Types of Income and Inequality

• Two types of income:
  – Owning (Stocks, Bonds, Proprietors, Rents, Royalties)
  – Working (Wages, Salaries, Bonuses, Stocks (Options))

• Inequality can go up 3 ways:
  – Capital Inequality Can Rise
    • It has Fallen
  – Wage Inequality Can Rise
    • It has risen dramatically
  – Capital Share Can Rise
    • It has risen modestly
A Quick History

• 1940s: Large Compression

• 1950s-1960s: Stability

• 1970s: Slight Rise in Inequality but Compression Between College-Educated and Non-College Educated

• 1980s: Large Rise in Inequality, particularly Bottom End

• 1990s: Rise in Top-End Inequality (Largely Finance and CEOs), Reduction in Bottom End Inequality

• 2000s: Stagnation
In contrast to P90–95 and P95–99, the top percentile (P99–100 in Figure II) underwent enormous fluctuations over the twentieth century. The share of total income received by the top 1 percent was about 18 percent before World War I, but only about 8 percent from the late 1950s to the 1970s. The top percentile share declined during World War I and the postwar depression (1916 to 1920), recovered during the 1920s boom, and declined again during the Great Depression (1929 to 1932, and 1936 to 1938) and World War II. This highly specific timing for the pattern of top incomes, composed primarily of capital income (see below), strongly suggests that shocks to capital owners between 1914 and 1945 (depression and wars) played a key role. The depressions of the interwar period were far more profound in their effects than the post-World War II recessions. As a result, it is not surprising that the fluctuations in top shares were far wider during the interwar period than in the decades after the war.15

15. 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 are more detailed before World War II than after), but reflects real changes in the economic conditions.
Capital Inequality Explained

• Two Forces:

  – Pension Plans – Ownership of capital is much broader.

  – Elite Workers – Most of the very wealthy these days work as opposed to only owning.

  – Caveat: top 0.01% owns over 11% of the wealth; top 0.1% owns over 22% of the wealth; top 1% owns; top 10% owns 75% of the wealth; Bottom 90% owns 25% of wealth; Bottom 50% owns nothing.
gains, but capital gains are added back into income to compute shares. In column (11) individuals are ranked by income including capital gains, and capital gains are added back into income to compute shares. These additional series show 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.\(^{20}\)

The decline of the capital income share is a very long-term phenomenon and is not limited to a few years and a few thousand tax units. Figure V shows a gradual secular decline of the share of capital income (again excluding capital gains realizations) and dividends in the top 0.5 percent fractile from the 1920s to the 1990s: capital income was about 55 percent of total income in the 1920s, 35 percent in the 1950s–1960s, and 15 percent in the 1990s.

\(^{20}\) It is interesting, however, to note 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.
Capital Share

• Piketty about capital share mostly
  – Rate of return to capital higher than rate of growth of wages
    • Worry that capital takes over world

  – Technical Change (related) : Owners of robots get all the income

• Focus here on wage inequality – largest aspect of increasing inequality
A Figures

Figure 1: Average net capital share of private domestic value added for G7 countries.

Figure 2: Average gross capital share of private domestic value added for G7 countries.
Sources of Wage Inequality

- Technology in 80s and 90s: Skill-biased technical change

- Trade in 2000s (China – which might be good for global inequality)

- Institutionalists: Policies: taxes, minimum

- Institutionalists: Market changes: deunionization, outsourcing
sation that include the value of employee benefits, and does not simply reflect the disproportionate recent increases in the burden of (and wage offsets from) rising health insurance benefit costs for middle-wage workers.15

To show more precisely where in the wage distribution the divergence of upper- and lower-half wage inequality occurred, figure 4 plots cumulative log hourly real wage growth by wage percentile (from the 4th to the 96th percentile) for 1974–88 and for 1988–2005. An almost linear spread-

15. Pierce (2001, 2007), using the microdata from the ECI, finds that the 90-50 log hourly total compensation differential increased by 0.108 from 1984 to 1996 and by 0.033 from 1994 to 2005. In contrast, the 50-10 log hourly total compensation differential decreased by 0.040 from 1984 to 1996 and by 0.022 from 1994 to 2005.
Northern Europe vs. US

• Remedies
  – Bottom-inequality: Minimum wage, EITC
  – Top Inequality: Taxes, Financial Regulation, Capital Tax
  – Both: Unions

• Northern Europe vs. US
  – Northern Europe: Higher taxes, Much Higher Unionization
  – Lower per capita growth
    • But not per hour worked
    • Differences due to decline in hours worked in Sweden and rise in US
  – Substantially Less Inequality
Figure 2
The Evolution of the Shares of the Top 1 Percent in Different Countries

A: Top 1 Percent Income Shares in English-speaking Countries (U-Shape)

B: Top 1 Percent Income Shares in Continental Europe and Japan (L-Shape)

Source: The World Top Incomes Database.
Notes: The figure reports the share of total income earned by the top 1 percent in four English-speaking countries in panel A, and in four other OECD countries (Japan and three continental European countries) in panel B. Income is defined as pre-tax market income. The estimates for Australia include realized capital gains partially and at varying degrees over time.
pre-tax income shares. For example, the United States experienced a reduction of 47 percentage points in its top income tax rate and a 10 percentage point increase in its top 1 percent pre-tax income share. By contrast, countries such as Germany, Spain, or Switzerland, which did not experience any significant top rate tax cut, did not show increases in top 1 percent income shares. Hence, the evolution of top tax rates is strongly negatively correlated with changes in pre-tax income concentration.

This negative correlation can be explained in a variety of ways. As pointed out originally by Slemrod (1996), it is possible that the rise in top US income shares occurred because, when top tax rates declined, those with high incomes had less...
the twentieth century. The most obvious policy difference—between countries and over time—regards taxation, and it is here that we begin.

**Taxes and Top Shares**

During the twentieth century, top income tax rates have followed an inverse U-shaped time-path in many countries, as illustrated in Figure 3. In the United States, top income tax rates were consistently above 60 percent from 1932 to 1981, and at the start of the 1920s, they were above 70 percent (of course, varying proportions of taxpayers were subject to the top rate). High income tax rates are not just a feature of the post-World War II period, and their cumulative effect contributed to the earlier decline in top income shares. While many countries have cut top tax rates in recent decades, the depth of these cuts has varied considerably. For example, the top tax rate in France in 2010 was only 10 percentage points lower than in 1950, whereas the top tax rate in the US was less than half its 1950 value.

Figure 3 plots the changes in top marginal income tax rates (combining both central and local government income taxes) since the early 1960s against the changes over that period in top 1 percent income shares for 18 high-income countries in the World Top Incomes Database. It shows that there is a strong correlation between the reductions in top tax rates and the increases in top 1 percent

---

**Figure 3**

Top Marginal Income Tax Rates, 1900–2011

Source: Piketty and Saez (2013, figure 1).

Notes: The figure depicts the top marginal individual income tax rate in the United States, United Kingdom, France, and Germany since 1900. The tax rate includes only the top statutory individual income tax rate applying to ordinary income with no tax preference. State income taxes are not included in the case of the United States. For France, we include both the progressive individual income tax and the flat rate tax “Contribution Sociale Generalisée.”