increased somewhat since then.

<sup>70</sup> Average household income was about \$52,000 in 1998 according to the Current Population

Average household income was about \$52,000 in 1998 according to the Current Population Survey (CPS) (cf. "Money Income in the United States 1999", <u>Current Population Report P60-209</u> (September 2000)). Note that total CPS income is virtually identical to our total income denominator (CPS income does include a number of cash transfers that are excluded by our tax income concept, but CPS income probably suffers from under-reporting at the top).

In variant 2 (Table A2), tax returns are ranked by income excluding capital gains, but we add back the average capital gains accruing to each fractile when we compute top fractiles incomes. Income shares were computed by using the total income (including capital gains series) series (table A0, col. (6) and (7)).

Finally, in variant 3 (Table A3), we include capital gains both when we rank tax returns and when we compute top fractiles incomes. Income shares were computed by using the total income (including capital gains series) series (table A0, col. (6) and (7)).

The concept of capital gains used to compute top fractiles incomes in variants 2 and 3 and to rank tax returns in variant 3 is always "full capital gains", i.e. total pre-exclusion capital gains (see below).

The top fractiles incomes series used to compute our top fractiles income shares series are reported on table A4 (variant 1), table A5 (variant 2) and table A6 (variant 3). For instance, table A4 indicates that the average top decile income was \$160,535 in 1998, and the top decile income share reported on table A1 for 1998 (41.44%) can be computed by dividing \$160,535 by the average income reported on table A0 for 1998 (160,535/38,739=4.144).

Whether one should use variants 1, 2 or 3 is a matter of perspective. In the text of this paper, we have focused on variant 1 series, so as to get rid of the very strong short-term volatility induced by capital gains. If one wants to include capital gains, then variant 2 series are probably the most meaningful series from an economic viewpoint: capital gains are typically very lumpy (they are realized once every few years), so that ranking tax returns by income including capital gains leads to artificially overestimate very top income levels. Note that variant 1 top income shares are always below variant 2 top income shares, and that variant 2 top income shares are always below variant 3 top income (see Figure 4B).

## Insert Tables A1, A2, A3, A4, A5 and A6

The top fractiles incomes series reported on tables A4, A5 and A6 were constructed as follows. For the 1966-1995 period, the series were computed directly from the IRS micro-files. The micro-files easily allow us to rank tax returns by income excluding capital gains (variants 1 and 2) or by income including full capital gains (variant 3) and to compute top fractiles incomes without capital gains (variant 1) or with full capital gains (variants 2 and 3). For the 1913-1965 and 1996-1998 periods, the series were estimated from the published IRS tables, according to the following methodology (all computations are available from the authors upon request):

(i) Published IRS tables rank tax returns by net income (1913-1943) or by AGI (1944-1998). These tables use a large number of income brackets (the thresholds P90, P95, P99, P99.5, P99.9 and P99.99 are usually very close to one of the income bracket thresholds), and one can use standard Pareto interpolation techniques in order to estimate the top fractiles income thresholds and income levels of the tax unit

distribution of net income (1913-1943) and AGI (1944-1965 and 1996-1998).<sup>71</sup> We also did the same computations for the 1966-1995 period in order to compare the series estimated from Pareto interpolation with the series computed from micro-files, and we found that both series never differ by more than 1% (the gap is usually less than 0.1%).<sup>72</sup>

(ii) For a number of years before WWII, the filing threshold is so high that less than 10% of tax units actually file returns (see table A0, col. (3)). However, the filing thresholds for singles is substantially lower than the filing threshold for married households. Thus from 1917 on, it is always the case than more than 10% of single tax units are actually filing returns, although for some years less than 10% of married tax units are filing returns. As a result, the number of married tax units in the bottom brackets is too low for some years and needs to be adjusted upward. This problem of missing returns is especially acute for years 1925 to 1931. We adjusted for missing married returns using a simple extrapolation method, based on the assumption that marital ratios (i.e. ratios of married tax units to single men not head of households tax units) across income brackets is constant over years.<sup>73</sup> We have done

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We used the same Pareto interpolation technique as Piketty (2001a, 2001b). That is, in order to estimate a given fractile threshold (P90, P95,..,P99.99), we choose the income bracket threshold s such that the fraction p of tax units with income above s is as close as possible to the given fractile; we note b the ratio between the average income of all tax returns above s and s; we then compute a=b/(b-1) and  $k=s p^{(1/a)}$ , which allows us to compute the given threshold income by using the Pareto formula  $1-F(y)=(k/y)^a$  (where F(y) is the cumulative distribution function); top fractiles average incomes (P90-100, P95-100,...,P99.99-100) are then obtained by multiplying the corresponding fractile threshold by b (in practice, the result barely depends on the interpolation threshold s, as long as s is not too far from the given fractile); intermediate fractiles average incomes (P90-95, P95-99, etc.) are obtained by difference. This interpolation technique is slightly different from the one used by Feenberg and Poterba (1993) and delivers more precise results (Feenberg and Poterba only use the slope between two consecutives thresholds s, and do not use the information embodied in the b coefficients).

<sup>&</sup>lt;sup>72</sup> Atkinson (2001) recently pointed out that estimation errors induced by Pareto interpolation techniques are sometimes non-negligible. But this is the case only when the raw data does not include sufficiently many income brackets. The only non-negligible (more than 1%) estimation error that we noticed over the 1966-1995 period is related to fractile P99.99-100 during the 1990s: the top income bracket used in the IRS tables of the 1990s is not high enough (1 million dollars and more, i.e. more than 0.1% of all tax units in the late 1990s), and this interpolation threshold yields estimates of P99.99-100 that are overestimated by about 5% (in 1995); therefore we reduced by 5% the corresponding estimates for 1996-1998, years for which micro-files are no longer available.

More precisely, we assume that the ratio of marital ratios over two adjacent brackets is constant from year to year. We can successfully test this assumption comparing these ratios for years with low filing thresholds and where missing returns is not an issue. Thus we use the closest years for which the filing threshold is low enough so that all the married tax units with income in that particular income bracket file a return to compute these marital ratios. We then extrapolate the marital ratio for a year with high filing threshold in a low bracket using the bracket just above for that year and the marital ratios for the year with complete returns. We compute then the expected number of married tax units in each bracket in high filing threshold years. We obtain thus the missing number of returns in each bracket or equivalently a multiplier factor by

some sensitivity analysis using both years 1924 and 1932 as the base year. The alternative multipliers we obtain with year 1924 instead of year 1932 are close and the final series estimates of shares and income levels for the bottom fractile P90-95 are almost identical. Our final estimates are obtained using a moving average of the multipliers based on years 1924, and 1932.<sup>74</sup>

- The 1913-1965 and 1996-1998 raw series obtained from Pareto (iii) interpolation were corrected in various ways. First, the raw series were adjusted upwards in order to include net income deductions (1913-1943) and AGI adjustments (1944-1965 and 1996-1998) (AGI adjustments were also included in the 1966-1995 micro-files computations). In practice, AGI adjustments (IRA contributions, moving expenses adjustment, self-employment tax, etc.) are pretty small (about 1% of AGI, up to 4% in the mid-1980s), and their importance declines with income within the top decile. Net income deductions (charitable gifts, interest paid, local taxes, etc.) are higher (about 10%) of net income), and their importance increases with income within the top decile (up to 15-20% for fractile P99.99-100). We adjust our raw series for threshold levels and average income in each fractile using multiplicative factors so that our new series correspond to the level of gross income (before adjustment or deductions) reported in the published tables for each fractile.<sup>75</sup>
- (iv) Next, and most importantly, corrections need to be made to the 1913-1965 and 1996-1998 raw series in order to ensure that capital gains are properly taken into account. The tax treatment of capital gains has changed many times since 1913: from 1913 to 1933, 100% of capital gains were included in net income (there was no capital gains exclusion); from 1934 to 1937, 70% of capital gains were included in net income (i.e. 30% of capital gains were excluded); from 1938 to 1941, 60% of capital gains were included in net income (i.e. 40% of capital gains were excluded); from 1942 to 1978, 50% of capital gains were included in net income (1942-1943) or in AGI (1944-1978) (i.e. 50% of capital gains were excluded); from 1979 to 1986, 40% of capital gains were included in AGI (i.e. 60% of capital gains were excluded); from 1987 to 1998, 100% of capital gains were included in AGI (there was again no capital gains exclusion). The income to compute

which we must adjust the actual number of returns to obtain the real number of tax units. We use the same multiplier factors to adjust the dollar amounts reported in each bracket.

<sup>76</sup> These exclusion rates actually applied to long term capital gains only, and the definition of "long term" capital gains (6 months, 12 months or 18 months) has changed many times (from 1934 to

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<sup>&</sup>lt;sup>74</sup> For example, for year 1925, our multiplier is (6/7)\*multiplier 1924 + (1/7)\*multiplier 1932, etc.

<sup>75</sup> In principle, going from net income (or AGI) to gross income might induce reranking. However, using the micro-files for 1966-1995, we have checked that this reranking has small effects on our final results and thus we do not attempt any correction for that reranking effect.

"variant 1" series from the raw series, one could simply deduct for each fractile the share of capital gains estimated from IRS composition tables. This is the method Kuznets (1953) adopted in order to compute his 1913-1948 series.<sup>77</sup> The problem is that IRS tables rank tax returns by net income or AGI (including the post-exclusion amount of capital gains), and that re-ranking can be substantial at the very top: in the extreme case where very top incomes of the net income or AGI distribution are only made of capital gains, then the deduction of capital gains would lead to the conclusion that the very top incomes of the income (excluding capital gains) distribution are equal to 0. Kuznets did not try to correct for re-ranking, which means that his estimates of top income shares are biased downward. 78 The micro-files allowed us to compute the magnitude of the corrections that one needs to apply in order to obtain unbiased "variant 1" series: the corrections are negligible for fractiles P90-95 and P95-99, but the income levels of fractiles P99-99.5 and P99.5-99.9 need to be increased by about 1%, the income level of fractiles P99.9-99.99 needs to be increased by about 2%. Most importantly, the top fractile P99.99-100 requires a more complicated correction method. We increase the income level of fractile P99.99-100 by about 40% of the capital gains share computed for that fractile.<sup>79</sup> These corrections coefficients were obtained from comparing micro-file unbiased estimates from the period 1966-1995 to estimates obtained from published tables. For the period 1966-1995, the correction coefficients are extremely stable (in spite of the huge variations in capital gains share), and it seems reasonable to use them for the 1913-1965 and 1996-1998 periods. Finally, one can compute "variant 2" series from these unbiased "variant 1" series using our capital gains shares series by fractiles of income excluding capital gains (see section A3 and table A8 below; these capital gains series also illustrate the importance of re-ranking at the very top).

(v) The construction of "variant 3" series from raw series raises similar issues. For the 1913-1933 and 1996-1998 period (when there was no capital gain exclusion), there is no re-ranking issue. But for the 1934-1965, one cannot simply add to the raw series the excluded amount of

1941, there were several exclusion rates, and the 30% and 40% figures that we use for our estimation are the approximate average exclusion rates over all capital gains). We did use all the relevant information given in IRS tables and in the micro-files in order to compute the exact exclusion rates for each fractile. In practice however, the vast majority of capital gains always falls under the most favorable tax regime, so that the exclusion rates given above apply to most capital gains

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<sup>&</sup>quot;Kuznets decided to exclude completely capital gains from his series, and he started by deducting capital gains from net income and AGI for each income bracket before applying Pareto interpolation techniques (Kuznets did not try to compute series including capital gains).

<sup>&</sup>lt;sup>78</sup> See above for other problems explaining why Kuznets' estimates are biased downward.

<sup>79</sup> For instance, in 1995, when the capital gains share is 38.4% for fractile P99.99-100 (see section A3 and table A8 below), the correction coefficient is about 15,4% (0.4x38.4=15.4).

capital gains for each fractile: this addition alters the ranking of tax returns, and ignoring this re-ranking issue would lead to "variant 3" series that are downwardly biased. The micro-files allowed us to compute the magnitude of the corrections that one needs to apply in order to obtain unbiased "variant 3" series: the corrections are negligible for fractile P90-95, but the income levels of fractiles P95-99 and P99-99.5, need to be increased by about 1%, the income level of fractiles P99.5-99.9 and P99.9-99.99 need to be increased by about 2%, and the income level of fractile P99.99-100 need to be increased by about 4% (irrespective of the capital gains share). These corrections coefficients were again obtained from the analysis of microfiles over the period 1966-1995. This analysis showed that applying the simple correction rule described above gave excellent results for all years 1966-1995, and it seems reasonable to use the same rule for the 1913-1965 and 1996-1998 periods. Note that the corrections required are smaller than the corrections coefficients associated to "variant 1" series (especially at the very top): that is, re-ranking is more important when one goes from ranking by income including post-exclusion capital gains to ranking by income excluding completely capital gains than when one goes from anking by income including the taxable fraction of capital gains to ranking by income including full capital gains.

## A3. Computing top fractiles income composition

We have also constructed top fractiles income composition series (Table A7 and Table A8). The composition series reported on table A7 indicate for each income fractile the fraction of total income (excluding capital gains) that comes from the various types of income (excluding capital gains). We consider 5 types of income: wage income; entrepreneurial income; dividends; interest; and rents. Wage income includes wages and salaries as well as pensions and annuities. Entrepreneurial income includes business, farm, partnerships and small corporations (S corporations) income. Dividends include general dividends and dividends received through partnerships and fiduciaries. Interest includes taxable interest only. Rents include rents, royalties and fiduciary income. We

 $^{80}$  The share of pensions and annuities in total AGI has increased continuously from less than 1% in the 1960s to more than 6% in the late 1990s, but it has always been less than for 4% for the top decile and less than 2% for the top percentile.

Data on tax-exempt interest is scarce and incomplete, and we did not attempt to take tax-exempt interest into account.

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From 1936 to 1953, dividends from tax statistics do not include dividends distributed to partnerships and fiduciaries. This discontinuity was relatively easy to correct: dividends distributed to partnerships and fiduciaries display a very stable pattern (in particular, the 1936 downward jump in the pattern of dividend share by income fractile is virtually the same as the 1954 upward jump), and we simply added them back to the dividends total. Similarly, dividends and interest are lumped together by tax statistics in 1944-1945, but this was easy to correct for because the pattern of interest share by income fractile was very stable at that time.

Because the pattern of interest i

have excluded from these composition series a number of small income categories such as alimony, taxable social security benefits, taxable unemployment insurance benefits, "other income", etc. Taken all together, these small categories never make more 2% of the total income of the top decile (they usually make less than 1%), and even less at the level of the top percentile, and excluding them simplifies the reading of our composition series (these small income categories were taken into account when computing top income levels and top income shares in total income).83 For the 1966-1995 period, the composition series were computed directly from the IRS micro-files. For the 1916-1965 and 1996-1998 periods, the composition series were estimated from the published IRS tables indicating for each income bracket not only the number of taxpayers and the total amount of their taxable income but also the separate amounts for each type of income. The composition of income within each fractile was estimated from these tables using a simple linear interpolation method. Such a method is less satisfactory than the Pareto interpolation method used to estimate top income levels (no obvious law seems to fit composition patterns in a stable way), but micro-files show that the resulting estimates are still relatively precise: estimation errors are always less than 2 points, and they are usually much smaller (thanks to the fact that IRS tables are usually based on a very large number of income brackets).

The composition series reported on table A8 indicate for each income fractile the fraction of total income (including capital gains) that takes the form of capital gains. The concept of capital gains used to compute these series is again "full capital gains", i.e. total pre-exclusion capital gains. We provide two sets of estimates on table A8: capital gains shares were computed both for fractiles of total income (excluding capital gains) (this corresponds to the "variant 1" and "variant 2" series described in section A2 above) and for fractiles of total income (including capital gains) (this corresponds to the "variant 3" series described in section A3 above). For the 1966-1995 period, both capital gains shares series were computed directly from the IRS micro-files. For the 1916-1965 and 1996-1998 period, linear extrapolation from published IRS tables yields capital gains shares series for fractiles of net income or AGI (including the post-exclusion amount of capital gains), and one needs to correct these raw estimates in order to take re-ranking into account (see section A2 above). That is, capital gains shares are smaller for fractiles of income excluding capital gains than for fractiles of income including post-exclusion capital gains, and capital gains shares are smaller for fractiles of income including post-exclusion capital gains than for fractiles of income including pre-exclusion capital gains. Micro-files allowed us to compute the magnitudes of these corrections coefficients.<sup>84</sup> The capital gains shares series reported on table A8 demonstrate that re-ranking is substantial at the very top: in 1995, 38.4% of total income reported by the fractile P99.99-100

<sup>&</sup>lt;sup>83</sup> The fact that these small income categories almost do not matter for top incomes implies that changes in tax law regarding those items (e.g. changes in the definition of taxable social security benefits) have negligible consequences for our income levels and shares series.

84 The corrections formulas for capital gains shares that we inferred from micro-files are more

complex than those applied to correct income levels, and they are available upon request.

of the distribution of income including capital gains takes the form of capital gains, but the capital gains share falls to 13.5% when one looks at the fractile P99.99-100 of the distribution of income excluding capital gains. Finally, note that the composition series (excluding capital gains) reported on table A7 were computed for fractiles of net income or AGI (including the post-exclusion amount of capital gains), but that the micro-files demonstrate that re-ranking has relatively small effects on non-capital gains income composition by fractile. For instance, in 1995, if one looks at the fractile P99.99-100 of the distribution of AGI (i.e. including 100% of capital gains), one can see that the wage share is 35.8%, the entrepreneurial income share is 38.8% and the dividend share is 10.2% (see table A7); with the fractile P99.99-100 of the distribution of income excluding capital gains, the wage share would be about 0.5 point higher, the entrepreneurial income share 1 point higher and the dividend share 1.5 points smaller. That is, shareholders are more likely than CEOs and entrepreneurs to have large capital gains, but the re-ranking is pretty small, and we therefore decided to compute all series reported on table A7 for fractiles of net income and AGI and to make no correction for re-ranking.

Insert Table A7 and Table A8

## A4. Computing pre-corporate tax top shares

In order to assess the effect of the corporate tax on top shares and analyze to what extent the reduction in top shares during the wars is the consequence of the corporate fiscal shock, it is useful to estimate top shares before the corporate income tax. In order to compute these shares, we make the following strong assumption. We assume that, in the absence of corporate taxes, the payout ratio (ratio of dividends to corporate net profits) would remain the same. As a result, removing the corporate tax with average rate tcorp would simply multiply dividend distributions by a factor 1/(1-tcorp). We estimate the average corporate income tax rate by taking the ratio of total corporate tax liability (net of investment and foreign tax credits) to total corporate taxable income (which is defined as gross profits minus depreciation allowances). To obtain pre-corporate top shares, we multiply the dividend amounts in each fractile (obtained from the composition table A7) by 1/(1-tcorp). We then obtain new amounts for each fractiles (we exclude capital gains as in Table A1), To obtain the shares, we use as denominator total personal income plus total extra dividends due to the removal of the corporate tax. These results can be compared to Table A1. Note that our estimates are slightly biased downward because we do not do any correction for re-ranking (see Appendix A3).

Insert Table A9: Pre-corporate income tax top shares, 1913-1998.

### **Appendix B: Wage Inequality Series**

This appendix describes the series of shares of top fractiles salary earners that we have constructed using the tables published in *Statistics of Income* by size of salary since 1927.

# B1. Computing total number of tax units with wages and total wages in the economy

The sum of total wages in the economy used to compute shares is obtained from National Accounts 1929-1998, wages and salaries, and does not include employers' health insurance and employers' social security contributions. Total wages for years before 1929 are obtained from Kuznets (1953) using a constant multiplier factor so that 1929 matches the NIPA figure. This total wage series includes both government employees and military personnel salaries. The total number of tax units with wage income in the full population is estimated as the number of part-time and full workers from National Accounts (which includes government and military employees) less the number of wives that are employees. Military wages and workers form a substantial part of total wages and workers from 1943 to 1945. However, excluding military wages and military personnel hardly changes the estimates of top shares, even during the war, because few military salaries are in the top fractiles and the average military salary is substantially smaller than average wage (see below).

Before 1948, as two wage earners had incentives to file separately (see Appendix A), the tax return statistics on wages reflects individual wages rather than family wages. As a result, using the same definition of tax units as described above produces a downward bias for top wage shares before 1947 and thus an artificial positive jump in top shares between 1947 and 1948. We correct for this discontinuity as follows. First, for years 1927 to 1947, we temporarily redefine the total number of tax units with wages as the total number of part-time and full-time employees from National Accounts (that is, we add back the working wives). Second, we then compute top shares and levels using this alternative definition for the total number of tax units. The wage levels and thresholds that we obtain for 1927 to 1947 correspond to individual wages (and not family wages) and thus are smaller than the levels and thresholds after 1948. But fortunately, shares computed at the individual level before 1948 and at the tax unit level after 1948 do not produce a discernible jump in the series. Third, in order b correct the discontinuity in levels and thresholds, we multiply the levels and thresholds that we obtain before 1948 by the ratio of the total number of individual tax units (new definition) to the total number of family tax units (old definition). This procedure

Military pay is about 15% of total wages in the US economy and slightly more than 20% of US wage earners from 1943 to 1945.

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The number of women employees is estimated as the number of women in the labor force (husband present) from the *Historical Statistics of the US* series D51 and D52 (before 1971) and *Statistical Abstract of the U.S.*, No. 653 (after 1971) multiplied by the ratio of employees (from NIPA) over labor force for the full population (D29 and No. 646). The numbers of tax units with wages for years 1927 and 1928 are based on a simple extrapolation method using Lebergott (1964), Tables A3, A4, and A5.

produces levels and thresholds that are both continuous in 1947-1948 and fully consistent with our share estimates.

Insert Table B1: the total number of employees, the total number of married women employees, the number of tax units with wages, the total wage bill in the economy, the average wage per employee in 1998 dollars, along with the share of officer compensation.

## B2. Interpolations from IRS tables

From 1927 to 1941, *Statistics of Income* provides tables by size of wages only for tax returns with net income above \$5,000. The tables contain both the number of taxpayers and total wages reported by bracket from 1927 to 1935. The tables contain only the number of taxpayers (and not total wages reported) from 1936 to 1941.

The number of returns and amounts of wage reported, even for brackets above \$5,000, are underestimated because wages can be above \$5,000 and net income below for some returns because of deductions (on average equal to 10% of gross income). Fortunately, the IRS publication for year 1928 provides the same table for returns filing Form 1040 with net income below \$5,000. Taxpayers with relatively low income levels composed mostly of wages and salaries are allowed to file a shorter form called Form 1040A. In 1928 (as for most inter-war years), Form 1040A could only be used for returns with income less than \$5,000. As a result, combining the Tables by size of wages for net income above \$5,000 and net income below \$5,000 provides a complete distribution of wages reported on Form 1040 and thus a complete distribution of wages above \$5,000. Assuming that for each bracket the ratio of the number of returns with net income below \$5,000 to the number of returns with net income above \$5,000 is constant from 1927 to 194187, we can correct the Tables and obtain a complete distribution of salaries above \$5,000. These tables, however, allow only the estimation of series of top shares above \$5,000. As \$5,000 corresponds roughly to the threshold level P99, these truncated distributions allow the estimation of levels and shares only within the top percentile. After 1944, the IRS provides tables by size of wages for all returns (Forms 1040A and 1040) and thus covering the full tax return population.

From 1927 and 1941, estimation of salary distributions below \$5,000 is done using the composition tables classified by net income brackets described in Appendix A. In these tables, the number of returns reporting wages, along with the total amount of those wages is reported for each bracket of net-income.<sup>88</sup>

Before 1937, the composition tables report only the amounts of wages and not the number of returns with positive wages in each bracket. We have estimated the number of returns in each bracket for these years assuming that the ratio of the number of returns with positive wages to the

<sup>&</sup>lt;sup>87</sup> This assumption can be successfully tested using the micro-files for the period 1966-1995.

Average wage for wage earners and average net-income for each net-income bracket are computed. We then assume that each net-income bracket corresponds to a wage bracket with thresholds equal to the actual net-income thresholds multiplied by the ratio of average wage to average net-income in that bracket. In order to generate brackets fitting together, the final thresholds are taken as equal to the average of the corresponding top and bottom thresholds of two adjacent brackets. We therefore obtain a set of wage bracket thresholds where the number of returns and the wage amount reported for each bracket is the same as in the original composition table. This new distribution by size of wages is not perfectly accurate because ranking in terms of net-income is not identical to ranking in terms of wages. This method is therefore reliable only if wage income is close to net-income bracket by bracket. Fortunately, salaries constitute more than 90% of net-income reported in tax returns (with positive wade income) for brackets of net-income below \$5,000. The ratio is above to 95% for brackets below \$3,000. Shares and levels below the top percentile are obtained using these estimated wage distributions. This method can be tested using later years and is shown to give results extremely close to the direct method using tables distributed by wage size.<sup>89</sup>

Years 1942 and 1943 raise special problems because the IRS did not provide tables by size of wages for these two years. Fortunately, the IRS provided tables for returns reporting only salary income for each of the years 1942 to 1945. These tables are used to estimate wage distributions for 1942 and 1943 using a simple multiplier method. We take year 1944 as a benchmark and we assume that the ratios of returns with wages only to all returns with wages by wage brackets<sup>90</sup> are constant. This method can be successfully tested using 1945, where we can compute shares using direct complete tabulations. This methodology is reliable because the number of returns eporting wage only is large, even in the very top fractiles of wage earners. Below the top percentile, the method described above using composition tables can be used to compute alternative estimates for 1942 and 1943. We have checked that this method gives very similar results.<sup>91</sup>

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number of returns (with positive or zero wages) is the same as in 1937 for each bracket. We have checked that this assumption is reasonable by comparing these ratios for years 1937 to 1940.

<sup>90</sup> In fact, the ratio is assumed to be constant by fractiles of the distribution corresponding to each of the brackets of 1944. The multipliers for each of the 1942 and 1943 brackets are then obtained by using interpolated 1944 multipliers.

<sup>&</sup>lt;sup>89</sup> As expected, this method provides estimates of levels and shares biased downward above the top percentile relative to the direct method using published tables by size of wages. We thus use the indirect estimates to compute thresholds, average levels, and shares for the fractiles P90-95 and P95-99 and then use the direct estimates for the fractiles within the top percentile.

<sup>&</sup>lt;sup>91</sup> In 1941, 1942, and 1943, an additional complication appears because returns for Forms 1040, and 1040A are tabulated separately in the composition tables by size of net-income. Wage distributions for returns corresponding to each of these forms are first estimated using the method described above. The two wage distributions thus obtained are then merged into a single wage distribution as follows: the distribution of wages within each bracket of the form 1040A distribution is assumed to be Paretian. Then we split each bracket of the form 1040A distribution so that each portion can be attributed fully to a given bracket of the form 1040 distribution. For each bracket of the form 1040 distribution, we add back the pieces coming from the form 1040A distribution.

Finally, years 1996, 1997, and 1998 require a specific method as microfiles are not available for these years. We used the composition tables showing by brackets of Adjusted Gross Income (AGI), the number of returns with wage income and the total amount of wages reported. Using the same methodology we used for years 1927 to 1941, we obtain a distribution of wages. We then compute shares and income levels from this distribution. Obviously, the levels and shares are underestimated using this method because ranking in terms of AGI and wages is not identical. However, using previous years 1991 to 1995 where both the micro-files and the published composition tables are available, we can estimate by how much levels and shares estimated from published tables for each fractile should be adjusted to match estimates from the micro-files. Fortunately, these multiplier factors are extremely stable from 1991 to 1995 (the maximum variation between multipliers is always less than 5%). Therefore, we can use the multipliers from year 1995 to adjust the levels and shares for years 1996 to 1998.<sup>92</sup>

The actual interpolation method used to obtain thresholds and average wage levels by fractiles is the same Pareto method as the one described in Appendix A. In a number of years, however, the IRS only published the number of returns and not the amounts.<sup>93</sup> For these years, before applying the Pareto interpolation method described above, we estimated amounts as follows. 94 We assume that the distribution of income in each bracket [s,t] is Pareto distributed  $F(y)=1-(k/y)^a$ . The Pareto parameters a and k are obtained by solving the two equations:  $k=s p^{(1/a)}$  and  $k=t q^{(1/a)}$  where p is the fraction of tax returns above s and g the fraction of tax returns above t. 95 Note that the Pareto parameters k and a may vary from bracket to bracket. We then estimate the amount reported in bracket [s,t] simply as Y=N  $\int_s^t y dF(y)$ , where N is the total number of tax units (with positive wages). For the top bracket, this method cannot be applied and we therefore assume that the top bracket is Pareto distributed with Pareto parameters a and k equal to those of the bracket just below the top estimated by the method just described. When data on amounts reported are available, we can check that our estimated amounts Y are very close to the true reported amounts.

All these steps involve a substantial number of computations that have not been described in full details. Our computer programs are available upon request for readers interested in getting the full details of the estimation.

<sup>&</sup>lt;sup>92</sup> Shares and levels are blown up by around 5% for fractiles P90-95 and P95-99, by around 10% for fractiles P99-99.5 and P99.5-99.9, and by around 20% for fractiles P99.9-99.99 and P99.99-100.

<sup>100. &</sup>lt;sup>93</sup> For years 1935 to 1941, and from 1944 to 1961, the published tables report only the number of tax units in each bracket.

<sup>&</sup>lt;sup>94</sup> We adopted the same method to compute top income shares in 1913-1915 where only the number of tax units was available.

number of tax units was available.

95 This is the standard method of Pareto interpolation used by Kuznets (1953) and Feenberg and Poterba (1993).

Insert Table B2: shares of total wages and salaries obtained by the fractiles, P90-100,.., P99.99-100, and the intermediate fractiles, P90-95,.., P99.99-100 for each of the years 1927 to 1998.

Insert Table B3: average salary levels (in 1998 dollars) for the fractiles, P90-100,..., P99.99-100, and the intermediate fractiles, P90-95,..., P99.99-100, and thresholds P90,...,P99.99 for each of the years 1927 to 1998.

# B3. Entry effects on top shares

The fractiles are defined relative to the total number of tax units with positive wages, and therefore our series measure inequality only among wage earners for each year. Entry or exit effects such as a rise of unemployment during depressions, or movements into the labor force as military personnel during the wars, or decline of self-employment and rise of wages workers, can affect our top shares measures through composition effects. Under one set of simple conditions that we now describe, shares of wages accruing to top fractiles are not affected by entry of exit effects. Suppose that the initial wage distribution density is f(w) and that we add (or substract) a new distribution g(w) to the former distribution. The new distribution g(w) represents a flow of entrants such as military personnel during WWII. Let us assume that the fraction of new entrants within the top fractile is negligible (that is, the support of g(w) is below the threshold of the top fractile of f(w)). This assumption is likely to be satisfied for top fractiles and movements in and out of the labor force due to wars or business cycles. Adding workers with the distribution g(w) below the top increases the total wage income denominator which tends to reduce top shares but also increases the size of each fractile, which tends to increase top shares. Let us assume realistically that the top of the distribution f(w) is Paretian with parameter a. Let us introduce b=a/(a-1). Then, it is possible to show the following result:

If the average wage of the initial distribution f(w) is b times larger than the average wage of distribution g(w). Then, the two effects just described cancel out and adding g(w) to the initial distribution f(w) does not change top shares (up to a first degree of approximation). If the average wage of f(w) is more (less) than b times the average wage of g(w), then introducing g(w) increases (decreases) top shares.

If we take the case of military personnel during WWII, b is about 1.5 and the average non-military salary during WWII is also about 1.5 times larger than the average military salary (see National Accounts). This explains why excluding military workers and wages hardly affects our top share estimates.

Let us consider the case of the very large increase in wage earners from a low level in 1938 (due to a very high unemployment rate) to 1948 (full employment). If we assume that the average of new entrants is 66% of the current average wage (which is perhaps a reasonable number), then excluding new entrants would not affect our top share estimates. If the average wage of new entrants is less that 66% of the average wage, then the entry effect biases

our top shares upward, implying that the decline in top shares would be larger when eliminating the entry effect.

### B4. CEO data

The CEO data is from Forbes magazine survey of 800 CEOs from the largest US corporations from 1970 to 1999. Total pay includes salary and bonus, stock options exercised during the year, the value of restricted stock awarded, and the value contingent pay. Average wage is the line wages and salaries from NIPA divided by the number of full-time equivalent employees from NIPA.

Insert Table B4.

## Appendix C: Dividend and Estate Series

#### C1. Dividends

The IRS has published from 1927 on, tables by size of dividends. The IRS stopped publishing these tables in 1942 and 1943 and published tables by size of dividends plus interest together in 1944 and 1945. Therefore, we do not provide estimates for these four years. Exactly as for wages, tables by size of dividends from 1927 to 1941 only include return with net income above \$5,000 with the exception of year 1928. We adopt the same method as for wages to obtain complete distributions of dividends for years 1927 to 1941. 96 The total number of tax units is the same as for total income (see Appendix A). Our series are obtained by interpolation methods described above. We limit ourselves to the top 2% of tax units because the number of returns with dividend income over the total number of tax units is small and even below 2% at the beginning of the period. It is important to note that the fractiles are defined relative to the total number of tax units and not only the number of tax units reporting dividends. We do not attempt to compute shares because as described in the main text the amount of dividends reported on tax returns relative to the total amount of dividends from National Accounts has decreased sharply since the 1980s, and therefore, shares would be very sensitive to the choice of the base for total dividends.

In general, dividends from tax statistics include dividends received through partnerships and fiduciaries. However, from 1936 to 1953, dividends do not include dividends distributed to partnerships and fiduciaries. We correct for that in the following way. We first estimate dividend series without taking into account this effect. This produces a jump downward in 1936 and a jump upward in 1954. Second, we use the composition tables of 1935 and 1936 and increase the dividend amounts and number of returns reporting dividends by brackets for 1936 assuming that the ratio of fiduciary income over dividend income stays

<sup>96</sup> Dividends reported on Form 1040A are almost always of very modest size. Therefore, these tables are in fact extremely close to the actual full distribution of dividends even below \$5,000.

constant from 1935 to 1936 by bracket. <sup>97</sup> We then estimate levels from these composition tables using the same methodology as for wages described above. Finally, we multiply the shares of our initial series for years 1936 to 1953 by a year common factor so that the change in levels from 1935 to 1936 is equal to the change observed from 1935 to 1936 using the composition tables. Fortunately, this method generates no discontinuity from 1952 to 1954.

Table C1 displays the average dividends reported in each fractiles, P98-100,.., P99.99-100, and the intermediate fractiles, P98-99,.., P99.99-100 for years 1927 to 1995 expressed in 1998 dollars.

### C2. Estates

The number of decedents above 24 is obtained from the *Historical Statistics of the US* (before 1970) and *Statistical Abstract of the U.S.*, (after 1970). This number is estimated as the total number of decedents less the sum of the mortality rates times population aged under 1 year, 1-4, 5-14, and 15-24 years. The number of estates corresponding to each of the fractiles is computed based of this total number of decedents.

Estate tax tables classified by size of gross estates for years 1916 to 1945 are obtained from McCubbin (1990). These statistics are based on the decedent year of death. As the estate tax applied only to the last 117 days of 1916, we blow up numbers for that year by 366/117. Note that *Statistics of Income* published only estate tables by size of net estate from 1916 to 1944 and bundled together years 1916 to 1921.

From 1946 to 1976, we use Tables from *Statistics of Income* classifying estates by gross estate levels. These statistics are based on the year when the return was filed. In general estates are filed within 12 months of the death of the decedent. Therefore, in the series, we assume that tax returns filed in year t represent decedents who died in year t-1. From 1982 to 1997, estate tax statistics have been published in various articles of *Statistics of Income Bulletin*.

Our estate series are produced using the standard Pareto interpolation method described in Appendix A. As for dividends, we do not attempt to estimate shares of estates for each fractile because there is no simple way to compute the total level of estates left by all decedents in each year.

Table C2 displays the number of decedents, the percentage of decedents filing an estate tax returns, and the levels of the thresholds, P98, P99, P99.5, P99.9, P99.95, P99.99 (in thousands of 1998 dollars). Table C3 presents the average levels of estates (in thousands of 1998 dollars) in all the corresponding fractiles.

Changes in the estate tax law potentially affecting our series:

Relatively few changes took place in the estate tax law legislation. Most of these changes expanded and clarified the definition of estates in order to discourage

 $<sup>^{97}</sup>$  This correction method had already been used for the composition series described in appendix A.

potential tax evasion strategies. Two important changes in estate tax legislation are important to note. First, gift and estate taxation have been unified only since 1976. Before 1976, gifts were taxed according to a separate schedule and at lower rates than estates. After 1976, the sum of lifetime gifts (above an annual exemption amount) is added to the estate and a unique tax is assessed on this total. As a result, before 1976, tax incentives to give away wealth before death were substantially higher which might produce an increase in reported estates after 1976. Second, the marital deduction for beguests between spouses was first added in 1948 and expanded without limitations in 1981. Without marital deductions, spousal bequests would generate estate tax liability, and therefore, wealth transmission across generations would be taxed twice. Therefore, before marital deductions were allowed, bequests between spouses must have been less common than now, and as a result, the level of the surviving spouse estates must have been lower, producing a smaller number of large estates overall. These two changes in law go in the same direction and should produce fewer large estates at the beginning of the period than at the end, which reinforces our conclusions.

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Figure 1: The top decile income share in the U.S.,1917-1998

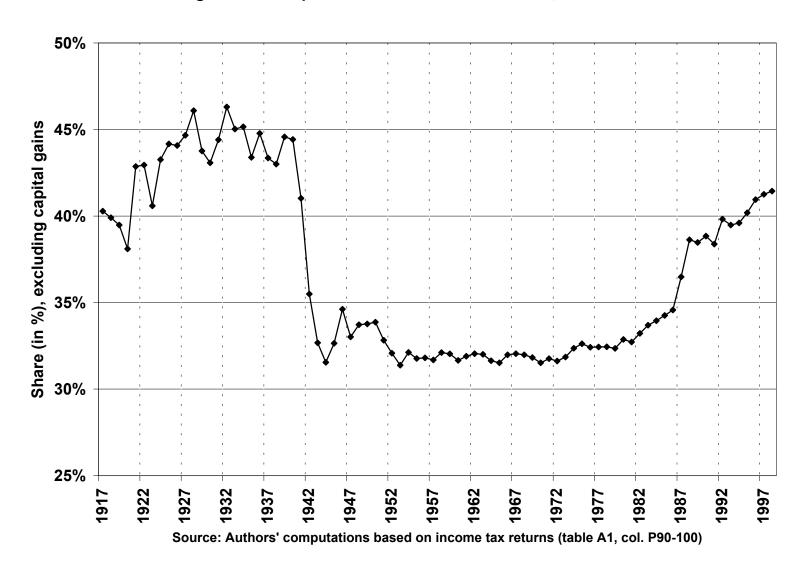
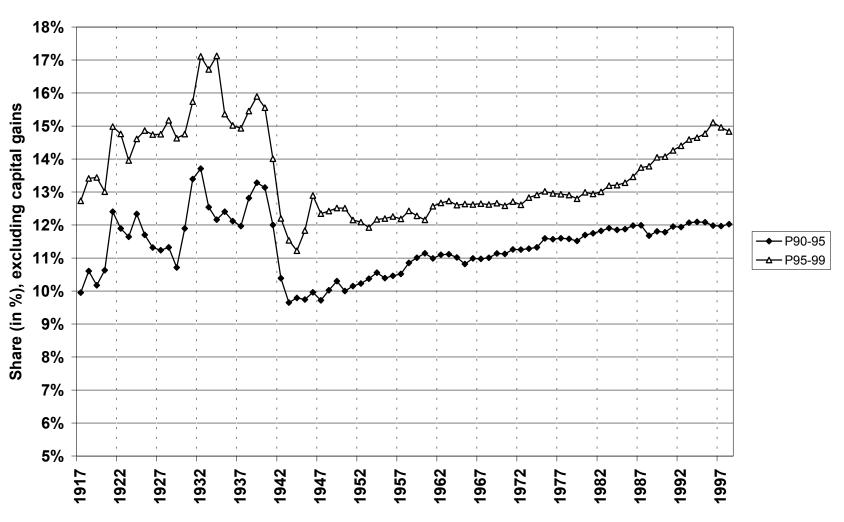


Figure 2: The income shares of fractiles P90-95 and P95-99 in the U.S.,1917-1998



Source: Authors' computations based on income tax returns (table A1, col. P90-95, P95-99)

Figure 3: The top centile income share in the U.S.,1913-1998

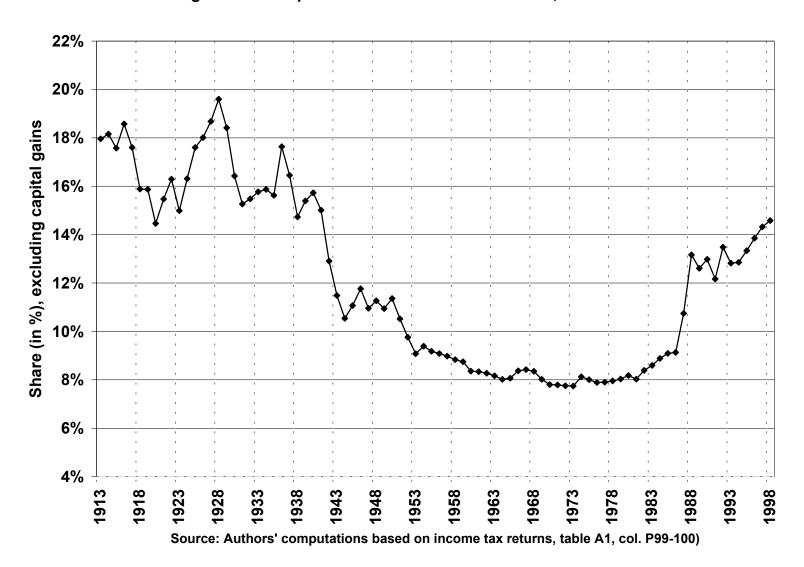


Figure 4: The top 0.01% income share in the U.S.,1913-1998

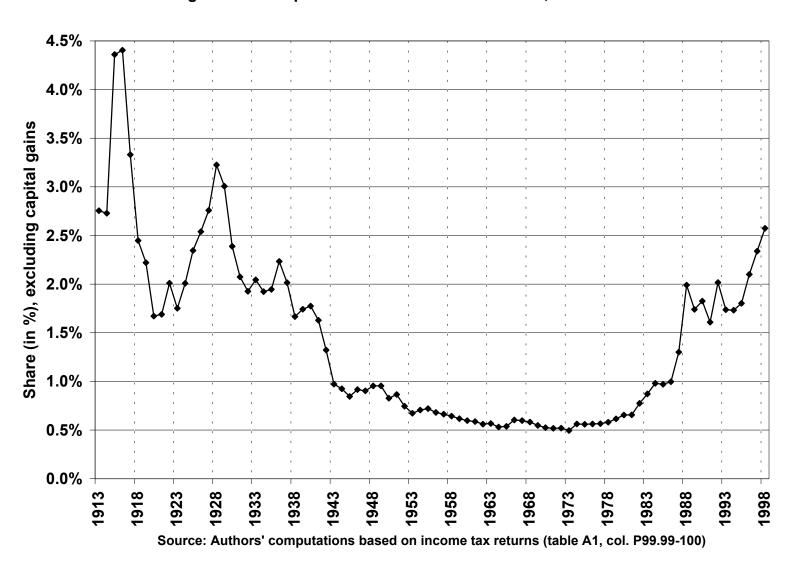
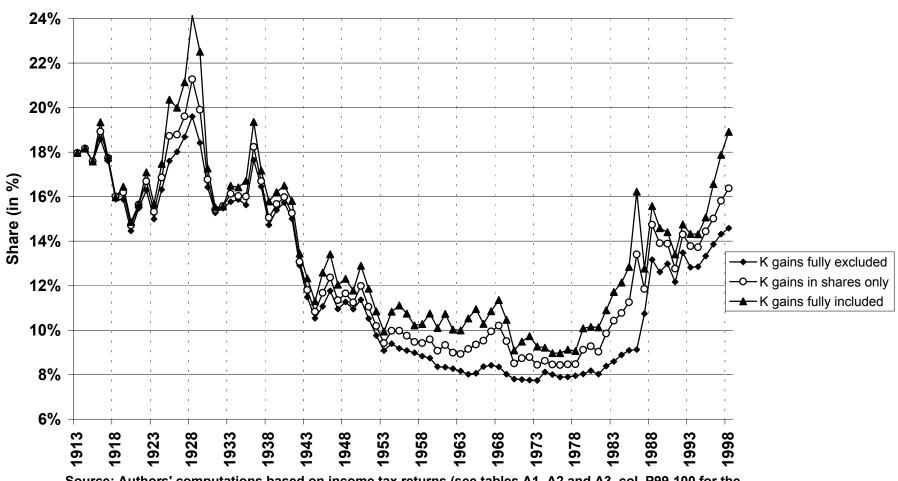
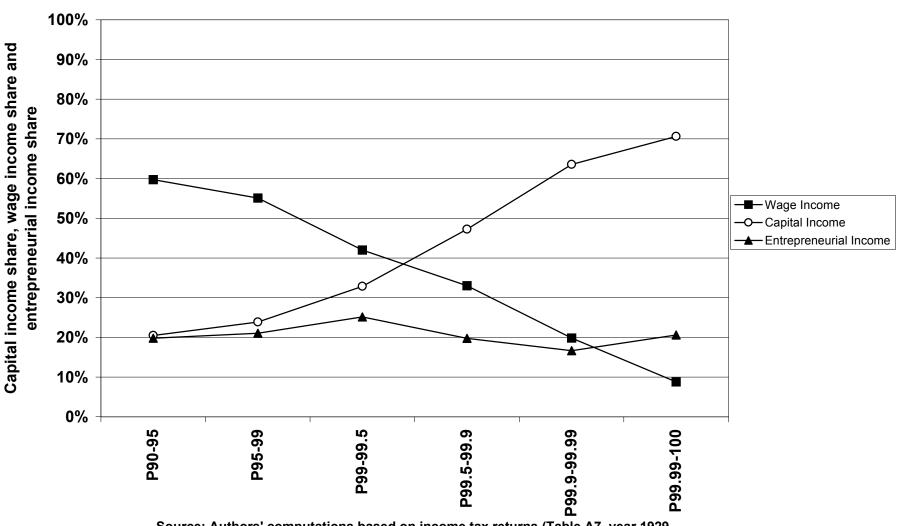


Figure 4B: The top percentile income share in the U.S.,1913-1998



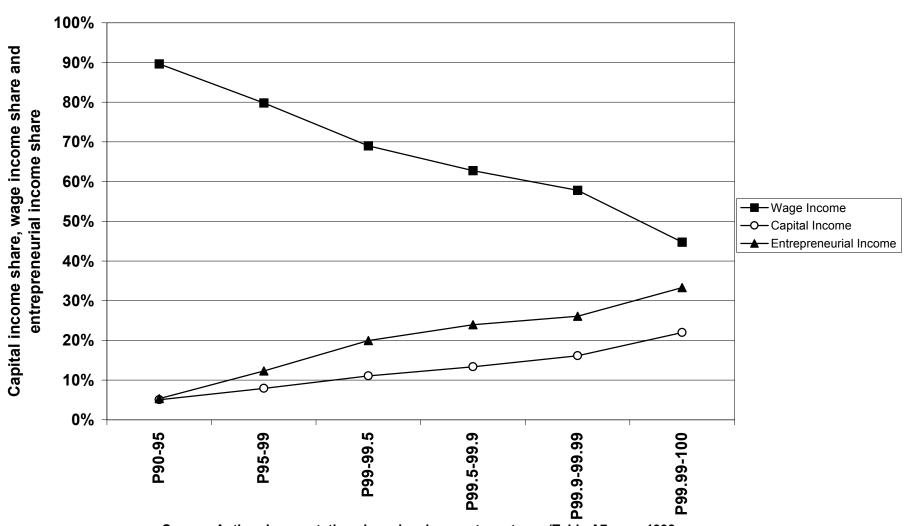
Source: Authors' computations based on income tax returns (see tables A1, A2 and A3, col. P99-100 for the corresponding series)

Figure 5: The income composition of the top fractiles in the U.S. in 1929



Source: Authors' computations based on income tax returns (Table A7, year 1929, capital gains excluded)

Figure 6: The income composition of the top decile in the U.S. in 1998



Source: Authors' computations based on income tax returns (Table A7, year 1998, capital gains excluded)

Figure 7: The capital income share in the top 0.5% in the U.S.,1916-1998

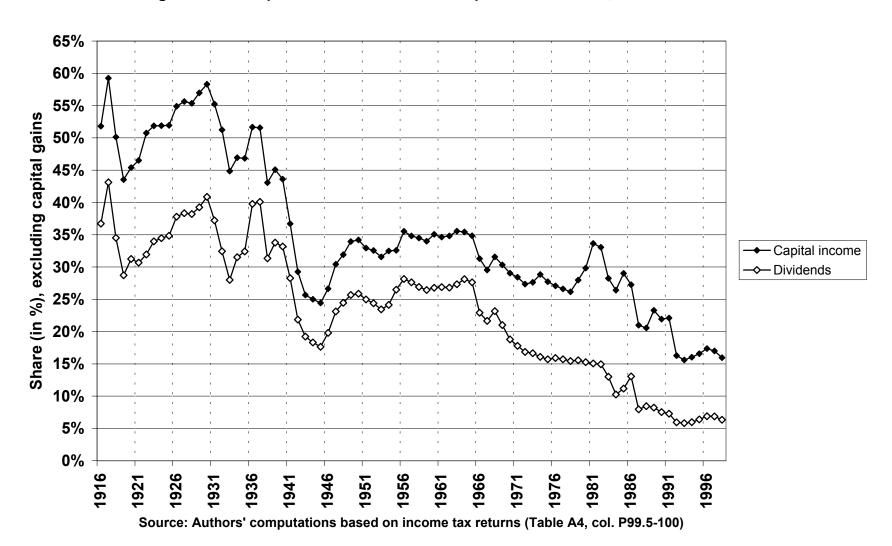


Figure 8: Average real dividends of top 0.1% dividend earners, 1927-1995

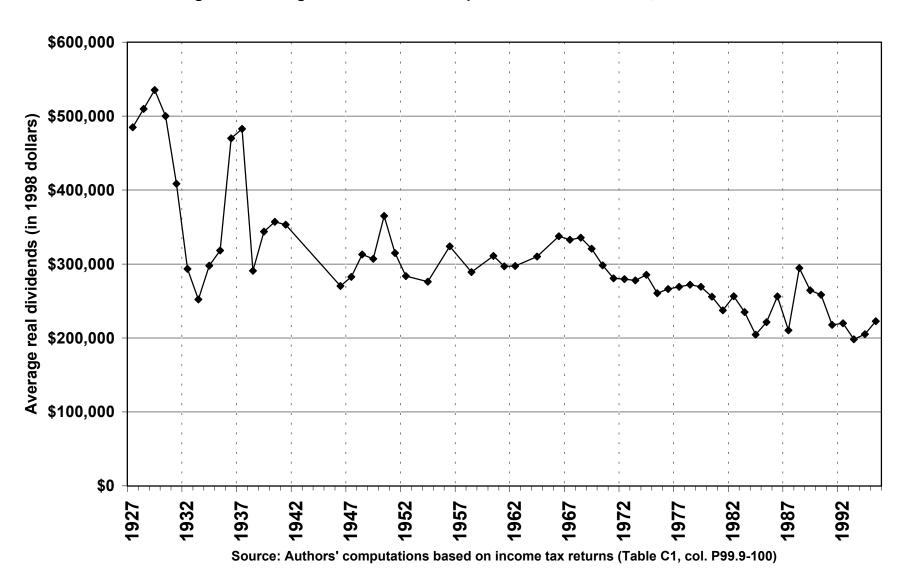
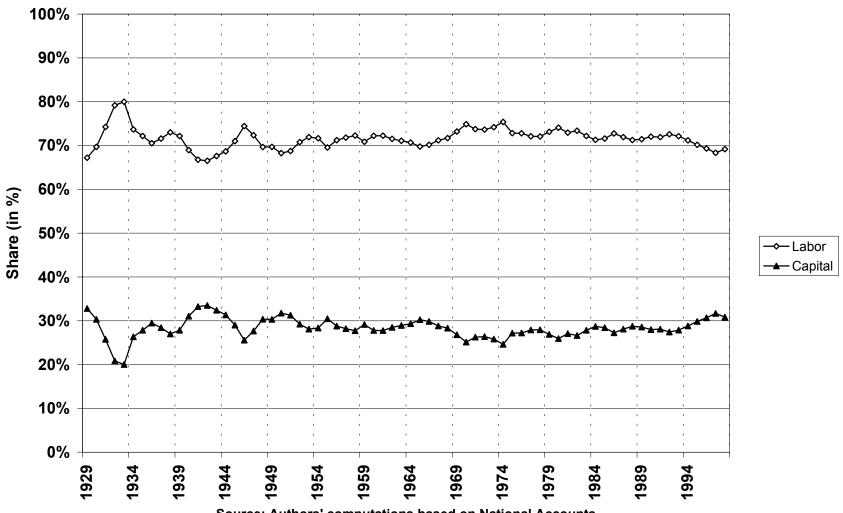
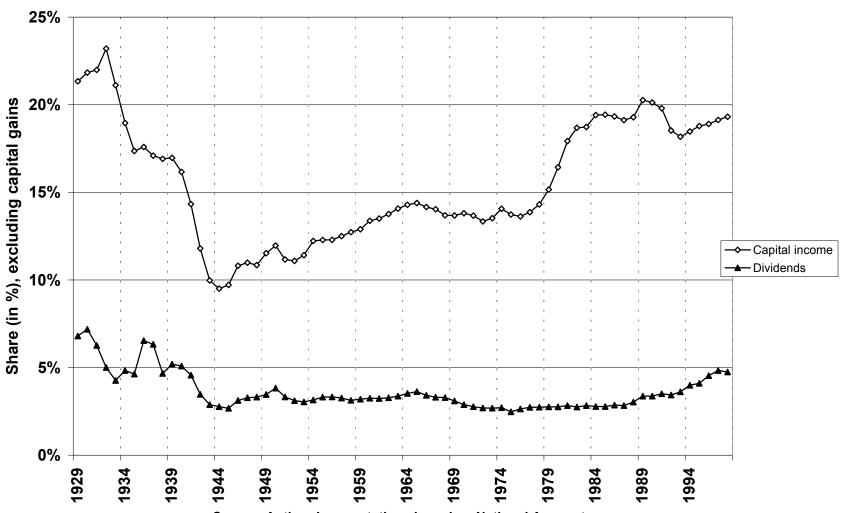


Figure 9: Factor shares in the U.S. corporate sector, 1929-1999



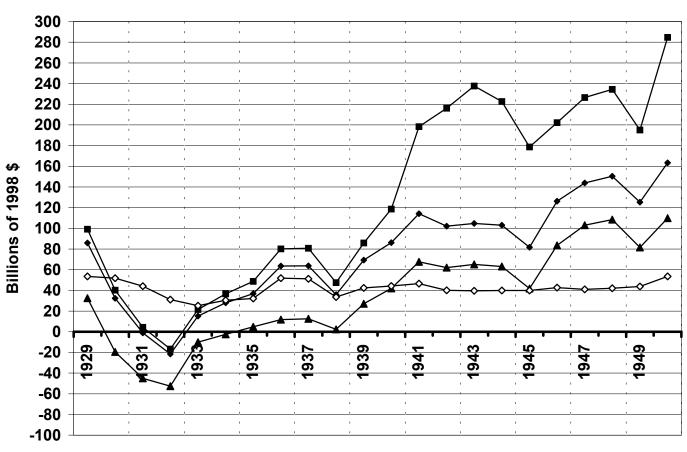
Source: Authors' computations based on National Accounts (NIPA Table 1,16; CFC and net interest have been included in the capital share)

Figure 10: The capital income share in the U.S. personal income, 1929-1998



Source: Authors' computations based on National Accounts (NIPA table 2.1; capital income includes dividends, interest and rents)

Figure 10B: Dividends, retained earnings and corporate tax in the U.S., 1929-1950



Source: Authors' computations based on National Accounts (NIPA Table 1,16)

Total Profits → After-tax profits → Retained earnings → Dividends

Figure 11: Average estate of top 0.01% decedents, 1916-1997

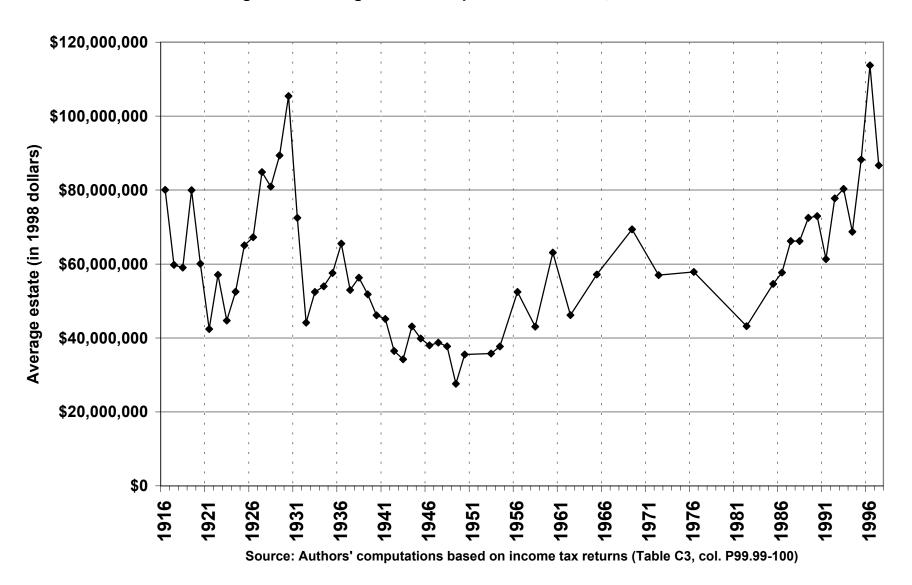
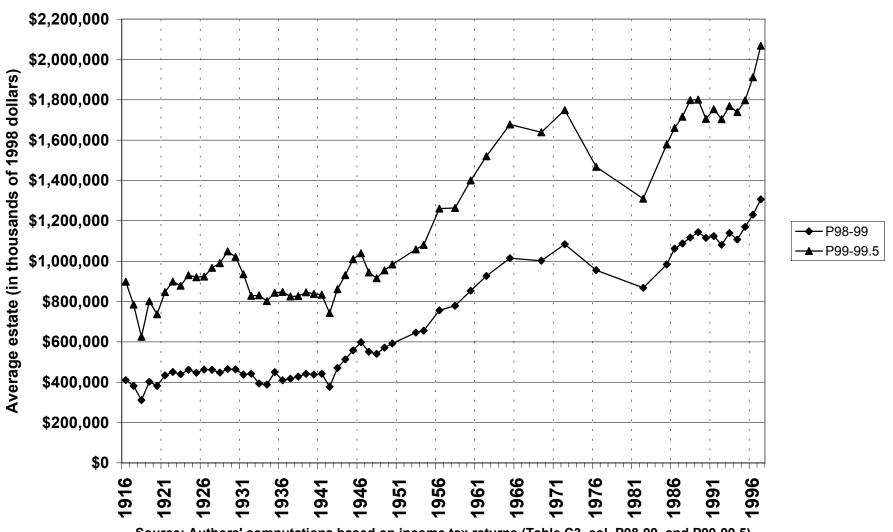


Figure 12: Average estate of P98-99, and P99-99.5 decedents, 1916-1997



Source: Authors' computations based on income tax returns (Table C3, col. P98-99, and P99-99.5)

Figure 13: Share of top 10% salary earners, 1927 to 1998

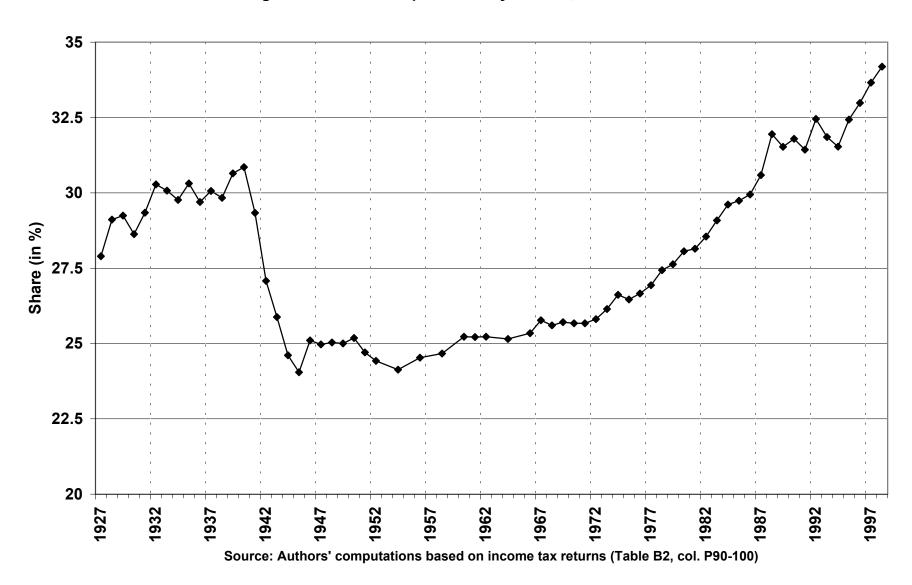


Figure 14: Shares of P90-95 and P95-99 salary earners, 1927 to 1998

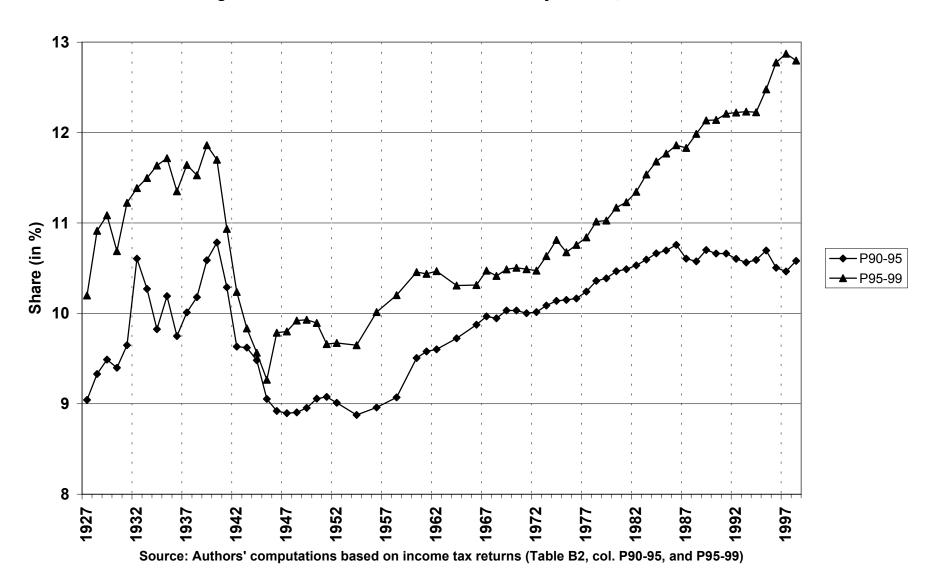


Figure 15: Share of top 1% salary earners, 1927 to 1998

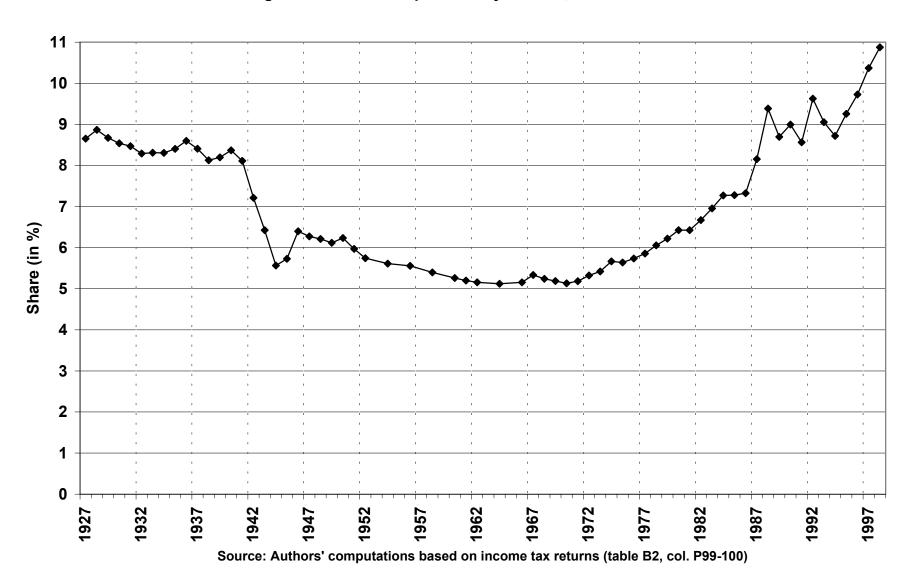


Figure 16: Shares of P99-99.5, P99.5-99.9, and P99.9-100 salary earners, 1927 to 1998

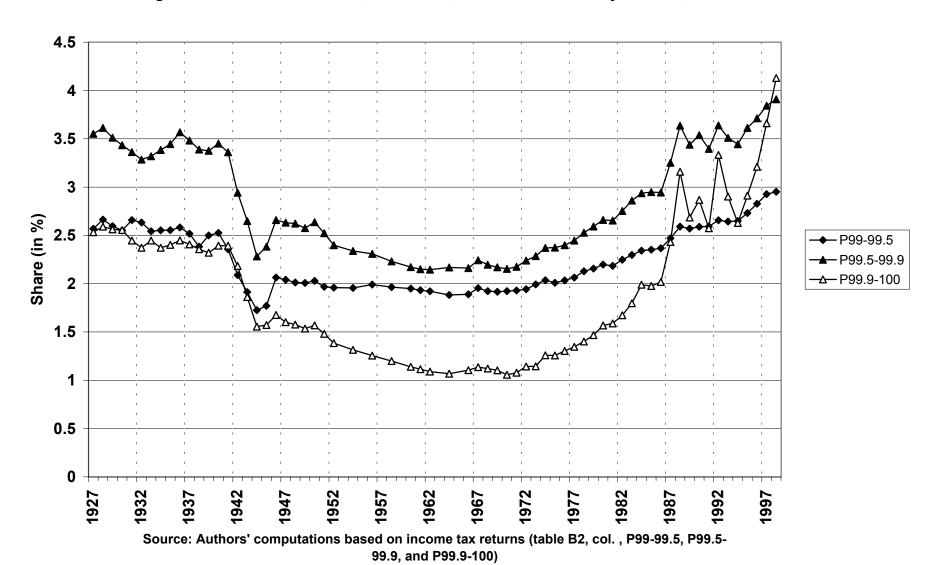
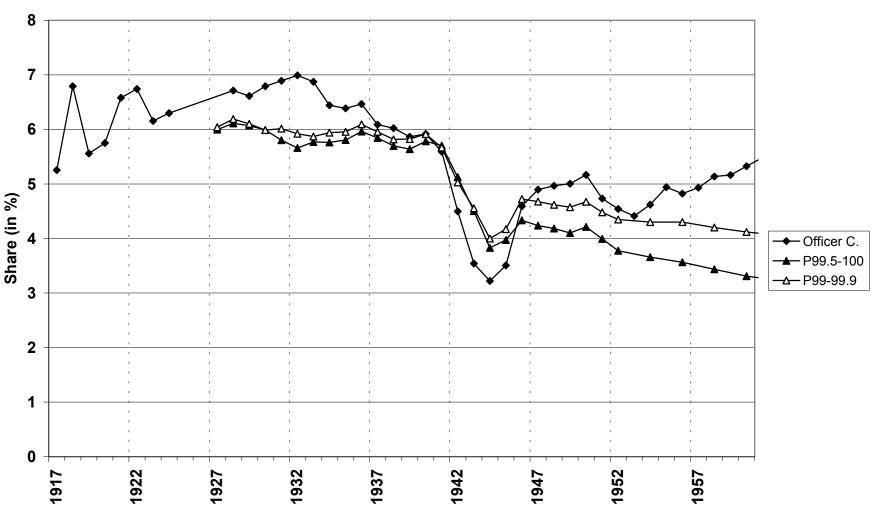
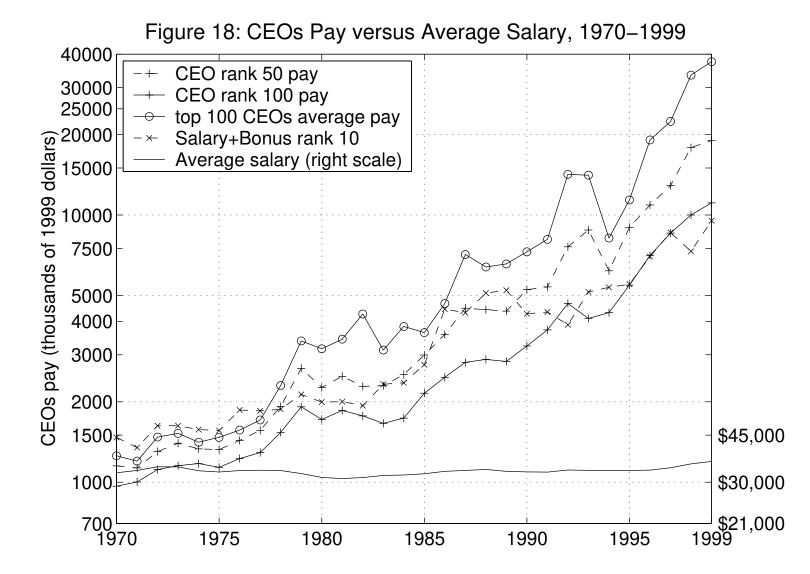


Figure 17: Shares of Officer Compensation, P99.5-100 and P99-99.9 salary earners, 1917-



Source: Authors' computations based on income tax returns (table B1, col. Officer comp., and Table B2, col. P99.5-100, and P99-99.5+P99.5-99.9)

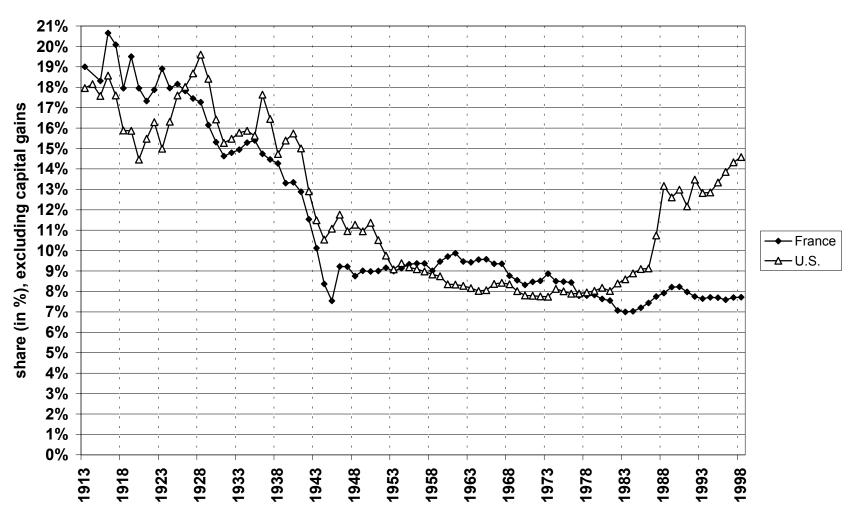


50% 48% 46% Share (in %), excluding capital gains 44% 42% 40% 38% → France <u>-</u>Δ-- U.S. 36% 34% 32% 30% 28% 26% 1913 1918 1928 1933 1938 1943 1948 1953 1958 1963 1968 1983 1988 1993 1998 1923 1973 1978

Figure 19: The top decile income share in France and in the U.S.,1913-1998

Source: Authors' computations based on income tax returns (France: see Piketty (2001b, table A1, col. P90-100); U.S.: see this paper, table A1, col. P90-100)

Figure 20: The top 1% income share in France and in the U.S.,1913-1998



Source: Authors' computations based on income tax returns (France: see Piketty (2001b, table A1, col. P99-100); U.S.: see this paper, table A1, col. P99-100).

13% 12% 11% share (in %), excluding capital gains 10% 9% 8% **7**% → France 6% <u>-</u>Δ-- U.S. 5% —O— U.K. 4% 3% 2% 1% 0% 1913 1998 1918 1923 1928 1933 1938 1943 1948 1953 1958 1963 1968 1973 1978 1983 1988 1993

Figure 21: The top 0.1% income share in France, the U.S. and the U.K.,1913-1998

Source: Authors' computations based on income tax returns (France: see Piketty (2001b, table A1, col. P99-100); U.S.: see this paper, table A1, col. P99-100); U.K. See
Atkinson (2001).

Table 1: Thresholds and average incomes by fractiles in 1998

Thresholds (1)	Income level (2)	Fractiles (3)	Number of tax units (4)	Average Income (5)
		Full Population	130,945,000	\$38,740
P90	\$81,700	P90-95	6,550,000	\$94,000
P95	\$107,400	P95-99	5,240,000	\$143,000
P99	\$230,200	P99-99.5	655,000	\$267,000
P99.5	\$316,100	P99.5-99.9	524,000	\$494,000
P99.9	\$790,400	P99.9-99.99	117,900	\$1,490,000
P99.99	\$3,620,500	P99.99-100	13,100	\$9,970,000

Source: Table A0 and Table A4, row 1998. Amounts expressed in 1998 dollars.

Table 2: Shares of each occupation within the top 1% in 1916

Fractiles	Number of tax units	Salaried Professions	Independent Professions	Business Owners	Capitalists and Rentiers
(1)	(2)	(3)	(4)	(5)	(6)
P99-99.5	198,950	30.5%	19.0%	30.3%	20.2%
P99.5-99.9	159,160	22.1%	14.0%	35.8%	27.9%
P99.9-99.99	35,811	16.2%	8.0%	39.7%	45.2%
P99.99-99.999	3,581	12.0%	5.1%	42.6%	65.4%
P99.999-100	398	8.0%	3.1%	33.2%	94.6%

Notes: Computations based on interpolations from Statistics of Income, 1916, Table 6c, pp. 126-137.

Salaried Professions defined as accounting profession (accountants, statisticians, actuaries, etc.), engineers, clergymen, public service: civil and military, teachers, corporation officials, and all other employees.

Independent professions defined as architects, artists, authors, clergymen, lawyers and judges, medical profession, theatrical profession, all other professions, profession not stated, commercial travelers, and sportsmen.

Business owners defined as farmers, hotel proprietors and restaurateurs, insurance agents, labor skilled and unskilled, lumbermen, manufacturers, merchants and dealers, mine owners and operators, saloon keepers, theatrical business owners, all other business, and business not stated.

Capitalists and Rentiers defined as bankers, real-estate brokers, stock and bond brokers, insurance brokers, all other brokers, and capitalists: investors and speculators.

Table A0: Reference totals for tax units and income

		Tax units		Income (excludi	ng capital gains)	Income (includia	ng capital gains)	Inflation
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Year	N. tax units	N. tax returns	(2)/(1)	Total income	Average income	Total income	Average income	ĊPI
	(thousands)	(thousands)	(%)	(millions 1998 \$)	(1998 \$)	(millions 1998 \$)	(1998 \$)	(p(1998)/p(n))
1913	37,701	358	0.9	455,291	12,076	455,291	12,076	16.4776
1914	38,513	358	0.9	454,609	11,804	454,609	11,804	16.2662
1915	39,154	337	0.9	466,623	11,918	466,623	11,918	16.1051
1916	39,790	437	1.1	515,723	12,961	523,153	13,148	14.9676
1917	40,387	3,473	8.6	533,262	13,204	537,464	13,308	12.7492
1918	40,451	4,425	10.9	505,717	12,502	509,077	12,585	10.8596
1919	41,052	5,333	13.0	502,470	12,240	511,607	12,462	9.4514
1920	41,909	7,260	17.3	457,568	10,918	465,925	11,118	8.1618
1921	42,835	6,662	15.6	412,769	9,636	416,502	9,723	9.1398
1922	43,543	6,787	15.6	473,539	10,875	482,784	11,088	9.7543
1923	44,409	7,698	17.3	537,168	12,096	547,981	12,340	9.5818
1924	45,384	7,370	16.2	542,369	11,951	556,970	12,272	9.5627
1925	46,190	4,171	9.0	557,656	12,073	587,198	12,713	9.3295
1926	46,940	4,138	8.8	572,630	12,199	596,756	12,713	9.2371
1927	47,723	4,102	8.6	586,544	12,291	616,387	12,916	9.4160
1928	48,445	4,071	8.4	607,617	12,542	656,491	13,551	9.5400
1929	49,085	4,044	8.2	641,852	13,076	686,577	13,988	9.5400
1930	49,750	3,708	7.5	589,426	11,848	603,286	12,126	9.7846
1931	50,462	3,226	6.4	542,446	10,750	547,788	10,856	10.7288
1932	51,117	3,877	7.6	462,162	9,041	463,643	9,070	11.9607
1933	51,757	3,724	7.2	455,742	8,805	462,657	8,939	12.6035
1934	52,430	4,094	7.8	507,065	9,671	511,784	9,761	12.1891
1935	53,147	4,575	8.6	556,534	10,472	566,824	10,665	11.8918
1936	53,844	5,413	10.1	618,843	11,493	639,226	11,872	11.7740
1937	54,539	6,350	11.6	657,345	12,053	664,551	12,185	11.3649
1938	55,342	6,204	11.2	613,542	11,086	623,038	11,258	11.5850
1939	56,181	7,633	13.6	663,611	11,812	671,995	11,961	11.7495
1940	57,115	14,665	25.7	706,366	12,367	714,300	12,506	11.6332
1941	57,392	25,855	45.0	829,611	14,455	839,120	14,621	11.0792
1942	57,736	36,538	63.3	969,605	16,794	976,191	16,908	10.0083
1943	58,250	43,602	74.9	1,131,194	19,420	1,145,821	19,671	9.4329
1944	58,656	46,920	80.0	1,206,418	20,568	1,220,989	20,816	9.2752
1945	58,997	49,933	84.6	1,185,936	20,102	1,217,235	20,632	9.0667
1946	59,297	52,817	89.1	1,128,137	19,025	1,167,556	19,690	8.3564
1947	60,118	55,099	91.7	1,097,594	18,257	1,120,607	18,640	7.3045
1948	60,825	52,072	85.6	1,130,096	18,579	1,153,058	18,957	6.7760
1949	61,537	51,814	84.2	1,129,374	18,353	1,145,980	18,623	6.8445
1950	62.446	53,060	85.0	1,237,013	19,809	1,269,141	20,324	6.7767
1951	63,060	55,447	87.9	1,287,013	20,410	1,315,566	20,862	6.2805
1952	63,684	56,528	88.8	1,341,108	21,059	1,364,220	21,422	6.1453
1953	64,273	57,838	90.0	1,413,175	21,987	1,431,986	22,280	6.0966
1953	64,928	56,747	90.0 87.4	1,410,249	21,720	1,442,894	22,223	6.0662
1954	65,589	58,250	88.8	1,522,936	23,219	1,572,885	23,981	6.0906
1955	66,257	56,250 59,197	89.3	1,618,317	23,219 24,425	1,660,359	25,961	6.0006
1956	66,947	59,197 59,825	89.4		24,425 24,528		25,059 24,998	5.7921
1957	67,546	59,025 59,085	87.5	1,642,054 1,606,426	24,526 23,783	1,673,521 1,642,886	24,996 24,322	5.6398
1959	68.144	60,272	88.4	1,716,246	25,763 25,186	1,769,884	24,322 25,973	5.5950
1960	68,681	61,028	88.9	1,716,246	25,166 25,500	1,797,766	25,973 26,176	5.5069
1900	00,001	01,020	00.9	1,731,300	25,500	1,131,100	20,170	3.3009

1961	69,997	61,499	87.9	1,806,049	25,802	1,872,370	26,749	5.4524
1962	71,254	62,712	88.0	1,901,030	26,679	1,947,923	27,338	5.3931
1963	72,464	63,943	88.2	1,983,303	27,369	2,036,144	28,099	5.3291
1964	73,660	65,376	88.8	2,112,537	28,680	2,185,751	29,674	5.2607
1965	74,772	67,596	90.4	2,230,338	29,828	2,324,583	31,089	5.1728
1966	75,831	70,160	92.5	2,361,069	31,136	2,436,446	32,130	5.0270
1967	76,856	71,652	93.2	2,455,877	31,954	2,563,279	33,352	4.8853
1968	77,826	73,729	94.7	2,568,414	33,002	2,704,187	34,747	4.6884
1969	78,793	75,834	96.2	2,640,050	33,506	2,742,547	34,807	4.4482
1970	79,924	74,280	92.9	2,688,431	33,637	2,744,649	34,341	4.2004
1971	81,849	74,576	91.1	2,745,458	33,543	2,825,680	34,523	4.0234
1972	83,670	77,573	92.7	2,923,459	34,941	3,029,006	36,202	3.8986
1973	85,442	80,693	94.4	3,048,499	35,679	3,137,866	36,725	3.6710
1974	87,228	83,340	95.5	3,020,106	34,623	3,079,658	35,306	3.3072
1975	89,127	82,229	92.3	2,924,044	32,807	2,978,359	33,417	3.0314
1976	91,048	84,670	93.0	3,058,025	33,587	3,125,544	34,328	2.8652
1977	93,076	86,635	93.1	3,157,500	33,924	3,235,333	34,760	2.6903
1978	95,213	89,771	94.3	3,290,603	34,560	3,367,342	35,366	2.5003
1979	97,457	92,694	95.1	3,315,247	34,018	3,433,727	35,233	2.2464
1980	99,625	93,902	94.3	3,230,654	32,428	3,335,499	33,481	1.9792
1981	101,432	95,396	94.0	3,221,759	31,763	3,325,204	32,783	1.7944
1982	103,250	95,337	92.3	3,232,739	31,310	3,348,315	32,429	1.6897
1983	105,067	96,321	91.7	3,290,505	31,318	3,445,118	32,790	1.6373
1984	106,871	99,439	93.0	3,462,745	32,401	3,632,584	33,990	1.5698
1985	108,736	101,660	93.5	3,581,498	32,938	3,790,299	34,858	1.5152
1986	110,684	103,045	93.1	3,692,621	33,362	4,106,959	37,105	1.4870
1987	112,640	106,996	95.0	3,866,715	34,328	4,032,861	35,803	1.4353
1988	114,656	109,708	95.7	4,111,836	35,862	4,302,833	37,528	1.3788
1989	116,759	112,136	96.0	4,157,466	35,607	4,322,564	37,021	1.3156
1990	119,055	113,717	95.5	4,187,638	35,174	4,309,960	36,201	1.2482
1991	120,453	114,730	95.2	4,111,902	34,137	4,219,547	35,031	1.1979
1992	121,944	113,605	93.2	4,188,147	34,345	4,300,875	35,269	1.1630
1993	123,378	114,602	92.9	4,149,646	33,633	4,280,815	34,697	1.1291
1994	124,716	115,943	93.0	4,253,680	34,107	4,382,975	35,144	1.1005
1995	126,023	118,218	93.8	4,407,172	34,971	4,561,664	36,197	1.0705
1996	127,625	120,351	94.3	4,553,909	35,682	4,776,620	37,427	1.0394
1997	129,301	122,422	94.7	4,790,115	37,046	5,108,318	39,507	1.0160
1998	130,945	124,771	95.3	5,072,706	38,739	5,474,766	41,810	1.0000
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Table A1: Top fractiles income shares (excluding capital gains) in the U.S., 1913-1998 (fractiles are defined by total income (excluding capital gains))

	P90-100	P95-100	P99-100	P99.5-100		P99.99-100	P90-95	P95-99	P99-99.5		P99.9-99.99
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1913			17.96	14.73	8.62	2.76			3.23	6.11	5.86
1914			18.16	15.08	8.60	2.73			3.08	6.48	5.87
1915			17.58	14.58	9.22	4.36			3.00	5.36	4.86
1916	40.00	00.00	18.57	15.60	9.87	4.40	0.05	40.74	2.97	5.74	5.46
1917	40.29	30.33	17.60	14.23	8.36	3.33	9.95	12.74	3.37	5.88	5.03
1918	39.90	29.30	15.88	12.39	6.74	2.45	10.61	13.41	3.50	5.64	4.29
1919	39.48	29.31	15.87	12.23	6.45	2.22	10.17	13.44	3.63	5.78	4.23
1920	38.10	27.47	14.46	10.95	5.37	1.67	10.63	13.01	3.51	5.58	3.70
1921	42.86	30.46	15.47	11.60	5.60	1.69	12.40	14.98	3.87	6.00	3.91
1922	42.95	31.05	16.29	12.38	6.17	2.01	11.90	14.76	3.92	6.21	4.16
1923	40.59	28.95	14.99	11.32	5.50	1.75	11.64	13.96	3.67	5.82	3.75
1924	43.26	30.93	16.32	12.42	6.14	2.01	12.34	14.61	3.90	6.28	4.13
1925	44.17	32.47	17.60	13.41	6.75	2.35	11.70	14.86	4.19	6.66	4.41
1926	44.07	32.75	18.01	13.75	7.07	2.54	11.32	14.74	4.26	6.68	4.53
1927	44.67	33.43	18.68	14.33	7.47	2.76	11.23	14.75	4.35	6.86	4.71
1928	46.09	34.77	19.60	15.17	8.19	3.23	11.32	15.17	4.42	6.98	4.97
1929	43.76	33.05	18.42	14.21	7.62	3.01	10.71	14.63	4.20	6.59	4.62
1930	43.07	31.18	16.42	12.42	6.40	2.39	11.89	14.76	4.01	6.02	4.01
1931	44.40	31.01	15.27	11.32	5.68	2.07	13.39	15.74	3.95	5.65	3.60
1932	46.30	32.59	15.48	11.55	5.90	1.93	13.71	17.11	3.93	5.65	3.97
1933	45.03	32.49	15.77	11.78	6.05	2.04	12.54	16.72	3.99	5.72	4.01
1934	45.16	32.99	15.87	11.80	5.82	1.92	12.16	17.13	4.07	5.97	3.90
1935	43.39	30.99	15.63	11.67	5.80	1.95	12.40	15.36	3.96	5.87	3.85
1936	44.77	32.65	17.64	13.37	6.69	2.23	12.12	15.02	4.27	6.68	4.45
1937	43.35	31.38	16.45	12.42	6.16	2.02	11.97	14.93	4.04	6.25	4.15
1938	43.00	30.18	14.73	10.82	5.16	1.67	12.82	15.45	3.91	5.66	3.49
1939	44.57	31.29	15.39	11.37	5.45	1.74	13.28	15.89	4.03	5.91	3.71
1940	44.43	31.29	15.73	11.66	5.57	1.77	13.14	15.55	4.07	6.09	3.80
1941	41.02	29.02	15.01	11.15	5.29	1.63	12.00	14.01	3.86	5.86	3.66
1942	35.49	25.11	12.91	9.60	4.48	1.32	10.39	12.20	3.31	5.12	3.16
1943	32.67	23.02	11.48	8.43	3.78	0.97	9.65	11.54	3.06	4.65	2.81
1944	31.55	21.76	10.54	7.60	3.33	0.92	9.79	11.22	2.94	4.28	2.40
1945	32.64	22.90	11.07	7.87	3.32	0.84	9.74	11.83	3.20	4.55	2.47
1946	34.62	24.66	11.76	8.28	3.43	0.92	9.96	12.90	3.48	4.85	2.52
1947	33.02	23.30	10.95	7.71	3.24	0.90	9.72	12.35	3.25	4.47	2.33
1948	33.72	23.70	11.27	8.03	3.44	0.95	10.02	12.43	3.24	4.59	2.48
1949	33.76	23.46	10.95	7.77	3.34	0.95	10.30	12.52	3.18	4.43	2.38
1950	33.87	23.87	11.36	8.14	3.53	0.83	10.00	12.51	3.22	4.60	2.70
1951	32.82	22.67	10.52	7.41	3.12	0.87	10.15	12.15	3.11	4.29	2.25
1952	32.07	21.85	9.76	6.81	2.76	0.75	10.23	12.09	2.95	4.05	2.01
1953	31.38	21.01	9.08	6.26	2.51	0.67	10.37	11.93	2.82	3.76	1.83
1954	32.12	21.56	9.39	6.47	2.57	0.71	10.56	12.17	2.92	3.90	1.86
1955	31.77	21.38	9.18	6.28	2.49	0.72	10.39	12.20	2.90	3.80	1.77
1956	31.81	21.35	9.09	6.14	2.38	0.68	10.46	12.26	2.94	3.76	1.70
1957	31.69	21.17	8.98	6.08	2.36	0.66	10.52	12.19	2.90	3.72	1.70
1958	32.11	21.17	8.83	5.94	2.29	0.64	10.85	12.13	2.89	3.65	1.65
1959	32.11	21.02	8.75	5.90	2.19	0.62	11.01	12.43	2.85	3.71	1.58

1960	31.66	20.51	8.36	5.52	2.10	0.60	11.15	12.15	2.84	3.42	1.50
1961	31.90	20.91	8.34	5.41	2.05	0.59	10.99	12.57	2.93	3.36	1.47
1962	32.04	20.94	8.27	5.40	1.98	0.56	11.10	12.67	2.87	3.42	1.42
1963	32.01	20.90	8.16	5.33	1.96	0.57	11.11	12.73	2.83	3.37	1.40
1964	31.64	20.62	8.02	5.33	1.97	0.53	11.02	12.60	2.69	3.36	1.44
1965	31.52	20.70	8.07	5.42	2.04	0.54	10.82	12.63	2.64	3.38	1.50
1966	31.98	20.99	8.37	5.59	2.15	0.60	10.99	12.62	2.78	3.43	1.55
1967	32.05	21.07	8.43	5.63	2.16	0.60	10.97	12.65	2.80	3.47	1.56
1968	31.98	20.98	8.35	5.58	2.15	0.58	11.01	12.62	2.77	3.43	1.56
1969	31.82	20.68	8.02	5.30	2.00	0.55	11.14	12.66	2.71	3.30	1.45
1970	31.51	20.39	7.80	5.16	1.94	0.53	11.13	12.58	2.65	3.22	1.41
1971	31.75	20.50	7.79	5.12	1.91	0.52	11.26	12.71	2.66	3.21	1.40
1972	31.62	20.37	7.75	5.10	1.92	0.52	11.25	12.62	2.66	3.18	1.40
1973	31.85	20.57	7.74	5.07	1.89	0.50	11.28	12.83	2.67	3.18	1.39
1974	32.36	21.04	8.12	5.41	2.11	0.56	11.32	12.91	2.71	3.30	1.54
1975	32.62	21.03	8.01	5.31	2.04	0.56	11.60	13.02	2.70	3.27	1.48
1976	32.42	20.85	7.89	5.23	2.02	0.56	11.57	12.96	2.66	3.21	1.46
1977	32.43	20.83	7.90	5.25	2.04	0.57	11.60	12.93	2.65	3.21	1.48
1978	32.44	20.86	7.95	5.30	2.08	0.58	11.58	12.91	2.65	3.22	1.50
1979	32.35	20.83	8.03	5.38	2.16	0.62	11.52	12.80	2.65	3.23	1.54
1980	32.87	21.17	8.18	5.51	2.23	0.65	11.70	12.99	2.67	3.28	1.58
1981	32.72	20.97	8.03	5.42	2.23	0.66	11.75	12.94	2.60	3.20	1.57
1982	33.22	21.40	8.39	5.73	2.45	0.77	11.82	13.01	2.66	3.28	1.68
1983	33.69	21.79	8.59	5.94	2.61	0.87	11.91	13.19	2.66	3.33	1.74
1984	33.95	22.10	8.89	6.22	2.83	0.98	11.85	13.21	2.67	3.39	1.85
1985	34.25	22.38	9.09	6.39	2.91	0.97	11.87	13.28	2.70	3.48	1.94
1986	34.57	22.59	9.13	6.38	2.87	1.00	11.98	13.46	2.75	3.51	1.87
1987	36.48	24.49	10.75	7.76	3.73	1.30	11.99	13.74	2.98	4.04	2.43
1988	38.63	26.95	13.17	9.96	5.21	1.99	11.68	13.78	3.20	4.75	3.22
1989	38.47	26.66	12.61	9.37	4.74	1.74	11.81	14.05	3.24	4.63	3.00
1990	38.84	27.05	12.98	9.71	4.90	1.83	11.78	14.07	3.27	4.82	3.07
1991	38.38	26.43	12.17	8.90	4.36	1.61	11.95	14.26	3.27	4.54	2.75
1992	39.82	27.88	13.48	10.11	5.21	2.02	11.94	14.40	3.37	4.90	3.20
1993	39.48	27.41	12.82	9.45	4.72	1.74	12.07	14.59	3.37	4.74	2.98
1994	39.60	27.50	12.85	9.45	4.70	1.73	12.09	14.65	3.40	4.74	2.97
1995	40.19	28.11	13.33	9.87	4.94	1.80	12.08	14.77	3.47	4.93	3.14
1996	40.95	28.96	13.85	10.18	5.31	2.10	11.98	15.11	3.68	4.86	3.21
1997	41.25	29.28	14.32	10.79	5.73	2.34	11.97	14.96	3.53	5.06	3.39
1998	41.44	29.42	14.58	11.14	6.04	2.57	12.02	14.83	3.44	5.10	3.47

Table A2: Top fractiles income shares (including capital gains) in the U.S., 1913-1998 (fractiles are defined by total income (excluding capital gains))

	P90-100	P95-100	P99-100	P99.5-100	P99.9-100	P99.99-100	P90-95	P95-99	P99-99.5	P99.5-99.9	P99.9-99.99
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1913			17.96	14.73	8.62	2.76			3.23	6.11	5.86
1914			18.16	15.08	8.60	2.73			3.08	6.48	5.87
1915			17.58	14.58	9.22	4.36			3.00	5.36	4.86
1916			18.92	15.96	10.14	4.52			2.96	5.82	5.62
1917	40.47	30.59	17.73	14.33	8.40	3.33	9.87	12.86	3.40	5.94	5.06
1918	40.11	29.50	16.00	12.46	6.75	2.44	10.61	13.50	3.54	5.71	4.31
1919	40.00	29.85	16.19	12.44	6.52	2.23	10.15	13.67	3.74	5.92	4.30
1920	38.76	28.08	14.71	11.06	5.36	1.65	10.68	13.37	3.64	5.71	3.70
1921	43.13	30.75	15.63	11.69	5.62	1.68	12.38	15.12	3.94	6.08	3.94
1922	43.30	31.51	16.68	12.70	6.36	2.09	11.79	14.83	3.99	6.34	4.27
1923	41.07	29.39	15.32	11.59	5.67	1.83	11.68	14.07	3.72	5.93	3.84
1924	43.78	31.48	16.85	12.86	6.40	2.10	12.30	14.63	3.99	6.46	4.29
1925	44.80	33.42	18.72	14.41	7.41	2.65	11.38	14.70	4.31	7.00	4.77
1926	44.55	33.43	18.78	14.46	7.58	2.80	11.12	14.65	4.32	6.88	4.78
1927	45.21	34.20	19.60	15.21	8.13	3.06	11.00	14.60	4.39	7.09	5.06
1928	46.65	35.87	21.27	16.80	9.41	3.76	10.78	14.60	4.47	7.39	5.65
1929	44.29	34.02	19.90	15.67	8.84	3.64	10.27	14.12	4.23	6.83	5.20
1930	43.36	31.54	16.76	12.74	6.66	2.54	11.81	14.79	4.02	6.08	4.12
1931	44.45	31.13	15.41	11.46	5.78	2.13	13.32	15.72	3.96	5.68	3.64
1932	46.38	32.67	15.57	11.64	5.96	1.95	13.70	17.11	3.93	5.68	4.01
1933	45.24	32.82	16.12	12.11	6.30	2.15	12.43	16.70	4.01	5.81	4.15
1934	45.22	33.14	16.02	11.93	5.90	1.94	12.08	17.12	4.08	6.03	3.96
1935	43.63	31.40	16.00	12.00	5.98	1.98	12.23	15.40	4.00	6.02	4.00
1936	45.31	33.34	18.23	13.88	6.94	2.26	11.97	15.11	4.35	6.94	4.68
1937	43.60	31.63	16.69	12.60	6.24	2.03	11.96	14.94	4.09	6.36	4.21
1938	43.20	30.46	15.05	11.10	5.36	1.80	12.74	15.41	3.95	5.74	3.57
1939	44.82	31.57	15.66	11.58	5.56	1.78	13.24	15.91	4.08	6.02	3.79
1940	44.61	31.53	15.97	11.86	5.69	1.82	13.08	15.56	4.11	6.17	3.86
1941	41.21	29.29	15.25	11.35	5.43	1.71	11.92	14.04	3.89	5.92	3.73
1942	35.63	25.30	13.07	9.73	4.57	1.37	10.33	12.23	3.34	5.16	3.20
1943	33.03	23.42	11.80	8.68	3.94	1.03	9.61	11.62	3.12	4.74	2.90
1944	31.90	22.15	10.82	7.83	3.46	0.98	9.75	11.33	2.99	4.37	2.49
1945	33.42	23.76	11.67	8.36	3.61	0.95	9.66	12.08	3.31	4.75	2.66
1946	35.64	25.65	12.36	8.76	3.75	1.06	10.00	13.29	3.60	5.01	2.69
1947	33.63	23.91	11.34	8.03	3.47	1.01	9.72	12.57	3.31	4.56	2.46
1948	34.28	24.28	11.64	8.33	3.64	1.04	10.00	12.64	3.31	4.69	2.60
1949	34.15	23.87	11.24	8.02	3.50	1.02	10.28	12.63	3.22	4.52	2.47
1950	34.60	24.54	11.98	8.61	3.84	0.93	10.05	12.56	3.37	4.77	2.91
1951	33.39	23.32	11.05	7.84	3.39	0.97	10.07	12.27	3.21	4.45	2.41
1952	32.52	22.34	10.19	7.17	3.00	0.84	10.18	12.15	3.02	4.17	2.16
1953	31.72	21.40	9.41	6.55	2.70	0.75	10.33	11.99	2.86	3.85	1.95
1954	32.70	22.32	9.97	6.96	2.91	0.83	10.38	12.35	3.01	4.05	2.08
1955	32.66	22.31	9.97	6.95	2.95	0.89	10.36	12.34	3.02	4.01	2.06
1956	32.45	22.07	9.75	6.80	2.81	0.83	10.38	12.32	2.95	3.99	1.98
1957	32.19	21.76	9.47	6.55	2.67	0.77	10.43	12.30	2.92	3.88	1.90
1958	32.70	22.00	9.42	6.50	2.65	0.76	10.70	12.58	2.92	3.85	1.88
1959	32.70	22.00	9.42	6.68	2.68	0.78	10.70	12.56	2.92	4.00	1.90

1980   32 39												
1961   32.85   22.02   9.32   6.37   2.68   0.82   10.82   12.70   2.95   3.69   1.85     1962   32.67   21.71   8.98   6.10   2.46   0.74   11.00   12.73   2.88   3.64   1.72     1963   32.73   21.73   8.93   6.04   2.42   0.74   11.00   12.80   2.96   3.62   1.69     1964   32.89   21.95   91.5   6.19   2.50   0.76   10.94   12.80   2.96   3.70   1.74     1965   33.02   22.11   9.35   6.36   2.83   0.83   10.90   12.76   2.99   3.73   1.81     1966   33.17   22.32   9.52   6.55   2.78   0.84   10.85   12.79   2.97   3.77   1.94     1967   33.75   22.90   9.94   6.89   2.90   0.85   10.84   12.97   3.05   3.98   2.06     1968   34.01   23.15   10.20   7.12   3.04   0.88   10.86   12.96   3.08   4.09   2.16     1969   33.27   22.32   9.50   6.61   2.82   0.88   10.85   12.82   2.89   3.79   1.94     1970   32.15   21.13   8.50   5.75   2.30   0.67   11.02   12.63   2.75   3.44   1.63     1971   32.71   21.58   8.73   5.92   2.40   0.70   11.13   12.85   2.82   3.52   1.70     1972   32.75   21.60   8.78   5.95   2.42   0.72   11.15   12.82   2.84   3.53   1.69     1974   32.88   21.62   8.61   5.81   2.33   0.64   11.26   13.00   2.80   3.48   1.69     1976   33.04   21.51   8.43   5.67   2.27   0.66   11.54   13.08   2.76   3.40   1.61     1977   33.05   21.50   8.46   5.67   2.27   0.65   11.54   13.08   2.76   3.40   1.61     1978   33.04   21.51   8.43   5.67   2.27   0.66   11.54   13.08   2.76   3.40   1.61     1978   33.04   21.51   8.43   5.67   2.27   0.65   11.54   13.08   2.76   3.40   1.61     1978   33.04   21.50   8.47   5.72   2.30   0.66   11.54   13.03   2.79   3.44   1.65     1997   33.43   22.04   9.11   6.32   2.78   0.99   11.39   12.93   2.79   3.44   1.67     1987   33.04   21.50   8.46   5.70   2.29   0.65   11.54   13.08   2.76   3.40   1.61     1978   33.04   21.50   8.47   5.72   2.30   0.66   11.54   13.05   2.76   3.40   1.61     1979   33.43   22.04   9.11   6.32   2.78   0.99   11.39   12.93   2.79   3.44   1.65     1997   33.66   23.77   10.42   7.51   3.59   1.26   11.66   13.	1960	32.39	21.43	9.07	6.19	2.54	0.76	10.96	12.36	2.88	3.65	1.77
1963         32.73         21.73         8.93         6.04         2.42         0.74         11.00         12.80         2.89         3.62         1.89           1964         32.89         21.95         9.15         6.19         2.50         0.76         10.94         12.80         2.96         3.70         1.74           1965         33.02         22.11         9.35         6.36         2.63         0.83         10.90         12.76         2.99         3.73         1.81           1966         33.17         22.32         9.52         6.55         2.78         0.84         10.86         12.79         2.97         3.77         1.94           1967         33.75         22.90         9.94         6.89         2.90         0.85         10.86         12.96         3.08         4.09         2.16           1968         34.01         23.15         10.20         7.12         3.04         0.88         10.86         12.96         3.08         4.09         2.16           1970         32.15         21.13         8.50         5.75         230         0.67         11.02         12.63         2.75         3.44         1.63           1971	1961	32.85	22.02	9.32	6.37	2.68	0.82	10.82	12.70	2.95	3.69	1.85
1963         32.73         21.73         8.93         6.04         2.42         0.74         11.00         12.80         2.89         3.62         1.89           1964         32.89         21.95         9.15         6.19         2.50         0.76         10.94         12.80         2.96         3.70         1.74           1965         33.02         22.11         9.35         6.36         2.63         0.83         10.90         12.76         2.99         3.73         1.81           1966         33.17         22.32         9.52         6.55         2.78         0.84         10.86         12.79         2.97         3.77         1.94           1967         33.75         22.90         9.94         6.89         2.90         0.85         10.86         12.96         3.08         4.09         2.16           1968         34.01         23.15         10.20         7.12         3.04         0.88         10.86         12.96         3.08         4.09         2.16           1970         32.15         21.13         8.50         5.75         230         0.67         11.02         12.63         2.75         3.44         1.63           1971	1962	32.67	21.71	8.98	6.10	2.46	0.74	10.96	12.73	2.88	3.64	1.72
1985         33.02         2211         9.35         6.36         2.63         0.83         10.90         12.76         2.99         3.73         1.81           1967         33.75         22.90         9.94         6.89         2.90         0.85         10.84         12.97         3.05         3.98         2.06           1968         34.01         23.15         10.20         7.12         3.04         0.88         10.86         12.96         3.08         4.09         2.16           1969         33.27         22.32         9.50         6.61         2.82         0.88         10.86         12.96         3.08         4.09         2.16           1970         32.15         21.13         8.50         5.75         2.30         0.67         11.02         12.63         2.75         3.44         1.63           1971         32.75         21.60         8.78         5.95         2.42         0.72         11.15         12.82         2.84         3.53         1.69           1973         32.64         21.46         8.44         5.65         2.21         0.61         11.18         13.03         2.79         3.44         1.61           1974	1963	32.73	21.73	8.93	6.04		0.74	11.00			3.62	1.69
1985         33.02         2211         9.35         6.36         2.63         0.83         10.90         12.76         2.99         3.73         1.81           1967         33.75         22.90         9.94         6.89         2.90         0.85         10.84         12.97         3.05         3.98         2.06           1968         34.01         23.15         10.20         7.12         3.04         0.88         10.86         12.96         3.08         4.09         2.16           1969         33.27         22.32         9.50         6.61         2.82         0.88         10.86         12.96         3.08         4.09         2.16           1970         32.15         21.13         8.50         5.75         2.30         0.67         11.02         12.63         2.75         3.44         1.63           1971         32.75         21.60         8.78         5.95         2.42         0.72         11.15         12.82         2.84         3.53         1.69           1973         32.64         21.46         8.44         5.65         2.21         0.61         11.18         13.03         2.79         3.44         1.61           1974	1964	32.89	21.95	9.15	6.19	2.50	0.76	10.94	12.80	2.96	3.70	1.74
1967       33.75       22.90       9.94       6.89       2.90       0.85       10.84       12.97       3.05       3.98       2.06         1968       34.01       23.15       10.20       7.12       3.04       0.88       10.95       12.82       2.89       3.79       1.94         1970       32.15       21.13       8.50       5.75       2.30       0.67       11.02       12.63       2.75       3.44       1.63         1971       32.71       21.56       8.73       5.92       2.40       0.70       11.13       12.85       2.82       3.52       1.70         1972       32.75       21.60       8.78       5.95       2.42       0.72       11.15       12.82       2.84       3.53       1.69         1973       32.64       21.46       8.44       5.65       2.21       0.61       11.18       13.03       2.79       3.44       1.61         1974       32.88       21.62       8.61       5.87       2.25       0.65       11.54       13.00       2.80       3.48       1.69         1975       33.10       21.55       8.45       5.67       2.25       0.65       11.54       13.00	1965		22.11									
1967       33.75       22.90       9.94       6.89       2.90       0.85       10.84       12.97       3.05       3.98       2.06         1968       34.01       23.15       10.20       7.12       3.04       0.88       10.95       12.82       2.89       3.79       1.94         1970       32.15       21.13       8.50       5.75       2.30       0.67       11.02       12.63       2.75       3.44       1.63         1971       32.71       21.56       8.73       5.92       2.40       0.70       11.13       12.85       2.82       3.52       1.70         1972       32.75       21.60       8.78       5.95       2.42       0.72       11.15       12.82       2.84       3.53       1.69         1973       32.64       21.46       8.44       5.65       2.21       0.61       11.18       13.03       2.79       3.44       1.61         1974       32.88       21.62       8.61       5.87       2.25       0.65       11.54       13.00       2.80       3.48       1.69         1975       33.10       21.55       8.45       5.67       2.25       0.65       11.54       13.00	1966	33.17	22.32	9.52	6.55	2.78	0.84	10.85	12.79	2.97	3.77	1.94
1968   34.01   23.15   10.20   7.12   3.04   0.88   10.86   12.96   3.08   4.09   2.16   1969   33.27   22.32   9.50   6.61   2.62   2.89   3.79   1.94   1970   32.15   21.13   8.50   5.75   2.30   0.67   11.02   12.63   2.75   3.44   1.63   1971   32.71   21.58   8.73   5.92   2.40   0.70   11.13   12.85   2.82   3.52   1.70   1972   32.75   21.60   8.78   5.95   2.42   0.72   11.15   12.85   2.82   3.52   1.70   1973   32.64   21.46   8.44   5.65   2.21   0.61   11.18   13.03   2.79   3.44   1.61   1974   32.88   21.62   8.61   5.81   2.33   0.64   11.26   13.00   2.80   3.48   1.69   1975   33.10   21.55   8.45   5.67   2.25   0.65   11.54   13.10   2.78   3.42   1.60   1976   33.04   21.51   8.43   5.67   2.27   0.66   11.54   13.05   2.76   3.40   1.61   1977   33.05   21.50   8.46   5.70   2.29   0.65   11.54   13.05   2.76   3.40   1.61   1978   33.04   21.50   8.47   5.72   2.30   0.66   11.54   13.05   2.76   3.40   1.61   1978   33.04   21.50   8.47   5.72   2.30   0.66   11.55   13.03   2.75   3.41   1.65   1979   33.43   22.04   9.11   6.32   2.78   0.91   11.39   12.93   2.79   3.54   1.87   1980   33.97   22.38   9.27   6.44   2.80   0.89   11.59   13.11   2.83   3.64   1.92   1.98   1.98   1.98   1.59   13.11   2.83   3.64   1.92   1.98   1.98   1.98   1.59   13.11   2.83   3.64   1.92   1.98   1.98   1.98   3.56   22.05   9.03   6.28   2.75   0.87   11.62   13.03   2.74   3.53   1.88   1.92   1.98   1.59   13.11   2.83   3.64   1.92   1.98   1.98   3.56   2.377   10.42   7.51   3.59   1.26   11.68   13.35   2.91   3.92   2.33   1.98   1.98   3.54   2.96   4.16   2.69   1.98   3.56   2.479   11.24   8.28   4.13   1.44   11.67   13.54   2.96   4.16   2.69   1.98   3.58   2.96   4.16   2.69   1.98   3.58   2.96   4.16   2.69   1.98   3.58   2.91   3.92   2.33   3.91   3.92   2.33   3.94   3.96   2.77   3.96   4.16   3.95   3.96   4.16   3.95   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3.96   4.16   3												
1969         33.27         22.32         9.50         6.61         2.82         0.88         10.95         12.82         2.89         3.79         1.94           1970         32.15         21.13         8.50         5.75         2.30         0.67         11.02         12.63         2.75         3.44         1.63           1971         32.75         21.60         8.78         5.95         2.42         0.70         11.13         12.82         2.84         3.53         1.69           1973         32.64         21.46         8.44         5.65         2.21         0.61         11.18         13.03         2.79         3.44         1.61           1974         32.88         21.62         8.61         5.81         2.33         0.64         11.26         13.00         2.80         3.48         1.69           1975         33.10         21.55         8.45         5.67         2.27         0.66         11.54         13.00         2.80         3.42         1.60           1976         33.05         21.50         8.46         5.70         2.29         0.65         11.54         13.05         2.76         3.40         1.61           1977	1968	34.01	23.15	10.20	7.12			10.86				
1970         32.15         21.13         8.50         5.75         2.30         0.67         11.02         12.63         2.75         3.44         1.63           1971         32.75         21.60         8.78         5.95         2.40         0.70         11.13         12.85         2.82         3.52         1.70           1972         32.75         21.60         8.78         5.95         2.42         0.72         11.15         12.82         2.84         3.53         1.69           1973         32.64         21.46         8.44         5.65         2.21         0.61         11.18         13.00         2.80         3.44         1.61           1974         32.88         21.62         8.61         5.81         2.33         0.64         11.26         13.00         2.80         3.48         1.69           1975         33.10         21.55         8.45         5.67         2.25         0.65         11.54         13.00         2.80         3.42         1.60           1976         33.04         21.51         8.43         5.67         2.27         0.66         11.54         13.06         2.76         3.40         1.61           1978	1969											
1971         32.71         21.58         8.73         5.92         2.40         0.70         11.13         12.85         2.82         3.52         1.70           1972         32.75         21.60         8.78         5.95         2.42         0.72         11.15         12.82         2.84         3.53         1.69           1973         32.64         21.46         8.44         5.65         2.21         0.61         11.18         13.03         2.79         3.44         1.61           1974         32.88         21.62         8.61         5.81         5.67         2.25         0.65         11.54         13.00         2.80         3.48         1.69           1976         33.04         21.51         8.43         5.67         2.27         0.66         11.54         13.08         2.76         3.40         1.61           1977         33.05         21.50         8.46         5.72         2.30         0.66         11.54         13.05         2.76         3.40         1.61           1977         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.32         2.79         3.54         1.87	1970	32.15		8.50	5.75			11.02		2.75	3.44	
1972         32,75         21,60         8,78         5,95         2,42         0,72         11,15         12,82         2,84         3,53         1,69           1973         32,64         21,46         8,44         5,65         2,21         0,61         11,18         13,03         2,78         3,44         1,69           1975         33,10         21,55         8,45         5,67         2,25         0,65         11,54         13,10         2,78         3,42         1,60           1976         33,04         21,51         8,43         5,67         2,27         0,66         11,54         13,08         2,76         3,40         1,61           1977         33,05         21,50         8,46         5,70         2,29         0,65         11,54         13,03         2,76         3,40         1,64           1978         33,04         21,50         8,47         5,72         2,30         0,66         11,55         13,03         2,75         3,41         1,69           1978         33,43         22,04         9,11         6,32         2,78         0,91         11,39         12,93         2,79         3,54         1,87           1980	1971											
1973         32.64         21.46         8.44         5.65         2.21         0.61         11.18         13.03         2.79         3.44         1.61           1974         32.88         21.62         8.61         5.81         2.33         0.64         11.26         13.00         2.80         3.48         1.69           1975         33.10         21.55         8.45         5.67         2.27         0.66         11.54         13.10         2.78         3.40         1.61           1976         33.04         21.51         8.43         5.67         2.27         0.66         11.54         13.08         2.76         3.40         1.61           1977         33.05         21.50         8.46         5.70         2.29         0.65         11.54         13.05         2.75         3.41         1.65           1979         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.93         2.79         3.54         1.87           1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981	1972	32.75	21.60	8.78	5.95	2.42		11.15			3.53	1.69
1974         32.88         21.62         8.61         5.81         2.33         0.64         11.26         13.00         2.80         3.48         1.69           1976         33.10         21.55         8.45         5.67         2.25         0.65         11.54         13.10         2.78         3.42         1.60           1977         33.05         21.50         8.46         5.70         2.29         0.65         11.54         13.05         2.76         3.40         1.61           1978         33.04         21.50         8.47         5.72         2.30         0.66         11.54         13.05         2.76         3.40         1.64           1978         33.04         21.50         8.47         5.72         2.30         0.66         11.55         13.03         2.75         3.41         1.65           1979         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.93         2.79         3.54         1.87           1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981	1973											
1975         33.10         21.55         8.45         5.67         2.25         0.65         11.54         13.10         2.78         3.42         1.60           1976         33.04         21.50         8.46         5.70         2.27         0.66         11.54         13.08         2.76         3.40         1.61           1978         33.04         21.50         8.47         5.72         2.30         0.66         11.55         13.03         2.75         3.41         1.65           1979         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.93         2.79         3.54         1.87           1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981         33.68         22.05         9.03         6.28         2.75         0.87         11.62         13.03         2.74         3.53         1.88           1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.01         2.82         3.72         2.17           1983	1974	32.88										
1976         33.04         21.51         8.43         5.67         2.27         0.66         11.54         13.08         2.76         3.40         1.61           1977         33.05         21.50         8.46         5.70         2.29         0.65         11.54         13.05         2.76         3.40         1.64           1978         33.04         21.50         8.47         5.72         2.30         0.66         11.55         13.03         2.75         3.41         1.65           1979         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.93         2.79         3.54         1.87           1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981         33.68         22.05         9.03         6.28         2.75         0.87         11.62         13.03         2.74         3.53         1.88           1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.03         2.74         3.92         2.17           1983	1975	33.10	21.55	8.45								
1977         33.05         21.50         8.46         5.70         2.29         0.65         11.54         13.05         2.76         3.40         1.64           1978         33.04         21.50         8.47         5.72         2.30         0.66         11.55         13.03         2.79         3.54         1.65           1979         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.93         2.79         3.54         1.87           1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981         33.68         22.05         9.03         6.28         2.75         0.87         11.62         13.03         2.74         3.53         1.88           1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.11         2.82         3.72         2.17           1983         35.46         23.77         10.42         7.51         3.59         1.26         11.68         13.35         2.91         3.92         2.33           1984												
1978         33.04         21.50         8.47         5.72         2.30         0.66         11.55         13.03         2.75         3.41         1.65           1979         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.93         2.79         3.54         1.87           1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981         33.68         22.05         9.03         6.28         2.75         0.87         11.62         13.03         2.74         3.53         1.88           1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.11         2.82         3.72         2.17           1983         35.46         23.77         10.42         7.51         3.59         1.26         11.68         13.35         2.91         3.92         2.33           1984         35.78         24.14         10.76         7.88         3.92         1.40         11.64         13.37         2.88         3.97         2.51           1986	1977											
1979         33.43         22.04         9.11         6.32         2.78         0.91         11.39         12.93         2.79         3.54         1.87           1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981         33.68         22.05         9.03         6.28         2.75         0.87         11.62         13.03         2.74         3.53         1.88           1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.11         2.82         3.72         2.17           1983         35.46         23.77         10.42         7.51         3.59         1.26         11.68         13.35         2.91         3.92         2.33           1984         35.78         24.14         10.76         7.88         3.92         1.40         11.64         13.37         2.88         3.97         2.51           1985         36.46         24.79         11.24         8.28         4.13         1.44         11.67         13.54         2.96         4.16         2.69           1986	1978	33.04										
1980         33.97         22.38         9.27         6.44         2.80         0.89         11.59         13.11         2.83         3.64         1.92           1981         33.68         22.05         9.03         6.28         2.75         0.87         11.62         13.03         2.74         3.53         1.88           1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.11         2.82         3.72         2.17           1983         35.46         23.77         10.42         7.51         3.59         1.26         11.68         13.35         2.91         3.92         2.33           1984         35.78         24.14         10.76         7.88         3.92         1.40         11.64         13.37         2.88         3.97         2.51           1985         36.46         24.79         11.24         8.28         4.13         1.44         11.67         13.54         2.96         4.16         2.69           1986         38.60         27.14         13.40         10.18         4.99         1.97         11.45         13.75         3.22         5.19         3.01           1987												
1981         33.68         22.05         9.03         6.28         2.75         0.87         11.62         13.03         2.74         3.53         1.88           1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.11         2.82         3.72         2.17           1983         35.46         23.77         10.42         7.51         3.59         1.26         11.68         13.35         2.91         3.92         2.33           1984         35.78         24.14         10.76         7.88         3.92         1.40         11.64         13.37         2.88         3.97         2.51           1985         36.46         24.79         11.24         8.28         4.13         1.44         11.67         13.54         2.96         4.16         2.69           1986         38.60         27.14         13.40         10.18         4.99         1.97         11.45         13.75         3.22         5.19         3.01           1987         37.60         25.77         11.84         8.70         4.28         1.52         11.83         13.93         3.14         4.43         2.76           1988 <td>1980</td> <td>33.97</td> <td>22.38</td> <td>9.27</td> <td></td> <td>2.80</td> <td></td> <td></td> <td></td> <td></td> <td>3.64</td> <td></td>	1980	33.97	22.38	9.27		2.80					3.64	
1982         34.58         22.96         9.85         7.03         3.31         1.14         11.62         13.11         2.82         3.72         2.17           1983         35.46         23.77         10.42         7.51         3.59         1.26         11.68         13.35         2.91         3.92         2.33           1984         35.78         24.14         10.76         7.88         3.92         1.40         11.64         13.37         2.88         3.97         2.51           1985         36.46         24.79         11.24         8.28         4.13         1.44         11.67         13.54         2.96         4.16         2.69           1986         38.60         27.14         13.40         10.18         4.99         1.97         11.45         13.75         3.22         5.19         3.01           1987         37.60         25.77         11.84         8.70         4.28         1.52         11.83         13.93         3.14         4.43         2.76           1988         40.00         28.56         14.73         11.36         6.13         2.40         11.44         13.83         3.37         5.23         3.73           1989 </td <td>1981</td> <td></td>	1981											
1983         35.46         23.77         10.42         7.51         3.59         1.26         11.68         13.35         2.91         3.92         2.33           1984         35.78         24.14         10.76         7.88         3.92         1.40         11.64         13.37         2.88         3.97         2.51           1985         36.46         24.79         11.24         8.28         4.13         1.44         11.67         13.54         2.96         4.16         2.69           1986         38.60         27.14         13.40         10.18         4.99         1.97         11.45         13.75         3.22         5.19         3.01           1987         37.60         25.77         11.84         8.70         4.28         1.52         11.83         13.93         3.14         4.43         2.76           1988         40.00         28.56         14.73         11.36         6.13         2.40         11.44         13.83         3.37         5.23         3.73           1989         39.60         27.97         13.90         10.50         5.51         2.11         11.62         14.07         3.40         5.00         3.39           1990	1982		22.96									
1984         35.78         24.14         10.76         7.88         3.92         1.40         11.64         13.37         2.88         3.97         2.51           1985         36.46         24.79         11.24         8.28         4.13         1.44         11.67         13.54         2.96         4.16         2.69           1986         38.60         27.14         13.40         10.18         4.99         1.97         11.45         13.75         3.22         5.19         3.01           1987         37.60         25.77         11.84         8.70         4.28         1.52         11.83         13.93         3.14         4.43         2.76           1988         40.00         28.56         14.73         11.36         6.13         2.40         11.44         13.83         3.37         5.23         3.73           1989         39.60         27.97         13.90         10.50         5.51         2.11         11.62         14.07         3.40         5.00         3.39           1990         39.58         27.95         13.88         10.51         5.43         2.09         11.63         14.07         3.37         5.09         3.34           199	1983											
1985         36.46         24.79         11.24         8.28         4.13         1.44         11.67         13.54         2.96         4.16         2.69           1986         38.60         27.14         13.40         10.18         4.99         1.97         11.45         13.75         3.22         5.19         3.01           1987         37.60         25.77         11.84         8.70         4.28         1.52         11.83         13.93         3.14         4.43         2.76           1988         40.00         28.56         14.73         11.36         6.13         2.40         11.44         13.83         3.37         5.23         3.73           1989         39.60         27.97         13.90         10.50         5.51         2.11         11.62         14.07         3.40         5.00         3.39           1990         39.58         27.95         13.88         10.51         5.43         2.09         11.63         14.07         3.37         5.09         3.34           1991         38.90         27.06         12.76         9.41         4.68         1.72         11.84         14.30         3.35         4.73         2.96           199												
1986       38.60       27.14       13.40       10.18       4.99       1.97       11.45       13.75       3.22       5.19       3.01         1987       37.60       25.77       11.84       8.70       4.28       1.52       11.83       13.93       3.14       4.43       2.76         1988       40.00       28.56       14.73       11.36       6.13       2.40       11.44       13.83       3.37       5.23       3.73         1989       39.60       27.97       13.90       10.50       5.51       2.11       11.62       14.07       3.40       5.00       3.39         1990       39.58       27.95       13.88       10.51       5.43       2.09       11.63       14.07       3.37       5.09       3.34         1991       38.90       27.06       12.76       9.41       4.68       1.72       11.84       14.30       3.35       4.73       2.96         1992       40.52       28.71       14.30       10.83       5.70       2.21       11.81       14.41       3.46       5.14       3.49         1993       40.31       28.40       13.77       10.32       5.30       1.98       11.91       <	1985											
1987       37.60       25.77       11.84       8.70       4.28       1.52       11.83       13.93       3.14       4.43       2.76         1988       40.00       28.56       14.73       11.36       6.13       2.40       11.44       13.83       3.37       5.23       3.73         1989       39.60       27.97       13.90       10.50       5.51       2.11       11.62       14.07       3.40       5.00       3.39         1990       39.58       27.95       13.88       10.51       5.43       2.09       11.63       14.07       3.37       5.09       3.34         1991       38.90       27.06       12.76       9.41       4.68       1.72       11.84       14.30       3.35       4.73       2.96         1992       40.52       28.71       14.30       10.83       5.70       2.21       11.81       14.41       3.46       5.14       3.49         1993       40.31       28.40       13.77       10.32       5.30       1.98       11.91       14.63       3.46       5.01       3.32         1994       40.35       28.38       13.72       10.23       5.20       1.94       11.97       <												
1988       40.00       28.56       14.73       11.36       6.13       2.40       11.44       13.83       3.37       5.23       3.73         1989       39.60       27.97       13.90       10.50       5.51       2.11       11.62       14.07       3.40       5.00       3.39         1990       39.58       27.95       13.88       10.51       5.43       2.09       11.63       14.07       3.37       5.09       3.34         1991       38.90       27.06       12.76       9.41       4.68       1.72       11.84       14.30       3.35       4.73       2.96         1992       40.52       28.71       14.30       10.83       5.70       2.21       11.81       14.41       3.46       5.14       3.49         1993       40.31       28.40       13.77       10.32       5.30       1.98       11.91       14.63       3.46       5.01       3.32         1994       40.35       28.38       13.72       10.23       5.20       1.94       11.97       14.66       3.49       5.02       3.26         1995       41.16       29.25       14.43       10.82       5.54       2.01       11.92	1987	37.60	25.77	11.84	8.70	4.28					4.43	
1989       39.60       27.97       13.90       10.50       5.51       2.11       11.62       14.07       3.40       5.00       3.39         1990       39.58       27.95       13.88       10.51       5.43       2.09       11.63       14.07       3.37       5.09       3.34         1991       38.90       27.06       12.76       9.41       4.68       1.72       11.84       14.30       3.35       4.73       2.96         1992       40.52       28.71       14.30       10.83       5.70       2.21       11.81       14.41       3.46       5.14       3.49         1993       40.31       28.40       13.77       10.32       5.30       1.98       11.91       14.63       3.46       5.01       3.32         1994       40.35       28.38       13.72       10.23       5.20       1.94       11.97       14.66       3.49       5.02       3.26         1995       41.16       29.25       14.43       10.82       5.54       2.01       11.92       14.82       3.61       5.28       3.52         1996       41.55       29.84       15.01       11.29       6.07       2.40       11.50	1988	40.00										
1990       39.58       27.95       13.88       10.51       5.43       2.09       11.63       14.07       3.37       5.09       3.34         1991       38.90       27.06       12.76       9.41       4.68       1.72       11.84       14.30       3.35       4.73       2.96         1992       40.52       28.71       14.30       10.83       5.70       2.21       11.81       14.41       3.46       5.14       3.49         1993       40.31       28.40       13.77       10.32       5.30       1.98       11.91       14.63       3.46       5.01       3.32         1994       40.35       28.38       13.72       10.23       5.20       1.94       11.97       14.66       3.49       5.02       3.26         1995       41.16       29.25       14.43       10.82       5.54       2.01       11.92       14.82       3.61       5.28       3.52         1996       41.55       29.84       15.01       11.29       6.07       2.40       11.72       14.83       3.71       5.22       3.67         1997       42.11       30.62       15.80       12.14       6.66       2.70       11.50	1989											
1991       38.90       27.06       12.76       9.41       4.68       1.72       11.84       14.30       3.35       4.73       2.96         1992       40.52       28.71       14.30       10.83       5.70       2.21       11.81       14.41       3.46       5.14       3.49         1993       40.31       28.40       13.77       10.32       5.30       1.98       11.91       14.63       3.46       5.01       3.32         1994       40.35       28.38       13.72       10.23       5.20       1.94       11.97       14.66       3.49       5.02       3.26         1995       41.16       29.25       14.43       10.82       5.54       2.01       11.92       14.82       3.61       5.28       3.52         1996       41.55       29.84       15.01       11.29       6.07       2.40       11.72       14.83       3.71       5.22       3.67         1997       42.11       30.62       15.80       12.14       6.66       2.70       11.50       14.81       3.66       5.48       3.96												
1992       40.52       28.71       14.30       10.83       5.70       2.21       11.81       14.41       3.46       5.14       3.49         1993       40.31       28.40       13.77       10.32       5.30       1.98       11.91       14.63       3.46       5.01       3.32         1994       40.35       28.38       13.72       10.23       5.20       1.94       11.97       14.66       3.49       5.02       3.26         1995       41.16       29.25       14.43       10.82       5.54       2.01       11.92       14.82       3.61       5.28       3.52         1996       41.55       29.84       15.01       11.29       6.07       2.40       11.72       14.83       3.71       5.22       3.67         1997       42.11       30.62       15.80       12.14       6.66       2.70       11.50       14.81       3.66       5.48       3.96	1991											
1993     40.31     28.40     13.77     10.32     5.30     1.98     11.91     14.63     3.46     5.01     3.32       1994     40.35     28.38     13.72     10.23     5.20     1.94     11.97     14.66     3.49     5.02     3.26       1995     41.16     29.25     14.43     10.82     5.54     2.01     11.92     14.82     3.61     5.28     3.52       1996     41.55     29.84     15.01     11.29     6.07     2.40     11.72     14.83     3.71     5.22     3.67       1997     42.11     30.62     15.80     12.14     6.66     2.70     11.50     14.81     3.66     5.48     3.96	1992											
1994     40.35     28.38     13.72     10.23     5.20     1.94     11.97     14.66     3.49     5.02     3.26       1995     41.16     29.25     14.43     10.82     5.54     2.01     11.92     14.82     3.61     5.28     3.52       1996     41.55     29.84     15.01     11.29     6.07     2.40     11.72     14.83     3.71     5.22     3.67       1997     42.11     30.62     15.80     12.14     6.66     2.70     11.50     14.81     3.66     5.48     3.96	1993											
1995     41.16     29.25     14.43     10.82     5.54     2.01     11.92     14.82     3.61     5.28     3.52       1996     41.55     29.84     15.01     11.29     6.07     2.40     11.72     14.83     3.71     5.22     3.67       1997     42.11     30.62     15.80     12.14     6.66     2.70     11.50     14.81     3.66     5.48     3.96												
1996     41.55     29.84     15.01     11.29     6.07     2.40     11.72     14.83     3.71     5.22     3.67       1997     42.11     30.62     15.80     12.14     6.66     2.70     11.50     14.81     3.66     5.48     3.96												
1997 42.11 30.62 15.80 12.14 6.66 2.70 11.50 14.81 3.66 5.48 3.96												
10.00 T4.10 01.07 10.01 14.10 1.17 0.00 11.00 17.01 3.09 3.00 4.12	1998	42.40	31.04	16.37	12.73	7.14	3.02	11.35	14.67	3.64	5.59	4.12

Table A3: Top fractiles income shares (including capital gains) in the U.S., 1913-1998 (fractiles are defined by total income (including capital gains))

	P90-100	P95-100	P99-100	P99.5-100	P99.9-100	P99.99-100	P90-95	P95-99	P99-99.5	P99.5-99.9	P99.9-99.99
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
1913			17.96	14.73	8.62	2.76			3.23	6.11	5.86
1914			18.16	15.08	8.60	2.73			3.08	6.48	5.87
1915			17.58	14.58	9.22	4.36			3.00	5.36	4.86
1916		~~~	19.34	16.40	10.53	4.79		40.00	2.94	5.87	5.74
1917	40.54	30.67	17.75	14.36	8.41	3.37	9.87	12.92	3.40	5.95	5.04
1918	40.14	29.52	15.97	12.44	6.72	2.46	10.62	13.54	3.53	5.72	4.27
1919	40.40	30.23	16.44	12.66	6.64	2.29	10.17	13.78	3.78	6.02	4.35
1920	39.09	28.38	14.86	11.17	5.37	1.67	10.71	13.52	3.69	5.80	3.70
1921	43.22	30.83	15.65	11.71	5.61	1.69	12.39	15.18	3.94	6.10	3.92
1922	43.81	32.01	17.09	13.09	6.65	2.28	11.80	14.92	4.01	6.44	4.37
1923	41.55	29.84	15.68	11.93	5.92	2.00	11.71	14.17	3.74	6.01	3.92
1924	44.54	32.21	17.47	13.44	6.81	2.33	12.33	14.73	4.03	6.63	4.48
1925	46.61	35.21	20.36	15.95	8.57	3.33	11.41	14.85	4.41	7.38	5.24
1926	45.92	34.77	20.00	15.62	8.50	3.38	11.15	14.77	4.38	7.12	5.12
1927	46.92	35.88	21.14	16.69	9.30	3.77	11.04	14.74	4.45	7.38	5.53
1928	49.70	38.88	24.14	19.56	11.64	5.07	10.81	14.74	4.58	7.92	6.57
1929	47.05	36.75	22.51	18.20	10.99	5.03	10.30	14.23	4.32	7.20	5.97
1930	43.98	32.14	17.27	13.24	7.09	2.85	11.83	14.88	4.03	6.15	4.24
1931	44.59	31.26	15.52	11.58	5.90	2.25	13.33	15.75	3.94	5.68	3.65
1932	46.39	32.68	15.56	11.63	5.97	1.99	13.71	17.12	3.93	5.66	3.98
1933	45.68	33.24	16.49	12.49	6.62	2.35	12.44	16.75	4.00	5.87	4.27
1934	45.83	33.75	16.41	12.31	6.14	2.08	12.08	17.33	4.11	6.17	4.06
1935	44.58	32.35	16.71	12.66	6.41	2.19	12.23	15.64	4.05	6.25	4.21
1936	46.76	34.76	19.36	14.91	7.59	2.55	12.00	15.40	4.45	7.32	5.05
1937	44.28	32.31	17.17	13.04	6.50	2.18	11.98	15.14	4.13	6.54	4.33
1938	44.15	31.40	15.78	11.80	5.89	2.20 1.97	12.75	15.62	3.99	5.90	3.70 3.91
1939	45.58	32.32	16.20	12.07	5.88		13.26	16.13	4.12	6.19	
1940	45.35	32.26	16.50	12.35 11.88	6.01	2.05 1.98	13.09	15.76	4.15	6.34	3.97 3.83
1941	41.96 36.15	30.03 25.82	15.81	10.07	5.81 4.82	1.55	11.93 10.33	14.22 12.38	3.93 3.36	6.06	3.83 3.27
1942 1943	33.74	25.62 24.12	13.44 12.33	9.16	4.62 4.27	1.55 1.24	9.62	12.30	3.36 3.17	5.26 4.89	3.03
1943	32.56	22.80	12.33	8.27	3.76	1.2 <del>4</del> 1.17	9.62 9.76	11.79	3.17	4.69 4.51	2.60
1944	34.61	24.93	12.58	9.19	4.18	1.17	9.68	12.34	3.40	5.01	2.91
1945	37.08	27.04	13.41	9.71	4.16	1.49	10.04	13.63	3.70	5.01	2.95
1946	34.61	24.87	12.05	9.71 8.68	3.95	1.49	9.74	12.82	3.70	4.73	2.63
1947	35.21	25.20	12.03	8.95	4.08	1.31	10.02	12.82	3.36	4.73	2.77
1949	34.90	24.61	11.78	8.51	3.85	1.25	10.02	12.83	3.26	4.66	2.60
1950	35.76	25.67	12.89	9.42	4.41	1.23	10.29	12.78	3.47	5.01	3.19
1951	34.44	24.36	11.86	8.58	3.92	1.29	10.08	12.76	3.47	4.67	2.63
1951	33.38	23.19	10.85	o.so 7.78	3.45	1.09	10.06	12.49	3.26 3.07	4.87	2.35
1952	32.44	23.19	9.94	7.76 7.05	3.45	0.97	10.20	12.34	2.89	3.98	2.10
1953	33.81	23.42	10.83	7.05 7.75	3.51	1.17	10.34	12.10	3.08	4.24	2.33
1955	34.09	23.42	11.11	8.00	3.73	1.32	10.39	12.59	3.11	4.24	2.33
1956	33.69	23.70	10.74	7.76	3.73	1.21	10.40	12.54	2.99	4.27	2.30
1957	33.16	23.20	10.74	7.76 7.27	3.20	1.06	10.44	12.54	2.95	4.25	2.14
1958	33.80	23.09	10.21	7.32	3.24	1.09	10.71	12.81	2.96	4.07	2.15
1959	34.31	23.60	10.28	7.79	3.48	1.20	10.71	12.86	2.96	4.30	2.13
1909	J <del>4</del> .J1	23.00	10.74	1.18	3.40	1.20	10.71	12.00	2.30	4.30	2.20

1960	33.69	22.72	10.10	7.17	3.27	1.18	10.97	12.62	2.92	3.91	2.09
1961	34.55	23.71	10.73	7.72	3.68	1.39	10.85	12.97	3.01	4.04	2.29
1962	33.95	22.97	10.02	7.11	3.22	1.17	10.97	12.95	2.92	3.89	2.05
1963	34.04	23.02	9.99	7.05	3.17	1.16	11.02	13.03	2.94	3.88	2.01
1964	34.59	23.62	10.53	7.42	3.39	1.31	10.98	13.09	3.11	4.03	2.08
1965	34.96	24.00	10.95	7.76	3.67	1.50	10.96	13.05	3.18	4.09	2.18
1966	34.03	23.16	10.28	7.30	3.42	1.30	10.87	12.88	2.99	3.87	2.12
1967	34.81	23.96	10.85	7.76	3.72	1.43	10.86	13.10	3.10	4.04	2.28
1968	35.29	24.46	11.36	8.24	4.07	1.64	10.83	13.10	3.11	4.17	2.44
1969	34.29	23.33	10.46	7.52	3.73	1.57	10.96	12.87	2.94	3.79	2.16
1970	32.87	21.82	9.09	6.30	2.80	1.00	11.05	12.73	2.79	3.50	1.79
1971	33.64	22.46	9.48	6.62	3.01	1.12	11.18	12.98	2.86	3.61	1.89
1972	33.90	22.73	9.73	6.84	3.16	1.19	11.17	13.00	2.88	3.69	1.97
1973	33.71	22.47	9.27	6.38	2.79	0.95	11.25	13.20	2.89	3.58	1.84
1974	33.64	22.34	9.21	6.37	2.76	0.89	11.30	13.13	2.84	3.61	1.87
1975	33.79	22.21	8.97	6.13	2.59	0.86	11.57	13.25	2.83	3.54	1.74
1976	33.83	22.25	8.97	6.15	2.63	0.87	11.58	13.28	2.83	3.52	1.76
1977	33.95	22.37	9.12	6.29	2.74	0.93	11.58	13.24	2.84	3.55	1.80
1978	33.91	22.31	9.06	6.24	2.68	0.87	11.59	13.25	2.82	3.56	1.81
1979	34.65	23.22	10.08	7.20	3.48	1.39	11.42	13.14	2.89	3.72	2.09
1980	35.07	23.46	10.15	7.24	3.45	1.29	11.61	13.31	2.91	3.79	2.16
1981	34.91	23.28	10.12	7.31	3.60	1.38	11.63	13.16	2.81	3.71	2.22
1982	35.65	24.05	10.89	8.04	4.21	1.75	11.61	13.15	2.86	3.82	2.46
1983	36.88	25.19	11.71	8.75	4.68	1.91	11.69	13.48	2.96	4.06	2.77
1984	37.20	25.61	12.14	9.15	5.04	2.18	11.59	13.47	2.99	4.11	2.86
1985	38.07	26.47	12.84	9.76	5.39	2.27	11.60	13.63	3.09	4.37	3.12
1986	41.41	30.06	16.22	12.87	7.54	3.41	11.36	13.83	3.36	5.33	4.13
1987	38.55	26.75	12.76	9.52	4.94	1.92	11.80	13.99	3.24	4.59	3.01
1988	40.85	29.45	15.58	12.16	6.84	2.88	11.40	13.87	3.42	5.32	3.96
1989	40.34	28.73	14.58	11.15	6.04	2.47	11.61	14.15	3.43	5.11	3.57
1990	40.18	28.55	14.40	11.00	5.85	2.35	11.63	14.15	3.40	5.15	3.51
1991	39.67	27.81	13.40	10.02	5.14	1.96	11.86	14.41	3.39	4.88	3.18
1992	41.03	29.21	14.74	11.26	6.06	2.48	11.82	14.47	3.49	5.19	3.59
1993	40.94	29.02	14.33	10.85	5.77	2.33	11.93	14.69	3.48	5.08	3.43
1994	41.00	29.05	14.31	10.79	5.73	2.31	11.95	14.74	3.52	5.06	3.43
1995	41.82	29.91	15.06	11.46	6.16	2.45	11.91	14.85	3.61	5.29	3.71
1996	43.26	31.51	16.57	12.81	7.26	3.06	11.75	14.94	3.76	5.55	4.20
1997	44.41	32.89	17.87	14.10	8.19	3.55	11.53	15.01	3.77	5.91	4.64
1998	45.19	33.82	18.91	15.12	9.01	4.07	11.38	14.91	3.79	6.11	4.94
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Table A4: Top fractiles income levels (excluding capital gains) in the U.S., 1913-1998 (fractiles are defined by total income (excluding capital gains)) (incomes are expressed in 1998 \$)

	P90-100	P95-100	P99-100	P99.5-100	P99.9-100	P99.99-100	P0-90	P90-95	P95-99	P99-99.5	P99.5-99.9	P99.9-99.99	P90	P95	P99	P99.5	P99.9	P99.99
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1913			216,894	355,687	1,040,581	3,327,085				78,101	184,463	786,525			62,114	101,862	322,023	1,354,485
1914			214,336	,	, ,					72,658	191,133	770,422			57,429	95,390	308,566	1,346,418
1915			209,485	,	1,098,731					71,493	159,654	643,442			48,411	92,114	339,477	1,722,459
1916		00.400	240,727	- , -	, -,	, ,				76,974	185,898	786,536			58,073	103,766	389,454	, - ,-
1917	53,194	80,106	232,380	375,891	1,103,559		9,127	26,282	42,038	88,869	193,974	737,523	20,955	29,021	71,644	116,146	403,108	1,838,983
1918	49,887	73,256	198,571	309,685	842,776	3,060,677	8,695	26,519	41,928	87,457	176,413	596,342	22,186	29,642	71,580	111,165	343,640	1,390,570
1919 1920	48,324 41,599	71,744 59,983	194,213 157,866	299,481 239,178	789,950 586,460	2,717,474 1,825,117	8,570 7,812	24,905 23,214	41,126 35,512	88,945 76,553	176,864 152,358	575,780 448,832	20,995 21,312	28,997 25,815	72,745 62,440	113,139 99,723	360,773 285,685	1,283,974 927,112
1921	41,301	58,698	149,101	223,538	539,837	1,627,760	6,386	23,903	36,098	74,663	144,463	418,956	20,905	26,076	61,521	94,928	266,653	852,871
1922	46,708	67,541	177,183	269,189	670,841	2,185,182	7,196	25,874	40,131	85,177	168,775	502,581	22,245	28,903	68,883	107,869	310,573	986,669
1923	49,097	70,033	181,332	,	665,751	2,118,743	8,321	28,162	42,208	88,733	175,976	504,307	23,902	32,532	71,127	112,735	317,815	970,503
1924	51,703	73,921	194,984	296,765	733,778	2,400,521	7,866	29,484	43,655	93,203	187,512	548,585	24,844	33,263	74,729	118,403	336,232	1,108,211
1925	53,323	78,392	212,520	323,884	815,177	2,831,227	7,825	28,254	44,860	101,156		591,171	25,470	33,231	80,243	126,174	351,183	1,168,497
1926	53,761	79,910	219,726	335,422	862,259	3,097,102	7,920	27,611	44,957	104,029	203,713	613,943	24,830	32,240	83,314	129,750	361,566	1,244,202
1927	54,897	82,179	229,575	352,324	918,430	3,389,919	7,898	27,615	45,330	106,827	210,797	643,820	25,289	33,064	85,204	132,048	370,110	1,382,980
1928	57,812	87,224	245,815				7,861	28,400	47,576		218,967	692,087	26,006	34,224	87,686		377,540	1,574,752
1929	57,220	86,431	240,840	371,713	996,664	3,930,476	8,535	28,010	47,828	109,967	215,475	670,685	25,388	33,871	88,232	133,853	355,459	1,417,780
1930	51,032	73,884	194,573	294,233	758,460	2,830,137	7,823	28,181	43,712	94,914	178,176	528,274	25,013	31,989	78,078		313,235	1,116,632
1931	47,734	66,674	164,154		610,059	2,229,924	6,939	28,794	42,304	84,854	151,802	430,074	24,726	31,026	70,737			920,491
1932	41,861	58,932	139,944	208,833	533,089	1,741,772	5,646	24,790	38,679	71,055 70,306	127,769	398,791	16,959	28,964	60,513	86,906	229,132	864,175
1933 1934	39,648 43,671	57,211 63.820	138,869 153,466	207,432 228,165	533,122 563.225	1,800,367 1,858,718	5,623 6.162	22,084 23,521	36,797 41,409	70,306	126,010 144,400	392,317 419,281	16,495 19,985	26,601 28,327	58,862 65.510	84,551 96,834	221,423 261,804	828,859 891,393
1934	45,439	64,903	163,653	244,418	607,024	2,038,124	6,877	25,975	40,216	82,889	153,766	448,013	21,948	31,146	68,665	,	,	971,883
1936	51,458	75,061	202,709	307,308	768,601	2,567,722	7,372	27,854	43,150	98,111	191,985	568,699	23,700	33,787	79,956	122,050	345,642	1,250,841
1937	52,246	75,641	198,273	299,274	742,591	2,429,273	7,922	28,851	44,983	97,271	188,445	555,181	25,116	33,722	79,946		,	1,172,399
1938	47,672	66,922	163,295	239,827	571,580	1,847,495	7,329	28,422	42,829	86,762	156,889	429,811	24,603	32,680	72,689	106,595	272,042	818,156
1939	52,645	73,911	181,822	268,493	643,865	2,056,768	7,603	31,378	46,934	95,150	174,650	486,876	27,744	36,636	79,522	,	,	1,003,511
1940	54,944	77,391	194,589	288,441	689,261	2,194,028	7,980	32,498	48,091	100,737	188,236	522,065	30,784	36,264	83,540	127,048	331,642	1,060,030
1941	59,309	83,889	216,941	322,300	764,583	2,354,796	9,947	34,698	50,626		211,730	587,893	31,845	39,320	91,231	141,724	373,737	1,162,833
1942	59,606	84,329	216,730		751,867	2,219,623	12,514	34,887	51,229	111,188		588,783	32,398	39,300	90,203			1,149,558
1943	63,444	89,412	223,030	327,374	734,703	1,888,908	15,068	37,477	56,007	118,686	,	606,458	33,085	42,865	96,359	152,026	387,942	1,006,826
1944	64,889	89,503	216,755	312,777	684,372	1,900,635	16,214	40,274	57,690	120,734		549,231	36,124	42,839	99,184			1,019,490
1945	65,621	92,079	222,548	316,351	667,143	1,698,405	15,602	39,162	59,461		228,653	552,558	34,801	42,460	105,888		365,112	891,986
1946	65,858	93,823	223,781	315,084	652,963	1,743,426	14,350	37,893 35.484	61,334	132,478		531,801	33,926	43,385	109,383	163,343		883,203
1947 1948	60,280 62,651	85,077 88.051	199,986 209,387	281,434 298,237	590,747 638,598	1,648,430 1,772,191	14,095 13,683	37,250	56,349 57.717	118,538 120,536	204,106 213,147	473,227 512,643	31,380 33.009	39,571 43,108	98,311 100.187	145,543 150,776	321,736 343,528	826,231 930,074
1949	61,965	86,119	200,892	,	612,389	1,772,191	13,507	37,811	57,425	,	203,408	485,805	33,563	43,898	96,557	142,989	,	898,553
1950	67,096	94,575	225,035	322,311	699,626	1,638,040	14,555	39.618	61,960	127,759	,	595,358	36,268	45,118	103,836	160,138	362,109	805.013
1951	66,987	92,541	214,683	302,511	636,210	1,765,843	15,235	41,432	62,006	,	219,086	510,695	37,113	45,662	106,786	154,876	344,583	905,052
1952	67,544	92,014	205,498	286,728	580,361	1,570,387	15,894	43,074	63,643	,	213,319	470,358	39,648	48,695	105,660	155,756	,	808,902
1953	68,996	92,378	199,666	275,407	551,066	1,478,946	16,764	45,615	65,556	123,925	206,493	447,968	40,847	50,089	106,151	152,608	310,691	741,408
1954	69,764	93,660	203,962	281,025	557,411	1,533,185	16,382	45,867	66,085	126,899	211,929	448,992	41,071	50,123	108,058	154,920	313,192	751,189
1955	73,772	99,275	213,165	291,864	577,487	1,673,204	17,602	48,269	70,803	134,465	220,458	455,741	43,872	54,795	113,556	162,000	314,537	772,788
1956	77,685	104,282			582,021	1,663,700	18,507	51,089	74,865		229,659	461,835	45,701	57,176		164,907	326,026	778,463
1957	77,721	103,837	220,303	298,252	578,638	1,626,371	18,617	51,605	74,721	142,355		462,223	46,702	57,994	120,167	165,126	330,365	792,157
1958	76,372	,	210,086	,	545,274	1,527,890	17,939	51,619	73,884	,	216,989	436,094	46,717	58,261		158,017		747,823
1959	80,678	105,905	,	,	551,886	1,551,880	19,020	55,451	77,301	,	233,538	440,775	49,408	62,513	,	,	318,651	733,247
1960	80,727	,	213,093	,	534,597	1,520,754	19,364	56,844	77,488		218,314	425,024	50,306	57,644	123,683	162,661		719,530
1961 1962	82,298	107,887	215,124 220.737	279,139 288.093	529,812 529.351	1,514,657	19,524	56,709 59.234	81,077 84.501	151,109 153.381	216,471	420,385	50,635	63,121 65.505		159,023	296,135 308.900	704,831 696.485
1962	85,491 87.608	, -	220,737	,	,	1,498,372 1,554,586	20,145 20,676	60.840	84,501 87,111	,	227,778 230,322	421,682 424,393	53,449 55.189	68,350	- ,	170,912 173,048		710.669
1903	01,000	114,311	220, <del>44</del> 1	231,740	331,412	1,004,000	20,070	00,040	01,111	100,140	250,322	<del>4</del> 24,383	55, 169	00,330	132,037	173,040	515,559	7 10,009

1964	90,741	-,	230,033	,	564,700	1,523,722	21,784	63,189	90,358	,	241,213	458,142	57,584	68,945	,	180,361	,	684,938
1965	94,014	-,	-,	, -	607,661	1,604,370	22,697	64,539	94,219	- ,	252,402	496,916	59,244	72,450	,	188,616	,	690,821
1966	99,577	,	260,551	347,816	670,721	1,877,327	23,531	68,433	98,264	173,285	- ,	536,653	61,813	76,309	,	203,777	,	853,083
1967	102,400	- ,	269,226	,	690,215	1,905,987	24,127	70,126	,	178,691	,	555,129	62,913	77,945	,	208,670	,	877,191
1968	105,549	138,453	275,632	368,207	708,045	1,919,312	24,941	72,646	104,158	183,057	283,247	573,460	65,454	80,548	157,749	210,349	388,082	849,738
1969	106,620	138,582	268,633	355,405	670,511	1,833,223	25,382	74,658	106,069	181,862	276,628	541,321	67,385	83,362	156,427	211,295	366,017	779,228
1970	106,004	137,158	262,501	346,873	651,815	1,767,102	25,597	74,850	105,822	178,128	270,638	527,895	67,540	84,028	154,215	208,499	373,731	838,434
1971	106,512	137,499	261,167	343,678	642,151	1,737,675	25,435	75,524	106,582	178,657	269,060	520,426	67,960	84,661	155,706	206,509	364,383	805,016
1972	110,494	142,343	270,933	356,322	669,328	1,818,502	26,546	78,644	110,196	185,545	278,071	541,642	71,063	87,570	161,802	214,082	377,980	832,552
1973	113,651	146,789	276,228	361,825	673,035	1,766,906	27,016	80,513	114,429	190,632	284,022	551,494	72,386	90,310	167,085	219,482	389,995	891,555
1974	112,039	145,671	281,266	374,564	729,470	1,949,164	26,021	78,408	111,772	187,968	285,837	593,949	70,734	90,065	164,244	218,232	427,890	1,026,567
1975	107,021	137,957	262,652	348,313	668,626	1,836,260	24,561	76,086	106,783	176,991	268,235	538,889	68,514	85,523	154,558	206,092	383,389	919,715
1976	108,881	140,029	264,973	351,369	678,179	1,887,354	25,221	77,732	108,793	178,576	269,666	543,826	70,052	87,191	156,025	206,652	384,543	940,787
1977	110,032	141,350	267,973	356,315	692,596	1,920,794	25,468	78,714	109,694	179,632	272,244	556,130	70,819	88,325	156,772	207,970	389,631	942,361
1978	112,115	144,201	274,846	366,486	718,598	2,006,433	25,943	80,030	111,539	183,206	278,458	575,505	71,990	89,534	160,173	212,212	403,346	1,022,383
1979	110,032	141,717	273,243	366,365	734,053	2,093,182	25,571	78,347	108,835	180,120	274,443	583,038	70,674	87,634	156,198	208,290	395,535	946,741
1980	106.577	137,297	265,156	357.110	723,517	2,123,441	24,189	75,856	105.333	173,201	265,509	567,970	68,472	84.776	151.025	200,048	385.678	1.015.778
1981	103.919	133.207	254.930	344.500	706.828	2.083.512	23.745	74.631	102,776	165.360	253.918	553.863	67.274	83.597	144.673	189,295	372,509	982.597
1982	104,005	133.978	262,686	358.932	767,177	2,425,651	23,232	74,031	101.801	166,440	256.871	582,903	66,798	82,267	144,541	188.641	375,384	1.094.262
1983	105.515	136,462	269,114	371.841	816.940	2.729.350	23,074	74,569	103.299	166.387	260.566	604,451	67,184	83.042	144,429	189.341	379.061	1.212.850
1984	109,993	143,192	287.928	402.854	916.897	3.178.163	23.780	76.793	107.008	173.003	274.343	665.645	68,909	85.907	150.240	197.225	403.653	1.386.360
1985	112,817	147,410	299,552	421,268	958,755	3,196,503	24,062	78,224	109,374	177,837	286,897	710,117	69,934	87,484	154,868	201,128	441,385	1,395,886
1986	115.327	150.719	304.571	425.704	956.671	3.326.014	24.255	79,936	112.256	183,438	292.962	693.411	71.307	88.768	156.883	203.990	391,203	1.368.813
1987	125,239	168,134	368.898	532.924	1,279,095	4.466.132	24,227	82,343	117.943	204,872	346.382	924.980	73,059	91,388	173.388	240.238	552.754	1,888,974
1988	138,524	,	,	,	1,869,572	, ,	24,455	83,761	,	,	425,798	1,284,221	73,991	94,223	,	,	,	2,830,928
1989	136,983	189,882	449,059	667,412	1,687,621	6,197,276	24,343	84,085	125,087	230,706	412,360	1,186,549	74,028	95,512	191,849	278,640	687,751	2,493,300
1990	136,605	190,319	456,616	683,336	1,722,975	6,421,632	23,904	82,890	123,745	229,897	423,426	1,200,902	73,039	94,270	190,810	281,953	702,260	2,631,453
1991	131,021	180,446	415,357	607,698	1,487,389	5,489,044	23,372	81,596	121,718	223,015	387,775	1,042,760	72,481	94,454	185,427	267,594	625,786	2,383,771
1992	136,754	191,510	462,959	694,575	1,790,694	6,926,722	22,966	81,997	123,648	231,344	420,545	1,220,024	72,143	93,611	192,066	284,720	704,331	2,837,956
1993	132.791	184.390	431.223	635.805	1.586.080	5.844.144	22.616	81.191	122.682	226.642	398,236	1.112.962	71.584	92.661	191.217	270,705	648.885	2.384.246
1994	135,053	187,609	438.347	644,491	1,604,650	5.908.184	22,891	82,497	124,924	232.204	404,451	1,126,480	72,391	94,537	195,474	276,909	659,697	2,453,269
1995	140.550	,	,	,	1,727,194	, ,	23,240	84,517	,	,	,	1,218,747	73,873	96.810	,	,	,	, ,
1996	146.103				1.895.593		23,413	85.508	,	,	,	1.273.602	73.841	98.957	,		,	2.977.409
1997	152,819	,	. ,	-, -	2,123,578	,,	24,182	88,685	138,562	261,446	,	1,396,993	77,122	101,911	-, -	,	,	3,328,163
1998	- ,	-,	, -	,	2.339.901		25.206	93.167	,	- ,	,	1,492,150	81.687	- ,-	,		,	3,620,511
	,	,	,	,	, ,	-,,	- ,	,	-,	,	,	, : , :	- 1,001	. ,	)	,	,	-,,

Table A5: Top fractiles income levels (including capital gains) in the U.S., 1913-1998 (fractiles are defined by total income (excluding capital gains)) (incomes are expressed in 1998 \$)

	P90-100	P95-100	P99-100	P99.5-100	P99.9-100	P99.99-100	P0-90	P90-95	P95-99	P99-99.5	P99.5-99.9	P99.9-99.99	P90	P95	P99	P99.5	P99.9	P99.99
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1913			216,894	355,687	1,040,581	3,327,085				78,101	184,463	786,525			62,114	101,862	322,023	1,354,485
1914			214,336	356,013	1,015,535	3,221,546				72,658	191,133	770,422			57,429	95,390	308,566	1,346,418
1915			209,485	347,474	1,098,731	5,196,144				71,493	159,654	643,442			48,411	92,114	339,477	1,722,459
1916			248,746	419,678	1,333,534	5,945,374				77,815	191,213	821,108			58,708	106,732	406,573	2,221,145
1917	53,856	81,429	236,013	381,434	1,117,274	4,432,756	9,172	26,282	42,783	90,593	197,474	748,887	20,955	29,536	73,034	118,241	409,319	1,853,564
1918	50,478	74,244	201,340	313,546	849,443	3,073,221	8,724	26,713	42,470	89,135	179,571	602,357	22,349	30,025	72,954	113,155	347,106	1,396,270
1919	49,854	74,409	201,719	310,145	813,067	2,773,745	8,654	25,300	42,582	93,293	184,415	595,214	21,328	30,024	76,301	117,969	372,950	1,310,562
1920	43,095	62,434	163,505	245,970	595,500	1,836,421	7,873	23,757	37,167	81,039	158,588	457,620	21,810	27,017	66,099	103,800	291,279	932,854
1921	41,934	59,794	152,002	227,384	546,215	1,634,217	6,414	24,074	36,742	76,621	147,676	425,326	21,054	26,542	63,134	97,040	270,707	856,254
1922	48,012	69,884	184,984	281,574	705,390	2,320,876	7,293	26,140	41,109	88,395	175,620	525,891	22,474	29,607	71,485	112,244	324,978	1,047,938
1923	50,675	72,525	189,022	286,118	699,270	2,258,275	8,423	28,826	43,400	91,925	182,830	526,047	24,465	33,451	73,685	117,126	331,515	1,034,416
1924	53,733	77,278	206,831	315,697	785,181	2,582,304	8,006	30,187	44,889	97,965	198,327	585,501	25,436	34,203	78,548	125,232	358,859	1,192,132
1925	56,956	84,982	238,023	366,457	942,216	3,363,142	8,150	28,930	46,722			673,224	26,080	34,611	86,934	139,639	399,926	1,388,027
1926	56,635	85,001	238,812	367,662	963,789	3,556,865	8,186	28,268	46,548		218,631	675,670	25,421	33,381	88,065	139,252	397,918	1,428,902
1927	58,387	88,353	253,147	392,940	1,049,595	3,956,528	8,222	28,420	47,155	113,354		726,603	26,027	34,395	90,410	143,311	417,699	1,614,139
1928	63,217	97,216	288,176	455,325	1,275,625	5,101,036	8,409	29,217	49,476	121,028	250,250	850,579	26,754	35,591	95,633	152,047	463,999	1,985,609
1929	61,953	95,171	278,332	438,283	1,235,963	5,085,400	9,047	28,735	49,381		238,863	808,248	26,046	34,971	94,983	148,382	428,367	1,834,378
1930	52,574	76,503	203,213	308,863	807,620	3,076,459	7,969	28,645	44,825	97,564	184,174	555,527	25,425	32,803	80,257	121,142	329,394	1,213,818
1931 1932	48,252 42,065	67,584 59,273	167,301 141,207	248,714 211,139	627,127 540,408	2,316,601	7,002 5,656	28,920 24,857	42,655 38,789	85,887 71,275	154,111 128,822	439,408	24,834 17,005	31,283 29,046	71,598 60,701	105,853 87,623	266,759 232,143	956,270 877,082
1932	40,443	58,668	141,207	211,139	563,158	1,767,786 1,918,738	5,687	22,218	37,313	71,275	120,022	404,033 412,538	16,595	26,974	60,009	87,119	232,143	883,355
1933	44,141	64,700	156,351	232,959	575,802	1,889,702	6,212	23,581	41,788	71,677	147,248	429,813	20,036	28,586	66,322	98,744	268,380	906,252
1934	46,535	66,987	170,642	255,941	637,375	2,111,161	6,976	26,083	41,766	85,343	160,583	473,621	22,040	31,811	70,698	105,690	290,207	1,006,711
1936	53,789	79,155	216,399	329,475	823,985	2,685,387	7,544	28,423	44,844	103,322		617,162	24,184	35,114	84,203	130,864	375,097	1,308,160
1937	53,120	77,086	203,346	307,047	760,489	2,471,428	7,975	29,154	45,521	99.646	193,686	570,385	25,380	34,125	81,897	125,950	352,922	1,192,744
1938	48,633	68.583	169,397	249,946	603,952	2,025,127	7,418	28,683	43,379	88.849	161.445	446,043	24,828	33,099	74,437	109,690	282,315	896.820
1939	53,605	75,529	187,323	277,051	665,597	2,124,457	7,666	31,681	47,581	97,594	179,914	503,501	28,012	37,141	81,565	120,622	315,349	1,036,537
1940	55,794	78,877	199,755	296,629	711,192	2,282,332	8,044	32,711	48,657	,	192,988	536,620	30,985	36,690	85,318	130,256	340,889	1,102,694
1941	60,273	85,634	222,943	331,996	794,555	2,497,129	10,030	34,864	51,307			605,380	31,997	39,849	93,118	144,822	384,853	1,233,119
1942	60,245	85,558	220,961	328,926	772,544	2,312,956	12,573	34,934	51,707	112,995	218,022	601,387	32,442	39,666	91,669	143,892	382,695	1,197,896
1943	64,966	92,119	232,093	341,387	774,362	2,032,405	15,185	37,813	57,125	122,799	233,143	634,579	33,382	43,721	99,698	157,150	405,931	1,083,313
1944	66,411	92,216	225,287	326,109	721,129	2,038,507	16,328	40,606	58,948			574,754	36,422	43,774	102,250	155,219	384,561	1,093,443
1945	68,946	98,027	240,830	344,951	745,349	1,963,729	15,837	39,866	62,326	,	244,852	609,974	35,426	44,505	112,439	,	403,050	1,031,331
1946	70,182	101,002	243,398	344,987	738,901	2,092,467	14,627	39,363	65,403		246,509	588,504	35,243	46,263	117,088		403,100	1,060,024
1947	62,692	89,146	211,370	299,317	646,069	1,875,729	14,263	36,239	58,590	123,422	212,629	509,440	32,048	41,145	102,361	151,620	346,356	940,159
1948	64,982	92,065	220,665	315,958	689,942	1,971,381	13,843	37,900	59,915	125,372	222,462	547,560	33,585	44,750	104,206	157,365	366,926	1,034,612
1949	63,592	88,913	209,328	298,565	651,277	1,905,768	13,626	38,272	58,809	120,090	210,388	511,889	33,972	44,955	99,465	147,895	344,752	977,610
1950	70,311	99,766	243,464	349,906	780,180	1,882,916	14,770	40,857	63,842	137,022	242,337	657,653	37,402	46,488	111,364	170,221	399,998	925,357
1951	69,656	97,313	230,510	327,195	706,804	2,030,623	15,441	41,999	64,014	133,825	232,293	559,713	37,621	47,141	112,653	164,212	377,658	1,040,760
1952	69,662	95,704	218,191	307,019	642,624	1,790,566	16,062	43,619	65,083	129,363	223,118	515,075	40,150	49,797	109,992	162,910	354,269	922,316
1953	70,676	95,342	209,679	291,998	602,378	1,672,127	16,902	46,010	66,758	127,359	214,403	483,517	41,200	51,008	109,093		335,346	838,251
1954	72,673	99,189	221,485	309,182	646,516	1,851,053	16,617	46,156	68,616		224,848	512,678	41,329	52,043	113,925		357,616	906,930
1955	78,332	106,992	239,066	333,406	706,386	2,124,097	17,942	49,671	73,974		240,161	548,862	45,146	57,249	122,221	176,478	378,806	981,038
1956	81,326	110,611	,	340,614	703,447	2,069,263	18,807	52,041	77,192	147,956	249,906	551,689	46,552	58,953	124,955	-,	389,457	968,230
1957	80,463	108,804	236,613	327,389	668,008	1,923,772	18,835	52,121	76,852	145,838	, -	528,479	47,170	59,648	123,108	,	377,720	937,012
1958	79,532	107,005	229,069	316,130	644,011	1,859,999	18,188	52,059	76,489	142,009	234,160	508,901	47,115	60,316	120,751	170,521	363,906	910,373
1959	85,319	115,025	248,783	346,975	697,021	2,031,040	19,379	55,612	81,585	150,591	259,464	548,796	49,551	65,977	131,007		396,743	959,645
1960	84,788			324,202	664,415	1,999,585	19,663	57,374	80,911		239,149	516,063	50,775	60,190	128,745		370,520	946,084
1961	87,864	117,830	249,432	340,800	715,617	2,203,353	19,959	57,897	84,930			550,312	51,696	66,120	133,365		387,661	1,025,308
1962	89,320	118,714	245,566	333,542	671,540	2,017,982	20,451	59,926	87,001			521,935	54,073	67,443	134,902		382,339	938,014
1963	91,968	122,094	250,873	339,511	681,111	2,070,623	21,002	61,842	89,899	162,235	- ,	526,721	56,099	70,539	138,931	190,922	388,891	946,572
1964	97,606	130,268	271,473	367,537	740,814	2,259,676	22,126	64,943	94,967	175,408	274,218	572,051	59,183	72,461	152,016	,	399,443	1,015,761
1965	102,641	137,495	290,723	395,601	818,590	2,565,970	23,139	67,788	99,188	185,846	289,854	624,437	62,227	76,271	160,411	216,602	413,317	1,104,872
1966	106,559	143,398	305,896	420,896	893,100	2,710,141	23,860	69,720	102,773	190,896	302,845	691,207	62,976	79,811	163,006	231,056	473,607	1,231,525

1967   112,551   152,778   331,409   459,422   968,709   28,623   02,567   3085,767   25,475   75,688   112,593   213,740   354,878   832,336   67,996   87,629   181,190   263,544   632,731   35,7309   1969   115,793   155,354   30,669   459,979   980,023   30,556,29   28,809   76,231   111,525   201,336   329,967   749,733   68,806   87,650   173,190   253,036   506,937   1,297,548   312,390   312,394   301,440   40,408,498   28,854   2,414,002   25,810   76,877   110,882   194,383   303,459   625,056   69,778   88,077   169,412   232,911   458,859   1,118,339   1973   119,824   157,572   309,670   414,796   812,458   222,1354   27,492   82,075   110,546   204,551   315,381   655,914   73,700   94,348   179,293   243,715   438,837   110,894   144,002   225,293   370,042   752,991   2,171,611   24,842   77,158   109,405   186,015   255,555   595,366   69,479   37,204   417,203   243,716   413,838   415,848   417,848   41																			
1869	1967	112,551	152,778	331,409	459,422	968,709	2,826,310	24,552	72,324	108,120	203,397	332,100	762,309	64,885	83,409	174,065	250,044	517,145	1,300,750
1970   110,391   145,108   291,920   394,820   791,150   2,300,181   25,881   76,674   108,405   189,020   295,738   623,480   68,284   86,079   163,644   227,837   441,401   1,091,683   1972   118,573   156,400   317,938   430,803   874,750   262,058   27,050   80,745   16,016   205,272   319,566   80,771   72,961   92,195   179,005   246,030   476,000   1,199,751   1973   119,824   157,572   309,679   414,798   812,485   2,221,354   27,492   82,075   119,540   204,561   315,381   655,914   73,790   94,348   179,293   243,715   463,837   1,120,863   1975   110,594   144,000   282,529   304,148   410,269   822,547   2,70493   63,322   79,515   114,749   198,027   307,199   616,664   71,733   92,464   173,033   244,173   41,476   1,120,863   1975   110,594   144,000   282,529   379,042   752,991   2,171,611   24,842   77,158   109,405   186,015   285,555   595,366   69,479   87,624   162,437   219,399   423,569   1087,689   144,798	1968	118,188	160,909	354,389	495,038	1,055,679	3,065,767	25,475	75,468	112,539	213,740	354,878	832,336	67,996	87,029	184,190	263,544	563,273	1,357,309
1971 112,936 148,994 301,404 408,488 828,664 2414,002 25,610 687 110,882 194,383 303,459 652,505 681,78 88,077 189,412 232,911 456,859 1,118,339 191,815,73 156,400 317,384 840,603 87,785 22,620,558 27,650 80,745 110,816 204,561 315,381 655,914 73,790 94,348 179,293 243,715 463,837 1,120,863 1974 116,072 152,629 304,148 410,269 822,547 2,270,483 26,332 79,515 114,749 180,027 307,199 681,664 71,733 92,464 173,033 245,452 476,673 1,195,802 1976 113,437 147,664 289,406 389,512 779,760 2,263,919 25,539 79,210 112,228 189,301 291,950 614,853 71,384 89,944 165,395 223,728 434,766 1,128,493 1978 116,861 152,049 299,939 404,278 815,062 2,318,328 26,312 81,673 115,213 194,508 301,582 648,033 73,468 92,483 170,064 229,835 454,177 1,181,311 198,191 177,782 155,332 320,070 445,309 97,9315 32,060,999 24,665 31 28,785 223,785 484,616 1,384,492 198,012 142,184 142,1	1969	115,793	155,354	330,669	459,979	980,023	3,052,629	25,809	76,231	111,525	201,359	329,967	749,733	68,806	87,650	173,198	252,036	506,937	1,297,548
1972 118,573 156,400 317,938 430,603 874,750 2,620,558 27,050 80,745 118,016 205,272 319,566 880,771 72,961 19,549 145,767 230,679 414,796 812,458 2,221,354 27,492 82,075 119,546 204,561 315,381 655,914 73,790 94,348 179,233 23,715 463,837 1,120,863 1975 110,594 144,032 826,529 379,042 752,991 2,171,611 24,642 77,158 109,405 186,015 285,555 595,566 69,479 87,624 162,437 219,399 42,569 1,087,680 1976 114,873 149,495 293,919 396,024 796,583 2,274,808 25,859 80,251 113,389 191,814 295,884 632,336 72,202 91,300 167,405 226,029 443,022 11,160,43 1979 117,782 155,332 320,970 445,509 979,315 32,069,909 26,061 80,231 113,243 149,682 310,327 445,988 294,881 710,594 294,838 11,916 901,894 2,845,526 246,535 18,828 244,585 31,82	1970	110,391	145,108	291,920	394,820	791,150	2,300,181	25,891	75,674	108,405	189,020	295,738	623,480	68,284	86,079	163,644	227,837	441,401	1,091,363
1973 119,824 157,572 309,679 414,786 812,485 2,271,354 27,92 82,075 119,546 204,561 315,881 655,914 73,790 94,348 179,293 243,715 463,837 1,120,863 1975 110,594 144,030 282,529 379,042 752,991 2,171,611 24,842 77,158 109,405 186,015 285,555 595,366 69,479 87,624 162,437 21,999 423,6680 1976 113,437 147,664 289,406 389,512 779,760 2,263,919 25,539 79,210 112,228 189,301 291,950 614,853 71,384 89,944 165,395 223,728 434,766 1,126,439 1978 116,861 152,049 299,393 404,278 815,062 2,318,328 26,312 81,673 115,213 194,508 301,582 648,033 73,468 92,483 170,054 229,835 454,177 1,181,311 1979 117,782 155,332 320,970 445,309 979,315 3,206,909 26,061 80,231 113,389 19,861 80,331 118,884 140,893 19,327 431,470 938,673 2,963,667 24,565 75,644 106,322 18,243 100,444 105,389 116,284 155,393 41,797 492,411 1,177,214 4,135,849 23,513,274 455,001 10,74,222 3,708,530 19,764 166,383 21,211 848,477 1986 143,255 201,499 49,243 536,106 1,331,452 4,676,682 24,515 75,404 106,322 182,753 301,320 781,521 68,037 85,920 156,707 221,283 503,293 1,878,861 18,977 19,878 12,644 18,23 24,235 177,668 1,365,478 18,985 127,111 172,847 392,011 577,669 1,435,569 5,021,733 24,607 81,378 19,378 144,509 24,465 25,478 18,985 127,111 172,847 392,011 577,669 1,435,569 5,021,733 24,607 81,378 19	1971	112,936	148,994	301,440	408,498	828,654	2,414,002	25,810	76,877	110,882	194,383	303,459	652,505	69,178	88,077	169,412	232,911	456,859	1,118,339
1974 116,072 152,629 304,148 410,269 822,547 2,270,483 26,332 79,515 114,749 198,027 307,199 661,664 71,733 92,464 173,033 234,524 476,673 1,195,802 1975 110,594 144,030 282,529 379,042 752,991 2,171,611 24,842 77,158 109,405 186,015 285,555 595,366 69,479 87,624 165,395 223,728 434,668 1,284,933 1977 114,873 149,495 293,919 39,60,24 796,583 2,274,806 25,859 80,251 113,389 191,814 295,884 632,336 72,202 91,300 167,405 226,029 443,022 1116,043 1979 117,782 155,332 30,970 445,309 979,315 3,206,909 26,061 80,231 113,922 196,631 311,808 731,804 72,375 91,730 170,516 236,648 496,458 1,450,477 1980 113,733 149,862 310,327 431,470 938,673 2,963,667 24,565 77,583 198,041 130,389 141,916 901,894 24,685,962 68,686 86,826 85,825 157,532 215,762 441,383 198,483 198,484 121,648 159,396 319,327 455,901 1,074,222 3,708,550 23,570 75,404 106,322 182,753 301,320 781,521 162,843 170,045 228,125 464,354 1,477,134 1984 121,648 154,127 365,954 536,106 1,331,452 4,767,682 24,251 79,169 113,670 195,803 337,270 949,649 71,041 191,255 170,041 242,462 575,875 2,079,731 1985 127,111 172,847 392,011 577,669 1,438,569 5,021,733 24,860 24,838 199,148 183,255 124,157 104,148 183,255 124,147 143,254 144	1972	118,573	156,400	317,938	430,603	874,750	2,620,558	27,050	80,745	116,016	205,272	319,566	680,771	72,961	92,195	179,005	246,030	475,070	1,199,751
1975 110,589 144,030 282,529 379,042 752,991 2,171,611 24,842 77,158 109,405 186,015 285,555 595,366 69,479 87,624 162,437 219,399 423,569 1,087,680 1977 114,873 147,664 289,406 389,512 779,760 2,263,919 25,539 79,210 112,228 189,301 291,950 614,853 71,384 89,944 165,395 223,728 434,766 1,128,493 1977 114,873 149,495 293,919 396,024 796,583 2,274,806 25,859 80,251 113,389 191,814 295,884 632,336 72,202 91,300 167,405 226,029 443,002 1,116,043 1978 116,861 152,049 299,393 404,278 815,062 2,318,328 26,312 81,673 115,213 194,508 301,582 648,033 73,468 92,483 170,054 229,835 454,177 1,181,311 1978 117,782 155,332 320,970 445,309 979,315 32,069,09 26,061 80,231 113,289 113,281 31,808 73,804 92,483 170,054 229,835 454,177 1,181,311 110,398 114,598 295,883 41,470 93,673 2,963,667 24,565 77,583 109,746 189,185 304,669 713,674 70,031 88,328 164,963 229,553 484,618 1,417,712 1981 110,398 144,598 295,883 41,1916 901,894 2,845,282 24,159 76,197 106,776 179,851 289,421 88,925 188,221 152,163 148,923 313,327 455,901 1,074,222 3,708,530 23,757 75,604 106,322 182,753 301,320 781,521 68,037 88,592 158,707 221,283 503,293 1,837,861 162,884 155,936 341,797 492,411 1,177,214 4,135,849 23,513 76,633 109,471 191,182 321,211 848,477 69,044 88,003 165,952 233,408 532,093 1,837,861 189,77 134,621 184,523 424,027 623,278 1,851,917 5,472,990 1886 143,255 201,499 497,243 755,605 1,850,830 7,324,484 25,311 85,011 127,563 238,809 481,799 1,422,646 75,875 100,673 109,475 198,428 179,022 24,875 552,923 852,688 2,301,745 9,012,571 24,303 84,187 127,562 24,647 224,776 396,105 1,099,157 75,189 96,593 190,233 274,724 656,840 1990 143,291 202,295 502,497 761,149 1,048,387 77,581 1995 143,900 214,307 446,843 522,324 485,090 6,873,006 23,783 82,94 127,054 244,290 422,846 62,540 1,334,634 74,182 97,032 202,387 306,533 784,557 3,101,691 1991 143,291 202,346 502,491 761,492 124,494 202,485 139,888 199,888 199,888 199,888 199,887 202,488 199,888 199,888 199,888 199,888 199,888 199,888 199,887 202,488 199,888 199,888 199,888 199,888 199,888 199,888 199,8	1973	119,824	157,572	309,679	414,796	812,458	2,221,354	27,492	82,075	119,546	204,561	315,381	655,914	73,790	94,348	179,293	243,715	463,837	1,120,863
1976 113,437 147,664 289,406 389,512 779,760 2,263,919 25,539 79,210 112,228 189,301 29,950 614,863 71,384 89,944 165,395 223,728 434,766 1,128,493 1977 114,873 149,495 293,919 396,024 779,6583 2,274,806 25,889 80,245 113,389 191,814 295,884 632,336 72,202 91,300 167,405 226,029 443,022 1,116,043 1978 116,861 152,049 299,393 404,278 815,062 2,318,328 26,312 81,673 115,213 194,508 301,582 648,033 73,668 92,483 170,054 229,835 454,177 1,181,311 1979 117,782 155,332 320,970 445,309 979,315 3,206,909 26,061 80,231 113,922 196,631 311,808 731,804 72,375 91,730 170,516 236,648 496,487 147,712 1981 110,398 144,598 295,883 411,916 901,894 2,845,262 24,565 77,583 109,746 189,185 304,669 713,674 70,031 88,328 164,963 229,553 484,618 1,447,712 1981 110,398 144,598 295,883 411,916 901,894 2,845,262 24,159 76,197 106,776 179,851 289,421 685,962 68,686 86,852 157,352 215,762 461,354 1,341,853 1982 112,163 148,923 319,327 455,901 1,074,222 3708,530 23,570 75,404 106,322 182,753 301,320 781,521 68,037 85,902 158,707 221,283 503,293 1,672,996 1984 121,648 164,127 365,954 536,106 1,331,452 4,767,682 24,251 79,169 113,670 195,803 337,270 949,649 71,041 91,255 170,041 242,462 575,875 2,079,731 1985 127,111 172,847 392,011 577,669 1,483,569 502,1733 24,607 81,352 146,647 75,853 109,872 207,130 146,837 77,681 2,038,244 25,311 85,011 127,563 238,880 481,799 1,242,646 75,835 100,872 204,299 334,476 143,245 207,130 144,843 14,843 14,843 14,843 14,843 14,843 14,843 14,843 14,843 14,843 14,843 14,844 1	1974	116,072	152,629	304,148	410,269	822,547	2,270,493	26,332	79,515	114,749	198,027	307,199	661,664	71,733	92,464	173,033	234,542	476,673	1,195,802
1977 114,873 149,495 293,919 396,024 796,583 2,274,806 25,859 80,251 113,389 191,814 295,884 632,336 72,020 91,300 167,055 226,029 443,022 1,116,043 1978 116,861 152,049 293,939 404,278 815,062 2,318,328 26,312 81,602 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,318,328 24,402 2,40	1975	110,594	144,030	282,529	379,042	752,991	2,171,611	24,842	77,158	109,405	186,015	285,555	595,366	69,479	87,624	162,437	219,399	423,569	1,087,680
1978 116,861 152,049 299,393 404,278 815,062 2,318,328 26,312 81,673 115,213 194,508 301,582 648,033 73,468 92,483 170,054 229,835 454,177 1,181,311 1979 117,782 155,332 320,970 445,309 979,315 3,206,909 26,061 80,231 113,922 196,631 311,808 731,804 72,375 91,730 170,516 236,648 496,458 1,450,477 198,01 113,723 149,862 310,327 431,470 938,673 2,963,667 24,656 77,583 109,746 189,185 304,669 713,674 70,031 88,328 164,963 229,583 484,618 1,417,712 1981 110,398 144,598 295,883 411,916 901,894 2,845,282 24,159 76,197 106,776 179,851 289,421 685,962 68,666 86,862 157,352 215,762 461,354 1,341,853 1982 112,163 148,923 319,327 455,901 1,074,222 37,085,300 23,570 75,404 106,322 182,753 301,320 781,521 680,37 85,900 156,707 221,283 503,293 1,672,996 1983 116,284 155,936 341,797 492,411 1,177,214 4,135,849 23,513 76,633 109,471 191,182 321,211 848,477 69,044 88,003 165,952 233,408 532,093 1,837,861 1984 121,648 164,127 365,954 536,106 1,331,452 4,767,682 24,251 79,169 113,670 195,803 37,270 949,649 71,041 91,255 170,041 242,462 575,875 2,079,731 1986 143,255 201,499 497,243 75,605 1,850,830 7,324,848 25,311 85,011 127,563 238,840 481,799 1,242,646 75,835 100,872 204,299 335,477 701,066 3,014,374 198,840 150,102 214,375 552,293 852,688 2,301,745 9,012,571 250,200 85,829 129,739 255,159 490,404 172,751 18,054 18,054 1990 143,291 202,395 502,497 761,149 1,964,388 77,691 17,041 243,030 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 1990 144,807 199,478 482,143 715,732 1,845,904 683,040 139,749 199,478 482,143 715,732 1,845,904 1991 136,660 138,771 191,478 124,375 552,049 136,860 138,749 124,546 139,868 1993 139,566 17,086 477,807 15,792 1,840,500 6,873,006 139,749 141,807 199,478 482,143 715,732 1,845,004 139,147 124,046 139,148 14,807 199,478 482,143 715,732 1,845,004 139,147 124,046 139,148 14,807 199,478 482,143 715,732 1,845,004 14,807 199,478 482,143 715,732 1,845,004 14,807 199,478 482,143 715,734 11,845 14,807 199,478 144,807 199,478 482,143 715,734 11,845 14,808 14,808 14,808 14,808 14,	1976	113,437	147,664	289,406	389,512	779,760	2,263,919	25,539	79,210	112,228	189,301	291,950	614,853	71,384	89,944	165,395	223,728	434,766	1,128,493
1979 117,782 155,332 320,970 445,309 979,315 3,206,909 26,061 80,231 113,922 196,631 311,808 731,804 72,375 91,730 170,516 236,648 496,458 1,450,477 1980 113,723 149,862 310,327 431,470 938,673 2,963,667 24,565 77,583 109,746 189,185 304,669 713,674 70,031 88,328 164,963 229,553 484,618 1,417,712 144,4598 296,883 411,196 91,894 2,845,282 24,159 76,197 106,776 179,851 289,421 685,962 68,686 68,682 187,532 215,753 221,576 481,354 13,41,853 1982 112,163 148,923 319,327 455,901 1,074,222 3,708,530 23,570 75,404 106,322 182,753 301,320 781,521 68,037 85,920 158,707 221,283 503,293 1,672,996 1983 116,284 155,936 341,797 492,411 1,177,214 4,135,849 23,513 76,633 109,471 191,182 321,211 848,477 69,044 88,003 165,952 233,408 532,093 1,837,861 1895 127,111 172,847 392,011 577,669 1,438,569 5,021,733 24,607 81,375 118,057 206,353 362,444 1,040,440 72,751 94,428 179,702 254,091 646,703 2,192,949 1986 143,255 201,499 497,243 755,605 1,850,830 7,324,484 25,311 85,011 127,563 238,880 481,799 1,242,646 75,835 100,872 204,299 325,477 701,066 3,014,374 199,185 150,102 214,375 552,923 852,688 2,301,745 9,012,571 25,020 85,829 129,739 253,159 490,424 1,556,097 75,817 98,924 209,781 318,664 871,732 3,574,515 1989 146,592 207,133 514,683 777,681 2,038,242 7,819,320 24,845 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 890,905 3,145,884 1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,883 82,934 125,273 243,845 460,340 1,341,634 74,182 97,032 202,387 306,530 78,456 1993 144,800 211,738 522,324 783,082 2,033,671 7,290,769 144,800 211,738 522,324 783,082 2,003,671 7,290,769 143,091 141,807 199,478 482,143 718,732 1,288,950,688 1991 139,550 144,800 211,738 522,324 783,082 2,003,671 7,290,769 143,091 141,807 199,478 482,143 718,732 1,288,950,769 139,676 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,738 144,800 211,73	1977	114,873	149,495	293,919	396,024	796,583	2,274,806	25,859	80,251	113,389	191,814	295,884	632,336	72,202	91,300	167,405	226,029	443,022	1,116,043
1980         113,723         149,862         310,327         431,470         938,673         2,963,667         24,565         77,583         109,746         189,185         304,669         713,674         70,031         88,328         164,963         229,553         484,618         1,417,712           1981         110,388         144,589         255,883         411,916         901,894         2,845,282         24,159         76,197         106,776         179,851         289,421         685,962         68,686         86,852         157,352         215,762         461,354         1,341,853           1983         116,284         155,936         341,797         492,411         1,177,214         4,135,849         23,513         76,633         109,471         191,182         321,211         88,328         164,963         29,553         484,618         1,341,853           1984         121,648         164,172         365,954         536,106         1,331,452         4,767,682         24,251         79,169         118,670         195,803         37,270         949,649         71,041         91,255         170,041         24,2462         575,875         2,079,731           1985         127,111         712,684         745,595         1,834,528	1978	116,861	152,049	299,393	404,278	815,062	2,318,328	26,312	81,673	115,213	194,508	301,582	648,033	73,468	92,483	170,054	229,835	454,177	1,181,311
1981         110,398         144,598         295,883         411,916         901,894         2,845,282         24,159         76,197         106,776         179,851         289,421         685,962         68,686         86,852         157,352         215,762         461,354         1,341,853           1982         112,163         148,923         319,327         455,901         1,074,222         3,708,530         23,570         75,404         106,322         182,753         301,320         781,521         68,037         85,920         158,707         221,283         503,293         1,672,996           1983         112,163         148,923         314,797         492,411         1,177,214         4,135,849         24,251         79,169         113,670         195,803         37,707         949,649         71,041         91,255         170,041         24,625         575,875         2,079,731           1985         127,111         172,847         392,011         577,669         1,331,452         4,767,682         24,251         79,169         113,607         195,803         37,270         949,649         71,041         91,255         170,041         24,462         575,875         2,079,731           1986         143,255         201,499 <td>1979</td> <td>117,782</td> <td>155,332</td> <td>320,970</td> <td>445,309</td> <td>979,315</td> <td>3,206,909</td> <td>26,061</td> <td>80,231</td> <td>113,922</td> <td>196,631</td> <td>311,808</td> <td>731,804</td> <td>72,375</td> <td>91,730</td> <td>170,516</td> <td>236,648</td> <td>496,458</td> <td>1,450,477</td>	1979	117,782	155,332	320,970	445,309	979,315	3,206,909	26,061	80,231	113,922	196,631	311,808	731,804	72,375	91,730	170,516	236,648	496,458	1,450,477
1982 112,163 148,923 319,327 455,901 1,074,222 3,708,530 23,570 75,404 106,322 182,753 301,320 781,521 68,037 85,920 158,707 221,283 503,293 1,672,996 1983 116,284 155,936 341,797 492,411 1,177,214 4,135,849 23,513 76,633 109,471 191,182 321,211 848,477 69,044 88,003 165,952 233,408 532,093 1,837,861 1984 121,648 164,127 365,954 536,106 1,331,452 4,767,682 24,251 79,169 113,670 195,803 337,270 949,649 71,041 91,255 170,041 242,462 575,875 20,7731 1985 127,111 172,847 392,011 577,669 1,438,569 5,021,733 24,607 81,375 118,057 206,353 362,444 1,040,440 72,751 94,428 179,702 254,091 646,703 2,192,949 1986 143,255 201,499 497,243 755,605 1,850,830 7,324,484 25,311 85,011 127,563 238,880 481,799 1,242,646 75,835 100,872 204,299 335,477 701,066 3,014,374 1987 134,621 184,523 424,027 623,278 1,531,970 5,427,290 24,823 84,720 124,647 224,776 396,105 1,099,157 75,168 96,583 190,233 274,724 656,840 2,295,501 1989 146,592 207,130 514,683 777,681 2,038,242 7,819,320 24,847 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 809,095 3,145,884 1990 143,291 202,395 502,497 761,149 1,964,388 7,569,171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 3,101,691 1991 136,620 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,527 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,387 306,533 784,557 3,101,691 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,929 84,136 128,811 245,555 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,44 783,082 2,273,316 8,991,678 243,089 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 254,10 90,847 146,324 289,194 541,665 1,737,513 79,002 107,602 246,603 349,458 940,966 4,100,916	1980	113,723	149,862	310,327	431,470	938,673	2,963,667	24,565	77,583	109,746	189,185	304,669	713,674	70,031	88,328	164,963	229,553	484,618	1,417,712
1983	1981	110,398	144,598	295,883	411,916	901,894	2,845,282	24,159	76,197	106,776	179,851	289,421	685,962	68,686	86,852	157,352	215,762	461,354	1,341,853
1984 121,648 164,127 365,954 536,106 1,331,452 4,767,682 24,251 79,169 113,670 195,803 337,270 949,649 71,041 91,255 170,041 242,462 575,875 2,079,731 1985 127,111 172,847 392,011 575,605 1,850,830 7,324,484 25,311 85,011 127,563 238,880 481,799 1,242,646 75,835 100,872 204,293 335,477 701,066 3,014,375 1988 150,102 214,375 552,923 852,688 2,301,745 9,102,571 25,020 85,829 129,739 253,159 490,424 1,556,097 75,168 96,583 190,233 274,724 656,840 2,295,501 1988 150,102 214,375 552,923 852,688 2,301,745 9,012,571 25,020 85,829 129,739 253,159 490,424 1,556,097 75,817 98,922 209,781 318,864 871,732 3,574,515 1989 146,592 207,130 514,683 777,681 2,038,242 7,819,320 24,847 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 809,095 3,145,884 1990 143,291 202,395 502,497 761,149 1,964,388 7,569,171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 3,101,691 136,260 189,587 446,843 659,096 1,639,593 6,030,432 237,83 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,881 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1990 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 75,732 101,865 231,099 318,688 838,178 3,572,680 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1982	112,163	148,923	319,327	455,901	1,074,222	3,708,530	23,570	75,404	106,322	182,753	301,320	781,521	68,037	85,920	158,707	221,283	503,293	1,672,996
1985 127,111 172,847 392,011 577,669 1,438,569 5,021,733 24,607 81,375 118,057 206,353 362,444 1,040,440 72,751 94,428 179,702 254,091 646,703 2,192,949 1986 143,255 201,499 497,243 755,605 1,850,830 7,324,484 25,311 85,011 127,563 238,880 481,799 1,242,646 75,835 100,872 204,299 335,477 701,066 3,014,374 1987 134,621 184,523 424,027 623,278 1,531,970 5,427,290 24,823 84,720 124,647 224,776 396,105 1,099,157 75,168 96,583 190,233 274,724 656,840 2,295,501 1988 150,102 214,375 552,923 852,688 2,301,745 9,012,571 25,020 85,829 129,739 253,159 490,424 1,556,097 75,817 98,924 209,781 318,664 871,732 3,574,515 1989 146,592 207,130 514,683 777,681 2,038,242 7,819,320 24,847 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 809,095 143,291 202,395 502,497 761,149 1,964,388 7,859,9171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,122 97,032 202,387 306,533 784,557 3,101,691 1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 3,193,868 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,625 41,436 128,811 245,553 441,185 1,273,411 73,829 97,478 202,376 295,434 747,049 2,803,993 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,663 86,266 134,091 261,555 477,935 1,416,215 75,401 100,516 217,902 302,268 808,219 3,135,762 1996 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 75,732 101,885 231,099 318,688 838,178 3,572,680 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1983	116,284	155,936	341,797	492,411	1,177,214	4,135,849	23,513	76,633	109,471	191,182	321,211	848,477	69,044	88,003	165,952	233,408	532,093	1,837,861
1986 143,255 201,499 497,243 755,605 1,850,830 7,324,484 25,311 85,011 127,563 238,880 481,799 1,242,646 75,835 100,872 204,299 335,477 701,066 3,014,374 1987 134,621 184,523 424,027 623,278 1,531,970 5,427,290 24,823 84,720 124,647 224,776 396,105 1,099,157 75,168 96,583 190,233 274,724 656,840 2,295,501 1988 150,102 214,375 552,923 852,688 2,301,745 9,012,571 25,020 85,829 129,739 253,159 490,424 1,556,097 75,817 98,924 209,781 318,864 871,732 3,574,515 1989 144,659 207,130 514,683 77,681 2,038,242 7,819,320 24,847 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 809,095 143,291 202,395 502,497 761,149 1,964,388 7,569,171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 3,101,691 1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 3,193,868 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 144,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,416,215 75,401 100,516 217,920 322,282 808,219 41,090 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1984	121,648	164,127	365,954	536,106	1,331,452	4,767,682	24,251	79,169	113,670	195,803	337,270	949,649	71,041	91,255	170,041	242,462	575,875	2,079,731
1987 134,621 184,523 424,027 623,278 1,531,970 5,427,290 24,823 84,720 124,647 224,776 396,105 1,099,157 75,168 96,583 190,233 274,724 656,840 2,295,501 1988 150,102 214,375 552,923 852,688 2,301,745 9,012,571 25,020 85,829 129,739 253,159 490,424 1,556,097 75,817 98,924 209,781 318,864 871,732 3,574,515 1989 146,592 207,130 514,683 776,681 2,038,242 7,819,320 24,847 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 809,095 3,145,884 1990 143,291 202,395 502,497 761,149 1,964,388 7,569,171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 3,101,691 1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 3,193,868 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,462,15 75,401 100,516 217,920 322,282 808,219 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1985	127,111	172,847	392,011	577,669	1,438,569	5,021,733	24,607	81,375	118,057	206,353	362,444	1,040,440	72,751	94,428	179,702	254,091	646,703	2,192,949
1988 150,102 214,375 552,923 852,688 2,301,745 9,012,571 25,020 85,829 129,739 253,159 490,424 1,555,097 75,817 98,924 209,781 318,864 871,732 3,574,515 1989 146,592 207,130 514,683 777,681 2,038,242 7,819,320 24,847 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 809,095 3,145,884 1990 143,291 202,395 502,497 761,149 1,964,388 7,569,171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 3,101,691 1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 31,93,868 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 144,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,416,215 75,401 100,516 217,920 322,282 808,219 3,135,762 1996 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 75,732 101,885 231,099 318,688 838,178 3,572,680 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1986	143,255	201,499	497,243	755,605	1,850,830	7,324,484	25,311	85,011	127,563	238,880	481,799	1,242,646	75,835	100,872	204,299	335,477	701,066	3,014,374
1989 146,592 207,130 514,683 777,681 2,038,242 7,819,320 24,847 86,054 130,242 251,685 462,540 1,395,900 75,762 99,447 209,294 312,548 809,095 3,145,884 1990 143,291 202,395 502,497 761,149 1,964,388 7,569,171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 3,101,691 1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 3,193,868 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,416,215 75,401 100,516 217,920 322,282 808,219 3,135,762 1996 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 75,732 101,885 231,099 318,688 838,178 3,572,680 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1987	134,621	184,523	424,027	623,278	1,531,970	5,427,290	24,823	84,720	124,647	224,776	396,105	1,099,157	75,168	96,583	190,233	274,724	656,840	2,295,501
1990 143,291 202,395 502,497 761,149 1,964,388 7,569,171 24,303 84,187 127,370 243,845 460,340 1,341,634 74,182 97,032 202,387 306,533 784,557 3,101,691 1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 3,193,868 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,416,215 75,401 100,516 217,920 322,282 808,219 3,135,762 1996 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 75,732 101,885 231,099 318,688 838,178 3,572,680 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1988	150,102	214,375	552,923	852,688	2,301,745	9,012,571	25,020	85,829	129,739	253,159	490,424	1,556,097	75,817	98,924	209,781	318,864	871,732	3,574,515
1991 136,260 189,587 446,843 659,096 1,639,593 6,030,432 23,783 82,934 125,273 234,590 413,972 1,151,722 73,669 97,213 195,050 285,671 691,177 2,618,883 1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 3,193,868 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,416,215 75,401 100,516 217,920 322,282 808,219 3,135,762 1996 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 79,002 107,620 246,603 349,458 940,966 4,100,916	1989	146,592	207,130	514,683	777,681	2,038,242	7,819,320	24,847	86,054	130,242	251,685	462,540	1,395,900	75,762	99,447	209,294	312,548	809,095	3,145,884
1992 142,902 202,486 504,213 764,136 2,008,757 7,795,414 23,310 83,317 127,054 244,290 452,980 1,365,795 73,305 96,190 202,815 306,680 788,486 3,193,688 1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,416,215 75,401 100,516 217,920 322,282 808,219 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1990	143,291	202,395	502,497	761,149	1,964,388	7,569,171	24,303	84,187	127,370	243,845	460,340	1,341,634	74,182	97,032	202,387	306,533	784,557	3,101,691
1993 139,856 197,086 477,830 715,792 1,840,500 6,873,006 23,012 82,626 126,900 239,868 434,615 1,281,332 72,849 95,847 202,376 295,434 747,049 2,803,993 1994 141,807 199,478 482,143 718,732 1,828,920 6,828,504 23,292 84,136 128,811 245,553 441,185 1,273,411 73,829 97,478 206,712 302,060 745,744 2,835,415 1995 149,002 211,738 522,324 783,082 2,003,671 7,290,769 23,663 86,266 134,091 261,565 477,935 1,416,215 75,401 100,516 217,920 322,282 808,219 3,135,762 1996 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 75,732 101,885 231,099 318,688 838,178 3,572,680 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1991	136,260	189,587	446,843	659,096	1,639,593	6,030,432	23,783	82,934	125,273	234,590	413,972	1,151,722	73,669	97,213	195,050	285,671	691,177	2,618,883
1994       141,807       199,478       482,143       718,732       1,828,920       6,828,504       23,292       84,136       128,811       245,553       441,185       1,273,411       73,829       97,478       206,712       302,060       745,744       2,835,415         1995       149,002       211,738       522,324       783,082       2,003,671       7,290,769       23,663       86,266       134,091       261,565       477,935       1,416,215       75,401       100,516       217,920       322,282       808,219       3,135,762         1996       155,519       223,340       561,614       845,329       2,273,316       8,991,678       24,306       87,698       138,771       277,898       488,332       1,526,831       75,732       101,885       231,099       318,688       838,178       3,572,680         1997       166,383       241,920       624,302       959,409       2,631,186       10,674,237       25,410       90,847       146,324       289,194       541,465       1,737,513       79,002       107,620       246,603       349,458       940,966       4,100,916	1992	142,902	202,486	504,213	764,136	2,008,757	7,795,414	23,310	, -	127,054	244,290	452,980	1,365,795	73,305	96,190	202,815	306,680	788,486	3,193,868
1995       149,002       211,738       522,324       783,082       2,003,671       7,290,769       23,663       86,266       134,091       261,565       477,935       1,416,215       75,401       100,516       217,920       322,282       808,219       3,135,762         1996       155,519       223,340       561,614       845,329       2,273,316       8,991,678       24,306       87,698       138,771       277,898       488,332       1,526,831       75,732       101,885       231,099       318,688       838,178       3,572,680         1997       166,383       241,920       624,302       959,409       2,631,186       10,674,237       25,410       90,847       146,324       289,194       541,465       1,737,513       79,002       107,620       246,603       349,458       940,966       4,100,916	1993	139,856	197,086	477,830	715,792	1,840,500	6,873,006	23,012	82,626	126,900	239,868	434,615	1,281,332	72,849	95,847	202,376	295,434	747,049	2,803,993
1996 155,519 223,340 561,614 845,329 2,273,316 8,991,678 24,306 87,698 138,771 277,898 488,332 1,526,831 75,732 101,885 231,099 318,688 838,178 3,572,680 1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1994	141,807	199,478	482,143	718,732	1,828,920	6,828,504	23,292	84,136	128,811	245,553	441,185	1,273,411	73,829	97,478	206,712	302,060	745,744	2,835,415
1997 166,383 241,920 624,302 959,409 2,631,186 10,674,237 25,410 90,847 146,324 289,194 541,465 1,737,513 79,002 107,620 246,603 349,458 940,966 4,100,916	1995	149,002	211,738	522,324	783,082	2,003,671	7,290,769	23,663	86,266	134,091	261,565	477,935	1,416,215	75,401	100,516	217,920	322,282	808,219	3,135,762
	1996	155,519	223,340	561,614	845,329	2,273,316	8,991,678	24,306	87,698	138,771	277,898	488,332	1,526,831	75,732	101,885	231,099	318,688	838,178	3,572,680
1998 177,257 259,578 684,373 1,064,583 2,984,948 12,611,297 26,760 94,935 153,380 304,163 584,491 1,915,354 83,238 114,666 262,557 374,021 1,014,547 4,579,828		,	,	. ,			-,- , -	,	,					-,				,	, ,
	1998	177,257	259,578	684,373	1,064,583	2,984,948	12,611,297	26,760	94,935	153,380	304,163	584,491	1,915,354	83,238	114,666	262,557	374,021	1,014,547	4,579,828

Table A6: Top fractiles income levels (including capital gains) in the U.S., 1913-1998 (fractiles are defined by total income (including capital gains)) (incomes are expressed in 1998 \$)

	P90-100	P95-100	P99-100	P99.5-100	P99.9-100	P99.99-100	P0-90	P90-95	P95-99	P99-99.5	P99.5-99.9	P99.9-99.99	P90	P95	P99	P99.5	P99.9	P99.99
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1913			216,894	355,687	1,040,581	3,327,085				78,101	184,463	786,525			62,114	101,862	322,023	1,354,485
1914			214,336	356,013	1,015,535	3,221,546				72,658	191,133	770,422			57,429	95,390	308,566	1,346,418
1915			209,485	347,474	1,098,731	5,196,144				71,493	159,654	643,442			48,411	92,114	339,477	1,722,459
1916			254,295	431,189		6,296,206				77,401	192,829	838,901			58,395	107,634	415,383	2,352,213
1917	53,954	81,625	236,248	382,070	1,119,035	4,482,252	9,161	26,282	42,970	90,427	197,828	745,344	20,955	29,664	72,900	118,453	407,383	1,874,261
1918	50,512	74,289	201,022	313,080	845,889	3,090,911	8,721	26,734	42,606	88,965	179,878	596,443	22,367	30,121	72,815	113,349	343,698	1,404,307
1919	50,342	75,341	204,922	315,630	827,855	2,855,198	8,600	25,344	42,946	94,214	187,573	602,595	21,365	30,280	77,055	119,990	377,575	1,349,048
1920	43,461	63,104	165,200	248,259	596,779	1,852,420	7,833	23,817	37,580	82,140	161,129	457,264	21,865	27,318	66,998	105,464	291,052	940,981
1921	42,028	59,963	152,204	227,716	545,240	1,643,322	6,404	24,093	36,903	76,693	148,335	423,231	21,071	26,659	63,194	97,473	269,373	861,025
1922	48,580	70,989	189,530	290,174	737,274	2,526,853	7,230	26,170	41,354	88,885	178,399	538,432	22,499	29,784	71,882	114,020	332,728	1,140,943
1923	51,273	73,648	193,444	294,520	730,422	2,470,806	8,356	28,899	43,699	92,369	185,544	537,046	24,527	33,680	74,042	118,865	338,447	1,131,767
1924	54,656	79,047	214,443	329,870	835,346	2,861,547	7,904	30,265	45,198	99,016	203,501	610,213	25,502	34,439	79,390	128,499	374,005	1,321,046
1925	59,258	89,510	258,800	405,516		4,232,489	7,894	29,005	47,188	112,084		740,468	26,147	34,956	88,912	147,144	439,872	1,746,821
1926	58,373	88,405	254,244	397,098	1,080,238	4,295,940	7,993	28,341	46,946	111,390	-,	722,937	25,487	33,666	89,209	144,145	425,755	1,725,812
1927	60,601	92,693	273,019	431,037	1,201,665	, ,	7,976	28,509	47,611	115,002	,	793,515	26,108	34,728	91,725	149,326	456,165	1,988,850
1928	67,345	105,382		530,112	1,576,876		7,951	29,308	49,951	124,097		989,286	26,837	35,933	98,059	163,088	539,665	2,672,313
1929	65,808		314,925	509,071	1,537,608	7,030,686	8,618	28,816	49,769	120,780	- ,	927,266	26,119	35,246	96,908	156,503	491,446	2,536,072
1930	53,329	77,960	209,389	321,055	860,039	3,458,208	7,885	28,697	45,103	97,722	186,309	571,353	25,471	33,007	80,388	122,547	338,778	1,364,437
1931	48,406	67,879	168,426	251,377	640,452	2,445,033	6,985	28,934	42,742	85,475	154,109	439,943	24,846	31,347	71,255	105,851	267,084	1,009,285
1932	42,074	59,282	141,145	210,920	541,637	1,805,122	5,655	24,865 22,233	38,816	71,370	128,241	401,250	17,010	29,067 27,067	60,782	87,228 87,952	230,544 239,460	895,606 966,354
1933 1934	40,831 44,736	59,430 65,885	147,381 160,220	223,214 240,277	591,749 598,893	2,099,020	5,644 6,146	23,588	37,442 42,301	71,549 80,162	131,080 150,623	424,274 440,345	16,606 20,041	28,937	59,902 66,670	,	239,460	900,334
1934	,	,	178,215	270,035	683,125	2,025,825	6,863	26,095	,	86,395	,	499,228	,	32,296	,	101,007	305,898	,
1935	47,549 55,511	69,004 82,536	229,796	354,037	901,307	2,338,196 3,022,435	7,353	28,486	41,701 45,721		166,762 217,219	499,226 665,626	22,050 24,238	35,800	71,569 86,024	109,757 138,093	404,553	1,114,973 1,472,350
1930	53,960	78,733	209,214	317,765	792,294	2,652,643	7,333 7,882	29,188	46,112	,	199,132	585,588	25,410	34,568	82,733	129,492	362,329	1,472,330
1938	49,703	70,695	177,668	265,593	663,522	2,474,747	7,299	28,711	43,951	89,743	166,110	462,275	24,853	33,536	75,186	112,860	292,589	1,095,932
1939	54,520	77,325	193,746	288,850	703,290	2,351,763	7,565	31,715	48,220	98,641	185,240	520,126	28,042	37,640	82,440	124,192	325,761	1,147,441
1940	56,715	80,696	206,335	308,870	751,956	2,558,970	7,942	32,734	49,286	,	198,099	551,176	31,008	37,165	86,080	133,705	350,135	1,236,350
1941	61,382	87,811	231,087	347,296	850,022	2,894,418	9,908	34,882	51,992	114,878	,	622,866	32,014	40,381	93,927	148,341	395,970	1,429,307
1942	61.130	87,320	227,219	340,669	814,143	2,615,516	12,475	34,940	52,345	113,770	,	613,991	32,447	40.155	92,297	146,715	390,715	1,354,594
1943	66,365	94,880	242,482	360,403	839,735	2,433,048	15,029	37,850	57,979	,	240,569	662,700	33,415	44,375	101,129	162,156	423,919	1,296,864
1944	67,782	94,921	235,185	344,304	782,969	2,427,199	16,176	40,643	59,855		234,638	600,276	36,455	44,447	103,564	160,192	401,637	1,301,935
1945	71,401	102,859		379,087	862,705	2,620,551	15,564	39,944	63,672	140,123	258,182	667,389	35,495	45,466	115,246	182,826	440,989	1,376,288
1946	73,010	106,494	264,134	382,460	873,694	2,930,066	14,312	39,526	67,084	145,808	259,651	645,208	35,389	47,453	120,389	183,910	441,940	1,484,344
1947	64,512	92,701	224,538	323,561	735,912	2,448,242	14,061	36,323	59,741	125,515	220,473	545,653	32,122	41,953	104,097	157,213	370,977	1,227,116
1948	66,755	95,537	233,410	339,375	773,128	2,488,982	13,646	37,972	61,069	127,444	230,937	582,477	33,648	45,612	105,929	163,360	390,324	1,306,258
1949	64,992	91,661	219,320	317,046	716,551	2,323,751	13,471	38,323	59,746		217,170	537,973	34,018	45,672	100,711	152,663	362,320	1,192,024
1950	72,677	104,360	261,979	382,966	897,228	2,492,746	14,507	40,994	64,955	140,992	254,401	719,949	37,528	47,299	114,590	178,694	437,887	1,225,057
1951	71,843	,	247,483	358,154	816,833	2,689,746	15,198	42,062	65,161		243,484	608,732	37,677	47,986	115,168	172,124	410,732	1,378,582
1952	71,515	99,350	232,362	333,178	738,195	2,343,825	15,856	43,680	66,097	,	231,924	559,792	40,205	50,573	111,848	169,340	385,025	1,207,298
1953	72,268	98,483	221,498	314,165	683,416	2,162,564	16,725	46,053	67,730	128,831	,	519,067	41,239	51,750	110,354	163,960	360,002	1,084,111
1954	75,136	,	240,660	344,578	779,803	2,610,747	16,344	46,188	69,941	136,741	,	576,365	41,358	53,048	116,439	172,350	402,041	1,279,145
1955	81,757	,	266,378	383,631	894,942	3,171,561	17,561	49,827	75,514	,	255,804	641,984	45,287	58,441	125,935	187,973	443,075	1,464,821
1956	84,418		269,233	388,714	879,519	3,021,297	18,464	52,147	78,552		266,012	641,544	46,647	59,992	126,473	191,011	452,889	1,413,697
1957	82,882	- ,	255,288	363,246	799,788	2,645,265	18,566	52,179	78,159	147,330	- , -	594,735	47,221	60,662	124,368	183,911	425,075	1,288,429
1958	82,222	,	250,029	356,128	788,482	2,649,460	17,889	52,108	77,912	,	248,039	581,707	47,159	61,438	122,385	180,628	415,968	1,296,774
1959	89,111		279,032	404,405	904,073	3,129,379	18,957	55,630	83,483		279,487	656,817	49,567	67,512	133,676	209,954	474,835	1,478,599
1960	88,184		264,344	375,616	855,906	3,095,137	19,286	57,433	82,584	, -	255,544	607,102	50,827	61,435	130,914	190,400	435,884	1,464,434
1961	92,426	,	287,105	413,165	985,185	3,729,687	19,452	58,029	86,752	,	270,160	680,240	51,814	67,539	135,879	198,464	479,187	1,735,572
1962 1963	92,801	,	273,987	388,580 396.254	879,598	3,196,292	20,064	60,003 61.954	88,503	159,395 165.275	265,825 272.644	622,187 629.049	54,142	68,607	136,446	199,460	455,778	1,485,725
1963	95,654	- ,	280,765 312,487	396,254 440,457	890,695	3,245,501 3,883,060	20,592 21,565	65,138	91,503 97,080	,	272,644 299,153	629,049 685,961	56,200 59.360	71,797	141,534	204,846 223,685	464,442 478.983	1,483,660 1,745,499
1904	102,000	140,101	312,40/	440,437	1,005,071	3,003,000	∠1,303	00,136	91,000	104,517	299,103	000,901	59,560	14,014	109,910	223,000	410,903	1,740,499

1965	108 683	149.217	340 348	482,781	1,142,152	4 653 805	22.467	68.149	101,434	107 016	317 038	751.958	62.558	77.998	170 820	237,590	497.723	2.003.905
1966	,	148,839	,	468,785	, ,	4.188.135	23,552	69.822	,	191,980	,	755.958	63,067	80.339	-,	237,420	517.974	1.903.145
1967	,	159.794	,	517,417	, , -	4.774.332	24.157	72.422		206.481	,	846.711	64.973	84.285	176.705		574.402	2.197.287
1968	-,	169,969	,	572.806	,, -	5.682.763	24.983	75.278	113.819	, -	,	941.473	67.825	88.020	-,	268.913	637.131	2.515.933
1969	, -	162.400	,	523,826	1.299.293	5.481.013	25,413	76.299	111,970	-,	, -	834.657	68,867	87.999	,	252,030	564.358	2,329,755
1970	-,	149,890	,	432,526	960.167	3.446.745	25,614	75.866	,	191,958	,	683.881	68.456	86.792	,	231,594	484.163	1.635.371
1971	,	155.072	,	457.303	1.040.797	3.879.687	25.455	77.191	111.984	,	,	725.365	69.460	88.952	,	239,028	507.873	1.797.350
1972	-, -	164.570	- ,	495,502	, , -	4.305.112	26,588	80.883	,	208.842	- , -	790.779	73.086	93.509	182.118	,	551.838	1.970.978
1973	,	164,950	,	468.099	1.024.765	3,495,215	27,055	82.566	,	212,269	,	750,270	74.232	95.607	- , -	254,187	530,562	1.763.635
1974	,	157,746	,	449,808	972,894	3,134,015	26,031	79,814	115,855	,	,	732,770	72,002	93,355	,	243,580	527,899	1,650,593
1975	112,901	148,458	299,624	409,817	866,017	2,858,845	24,585	77,343	110,667	189,430	295,767	644,592	69,645	88,634	165,420	227,245	458,591	1,431,890
1976	116,145	152,767	308,004	421,909	901,931	2,989,141	25,238	79,524	113,958	194,098	301,903	670,019	71,667	91,330	169,587	231,356	473,774	1,489,993
1977	118,018	155,499	317,160	436,959	951,620	3,245,813	25,509	80,538	115,084	197,361	308,294	696,710	72,460	92,665	172,246	235,509	488,122	1,592,429
1978	119,926	157,838	320,550	441,315	948,332	3,066,992	25,971	82,014	117,159	199,785	314,561	712,926	73,775	94,045	174,668	239,726	499,658	1,562,795
1979	122,066	163,634	355,281	507,253	1,227,096	4,898,220	25,585	80,499	115,722	203,309	327,292	819,194	72,616	93,179	176,308	248,399	555,743	2,215,452
1980	117,416	157,090	339,741	484,745	1,155,921	4,327,616	24,154	77,741	111,428	194,736	316,951	803,510	70,174	89,682	169,803	238,807	545,621	2,070,177
1981	114,442	152,638	331,862	479,279	1,181,473	4,525,088	23,709	76,246	107,832	184,446	303,730	809,961	68,729	87,710	161,372	226,430	544,751	2,134,060
1982	,	155,984	,	521,348	1,366,615	5,674,229	23,184	75,281	,	185,286	,	887,991	67,926	86,186	,	227,680	571,859	2,559,765
1983	120,939	165,221	384,112	573,783	1,536,044	6,263,240	22,995	76,657	-,	194,442	,	1,010,800	69,065	88,829	, -	242,133	633,889	2,783,216
1984	-, -	174,115	,	622,408	1,714,915	, , -	23,714	78,834	114,450	,	, -	1,081,651	70,741	91,881	176,413	- ,	655,922	3,234,220
1985	- ,	184,582	,	680,256	, , -	7,902,090	23,983	80,879	,	215,121	380,507	1,210,050	72,307	95,027	,	266,754	752,127	3,450,777
1986	,	223,128	,	955,093		12,653,584	24,149	84,305	,	,	,	1,703,987	75,205	,	213,236	,	961,342	5,207,553
1987	,	191,542	,	681,931		6,884,694	24,446	84,493	,	,	,	1,199,386	74,967	97,006	,	284,663	716,735	2,911,917
1988	,	221,040	,	912,514	, ,	10,801,574	24,664	85,575	,	, -	,	1,650,420	75,594	,	212,742	,	924,572	4,284,059
1989	,	212,738	,	825,602	2,235,379	, ,	24,540	85,971	,	,	,	1,467,511	75,689	,	211,159	,	850,603	3,679,715
1990	,	206,723	,	796,459	2,119,368		24,062	84,196	,	,	,	1,411,408	74,190	97,550	204,480	,	825,359	3,479,441
1991	,	194,821	,	701,734	1,800,011		23,484	83,082	,	,	,	1,235,964	73,801	97,903	,	294,775	741,732	2,986,283
1992	,	206,052	,	793,948	2,137,994		23,110	83,357		,	,	1,405,447	73,340	96,569		310,036	811,377	3,577,153
1993	,	201,357	- , -	752,600	2,001,037	-,,	22,767	82,769	,	,	,	1,324,034	72,976	96,237	,	299,428	771,946	3,302,148
1994	, -	204,181	, -	758,577	, , -	8,108,346	23,037	84,021	-,	, -	,	1,338,490	73,728	98,004	208,080	,	783,856	3,366,847
1995	- ,	216,506	,	829,287		8,860,129	23,400	86,232	,	,	,	1,493,662	75,372	,	217,510	,	852,417	3,810,743
1996	- ,	235,852	, -	958,672	2,715,729	,,	23,597	87,941	,	,	,	1,745,157	75,942	- ,	234,263	,	958,031	4,549,799
1997	-,	,	706,188		3,234,554	, ,	24,400	91,087	,	,	,	2,037,288	79,211	,	,	,	1,103,312	
1998	188,947	282,762	790,558	1,264,061	3,766,534	17,030,999	25,461	95,132	155,813	317,055	638,443	2,292,704	83,410	116,485	273,685	408,545	1,214,426	6,184,855

Table A7: Income composition by sources of income and by fractiles of total income in the U.S., 1916-1998 (wage income, entrepreneurial income, dividends, interest and rents are expressed in % of total income (excluding capital gains) of each fractile)

		<u> </u>	90-10	0		<u>P95-100</u>									<u> </u>	299-100	<u>)</u>					P	99,5-10	00			
	Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents	
1916							1916							1916	19.5	32.8	32.4	9.3	6.0	100.0	1916	16.5	31.7	36.7	9.5	5.6	100.0
1917							1917	31.4	31.4	23.5	7.7	5.9	100.0	1917	24.4	22.2	37.3	11.4	4.6	100.0	1917	21.7	19.0	43.1	12.0	4.1	100.0
1918	46.1	25.8	14.4	8.0	5.6	100.0	1918	38.2	28.2	19.0	9.0	5.7	100.0	1918	27.6	26.7	29.8	10.9	5.0	100.0	1918	25.7	24.2	34.5	11.3	4.3	100.0
1919	47.7	28.3	12.1	7.1	4.8	100.0	1919	39.4	31.7	15.8	8.2	5.0	100.0	1919	28.7	31.8	24.9	10.2	4.4	100.0	1919	26.0	30.4	28.7	10.8	4.0	100.0
1920	52.0	22.4	13.8	7.4	4.4	100.0	1920	44.7	25.4	17.1	8.2	4.7	100.0	1920	32.1	26.6	27.3	9.6	4.4	100.0	1920	28.8	25.8	31.2	10.0	4.2	100.0
1921	58.0	17.6	11.9	7.4	5.0	100.0	1921	49.0	20.5	16.4	8.7	5.4	100.0	1921	35.5	22.5	26.4	10.2	5.4	100.0	1921	31.5	22.0	30.7	10.7	5.2	100.0
1922	54.3	19.1	12.6	7.7	6.3	100.0	1922	45.7	21.6	16.9	8.8	7.0	100.0	1922	32.0	22.1	27.4	10.5	8.0	100.0	1922	28.0	21.2	31.9	10.9	8.0	100.0
1923	45.6	24.3	14.0	8.3	7.7	100.0	1923	39.6	25.4	17.8	9.1	8.0	100.0	1923	32.2	20.9	29.0	9.9	8.0	100.0	1923	28.1	20.0	34.0	10.1	7.8	100.0
1924	44.3	25.1	13.8	8.6	8.3	100.0	1924	39.4	25.7	17.4	9.2	8.3	100.0	1924	31.4	22.3	29.0	9.8	7.5	100.0	1924	27.6	20.5	34.5	10.1	7.3	100.0
1925	43.2	25.7	14.8	8.3	8.1	100.0	1925	39.3	26.0	18.3	8.6	7.9	100.0	1925	29.7	23.7	29.5	9.5	7.5	100.0	1925	25.9	22.2	34.8	9.8	7.3	100.0
1926	43.2	23.7	16.7	8.6	7.8	100.0	1926	39.1	24.2	20.3	8.8	7.6	100.0	1926	29.4	21.3	32.2	9.9	7.2	100.0	1926	25.7	19.4	37.8	10.1	7.0	100.0
1927	44.2	22.5	17.2	9.0	7.1	100.0	1927	39.8	22.8	21.0	9.4	7.0	100.0	1927	29.2	20.7	32.8	10.3	7.0	100.0	1927	25.3	19.1	38.3	10.5	6.8	100.0
1928	45.5	20.9	18.2	8.9	6.4	100.0	1928	40.6	21.4	22.2	9.3	6.5	100.0	1928	28.6	21.3	32.9	10.5	6.7	100.0	1928	24.5	20.2	38.2	10.7	6.4	100.0
1929	45.2	20.2	19.0	8.8	6.8	100.0	1929	40.4	20.7	23.0	9.1	6.8	100.0	1929	28.4	20.3	33.8	10.4	7.0	100.0	1929	24.2	18.9	39.3	10.8	6.9	100.0
1930	49.1	15.8	19.1	9.4	6.6	100.0	1930	44.5	15.6	23.8	9.5	6.6	100.0	1930	32.4	15.5	34.9	10.3	6.9	100.0	1930	27.8	13.9	40.9	10.6	6.9	100.0
1931	51.6	14.0	18.1	9.6	6.7	100.0	1931	47.2	13.8	22.4	9.9	6.7	100.0	1931	37.0	14.3	31.4	10.5	6.9	100.0	1931	31.6	13.1	37.2	10.9	7.1	100.0
1932	58.1	11.3	15.4	8.9	6.3		1932	53.2	11.4	18.8	9.9	6.8		1932	43.3	12.2	27.1	10.4	6.9		1932	36.7	12.1	32.4	11.3	7.5	100.0
1933	59.0	15.6	11.7	8.0	5.7	100.0	1933	53.8	15.7	15.1	8.8	6.6		1933	44.3	16.6	23.2	9.5	6.5	100.0	1933	37.9	17.2	28.0	10.1	6.8	100.0
1934	60.2	15.4	12.4	6.5	5.5	100.0	1934	52.9	16.3	16.7	7.6	6.5		1934	42.6	17.1	26.1	7.8	6.3	100.0	1934	36.3	16.8	31.5	8.8	6.6	100.0
1935	60.0	15.9	12.5	6.0	5.6	100.0	1935	52.4	17.3	16.9	6.8	6.6	100.0	1935	41.7	18.4	26.6	6.8	6.4	100.0	1935	35.7	17.4	32.4	7.7	6.7	100.0
1936	56.5	17.0	15.7	4.7	6.1	100.0	1936	48.0	18.5	21.5	5.0	6.9		1936	36.1	19.0	33.7	4.8	6.4	100.0	1936	30.7	17.6	39.8	5.4	6.5	100.0
1937	59.6	15.8	15.7	3.8	5.0	100.0	1937	53.8	16.8	20.3	3.9	5.2	100.0	1937	36.3	18.4	34.0	4.9	6.4	100.0	1937	31.7	16.8	40.1	5.0	6.5	100.0
1938	63.1	16.6	11.5	3.9	4.9	100.0	1938	58.2	17.4	15.3	4.0	5.1		1938	42.3	20.1	26.2	5.2	6.3	100.0	1938	37.9	19.0	31.4	5.3	6.4	100.0
1939	62.4	16.8	12.8	3.4	4.6	100.0	1939	56.4	18.4	16.6	3.7	5.0		1939	39.5	21.2	28.2	4.7	6.3	100.0	1939	35.1	19.8	33.8	4.9	6.4	100.0
1940	63.4	16.8	12.7	2.8	4.3	100.0	1940	55.2	19.6	16.9	3.4	5.0	100.0	1940	39.4	22.4	27.9	4.1	6.2	100.0	1940	35.4	21.0	33.2	4.2	6.3	100.0
1941	61.4	20.9	11.5	2.3	3.9	100.0	1941	52.2	24.7	15.6	2.8	4.7		1941	38.4	28.9	24.3	3.2	5.3	100.0	1941	35.2	28.1	28.3	3.1	5.3	100.0
1942	60.1	25.4	8.9	1.8	3.7	100.0	1942	52.0	29.9	11.8	2.3	4.0	100.0	1942	35.7	37.8	19.0	2.8	4.7	100.0	1942	32.7	38.0	21.9	2.8	4.6	100.0
1943	57.0	30.0	7.9	1.6	3.5	100.0	1943	47.7	36.2	10.6	2.0	3.6		1943	30.0	46.6	16.8	2.5	4.1	100.0	1943	27.3	47.0	19.2	2.5	3.9	100.0
1944 1945	61.1 57.4	27.6 31.3	6.9 6.8	1.5 1.5	2.9 3.0	100.0	1944 1945	48.9 45.2	36.0 39.8	9.6 9.4	1.9 1.9	3.6 3.6		1944 1945	30.8 29.7	46.8 48.7	15.7 15.0	2.4 2.4	4.2 4.2	100.0	1944 1945	28.1 27.4	46.9 48.2	18.3 17.7	2.5 2.6	4.2 4.2	100.0 100.0
1945	54.0	33.6	7.8	1.5	3.1	100.0	1945	43.4	40.6	10.5	1.9	3.6		1945	31.5	45.2	16.6	2.4	4.2	100.0	1945	29.3	44.1	19.8	2.5	4.2	100.0
1940	56.4	30.3	8.5	1.4	3.3	100.0	1940	45.4	36.6	11.7	1.8	4.0		1940	34.4	39.4	19.2	2.4	4.8	100.0	1940	31.9	37.7	23.1	2.3	5.0	100.0
1948	59.7	27.0	8.6	1.4	3.3	100.0	1948	49.1	33.4	11.9	1.7	4.0		1948	35.1	37.6	20.1	2.2	4.9	100.0	1948	32.4	35.7	24.5	2.3	5.1	100.0
1946	62.9	23.1	8.9	1.6	3.6	100.0	1949	53.0	28.5	12.3	1.7	4.0		1949	37.6	33.3	21.1	2.5	5.5	100.0	1949	34.4	31.6	25.7	2.6	5.7	100.0
1950	63.1	23.0	8.9	1.5	3.5	100.0	1950	52.7	28.8	12.3	1.9	4.3	100.0	1950	36.0	34.6	21.5	2.5	5.5	100.0	1950	32.7	33.1	25.9	2.6	5.7	100.0
1950	64.0	22.5	8.6	1.5	3.4	100.0	1950	53.4	28.5	12.3	1.8	4.3	100.0	1950	37.1	34.4	20.9	2.3	5.3	100.0	1950	33.8	33.3	25.9	2.4	5.7	100.0
1952	65.7	21.6	8.0	1.5	3.4	100.0	1952	55.7	27.3	11.2	1.9	3.9	100.0	1952	37.7	34.4	20.9	2.5	5.4	100.0	1952	34.7	32.7	24.4	2.6	5.6	100.0
1953	68.2	19.9	7.4	1.5	3.0	100.0	1953	58.1	25.7	10.5	1.9	3.8	100.0	1953	40.4	32.7	19.1	2.6	5.2	100.0	1953	37.5	31.0	23.4	2.7	5.5	100.0
1954	67.0	20.5	7.7	1.5	3.3	100.0	1954	58.3	25.1	10.9	1.8	3.9	100.0	1954	39.4	32.9	19.8	2.9	5.0	100.0	1954	36.4	31.1	24.1	3.0	5.3	100.0
1955	67.6	20.4	8.0	1.5	2.5	100.0	1955	60.0	24.4	10.9	1.7	2.9		1955	39.2	33.2	21.4	2.9	3.4	100.0	1955	36.8	30.6	26.5	3.0	3.1	100.0
1000	57.0	20.7	0.0	1.0	2.0	٥٠٠٠٠	1000	50.0	4-77	10.5	1.7	2.0	.00.0	.000	55.2	30.2	∠ 17	2.0	0.7	.00.0	1000	50.0	00.0	20.0	0.0	J. 1	.00.0

1956 67.0 20.8 7.9 1.5 2.8 100.0 1956 58.6 25.3 11.1 1.9 3.2 100.0 1956 39.3 32.0 21.6 2.9 4.2 100.0 1956 36.4 28.1 28.1 3.0 4.4 100.0 67.9 19.7 8.3 1.9 2.2 100.0 1957 57.5 25.4 11.8 2.4 2.9 100.0 1957 40.2 31.8 21.1 3.1 3.9 100.0 1957 36.5 28.7 27.6 3.2 4.0 100.0 1958 68.9 19.1 58.5 100.0 1958 40.8 31.6 20.2 100.0 1958 37.1 28.3 26.9 7.8 2.0 2.2 100.0 1958 24.7 11.3 2.6 2.9 3.3 4.0 3.5 4.1 100.0 19.2 8.1 2.2 2.0 100.0 1959 57.5 25.4 11.6 2.8 2.7 100.0 1959 40.6 32.2 20.0 3.5 3.7 100.0 1959 36.6 29.4 26.4 3.7 3.9 100.0 1960 70.1 17.7 7.8 2.3 2.1 100.0 1960 59.0 23.7 11.4 3.0 2.8 100.0 1960 42.5 30.1 19.7 3.8 4.0 100.0 1960 38.2 26.7 26.8 4.0 4.3 100.0 1961 70.6 17.6 7.4 2.5 1.9 100.0 1961 61.1 22.9 10.5 3.1 2.5 100.0 1961 42.0 30.9 19.7 3.9 3.5 100.0 1961 37.8 27.6 26.9 4 1 3.7 100.0 1962 70.7 17.5 7.2 2.7 1.8 100.0 1962 61.0 22.9 10.3 3.3 2.4 100.0 1962 42.1 30.8 19.4 4.3 3.4 100.0 1962 38.1 27.1 26.8 4.4 3.6 100.0 1963 70.8 17.0 7.4 3.1 1.7 100.0 1963 61.5 22.1 10.4 3.7 2.2 100.0 1963 42.4 29.9 19.9 4.6 3.2 100.0 1963 37.9 26.6 27.3 4.8 3.4 100.0 1964 69.0 100.0 1964 59.8 100.0 1964 42.7 100.0 1964 37.6 18.4 8.0 3.3 1.3 23.6 11.0 3.9 1.7 28.5 21.8 4.7 2.4 27.0 28.1 4.8 2.5 100.0 59.9 1965 68.1 100.0 1965 42.3 100.0 1965 37.5 27.7 19.4 7.8 3.5 1.2 100.0 1965 23.9 10.7 4.0 1.5 28.8 21.9 4.9 2.1 27.6 5.0 2.2 100.0 1966 69.9 18.0 6.9 3.4 1.7 100.0 1966 60.2 23.7 9.9 4.0 100.0 1966 40.9 32.6 18.5 4.9 100.0 1966 37.2 31.6 22.9 100.0 1967 70.3 18.0 3.6 100.0 1967 60.9 23.6 9.4 4.2 100.0 1967 41.8 33.1 17.5 100.0 1967 38.0 32.5 21.7 2.8 100.0 6.7 1.5 1.9 5.0 2.7 5.0 1968 70.8 100.0 1968 61.2 100.0 1968 42.0 31.5 100.0 1968 37.3 31.1 17.3 6.7 3.8 1.4 22.8 9.5 4.5 1.9 18.3 5.4 2.7 23.2 5.6 2.8 100.0 1969 72.2 16.5 6.1 3.8 1.3 100.0 1969 63.3 21.9 8.6 4.5 1.7 100.0 1969 43.9 31.1 16.6 5.9 2.5 100.0 1969 39.9 29.7 21.0 6.5 2.8 100.0 1970 73.7 15.2 5.6 4.2 1.3 100.0 1970 65.2 20.2 7.9 100.0 1970 45.6 30.0 100.0 1970 41.0 30.0 18.8 3.2 100.0 5.0 1.8 14.9 6.5 2.9 7.0 1971 74.8 14.3 5.1 4.4 13 100.0 1971 66.3 19.2 7.4 5.3 1.8 100.0 1971 47.6 28.8 14.0 6.8 3.0 100.0 1971 42.5 29.1 17.8 7.2 3.5 100.0 1972 74.6 14.5 100.0 1972 66.2 7.2 5.3 2.0 100.0 1972 49.3 27.2 13.6 3.2 100.0 1972 46.2 26.4 16.9 3.5 100.0 5.1 4.4 1.4 19.3 6.6 7.0 1973 73.2 15.4 5.1 4.8 1.5 100.0 1973 64.9 20.2 7.1 5.7 2.1 100.0 1973 49.1 27.2 13.3 7.1 3.2 100.0 1973 45.7 26.7 16.6 7.5 3.5 100.0 1974 72.7 14.9 5.2 5.4 1.8 100.0 1974 64.8 19.5 7.0 6.3 2.4 100.0 1974 49.4 26.2 12.9 7.9 3.6 100.0 1974 45.6 25.5 16.1 8.6 4.2 100.0 1975 75.5 100.0 1975 52.9 100.0 1975 13.0 4.9 5.0 1.6 100.0 1975 68.1 17.1 6.8 5.8 2.3 23.4 12.7 7.3 3.7 49.7 22.6 15.7 7.7 4.3 100.0 1976 76.1 100.0 1976 52.0 12.4 4.9 5.1 1.5 100.0 1976 69.2 16.2 6.8 5.8 2.0 100.0 1976 54.7 22.0 12.8 7.0 3.6 20.9 15.9 7.0 4.2 100.0 1977 76.6 11.9 5.0 100.0 1977 69.8 1.9 100.0 1977 56.1 21.0 12.8 6.7 3.4 100.0 1977 53.3 20.1 15.7 100.0 5.1 1.4 15.6 6.9 5.7 6.9 4.0 1978 76.9 11.9 4.9 5.0 1.4 100.0 1978 70.5 15.2 6.7 5.7 1.9 100.0 1978 58.1 19.6 12.4 6.5 3.4 100.0 1978 55.0 18.9 15.4 6.7 4.0 100.0 1979 77.5 10.6 4.9 5.7 13 100.0 1979 71.0 13.6 6.8 6.7 19 100.0 1979 59.0 17.0 12.5 8.0 3.5 100.0 1979 56.3 15.7 15.6 8.3 4 1 100.0 1980 78.1 8.3 5.1 7.2 1.3 100.0 1980 72.3 10.3 7.0 8.4 1.9 100.0 1980 60.5 13.3 12.5 10.0 3.6 100.0 1980 57.7 12.5 15.3 10.3 4.3 100.1 1981 79.0 5.7 5.0 9.3 1.1 100.0 1981 73.8 6.8 6.9 10.8 1.7 100.0 1981 62.7 7.8 12.4 13.3 3.7 100.0 1981 59.8 6.6 15.1 14.0 4.6 100.0 1982 79.4 5.1 5.3 9.0 100.0 1982 73.9 7.2 10.5 1.9 100.0 1982 62.6 8.2 12.3 12.9 3.9 100.0 1982 59.3 7.6 14.9 13.1 12 6.5 5.0 100.0 1983 81.0 5.9 4.6 7.7 100.0 1983 76.4 7.3 6.3 1.3 100.0 1983 65.5 9.8 11.0 10.7 3.0 100.0 1983 61.8 10.0 13.0 11.3 8.8 100.0 1984 75.5 1984 80.6 6.2 4.1 8.6 0.6 7.7 5.6 10.1 1.1 100.0 1984 66.1 9.9 8.9 12.4 2.7 100.0 1984 63.5 10.0 10.3 12.9 3.2 100.0 1985 80.3 6.6 4.2 8.3 0.6 100.0 1985 75.2 8.4 5.7 9.6 1.2 100.0 1985 63.6 11.0 9.6 12.3 3.4 100.0 1985 59.3 11.7 11.2 13.2 47 100.0 1986 81.2 7.1 4.6 6.9 0.2 100.0 1986 76.4 8.8 6.1 8.1 0.6 100.0 1986 65.7 11.1 10.8 10.6 1.7 100.0 1986 61.5 11.3 13.1 11.7 2.5 100.0 1987 79.5 9.7 4.0 6.7 0.1 100.0 1987 74.2 12.5 5.1 7.9 0.4 100.0 1987 63.9 17.2 7.2 10.4 1.4 100.0 1987 61.2 17.8 8.0 11.3 1.7 100.0 1988 76.3 12.3 4.3 6.8 0.3 100.0 1988 70.5 15.5 5.3 8.0 0.7 100.0 1988 59.8 21.2 7.6 10.0 1.5 100.0 1988 56.9 22.5 8.5 10.5 1.6 100.0 68.8 1989 75.0 12.5 4.2 100.0 1989 100.0 1989 56.7 22.3 100.0 1989 52.9 7.9 0.5 15.9 5.2 9.1 0.9 7.4 11.8 1.8 23.8 8.2 12.8 2.2 100.0 1990 75.6 12.3 3.9 7.6 0.6 100.0 1990 69.8 15.7 4.7 8.8 1.0 100.0 1990 57.9 22.3 6.8 11.1 2.0 100.0 1990 54.1 24.0 7.5 12.1 2.3 100.0 1991 76.2 12.5 3.7 7.0 0.7 100.0 1991 70.1 16.0 4.5 8.2 100.0 1991 57.4 23.0 6.6 11.0 2.1 100.0 1991 53.1 24.8 7.3 12.4 2.4 100.0 1.1 1992 78.1 3.3 100.0 1992 72.6 100.0 1992 100.0 1992 58.6 13.0 4.8 0.9 16.7 4.0 5.4 1.3 61.6 23.6 5.4 7.1 2.3 25.1 5.9 7.9 2.5 100.0 3.2 3.9 1.0 100.0 1993 73.4 3.8 100.0 1993 62.1 6.2 100.0 1993 58.7 100.0 13.1 16.8 4.5 1.4 23.8 5.3 2.6 25.7 5.8 1994 77.9 14.1 3.2 3.7 1.1 100.0 1994 72.0 18.2 3.9 4.4 1.6 100.0 1994 59.1 26.8 5.3 6.1 2.7 100.0 1994 54.7 29.3 6.0 6.9 3.1 100.0 1995 77.3 13.7 3.5 4.3 1.2 100.0 1995 71.6 17.6 4.2 5.0 1.6 100.0 1995 59.6 25.5 5.8 6.6 2.5 100.0 1995 55.7 27.8 7.4 2.8 100.0 6.4 1996 76.7 13.8 3.7 4.4 1.4 100.0 1996 70.9 17.8 44 4.9 1.9 100.0 1996 58.9 25.6 6.1 6.6 2.7 100.0 1996 54.4 28.2 6.9 7.6 2.9 100.0 14 1 4.1 4.3 1.5 100.0 1997 70.2 18.0 4.9 5.0 2.0 100.0 1997 59.2 25.2 6.4 6.5 2.7 100.0 1997 55.6 27.4 6.9 100.0 14.6 3.8 4.2 1.4 100.0 1998 70.4 18.4 4.5 4.8 1.9 100.0 1998 60.3 24.9 5.9 6.3 2.5 100.0 1998 57.5 26.5 6.3 7.0 2.7 100.0

Table A7: Income composition by sources of income and by fractiles of total income in the U.S., 1916-1998 (continued) (wage income, entrepreneurial income, dividends, interest and rents are expressed in % of total income (excluding capital gains) of each fractile)

		<u>P</u>	99,9-10	00					<u>P9</u>	9,99-1	00						P90-9	<u>5</u>						P95-99	<u>)</u>		
	Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents	
1916	10.2	28.3	47.3	9.6	4.6	100.0	1916	5.6	24.3	56.8	9.3	4.0	100.0	1916							1916						
1917	15.4	16.0	52.7	12.9	3.1	100.0	1917	8.4	13.8	61.2	14.3	2.4	100.0	1917							1917	41.3	44.4	4.1	2.6	7.7	100.0
1918	19.2	22.5	42.7	12.4	3.2	100.0	1918	10.1	23.5	49.5	14.3	2.6	100.0	1918	67.9	18.5	2.5	5.6	5.5	100.0	1918	50.7	29.8	6.2	6.9	6.4	100.0
1919	19.0	30.7	35.4	11.6	3.3	100.0	1919	10.0	31.8	42.6	12.9	2.7	100.0	1919	71.2	18.2	2.2	4.0	4.4	100.0	1919	52.1	31.5	4.8	5.9	5.7	100.0
1920	21.1	25.5	39.2	10.5	3.7	100.0	1920	11.6	25.4	48.7	11.0	3.4	100.0	1920	73.2	15.3	2.6	5.3	3.6	100.0	1920	58.6	24.1	5.6	6.8	4.9	100.0
1921	23.1	21.7	39.9	10.9	4.5	100.0	1921	13.5	21.3	51.0	10.2	4.0	100.0	1921	79.0	10.8	1.4	4.6	4.1	100.0	1921	62.8	18.7	6.0	7.2	5.4	100.0
1922	20.0	20.0	41.4	10.9	7.6	100.0	1922	11.2	18.1	52.6	10.3	7.8	100.0	1922	75.7	12.9	1.8	4.9	4.7	100.0	1922	60.5	21.1	5.3	7.1	6.0	100.0
1923	20.2	17.7	44.7	10.1	7.3	100.0	1923	12.2	13.5	57.6	9.7	7.1	100.0	1923	61.8	21.8	2.8	6.5	7.1	100.0	1923	48.0	29.9	5.8	8.3	7.9	100.0
1924	20.1	17.2	45.8	10.2	6.6	100.0	1924	12.4	13.5	58.1	9.5	6.5	100.0	1924	58.1	23.5	3.0	7.2	8.2	100.0	1924	48.5	29.2	4.7	8.5	9.1	100.0
1925	18.7	20.2	45.3	9.5	6.4	100.0	1925	10.7	19.1	56.5	8.6	5.1	100.0	1925	56.0	24.6	3.4	7.4	8.6	100.0	1925	50.5	28.5	5.2	7.5	8.3	100.0
1926	18.1	16.3	49.8	9.7	6.1	100.0	1926	11.4	13.3	62.7	8.1	4.5	100.0	1926	56.9	22.2	4.6	7.8	8.5	100.0	1926	51.0	27.3	6.0	7.7	8.0	100.0
1927	17.6	16.9	49.8	9.8	5.8	100.0	1927	10.2	16.3	61.0	8.4	4.1	100.0	1927	59.0	21.3	4.5	7.8	7.4	100.0	1927	53.0	25.3	6.4	8.3	7.1	100.0
1928	16.6	20.3	47.9	10.1	5.1	100.0	1928	9.3	24.1	54.3	9.2	3.1	100.0	1928	61.2	20.2	4.5	7.8	6.3	100.0	1928	55.5	21.5	8.8	7.9	6.2	100.0
1929	15.9	18.0	49.6	10.6	5.8	100.0	1929	8.8	20.6	56.8	10.2	3.7	100.0	1929	59.7	19.8	5.8	7.7	7.0	100.0	1929	55.1	21.1	9.7	7.7	6.5	100.0
1930	19.1	10.7	53.8	10.1	6.2	100.0	1930	12.2	6.7	69.1	8.1	3.9	100.0	1930	61.2	18.1	5.4	8.8	6.4	100.0	1930	57.7	15.7	11.4	8.8	6.4	100.0
1931	21.8	10.4	50.4	10.6	6.8	100.0	1931	12.9	6.5	67.8	8.4	4.4		1931	62.6	16.4	5.6	8.7	6.7	100.0	1931	58.3	14.3	11.3	9.4	6.6	100.0
1932	25.7	10.4	44.9	11.4	7.6	100.0	1932	15.6	6.9	64.0	8.5	5.0	100.0	1932	71.4	12.1	4.7	6.6	5.1	100.0	1932	64.6	11.7	8.9	8.2	6.7	100.0
1933	27.0	16.6	39.5	10.2	6.6	100.0	1933	15.6	14.6	57.4	8.2	4.2	100.0	1933	71.5	16.2	2.3	5.9	4.1	100.0	1933	65.6	16.1	4.7	6.8	6.8	100.0
1934	26.0	13.6	45.4	8.6	6.3	100.0	1934	15.6	9.2	64.6	6.3	4.2	100.0	1934	74.5	15.0	3.4	3.8	3.4	100.0	1934	65.9	16.5	5.0	5.9	6.6	100.0
1935	25.3	14.9	46.0	7.4	6.4	100.0	1935	14.2	11.4	64.8	5.2	4.4	100.0	1935	73.8	15.0	3.2	4.2	3.8	100.0	1935	66.2	17.0	5.0	5.2	6.6	100.0
1936	21.1	14.5	53.5	4.9	6.0	100.0	1936	10.8	11.3	70.3	3.4	4.2		1936	72.2	15.9	3.3	4.0	4.6	100.0	1936	63.4	18.6	6.9	3.7	7.4	100.0
1937	22.6	12.5	54.3	4.4	6.2	100.0	1937	12.5	7.2	72.5	3.2	4.6	100.0	1937	74.0	13.6	4.3	3.5	4.6	100.0	1937	71.6	15.1	6.5	2.9	4.0	100.0
1938	29.4	15.6	44.2	4.8	6.0	100.0	1938	18.9	9.5	63.6	3.4	4.6	100.0	1938	74.0	14.9	3.0	3.6	4.6	100.0	1938	72.1	15.0	5.8	3.1	4.0	100.0
1939	26.5	15.2	47.7	4.4	6.1	100.0	1939	16.3	8.1	67.8	3.1	4.7	100.0	1939	76.0	13.2	4.5	2.7	3.7	100.0	1939	71.3	15.8	6.2	2.8	3.8	100.0
1940	27.2	16.5	46.6	3.7	6.0	100.0	1940	16.3	9.4	66.9	2.7	4.6	100.0	1940	81.9	10.4	3.2	1.6	2.8	100.0	1940	69.9	17.0	6.5	2.7	3.9	100.0
1941	28.0	25.1	39.1	2.8	5.1	100.0	1941	16.8	19.4	57.4	2.2	4.2	100.0	1941	83.3	12.0	1.6	1.0	2.0	100.0	1941	65.7	20.6	7.1	2.5	4.1	100.0
1942	25.3	39.4	28.8	2.4	4.2	100.0	1942	13.3	42.3	39.3	1.9	3.2		1942	79.5	14.7	2.1	0.7	3.0	100.0	1942	68.4	21.9	4.6	1.8	3.3	100.0
1943	21.2	46.8	25.9	2.4	3.7	100.0	1943	11.5	44.8	38.3	2.3	3.1		1943	78.8	15.7	1.7	0.6	3.2	100.0	1943	65.0	26.0	4.4	1.5	3.2	100.0
1944	22.1	45.7	25.7	2.5	4.1	100.0	1944	12.5	39.6	41.8	2.5	3.6		1944	87.9	9.1	0.8	0.7	1.6	100.0	1944	65.6	26.0	4.0	1.5	3.0	100.0
1945	21.8	45.6	25.7	2.7	4.2	100.0	1945	13.4	35.0	44.5	3.1	3.9	100.0	1945	85.8	11.4	0.7	0.6	1.6	100.0	1945	59.5	31.6	4.4	1.5	3.1	100.0
1946	23.9	38.7	30.0	2.9	4.5	100.0	1946	15.1	24.4	52.5	3.6	4.4	100.0	1946	80.0	16.3	1.3	0.6	1.8	100.0	1946	54.0	36.4	5.0	1.5	3.1	100.0
1947	25.7	30.9	35.4	2.6	5.4	100.0	1947	15.0	17.1	59.6	3.0	5.3		1947	81.4	15.2	1.0	0.5	1.8	100.0	1947	56.0	34.2	5.1	1.4	3.3	100.0
1948	26.1	29.2	36.8	2.5	5.5	100.0	1948	15.6	17.1	59.4	2.7	5.2		1948	84.5	12.3	0.9	0.6	1.7	100.0	1948	61.5	29.5	4.6	1.3	3.1	100.0
1949	28.0	24.8	38.6	2.7	6.0	100.0	1949	17.0	13.6	61.4	2.7	5.4		1949	85.3	10.8	1.2	0.8	1.9	100.0	1949	66.3	24.3	4.7	1.4	3.3	100.0
1950	25.2	26.7	39.4	2.7	6.1	100.0	1950	11.9	15.0	64.7	2.6	5.8		1950	86.4	10.0	1.0	0.7	1.8	100.0	1950	66.6	24.0	4.7	1.4	3.3	100.0
1951	27.3	26.8	37.5 38.5	2.5	5.8	100.0	1951	15.4	15.0	61.6	2.3	5.6		1951	87.6 86.9	9.1	0.9	0.6	1.7	100.0	1951	67.2	23.5	4.7	1.4	3.1	100.0 100.0
1952	28.1	24.5		2.7	6.2	100.0	1952	16.3	11.5	63.5	2.7	6.0		1952	88.4	9.5	1.3	0.6	1.7	100.0	1952	70.1	21.7	4.2	1.4	2.7	
1953 1954	30.3 29.6	24.2 22.7	36.6 38.7	2.8 3.1	6.1 6.0	100.0	1953 1954	17.2 18.2	11.3 11.5	62.5 61.0	2.8 3.0	6.2 6.3	100.0 100.0	1953 1954	84.5	8.3 11.4	1.2 1.1	0.7 0.8	1.5 2.2	100.0	1953 1954	71.4 72.7	20.4 19.2	4.1 4.1	1.4 1.0	2.8 3.0	100.0 100.0
1954	29.6		38.7 43.6	2.9	6.0 4.7			17.1		67.1	3.0 2.7	4.0					1.1	0.8			1954			3.2	0.9		100.0
1905	29.0	19.9	43.0	2.9	4.7	100.0	1955	17.1	9.3	07.1	2.1	4.0	100.0	1955	83.1	12.3	1.9	0.9	1.8	100.0	1900	75.4	18.0	3.2	0.9	2.5	100.0

1956 29.6 17.9 44.8 3.0 4.6 100.0 1956 17.7 6.7 68.7 2.9 4.0 100.0 1956 84.0 11.9 1.4 0.6 2.1 100.0 1956 72.6 20.4 3.4 1.2 100.0 19.6 43.9 3.3 4.3 100.0 1957 17.6 7.3 67.3 3.3 4.4 100.0 1957 88.8 8.2 1.2 0.9 0.9 100.0 1957 70.0 20.7 5.1 1.9 2.2 100.0 1958 30.0 18.9 42.9 18.1 100.0 1958 100.0 1958 70.8 3.7 4.5 100.0 1958 7.5 66.1 3.7 4.6 89.3 8.1 0.9 0.9 0.8 19.8 5.2 2.0 2.2 100.0 29.2 20.1 42.9 3.9 4.0 100.0 1959 17.8 8.6 65.9 3.8 3.8 100.0 1959 89.5 7.4 1.3 1.0 0.7 100.0 1959 69.4 20.6 5.7 2.2 2.1 100.0 1960 30.6 17.1 43.3 4.2 4.8 100.0 1960 18.1 5.4 68.4 4.2 3.8 100.0 1960 90.3 1.2 100.0 1960 70.3 5.8 2.4 2.1 100.0 6.8 1.1 0.6 19.4 30.0 18.9 43.0 4.3 3.8 100.0 1961 17.0 7.8 67.5 4.3 3.4 100.0 1961 88.5 7.6 1.7 1.4 100.0 1961 73.6 17.7 4.5 2.5 1.8 100.0 17.4 1962 29.7 17.8 44.0 4.6 3.8 100.0 1962 5.4 68.7 4.7 3.8 100.0 1962 88.9 7.3 1.4 1.6 8.0 100.0 1962 73.1 17.9 4.5 2.7 1.7 100.0 1963 29.1 17.4 44.8 5.0 3.7 100.0 1963 16.6 4.9 69.9 4.9 3.6 100.0 1963 88.1 7.4 1.8 2.0 0.7 100.0 1963 73.6 17.1 4.4 3.2 1.6 100.0 1964 29.0 18.3 100.0 1964 100.0 1964 100.0 1964 71.6 100.0 45.1 5.1 2.4 12.6 3.2 78.0 4.7 1.5 86.2 8.6 2.4 2.2 0.6 19.1 4.5 3.5 1.3 83.9 3.9 1965 29.1 19.2 13.1 100.0 1965 72.0 44.1 5.4 2.2 100.0 1965 5.7 74.0 5.3 1.9 100.0 1965 10.7 2.3 2.5 0.6 19.3 3.6 1.2 100.0 1966 29.8 23.4 37.9 5.3 3.6 100.0 1966 15.9 11.3 62.9 5.8 4.0 100.0 1966 88.3 7.4 1.4 2.3 100.0 1966 72.7 17.9 4.3 1.6 100.0 6.4 1967 30.4 24.7 35.7 5.7 3.6 100.0 1967 17.8 13.6 58.0 4.1 100.0 1967 88.2 2.3 100.0 1967 73.3 4.1 3.7 100.0 7.3 1.7 0.6 17.4 1.4 29.3 21.7 39.7 100.0 1968 18.2 100.0 1968 100.0 1968 73.7 3.9 1968 6.4 2.9 11.3 58.8 8.2 3.6 88.6 7.0 1.3 2.4 0.6 17.2 3.9 1.3 100.0 1969 32.1 21.7 34.4 8.1 3.7 100.0 1969 18.4 8.3 57.2 11.2 4.8 100.0 1969 88.6 6.8 1.4 2.6 0.6 100.0 1969 75.3 16.1 3.7 3.7 1.2 100.0 1970 32.2 23.0 31.8 8.9 4.1 100.0 1970 18.1 10.6 55.0 11.2 5.0 100.0 1970 89.2 100.0 1970 77.1 3.5 100.0 6.0 1.5 2.7 0.5 14.1 4.1 1.1 1971 34.0 22.9 30.3 8.6 4.3 100.0 1971 19.0 13.6 51.5 10.8 5.1 100.0 1971 90.1 5.6 1.1 28 100.0 1971 77.6 13.4 3.5 44 1.2 100.0 1972 37.4 21.7 28.6 100.0 1972 24.5 12.3 48.3 9.9 4.9 100.0 1972 89.6 100.0 1972 76.4 3.3 1.2 100.0 8.1 4.2 5.9 1.3 2.8 0.5 14.6 4.5 1973 36.9 22.1 27.2 9.2 4.6 100.0 1973 23.3 12.8 46.2 11.8 5.8 100.0 1973 88.8 6.4 1.4 3.0 100.0 1973 74.2 16.0 3.4 4.8 1.5 100.0 1974 36.2 22.5 25.6 9.8 5.9 100.0 1974 22.9 18.3 39.9 11.1 7.8 100.0 1974 86.9 6.6 2.0 3.8 8.0 100.0 1974 74.3 15.5 3.4 5.3 1.6 100.0 1975 40.7 20.3 100.0 1975 77.4 25.0 8.3 5.7 100.0 1975 25.8 16.7 40.1 9.7 7.6 100.0 1975 88.7 5.6 1.4 3.7 0.5 13.3 3.2 4.8 1 4 100.0 18.6 24.8 7.5 5.7 100.0 1976 27.9 16.4 38.9 8.4 8.3 100.0 1976 88.4 5.8 1.5 3.7 100.0 1976 77.9 12.7 3.3 5.1 1.0 100.0 1977 45.4 17.5 24.5 7.3 5.2 100.0 1977 29.2 15.6 39.4 8.1 7.7 100.0 1977 88.7 5.4 1.5 100.0 1977 78.1 12.4 100.0 3.9 0.4 3.4 5.2 1.0 1978 45.9 16.9 24.2 7.5 5.5 100.0 1978 30.7 16.3 37.7 7.9 7.4 100.0 1978 88.4 5.8 1.6 3.7 0.5 100.0 1978 78.0 12.6 3.3 5.2 1.0 100.0 1979 46.8 14.2 23.9 9.5 5.6 100.0 1979 31.3 13.7 36.2 11.5 7.3 100.0 1979 89.1 5.2 1.6 4.0 0.2 100.0 1979 78.4 11.5 3.3 5.8 1.0 100.0 1980 49.1 10.4 23.0 11.6 6.0 100.0 1980 33.7 10.7 34.7 13.3 7.6 100.0 1980 88.6 4.5 1.7 4.9 0.4 100.0 1980 79.7 8.5 3.6 7.4 0.9 100.0 1981 50.7 4.6 22.1 15.7 6.9 100.0 1981 35.4 3.5 32.5 18.9 9.7 100.0 1981 88.1 3.7 1.6 6.6 0.0 100.0 1981 80.6 6.1 3.5 9.2 0.5 100.0 1982 47.6 8.0 22.1 15.1 7.3 100.0 1982 30.3 12.1 30.8 18.6 8.3 100.0 1982 89.2 2.5 2.0 100.0 1982 81.2 3.9 6.2 0.0 5.4 9.0 0.6 100.0 1983 50.2 12.1 18.7 12.9 6.1 100.0 1983 34.0 21.4 23.9 14.6 6.1 100.0 1983 89.5 1.6 100.0 1983 83.4 5.7 3.2 100.0 3.4 5.7 -0.1 7.5 0.2 100.0 1984 32.6 28.2 1984 53.9 12.1 13.1 15.6 5.3 17.0 16.3 5.9 100.0 1984 89.9 3.2 1.4 5.8 -0.4 100.0 1984 81.8 6.3 3.3 8.5 0.1 100.0 1985 46.1 15.5 15.4 14.9 8.1 100.0 1985 34.5 26.5 15.9 17.1 6.0 100.0 1985 89.9 3.2 1.4 5.8 -0.4 100.0 1985 82.9 6.6 3.0 7.8 -0.3100.0 1986 49.2 14.6 17.5 13.8 4.9 100.0 1986 38.8 24.1 18.0 15.7 3.4 100.0 1986 90.1 3.8 1.7 4.8 -0.5 100.0 1986 83.3 7.3 3.1 6.4 -0.2 100.0 1987 52.3 22.0 9.6 13.7 2.3 100.0 1987 36.2 31.3 12.2 17.9 2.5 100.0 1987 90.1 4.3 1.9 4.3 -0.6 100.0 1987 81.8 8.9 3.5 6.0 -0.2 100.0 26.8 10.7 12.2 2.0 100.0 1988 38.7 30.3 14.7 14.3 2.0 100.0 1988 89.4 4.9 2.0 4.2 -0.5 100.0 1988 80.3 10.4 3.2 6.2 -0.1 100.0 1989 43.5 28.6 10.2 2.6 100.0 1989 30.8 35.3 17.9 2.7 100.0 1989 100.0 1989 79.3 15.2 13.2 88.6 4.9 1.9 5.1 -0.5 10.3 3.4 6.9 0.1 100.0 1990 45.7 27.4 9.6 14.4 2.8 100.0 1990 34.3 33.1 13.3 16.6 2.7 100.0 1990 88.7 4.7 2.0 4.9 -0.3 100.0 1990 80.5 9.8 2.9 0.1 100.0 1991 43.2 29.3 9.4 15.5 2.7 100.0 1991 29.9 36.4 11.8 19.3 2.6 100.0 1991 89.4 4.7 1.8 4.4 -0.3 100.0 1991 80.8 10.2 2.8 0.3 100.0 5.9 1992 53.2 7.3 100.0 1992 46.1 2.3 100.0 1992 100.0 1992 82.6 100.0 27.6 9.3 2.7 32.3 8.5 10.8 90.9 4.3 1.7 3.3 -0.1 10.5 2.6 3.9 0.4 7.2 8.5 100.0 1993 41.0 36.2 8.7 10.4 3.8 100.0 1993 1.8 2.5 -0.1 100.0 1993 83.2 90.9 5.0 10.7 2.6 3 1 100.0 1994 44.4 35.9 7.2 8.9 3.5 100.0 1994 32.7 43.6 8.4 11.4 3.9 100.0 1994 91.1 5.0 1.6 2.2 0.1 100.0 1994 82.9 10.8 2.7 2.9 0.7 100.0 32.7 8.0 9.3 3.3 100.0 1995 35.8 38.8 10.2 11.7 3.6 100.0 1995 90.4 4.9 1.8 2.8 0.1 100.0 1995 82.1 10.6 2.9 3.5 8.0 100.0 1996 47.2 32.2 8.2 9.2 3.2 100.0 1996 37.9 37.5 9.8 11.1 3.6 100.0 1996 90.3 4.5 1.9 3.1 0.2 100.0 1996 81.6 10.9 3.0 3.4 1.2 100.0 30.8 8.0 8 7 3 1 100.0 1997 40.1 35.8 10.2 10.4 3.5 100.0 1997 89.8 4.9 2.3 2.6 0.4 100.0 1997 80.3 11.3 3.6 1.3 100.0 1998 52.8 28.9 7.3 8.3 2.8 100.0 1998 44.8 33.3 8.9 9.8 3.3 100.0 1998 89.6 5.3 2.0 2.7 0.4 100.0 1998 79.8 12.3 3.2 3.4 1.3 100.0

Table A7: Income composition by sources of income and by fractiles of total income in the U.S., 1916-1998 (continued) (wage income, entrepreneurial income, dividends, interest and rents are expressed in % of total income (excluding capital gains) of each fractile)

		<u>P</u>	99-99.	<u>5</u>					<u>P</u>	99,5-99	<u>9,9</u>					P9	9,9-99	.99					<u>P9</u>	99,99-1	<u>00</u>		
	Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents			Wage	Entrep.	Divid.	Interest	Rents	
1916	35.0	38.4	10.0	8.3	8.3	100.0	1916	26.9	37.4	19.0	9.4	7.2	100.0	1916	13.8	31.4	39.9	9.7	5.2	100.0	1916	5.6	24.3	56.8	9.3	4.0	100.0
1917	35.6	35.7	13.0	8.9	6.8	100.0	1917	30.6	23.4	29.6	10.9	5.5	100.0	1917	20.1	17.4	47.0	11.9	3.6	100.0	1917	8.4	13.8	61.2	14.3	2.4	100.0
1918	34.3	35.9	13.1	9.4	7.4	100.0	1918	33.5	26.1	24.8	10.0	5.6	100.0	1918	24.4	21.9	38.8	11.4	3.5	100.0	1918	10.1	23.5	49.5	14.3	2.6	100.0
1919	37.7	36.4	12.0	8.4	5.6	100.0	1919	33.7	30.2	21.3	9.9	4.9	100.0	1919	23.7	30.1	31.7	11.0	3.6	100.0	1919	10.0	31.8	42.6	12.9	2.7	100.0
1920	42.2	29.0	15.1	8.3	5.3	100.0	1920	36.1	26.1	23.7	9.5	4.6	100.0	1920	25.5	25.5	34.8	10.3	3.9	100.0	1920	11.6	25.4	48.7	11.0	3.4	100.0
1921	47.4	23.9	13.5	9.0	6.1	100.0	1921	39.4	22.3	22.1	10.4	5.8	100.0	1921	27.3	21.8	35.0	11.2	4.8	100.0	1921	13.5	21.3	51.0	10.2	4.0	100.0
1922	44.4	25.1	13.0	9.5	8.0	100.0	1922	35.7	22.4	22.8	10.8	8.3	100.0	1922	24.1	20.8	36.2	11.2	7.6	100.0	1922	11.2	18.1	52.6	10.3	7.8	100.0
1923	44.5	23.8	13.9	9.3	8.5	100.0	1923	35.4	22.1	24.1	10.1	8.3	100.0	1923	23.7	19.5	39.0	10.3	7.4	100.0	1923	12.2	13.5	57.6	9.7	7.1	100.0
1924	43.6	27.9	11.7	8.6	8.1	100.0	1924	34.6	23.7	23.7	10.1	7.9	100.0	1924	23.6	18.9	40.3	10.5	6.7	100.0	1924	12.4	13.5	58.1	9.5	6.5	100.0
1925	41.7	28.3	13.0	8.7	8.3	100.0	1925	32.8	24.1	24.8	10.1	8.1	100.0	1925	22.3	20.7	40.1	9.9	7.0	100.0	1925	10.7	19.1	56.5	8.6	5.1	100.0
1926	41.0	27.3	14.7	9.2	7.8	100.0	1926	33.3	22.6	25.7	10.5	7.9	100.0	1926	21.5	17.8	43.4	10.5	6.8	100.0	1926	11.4	13.3	62.7	8.1	4.5	100.0
1927	41.7	25.8	15.0	9.8	7.7	100.0	1927	33.2	21.3	26.5	11.2	7.8	100.0	1927	21.3	17.3	44.1	10.6	6.7	100.0	1927	10.2	16.3	61.0	8.4	4.1	100.0
1928	42.1	25.2	15.4	9.7	7.5	100.0	1928	33.1	20.0	27.7	11.4	7.8	100.0	1928	20.5	18.3	44.3	10.6	6.3	100.0	1928	9.3	24.1	54.3	9.2	3.1	100.0
1929	42.0	25.1	16.2	9.3	7.4	100.0	1929	33.0	19.7	28.1	10.9	8.2	100.0	1929	19.8	16.6	45.7	10.9	7.0	100.0	1929	8.8	20.6	56.8	10.2	3.7	100.0
1930	46.5	20.4	16.9	9.3	6.8	100.0	1930	36.7	17.1	27.6	11.0	7.6	100.0	1930	22.9	13.0	45.4	11.2	7.5	100.0	1930	12.2	6.7	69.1	8.1	3.9	100.0
1931	52.1	17.6	14.7	9.3	6.3	100.0	1931	41.3	15.9	24.2	11.3	7.4	100.0	1931	26.9	12.5	40.7	11.7	8.2	100.0	1931	12.9	6.5	67.8	8.4	4.4	100.0
1932	62.6	12.7	11.8	7.7	5.3	100.0	1932	48.0	13.9	19.6	11.1	7.4	100.0	1932	30.5	12.0	35.7	12.9	8.9	100.0	1932	15.6	6.9	64.0	8.5	5.0	100.0
1933	63.0	14.6	9.1	7.7	5.7	100.0	1933	49.1	17.8	16.2	10.0	6.9	100.0	1933	32.5	17.6	30.9	11.1	7.8	100.0	1933	15.6	14.6	57.4	8.2	4.2	100.0
1934	60.9	18.0	10.5	4.9	5.6	100.0	1934	46.2	19.8	18.1	9.1	6.8		1934	31.2	15.8	35.9	9.7	7.4	100.0	1934	15.6	9.2	64.6	6.3	4.2	100.0
1935	59.3	21.2	9.8	4.1	5.7	100.0	1935	45.9	19.9	19.2	8.1	7.0	100.0	1935	30.8	16.6	36.7	8.5	7.4	100.0	1935	14.2	11.4	64.8	5.2	4.4	100.0
1936	52.9	23.4	14.7	2.8	6.2	100.0	1936	40.2	20.7	26.3	5.9	6.9	100.0	1936	26.1	16.1	45.3	5.6	6.9	100.0	1936	10.8	11.3	70.3	3.4	4.2	100.0
1937	50.4	23.5	15.3	4.6	6.2	100.0	1937	40.5	20.9	26.2	5.5	6.9	100.0	1937	27.5	15.1	45.4	5.1	6.9	100.0	1937	12.5	7.2	72.5	3.2	4.6	100.0
1938	54.2	23.0	12.0	4.7	6.1	100.0	1938	45.5	22.0	19.9	5.7	6.8	100.0	1938	34.1	18.4	35.5	5.5	6.6	100.0	1938	18.9	9.5	63.6	3.4	4.6	100.0
1939	52.1	25.0	12.5	4.3	6.0	100.0	1939	42.9	24.0	21.1	5.3	6.7		1939	31.3	18.6	38.3	5.0	6.8	100.0	1939	16.3	8.1	67.8	3.1	4.7	100.0
1940	50.8	26.3	13.0	3.9	6.0	100.0	1940	42.8	25.1	21.0	4.6	6.5	100.0	1940	32.2	19.7	37.3	4.2	6.6	100.0	1940	16.3	9.4	66.9	2.7	4.6	100.0
1941	47.3	31.2	12.9	3.2	5.4	100.0	1941	41.6	30.7	18.7	3.5	5.5		1941	32.8	27.6	31.2	3.0	5.4	100.0	1941	16.8	19.4	57.4	2.2	4.2	100.0
1942	44.4	37.0	10.8	2.9	5.0	100.0	1942	39.1	36.9	15.9	3.1	5.0	100.0	1942	30.2	38.1	24.4	2.7	4.5	100.0	1942	13.3	42.3	39.3	1.9	3.2	100.0
1943	37.3	45.4	10.3	2.5	4.6	100.0	1943	32.3	47.2	13.9	2.6	4.1		1943	24.5	47.4	21.8	2.5	3.9		1943	11.5	44.8	38.3	2.3	3.1	100.0
1944	37.7	46.6	9.0	2.3	4.3	100.0	1944	32.7	47.8	12.7	2.5	4.3		1944	25.7	47.9	19.7	2.5	4.2	100.0	1944	12.5	39.6	41.8	2.5	3.6	100.0
1945	35.3	49.9	8.5	2.2	4.1	100.0	1945	31.3	50.1	11.9	2.4	4.3		1945	24.5	48.9	19.7	2.6	4.3		1945	13.4	35.0	44.5	3.1	3.9	100.0
1946	36.8	47.9	9.2	2.0	4.0	100.0	1946	32.9	47.8	12.8	2.3	4.2		1946	26.8	43.5	22.4	2.6	4.6	100.0	1946	15.1	24.4	52.5	3.6	4.4	100.0
1947	40.2	43.4	10.0	2.0	4.3		1947	36.3	42.4	14.5	2.2	4.7	100.0		29.6	35.9	26.5	2.5	5.4		1947	15.0	17.1	59.6	3.0	5.3	100.0
1948	41.9	42.4	9.4	2.0	4.4	100.0	1948	37.0	40.5	15.4	2.2	4.9		1948	29.9	33.6	28.6	2.4	5.6		1948	15.6	17.1	59.4	2.7	5.2	100.0
1949	45.2	37.5	10.2	2.2	4.9	100.0	1949	39.2	36.7	16.1	2.5	5.5		1949	32.2	29.1	29.8	2.7	6.2		1949	17.0	13.6	61.4	2.7	5.4	100.0
1950	43.9	38.1	10.8	2.2	5.0	100.0	1950	38.0	37.7	16.3	2.5	5.5	100.0	1950	30.0	30.9	30.1	2.7	6.2	100.0	1950	11.9	15.0	64.7	2.6	5.8	100.0
1951	44.8	37.1	11.1	2.2	4.8	100.0	1951	38.3	37.8	16.1	2.4	5.3	100.0	1951	31.6	31.1	28.9	2.5	5.9	100.0	1951	15.4	15.0	61.6	2.3	5.6	100.0
1952	44.4	38.2	10.1	2.4	4.9	100.0	1952	39.1	38.2	15.0	2.5	5.2	100.0	1952	32.2	29.0	29.8	2.7	6.3	100.0	1952	16.3	11.5	63.5	2.7	6.0	100.0
1953	47.0	36.6	9.6	2.3	4.5	100.0	1953	42.1	35.4	14.9	2.6	5.1	100.0	1953	34.9	28.7	27.6	2.8	6.0	100.0	1953	17.2	11.3	62.5	2.8	6.2	100.0
1954	46.0	36.8	10.3	2.6	4.4	100.0	1954	40.7	36.5	14.9	3.0	4.9	100.0	1954	33.5	26.6	30.9	3.1	5.9	100.0	1954	18.2	11.5	61.0	3.0	6.3	100.0
1955	44.2	38.6	10.5	2.6	4.0	100.0	1955	41.7	37.4	15.7	3.0	2.1	100.0	1955	33.3	23.7	35.1	2.9	4.9	100.0	1955	17.1	9.3	67.1	2.7	4.0	100.0

39.9 8.0 2.8 3.8 100.0 1956 40.5 34.3 18.0 3.0 4.3 100.0 1956 33.9 22.0 36.2 3.1 4.8 100.0 1956 17.7 6.7 68.7 2.9 4.0 100.0 1957 47.4 38.3 7.7 2.8 3.8 100.0 1957 41.2 34.2 17.6 3.2 3.8 100.0 1957 33.0 24.0 35.5 3.3 4.2 100.0 1957 17.6 7.3 67.3 3.3 4.4 100.0 1958 48.0 38.5 41.5 100.0 1958 34.2 23.0 100.0 1958 6.7 3.1 3.7 100.0 1958 34.1 17.2 3.3 3.9 34.7 3.7 4.5 18.1 7.5 66.1 3.7 4.6 100.0 1959 48.2 38.2 7.1 3.3 3.3 100.0 1959 40.9 34.6 17.1 3.6 3.8 100.0 1959 33.1 24.0 34.9 4.0 4.0 100.0 1959 17.8 8.6 65.9 3.8 3.8 100.0 1960 50.5 36.1 6.4 3.5 3.5 100.0 1960 42.6 32.4 17.1 3.8 4.0 100.0 1960 34.9 21.2 34.4 4.2 5.2 100.0 1960 18.1 5.4 68.4 4.2 3.8 100.0 1961 50.3 35.7 7.1 3.7 3.3 100.0 1961 42.3 32.6 17.6 3.9 3.6 100.0 1961 34.5 22.7 34.5 4.3 40 100.0 1961 17.0 7.8 67.5 3 4 100.0 1962 50.5 36.2 6.0 4.1 3.1 100.0 1962 42.7 32.3 17.3 4.3 3.5 100.0 1962 34.0 22.1 35.4 4.6 3.9 100.0 1962 17.4 5.4 68.7 4.7 3.8 100.0 1963 51.6 34.7 6.4 4.4 2.9 100.0 1963 42.8 31.7 17.6 4.7 3.3 100.0 1963 33.5 21.9 35.8 5.0 3.8 100.0 1963 16.6 4.9 69.9 4.9 3.6 100.0 1964 52.6 100.0 1964 42.4 100.0 1964 34.2 100.0 1964 31.4 9.5 4.4 2.1 31.8 18.7 4.7 2.5 23.0 34.8 5.3 2.7 12.6 3.2 78.0 4.7 1.5 100.0 1965 52.0 100.0 1965 42.3 32.5 100.0 1965 34.0 31.2 10.3 4.6 1.9 18.2 4.9 2.1 23.2 35.1 5.4 2.3 100.0 1965 13.1 5.7 74.0 5.3 1.9 100.0 1966 48.2 34.6 9.8 4.8 2.7 100.0 1966 41.6 36.5 13.9 4.7 3.4 100.0 1966 34.5 27.5 29.4 5.2 3.5 100.0 1966 15.9 11.3 62.9 5.8 100.0 1967 49.1 34.3 9.3 5.0 2.3 100.0 1967 42.4 37.0 13.5 4.6 2.4 100.0 1967 34.5 28.3 28.4 5.5 100.0 1967 17.8 13.6 100.0 3.4 58.0 6.4 4.1 32.3 1968 100.0 1968 32.7 100.0 1968 18.2 1968 51.1 8.9 5.0 2.7 100.0 41.9 36.6 13.7 5.2 2.7 24.9 33.8 5.9 2.7 11.3 58.8 8.2 3.6 100.0 1969 51.3 33.7 8.2 4.9 1.9 100.0 1969 44.3 34.3 13.5 5.6 2.3 100.0 1969 36.3 25.8 27.5 7.1 3.4 100.0 1969 18.4 8.3 57.2 11.2 4.8 100.0 1970 54.5 30.2 7.5 2.3 100.0 1970 46.0 34.0 2.7 100.0 1970 36.8 27.1 8.1 3.8 100.0 1970 18.1 10.6 55.0 11.2 100.0 5.5 11.4 6.0 24.1 5.0 1971 57.2 28.1 6.8 6.0 2.0 100.0 1971 47.2 32.6 10.8 6.3 3.1 100.0 1971 38.9 25.9 23.4 7.9 4.0 100.0 1971 19.0 13.6 51.5 10.8 100.0 1972 54.9 28.7 7.7 2.7 100.0 1972 51.1 29.1 10.4 6.3 3.1 100.0 1972 41.5 24.7 22.3 100.0 1972 24.5 12.3 48.3 9.9 100.0 6.0 7.6 40 49 1973 55.5 28.2 7.3 6.4 2.6 100.0 1973 50.5 29.3 10.8 6.6 2.9 100.0 1973 41.2 25.0 21.2 8.3 4.2 100.0 1973 23.3 12.8 46.2 11.8 5.8 100.0 1974 56.7 27.3 6.9 6.6 2.5 100.0 1974 51.2 27.4 10.3 7.9 3.2 100.0 1974 40.8 24.0 20.7 9.3 5.2 100.0 1974 22.9 18.3 39.9 11.1 7.8 100.0 1975 59.0 100.0 1975 45.9 100.0 1975 25.8 25.0 6.8 6.6 2.6 100.0 1975 55.1 24.0 10.1 7.3 3.5 21.6 19.6 7.8 5.0 16.7 40.1 9.7 7.6 100.0 24.0 6.7 6.8 2.5 100.0 1976 57.2 22.4 10.5 6.7 3.2 100.0 1976 48.9 19.3 19.7 7.2 4.8 100.0 1976 27.9 16.4 38.9 8.4 8.3 100.0 1977 61.5 22.8 2.1 100.0 1977 58.1 21.7 10.3 3.3 100.0 1977 51.1 18.2 19.3 7.1 4.4 100.0 1977 29.2 39.4 8.1 7.7 100.0 7.2 6.4 6.6 15.6 1978 64.2 21.0 6.4 6.1 2.2 100.0 1978 60.7 20.1 10.0 6.2 3.1 100.0 1978 51.4 17.1 19.3 7.3 4.9 100.0 1978 30.7 16.3 37.7 7.9 7.4 100.0 1979 64.4 19.6 6.4 7 4 22 100.0 1979 62.5 16.7 10.2 7.6 3.1 100.0 1979 52.3 14.4 19.5 8.7 5.0 100.0 1979 31.3 13.7 36.2 11.5 7.3 100.0 1980 66.3 15.0 7.0 9.5 2.2 100.0 1980 63.2 13.9 10.3 9.5 3.1 100.0 1980 54.9 10.3 18.5 10.9 5.4 100.0 1980 33.7 10.7 34.7 13.3 7.6 100.0 1981 68.6 10.4 7.0 12.1 1.9 100.0 1981 65.7 7.9 10.5 12.8 3.1 100.0 1981 56.5 5.0 18.2 14.5 5.9 100.0 1981 35.4 3.5 32.5 18.9 9.7 100.0 1982 69.6 9.5 6.8 12.6 100.0 1982 67.7 7.3 9.9 11.7 3.4 100.0 1982 54.7 6.3 18.5 13.6 6.9 100.0 1982 30.3 12.1 30.8 18.6 8.3 1.5 100.0 9.5 100.0 1983 70.4 8.8 10.1 2.3 100.0 1983 57.6 7.8 16.3 12.1 6.1 100.0 1983 34.0 21.4 23.9 6.6 9.4 0.98.4 100.0 1984 64.1 1984 71.9 9.6 5.9 11.3 1.3 100.0 1984 71.2 8.4 8.0 10.8 1.6 4.4 11.3 15.2 5.0 100.0 1984 32.6 28.2 17.0 16.3 5.9 100.0 1985 73.9 9.4 6.1 10.3 0.4 100.0 1985 69.8 8.7 7.8 11.8 2.0 100.0 1985 51.2 10.6 15.2 14.0 9.0 100.0 1985 34.5 26.5 15.9 17.1 6.0 100.0 1986 75.1 10.9 5.7 8.2 0.1 100.0 1986 70.6 8.8 9.8 10.2 0.7 100.0 1986 53.9 10.4 17.2 12.9 5.6 100.0 1986 38.8 24.1 18.0 15.7 3.4 100.0 1987 70.4 15.9 5.2 0.4 100.0 1987 68.8 6.5 9.3 1.2 100.0 1987 59.9 17.7 8.4 11.7 2.2 100.0 1987 36.2 31.3 12.2 17.9 2.5 100.0 8.1 14.1 1988 68.3 17.2 5.1 8.5 0.9 100.0 1988 65.6 18.1 6.2 8.7 1.3 100.0 1988 53.9 24.8 8.4 10.9 2.0 100.0 1988 38.7 30.3 14.7 14.3 2.0 100.0 100.0 62.0 67.4 1989 100.0 1989 50.1 13.7 2.5 100.0 1989 30.8 35.3 1989 18.2 4.9 8.8 0.7 19.1 6.4 10.6 1.9 25.1 8.6 13.2 17.9 2.7 100.0 1990 68.8 17.4 4.5 8.2 1.0 100.0 1990 62.1 20.7 5.5 9.8 1.8 100.0 1990 52.1 24.3 7.6 13.2 2.8 100.0 1990 34.3 33.1 13.3 16.6 100.0 1991 68.9 18.0 4.7 7.1 100.0 1991 62.1 20.8 5.4 9.6 2.1 100.0 1991 50.3 25.4 8.0 13.4 2.8 100.0 1991 29.9 36.4 11.8 19.3 2.6 100.0 1.3 1992 70.4 19.1 100.0 1992 64.2 100.0 1992 100.0 1992 46.1 4.0 5.0 1.6 22.6 4.6 6.3 2.3 57.4 24.8 6.6 8.5 2.9 32.3 8.5 10.8 2.3 100.0 100.0 1993 65.9 100.0 1993 56.5 100.0 1993 41.0 36.2 18.7 4.0 4.4 1.6 21.8 4.5 5.2 2.5 26.4 6.5 7.5 3.2 8.7 10.4 1994 71.1 20.0 3.5 3.7 1.6 100.0 1994 64.3 23.1 4.8 5.1 2.7 100.0 1994 50.7 31.9 6.6 7.5 3.3 100.0 1994 32.7 43.6 8.4 11.4 3.9 100.0 1995 70.6 19.2 4.0 4.5 1.7 100.0 1995 64.1 23.1 4.9 5.5 2.5 100.0 1995 52.2 29.6 6.9 8.1 3.1 100.0 1995 35.8 38.8 10.2 11.7 100.0 3.6 1996 70.9 18.7 4 1 4.2 2.2 100.0 1996 61.8 24.2 5.5 5.9 2.7 100.0 1996 52.4 29.1 7.3 8.2 2.9 100.0 1996 37.9 37.5 9.8 11 1 3.6 100.0 69.5 18.8 4.8 4.6 22 100.0 1997 62.2 23.7 5.7 5.6 2.7 100.0 1997 54.8 27.9 6.7 7.7 29 100.0 1997 40.1 35.8 10.2 10.4 100.0 1998 69.0 20.0 4.5 4.4 2.1 100.0 1998 62.7 23.9 5.3 5.6 2.4 100.0 1998 57.8 26.1 6.2 7.3 2.6 100.0 1998 44.8 33.3 8.9 9.8 3.3 100.0

Table A8: Capital gains by fractiles of total income in the U.S., 1916-1998 (capital gains are expressed in % of total income (including capital gains) of each fractile)

(fractiles are defined by total income (excluding capital gains)) (fractiles are defined by total income (including capital gains)) P95-100 P99-100 P99.5-100 P99.9-100 P99.99-100 P90-95 P99.5-99.9 P99.9-99.99 P99.99-100 P90-100 P95-100 P99-100 P99.5-100 P99.9-100 P99.99-100 P90-95 P95-99 P99.5-99.9 P99.9-99.99 P99.99-100 3.6 4.0 4.2 1916 10.9 4.5 8.1 14.2 1916 3.2 4.1 1.1 2.8 4.0 7.5 8.6 14.2 1.5 2.9 2.9 1.5 8.0 1.9 1.5 0.8 1917 2.6 3.0 2.2 2.7 3.0 3.1 1917 1.6 1.5 1.2 1.7 1.8 3.0 3.1 1.2 0.7 2.0 2.4 1.6 2.7 2.9 1918 1.2 1.3 1.4 0.8 0.4 1.3 1.9 1.8 1.0 0.4 1918 1.7 2.3 1.8 1.6 8.0 2.0 1.6 3.1 2.8 2.0 3.3 2.0 1919 5.5 6.7 1.7 4.2 6.3 7.6 1919 3.6 3.7 3.4 1.6 3.4 4.7 4.1 4.5 6.7 6.8 7.6 6.5 6.6 2.3 1920 3.5 3.9 3.4 2.8 1.5 0.6 4.5 5.5 3.9 1.9 0.6 1920 4.7 5.6 5.6 4.9 3.3 2.4 2.5 5.5 7.7 6.4 3.8 2.4 1921 1.5 1.8 0.4 0.7 1.8 2.6 2.2 1.5 1921 2.7 3.2 2.5 2.2 3.6 3.6 3.0 1.9 1.7 1.2 0.4 2.1 3.1 1.6 8.0 1.6 1922 1922 5.8 8.4 12.4 19.9 2.7 3.4 4.2 4.4 4.9 5.8 1.0 2.4 3.6 3.9 4.4 5.8 4.5 9.4 19.9 1.1 3.0 5.1 6.3 8.5 1923 3.1 3.4 4.1 4.3 4.8 6.2 2.3 2.7 3.5 3.7 4.1 6.2 1923 4.9 5.8 8.2 9.2 12.3 20.9 2.6 3.4 4.9 6.1 7.9 20.9 2.3 3.8 6.5 7.0 2.7 4.9 6.3 7.0 7.4 12.3 15.8 23.2 2.6 8.8 23.2 1924 4.3 5.7 6.0 5.5 1924 6.0 11.0 3.4 6.8 11.9 1925 7.8 10.7 11.6 13.5 15.8 2.3 4.0 9.6 12.2 15.8 1925 13.6 20.4 23.1 30.0 42.9 2.6 4.9 10.6 15.1 21.7 42.9 6.4 7.7 11.1 8.8 10.5 12.9 2.3 5.4 9.1 12.9 1926 10.9 16.1 37.3 2.6 4.2 7.5 10.9 16.7 37.3 1926 5.1 6.0 8.0 3.4 6.8 9.0 18.5 24.9 7.0 10.3 12.5 14.3 2.8 3.9 5.8 7.9 11.4 1927 12.7 18.5 21.3 28.4 40.1 3.1 12.4 20.5 40.1 1927 6.0 9.3 14.3 10.6 4.8 8.0 8.5 10.3 20.7 2.8 3.8 8.3 12.5 18.6 20.7 1928 18.7 27.8 51.1 51.1 1928 14.7 16.4 19.5 15.4 31.6 40.0 3.1 4.8 11.5 19.2 31.4 9.2 22.7 2.5 3.1 7.1 9.8 17.0 22.7 1929 17.4 26.6 30.5 40.5 54.0 2.8 3.9 15.3 29.1 1929 7.6 13.5 15.2 19.4 14.2 9.9 54.0 1930 2.9 3.4 4.7 6.1 8.0 1.6 2.5 2.7 3.3 4.9 8.0 1930 5.4 6.3 9.3 16.0 25.8 1.8 3.8 5.3 9.4 25.8 4.3 11.0 3.1 1931 1.1 1.3 1.9 2.1 2.7 3.7 0.4 8.0 1.2 1.5 2.1 3.7 1931 2.2 2.6 4.3 7.7 13.5 0.5 1.7 2.5 4.2 13.5 5.1 1.0 1932 0.5 0.6 0.9 1.5 0.3 0.3 0.3 1.3 1932 0.9 2.0 2.5 0.4 0.4 1.4 2.6 1.1 1.4 8.0 1.5 0.7 3.6 5.6 0.3 5.6 1933 2.0 3.6 4.2 5.3 6.2 0.6 1.4 1.9 4.9 6.2 1933 3.4 4.4 7.8 13.4 20.8 0.7 2.7 4.8 9.3 20.8 2.5 2.9 9.4 1.7 1934 1.4 2.1 2.2 1.6 0.3 1.2 2.5 1934 2.2 3.4 4.0 4.7 4.5 3.2 4.9 4.5 1.1 1.8 0.9 1.9 1.6 1.7 0.3 1.1 1.8 1935 2.4 3.1 4.1 4.5 4.8 3.5 0.4 2.1 2.9 5.4 3.5 1935 3.9 5.1 7.5 8.6 10.1 9.1 0.5 2.6 4.1 7.0 10.6 9.1 1936 4.3 5.2 6.3 6.7 6.7 4.4 2.0 3.8 5.0 6.7 7.9 4.4 1936 6.8 8.4 11.3 12.5 13.9 11 4 2.2 4.7 7.2 11.1 15.2 11 4 1937 1.6 1.9 2.5 2.5 2.4 1.7 1.0 1.2 2.4 2.7 2.7 1.7 1937 2.5 3.1 4.4 4.8 5.1 4.6 1.2 1.5 3.4 4.5 5.3 4.6 1938 2.0 2.4 3.6 4.0 5.4 8.8 0.9 1.3 2.3 2.8 3.6 8.8 1938 3.5 4.5 7.3 8.7 12.7 21.9 1.0 1.6 3.4 4.7 7.2 21.9 1939 1.8 2.1 2.9 3.1 3.3 3.2 1.0 1.4 2.5 2.9 3.3 3.2 1939 2.8 3.6 5.4 6.0 7.2 8.5 1.1 1.7 3.6 4.9 6.6 8.5 1940 1.5 1.9 2.6 2.8 3.1 3.9 0.7 1.2 2.1 2.5 2.7 3.9 1940 2.5 3.2 4.9 5.5 7.1 10.3 0.7 1.5 3.0 4.1 5.4 10.3 1941 1.6 2.0 2.7 2.9 3.8 5.7 0.5 1.3 2.0 2.1 2.9 5.7 1941 2.7 3.6 5.3 6.1 8.8 14.8 0.5 1.7 2.9 3.6 5.7 14.8 1942 1.1 1.4 1.9 2.0 2.7 4.0 0.1 0.9 1.6 1.4 2.1 4.0 1942 1.9 2.5 3.8 4.3 6.3 10.9 0.2 1.2 2.3 2.4 4.2 10.9 2.3 2.9 3.9 5.1 7.1 0.9 2.0 3.3 3.3 4.4 7.1 1943 5.0 7.4 1.0 2.5 4.8 5.5 8.9 18.5 1943 4.1 3.9 8.3 11.6 18.5 6.8 2.1 4.9 7.2 17.7 5.5 17.7 1944 2.3 2.9 3.8 4.1 5.1 0.8 3.0 3.3 4.4 6.8 1944 3.7 8.3 11.6 0.9 2.7 4.3 8.9 10.5 13.5 1945 7.9 10.2 23.2 33.3 2.0 33.3 1945 4.8 6.1 7.6 8.3 1.8 4.6 5.8 6.6 9.4 13.5 14.4 16.6 5.8 8.5 11.1 18.8 6.2 7.1 16.7 3.7 9.6 11.7 26.2 40.0 4.2 9.6 19.3 40.0 1946 8.1 8.7 11.6 6.2 6.6 6.4 16.7 1946 9.7 15.6 17.9 8.0 10.9 3.8 4.6 5.4 12.1 2.1 3.8 4.0 4.0 12.1 1947 7.7 10.6 12.6 19.6 30.3 2.3 6.7 14.2 30.3 1947 6.0 8.6 7.1 6.2 4.8 5.7 1948 3.6 4.4 5.1 5.6 7.4 10.1 1.7 3.7 3.9 4.2 6.4 10.1 1948 7.2 9.9 16.9 25.7 1.9 4.6 5.6 7.0 12.8 25.7 5.7 11.5 2.6 4.5 8.1 2.4 2.9 5.1 1949 7.8 20.9 1.3 10.2 20.9 1949 3.1 4.0 6.0 1.2 3.3 8.1 4.1 5.3 9.2 13.7 3.0 4.2 5.6 7.6 7.9 10.3 13.0 3.0 2.9 5.9 9.5 13.0 1950 14.3 15.9 22.6 32.2 3.4 3.7 10.0 18.9 32.2 1950 4.6 5.2 6.8 7.4 9.0 9.8 3.8 4.9 7.5 13.0 3.1 5.2 8.8 13.0 1951 8.5 13.2 22.4 32.3 1.5 9.6 17.5 32.3 1951 6.9 10.0 1.3 5.7 6.4 15.4 4.0 7.6 1952 3.0 3.9 5.8 6.6 9.7 12.3 1.3 2.2 3.9 4.4 8.7 12.3 1952 5.2 6.8 11.4 13.7 21.6 30.7 1.4 2.8 5.7 7.4 17.4 30.7 11.6 0.9 7.4 11.6 1953 9.5 19.2 29.0 2.3 29.0 1953 2.4 3.1 4.8 5.7 8.5 1.8 2.7 3.7 4.1 5.5 11.9 1.0 3.9 6.2 14.7 12.4 30.3 1954 4.0 5.6 7.9 9.1 13.8 17.2 0.6 3.7 5.1 5.7 17.2 1954 7.0 9.8 15.7 19.0 41.0 0.7 4.7 7.5 9.7 24.8 41.0

1955	5.8	7.2	10.8	12.5	18.2	21.2	2.8	4.3	7.1	8.2	17.0	21.2	1955	10.0	12.9	21.4	25.7	39.3	49.0	3.2	5.4	10.3	13.9	33.9	49.0
1956	4.5	5.7	9.1	11.9	17.3	19.6	1.8	3.0	2.8	8.1	16.3	19.6	1956	8.0	10.7	18.7	24.3	37.1	45.9	2.0	3.8	4.1	13.7	32.6	45.9
1957	3.4	4.6	6.9	8.9	13.4	15.5	1.0	2.8	2.4	5.8	12.5	15.5	1957	6.0	8.2	14.0	18.3	29.2	37.5	1.1	3.5	3.4	9.8	25.1	37.5
1958	4.0	5.5	8.3	10.6	15.3	17.9	8.0	3.4	3.2	7.3	14.3	17.9	1958	7.0	9.8	16.7	21.6	33.3	42.4	0.9	4.3	4.6	12.4	28.6	42.4
1959	5.4	7.9	11.4	14.3	20.8	23.6	0.3	5.3	4.8	10.0	19.7	23.6	1959	9.8	14.1	23.0	29.1	44.2	53.4	0.3	6.7	6.9	16.9	39.4	53.4
1960	4.8	6.8	10.2	13.1	19.5	23.9	0.9	4.2	3.9	8.7	17.6	23.9	1960	8.6	12.3	21.0	27.2	42.1	54.1	1.0	5.4	5.7	14.7	35.3	54.1
1961	6.3	8.4	13.8	18.1	26.0	31.3	2.1	4.5	4.4	12.4	23.6	31.3	1961	11.7	16.0	28.5	37.1	54.6	66.7	2.3	5.8	6.4	21.1	47.2	66.7
1962	4.3	5.9	10.1	13.6	21.2	25.7	1.2	2.9	2.7	8.5	19.2	25.7	1962	8.1	11.3	21.3	28.4	45.3	57.3	1.3	3.6	3.8	14.4	38.4	57.3
1963	4.7	6.3	10.9	14.1	21.1	24.9	1.6	3.1	4.4	9.4	19.4	24.9	1963	8.6	11.9	22.3	29.0	45.1	55.9	1.8	3.9	6.3	15.9	38.9	55.9
1964	7.0	9.2	15.3	16.8	23.8	32.6	2.7	4.9	12.1	12.0	19.9	32.6	1964	12.3	16.6	29.5	34.4	51.0	68.8	3.0	6.2	17.9	20.5	39.8	68.8
1965	8.4	10.2	17.3	18.2	25.8	37.5	4.8	5.0	15.2	12.9	20.4	37.5	1965	14.5	18.7	33.4	37.8	55.3	76.3	5.4	6.4	22.6	22.0	40.8	76.3
1966	6.6	8.8	14.8	17.4	24.9	30.7	1.8	4.4	9.2	11.8	22.4	30.7	1966	10.5	14.4	25.3	31.5	48.6	68.0	2.3	5.6	10.2	16.4	36.7	68.0
1967	9.0	11.8	18.8	21.7	28.7	32.6	3.0	6.6	12.1	16.5	27.2	32.6	1967	13.6	18.3	30.7	36.1	53.3	72.8	3.3	7.9	17.2	20.3	41.1	72.8
1968	10.7	14.0	22.2	25.6	32.9	37.4	3.7	7.4	14.4	20.2	31.1	37.4	1968	15.6	21.3	35.3	42.1	60.0	78.9	3.0	9.1	17.1	24.6	47.3	78.9
1969	7.9	10.8	18.8	22.7	31.6	39.9	2.1	4.9	9.7	16.2	27.8	39.9	1969	12.2	17.0	31.1	38.5	58.4	79.7	2.1	5.5	12.2	18.9	42.8	79.7
1970	4.0	5.5	10.1	12.1	17.6	23.2	1.1	2.4	5.8	8.5	15.3	23.2	1970	7.5	10.6	20.1	25.2	41.7	64.4	1.3	3.8	8.7	12.0	28.9	64.4
1971	5.7	7.7	13.4	15.9	22.5	28.0	1.8	3.9	8.1	11.3	20.2	28.0	1971	9.9	13.9	25.1	31.3	49.0	71.0	1.9	5.6	10.7	16.6	35.8	71.0
1972	6.8	9.0	14.8	17.3	23.5	30.6	2.6	5.0	9.6	13.0	20.4	30.6	1972	11.9	16.4	28.4	34.9	53.4	75.3	2.7	7.4	13.1	19.1	40.1	75.3
1973	5.2	6.8	10.8	12.8	17.2	20.5	1.9	4.3	6.8	9.9	15.9	20.5	1973	10.2	13.9	24.9	30.0	46.5	68.5	2.8	6.2	13.7	17.1	35.0	68.5
1974	3.5	4.6	7.5	8.7	11.3	14.2	1.4	2.6	5.1	7.0	10.2	14.2	1974	7.2	9.9	17.9	22.6	35.3	55.0	1.7	4.4	7.3	12.9	26.0	55.0
1975	3.2	4.2	7.0	8.1	11.2	15.4	1.4	2.4	4.9	6.1	9.5	15.4	1975	6.5	9.1	16.3	20.1	31.7	51.2	1.5	4.2	8.2	11.6	22.0	51.2
1976	4.0	5.2	8.4	9.8	13.0	16.6	1.9	3.1	5.7	7.6	11.6	16.6	1976	7.9	10.8	18.6	22.2	34.0	52.1	2.1	5.6	10.7	13.4	25.1	52.1
1977	4.2	5.4	8.8	10.0	13.1	15.6	1.9	3.3	6.4	8.0	12.1	15.6	1977	8.4	11.6	20.9	25.0	37.4	58.2	2.2	5.3	11.7	15.5	26.7	58.2
1978	4.1	5.2	8.2	9.3	11.8	13.5	2.0	3.2	5.8	7.7	11.2	13.5	1978	8.3	11.2	19.0	22.8	34.3	51.7	2.6	5.9	10.8	14.1	25.9	51.7
1979	6.6	8.8	14.9	17.7	25.0	34.7	2.3	4.5	8.4	12.0	20.3	34.7	1979	12.4	17.0	29.6	35.5	50.5	71.7	3.0	7.4	14.8	21.5	36.5	71.7
1980	6.3	8.4	14.6	17.2	22.9	28.4	2.2	4.0	8.4	12.9	20.4	28.4	1980	11.3	15.6	27.8	33.9	48.6	67.4	2.6	6.3	12.7	20.4	37.4	67.4
1981	5.9	7.9	13.8	16.4	21.6	26.8	2.1	3.7	8.1	12.3	19.3	26.8	1981	11.1	15.7	29.1	35.4	51.9	71.1	2.0	5.3	12.8	19.4	39.9	71.1
1982	7.3	10.1	17.8	21.3	28.6	34.6	1.8	4.3	8.9	14.8	25.4	34.6	1982	11.7	16.5	30.4	37.2	53.4	71.0	1.5	5.0	10.8	19.2	40.9	71.0
1983	9.3	12.6	21.3	24.5	30.6	34.0	2.7	5.6	13.0	18.9	28.8	34.0	1983	15.0	20.6	35.8	42.2	56.7	70.5	2.8	7.1	16.7	25.4	47.2	70.5
1984	9.6	12.8	21.4	24.9	31.1	33.3	3.0	5.9	11.6	18.7	29.9	33.3	1984	15.1	21.0	36.3	42.1	55.5	70.6	2.0	7.0	18.3	25.5	43.9	70.6
1985	11.3	14.8	23.6	27.1	33.4	36.3	3.9	7.4	13.8	20.8	31.7	36.3	1985	17.3	23.6	39.3	45.1	58.6	73.9	2.9	8.6	20.6	28.3	47.4	73.9
1986	19.6	25.3	38.8	43.7	48.3	54.6	6.0	12.0	23.2	39.2	44.2	54.6	1986	27.9	36.7	56.7	63.4	75.9	84.9	4.4	13.1	30.5	45.7	68.3	84.9
1987	7.0	8.9	13.0	14.5	16.5	17.7	2.8	5.4	8.9	12.6	15.8	17.7	1987	10.7	14.3	23.5	27.0	35.3	46.7	2.9	5.7	9.7	14.4	18.8	46.7
1988	7.7	9.8	14.6	16.2	18.8	20.8	2.4	4.8	9.3	13.2	17.5	20.8	1988	10.9	14.4	22.7	25.6	33.2	43.0	2.5	5.0	10.2	15.2	21.2	43.0
1989	6.6	8.3	12.8	14.2	17.2	20.7	2.3	4.0	8.3	10.8	15.0	20.7	1989	9.5	12.4	19.9	22.9	30.1	40.9	2.3	4.1	9.1	12.2	17.6	40.9
1990	4.7	6.0	9.1	10.2	12.3	15.2	1.5	2.8	5.7	8.0	10.5	15.2	1990	7.1	9.3	14.9	17.2	23.4	31.9	1.6	2.9	6.1	8.7	11.7	31.9
1991	3.8	4.8	7.0	7.8	9.3	9.0	1.6	2.8	4.9	6.3	9.5	9.0	1991	6.4	8.4	13.7	16.0	21.5	28.3	1.6	2.9	5.2	6.8	10.4	28.3
1992	4.3	5.4	8.2	9.1	10.9	11.1	1.6	2.7	5.3	7.2	10.7	11.1	1992	6.4	8.3	13.1	15.1	20.2	27.1	1.6	2.8	5.6	7.7	11.9	27.1
1993	5.1	6.4	9.8	11.2	13.8	15.0	1.7	3.3	5.5	8.4	13.1	15.0	1993	7.5	9.8	15.6	18.3	25.2	35.7	1.8	3.4	5.8	9.1	15.1	35.7
1994	4.8	6.0	9.1	10.3	12.3	13.5	1.9	3.0	5.4	8.3	11.5	13.5	1994	7.2	9.5	15.4	18.0	25.3	35.6	2.0	3.1	5.7	9.1	13.0	35.6
1995	5.7	7.2	10.7	11.9	13.8	13.5	2.0	3.7	7.3	9.9	13.9	13.5	1995	8.1	10.5	16.8	19.6	27.4	38.4	2.1	3.8	7.8	10.9	16.2	38.4
1996	6.1	7.5	12.0	14.1	16.6	16.7	2.5	2.9	5.6	11.1	16.6	16.7	1996	10.8	13.8	23.0	27.4	35.2	44.4	2.6	3.0	5.9	12.5	19.9	44.4
1997	8.2	10.3	15.0	16.7	19.3	18.8	2.4	5.3	9.6	13.5	19.6	18.8	1997	14.0	18.0	27.7	31.5	39.4	48.2	2.4	5.6	10.6	15.5	24.4	48.2
1998	9.4	12.2	17.5	18.9	21.6	20.9	1.9	6.3	12.3	15.5	22.1	20.9	1998	16.3	21.0	31.4	35.1	43.1	51.5	1.9	6.8	14.1	18.3	28.4	51.5

Table A9: Top fractiles income shares before corporate income taxes in the U.S., 1913-1998 (fractiles are defined by total post-corporate tax income (excluding capital gains))

	Corporate tax rate	P90-100	P95-100	P99-100	P99.5-100	P99.9-100	P99.99-100
	(0)	(1)	(2)	(3)	(4)	(5)	(6)
1913	0.91	( )	( )	18.00	14.77	8.65	2.77
1914	0.99			18.20	15.12	8.64	2.74
1915	1.07			17.62	14.62	9.26	4.38
1916	1.96			18.67	15.70	9.95	4.45
1917	19.97	41.29	31.58	18.92	15.50	9.30	3.77
1918	37.78	42.04	31.66	18.17	14.51	8.22	3.08
1919	23.11	40.36	30.28	16.82	13.11	7.04	2.47
1920	20.56	38.97	28.33	15.29	11.69	5.84	1.86
1921	16.18	43.39	31.09	16.09	12.16	5.97	1.84
1921	11.26	43.33	31.50	16.74	12.79	6.45	2.13
1922	11.26	41.02	29.40	15.43	11.73	5.78	1.87
	11.62	43.72	31.40	16.81	12.88	6.46	2.15
1924	12.21	44.71	33.03	18.18	13.95	7.12	2.13
1925							2.74
1926	12.71	44.72	33.40	18.68	14.37	7.51	
1927	12.59	45.33	34.11	19.37	14.98	7.93	2.97
1928	11.15	46.75	35.44	20.24	15.77	8.61	3.42
1929	10.24	44.35	33.64	18.97	14.73	7.99	3.17
1930	12.01	43.78	31.89	17.04	12.99	6.81	2.59
1931	10.83	45.05	31.62	15.73	11.75	5.98	2.23
1932	13.26	47.02	33.27	16.00	12.03	6.25	2.10
1933	14.17	45.57	33.06	16.26	12.24	6.40	2.22
1934	13.94	45.71	33.63	16.41	12.30	6.20	2.11
1935	14.24	43.95	31.61	16.19	12.20	6.19	2.14
1936	12.57	45.39	33.37	18.33	14.01	7.14	2.44
1937	13.25	43.98	32.06	17.15	13.05	6.61	2.22
1938	13.17	43.48	30.69	15.22	11.26	5.47	1.82
1939	13.96	45.17	31.89	15.98	11.90	5.83	1.92
1940	22.75	45.42	32.37	16.78	12.62	6.25	2.09 2.18
1941	39.58	42.87	31.09	16.91	12.84	6.46	
1942	50.95	37.53 34.88	27.27 25.31	14.95 13.50	11.39 10.15	5.63 4.86	1.80 1.40
1943	55.46						
1944	54.87	32.98 33.79	23.44 24.27	12.11 12.30	8.97 8.93	4.21 4.01	1.34 1.17
1945	48.70	35.79 35.46	24.27 25.58	12.55	8.96	3.88	1.17
1946	32.65 32.90	33.40	24.29	11.82	8.46	3.74	1.15
1947 1948		34.64	24.72	12.20	8.86	4.00	1.13
	32.86 32.11	34.66	24.72	11.86	8.58	3.89	1.21
1949		35.04	25.22	12.66	9.29	4.34	1.15
1950 1951	39.23 47.33	34.46	24.49	12.17	8.84	4.06	1.31
		33.48	23.38	11.16	8.03	3.57	1.12
1952 1953	45.80 45.98	32.66	22.41	10.34	7.35	3.22	1.01
1954	48.35	33.44	23.08	10.81	7.71	3.40	1.08
1954	41.29	32.85	22.54	10.34	7.30	3.18	1.04
1956	40.58	32.78	22.46	10.20	7.16	3.04	0.98
1957	40.13	32.76	22.37	10.20	7.06	2.99	0.94
1958	40.13	33.11	22.43	9.85	6.89	2.91	0.92
1959	41.33	33.11	22.25	9.76	6.85	2.79	0.88
1960	40.97	32.67	21.66	9.30	6.41	2.67	0.86
1961	40.19	32.81	21.92	9.25	6.26	2.59	0.84
1962	39.01	32.87	21.89	9.11	6.20	2.49	0.79
1302	38.72	32.84	21.82	9.01	6.13	2.47	0.80

1964     36.09     32.49     21.52     8.85     6.07     2.43       1965     34.67     32.27     21.50     8.85     6.11     2.47       1966     34.60     32.61     21.73     9.04     6.16     2.54       1967     33.35     32.63     21.73     9.03     6.15     2.51	0.75 0.74 0.79 0.76 0.76 0.72
1966     34.60     32.61     21.73     9.04     6.16     2.54       1967     33.35     32.63     21.73     9.03     6.15     2.51	0.79 0.76 0.76
1967 33.35 32.63 21.73 9.03 6.15 2.51	0.76 0.76
	0.76
1968 36.38 32.64 21.75 9.07 6.21 2.59	0.72
1969 37.03 32.41 21.36 8.65 5.86 2.37	
1970 34.55 32.00 20.94 8.30 5.59 2.23	0.67
1971 31.24 32.14 20.95 8.19 5.48 2.15	0.63
1972 29.74 31.97 20.77 8.12 5.41 2.13	0.62
1973 28.24 32.19 20.95 8.07 5.35 2.07	0.58
1974 24.04 32.64 21.34 8.39 5.64 2.26	0.63
1975 23.42 32.86 21.30 8.26 5.52 2.18	0.62
1976 23.69 32.67 21.13 8.14 5.45 2.16	0.63
1977 23.13 32.68 21.11 8.14 5.46 2.18	0.63
1978 23.45 32.68 21.14 8.19 5.51 2.22	0.64
1979 20.48 32.56 21.07 8.24 5.57 2.28	0.67
1980 21.22 33.10 21.43 8.40 5.69 2.35	0.71
1981 19.39 32.90 21.18 8.21 5.58 2.33	0.70
1982 18.20 33.40 21.60 8.57 5.89 2.55	0.82
1983 17.47 33.84 21.96 8.75 6.07 2.70	0.91
1984 18.33 34.08 22.26 9.02 6.33 2.90	1.01
1985 17.41 34.38 22.53 9.23 6.51 2.99	1.00
1986 18.07 34.72 22.76 9.29 6.53 2.96	1.03
1987 18.70 36.61 24.63 10.86 7.86 3.79	1.33
1988 17.25 38.76 27.10 13.30 10.08 5.30	2.04
1989 17.28 38.60 26.81 12.74 9.48 4.81	1.78
1990 17.45 38.96 27.19 13.10 9.82 4.97	1.87
1991 17.60 38.50 26.56 12.28 9.00 4.42	1.64
1992 17.80 39.91 27.99 13.58 10.19 5.27	2.04
1993 18.10 39.57 27.51 12.91 9.53 4.77	1.76
1994 18.33 39.69 27.61 12.94 9.53 4.76	1.76
1995 17.76 40.29 28.22 13.43 9.95 5.00	1.83
1996 17.29 41.06 29.09 13.96 10.27 5.38	2.13
1997 17.14 41.38 29.42 14.43 10.89 5.80	2.37
1998 17.11 41.56 29.55 14.69 11.23 6.10	2.61

Notes: Corporate tax rate defined as corporate taxes (net of credits) divided by corporate taxable income (net-profits) Shares are recomputed from Table A1 by inflating dividends by a factor 1/(1-tcorp)

Table B1: Aggregate Series on Wages

	Total Number of Employees	Married Women Employees	Number of Tax units with Wage	Total wage Bill (current mn\$)	Average wage (\$ 1998)	Share of officer compensation	СРІ
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
1917	29,042	1,354	27,689	26,174	11,490	5.25	7.844
1918	32,119	1,406	30,713	32,773	11,081	6.79	9.208
1919	31,441	1,404	30,036	35,858	10,779	5.56	10.580
1920	30,406	1,399	29,008	42,377	11,375	5.75	12.252
1921	28,041	1,446	26,595	34,311	11,183	6.58	10.941
1922	30,410	1,554	28,856	35,727	11,460	6.74	10.252
1923	33,285	1,677	31,608	41,845	12,046	6.15	10.436
1924	32,993	1,761	31,233	41,829	12,124	6.30	10.457
1925	34,619	1,864	32,756	43,467	11,714		10.719
1926	35,882	1,971	33,911	46,361	11,935		10.826
1927	36,017	2,064	33,953	46,763	12,225		10.620
1928	36,355	2,159	34,197	47,659	12,506	6.71	10.482
1929	37,699	2,274	35,425	50,460	12,769	6.61	10.482
1930	35,590	2,324	33,266	46,214	12,705	6.79	10.220
1931	32,724	2,338	30,386	39,157	12,838	6.89	9.321
1932	29,445	2,328	27,117	30,514	12,395	6.99	8.361
1933	30,940	2,449	28,491	29,027	11,824	6.87	7.934
1934	34,238	2,673	31,565	33,734	12,010	6.44	8.204
1935	35,577	2,787	32,790	36,722	12,274	6.39	8.409
1936	38,599	2,991	35,608	41,954	12,797	6.47	8.493
1937	39,701	3,047	36,654	46,139	13,208	6.09	8.799
1938	38,322	3,117	35,205	43,013	13,003	6.02	8.632
1939	39,633	3,220	36,413	45,985	13,633	5.86	8.511
1940	41,437	3,350	38,087	49,860	13,998	5.92	8.596
1941	45,785	3,896	41,889	62,085	15,024	5.59	9.026
1942	50,219	4,328	45,891	82,098	16,362	4.50	9.992
1943	55,995	4,887	51,108	105,786	17,821	3.54	10.601
1944	57,221	5,293	51,928	116,749	18,924	3.22	10.781
1945	55,548	5,338	50,210	117,493	19,178	3.50	11.029
1946	49,643	5,273	44,370	112,005	18,854	4.59	11.967
1947	49,936	5,354	44,582	123,097	18,006	4.90	13.690
1948	51,332	6,057	45,275	135,537	17,891	4.97	14.758
1949	50,358	6,270	44,088	134,719	18,310	5.01	14.610
1950	52,424	6,832	45,592	147,238	19,033	5.17	14.756
1951	56,415	7,557	48,858	171,591	19,103	4.73	15.922
1952	57,702	7,739	49,963	185,619	19,769	4.54	16.273
1953	58,918	8,227	50,691	198,970	20,588	4.41	16.403
1954	57,387	8,243	49,144	197,242	20,850	4.62	16.485
1955	59,080	8,615	50,465	212,129	21,869	4.94	16.419
1956	60,845	9,213	51,632	229,002	22,584	4.82	16.665

1957	61,308	9,583	51,725	239,926	22,667	4.93	17.265
1958	59,839	9,686	50,153	241,290	22,741	5.14	17.731
1959	61,587	10,072	51,515	259,814	23,603	5.16	17.873
1960	62,680	10,126	52,554	272,823	23,970	5.32	18.159
1961	62,881	10,935	51,946	280,483	24,321	5.48	18.341
1962	64,573	11,235	53,338	299,319	24,999	5.67	18.542
1963	65,619	11,726	53,893	314,809	25,567	5.74	18.765
1964	67,275	12,059	55,216	337,742	26,411	5.70	19.009
1965	69,692	12,453	57,239	363,707	26,996	5.78	19.332
1966	73,516	13,158	60,358	400,265	27,370	5.70	19.893
1967	75,442	13,871	61,571	428,946	27,777	5.71	20.469
1968	77,602	14,766	62,836	471,904	28,511	5.62	21.329
1969	79,850	15,479	64,371	518,259	28,871	5.85	22.481
1970	79,750	15,972	63,778	551,472	29,046	5.96	23.807
1971	79,554	16,360	63,194	584,450	29,558	6.23	24.855
1972	81,583	16,833	64,750	638,671	30,520	6.47	25.650
1973	85,202	17,588	67,614	708,639	30,532	6.65	27.240
1974	86,573	18,055	68,518	772,150	29,497	6.87	30.237
1975	85,044	18,373	66,671	814,690	29,039	7.10	32.988
1976	87,402	18,943	68,459	899,580	29,490	7.11	34.902
1977	90,421	19,523	70,898	993,986	29,574	7.42	37.170
1978	94,785	20,282	74,503	1,121,020	29,571	7.59	39.995
1979	98,025	20,987	77,038	1,255,590	28,774	7.74	44.515
1980	98,379	21,466	76,913	1,377,416	27,712	7.91	50.524
1981	99,235	21,796	77,439	1,517,272	27,436	7.93	55.728
1982	97,762	21,991	75,771	1,593,395	27,539	8.13	59.183
1983	98,527	22,267	76,260	1,684,275	27,988	8.38	61.077
1984	103,119	23,111	80,008	1,854,793	28,235	8.47	63.704
1985	105,806	23,870	81,936	1,995,186	28,573	8.56	65.997
1986	107,735	24,395	83,340	2,114,392	29,183	8.77	67.251
1987	110,743	25,125	85,618	2,270,210	29,423	8.81	69.672
1988	113,896	25,775	88,121	2,452,699	29,691	8.29	72.529
1989	116,631	26,486	90,145	2,596,838	29,293	7.62	76.010
1990	118,127	26,779	91,348	2,754,605	29,107	7.46	80.114
1991	116,625	26,812	89,813	2,824,190	29,008	7.13	83.479
1992	117,110	27,227	89,883	2,966,813	29,463	7.45	85.984
1993	118,790	27,511	91,279	3,091,625	29,387	7.31	88.563
1994	121,708	28,438	93,270	3,254,312	29,427	8.66	90.866
1995	124,632	29,244	95,388	3,441,060	29,558	8.82	93.410
1996	127,009	29,671	97,338	3,630,142	29,707	8.79	96.212
1997	130,118	29,957	100,161	3,885,977	30,343	8.64	98.425
1998	133,433	30,380	103,053	4,192,775	31,422		100.000
1999	136,363	30,741	105,622	4,475,142	32,111		102.200

Notes: Total number of part-time and full time employees from NIPA 1929-1999 (includes military). From 1917 to 1929. extrapolated using Lebergott series on employees. Married women employees from Historical Statistics and Statistical Abstract. Total wage bill is from NIPA 1929-1999 (line 1). Wage bill 1917-1927 extrapolated from Kuznets (p. 570, (1)) Average wage is column (5) over column (2).Officer compensation share from Corporate Tax returns statistics.

Table B2: Shares of wages for each fractile

	P90-100	P95-100	P99-100	P99.5-100		P99.99-100	P90-95	P95-99	P99-99.5	P99.5-99.9	P99.9-99.99
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
1927	27.89	18.85	8.65	6.08	2.53	0.68	9.04	10.20	2.57	3.55	1.86
1928	29.11	19.78	8.87	6.20	2.59	0.69	9.33	10.91	2.66	3.61	1.91
1929	29.24	19.76	8.67	6.08	2.56	0.72	9.49	11.09	2.60	3.51	1.85
1930	28.63	19.23	8.54	5.99	2.56	0.73	9.40	10.69	2.55	3.43	1.82
1931	29.34	19.69	8.47	5.81	2.45	0.67	9.65	11.22	2.66	3.36	1.78
1932	30.28	19.68	8.29	5.66	2.37	0.62	10.61	11.39	2.63	3.29	1.75
1933	30.08	19.81	8.31	5.77	2.45	0.63	10.27	11.50	2.54	3.32	1.82
1934	29.77	19.94	8.31	5.76	2.37	0.59	9.83	11.64	2.55	3.38	1.78
1935	30.31	20.12	8.40	5.85	2.40	0.60	10.19	11.72	2.55	3.45	1.80
1936	29.70	19.95	8.60	6.02	2.45	0.59	9.75	11.35	2.58	3.57	1.86
1937	30.06	20.05	8.41	5.89	2.41	0.60	10.01	11.64	2.52	3.48	1.81
1938	29.83	19.66	8.13	5.74	2.36	0.59	10.18	11.53	2.38	3.39	1.77
1939	30.65	20.06	8.20	5.70	2.32	0.57	10.59	11.86	2.50	3.38	1.75
1940	30.85	20.07	8.37	5.84	2.39	0.58	10.78	11.70	2.53	3.45	1.81
1941	29.33	19.05	8.11	5.75	2.39	0.57	10.29	10.94	2.36	3.36	1.83
1942	27.08	17.45	7.21	5.12	2.18	0.51	9.63	10.24	2.09	2.94	1.67
1943	25.88	16.26	6.42	4.51	1.86	0.41	9.62	9.83	1.91	2.65	1.45
1944	24.61	15.13	5.56	3.84	1.56	0.36	9.48	9.56	1.73	2.28	1.20
1945	24.05	14.99	5.73	3.96	1.57	0.35	9.05	9.27	1.77	2.38	1.22
1946	25.10	16.18	6.40	4.33	1.68	0.37	8.92	9.79	2.06	2.66	1.31
1947	24.97	16.07	6.27	4.23	1.60	0.34	8.90	9.80	2.04	2.63	1.26
1948	25.03	16.13	6.21	4.20	1.58	0.35	8.90	9.92	2.01	2.62	1.23
1949	25.00	16.05	6.12	4.11	1.54	0.34	8.95	9.93	2.01	2.58	1.20
1950	25.18	16.13	6.24	4.21	1.57	0.34	9.06	9.89	2.03	2.64	1.23
1951	24.71	15.63	5.97	4.00	1.48	0.31	9.08	9.66	1.97	2.52	1.17
1952	24.43	15.41	5.74	3.78	1.39	0.30	9.01	9.67	1.96	2.40	1.09
1954	24.13	15.26	5.61	3.65	1.32	0.28	8.88	9.65	1.96	2.34	1.04
1956	24.53	15.57	5.56	3.57	1.26	0.25	8.96	10.02	1.99	2.31	1.00
1958	24.67	15.60	5.40	3.43	1.20	0.25	9.07	10.20	1.97	2.23	0.95
1960	25.23	15.72	5.26	3.31	1.14	0.23	9.51	10.46	1.95	2.17	0.91
1961	25.21	15.63	5.20	3.26	1.11	0.22	9.58	10.44	1.93	2.15	0.89
1962	25.22	15.62	5.16	3.24	1.09	0.21	9.60	10.47	1.92	2.15	0.88
1964	25.15	15.43	5.12	3.24	1.07	0.21	9.72	10.31	1.88	2.17	0.86
1966	25.34	15.47	5.16	3.27	1.11	0.22	9.87	10.31	1.89	2.16	0.88
1967	25.77	15.81	5.34	3.38	1.14	0.23	9.97	10.47	1.96	2.24	0.91
1968	25.60	15.66	5.24	3.32	1.12	0.23	9.95	10.42	1.92	2.20	0.89
1969	25.71	15.68	5.19	3.27	1.10	0.24	10.03	10.49	1.92	2.17	0.87
1970	25.67	15.64	5.13	3.21	1.06	0.21	10.03	10.51	1.92	2.15	0.85
1971	25.67	15.67	5.18	3.25	1.08	0.22	10.00	10.49	1.93	2.18	0.86
1972	25.81	15.80	5.32	3.38	1.14	0.24	10.02	10.47	1.94	2.24	0.90
1973	26.14	16.06	5.42	3.43	1.14	0.24	10.09	10.63	1.99	2.29	0.91
1974	26.61	16.48	5.66	3.63	1.26	0.27	10.14	10.81	2.04	2.37	0.99
1975	26.46	16.32	5.64	3.63	1.26	0.27	10.15	10.68	2.01	2.37	0.99
1976	26.66	16.49	5.74	3.70	1.30	0.29	10.16	10.76	2.03	2.40	1.02
	26.94	16.70	5.86	3.79	1.35	0.30	10.24	10.76	2.06	2.45	1.05

1978	27.43	17.07	6.06	3.93	1.40	0.31	10.36	11.02	2.13	2.53	1.09
1979	27.63	17.24	6.22	4.06	1.47	0.34	10.39	11.03	2.16	2.59	1.13
1980	28.06	17.60	6.43	4.23	1.57	0.38	10.47	11.17	2.20	2.66	1.19
1981	28.14	17.66	6.43	4.24	1.59	0.39	10.49	11.23	2.18	2.65	1.20
1982	28.55	18.02	6.67	4.42	1.67	0.41	10.53	11.35	2.25	2.75	1.26
1983	29.09	18.49	6.96	4.66	1.80	0.47	10.59	11.54	2.30	2.86	1.33
1984	29.61	18.95	7.27	4.93	1.99	0.52	10.66	11.68	2.34	2.94	1.47
1985	29.74	19.05	7.28	4.92	1.98	0.54	10.70	11.77	2.35	2.95	1.44
1986	29.94	19.19	7.33	4.96	2.02	0.58	10.76	11.86	2.37	2.94	1.44
1987	30.59	19.98	8.15	5.68	2.43	0.69	10.61	11.83	2.47	3.25	1.74
1988	31.95	21.37	9.39	6.79	3.16	1.10	10.58	11.99	2.59	3.64	2.06
1989	31.53	20.83	8.69	6.12	2.69	0.82	10.70	12.13	2.57	3.44	1.86
1990	31.79	21.13	8.99	6.41	2.87	0.91	10.66	12.14	2.59	3.54	1.96
1991	31.43	20.77	8.56	5.97	2.57	0.78	10.66	12.21	2.59	3.40	1.79
1992	32.45	21.85	9.63	6.97	3.33	1.22	10.60	12.22	2.66	3.64	2.11
1993	31.85	21.29	9.05	6.41	2.90	0.96	10.56	12.23	2.64	3.51	1.94
1994	31.54	20.94	8.72	6.07	2.63	0.83	10.59	12.22	2.65	3.44	1.80
1995	32.43	21.73	9.25	6.52	2.91	0.94	10.70	12.48	2.73	3.61	1.97
1996	32.98	22.49	9.73	6.90	3.21	1.12	10.51	12.78	2.83	3.71	2.10
1997	33.65	23.22	10.37	7.45	3.66	1.34	10.46	12.87	2.93	3.84	2.33
1998	34.19	23.63	10.88	7.95	4.13	1.62	10.58	12.80	2.95	3.91	2.53

Notes: Shares computed from Tax returns statistics and total number of tax units and total wage bill from Table B-1.

Table B3: Average salary and threshold for each fractile (in 1998 dollars)

Year	P90-100	P95-100	P99-100	P99.5-100	P99.9-100	P99.99-100	P90-95	P95-99	P99-99.5	P99.5-99.9	P99.9-99.99	P90	P95	P99	P99.5	P99.9	P99.99
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
1927	36,173	48,892	112,203	157,801	328,508	875,777	23,453	33,064	66,603	115,122	267,694	20,297	26,151	53,680	82,856	188,207	521,459
1928	38,703	52,598	117,885	164,935	344,487	910,553	24,808	36,276	70,833	120,046	281,586	21,725	29,119	59,465	87,113	196,691	544,383
1929	39,740	53,692	117,830	165,121	348,313	972,470	25,787	37,657	70,539	119,321	278,958	22,234	29,128	59,311	86,550	195,893	561,050
1930	38,916	52,278	116,103	162,833	347,376	994,979	25,552	36,321	69,372	116,696	275,417	22,203	28,484	61,323	84,876	189,934	549,286
1931	40,564	54,448	117,078	160,636	338,371	928,307	26,679	38,791	73,520	116,205	272,830	23,929	30,434	61,109	86,921	187,926	535,702
1932	40,754	52,961	111,567	152,248	319,156	835,392	28,547	38,310	70,886	110,524	261,806	23,792	30,701	57,104	86,584	178,715	520,144
1933	38,619	50,864	106,693	148,058	314,034	808,415	26,375	36,907	65,328	106,560	259,092	22,612	28,909	54,039	80,770	176,022	505,291
1934	38,777	51,957	108,211	149,945	308,934	773,764	25,597	37,893	66,478	110,197	257,284	21,882	29,762	55,412	80,440	179,548	489,779
1935	40,366	53,584	111,874	155,739	319,955	800,681	27,147	39,012	68,010	114,682	266,535	23,355	31,070	57,625	80,915	184,242	504,984
1936	41,194	55,342	119,266	166,880	339,670	823,081	27,044	39,361	71,651	123,679	285,948	23,434	30,836	60,945	86,408	198,546	532,154
1937	43,005	57,364	120,266	168,496	344,414	854,962	28,645	41,638	72,036	124,516	287,686	25,604	32,830	61,586	88,434	200,526	539,820
1938	42,229	55,641	115,035	162,601	333,476	828,986	28,816	40,793	67,468	119,885	278,424	25,739	32,762	59,939	85,613	192,691	520,681
1939	45,473	59,524	121,633	169,066	344,360	846,929	31,422	43,996	74,200	125,243	288,519	28,135	35,642	63,317	90,249	200,104	531,216
1940	46,985	61,128	127,451	177,988	364,595	884,941	32,843	44,547	76,913	131,334	306,775	30,034	36,451	64,852	93,861	212,160	568,010
1941	48,170	62,553	133,194	188,984	393,188	931,378	33,786	44,894	77,405	137,933	333,392	31,037	37,225	64,714	95,957	229,030	622,412
1942	48,484	62,481	129,123	183,488	390,787	918,264	34,488	45,821	74,760	131,668	332,188	31,509	38,332	64,343	91,241	223,156	618,083
1943	50,527	63,487	125,435	176,149	363,512	806,945	37,567	48,000	74,721	129,306	314,236	34,767	41,237	64,583	90,575	220,383	552,518
1944	51,320	63,095	116,040	160,063	324,448	741,632	39,544	49,857	72,015	118,962	278,083	36,530	43,286	64,260	84,733	193,904	504,901
1945	51,018	63,616	121,495	167,808	333,559	739,341	38,417	49,145	75,179	126,365	288,462	35,509	42,150	65,782	90,258	204,942	513,052
1946	52,955	68,278	134,968	182,827	353,462	778,007	37,631	51,606	87,109	140,169	306,293	34,396	41,726	76,291	103,048	222,122	529,707
1947	50,360	64,842	126,534	170,740	322,949	687,077	35,877	49,418	82,325	132,688	282,487	33,259	39,363	72,255	97,774	208,581	477,783
1948	50,779	65,436	125,959	170,253	319,738	699,871	36,123	50,305	81,665	132,883	277,503	32,687	40,907	70,152	97,879	203,341	469,827
1949	52,293	67,132	127,981	171,944	321,047	704,257	37,453	51,919	84,016	134,665	278,461	33,847	42,348	72,526	100,151	204,415	471,752
1950	55,117	70,595	136,460	184,088	343,332	744,680	39,637	54,127	88,829	144,272	298,728	36,006	44,551	76,254	106,533	218,962	501,430
1951	54,497	68,955	131,692	176,580	326,573	679,337	40,038	53,270	86,803	139,079	287,373	36,760	44,347	75,656	103,078	211,619	479,889
1952	55,761	70,380	131,082	172,734	316,106	682,996	41,143	55,207	89,433	136,895	275,349	37,657	45,831	78,301	104,879	202,532	460,376
1954	58,756	74,292	136,591	177,950	320,218	674,826	43,222	58,718	95,234	142,385	280,823	39,478	48,256	84,028	110,701	208,201	461,771
1956	65,287	82,880	147,879	189,775	334,287	677,204	47,693	66,631	105,982	153,646	296,185	43,228	53,741	94,605	121,572	222,484	473,879
1958	66,934	84,643	146,382	186,143	325,402	664,582	49,224	69,207	106,620	151,327	287,713	44,211	56,049	96,013	121,048	217,371	461,316
1960	72,113	89,867	150,399	189,366	325,805	662,459	54,359	74,734	111,433	155,257	288,400	48,406	61,578	101,178	125,304	220,144	460,102
1961	74,222	92,051	152,985	192,181	327,986	660,575	56,394	76,819	113,792	158,234	291,039	50,428	63,503	103,489	127,714	223,456	461,164
1962	74,841	94,564	156,035	195,826	330,029	640,411	55,117	79,195	116,242	162,272	295,538	53,398	65,786	105,965	130,110	229,285	457,960
1964	80,383	98,185	164,754	208,317	343,937	661,934	62,582	81,544	121,192	174,414	308,608	57,489	69,157	109,238	138,634	247,162	468,299
1966	84,487	103,142	171,875	217,735	368,527	746,308	65,834	85,961	126,017	180,041	326,559	60,529	72,719	114,804	143,307	254,657	514,920
1967	87,718	107,602	181,567	230,080	387,073	785,290	67,833	89,109	133,052	190,828	342,820	62,109	75,226	119,771	152,377	269,896	538,839
1968	90,145	110,254	184,552	233,644	395,082	810,690	70,036	91,679	135,458	193,284	348,901	64,222	77,486	122,556	155,122	271,757	550,602
1969	92,064	112,273	185,792	234,353	395,080	842,876	71,857	93,893	137,232	194,173	345,327	65,905	79,552	123,727	156,176	270,784	549,264
1970	93,229	113,597	186,433	233,171	383,879	760,453	72,860	95,387	139,693	195,492	342,033	66,774	80,829	126,341	158,630	270,937	530,394
1971	95,522	116,616	192,830	242,100	400,970	801,247	74,428	97,564	143,562	202,385	356,497	68,115	82,547	130,159	164,031	282,422	552,617
1972	99,255	121,489	204,678	260,062	439,263	935,821	77,021	100,691	149,294	215,261	384,088	70,721	85,212	134,986	171,528	301,782	608,133
1973	100,580	123,546	208,601	263,840	440,209	911,028	77,613	102,281	153,360	219,744	387,890	71,039	86,263	137,394	175,709	305,463	608,814
1974	99,190	122,810	211,109	270,420	468,843	1,014,009	75,570	100,735	151,798	220,816	408,270	68,863	84,287	137,021	173,711	314,201	669,623

1975	98,030	120,877	208,915	268,995	465,603	1,006,160	75,181	98,866	148,834	219,840	405,535	68,622	83,373	132,400	173,596	313,265	655,062
1976	100,358	124,179	215,916	278,700	490,614	1,083,296	76,538	101,246	153,133	225,723	424,763	70,073	85,121	136,829	177,213	323,603	700,235
1977	101,601	125,954	220,864	286,161	508,044	1,119,473	77,247	102,225	155,565	230,688	440,103	70,686	85,970	138,488	179,874	332,147	730,032
1978	103,200	128,456	227,853	295,527	526,896	1,178,552	77,944	103,606	160,179	237,683	454,486	71,236	86,786	142,213	186,271	344,658	755,869
1979	101,166	126,268	227,622	297,324	537,408	1,252,910	76,065	100,929	157,920	237,305	457,909	69,466	84,515	139,072	185,241	341,959	778,207
1980	99,464	124,731	227,755	299,630	555,267	1,349,086	74,196	98,974	155,879	235,719	467,062	67,590	82,476	137,527	181,987	348,543	805,425
1981	98,950	124,146	225,906	298,211	558,199	1,367,968	73,754	98,705	153,601	233,213	468,222	67,103	82,476	136,443	179,032	346,190	815,459
1982	101,441	128,047	237,087	314,391	593,985	1,463,856	74,835	100,786	159,781	244,491	497,328	67,942	83,683	139,844	187,452	363,094	877,292
1983	105,177	133,734	251,487	336,871	649,703	1,708,530	76,619	104,296	166,102	258,662	532,052	69,309	85,962	145,513	196,398	386,790	973,615
1984	107,753	137,903	264,476	358,508	723,810	1,902,499	77,603	106,261	170,445	267,184	592,848	70,126	87,159	149,548	201,187	415,855	1,069,429
1985	109,731	140,538	268,468	363,362	729,042	1,987,636	78,923	108,556	173,575	271,942	589,198	71,121	89,046	152,263	204,500	417,921	1,119,134
1986	112,959	144,759	276,380	374,271	761,000	2,180,675	81,159	111,854	178,488	277,589	603,259	72,934	91,578	157,153	208,076	424,035	1,166,711
1987	116,414	152,103	310,275	432,580	925,388	2,625,112	80,725	112,560	187,971	309,378	736,529	72,660	91,446	163,340	223,906	498,078	1,426,530
1988	122,592	164,020	360,154	521,452	1,212,442	4,212,731	81,165	114,987	198,857	348,707	879,082	72,581	92,450	170,063	243,941	582,215	1,878,886
1989	119,495	157,878	329,492	464,105	1,017,581	3,123,525	81,112	114,974	194,880	325,736	783,588	72,289	92,559	167,513	236,337	520,484	1,590,929
1990	119,674	159,081	338,508	482,192	1,079,090	3,416,908	80,268	114,223	194,823	332,965	819,328	71,628	91,501	167,489	237,445	550,039	1,664,682
1991	118,396	156,466	322,492	449,654	969,361	2,947,771	80,327	114,959	195,329	319,727	749,536	71,448	92,180	168,399	233,745	508,935	1,500,450
1992	124,569	167,732	369,536	535,134	1,279,164	4,675,227	81,405	117,282	203,939	349,129	901,827	72,299	92,943	174,635	248,453	576,192	2,010,960
1993	121,804	162,813	346,255	490,344	1,109,413	3,662,908	80,794	116,952	202,167	335,576	825,690	71,764	92,762	174,324	244,082	543,838	1,738,283
1994	121,091	160,846	334,847	466,279	1,009,371	3,174,638	81,338	117,346	203,415	330,507	768,788	72,247	93,221	174,831	244,157	522,376	1,596,630
1995	125,236	167,854	357,374	503,865	1,124,101	3,636,494	82,619	120,473	210,883	348,805	844,946	73,308	94,957	180,531	254,938	560,224	1,814,929
1996	127,849	174,375	376,953	534,936	1,243,398	4,320,915	81,443	123,801	219,229	359,745	903,145	72,496	95,712	187,682	265,019	566,538	2,027,387
1997	132,657	183,029	408,729	587,502	1,442,291	5,287,854	82,492	126,843	230,793	378,878	1,018,537	73,347	98,065	196,254	281,122	622,235	2,359,524
1998	139,086	192,304	442,550	646,655	1,679,256	6,575,840	86,102	130,160	240,135	397,630	1,141,685	75,011	101,463	204,295	292,338	678,546	2,748,253

Notes: Levels computed from Tax returns statistics and total number of tax units and total wage bill from Table B-1.

Table B4: CEO Pay versus Average Wage, 1970 to 1999

		CEO	pay statisti	cs (in thou	sands of 1998	dollars)	Compositio	n of Pay of top	100 CEOs
Year	Average wage (in \$ 1998)	Total pay rank 10	Total pay rank 50	Total pay	Total pay average 100	Salary+bonus rank 10	Share Salary+bonus	Share Stock options	Share Other
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
1970	32,522	1,600	1,151	966	1,255	1,470	84.66	15	5.34
1970	32,322	1,549		1,002	1,199		84.07		5.93
1971	,	1,549 1,949	1,131 1,302	1,002	1,199	1,348 1,626	85.99		i.93 I.01
1972	34,262 34,214	1,949	1,302	1,115	1,474	1,626	82.85		'.15
	,	,		,					
1974	33,103	1,746	1,333	1,174	1,411	1,574	87.13		2.87
1975	32,764	1,937	1,325	1,137	1,472	1,561	86.04		3.96
1976	33,167	2,034	1,433	1,226	1,567	1,862	84.45		5.55
1977	33,253	2,198	1,563	1,291	1,708	1,848	80.00		0.00
1978	33,162	3,293	1,920	1,535	2,300	1,875	59.50		0.50
1979	32,306	5,807	2,669	1,916	3,379	2,130	40.36	22.12	37.52
1980	31,253	5,872	2,262	1,718	3,159	1,993	43.44	38.10	18.46
1981	30,941	4,721	2,491	1,855	3,427	2,001	39.19	48.07	12.75
1982	31,228	4,302	2,284	1,771	4,260	1,935	32.66	55.29	12.06
1983	31,780	6,089	2,299	1,660	3,122	2,327	48.77	45.54	5.69
1984	31,925	6,938	2,529	1,738	3,829	2,355	42.68	15.76	41.56
1985	32,264	5,435	2,993	2,153	3,632	2,750	49.08	35.20	15.72
1986	32,951	6,562	3,575	2,470	4,665	4,446	52.44	30.53	17.04
1987	33,189	12,368	4,480	2,809	7,118	4,306	32.87	59.43	7.70
1988	33,467	12,756	4,422	2,880	6,393	5,101	38.32	51.90	9.78
1989	32,928	12,623	4,370	2,830	6,566	5,232	41.49	48.20	10.31
1990	32,775	11,007	5,257	3,234	7,290	4,270	35.68	38.56	25.76
1991	32,733	11,943	5,386	3,715	8,112	4,334	31.28	54.12	14.60
1992	33,325	26,348	7,610	4,669	14,215	3,882	17.29	67.55	15.16
1993	33,216	18,940	8,787	4,101	14,072	5,152	18.45	64.29	17.26
1994	33,169	13,597	6,186	4,310	8,193	5,363	41.23	34.22	24.54
1995	33,183	18,593	8,993	5,465	11,412	5,507	29.44	53.62	16.94
1996	33,301	35,306	10,879	7,060	19,051	6,992	22.37	58.28	19.35
1997	33,964	44,806	12,860	8,558	22,385	8,598	15.45	67.04	17.50
1998	35,124	60,297	17,914	10,000	33,429	7,312	9.24	78.72	12.04
1999	35,864	85,637	19,011	11,144	37,509	9,523	9.73	58.52	31.76

Notes: Average is the total wage bill divided by number of equivalent full-time employees (from NIPA 1929-1999)
CEO pay statistics are computed from the top 100 CEOs (in term of total pay) from Forbes survey of 800 CEOs from 1970 to 1999.

Table C1: Average Dividends in Each Fractile (in 1998 dollars)

Vaar	СРІ	P98-100	D00 400	P99.5-100	D00 0 400	P99.95- 100	P99.99- 100	P98-99	P99-99.5	P99.5- 99.9	P99.9- 99.95	P99.95- 99.99
<b>Year</b> (1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
1927	10.62	44,567	80,847	143,785	484,812	771,497	2,118,738	8,286	17,909	58,527	198,122	434,677
1928	10.482	46,852	84,850	150,735	509,798	815,417	2,256,001	8,853	18,966	60,968	204,175	455,264
1929	10.482	48,970	88,752	157,756	535,346	860,876	2,398,044	9,187	19,748	63,358	209,813	476,576
1930	10.22	44,286	80,577	144,061	500,039	812,016	2,322,828	7,994	17,094	55,065	188,060	434,308
1931	9.321	35,479	64,478	115,428	408,540	669,392	1,948,621	6,480	13,529	42,151	147,692	349,594
1932	8.361	25,990	46,837	83,268	293,350	479,548	1,357,374	5,143	10,406	30,748	107,156	260,101
1933	7.934	21,641	39,173	70,028	252,080	418,326	1,207,272	4,109	8,318	24,514	85,830	221,081
1934	8.204	26,438	47,660	84,727	297,672	485,190	1,366,407	5,217	10,592	31,490	110,152	264,883
1935	8.409	28,422	51,183	90,891	318,207	518,599	1,467,796	5,660	11,476	34,061	117,812	281,294
1936	8.493	42,705	77,423	137,744	469,908	749,672		7,982	17,109	54,428	189,766	421,803
1937	8.799 8.632	42,957	78,440	140,398	482,681	770,061	2,114,597	7,563	16,595	54,615	194,917	433,915
1938 1939	8.511	26,137 30,707	47,181 55,533	83,796 98,821	290,836 343,902	469,760 556,337	1,283,771 1,543,057	5,056 5,854	10,552 12,253	31,958 37,476	111,750 131,282	266,221 309,733
1939	8.596	30,707	58,754	104,138	343,902	572,195	1,548,070	6,360	13,325	40,727	141,718	328,086
1940	9.026	32,403	58,377	104,136	353,071	564,536	1,520,334	6,362	13,323	40,727	141,716	325,418
1946	11.967	27,473	50,126	87,005	270,198	418,215	1,101,326	4,870	12,974	40,559	121,821	247,176
1947	13.69	28,028	51,410	89,839	282,569	442,683	1,201,449	4,743	12,780	41,051	122,137	252,906
1948	14.758	29,966	55,426	97,725	312,825	492,028	1,334,183	4,690	13,018	43,390	133,295	281,390
1949	14.61	30,893	55,909	96,652	307,012	483,703	1,327,620	5,857	14,811	43,465	130,004	272,706
1950	14.756	35,841	65,645	114,887	364,934	572,693	1,569,235	6,147	16,164	51,665	156,772	323,521
1951	15.922	32,017	58,183	100,841	314,849	492,283	1,335,381	5,870	15,191	46,617	137,049	281,407
1952	16.273	29,648	53,594	92,531	283,767	438,425	1,156,847	5,673	14,302	43,971	128,725	258,564
1954	16.485	30,834	54,765	92,551	276,033	425,205	1,101,377	6,903	16,979	46,681	126,863	256,166
1956	16.665	36,118	64,032	108,437	323,912	498,728	1,300,960	8,203	19,628	54,568	149,097	298,169
1958	17.731	33,224	58,350	98,071	289,031	442,158	1,127,415	8,099	18,628	50,331	135,902	270,841
1960	18.159	35,079	61,231	102,726	311,025	487,901	1,363,698	8,927	19,737	50,651	134,149	268,953
1961	18.341	34,655	60,215	100,316	296,783	460,951	1,243,945	9,095	20,114	51,201	132,619	265,209
1962	18.542	35,692	61,320	101,693	297,347	454,676	1,195,502	10,063	20,947	52,779	140,015	269,465
1964 1966	19.009 19.893	37,461 40,668	64,485 69,597	106,981 114,824	310,022 337,465	474,880 520,640	1,251,444 1,384,165	10,437 11,738	21,990 24,371	56,221 59,165	145,165 154,294	280,743 304,767
1967	20.469	40,588	69,637	114,656	332,884	512,453	1,334,520	11,736	24,371	60,098	153,312	304,767
1968	21.329	40,991	69,755	114,487	335,506	517,277	1,344,025	12,227	25,022	59,232	153,734	310,588
1969	22.481	39,865	67,973	111,192	320,600	490,690	1,270,637	11,757	24,754	58,840	150,510	295,704
1970	23.807	36,851	62,389	102,642	298,085	460,289	1,201,017	11,312	22,136	53,781	135,879	275,104
1971	24.855	33,949	58,294	96,230	280,712	432,971	1,124,784	9,604	20,358	50,110	128,454	260,020
1972	25.65	35,068	59,481	97,240	279,587	426,706	1,110,920	10,655	21,723	51,653	132,467	255,651
1973	27.24	35,819	60,951	99,519	277,930	424,703	1,077,643	10,686	22,382	54,916	131,154	261,463
1974	30.237	35,080	59,645	98,174	285,468	439,485	1,131,435	10,514	21,117	51,351	131,452	266,498
1975	32.988	32,397	55,275	90,445	260,601	400,712	1,030,978	9,518	20,104	47,905	120,488	243,143
1976	34.902	33,359	56,581	92,869	266,148	407,427	1,043,742	10,137	20,294	49,549	124,870	248,349
1977	37.17	33,697	56,909	93,188	269,093	411,517	1,070,506	10,484	20,629	49,211	126,668	246,768
1978	39.995	34,097	57,535	94,542	272,007	418,080	1,087,956	10,659	20,527	50,175	125,932	250,609
1979	44.515	32,987	56,017	92,380	269,260	416,972	1,083,089	9,956	19,654	48,160	121,548	250,444
1980	50.524	32,389	54,794	89,969	255,696	395,663	1,044,577	9,983	19,618	48,537	115,728	233,434

1981	55.728	32,565	53,476	85,409	237,353	366,826	978,422	11,655	21,542	47,423	107,879	213,926
1982	59.183	33,449	55,053	88,473	256,342	401,560	1,080,930	11,845	21,633	46,505	111,124	231,715
1983	61.077	30,201	50,061	81,071	234,908	366,334	1,011,934	10,341	19,051	42,612	103,482	204,933
1984	63.704	27,686	45,255	72,708	204,471	315,068	881,334	10,117	17,801	39,768	93,874	173,503
1985	65.997	29,773	48,787	78,093	221,271	339,000	877,614	10,758	19,481	42,299	103,541	204,347
1986	67.251	31,808	52,218	84,497	256,206	415,864	993,640	11,398	19,939	41,570	96,547	271,421
1987	69.672	30,286	48,233	75,356	210,303	327,700	914,367	12,339	21,110	41,619	92,905	181,033
1988	72.529	34,909	57,667	94,117	294,492	487,291	1,530,480	12,151	21,216	44,023	101,694	226,495
1989	76.01	33,415	54,590	87,974	264,482	426,998	1,275,405	12,241	21,206	43,847	101,967	214,896
1990	80.114	31,313	51,547	83,706	258,455	421,214	1,305,307	11,079	19,387	40,018	95,697	200,189
1991	83.479	28,127	45,912	73,813	217,609	344,675	994,140	10,341	18,012	37,863	90,543	182,308
1992	85.984	27,625	45,340	73,474	219,749	355,974	1,074,135	9,910	17,206	36,906	83,524	176,435
1993	88.563	26,426	42,825	68,196	198,124	315,344	934,528	10,028	17,454	35,713	80,905	160,548
1994	90.866	26,272	42,862	68,816	205,141	325,018	943,718	9,681	16,908	34,734	85,263	170,344
1995	93.41	28,583	46,529	74,653	222,600	357,283	1,074,396	10,636	18,406	37,666	87,918	178,005

Notes: Estimates obtained from Pareto interpolation.

Table C2: Estates, Decedents and Fractile Thresholds

				Fractile TI	resholds (the	ousands of 19	98 dollars)	
Year	Decedents above 24	Decedents filing returns (%)	P98	P99	P99.5	P99.9	P99.95	P99.99
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1916	864,100	0.85	282	619	1,356	5,560	9,354	28,056
1917	901,900	0.88	272	558	1,147	4,604	7,884	22,849
1918	1,120,400	0.83	223	450	905	3,600	6,100	18,93
1919	860,200	1.23	290	580	1,120	4,421	7,479	23,56
1920	875,900	1.35	279	542	1,014	3,777	6,532	19,84
1921	800,400	1.37	316	621	1,178	4,380	7,030	18,28
1922	874,600	1.33	325	652	1,257	4,829	7,797	21,650
1923	918,300	1.33	317	636	1,234	4,790	7,715	19,74
1924	907,800	1.39	329	673	1,302	4,831	7,938	21,310
1925	949,800	1.38	315	659	1,300	4,973	8,486	23,893
1926	1,008,800	0.72	334	666	1,331	5,183	8,607	24,28
1927	976,500	0.74	325	682	1,427	5,704	9,843	28,60
1928	1,063,300	0.74	307	678	1,489	6,070	10,181	28,742
1929	1,080,300	0.78	315	712	1,580	6,820	11,497	32,18
1930	1,045,000	0.74	319	700	1,528	6,551	11,483	34,11
1931	1,055,200	0.64	305	653	1,395	5,704	9,561	26,82
1932	1,069,500	0.48	329	617	1,157	4,358	7,169	19,09
1933	1,064,800	0.93	277	583	1,231	4,690	7,930	22,10
1934	1,101,300	0.94	275	569	1,176	4,528	7,707	21,79
1935	1,109,200	1.06	335	629	1,178	4,646	7,707	21,82
1936	1,202,300	1.26	290	601	1,235	4,913	8,295	24,03
1937	1,181,800	1.32	302	598	1,175	4,305	7,330	21,19
1938	1,120,000	1.33	313	607	1,172	4,334	7,367	21,450
1939	1,154,500	1.35	325	623	1,194	4,327	7,300	21,01
1940	1,192,700	1.35	324	618	1,177	4,203	6,847	18,53
1941	1,165,500	1.44	328	620	1,161	4,079	6,740	18,64
1942	1,157,800	1.36	274	539	1,050	3,595	5,933	16,39
1943	1,258,500	1.17	354	651	1,164	3,754	6,003	15,46
1944	1,247,600	1.32	387	710	1,240	4,124	6,578	17,61
1945	1,277,100	1.49	418	776	1,337	4,342	6,892	17,65
1946	1,181,000	1.76	438	816	1,375	4,428	6,909	18,44
1947	1,256,800	1.85	403	746	1,240	3,900	6,128	17,18
1948	1,255,600	1.95	395	728	1,195	3,575	5,501	15,05
1949	1,254,800	2.06	424	762	1,243	3,661	5,553	14,49
1950	1,280,500	2.17	446	786	1,269	3,791	5,882	15,15
1953	1,358,500	2.7	501	846	1,364	4,012	6,290	17,750
1954	1,325,700	2.76	508	862	1,395	4,089	6,378	16,94
1956	1,412,400	3.29	593	1,000	1,650	5,099	8,010	22,83
1958	1,482,600	3.76	617	1,012	1,631	4,772	7,354	19,61
1960	1,538,800	4.19	673	1,116	1,820	5,421	8,501	22,324

1962	1,608,500	4.87	733	1,206	1,954	5,742	9,067	24,280
1965	1,671,800	5.82	800	1,330	2,191	6,535	10,274	27,185
1969	1,773,500	7.55	854	1,404	2,276	6,472	10,243	28,807
1972	1,818,900	9.62	868	1,401	2,257	6,605	10,264	26,466
1976	1,851,100	10.84	779	1,199	1,840	4,988	7,642	19,267
1982	1,923,800	3.29	697	1,076	1,649	4,668	6,901	18,525
1985	1,973,900	2.13	792	1,266	2,041	5,799	8,730	22,590
1986	1,991,500	2.27	842	1,360	2,164	6,173	9,516	24,704
1987	2,008,700	2.17	871	1,407	2,190	6,096	9,560	26,140
1988	2,026,300	2.26	899	1,447	2,316	6,343	9,799	26,594
1989	2,044,800	2.46	913	1,468	2,288	6,542	10,187	29,238
1990	2,066,100	2.59	894	1,409	2,136	6,211	9,895	28,639
1991	2,099,700	2.82	906	1,432	2,224	6,286	9,907	26,733
1992	2,135,200	2.82	880	1,390	2,162	6,117	9,435	26,296
1993	2,169,600	3.16	920	1,444	2,244	6,188	9,644	26,769
1994	2,202,400	3.17	897	1,414	2,216	6,052	9,456	26,601
1995	2,234,800	3.55	944	1,471	2,273	6,385	10,169	29,975
1996	2,245,500	4.01	1,001	1,560	2,427	6,881	10,972	32,368
1997	2,250,000	4.35	1,062	1,665	2,612	7,438	11,559	31,429

Notes: Number of decedents above 24 from Historical Statistics and Statistical Abstract. Thresholds obtained by Pareto interpolation.

Table C3: Average Estate in Each Fractile (in thousands of 1998 dollars)

	P99.5- P99.9- 99.9 99.95	P99.95- 99.99
	(11) (12)	(13)
	2,580 7,126	14,974
	2,104 6,002	12,484
1918 9.208 1,252 2,194 3,762 12,168 19,693 59,028 311 626	1,660 4,642	9,859
	1,996 5,680	12,111
	1,772 4,899	10,499
	2,075 5,502	10,554
	2,262 6,164	11,971
	2,232 6,070	11,510
	2,328 6,080	12,063
	2,359 6,375	13,099
	2,451 6,557	13,246
	2,634 7,381	15,282
	2,834 7,754	15,600
	3,054 8,835	17,551
	2,919 8,643	18,008
	2,617 7,249	14,736
	2,088 5,604	10,886
	2,214 5,992	12,432
	2,101 5,844	12,116
	2,162 5,991	11,980
	2,261 6,352	13,071
	2,051 5,457	11,723
	2,056 5,536	11,713
	2,082 5,532	11,642
	2,045 5,347 1,992 5,355	10,380 10,444
	1,992 5,355 1,797 4,531	9,343
	1,797 4,531 1,905 4,749	9,343 8,988
	2,057 5,150	9,956
	2,194 5,554	10,282
	2,273 5,436	10,262
	2,004 4,804	9,499
	1,890 4,360	8,237
	1,954 4,434	8,201
	2,010 4,641	8,880
	2,151 4,936	9,535
	2,187 5,021	9,656
	2,650 6,228	12,242
	2,585 5,910	11,094
	2,872 6,667	12,887
	3,075 7,089	13,749
	3,473 8,052	15,501
	3,374 7,589	14,850
1972 25.65 2,481 3,878 6,008 15,922 23,748 57,003 1,084 1,749 3	3,529 8,096	15,435

1976	24.002	2.062	2 160	4.869	12 200	20 522	E7 044	OFF	1 460	2.762	6.065	11 205
	34.902	2,062	3,168	,	13,299	20,532	57,841	955	1,468	2,762	6,065	11,205
1982	59.183	1,834	2,800	4,291	11,211	16,838	43,187	868	1,309	2,561	5,585	10,250
1985	65.997	2,241	3,498	5,417	14,087	21,231	54,627	984	1,579	3,249	6,943	12,883
1986	67.251	2,383	3,704	5,748	15,177	22,876	57,678	1,063	1,660	3,390	7,477	14,176
1987	69.672	2,446	3,804	5,892	16,119	24,907	66,196	1,087	1,716	3,335	7,330	14,585
1988	72.529	2,546	3,975	6,151	16,446	25,104	66,214	1,117	1,798	3,578	7,787	14,827
1989	76.01	2,600	4,056	6,311	17,500	27,064	72,496	1,144	1,801	3,513	7,937	15,706
1990	80.114	2,498	3,881	6,057	17,294	26,962	72,980	1,115	1,706	3,248	7,626	15,457
1991	83.479	2,482	3,840	5,926	16,076	24,399	61,329	1,124	1,754	3,389	7,754	15,167
1992	85.984	2,495	3,908	6,111	17,258	27,049	77,763	1,081	1,704	3,325	7,468	14,370
1993	88.563	2,584	4,029	6,289	17,696	27,800	80,306	1,139	1,769	3,437	7,592	14,673
1994	90.866	2,491	3,875	6,010	16,451	25,467	68,718	1,107	1,739	3,400	7,434	14,655
1995	93.41	2,687	4,203	6,609	19,194	30,473	88,234	1,170	1,798	3,462	7,916	16,033
1996	96.212	2,965	4,699	7,486	22,459	36,287	113,714	1,230	1,912	3,742	8,631	16,931
1997	98.425	2,989	4,671	7,274	20,273	31,193	86,676	1,307	2,068	4,024	9,354	17,322

Notes: Estimates obtained from Pareto interpolation.