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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 highproductivity 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 $20^{\text {th }}$ 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 19131998 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. ${ }^{1}$ 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. ${ }^{2}$ 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. ${ }^{3}$ 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. ${ }^{4}$ 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 19141945 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 $20^{\text {th }}$ 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

[^0]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. ${ }^{5}$ 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. ${ }^{6}$ 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. ${ }^{7}$ A tax 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, ${ }^{8}$ 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

[^1]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 $0.01 \%$ (P99.99100). 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. ${ }^{10}$ It is important to note that our income definition is computed before individual income taxes and individual payroll taxes but after employers' payroll taxes a nd corporate income taxes. ${ }^{11}$

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. ${ }^{12}$ 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. ${ }^{13}$ Therefore,

[^2]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 $0.5 \%{ }^{15}$ 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).

[^3]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

[^4]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 $20^{\text {th }}$ 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 P9095 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, 19381939), 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

[^5]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). ${ }^{19}$

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 $20^{\text {th }}$ 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. ${ }^{20}$ From that perspective, looking at Figures 3 and 4, the average increase in

[^6]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. ${ }^{21}$

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

[^7]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. ${ }^{22}$

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 $20^{\text {th }}$ 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;

[^8]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. ${ }^{24}$ 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.

[^9]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 1920 s 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., 19161998

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). ${ }^{25}$ Corporate taxation

[^10]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. ${ }^{26}$

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. ${ }^{27}$

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

[^11]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. ${ }^{28}$ 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. ${ }^{29}$ Therefore, the biggest fortunes have in fact substantially declined in relative terms. ${ }^{30}$ 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 $20^{\text {th }}$ 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

[^12]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. ${ }^{31}$ 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, ${ }^{32}$ 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

[^13]and corporate income tax). The very large fortunes that generate the top $0.01 \%$ incomes observed at the beginning of the $20^{\text {th }}$ century were accumulated during the $19^{\text {th }}$ century, at a time where progressive taxes hardly existed and capitalists could dispose of almost $100 \%$ of their income to consume and to accumulate. ${ }^{33}$ The conditions faced by $20^{\text {th }}$ 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

[^14]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 19131948 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 $19^{\text {th }}$ century or the end of the $20^{\text {th }}$ century are more favorable to the making of fortunes than other periods, might also be relevant. ${ }^{34}$ 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.

[^15]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, $\mathbf{t}$ 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. ${ }^{35}$ 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 esult, 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. ${ }^{36}$

[^16]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 (19411969), 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 P99.5100 or P99-99.9, 1916-1960.

Previous studies have suggested that wage inequality has been gradually decreasing during the first half of the $20^{\text {th }}$ 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. ${ }^{37}$ 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 $20^{\text {th }}$ 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

[^17]All wage shares figures display a sharp drop during the four years of WWII from 1941 to $1945 .{ }^{38}$ 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. ${ }^{39}$ 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 erms 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. ${ }^{40}$

[^18]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 $20^{\text {th }}$ 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

[^19]1998. ${ }^{42}$ While everybody acknowledges that tax reforms can have large shortterm 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. ${ }^{43}$

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 $50^{\text {th }}$ and $100^{\text {th }}$ ranked CEO, and the salary plus bonus level of the top $10^{\text {th }}$ salary and bonus earner among the top 100 CEOs. As a comparison, we also report the average wage of a fulltime 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

[^20]1986 and 1988. Large increases took place in the early 1980s and later in the 1990s.

By the end of the $20^{\text {th }}$ 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

[^21]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. ${ }^{48}$

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

[^22]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. ${ }^{49}$

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. ${ }^{50}$ 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.

[^23]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 19141945 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 $20^{\text {th }}$ 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, ${ }^{51}$ are consistent with these findings. ${ }^{52}$

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. ${ }^{53}$

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

[^24]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. ${ }^{54}$ 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 $21^{\text {st }}$ 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. ${ }^{55}$ 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

[^25]tentatively suggested hat 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 $20^{\text {th }}$ 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 $21^{\text {st }}$ 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. ${ }^{56}$ Starting in 1960, the IRS has constructed large micro-files of tax returns oversampling high incomes. These micro-files were constructed annually since $1966,{ }^{57}$ 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. ${ }^{58}$ Income fractiles are defined with respect to this total number of tax

[^26]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 $1948 .{ }^{59}$

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 1940 s (around $75-80 \%$ ). ${ }^{60}$ 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

[^27]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. ${ }^{61} 62$ For the 1913-1943 period, our total income series (excluding capital gains) is equal to exactly $80 \%$ of total personal income (minus transfers). ${ }^{63}$

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. ${ }^{64}$ 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). ${ }^{65}$

## 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), ${ }^{66}$ 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

[^28]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. ${ }^{67}$ Note however that the pattern over years is reassuringly almost identical. ${ }^{68}$

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. ${ }^{69}$ 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 $\$ 51,000 .{ }^{70}$ 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)).

[^29]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 19961998). ${ }^{71}$ 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 $0.1 \%$ ). ${ }^{72}$
(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. ${ }^{73}$ We have done

[^30]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. ${ }^{74}$
(iii) The 1913-1965 and 1996-1998 raw series obtained from Pareto interpolation were corrected in various ways. First, the raw series were adjusted upwards in order to include net income deductions (19131943) 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. ${ }^{75}$
(iv) Next, and most importantly, corrections need to be made to the 19131965 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). ${ }^{76}$ In order to compute

[^31]"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. ${ }^{77}$ 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 AGl 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. ${ }^{79}$ 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 19341965, one cannot simply add to the raw series the excluded amount of

[^32]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. ${ }^{80}$ Entrepreneurial income includes business, farm, partnerships and small corporations (S corporations) income. Dividends include general dividends and dividends received through partnerships and fiduciaries. ${ }^{81}$ Interest includes taxable interest only. ${ }^{82}$ Rents include rents, royalties and fiduciary income. We

[^33]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 19961998 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. ${ }^{84}$ 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

[^34]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. ${ }^{85}$ Military wages and workers form a substantial part of total wages and workers from 1943 to $1945 .{ }^{86}$ 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

[^35]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 $1941^{87}$, 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. ${ }^{88}$

[^36]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 wage 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. ${ }^{89}$

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 ${ }^{90}$ 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. ${ }^{91}$

[^37]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 $1998 .{ }^{92}$

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. ${ }^{93}$ 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 $\mathrm{F}(\mathrm{y})=1-(\mathrm{k} / \mathrm{y})^{\mathrm{a}}$. 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 q the fraction of tax returns above $\mathrm{t} .{ }^{95}$ Note that the Pareto parameters k and a may vary from bracket to bracket. We then estimate the amount reported in bracket [ $\mathrm{s}, \mathrm{t}$ ] simply as $\mathrm{Y}=\mathrm{N} \int_{s}{ }^{t} \mathrm{ydF}(\mathrm{y})$, 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.

[^38]Insert Table B2: shares of total wages and salaries obtained by the fractiles, P90100,... 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, P90100,... 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 $f(\mathrm{w})$ and that we add (or substract) a new distribution $\mathrm{g}(\mathrm{w})$ to the former distribution. The new distribution $\mathrm{g}(\mathrm{w})$ 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 $\mathrm{g}(\mathrm{w})$ 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 $\mathrm{b}=\mathrm{a} /(\mathrm{a}-1)$. 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 $\mathrm{g}(\mathrm{w})$. 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 $\mathrm{g}(\mathrm{w})$, then introducing $\mathrm{g}(\mathrm{w})$ 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

[^39]constant from 1935 to 1936 by bracket. ${ }^{97}$ 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

[^40]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 bequests 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


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


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


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


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


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


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, 1960


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)

Figure 18: CEOs Pay versus Average Salary, 1970-1999


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


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


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 <br> (1) | Income level (2) | Fractiles (3) | Number of tax units <br> (4) | Average Income <br> (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 <br> units | Salaried <br> Professions <br> $(1)$ | Independent <br> Professions <br> $(2)$ | Business <br> Owners | Capitalists <br> and Rentiers |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 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 (excluding capital gains) |  | Income (including 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 | CPI |
|  | (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 | 1,287,076 | 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 |
| 1954 | 64,928 | 56,747 | 87.4 | 1,410,249 | 21,720 | 1,442,894 | 22,223 | 6.0662 |
| 1955 | 65,589 | 58,250 | 88.8 | 1,522,936 | 23,219 | 1,572,885 | 23,981 | 6.0906 |
| 1956 | 66,257 | 59,197 | 89.3 | 1,618,317 | 24,425 | 1,660,359 | 25,059 | 6.0006 |
| 1957 | 66,947 | 59,825 | 89.4 | 1,642,054 | 24,528 | 1,673,521 | 24,998 | 5.7921 |
| 1958 | 67,546 | 59,085 | 87.5 | 1,606,426 | 23,783 | 1,642,886 | 24,322 | 5.6398 |
| 1959 | 68,144 | 60,272 | 88.4 | 1,716,246 | 25,186 | 1,769,884 | 25,973 | 5.5950 |
| 1960 | 68,681 | 61,028 | 88.9 | 1,751,368 | 25,500 | 1,797,766 | 26,176 | 5.5069 |



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 | P99.9-100 | 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 |  |  | 18.57 | 15.60 | 9.87 | 4.40 |  |  | 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 | 21.26 | 8.83 | 5.94 | 2.29 | 0.64 | 10.85 | 12.43 | 2.89 | 3.65 | 1.65 |
| 1959 | 32.03 | 21.02 | 8.75 | 5.90 | 2.19 | 0.62 | 11.01 | 12.28 | 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 | 32.85 | 22.14 | 9.58 | 6.68 | 2.68 | 0.78 | 10.71 | 12.56 | 2.90 | 4.00 | 1.90 |


| 1960 | 32.39 | 21.43 | 9.07 | 6.19 | 2.54 | 0.76 | 10.96 | 12.36 | 2.88 | 3.65 | 1.77 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 | 10.96 | 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 | 2.89 | 3.62 | 1.69 |
| 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 | 10.85 | 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 | 10.95 | 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 | 21.58 | 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 | 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 | 13.08 | 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 | 13.11 | 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 | 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 | 11.72 | 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 |
| 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 |  |  | 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 | 12.75 | 15.62 | 3.99 | 5.90 | 3.70 |
| 1939 | 45.58 | 32.32 | 16.20 | 12.07 | 5.88 | 1.97 | 13.26 | 16.13 | 4.12 | 6.19 | 3.91 |
| 1940 | 45.35 | 32.26 | 16.50 | 12.35 | 6.01 | 2.05 | 13.09 | 15.76 | 4.15 | 6.34 | 3.97 |
| 1941 | 41.96 | 30.03 | 15.81 | 11.88 | 5.81 | 1.98 | 11.93 | 14.22 | 3.93 | 6.06 | 3.83 |
| 1942 | 36.15 | 25.82 | 13.44 | 10.07 | 4.82 | 1.55 | 10.33 | 12.38 | 3.36 | 5.26 | 3.27 |
| 1943 | 33.74 | 24.12 | 12.33 | 9.16 | 4.27 | 1.24 | 9.62 | 11.79 | 3.17 | 4.89 | 3.03 |
| 1944 | 32.56 | 22.80 | 11.30 | 8.27 | 3.76 | 1.17 | 9.76 | 11.50 | 3.03 | 4.51 | 2.60 |
| 1945 | 34.61 | 24.93 | 12.58 | 9.19 | 4.18 | 1.27 | 9.68 | 12.34 | 3.40 | 5.01 | 2.91 |
| 1946 | 37.08 | 27.04 | 13.41 | 9.71 | 4.44 | 1.49 | 10.04 | 13.63 | 3.70 | 5.27 | 2.95 |
| 1947 | 34.61 | 24.87 | 12.05 | 8.68 | 3.95 | 1.31 | 9.74 | 12.82 | 3.37 | 4.73 | 2.63 |
| 1948 | 35.21 | 25.20 | 12.31 | 8.95 | 4.08 | 1.31 | 10.02 | 12.89 | 3.36 | 4.87 | 2.77 |
| 1949 | 34.90 | 24.61 | 11.78 | 8.51 | 3.85 | 1.25 | 10.29 | 12.83 | 3.26 | 4.66 | 2.60 |
| 1950 | 35.76 | 25.67 | 12.89 | 9.42 | 4.41 | 1.23 | 10.09 | 12.78 | 3.47 | 5.01 | 3.19 |
| 1951 | 34.44 | 24.36 | 11.86 | 8.58 | 3.92 | 1.29 | 10.08 | 12.49 | 3.28 | 4.67 | 2.63 |
| 1952 | 33.38 | 23.19 | 10.85 | 7.78 | 3.45 | 1.09 | 10.20 | 12.34 | 3.07 | 4.33 | 2.35 |
| 1953 | 32.44 | 22.10 | 9.94 | 7.05 | 3.07 | 0.97 | 10.34 | 12.16 | 2.89 | 3.98 | 2.10 |
| 1954 | 33.81 | 23.42 | 10.83 | 7.75 | 3.51 | 1.17 | 10.39 | 12.59 | 3.08 | 4.24 | 2.33 |
| 1955 | 34.09 | 23.70 | 11.11 | 8.00 | 3.73 | 1.32 | 10.39 | 12.60 | 3.11 | 4.27 | 2.41 |
| 1956 | 33.69 | 23.28 | 10.74 | 7.76 | 3.51 | 1.21 | 10.40 | 12.54 | 2.99 | 4.25 | 2.30 |
| 1957 | 33.16 | 22.72 | 10.21 | 7.27 | 3.20 | 1.06 | 10.44 | 12.51 | 2.95 | 4.07 | 2.14 |
| 1958 | 33.80 | 23.09 | 10.28 | 7.32 | 3.24 | 1.09 | 10.71 | 12.81 | 2.96 | 4.08 | 2.15 |
| 1959 | 34.31 | 23.60 | 10.74 | 7.79 | 3.48 | 1.20 | 10.71 | 12.86 | 2.96 | 4.30 | 2.28 |


| 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 |

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 <br> (1) | P95-100 <br> (2) | P99-100 <br> (3) | P99.5-100 <br> (4) | P99.9-100 <br> (5) | P99.99-100 <br> (6) | P0-90 <br> (7) | P90-95 <br> (8) | P95-99 <br> (9) | P99-99.5 <br> (10) | P99.5-99.9 <br> (11) | $\begin{gathered} \text { P99.9-99.99 } \\ (12) \\ \hline \end{gathered}$ | $\begin{array}{r} \mathrm{P} 90 \\ (13) \\ \hline \end{array}$ | $\begin{aligned} & \text { P95 } \\ & (14) \\ & \hline \end{aligned}$ | $\begin{array}{r} \text { P99 } \\ (15) \\ \hline \end{array}$ | $\begin{gathered} \text { P99.5 } \\ (16) \\ \hline \end{gathered}$ | $\begin{array}{r} \text { P99.9 } \\ (17) \\ \hline \end{array}$ | P99.99 <br> (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 |  |  | 240,727 | 404,481 | 1,278,810 | 5,709,276 |  |  |  | 76,974 | 185,898 | 786,536 |  |  | 58,073 | 103,766 | 389,454 | 2,132,941 |
| 1917 | 53,194 | 80,106 | 232,380 | 375,891 | 1,103,559 | 4,397,886 | 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 | 48,324 | 71,744 | 194,213 | 299,481 | 789,950 | 2,717,474 | 8,570 | 24,905 | 41,126 | 88,945 | 176,864 | 575,780 | 20,995 | 28,997 | 72,745 | 113,139 | 360,773 | 1,283,974 |
| 1920 | 41,599 | 59,983 | 157,866 | 239,178 | 586,460 | 1,825,117 | 7,812 | 23,214 | 35,512 | 76,553 | 152,358 | 448,832 | 21,312 | 25,815 | 62,440 | 99,723 | 285,685 | 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 | 273,931 | 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 | 201,061 | 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 | 380,660 | 1,027,432 | 4,045,542 | 7,861 | 28,400 | 47,576 | 110,970 | 218,967 | 692,087 | 26,006 | 34,224 | 87,686 | 133,040 | 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 | 117,197 | 313,235 | 1,116,632 |
| 1931 | 47,734 | 66,674 | 164,154 | 243,453 | 610,059 | 2,229,924 | 6,939 | 28,794 | 42,304 | 84,854 | 151,802 | 430,074 | 24,726 | 31,026 | 70,737 | 104,267 | 261,092 | 920,491 |
| 1932 | 41,861 | 58,932 | 139,944 | 208,833 | 533,089 | 1,741,772 | 5,646 | 24,790 | 38,679 | 71,055 | 127,769 | 398,791 | 16,959 | 28,964 | 60,513 | 86,906 | 229,132 | 864,175 |
| 1933 | 39,648 | 57,211 | 138,869 | 207,432 | 533,122 | 1,800,367 | 5,623 | 22,084 | 36,797 | 70,306 | 126,010 | 392,317 | 16,495 | 26,601 | 58,862 | 84,551 | 221,423 | 828,859 |
| 1934 | 43,671 | 63,820 | 153,466 | 228,165 | 563,225 | 1,858,718 | 6,162 | 23,521 | 41,409 | 78,767 | 144,400 | 419,281 | 19,985 | 28,327 | 65,510 | 96,834 | 261,804 | 891,393 |
| 1935 | 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 | 101,204 | 274,516 | 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 | 122,542 | 343,515 | 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 | 117,092 | 304,936 | 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 | 111,582 | 211,730 | 587,893 | 31,845 | 39,320 | 91,231 | 141,724 | 373,737 | 1,162,833 |
| 1942 | 59,606 | 84,329 | 216,730 | 322,272 | 751,867 | 2,219,623 | 12,514 | 34,887 | 51,229 | 111,188 | 214,873 | 588,783 | 32,398 | 39,300 | 90,203 | 141,814 | 374,674 | 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 | 225,541 | 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 | 219,878 | 549,231 | 36,124 | 42,839 | 99,184 | 150,115 | 367,484 | 1,019,490 |
| 1945 | 65,621 | 92,079 | 222,548 | 316,351 | 667,143 | 1,698,405 | 15,602 | 39,162 | 59,461 | 128,745 | 228,653 | 552,558 | 34,801 | 42,460 | 105,888 | 161,915 | 365,112 | 891,986 |
| 1946 | 65,858 | 93,823 | 223,781 | 315,084 | 652,963 | 1,743,426 | 14,350 | 37,893 | 61,334 | 132,478 | 230,614 | 531,801 | 33,926 | 43,385 | 109,383 | 163,343 | 364,261 | 883,203 |
| 1947 | 60,280 | 85,077 | 199,986 | 281,434 | 590,747 | 1,648,430 | 14,095 | 35,484 | 56,349 | 118,538 | 204,106 | 473,227 | 31,380 | 39,571 | 98,311 | 145,543 | 321,736 | 826,231 |
| 1948 | 62,651 | 88,051 | 209,387 | 298,237 | 638,598 | 1,772,191 | 13,683 | 37,250 | 57,717 | 120,536 | 213,147 | 512,643 | 33,009 | 43,108 | 100,187 | 150,776 | 343,528 | 930,074 |
| 1949 | 61,965 | 86,119 | 200,892 | 285,204 | 612,389 | 1,751,653 | 13,507 | 37,811 | 57,425 | 116,579 | 203,408 | 485,805 | 33,563 | 43,898 | 96,557 | 142,989 | 327,185 | 898,553 |
| 1950 | 67,096 | 94,575 | 225,035 | 322,311 | 699,626 | 1,638,040 | 14,555 | 39,618 | 61,960 | 127,759 | 227,982 | 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 | 126,855 | 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 | 124,268 | 213,319 | 470,358 | 39,648 | 48,695 | 105,660 | 155,756 | 323,512 | 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 | 221,947 | 300,131 | 582,021 | 1,663,700 | 18,507 | 51,089 | 74,865 | 143,763 | 229,659 | 461,835 | 45,701 | 57,176 | 121,414 | 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 | 228,156 | 462,223 | 46,702 | 57,994 | 120,167 | 165,126 | 330,365 | 792,157 |
| 1958 | 76,372 | 101,124 | 210,086 | 282,646 | 545,274 | 1,527,890 | 17,939 | 51,619 | 73,884 | 137,526 | 216,989 | 436,094 | 46,717 | 58,261 | 116,940 | 158,017 | 311,843 | 747,823 |
| 1959 | 80,678 | 105,905 | 220,320 | 297,208 | 551,886 | 1,551,880 | 19,020 | 55,451 | 77,301 | 143,433 | 233,538 | 440,775 | 49,408 | 62,513 | 124,779 | 175,437 | 318,651 | 733,247 |
| 1960 | 80,727 | 104,609 | 213,093 | 281,570 | 534,597 | 1,520,754 | 19,364 | 56,844 | 77,488 | 144,616 | 218,314 | 425,024 | 50,306 | 57,644 | 123,683 | 162,661 | 305,156 | 719,530 |
| 1961 | 82,298 | 107,887 | 215,124 | 279,139 | 529,812 | 1,514,657 | 19,524 | 56,709 | 81,077 | 151,109 | 216,471 | 420,385 | 50,635 | 63,121 | 127,497 | 159,023 | 296,135 | 704,831 |
| 1962 | 85,491 | 111,748 | 220,737 | 288,093 | 529,351 | 1,498,372 | 20,145 | 59,234 | 84,501 | 153,381 | 227,778 | 421,682 | 53,449 | 65,505 | 131,298 | 170,912 | 308,900 | 696,485 |
| 1963 | 87,608 | 114,377 | 223,441 | 291,740 | 537,412 | 1,554,586 | 20,676 | 60,840 | 87,111 | 155,143 | 230,322 | 424,393 | 55,189 | 68,350 | 132,857 | 173,048 | 313,339 | 710,669 |


| 1964 | 90,741 | 118,293 | 230,033 | 305,910 | 564,700 | 1,523,722 | 21,784 | 63,189 | 90,358 | 154,155 | 241,213 | 458,142 | 57,584 | 68,945 | 133,598 | 180,361 | 319,904 | 684,938 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1965 | 94,014 | 123,489 | 240,568 | 323,454 | 607,661 | 1,604,370 | 22,697 | 64,539 | 94,219 | 157,682 | 252,402 | 496,916 | 59,244 | 72,450 | 136,102 | 188,616 | 328,910 | 690,821 |
| 1966 | 99,577 | 130,721 | 260,551 | 347,816 | 670,721 | 1,877,327 | 23,531 | 68,433 | 98,264 | 173,285 | 267,090 | 536,653 | 61,813 | 76,309 | 147,968 | 203,777 | 367,709 | 853,083 |
| 1967 | 102,400 | 134,675 | 269,226 | 359,761 | 690,215 | 1,905,987 | 24,127 | 70,126 | 101,037 | 178,691 | 277,148 | 555,129 | 62,913 | 77,945 | 152,922 | 208,670 | 376,595 | 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 | 193,288 | 472,145 | 714,553 | 1,869,572 | 7,137,735 | 24,455 | 83,761 | 123,573 | 229,738 | 425,798 | 1,284,221 | 73,991 | 94,223 | 190,373 | 276,846 | 719,426 | 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 | 196,582 | 466,325 | 690,056 | 1,727,194 | 6,303,220 | 23,240 | 84,517 | 129,147 | 242,594 | 430,771 | 1,218,747 | 73,873 | 96,810 | 202,114 | 290,478 | 695,526 | 2,711,017 |
| 1996 | 146,103 | 206,699 | 494,356 | 726,261 | 1,895,593 | 7,493,507 | 23,413 | 85,508 | 134,785 | 262,450 | 433,929 | 1,273,602 | 73,841 | 98,957 | 218,252 | 283,184 | 699,164 | 2,977,409 |
| 1997 | 152,819 | 216,953 | 530,521 | 799,596 | 2,123,578 | 8,662,845 | 24,182 | 88,685 | 138,562 | 261,446 | 468,601 | 1,396,993 | 77,122 | 101,911 | 222,942 | 302,432 | 756,554 | 3,328,163 |
| 1998 | 160,535 | 227,903 | 564,927 | 863,171 | 2,339,901 | 9,969,663 | 25,206 | 93,167 | 143,647 | 266,684 | 493,988 | 1,492,150 | 81,687 | 107,390 | 230,204 | 316,107 | 790,379 | 3,620,511 |

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 <br> (1) | P95-100 <br> (2) | P99-100 <br> (3) | P99.5-100 <br> (4) | P99.9-100 <br> (5) | P99.99-100 <br> (6) | P0-90 <br> (7) | P90-95 <br> (8) | P95-99 <br> (9) | P99-99.5 <br> (10) | P99.5-99.9 <br> (11) | P99.9-99.99 <br> (12) | $\begin{array}{r} \text { P90 } \\ (13) \\ \hline \end{array}$ | $\begin{array}{r} \text { P95 } \\ (14) \\ \hline \end{array}$ | $\begin{array}{r} \text { P99 } \\ (15) \\ \hline \end{array}$ | $\begin{aligned} & \text { P99.5 } \\ & (16) \end{aligned}$ | $\begin{gathered} \text { P99.9 } \\ (17) \\ \hline \end{gathered}$ | P99.99 <br> (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 | 109,590 | 222,517 | 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 | 109,961 | 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 | 228,777 | 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 | 118,382 | 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 | 48,252 | 67,584 | 167,301 | 248,714 | 627,127 | 2,316,601 | 7,002 | 28,920 | 42,655 | 85,887 | 154,111 | 439,408 | 24,834 | 31,283 | 71,598 | 105,853 | 266,759 | 956,270 |
| 1932 | 42,065 | 59,273 | 141,207 | 211,139 | 540,408 | 1,767,786 | 5,656 | 24,857 | 38,789 | 71,275 | 128,822 | 404,033 | 17,005 | 29,046 | 60,701 | 87,623 | 232,143 | 877,082 |
| 1933 | 40,443 | 58,668 | 144,090 | 216,502 | 563,158 | 1,918,738 | 5,687 | 22,218 | 37,313 | 71,677 | 129,838 | 412,538 | 16,595 | 26,974 | 60,009 | 87,119 | 232,836 | 883,355 |
| 1934 | 44,141 | 64,700 | 156,351 | 232,959 | 575,802 | 1,889,702 | 6,212 | 23,581 | 41,788 | 79,744 | 147,248 | 429,813 | 20,036 | 28,586 | 66,322 | 98,744 | 268,380 | 906,252 |
| 1935 | 46,535 | 66,987 | 170,642 | 255,941 | 637,375 | 2,111,161 | 6,976 | 26,083 | 41,074 | 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 | 205,848 | 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 | 102,881 | 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 | 113,889 | 216,357 | 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 | 124,466 | 227,354 | 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 | 136,710 | 244,852 | 609,974 | 35,426 | 44,505 | 112,439 | 173,386 | 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 | 141,809 | 246,509 | 588,504 | 35,243 | 46,263 | 117,088 | 174,601 | 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 | 158,455 | 335,346 | 838,251 |
| 1954 | 72,673 | 99,189 | 221,485 | 309,182 | 646,516 | 1,851,053 | 16,617 | 46,156 | 68,616 | 133,788 | 224,848 | 512,678 | 41,329 | 52,043 | 113,925 | 164,364 | 357,616 | 906,930 |
| 1955 | 78,332 | 106,992 | 239,066 | 333,406 | 706,386 | 2,124,097 | 17,942 | 49,671 | 73,974 | 144,727 | 240,161 | 548,862 | 45,146 | 57,249 | 122,221 | 176,478 | 378,806 | 981,038 |
| 1956 | 81,326 | 110,611 | 244,285 | 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 | 179,446 | 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 | 242,234 | 528,479 | 47,170 | 59,648 | 123,108 | 175,315 | 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 | 194,912 | 396,743 | 959,645 |
| 1960 | 84,788 | 112,203 | 237,368 | 324,202 | 664,415 | 1,999,585 | 19,663 | 57,374 | 80,911 | 150,535 | 239,149 | 516,063 | 50,775 | 60,190 | 128,745 | 178,184 | 370,520 | 946,084 |
| 1961 | 87,864 | 117,830 | 249,432 | 340,800 | 715,617 | 2,203,353 | 19,959 | 57,897 | 84,930 | 158,064 | 247,095 | 550,312 | 51,696 | 66,120 | 133,365 | 181,520 | 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 | 157,591 | 249,043 | 521,935 | 54,073 | 67,443 | 134,902 | 186,868 | 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 | 254,112 | 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 | 205,040 | 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 | 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 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 | 110,398 | 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 | 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 | 2,079,731 |
| 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 | 318,864 | 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 | 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 | 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 |
| 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 <br> (1) | P95-100 <br> (2) | P99-100 <br> (3) | P99.5-100 <br> (4) | P99.9-100 (5) | P99.99-100 <br> (6) | P0-90 | P90-95 <br> (8) | P95-99 <br> (9) | P99-99.5 <br> (10) | P99.5-99.9 <br> (11) | $\begin{gathered} \text { P99.9-99.99 } \\ (12) \\ \hline \end{gathered}$ | $\begin{array}{r} \text { P90 } \\ (13) \\ \hline \end{array}$ | $\begin{aligned} & \text { P95 } \\ & \text { (14) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { P99 } \\ & (15) \\ & \hline \end{aligned}$ | $\begin{gathered} \text { P99.5 } \\ (16) \\ \hline \end{gathered}$ | $\begin{array}{r} \text { P99.9 } \\ (17) \\ \hline \end{array}$ | P99.99 <br> (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 | 1,384,632 | 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 | 1,089,670 | 4,232,489 | 7,894 | 29,005 | 47,188 | 112,084 | 234,477 | 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 | 226,313 | 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 | 4,875,010 | 7,976 | 28,509 | 47,611 | 115,002 | 238,380 | 793,515 | 26,108 | 34,728 | 91,725 | 149,326 | 456,165 | 1,988,850 |
| 1928 | 67,345 | 105,382 | 327,104 | 530,112 | 1,576,876 | 6,865,180 | 7,951 | 29,308 | 49,951 | 124,097 | 268,421 | 989,286 | 26,837 | 35,933 | 98,059 | 163,088 | 539,665 | 2,672,313 |
| 1929 | 65,808 | 102,800 | 314,925 | 509,071 | 1,537,608 | 7,030,686 | 8,618 | 28,816 | 49,769 | 120,780 | 251,937 | 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 | 38,816 | 71,370 | 128,241 | 401,250 | 17,010 | 29,067 | 60,782 | 87,228 | 230,544 | 895,606 |
| 1933 | 40,831 | 59,430 | 147,381 | 223,214 | 591,749 | 2,099,020 | 5,644 | 22,233 | 37,442 | 71,549 | 131,080 | 424,274 | 16,606 | 27,067 | 59,902 | 87,952 | 239,460 | 966,354 |
| 1934 | 44,736 | 65,885 | 160,220 | 240,277 | 598,893 | 2,025,825 | 6,146 | 23,588 | 42,301 | 80,162 | 150,623 | 440,345 | 20,041 | 28,937 | 66,670 | 101,007 | 274,956 | 971,533 |
| 1935 | 47,549 | 69,004 | 178,215 | 270,035 | 683,125 | 2,338,196 | 6,863 | 26,095 | 41,701 | 86,395 | 166,762 | 499,228 | 22,050 | 32,296 | 71,569 | 109,757 | 305,898 | 1,114,973 |
| 1936 | 55,511 | 82,536 | 229,796 | 354,037 | 901,307 | 3,022,435 | 7,353 | 28,486 | 45,721 | 105,556 | 217,219 | 665,626 | 24,238 | 35,800 | 86,024 | 138,093 | 404,553 | 1,472,350 |
| 1937 | 53,960 | 78,733 | 209,214 | 317,765 | 792,294 | 2,652,643 | 7,882 | 29,188 | 46,112 | 100,663 | 199,132 | 585,588 | 25,410 | 34,568 | 82,733 | 129,492 | 362,329 | 1,280,201 |
| 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 | 103,800 | 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 | 221,614 | 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 | 222,300 | 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 | 124,561 | 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 | 126,065 | 234,638 | 600,276 | 36,455 | 44,447 | 103,564 | 160,192 | 401,637 | 1,301,935 |
| 1945 | 71,401 | 102,859 | 259,605 | 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 | 121,594 | 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 | 101,625 | 247,483 | 358,154 | 816,833 | 2,689,746 | 15,198 | 42,062 | 65,161 | 136,812 | 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 | 131,547 | 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 | 221,852 | 519,067 | 41,239 | 51,750 | 110,354 | 163,960 | 360,002 | 1,084,111 |
| 1954 | 75,136 | 104,085 | 240,660 | 344,578 | 779,803 | 2,610,747 | 16,344 | 46,188 | 69,941 | 136,741 | 235,772 | 576,365 | 41,358 | 53,048 | 116,439 | 172,350 | 402,041 | 1,279,145 |
| 1955 | 81,757 | 113,687 | 266,378 | 383,631 | 894,942 | 3,171,561 | 17,561 | 49,827 | 75,514 | 149,124 | 255,804 | 641,984 | 45,287 | 58,441 | 125,935 | 187,973 | 443,075 | 1,464,821 |
| 1956 | 84,418 | 116,688 | 269,233 | 388,714 | 879,519 | 3,021,297 | 18,464 | 52,147 | 78,552 | 149,753 | 266,012 | 641,544 | 46,647 | 59,992 | 126,473 | 191,011 | 452,889 | 1,413,697 |
| 1957 | 82,882 | 113,585 | 255,288 | 363,246 | 799,788 | 2,645,265 | 18,566 | 52,179 | 78,159 | 147,330 | 254,110 | 594,735 | 47,221 | 60,662 | 124,368 | 183,911 | 425,075 | 1,288,429 |
| 1958 | 82,222 | 112,335 | 250,029 | 356,128 | 788,482 | 2,649,460 | 17,889 | 52,108 | 77,912 | 143,930 | 248,039 | 581,707 | 47,159 | 61,438 | 122,385 | 180,628 | 415,968 | 1,296,774 |
| 1959 | 89,111 | 122,593 | 279,032 | 404,405 | 904,073 | 3,129,379 | 18,957 | 55,630 | 83,483 | 153,659 | 279,487 | 656,817 | 49,567 | 67,512 | 133,676 | 209,954 | 474,835 | 1,478,599 |
| 1960 | 88,184 | 118,936 | 264,344 | 375,616 | 855,906 | 3,095,137 | 19,286 | 57,433 | 82,584 | 153,072 | 255,544 | 607,102 | 50,827 | 61,435 | 130,914 | 190,400 | 435,884 | 1,464,434 |
| 1961 | 92,426 | 126,822 | 287,105 | 413,165 | 985,185 | 3,729,687 | 19,452 | 58,029 | 86,752 | 161,045 | 270,160 | 680,240 | 51,814 | 67,539 | 135,879 | 198,464 | 479,187 | 1,735,572 |
| 1962 | 92,801 | 125,600 | 273,987 | 388,580 | 879,598 | 3,196,292 | 20,064 | 60,003 | 88,503 | 159,395 | 265,825 | 622,187 | 54,142 | 68,607 | 136,446 | 199,460 | 455,778 | 1,485,725 |
| 1963 | 95,654 | 129,355 | 280,765 | 396,254 | 890,695 | 3,245,501 | 20,592 | 61,954 | 91,503 | 165,275 | 272,644 | 629,049 | 56,200 | 71,797 | 141,534 | 204,846 | 464,442 | 1,483,660 |
| 1964 | 102,650 | 140,161 | 312,487 | 440,457 | 1,005,671 | 3,883,060 | 21,565 | 65,138 | 97,080 | 184,517 | 299,153 | 685,961 | 59,360 | 74,074 | 159,910 | 223,685 | 478,983 | 1,745,499 |


| 1965 | 108,683 | 149,217 | 340,348 | 482,781 | 1,142,152 | 4,653,895 | 22,467 | 68,149 | 101,434 | 197,916 | 317,938 | 751,958 | 62,558 | 998 | 170,829 | 237,590 | 723 | 2,003,905 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1966 | 109,330 | 148,839 | 330,383 | 468,785 | 1,099,176 | 4,188,135 | 23,552 | 69,822 | 103,453 | 191,980 | 311,187 | 755,958 | 63,067 | 80,339 | 163,932 | 237,420 | 517,974 | 1,903,145 |
| 1967 | 116,108 | 159,794 | 361,949 | 517,417 | 1,239,473 | 4,774,332 | 24,157 | 72,422 | 109,256 | 206,481 | 336,903 | 846,711 | 64,973 | 84,285 | 176,705 | 253,661 | 574,402 | 2,197,287 |
| 1968 | 122,624 | 169,969 | 394,568 | 572,806 | 1,415,602 | 5,682,763 | 24,983 | 75,278 | 113,819 | 216,330 | 362,107 | 941,473 | 67,825 | 88,020 | 186,422 | 268,913 | 637,131 | 2,515,933 |
| 1969 | 119,350 | 162,400 | 364,124 | 523,826 | 1,299,293 | 5,481,013 | 25,413 | 76,299 | 111,970 | 204,421 | 329,960 | 834,657 | 68,867 | 87,999 | 175,832 | 252,030 | 564,358 | 2,329,755 |
| 1970 | 112,878 | 149,890 | 312,242 | 432,526 | 960,167 | 3,446,745 | 25,614 | 75,866 | 109,303 | 191,958 | 300,615 | 683,881 | 68,456 | 86,792 | 166,188 | 231,594 | 484,163 | 1,635,371 |
| 1971 | 116,131 | 155,072 | 327,422 | 457,303 | 1,040,797 | 3,879,687 | 25,455 | 77,191 | 111,984 | 197,542 | 311,429 | 725,365 | 69,460 | 88,952 | 172,165 | 239,028 | 507,873 | 1,797,350 |
| 1972 | 122,727 | 164,570 | 352,172 | 495,502 | 1,142,213 | 4,305,112 | 26,588 | 80,883 | 117,669 | 208,842 | 333,825 | 790,779 | 73,086 | 93,509 | 182,118 | 257,007 | 551,838 | 1,970,978 |
| 1973 | 123,758 | 164,950 | 340,184 | 468,099 | 1,024,765 | 3,495,215 | 27,055 | 82,566 | 121,141 | 212,269 | 328,932 | 750,270 | 74,232 | 95,607 | 186,049 | 254,187 | 530,562 | 1,763,635 |
| 1974 | 118,780 | 157,746 | 325,308 | 449,808 | 972,894 | 3,134,015 | 26,031 | 79,814 | 115,855 | 200,808 | 319,037 | 732,770 | 72,002 | 93,355 | 175,463 | 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 | 115,632 | 155,984 | 353,317 | 521,348 | 1,366,615 | 5,674,229 | 23,184 | 75,281 | 106,650 | 185,286 | 310,031 | 887,991 | 67,926 | 86,186 | 160,907 | 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 | 110,498 | 194,442 | 333,218 | 1,010,800 | 69,065 | 88,829 | 168,782 | 242,133 | 633,889 | 2,783,216 |
| 1984 | 126,475 | 174,115 | 412,774 | 622,408 | 1,714,915 | 7,414,291 | 23,714 | 78,834 | 114,450 | 203,140 | 349,282 | 1,081,651 | 70,741 | 91,881 | 176,413 | 251,097 | 655,922 | 3,234,220 |
| 1985 | 132,730 | 184,582 | 447,688 | 680,256 | 1,879,254 | 7,902,090 | 23,983 | 80,879 | 118,805 | 215,121 | 380,507 | 1,210,050 | 72,307 | 95,027 | 187,337 | 266,754 | 752,127 | 3,450,777 |
| 1986 | 153,717 | 223,128 | 602,212 | 955,093 | 2,798,947 | 12,653,584 | 24,149 | 84,305 | 128,358 | 249,330 | 494,130 | 1,703,987 | 75,205 | 101,501 | 213,236 | 344,063 | 961,342 | 5,207,553 |
| 1987 | 138,018 | 191,542 | 456,940 | 681,931 | 1,767,917 | 6,884,694 | 24,446 | 84,493 | 125,193 | 231,949 | 410,435 | 1,199,386 | 74,967 | 97,006 | 196,304 | 284,663 | 716,735 | 2,911,917 |
| 1988 | 153,308 | 221,040 | 584,623 | 912,514 | 2,565,535 | 10,801,574 | 24,664 | 85,575 | 130,144 | 256,732 | 499,259 | 1,650,420 | 75,594 | 99,233 | 212,742 | 324,609 | 924,572 | 4,284,059 |
| 1989 | 149,355 | 212,738 | 539,765 | 825,602 | 2,235,379 | 9,146,195 | 24,540 | 85,971 | 130,981 | 253,928 | 473,157 | 1,467,511 | 75,689 | 100,012 | 211,159 | 319,722 | 850,603 | 3,679,715 |
| 1990 | 145,460 | 206,723 | 521,413 | 796,459 | 2,119,368 | 8,491,008 | 24,062 | 84,196 | 128,050 | 246,367 | 465,732 | 1,411,408 | 74,190 | 97,550 | 204,480 | 310,124 | 825,359 | 3,479,441 |
| 1991 | 138,951 | 194,821 | 469,456 | 701,734 | 1,800,011 | 6,876,434 | 23,484 | 83,082 | 126,162 | 237,178 | 427,164 | 1,235,964 | 73,801 | 97,903 | 197,203 | 294,775 | 741,732 | 2,986,283 |
| 1992 | 144,704 | 206,052 | 520,039 | 793,948 | 2,137,994 | 8,730,913 | 23,110 | 83,357 | 127,555 | 246,129 | 457,937 | 1,405,447 | 73,340 | 96,569 | 204,342 | 310,036 | 811,377 | 3,577,153 |
| 1993 | 142,063 | 201,357 | 497,123 | 752,600 | 2,001,037 | 8,094,060 | 22,767 | 82,769 | 127,415 | 241,645 | 440,491 | 1,324,034 | 72,976 | 96,237 | 203,876 | 299,428 | 771,946 | 3,302,148 |
| 1994 | 144,101 | 204,181 | 502,877 | 758,577 | 2,015,475 | 8,108,346 | 23,037 | 84,021 | 129,506 | 247,178 | 444,352 | 1,338,490 | 73,728 | 98,004 | 208,080 | 304,228 | 783,856 | 3,366,847 |
| 1995 | 151,369 | 216,506 | 545,180 | 829,287 | 2,230,309 | 8,860,129 | 23,400 | 86,232 | 134,338 | 261,072 | 479,032 | 1,493,662 | 75,372 | 100,701 | 217,510 | 323,021 | 852,417 | 3,810,743 |
| 1996 | 161,896 | 235,852 | 620,187 | 958,672 | 2,715,729 | 11,450,881 | 23,597 | 87,941 | 139,768 | 281,702 | 519,408 | 1,745,157 | 75,942 | 102,616 | 234,263 | 338,968 | 958,031 | 4,549,799 |
| 1997 | 175,468 | 259,849 | 706,188 | 1,114,271 | 3,234,554 | 14,009,942 | 24,400 | 91,087 | 148,265 | 298,105 | 584,200 | 2,037,288 | 79,211 | 109,048 | 254,202 | 377,039 | 1,103,312 | 5,382,454 |
| 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)

|  | P90-100 |  |  |  |  |  |  | P95-100 |  |  |  |  |  |  | P99-100 |  |  |  |  |  |  | P99,5-100 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 100.0 | 1932 | 53.2 | 11.4 | 18.8 | 9.9 | 6.8 | 100.0 | 1932 | 43.3 | 12.2 | 27.1 | 10.4 | 6.9 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 61.1 | 27.6 | 6.9 | 1.5 | 2.9 | 100.0 | 1944 | 48.9 | 36.0 | 9.6 | 1.9 | 3.6 | 100.0 | 1944 | 30.8 | 46.8 | 15.7 | 2.4 | 4.2 | 100.0 | 1944 | 28.1 | 46.9 | 18.3 | 2.5 | 4.2 | 100.0 |
| 1945 | 57.4 | 31.3 | 6.8 | 1.5 | 3.0 | 100.0 | 1945 | 45.2 | 39.8 | 9.4 | 1.9 | 3.6 | 100.0 | 1945 | 29.7 | 48.7 | 15.0 | 2.4 | 4.2 | 100.0 | 1945 | 27.4 | 48.2 | 17.7 | 2.6 | 4.2 | 100.0 |
| 1946 | 54.0 | 33.6 | 7.8 | 1.5 | 3.1 | 100.0 | 1946 | 43.4 | 40.6 | 10.5 | 1.9 | 3.6 | 100.0 | 1946 | 31.5 | 45.2 | 16.6 | 2.4 | 4.2 | 100.0 | 1946 | 29.3 | 44.1 | 19.8 | 2.5 | 4.3 | 100.0 |
| 1947 | 56.4 | 30.3 | 8.5 | 1.4 | 3.3 | 100.0 | 1947 | 45.9 | 36.6 | 11.7 | 1.8 | 4.0 | 100.0 | 1947 | 34.4 | 39.4 | 19.2 | 2.2 | 4.8 | 100.0 | 1947 | 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 | 100.0 | 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 |
| 1949 | 62.9 | 23.1 | 8.9 | 1.6 | 3.6 | 100.0 | 1949 | 53.0 | 28.5 | 12.3 | 1.9 | 4.3 | 100.0 | 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 |
| 1951 | 64.0 | 22.5 | 8.6 | 1.5 | 3.4 | 100.0 | 1951 | 53.4 | 28.5 | 12.1 | 1.8 | 4.1 | 100.0 | 1951 | 37.1 | 34.4 | 20.9 | 2.4 | 5.3 | 100.0 | 1951 | 33.8 | 33.3 | 25.0 | 2.4 | 5.5 | 100.0 |
| 1952 | 65.7 | 21.6 | 8.0 | 1.5 | 3.2 | 100.0 | 1952 | 55.7 | 27.3 | 11.2 | 1.9 | 3.9 | 100.0 | 1952 | 37.7 | 34.4 | 20.0 | 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 | 100.0 | 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 |


| 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. | 100.0 | 1956 | 36.4 | 28.1 | 28.1 | 3.0 | 4. | 100.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1957 | 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 | 7.8 | 2.0 | 2.2 | 100.0 | 1958 | 58.5 | 24.7 | 11.3 | 2.6 | 2.9 | 100.0 | 1958 | 40.8 | 31.6 | 20.2 | 3.3 | 4.0 | 100.0 | 1958 | 37.1 | 28.3 | 26.9 | 3.5 | 4.1 | 100.0 |
| 1959 | 68.6 | 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. | 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 | 18.4 | 8.0 | 3.3 | 1.3 | 100.0 | 1964 | 59.8 | 23.6 | 11.0 | 3.9 | 1.7 | 100.0 | 1964 | 42.7 | 28.5 | 21.8 | 4.7 | 2.4 | 100.0 | 1964 | 37.6 | 27.0 | 28.1 | 4.8 | 2.5 | 100.0 |
| 1965 | 68.1 | 19.4 | 7.8 | 3.5 | 1.2 | 100.0 | 1965 | 59.9 | 23.9 | 10.7 | 4.0 | 1.5 | 100.0 | 1965 | 42.3 | 28.8 | 21.9 | 4.9 | 2.1 | 100.0 | 1965 | 37.5 | 27.7 | 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 | 2.2 | 100.0 | 1966 | 40.9 | 32.6 | 18.5 | 4.9 | 3.2 | 100.0 | 1966 | 37.2 | 31.6 | 22.9 | 4.9 | 3.5 | 100.0 |
| 1967 | 70.3 | 18.0 | 6.7 | 3.6 | 1.5 | 100.0 | 1967 | 60.9 | 23.6 | 9.4 | 4.2 | 1.9 | 100.0 | 1967 | 41.8 | 33.1 | 17.5 | 5.0 | 2.7 | 100.0 | 1967 | 38.0 | 32.5 | 21.7 | 5.0 | 2.8 | 100.0 |
| 1968 | 70.8 | 17.3 | 6.7 | 3.8 | 1.4 | 100.0 | 1968 | 61.2 | 22.8 | 9.5 | 4.5 | 1.9 | 100.0 | 1968 | 42.0 | 31.5 | 18.3 | 5.4 | 2.7 | 100.0 | 1968 | 37.3 | 31.1 | 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 | 5.0 | 1.8 | 100.0 | 1970 | 45.6 | 30.0 | 14.9 | 6.5 | 2.9 | 100.0 | 1970 | 41.0 | 30.0 | 18.8 | 7.0 | 3.2 | 100.0 |
| 1971 | 74.8 | 14.3 | 5.1 | 4.4 | 1.3 | 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 | 5.1 | 4.4 | 1.4 | 100.0 | 1972 | 66.2 | 19.3 | 7.2 | 5.3 | 2.0 | 100.0 | 1972 | 49.3 | 27.2 | 13.6 | 6.6 | 3.2 | 100.0 | 1972 | 46.2 | 26.4 | 16.9 | 7.0 | 3.5 | 100.0 |
| 1973 | 73.2 | 15.4 | 5.1 | 4.8 | 1.5 | 100.0 | 1973 | 64.9 | 20.2 | 7.1 | 5.7 | 2. | 100.0 | 1973 | 49. | 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 | 13.0 | 4.9 | 5.0 | 1.6 | 100.0 | 1975 | 68.1 | 17.1 | 6.8 | 5.8 | 2.3 | 100.0 | 1975 | 52.9 | 23.4 | 12.7 | 7.3 | 3.7 | 100.0 | 1975 | 49.7 | 22.6 | 15.7 | 7.7 | 4.3 | 100.0 |
| 1976 | 76.1 | 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 | 100.0 | 1976 | 52.0 | 20.9 | 15.9 | 7.0 | 4.2 | 100.0 |
| 1977 | 76.6 | 11.9 | 5.0 | 5.1 | 1.4 | 100.0 | 1977 | 69.8 | 15.6 | 6.9 | 5.7 | 1.9 | 100.0 | 1977 | 56.1 | 21.0 | 12.8 | 6.7 | 3.4 | 100.0 | 1977 | 53.3 | 20.1 | 15.7 | 6.9 | 4.0 | 100.0 |
| 1978 | 76.9 | 11.9 | 4.9 | 5.0 | 1. | 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 | 1.3 | 100.0 | 1979 | 71.0 | 13.6 | 6.8 | 6.7 | 1.9 | 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. | 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 | 1.2 | 100.0 | 1982 | 73.9 | 6.5 | 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 | 5.0 | 100.0 |
| 1983 | 81.0 | 5.9 | 4.6 | 7.7 | 0.8 | 100.0 | 1983 | 76.4 | 7.3 | 6.3 | 8.8 | 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 | 3.9 | 100.0 |
| 1984 | 80.6 | 6.2 | 4.1 | 8.6 | 0.6 | 100.0 | 1984 | 75.5 | 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 | 4.7 | 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 |
| 1989 | 75.0 | 12.5 | 4.2 | 7.9 | 0.5 | 100.0 | 1989 | 68.8 | 15.9 | 5.2 | 9.1 | 0.9 | 100.0 | 1989 | 56.7 | 22.3 | 7.4 | 11.8 | 1.8 | 100.0 | 1989 | 52.9 | 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 | 1.1 | 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 |
| 1992 | 78.1 | 13.0 | 3.3 | 4.8 | 0.9 | 100.0 | 1992 | 72.6 | 16.7 | 4.0 | 5.4 | 1.3 | 100.0 | 1992 | 61.6 | 23.6 | 5.4 | 7.1 | 2.3 | 100.0 | 1992 | 58.6 | 25.1 | 5.9 | 7.9 | 2.5 | 100.0 |
| 1993 | 78.8 | 13.1 | 3.2 | 3.9 | 1.0 | 100.0 | 1993 | 73.4 | 16.8 | 3.8 | 4.5 | 1.4 | 100.0 | 1993 | 62.1 | 23.8 | 5.3 | 6.2 | 2.6 | 100.0 | 1993 | 58.7 | 25.7 | 5.8 | 6.8 | 3.0 | 100.0 |
| 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 | 6.4 | 7.4 | 2.8 | 100.0 |
| 1996 | 76.7 | 13.8 | 3.7 | 4.4 | 1.4 | 100.0 | 1996 | 70.9 | 17.8 | 4.4 | 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 |
| 1997 | 76.0 | 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 | 7.2 | 2.9 | 100.0 |
| 1998 | 76.0 | 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)

|  | P99,9-100 |  |  |  |  |  |  | P99,99-100 |  |  |  |  |  |  | P90-95 |  |  |  |  |  | P95-99 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 4 | 44 | 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. | 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 | 100.0 | 1931 | 62.6 | 16.4 | 5.6 | 8. | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 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 | 2.5 | 5.8 | 100.0 | 1951 | 15.4 | 15.0 | 61.6 | 2.3 | 5.6 | 100.0 | 1951 | 87.6 | 9.1 | 0.9 | 0.6 | 1.7 | 100.0 | 1951 | 67.2 | 23.5 | 4.7 | 1.4 | 3.1 | 100.0 |
| 1952 | 28.1 | 24.5 | 38.5 | 2.7 | 6.2 | 100.0 | 1952 | 16.3 | 11.5 | 63.5 | 2.7 | 6.0 | 100.0 | 1952 | 86.9 | 9.5 | 1.3 | 0.6 | 1.7 | 100.0 | 1952 | 70.1 | 21.7 | 4.2 | 1.4 | 2.7 | 100.0 |
| 1953 | 30.3 | 24.2 | 36.6 | 2.8 | 6.1 | 100.0 | 1953 | 17.2 | 11.3 | 62.5 | 2.8 | 6.2 | 100.0 | 1953 | 88.4 | 8.3 | 1.2 | 0.7 | 1.5 | 100.0 | 1953 | 71.4 | 20.4 | 4.1 | 1.4 | 2.8 | 100.0 |
| 1954 | 29.6 | 22.7 | 38.7 | 3.1 | 6.0 | 100.0 | 1954 | 18.2 | 11.5 | 61.0 | 3.0 | 6.3 | 100.0 | 1954 | 84.5 | 11.4 | 1.1 | 0.8 | 2.2 | 100.0 | 1954 | 72.7 | 19.2 | 4.1 | 1.0 | 3.0 | 100.0 |
| 1955 | 29.0 | 19.9 | 43.6 | 2.9 | 4.7 | 100.0 | 1955 | 17.1 | 9.3 | 67.1 | 2.7 | 4.0 | 100.0 | 1955 | 83.1 | 12.3 | 1.9 | 0.9 | 1.8 | 100.0 | 1955 | 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 | 2.4 | 100.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1957 | 28.9 | 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 | 3.7 | 4.5 | 100.0 | 1958 | 18.1 | 7.5 | 66.1 | 3.7 | 4.6 | 100.0 | 1958 | 89.3 | 8.1 | 0.9 | 0.9 | 0.8 | 100.0 | 1958 | 70.8 | 19.8 | 2 | 2.0 | 2.2 | 100.0 |
| 1959 | 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 | 6.8 | 1.2 | 1.1 | 0.6 | 100.0 | 1960 | 70.3 | 19.4 | 5.8 | 2.4 | 2.1 | 00.0 |
| 1961 | 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 | 0.8 | 100.0 | 1961 | 73.6 | 17.7 | 4.5 | 2.5 | 1.8 | 100.0 |
| 1962 | 29.7 | 17.8 | 44.0 | 4.6 | 3.8 | 100.0 | 1962 | 17.4 | 5.4 | 68.7 | 4.7 | 3.8 | 100.0 | 1962 | 88.9 | 7.3 | 1.4 | 1.6 | 0.8 | 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. | 0.7 | 100.0 | 1963 | 73.6 | 17 | 4.4 | 3.2 | 6 | 100.0 |
| 1964 | 29.0 | 18.3 | 45.1 | 5.1 | 2.4 | 100.0 | 1964 | 12.6 | 3.2 | 78.0 | 4.7 | 1.5 | 100.0 | 1964 | 86.2 | 8.6 | 2.4 | 2.2 | 0.6 | 100.0 | 1964 | 71.6 | 19.1 | 4.5 | 3.5 | 1.3 | 100.0 |
| 1965 | 29.1 | 19.2 | 44.1 | 5.4 | 2.2 | 100.0 | 1965 | 13.1 | 5.7 | 74.0 | 5.3 | 1.9 | 100.0 | 1965 | 83.9 | 10.7 | 2.3 | 2.5 | 0.6 | 100.0 | 1965 | 72.0 | 19.3 | 3.9 | 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 | 0.6 | 100.0 | 1966 | 72.7 | 17.9 | 4.3 | 3.5 | 1.6 | 100.0 |
| 1967 | 30.4 | 24.7 | 35.7 | 5.7 | 3.6 | 100.0 | 1967 | 17.8 | 13.6 | 58.0 | 6.4 | 4.1 | 100.0 | 1967 | 88.2 | 7.3 | 1.7 | 2.3 | 0.6 | 100.0 | 1967 | 73.3 | 17.4 | 4.1 | 3.7 | 1.4 | 100.0 |
| 1968 | 29.3 | 21.7 | 39.7 | 6.4 | 2.9 | 100.0 | 1968 | 18.2 | 11.3 | 58.8 | 8.2 | 3.6 | 100.0 | 1968 | 88.6 | 7.0 | 1.3 | 2.4 | 0.6 | 100.0 | 1968 | 73.7 | 17.2 | 3.9 | 3.9 | 1.3 | 00.0 |
| 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 | 6.0 | 1.5 | 2.7 | 0.5 | 100.0 | 1970 | 77.1 | 14.1 | 3.5 | 4.1 | 1 | 00.0 |
| 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 | 2.8 | 0.4 | 100.0 | 1971 | 77.6 | 13.4 | 3.5 | 4.4 | 1.2 | 100.0 |
| 1972 | 37.4 | 21.7 | 28.6 | 8.1 | 4.2 | 100.0 | 1972 | 24.5 | 12.3 | 48.3 | 9.9 | 4.9 | 100.0 | 1972 | 89.6 | 5.9 | 1.3 | 2.8 | 0.5 | 100.0 | 1972 | 76.4 | 14.6 | 3.3 | 4.5 | 1.2 | 100.0 |
| 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 | 0.5 | 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 | 0.8 | 100.0 | 1974 | 74.3 | 15.5 | 3.4 | 5.3 | 1.6 | 100.0 |
| 1975 | 40.7 | 20.3 | 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 | 100.0 | 1975 | 77.4 | 13.3 | 3.2 | 4.8 | 1.4 | 100.0 |
| 1976 | 43.4 | 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 | 0.6 | 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 | 3.9 | 0.4 | 100.0 | 1977 | 78.1 | 12.4 | 3.4 | 5.2 | 1.0 | 100.0 |
| 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 | 6.2 | 0.0 | 100.0 | 1982 | 81.2 | 5.4 | 3.9 | 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 | 3.4 | 1.6 | 5.7 | -0.1 | 100.0 | 1983 | 83.4 | 5.7 | 3.2 | 7.5 | 0.2 | 100.0 |
| 1984 | 53.9 | 12.1 | 13.1 | 15.6 | 5.3 | 100.0 | 1984 | 32.6 | 28.2 | 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 | -0.3 | 100.0 |
| 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 |
| 1988 | 48.4 | 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 | 15.2 | 2.6 | 100.0 | 1989 | 30.8 | 35.3 | 13.2 | 17.9 | 2.7 | 100.0 | 1989 | 88.6 | 4.9 | 1.9 | 5.1 | -0.5 | 100.0 | 1989 | 79.3 | 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 | 6.7 | 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 | 5.9 | 0.3 | 100.0 |
| 1992 | 53.2 | 27.6 | 7.3 | 9.3 | 2.7 | 100.0 | 1992 | 46.1 | 32.3 | 8.5 | 10.8 | 2.3 | 100.0 | 1992 | 90.9 | 4.3 | 1.7 | 3.3 | -0.1 | 100.0 | 1992 | 82.6 | 10.5 | 2.6 | 3.9 | 0.4 | 100.0 |
| 1993 | 51.1 | 29.8 | 7.2 | 8.5 | 3.4 | 100.0 | 1993 | 41.0 | 36.2 | 8.7 | 10.4 | 3.8 | 100.0 | 1993 | 90.9 | 5.0 | 1.8 | 2.5 | -0.1 | 100.0 | 1993 | 83.2 | 10.7 | 2.6 | 3.1 | 0.4 | 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 |
| 1995 | 46.7 | 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 | 0.8 | 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 |
| 1997 | 49.4 | 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 | 3.5 | 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)

|  | P99-99,5 |  |  |  |  |  |  | P99,5-99,9 |  |  |  |  |  |  | P99,9-99,99 |  |  |  |  |  |  | P99,99-100 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 | 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. | 48.7 | 11. | 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. | 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. | 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. | 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 | 100.0 | 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. | 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 | 100.0 | 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 | 100.0 | 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 | 100.0 | 1943 | 24.5 | 47.4 | 21.8 | 2.5 | 3.9 | 100.0 | 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 | 100.0 | 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 | 100.0 | 1945 | 24.5 | 48.9 | 19.7 | 2.6 | 4.3 | 100.0 | 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 | 100.0 | 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 | 100.0 | 1947 | 36.3 | 42.4 | 14.5 | 2.2 | 4.7 | 100.0 | 1947 | 29.6 | 35.9 | 26.5 | 2.5 | 5.4 | 100.0 | 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 | 100.0 | 1948 | 29.9 | 33.6 | 28.6 | 2.4 | 5.6 | 100.0 | 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 | 100.0 | 1949 | 32.2 | 29.1 | 29.8 | 2.7 | 6.2 | 100.0 | 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 |


| 556 | 45.4 | 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. | 4.8 | 100.0 | 1956 | 17. | 6. | 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 | 6.7 | 3.1 | 3.7 | 100.0 | 1958 | 41.5 | 34.1 | 17.2 | 3.3 | 3.9 | 100.0 | 1958 | 34.2 | 23.0 | 34.7 | 3.7 | 4.5 | 100.0 | 1958 | 18. | 7.5 | 66. | 3.7 | 6 | 00.0 |
| 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. | 34.5 | 4.3 | 4.0 | 100.0 | 1961 | 17. | 7.8 | 67.5 | 4.3 | 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 | 31.4 | 9.5 | 4.4 | 2.1 | 100.0 | 1964 | 42.4 | 31.8 | 18.7 | 4.7 | 2.5 | 100.0 | 1964 | 34.2 | 23.0 | 34.8 | 5.3 | 2.7 | 100.0 | 1964 | 12.6 | 3.2 | 78.0 | 4.7 | 1.5 | 100.0 |
| 1965 | 52.0 | 31.2 | 10.3 | 4.6 | 1.9 | 100.0 | 1965 | 42.3 | 32.5 | 18.2 | 4.9 | 2.1 | 100.0 | 1965 | 34.0 | 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. | 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 | 0 | 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 | 3.4 | 100.0 | 1967 | 17.8 | 13.6 | 58.0 | 6.4 | 4.1 | 100.0 |
| 1968 | 51.1 | 32.3 | 8.9 | 5.0 | 2.7 | 100.0 | 1968 | 41.9 | 36.6 | 13.7 | 5.2 | 2.7 | 100.0 | 1968 | 32.7 | 24.9 | 33.8 | 5.9 | 2.7 | 100.0 | 1968 | 18.2 | 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 | 5.5 | 2.3 | 100.0 | 1970 | 46.0 | 34.0 | 11.4 | 6.0 | 2.7 | 100.0 | 1970 | 36.8 | 27.1 | 24.1 | 8.1 | 3.8 | 100.0 | 1970 | 18.1 | 10.6 | 55.0 | 11.2 | 5.0 | 100.0 |
| 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 | 5.1 | 100.0 |
| 1972 | 54.9 | 28.7 | 7.7 | 6.0 | 2.7 | 100.0 | 1972 | 51.1 | 29.1 | 10.4 | 6.3 | 3.1 | 100.0 | 1972 | 41.5 | 24.7 | 22.3 | 7.6 | 4.0 | 100.0 | 1972 | 24.5 | 12.3 | 48.3 | 9.9 | 4.9 | 100.0 |
| 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. | 8.3 | 4. | 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 | 25.0 | 6.8 | 6.6 | 2.6 | 100.0 | 1975 | 55.1 | 24.0 | 10.1 | 7.3 | 3.5 | 100.0 | 1975 | 45.9 | 21.6 | 19.6 | 7.8 | 5.0 | 100.0 | 1975 | 25.8 | 16.7 | 40.1 | 9.7 | 7.6 | 100.0 |
| 1976 | 60.0 | 24.0 | 6.7 | 6.8 | 2.5 | 100.0 | 1976 | 57.2 | 22. | 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 | 7.2 | 6.4 | 2.1 | 100.0 | 1977 | 58.1 | 21.7 | 10.3 | 6.6 | 3.3 | 100.0 | 1977 | 51.1 | 18.2 | 19.3 | 7.1 | 4.4 | 100.0 | 1977 | 29.2 | 15.6 | 39.4 | 8.1 | 7.7 | 100.0 |
| 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 | 2.2 | 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 | 1.5 | 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 | 100.0 |
| 1983 | 73.7 | 9.5 | 6.6 | 9.4 | 0.9 | 100.0 | 1983 | 70.4 | 8.4 | 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 | 14.6 | 6.1 | 100.0 |
| 1984 | 71.9 | 9.6 | 5.9 | 11.3 | 1.3 | 100.0 | 1984 | 71.2 | 8.4 | 8.0 | 10.8 | 1.6 | 100.0 | 1984 | 64.1 | 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 | 8.1 | 0.4 | 100.0 | 1987 | 68.8 | 14.1 | 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 |
| 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 |
| 1989 | 67.4 | 18.2 | 4.9 | 8.8 | 0.7 | 100.0 | 1989 | 62.0 | 19.1 | 6.4 | 10.6 | 1.9 | 100.0 | 1989 | 50.1 | 25.1 | 8.6 | 13.7 | 2.5 | 100.0 | 1989 | 30.8 | 35.3 | 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 | 2.7 | 100.0 |
| 1991 | 68.9 | 18.0 | 4.7 | 7.1 | 1.3 | 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 |
| 1992 | 70.4 | 19.1 | 4.0 | 5.0 | 1.6 | 100.0 | 1992 | 64.2 | 22.6 | 4.6 | 6.3 | 2.3 | 100.0 | 1992 | 57.4 | 24.8 | 6.6 | 8.5 | 2.9 | 100.0 | 1992 | 46.1 | 32.3 | 8.5 | 10.8 | 2.3 | 100.0 |
| 1993 | 71.3 | 18.7 | 4.0 | 4.4 | 1.6 | 100.0 | 1993 | 65.9 | 21.8 | 4.5 | 5.2 | 2.5 | 100.0 | 1993 | 56.5 | 26.4 | 6.5 | 7.5 | 3.2 | 100.0 | 1993 | 41.0 | 36.2 | 8.7 | 10.4 | 3.8 | 100.0 |
| 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 | 3.6 | 100.0 |
| 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 |
| 1997 | 69.5 | 18.8 | 4.8 | 4.6 | 2.2 | 100.0 | 1997 | 62.2 | 23.7 | 5.7 | 5.6 | 2.7 | 100.0 | 1997 | 54.8 | 27.9 | 6.7 | 7.7 | 2.9 | 100.0 | 1997 | 40.1 | 35.8 | 10.2 | 10.4 | 3.5 | 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 

(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 P99.99-100

| 1916 |  |  | 3.2 | 3.6 | 4.1 | 4.0 |  |  | 1.1 | 2.8 | 4.2 | 4.0 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1917 |  | 1.6 | 1.5 | 1.5 | 1.2 | 0.8 |  | 1.7 | 1.9 | 1.8 | 1.5 | 0.8 |
| 1918 | 1.2 | 1.3 | 1.4 | 1.2 | 0.8 | 0.4 | 0.7 | 1.3 | 1.9 | 1.8 | 1.0 | 0.4 |
| 1919 | 3.1 | 3.6 | 3.7 | 3.4 | 2.8 | 2.0 | 1.6 | 3.4 | 4.7 | 4.1 | 3.3 | 2.0 |
| 1920 | 3.5 | 3.9 | 3.4 | 2.8 | 1.5 | 0.6 | 2.3 | 4.5 | 5.5 | 3.9 | 1.9 | 0.6 |
| 1921 | 1.5 | 1.8 | 1.9 | 1.7 | 1.2 | 0.4 | 0.7 | 1.8 | 2.6 | 2.2 | 1.5 | 0.4 |
| 1922 | 2.7 | 3.4 | 4.2 | 4.4 | 4.9 | 5.8 | 1.0 | 2.4 | 3.6 | 3.9 | 4.4 | 5.8 |
| 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 |
| 1924 | 3.8 | 4.3 | 5.7 | 6.0 | 6.5 | 7.0 | 2.3 | 2.7 | 4.9 | 5.5 | 6.3 | 7.0 |
| 1925 | 6.4 | 7.8 | 10.7 | 11.6 | 13.5 | 15.8 | 2.3 | 4.0 | 7.7 | 9.6 | 12.2 | 15.8 |
| 1926 | 5.1 | 6.0 | 8.0 | 8.8 | 10.5 | 12.9 | 2.3 | 3.4 | 5.4 | 6.8 | 9.1 | 12.9 |
| 1927 | 6.0 | 7.0 | 9.3 | 10.3 | 12.5 | 14.3 | 2.8 | 3.9 | 5.8 | 7.9 | 11.4 | 14.3 |
| 1928 | 8.5 | 10.3 | 14.7 | 16.4 | 19.5 | 20.7 | 2.8 | 3.8 | 8.3 | 12.5 | 18.6 | 20.7 |
| 1929 | 7.6 | 9.2 | 13.5 | 15.2 | 19.4 | 22.7 | 2.5 | 3.1 | 7.1 | 9.8 | 17.0 | 22.7 |
| 1930 | 2.9 | 3.4 | 4.3 | 4.7 | 6.1 | 8.0 | 1.6 | 2.5 | 2.7 | 3.3 | 4.9 | 8.0 |
| 1931 | 1.1 | 1.3 | 1.9 | 2.1 | 2.7 | 3.7 | 0.4 | 0.8 | 1.2 | 1.5 | 2.1 | 3.7 |
| 1932 | 0.5 | 0.6 | 0.9 | 1.1 | 1.4 | 1.5 | 0.3 | 0.3 | 0.3 | 0.8 | 1.3 | 1.5 |
| 1933 | 2.0 | 2.5 | 3.6 | 4.2 | 5.3 | 6.2 | 0.6 | 1.4 | 1.9 | 2.9 | 4.9 | 6.2 |
| 1934 | 1.1 | 1.4 | 1.8 | 2.1 | 2.2 | 1.6 | 0.3 | 0.9 | 1.2 | 1.9 | 2.5 | 1.6 |
| 1935 | 2.4 | 3.1 | 4.1 | 4.5 | 4.8 | 3.5 | 0.4 | 2.1 | 2.9 | 4.2 | 5.4 | 3.5 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 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 |
| 1943 | 2.3 | 2.9 | 3.9 | 4.1 | 5.1 | 7.1 | 0.9 | 2.0 | 3.3 | 3.3 | 4.4 | 7.1 |
| 1944 | 2.3 | 2.9 | 3.8 | 4.1 | 5.1 | 6.8 | 0.8 | 2.1 | 3.0 | 3.3 | 4.4 | 6.8 |
| 1945 | 4.8 | 6.1 | 7.6 | 8.3 | 10.5 | 13.5 | 1.8 | 4.6 | 5.8 | 6.6 | 9.4 | 13.5 |
| 1946 | 6.2 | 7.1 | 8.1 | 8.7 | 11.6 | 16.7 | 3.7 | 6.2 | 6.6 | 6.4 | 9.6 | 16.7 |
| 1947 | 3.8 | 4.6 | 5.4 | 6.0 | 8.6 | 12.1 | 2.1 | 3.8 | 4.0 | 4.0 | 7.1 | 12.1 |
| 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 |
| 1949 | 2.6 | 3.1 | 4.0 | 4.5 | 6.0 | 8.1 | 1.2 | 2.4 | 2.9 | 3.3 | 5.1 | 8.1 |
| 1950 | 4.6 | 5.2 | 7.6 | 7.9 | 10.3 | 13.0 | 3.0 | 2.9 | 6.8 | 5.9 | 9.5 | 13.0 |
| 1951 | 3.8 | 4.9 | 6.9 | 7.5 | 10.0 | 13.0 | 1.3 | 3.1 | 5.2 | 5.7 | 8.8 | 13.0 |
| 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 |
| 1953 | 2.4 | 3.1 | 4.8 | 5.7 | 8.5 | 11.6 | 0.9 | 1.8 | 2.7 | 3.7 | 7.4 | 11.6 |
| 1954 | 4.0 | 5.6 | 7.9 | 91 | 13.8 | 17. | 0.6 | 37 | 5.1 | 5.7 | 12 | 17 |

(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 P99.99-100

| 1916 |  |  | 7.5 | 8.6 | 10.9 | 14.2 |  |  | 1.5 | 4.5 | 8.1 | 14.2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1917 |  | 2.6 | 2.9 | 3.0 | 3.0 | 3.1 |  | 2.2 | 2.7 | 2.9 | 3.0 | 3.1 |
| 1918 | 1.7 | 2.0 | 2.4 | 2.3 | 1.8 | 1.6 | 0.8 | 1.6 | 2.7 | 2.9 | 2.0 | 1.6 |
| 1919 | 4.5 | 5.5 | 6.7 | 6.7 | 6.8 | 7.6 | 1.7 | 4.2 | 6.5 | 6.6 | 6.3 | 7.6 |
| 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 | 2.1 | 2.7 | 3.2 | 3.1 | 2.5 | 1.6 | 0.8 | 2.2 | 3.6 | 3.6 | 3.0 | 1.6 |
| 1922 | 4.5 | 5.8 | 8.4 | 9.4 | 12.4 | 19.9 | 1.1 | 3.0 | 5.1 | 6.3 | 8.5 | 19.9 |
| 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 |
| 1924 | 6.0 | 7.4 | 11.0 | 12.3 | 15.8 | 23.2 | 2.6 | 3.4 | 6.8 | 8.8 | 11.9 | 23.2 |
| 1925 | 11.1 | 13.6 | 20.4 | 23.1 | 30.0 | 42.9 | 2.6 | 4.9 | 10.6 | 15.1 | 21.7 | 42.9 |
| 1926 | 9.0 | 10.9 | 16.1 | 18.5 | 24.9 | 37.3 | 2.6 | 4.2 | 7.5 | 10.9 | 16.7 | 37.3 |
| 1927 | 10.6 | 12.7 | 18.5 | 21.3 | 28.4 | 40.1 | 3.1 | 4.8 | 8.0 | 12.4 | 20.5 | 40.1 |
| 1928 | 15.4 | 18.7 | 27.8 | 31.6 | 40.0 | 51.1 | 3.1 | 4.8 | 11.5 | 19.2 | 31.4 | 51.1 |
| 1929 | 14.2 | 17.4 | 26.6 | 30.5 | 40.5 | 54.0 | 2.8 | 3.9 | 9.9 | 15.3 | 29.1 | 54.0 |
| 1930 | 5.4 | 6.3 | 9.3 | 11.0 | 16.0 | 25.8 | 1.8 | 3.1 | 3.8 | 5.3 | 9.4 | 25.8 |
| 1931 | 2.2 | 2.6 | 4.3 | 5.1 | 7.7 | 13.5 | 0.5 | 1.0 | 1.7 | 2.5 | 4.2 | 13.5 |
| 1932 | 0.7 | 0.9 | 2.0 | 2.5 | 3.6 | 5.6 | 0.3 | 0.4 | 0.4 | 1.4 | 2.6 | 5.6 |
| 1933 | 3.4 | 4.4 | 7.8 | 9.4 | 13.4 | 20.8 | 0.7 | 1.7 | 2.7 | 4.8 | 9.3 | 20.8 |
| 1934 | 1.7 | 2.2 | 3.4 | 4.0 | 4.7 | 4.5 | 0.3 | 1.1 | 1.8 | 3.2 | 4.9 | 4.5 |
| 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 | 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 | 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 | 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 | 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 | 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 | 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 | 1.9 | 2.5 | 3.8 | 4.3 | 6.3 | 10.9 | 0.2 | 1.2 | 2.3 | 2.4 | 4.2 | 10.9 |
| 1943 | 3.9 | 5.0 | 7.4 | 8.3 | 11.6 | 18.5 | 1.0 | 2.5 | 4.8 | 5.5 | 8.9 | 18.5 |
| 1944 | 3.7 | 4.9 | 7.2 | 8.3 | 11.6 | 17.7 | 0.9 | 2.7 | 4.3 | 5.5 | 8.9 | 17.7 |
| 1945 | 7.9 | 10.2 | 14.4 | 16.6 | 23.2 | 33.3 | 2.0 | 5.8 | 8.5 | 11.1 | 18.8 | 33.3 |
| 1946 | 9.7 | 11.7 | 15.6 | 17.9 | 26.2 | 40.0 | 4.2 | 8.0 | 9.6 | 10.9 | 19.3 | 40.0 |
| 1947 | 6.2 | 7.7 | 10.6 | 12.6 | 19.6 | 30.3 | 2.3 | 4.8 | 5.7 | 6.7 | 14.2 | 30.3 |
| 1948 | 5.7 | 7.2 | 9.9 | 11.5 | 16.9 | 25.7 | 1.9 | 4.6 | 5.6 | 7.0 | 12.8 | 25.7 |
| 1949 | 4.1 | 5.3 | 7.8 | 9.2 | 13.7 | 20.9 | 1.3 | 3.0 | 4.2 | 5.6 | 10.2 | 20.9 |
| 1950 | 7.4 | 9.0 | 14.3 | 15.9 | 22.6 | 32.2 | 3.4 | 3.7 | 9.8 | 10.0 | 18.9 | 32.2 |
| 1951 | 6.4 | 8.5 | 13.2 | 15.4 | 22.4 | 32.3 | 1.5 | 4.0 | 7.6 | 9.6 | 17.5 | 32.3 |
| 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 |
| 1953 | 4.1 | 5.5 | 9.5 | 11.9 | 19.2 | 29.0 | 1.0 | 2.3 | 3.9 | 6.2 | 14.7 | 29.0 |
| 954 | 7.0 | 9.8 | 15.7 | 19.0 | 0.3 | 41.0 | 0.7 | 4.7 | 75 | 9.7 | 24 |  |


| 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 | 0.8 | 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 (0) | $\begin{gathered} \text { P90-100 } \\ \text { (1) } \end{gathered}$ | $\begin{aligned} & \text { P95-100 } \\ & (2) \end{aligned}$ | $\begin{gathered} \text { P99-100 } \\ \text { (3) } \end{gathered}$ | P99.5-100 <br> (4) | P99.9-100 <br> (5) | P99.99-100 <br> (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 |
| 1922 | 11.26 | 43.33 | 31.50 | 16.74 | 12.79 | 6.45 | 2.13 |
| 1923 | 11.26 | 41.02 | 29.40 | 15.43 | 11.73 | 5.78 | 1.87 |
| 1924 | 11.62 | 43.72 | 31.40 | 16.81 | 12.88 | 6.46 | 2.15 |
| 1925 | 12.21 | 44.71 | 33.03 | 18.18 | 13.95 | 7.12 | 2.51 |
| 1926 | 12.71 | 44.72 | 33.40 | 18.68 | 14.37 | 7.51 | 2.74 |
| 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 |
| 1941 | 39.58 | 42.87 | 31.09 | 16.91 | 12.84 | 6.46 | 2.18 |
| 1942 | 50.95 | 37.53 | 27.27 | 14.95 | 11.39 | 5.63 | 1.80 |
| 1943 | 55.46 | 34.88 | 25.31 | 13.50 | 10.15 | 4.86 | 1.40 |
| 1944 | 54.87 | 32.98 | 23.44 | 12.11 | 8.97 | 4.21 | 1.34 |
| 1945 | 48.70 | 33.79 | 24.27 | 12.30 | 8.93 | 4.01 | 1.17 |
| 1946 | 32.65 | 35.46 | 25.58 | 12.55 | 8.96 | 3.88 | 1.13 |
| 1947 | 32.90 | 33.92 | 24.29 | 11.82 | 8.46 | 3.74 | 1.15 |
| 1948 | 32.86 | 34.64 | 24.72 | 12.20 | 8.86 | 4.00 | 1.21 |
| 1949 | 32.11 | 34.66 | 24.46 | 11.86 | 8.58 | 3.89 | 1.21 |
| 1950 | 39.23 | 35.04 | 25.22 | 12.66 | 9.29 | 4.34 | 1.15 |
| 1951 | 47.33 | 34.46 | 24.49 | 12.17 | 8.84 | 4.06 | 1.31 |
| 1952 | 45.80 | 33.48 | 23.38 | 11.16 | 8.03 | 3.57 | 1.12 |
| 1953 | 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 |
| 1955 | 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 | 10.04 | 7.06 | 2.99 | 0.94 |
| 1958 | 40.80 | 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 |
| 1963 | 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 | 0.75 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 1965 | 34.67 | 32.27 | 21.50 | 8.85 | 6.11 | 2.47 | 0.74 |
| 1966 | 34.60 | 32.61 | 21.73 | 9.04 | 6.16 | 2.54 | 0.79 |
| 1967 | 33.35 | 32.63 | 21.73 | 9.03 | 6.15 | 2.51 | 0.76 |
| 1968 | 36.38 | 32.64 | 21.75 | 9.07 | 6.21 | 2.59 | 0.76 |
| 1969 | 37.03 | 32.41 | 21.36 | 8.65 | 5.86 | 2.37 | 0.72 |
| 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 <br> (1) | Married Women Employees <br> (2) | Number of Tax units with Wage <br> (3) | Total wage Bill (current mn\$) <br> (4) | Average wage (\$ 1998) <br> (5) | Share of officer compensation <br> (6) | CPI <br> (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 | P99.9-100 | 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) | (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 |
| 1977 | 26.94 | 16.70 | 5.86 | 3.79 | 1.35 | 0.30 | 10.24 | 10.84 | 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 <br> (1) | P90-100 (2) | P95-100 <br> (3) | P99-100 <br> (4) | P99.5-100 <br> (5) | P99.9-100 <br> (6) | P99.99-100 <br> (7) | P90-95 <br> (8) | P95-99 <br> (9) | P99-99.5 <br> (10) | P99.5-99.9 <br> (11) | $\begin{gathered} \text { P99.9-99.99 } \\ (12) \end{gathered}$ | $\begin{aligned} & \text { P90 } \\ & (13) \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { P95 } \\ & \text { (14) } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { P99 } \\ & (15) \end{aligned}$ | P99.5 <br> (16) | P99.9 <br> (17) | P99.99 <br> (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 statistics (in thousands of 1998 dollars) |  |  |  |  | Composition of Pay of top 100 CEOs |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> (1) | Average wage (in \$ 1998) <br> (2) | Total pay rank 10 (3) | Total pay rank 50 (4) | Total pay rank 100 (5) | Total pay average 100 <br> (6) | Salary+bonus rank 10 <br> (7) | Share Salary+bonus (8) | Share Stock options <br> (9) | Share Other (10) |
| 1970 | 32,522 | 1,600 | 1,151 | 966 | 1,255 | 1,470 | 84.66 |  |  |
| 1971 | 33,191 | 1,549 | 1,131 | 1,002 | 1,199 | 1,348 | 84.07 |  |  |
| 1972 | 34,262 | 1,949 | 1,302 | 1,115 | 1,474 | 1,626 | 85.99 |  |  |
| 1973 | 34,214 | 1,971 | 1,399 | 1,153 | 1,524 | 1,626 | 82.85 |  |  |
| 1974 | 33,103 | 1,746 | 1,333 | 1,174 | 1,411 | 1,574 | 87.13 |  |  |
| 1975 | 32,764 | 1,937 | 1,325 | 1,137 | 1,472 | 1,561 | 86.04 |  |  |
| 1976 | 33,167 | 2,034 | 1,433 | 1,226 | 1,567 | 1,862 | 84.45 |  |  |
| 1977 | 33,253 | 2,198 | 1,563 | 1,291 | 1,708 | 1,848 | 80.00 |  |  |
| 1978 | 33,162 | 3,293 | 1,920 | 1,535 | 2,300 | 1,875 | 59.50 |  |  |
| 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)

| Year | CPI | P98-100 | P99-100 | P99.5-100 | P99.9-100 | $\begin{gathered} \text { P99.95- } \\ 100 \end{gathered}$ | $\begin{gathered} \text { P99.99- } \\ 100 \end{gathered}$ | P98-99 | P99-99.5 | $\begin{gathered} \text { P99.5- } \\ 99.9 \end{gathered}$ | $\begin{gathered} \text { P99.9- } \\ 99.95 \end{gathered}$ | $\begin{gathered} \text { P99.95- } \\ 99.99 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (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 | 2,061,109 | 7,982 | 17,109 | 54,428 | 189,766 | 421,803 |
| 1937 | 8.799 | 42,957 | 78,440 | 140,398 | 482,681 | 770,061 | 2,114,597 | 7,563 | 16,595 | 54,615 | 194,917 | 433,915 |
| 1938 | 8.632 | 26,137 | 47,181 | 83,796 | 290,836 | 469,760 | 1,283,771 | 5,056 | 10,552 | 31,958 | 111,750 | 266,221 |
| 1939 | 8.511 | 30,707 | 55,533 | 98,821 | 343,902 | 556,337 | 1,543,057 | 5,854 | 12,253 | 37,476 | 131,282 | 309,733 |
| 1940 | 8.596 | 32,586 | 58,754 | 104,138 | 357,085 | 572,195 | 1,548,070 | 6,360 | 13,325 | 40,727 | 141,718 | 328,086 |
| 1941 | 9.026 | 32,403 | 58,377 | 103,365 | 353,071 | 564,536 | 1,520,334 | 6,362 | 13,332 | 40,743 | 141,341 | 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 | 19.009 | 37,461 | 64,485 | 106,981 | 310,022 | 474,880 | 1,251,444 | 10,437 | 21,990 | 56,221 | 145,165 | 280,743 |
| 1966 | 19.893 | 40,668 | 69,597 | 114,824 | 337,465 | 520,640 | 1,384,165 | 11,738 | 24,371 | 59,165 | 154,294 | 304,767 |
| 1967 | 20.469 | 40,588 | 69,637 | 114,656 | 332,884 | 512,453 | 1,334,520 | 11,539 | 24,617 | 60,098 | 153,312 | 306,930 |
| 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 Thresholds (thousands of 1998 dollars) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> (1) | above 24 <br> (2) | returns (\%) <br> (3) | P98 <br> (4) | P99 <br> (5) | P99.5 <br> (6) | P99.9 <br> (7) | P99.95 <br> (8) | P99.99 <br> (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 | 18,935 |
| 1919 | 860,200 | 1.23 | 290 | 580 | 1,120 | 4,421 | 7,479 | 23,561 |
| 1920 | 875,900 | 1.35 | 279 | 542 | 1,014 | 3,777 | 6,532 | 19,841 |
| 1921 | 800,400 | 1.37 | 316 | 621 | 1,178 | 4,380 | 7,030 | 18,289 |
| 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 | 19,741 |
| 1924 | 907,800 | 1.39 | 329 | 673 | 1,302 | 4,831 | 7,938 | 21,316 |
| 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 | 24,282 |
| 1927 | 976,500 | 0.74 | 325 | 682 | 1,427 | 5,704 | 9,843 | 28,606 |
| 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 | 32,189 |
| 1930 | 1,045,000 | 0.74 | 319 | 700 | 1,528 | 6,551 | 11,483 | 34,111 |
| 1931 | 1,055,200 | 0.64 | 305 | 653 | 1,395 | 5,704 | 9,561 | 26,821 |
| 1932 | 1,069,500 | 0.48 | 329 | 617 | 1,157 | 4,358 | 7,169 | 19,097 |
| 1933 | 1,064,800 | 0.93 | 277 | 583 | 1,231 | 4,690 | 7,930 | 22,100 |
| 1934 | 1,101,300 | 0.94 | 275 | 569 | 1,176 | 4,528 | 7,707 | 21,798 |
| 1935 | 1,109,200 | 1.06 | 335 | 629 | 1,178 | 4,646 | 7,707 | 21,827 |
| 1936 | 1,202,300 | 1.26 | 290 | 601 | 1,235 | 4,913 | 8,295 | 24,034 |
| 1937 | 1,181,800 | 1.32 | 302 | 598 | 1,175 | 4,305 | 7,330 | 21,194 |
| 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 | 21,011 |
| 1940 | 1,192,700 | 1.35 | 324 | 618 | 1,177 | 4,203 | 6,847 | 18,539 |
| 1941 | 1,165,500 | 1.44 | 328 | 620 | 1,161 | 4,079 | 6,740 | 18,645 |
| 1942 | 1,157,800 | 1.36 | 274 | 539 | 1,050 | 3,595 | 5,933 | 16,398 |
| 1943 | 1,258,500 | 1.17 | 354 | 651 | 1,164 | 3,754 | 6,003 | 15,461 |
| 1944 | 1,247,600 | 1.32 | 387 | 710 | 1,240 | 4,124 | 6,578 | 17,615 |
| 1945 | 1,277,100 | 1.49 | 418 | 776 | 1,337 | 4,342 | 6,892 | 17,651 |
| 1946 | 1,181,000 | 1.76 | 438 | 816 | 1,375 | 4,428 | 6,909 | 18,443 |
| 1947 | 1,256,800 | 1.85 | 403 | 746 | 1,240 | 3,900 | 6,128 | 17,187 |
| 1948 | 1,255,600 | 1.95 | 395 | 728 | 1,195 | 3,575 | 5,501 | 15,053 |
| 1949 | 1,254,800 | 2.06 | 424 | 762 | 1,243 | 3,661 | 5,553 | 14,490 |
| 1950 | 1,280,500 | 2.17 | 446 | 786 | 1,269 | 3,791 | 5,882 | 15,158 |
| 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 | 16,945 |
| 1956 | 1,412,400 | 3.29 | 593 | 1,000 | 1,650 | 5,099 | 8,010 | 22,838 |
| 1958 | 1,482,600 | 3.76 | 617 | 1,012 | 1,631 | 4,772 | 7,354 | 19,617 |
| 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)

| Year <br> (1) | CPI <br> (2) | P98-100 <br> (3) | P99-100 <br> (4) | P99.5-100 <br> (5) | P99.9-100 <br> (6) | $\begin{gathered} \text { P99.95- } \\ 100 \\ (7) \\ \hline \end{gathered}$ | $\begin{gathered} \text { P99.99- } \\ 100 \\ (8) \\ \hline \end{gathered}$ | P98-99 <br> (9) | $\begin{gathered} \text { P99-99.5 } \\ (10) \end{gathered}$ | $\begin{gathered} \text { P99.5- } \\ 99.9 \\ (11) \\ \hline \end{gathered}$ | $\begin{gathered} \text { P99.9- } \\ 99.95 \\ (12) \\ \hline \end{gathered}$ | $\begin{gathered} \text { P99.95- } \\ 99.99 \\ (13) \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1916 | 6.681 | 1,824 | 3,237 | 5,576 | 17,558 | 27,991 | 80,059 | 410 | 898 | 2,580 | 7,126 | 14,974 |
| 1917 | 7.844 | 1,506 | 2,631 | 4,477 | 13,969 | 21,936 | 59,745 | 382 | 785 | 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 |
| 1919 | 10.58 | 1,585 | 2,767 | 4,734 | 15,683 | 25,687 | 79,988 | 402 | 801 | 1,996 | 5,680 | 12,111 |
| 1920 | 12.252 | 1,362 | 2,343 | 3,949 | 12,656 | 20,413 | 60,068 | 381 | 737 | 1,772 | 4,899 | 10,499 |
| 1921 | 10.941 | 1,404 | 2,375 | 3,903 | 11,214 | 16,925 | 42,409 | 434 | 846 | 2,075 | 5,502 | 10,554 |
| 1922 | 10.252 | 1,582 | 2,712 | 4,525 | 13,578 | 20,993 | 57,081 | 451 | 899 | 2,262 | 6,164 | 11,971 |
| 1923 | 10.436 | 1,491 | 2,543 | 4,208 | 12,111 | 18,151 | 44,713 | 440 | 878 | 2,232 | 6,070 | 11,510 |
| 1924 | 10.457 | 1,585 | 2,708 | 4,486 | 13,115 | 20,151 | 52,500 | 462 | 930 | 2,328 | 6,080 | 12,063 |
| 1925 | 10.719 | 1,672 | 2,897 | 4,873 | 14,930 | 23,486 | 65,037 | 447 | 920 | 2,359 | 6,375 | 13,099 |
| 1926 | 10.826 | 1,717 | 2,972 | 5,021 | 15,299 | 24,042 | 67,227 | 462 | 923 | 2,451 | 6,557 | 13,246 |
| 1927 | 10.62 | 1,914 | 3,366 | 5,765 | 18,289 | 29,197 | 84,853 | 462 | 967 | 2,634 | 7,381 | 15,282 |
| 1928 | 10.482 | 1,949 | 3,450 | 5,909 | 18,211 | 28,667 | 80,932 | 447 | 990 | 2,834 | 7,754 | 15,600 |
| 1929 | 10.482 | 2,124 | 3,783 | 6,518 | 20,373 | 31,910 | 89,346 | 465 | 1,049 | 3,054 | 8,835 | 17,551 |
| 1930 | 10.22 | 2,174 | 3,885 | 6,749 | 22,068 | 35,493 | 105,432 | 463 | 1,021 | 2,919 | 8,643 | 18,008 |
| 1931 | 9.321 | 1,814 | 3,191 | 5,447 | 16,765 | 26,281 | 72,463 | 438 | 935 | 2,617 | 7,249 | 14,736 |
| 1932 | 8.361 | 1,424 | 2,407 | 3,985 | 11,570 | 17,536 | 44,136 | 442 | 829 | 2,088 | 5,604 | 10,886 |
| 1933 | 7.934 | 1,508 | 2,623 | 4,414 | 13,215 | 20,437 | 52,454 | 394 | 831 | 2,214 | 5,992 | 12,432 |
| 1934 | 8.204 | 1,473 | 2,558 | 4,314 | 13,166 | 20,488 | 53,977 | 388 | 802 | 2,101 | 5,844 | 12,116 |
| 1935 | 8.409 | 1,546 | 2,641 | 4,438 | 13,545 | 21,098 | 57,568 | 450 | 844 | 2,162 | 5,991 | 11,980 |
| 1936 | 8.493 | 1,616 | 2,824 | 4,800 | 14,957 | 23,563 | 65,531 | 409 | 847 | 2,261 | 6,352 | 13,071 |
| 1937 | 8.799 | 1,461 | 2,504 | 4,184 | 12,714 | 19,971 | 52,966 | 417 | 825 | 2,051 | 5,457 | 11,723 |
| 1938 | 8.632 | 1,486 | 2,544 | 4,261 | 13,083 | 20,631 | 56,302 | 427 | 827 | 2,056 | 5,536 | 11,713 |
| 1939 | 8.511 | 1,478 | 2,516 | 4,186 | 12,602 | 19,672 | 51,790 | 441 | 846 | 2,082 | 5,532 | 11,642 |
| 1940 | 8.596 | 1,409 | 2,381 | 3,923 | 11,438 | 17,528 | 46,123 | 438 | 838 | 2,045 | 5,347 | 10,380 |
| 1941 | 9.026 | 1,396 | 2,351 | 3,867 | 11,367 | 17,379 | 45,119 | 442 | 834 | 1,992 | 5,355 | 10,444 |
| 1942 | 9.992 | 1,216 | 2,055 | 3,367 | 9,649 | 14,768 | 36,467 | 376 | 742 | 1,797 | 4,531 | 9,343 |
| 1943 | 10.601 | 1,301 | 2,132 | 3,402 | 9,391 | 14,034 | 34,216 | 470 | 861 | 1,905 | 4,749 | 8,988 |
| 1944 | 10.781 | 1,444 | 2,375 | 3,820 | 10,869 | 16,588 | 43,115 | 514 | 931 | 2,057 | 5,150 | 9,956 |
| 1945 | 11.029 | 1,514 | 2,470 | 3,931 | 10,877 | 16,200 | 39,870 | 558 | 1,010 | 2,194 | 5,554 | 10,282 |
| 1946 | 11.967 | 1,546 | 2,494 | 3,949 | 10,655 | 15,875 | 38,012 | 598 | 1,039 | 2,273 | 5,436 | 10,340 |
| 1947 | 13.69 | 1,416 | 2,281 | 3,618 | 10,075 | 15,345 | 38,732 | 550 | 944 | 2,004 | 4,804 | 9,499 |
| 1948 | 14.758 | 1,339 | 2,139 | 3,361 | 9,248 | 14,137 | 37,737 | 540 | 916 | 1,890 | 4,360 | 8,237 |
| 1949 | 14.61 | 1,328 | 2,085 | 3,215 | 8,258 | 12,082 | 27,606 | 571 | 954 | 1,954 | 4,434 | 8,201 |
| 1950 | 14.756 | 1,415 | 2,239 | 3,493 | 9,426 | 14,210 | 35,525 | 592 | 984 | 2,010 | 4,641 | 8,880 |
| 1953 | 16.403 | 1,511 | 2,375 | 3,692 | 9,859 | 14,782 | 35,770 | 646 | 1,058 | 2,151 | 4,936 | 9,535 |
| 1954 | 16.485 | 1,543 | 2,430 | 3,778 | 10,143 | 15,264 | 37,697 | 655 | 1,081 | 2,187 | 5,021 | 9,656 |
| 1956 | 16.665 | 1,886 | 3,016 | 4,772 | 13,257 | 20,287 | 52,466 | 756 | 1,261 | 2,650 | 6,228 | 12,242 |
| 1958 | 17.731 | 1,807 | 2,836 | 4,408 | 11,697 | 17,483 | 43,037 | 779 | 1,264 | 2,585 | 5,910 | 11,094 |
| 1960 | 18.159 | 2,091 | 3,329 | 5,257 | 14,798 | 22,929 | 63,099 | 854 | 1,400 | 2,872 | 6,667 | 12,887 |
| 1962 | 18.542 | 2,141 | 3,356 | 5,193 | 13,663 | 20,236 | 46,184 | 926 | 1,520 | 3,075 | 7,089 | 13,749 |
| 1965 | 19.332 | 2,418 | 3,822 | 5,967 | 15,945 | 23,838 | 57,186 | 1,015 | 1,678 | 3,473 | 8,052 | 15,501 |
| 1969 | 22.481 | 2,419 | 3,837 | 6,034 | 16,671 | 25,752 | 69,360 | 1,002 | 1,639 | 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 | 3,529 | 8,096 | 15,435 |


| 1976 | 34.902 | 2,062 | 3,168 | 4,869 | 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.


[^0]:    ${ }^{1}$ Analyzing smaller fractiles within the top percentile is critical because capital income is extremely concentrated.
    ${ }^{2}$ 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.
    ${ }^{3}$ Kuznets and subsequent researchers have focused on tabulations by size of total income.
    ${ }^{4}$ 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)).

[^1]:    ${ }^{5}$ In 1913, a constitutional amendment allowed the US government to raise revenue with an individual income tax.
    ${ }^{6}$ From 1913 to 1916, because of higher exemption levels, we can only provide estimates within the top percentile.
    ${ }^{7}$ 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.
    ${ }^{8}$ 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

[^2]:    ${ }^{9}$ The number of returns actually filed is smaller, around 125 million.
    ${ }^{10}$ 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).
    ${ }^{11}$ 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.
    ${ }_{12}$ 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.
    ${ }^{13}$ The most important example is the treatment of capital gains and the percentage of these gains that are included in the statistics tables.

[^3]:    ${ }^{14}$ 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.
    ${ }^{15}$ They also present incomplete series for the top $1 \%$.

[^4]:    ${ }^{16}$ 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.

[^5]:    ${ }^{17}$ 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.

[^6]:    ${ }^{18}$ Piketty (2001a, 2001b) shows that exactly the same phenomenon is taking place in France at the same period.
    ${ }^{19}$ 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.
    ${ }^{20}$ Slemrod and Bakija (2000) pointed att 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.

[^7]:    ${ }^{21}$ 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.

[^8]:    ${ }^{22}$ We will come back on this issue later on when we look at wage inequality series.

[^9]:    ${ }^{23}$ At the very top, "capitalists: investors and speculators" form the overwhelming majority of our capitalists and rentiers group.
    ${ }^{24}$ 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".

[^10]:    ${ }^{25}$ 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

[^11]:    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).
    ${ }^{26}$ 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.
    ${ }^{27}$ In particular, note that the "personal holding company surtax", which has been in place since the 1930s, basically forces personal holding companies to distribute their dividends.

[^12]:    ${ }^{28}$ 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.
    ${ }^{29}$ Changes in life expectancy, retirement behavior, etc. could have modified life-cycle savings patterns over the century.

[^13]:    ${ }^{30}$ 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.
    ${ }^{31}$ 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.
    ${ }^{32}$ See the recent study of Slemrod and Kopczuk (2000).

[^14]:    ${ }^{33}$ During the $19^{\text {th }}$ century, the only progressive tax was the property tax, but its level was low (see Brownlee (2000) for a detailed description).

[^15]:    ${ }^{34}$ DeLong (1998) also points out the potential role of anti-trust law (according to DeLong, antitrust 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).

[^16]:    ${ }^{35}$ We explain in appendix why the major entry effect of military personnel during WWII, in fact does not affect our results.
    ${ }^{36}$ 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.

[^17]:    ${ }^{37}$ 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.

[^18]:    ${ }^{38}$ Note that for fractiles below the top percentile, the drop starts from 1940 to 1941.
    ${ }^{39}$ See Goldin and Margo (1992) for a more detailed description.
    ${ }^{40}$ 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 $20^{\text {th }}$ century than during the inter-war period.

[^19]:    ${ }^{41}$ 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)).

[^20]:    ${ }^{42}$ 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).
    ${ }^{43}$ 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.

[^21]:    ${ }^{44}$ As discussed above, our evidence is consistent with the new occupational ratios series constructed by Goldin and Katz (1999).
    ${ }^{45}$ 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.
    ${ }^{46}$ 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)).

[^22]:    ${ }^{47}$ 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.
    ${ }^{48}$ 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.

[^23]:    ${ }^{49}$ 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).
    ${ }^{50}$ 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).

[^24]:    ${ }^{51}$ 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.
    ${ }^{52}$ Atkinson did not attempt to compute comparable wage series for the UK.

[^25]:    ${ }^{53}$ Note however that the Great Depression was more severe in the US (the WWII fiscal shock was also more severe in the US).
    ${ }^{54}$ The recent U.K. inequality pattern appears to be increasing and intermediate between the U.S. and France.
    ${ }^{55}$ 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.

[^26]:    ${ }^{56}$ For 1913-1915, the tables only provide information on the number of tax returns for a large number of income brackets.
    ${ }^{57}$ 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).
    ${ }^{58}$ 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.

[^27]:    ${ }^{59}$ 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.
    ${ }^{60}$ 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.

[^28]:    ${ }^{61}$ Except in 1944-1945, where it is about 11-13\% higher (because of the lower fraction of tax units actually filing).
    ${ }_{62}$ 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).
    ${ }^{63}$ 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 19131929 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.
    ${ }^{64}$ 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.
    ${ }^{65}$ 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).
    ${ }^{66}$ 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).

[^29]:    ${ }^{67}$ 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).
    ${ }^{68}$ 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.
    ${ }^{69}$ 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.
    ${ }^{70}$ Average household income was about $\$ 52,000$ in 1998 according to the Current Population Survey (CPS) (cf. "Money Income in the United States 1999", Current Population Report P60-209 (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).

[^30]:    ${ }^{71}$ 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 $\mathrm{a}=\mathrm{b} /(\mathrm{b}-1)$ and $\mathrm{k}=\mathrm{s} \mathrm{p}^{(1 / a)}$, 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).
    ${ }^{72}$ 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.
    ${ }^{73}$ 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

[^31]:    which we must adjust the actual number of returns to dotain the real number of tax units. We use the same multiplier factors to adjust the dollar amounts reported in each bracket.
    ${ }_{75}^{74}$ For example, for year 1925, our multiplier is $(6 / 7)^{*}$ multiplier $1924+(1 / 7)^{*}$ multiplier 1932, etc.
    ${ }^{75}$ 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.
    ${ }^{76}$ 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

[^32]:    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.
    ${ }^{77}$ 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).
    ${ }_{79}^{78}$ See above for other problems explaining why Kuznets' estimates are biased downward.
    ${ }^{79}$ 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 $15,4 \%(0.4 \times 38.4=15.4)$.

[^33]:    ${ }^{80}$ 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.
    ${ }^{81}$ 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.
    ${ }^{82}$ Data on tax-exempt interest is scarce and incomplete, and we did not attempt to take taxexempt interest into account.

[^34]:    ${ }^{83}$ 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.

[^35]:    ${ }^{85}$ 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.
    ${ }^{86}$ 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.

[^36]:    ${ }^{87}$ This assumption can be successfully tested using the micro-files for the period 1966-1995.
    ${ }^{88}$ 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

[^37]:    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.
    ${ }^{89}$ 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.
    ${ }^{90}$ 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.
    ${ }^{95}$ 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.

[^38]:    ${ }^{92}$ 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 P99.99100.
    ${ }^{93}$ For years 1935 to 1941, and from 1944 to 1961, the published tables report only the number of tax units in each bracket.
    ${ }^{94}$ We adopted the same method to compute top income shares in 1913-1915 where only the number of tax units was available.
    ${ }^{95}$ This is the standard method of Pareto interpolation used by Kuznets (1953) and Feenberg and Poterba (1993).

[^39]:    ${ }^{96}$ 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 $\$ 5,000$.

[^40]:    ${ }^{97}$ This correction method had already been used for the composition series described in appendix A.

