Introduction

This book is about the macroeconomics of inequality in the USA, beginning around 1970. The analysis is based on a data framework combining the distributions by size of income and wealth with the income and output sides of the national accounts, flows of funds, and full balance-sheet accounting of real capital and financial claims. The numbers entering the household size distributions are mutually consistent and satisfy double-entry national accounting balances, making analysis and modeling roughly right about the big picture of distribution. The picture is "roughly right" because of the double-entry accounting consistency that goes into its creation.[1]

The first five chapters present the data, economic theory, and institutional analysis of fifty years of rising inequality. Chapter 6 sets out a numerical simulation model assessing future prospects for ameliorating the present distributive mess.

The key takeaway is that in the present-day American political economy, wage repression over decades is the basic cause of distributional malaise. "Big data" microeconomic detail is consistent with this finding but does not determine it – not monopoly power, not "superstar" firms. The model simulations show that undoing unequal distributions of income and wealth will take as much time as was needed to create them.

Wage repression operates through several channels, which will take some effort to trace. Here we first sketch the main observations coming from the data and simulation results. Because wages are central to the analysis, the discussion then turns to a preliminary analysis of the dynamics of payments to labor. We close this introduction with

[1] Other presentations such as Piketty et al. (2016) are less thorough because they consider only the income side of the national accounts.

a discussion of the broader political economy approach that animates the book as a whole and compare that with alternative perspectives.

FINDINGS FROM THE DATA

Chapters 1 through 5 suggest nine points about distributive shifts in the USA since around 1980.

Income and wealth distributions became substantially more unequal over a period of decades; "cumulative processes" of economic change were involved.

The profit share of output rose substantially. The wage share correspondingly went down; in accounting terms, because average real wage growth lagged rising labor productivity. Wage repression was the key driving force behind rising inequality. Increases in real labor compensation that actually occurred mostly flowed to the top 1 percent of households in the size distribution of income.

Workers have been pushed into low-wage, low-productivity sectors, contributing to an overall productivity slowdown. Both static and dynamic sectors have had lagging wage growth. Demand growth for manufacturing, information, and a few other dynamic sectors is offset by rising productivity so they shed labor although their wages are relatively high. Jobs trickle down to low-wage, low-productivity education–health, business service, and accommodation–food sectors with rising demand but slow productivity growth. A natural interpretation is that a productivity slowdown became a means to absorb surplus labor. Or, more baldly stated, business models changed to take advantage of the ever-growing masses of workers with no prospects for good jobs.

The top group of households also benefitted from interest and dividend payments supported by higher profits, together with rising proprietors' incomes. They received capital gains exceeding rising business profits after taxes and depreciation: via rising equity prices, companies effectively distributed more than they earned. Top 1 percent households also received "wages" including options and bonuses, and share buybacks. Because they have high saving rates, their net worth went up.

Higher capital gains were stimulated by wage repression in two ways. Businesses enjoyed rising profits and falling interest rates, the latter due to slower inflation because there was no wage-driven cost push. Insofar as asset price increases are driven by capitalization of higher profit rates as interest rates declined, they basically result from lagging wages.

Households at the bottom of the income distribution received modestly increasing government transfers. They apparently have negative saving rates, which supported their consumption spending.

Income of middle-class households, which principally rely on labor earnings, was squeezed from above and below; their share of total income went down.

Finally, summary measures underline the rapid growth of inequality. So-called Palma ratios that compare household incomes of the top 1 percent to incomes further down the scale increased by about 3 percent per year – an astonishingly high number for *any* macroeconomic ratio over a span of decades. The share of wealth in the total held by rich households was around 25 percent in the 1960s; now it is in the vicinity of 40 percent.

SIMULATION RESULTS

It is convenient to run simulations over a period of forty years, basically the span between Presidents Reagan and Trump. At a macro level over that time, visible realignment of the profit and wage shares would require steady growth of wages exceeding increases in productivity. A "double movement" of the type memorably chronicled by Karl Polanyi for the nineteenth century (as we will discuss) including institutional and social changes would certainly be necessary to allow labor to restore its income position. One-off policy moves such as tax and transfer packages in the range of $100 billion per year (half a percent of GDP) or minimum wage increases in the 10 to 20 percent range could knock a few points off Palma ratios, but would not alter the big picture of inequality.

Besides continued wage growth for the poor and middle classes, the rapid increases in labor payments to the top earners would have to be curtailed to push the Palmas down. Similar conclusions apply to financial transfers and proprietors' incomes flowing to the top 1 percent.

Growing government tax/transfer packages could benefit lower income groups. Resources could conceivably come from a wealth fund supported by taxes on capital gains. These taxes channeled to a wealth fund could halt increases in the share of wealth controlled by the top 1 percent.

Palma ratios and the 1 percent's wealth share could go down steadily if all these changes were to be combined.

These observations are robust insofar as they mainly build upon the accounting consistency underlying the simulation model. Policy is relevant only if it can support the distributional shifts built into the simulations.

PRODUCTIVITY AND WAGE REPRESSION

To unravel wage dynamics, it helps to bring in labor "productivity," a label economists use for the ratio of real output to employment. Productivity *is* just a ratio, but it is often interpreted as a measure of technical progress and assumed to have its own proper dynamics. Chapter 4 uses it to sort out changes in employment and output across producing sectors.

As explained in more detail in Chapter 4, the real "product wage" is the nominal or money wage divided by a producer price index – that is, corrected for cost inflation confronting business. A little algebra shows that the labor or wage share of output (which equals "unit labor cost") is equal to the real wage divided by productivity. Ignoring indirect taxes and government subsidies for producers for simplicity, the profit share equals 1 minus the wage share. Figure I.1 shows how the profit share and growth rates of real wages and productivity have varied over time. Real wage growth lagged productivity growth for almost 50 years after 1970, causing the profit share to

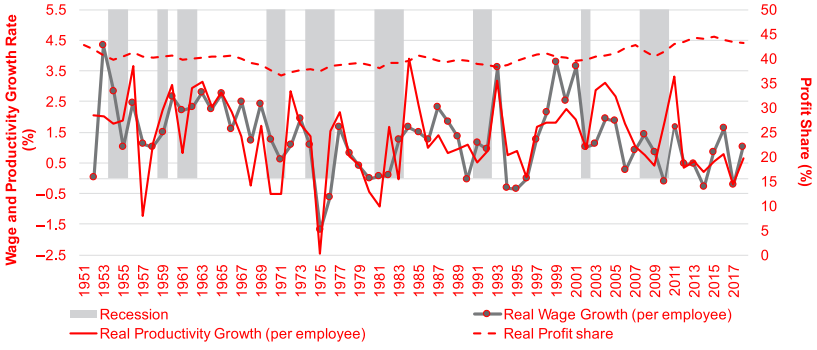

FIGURE I.1 Real wage and productivity growth rates and profit share

grow at 0.43 percent per year, 1970–2018. Annual growth at a rate of 0.4 percent (= 0.004) looks tiny but over 50 years it cumulates to 27 percent. That's a big change for any income share! The real profit level grew at 3.2 percent per year vs 2.8 percent for real GDP

Weaker labor bargaining power after 1970 was a key factor. As discussed in Chapter 5, there is a cyclical pattern (which can be traced to Marx in the nineteenth century and the Cambridge economist Richard Goodwin in the twentieth) superimposed on the rising profit share. Except around 1995 and 2015, productivity growth led real wage growth as the economy emerged from recessions (shaded). Typically since 1970, productivity growth has been stronger. Subsequent wage growth and a dip in the profit share lead into a new recession.[2]

Figure I.2 illustrates the slowdown in inflation across business cycles. The lower diagram shows that, coming out of a recession, the growth rate of a producer price index tends to exceed the rise of nominal unit labor costs (money wage growth minus productivity growth) so the profit share increases as in Figure I.1. The pattern is reversed late in the cycle as the profit share tails off (subject to real

[2] A similar observation applies to the "yield premium" or the difference between long-term and short-term interest rates. The premium is usually positive, but it has tended to fall or even "invert" (with the short rate exceeding the long rate) as short rates increase late in a cyclical upswing. Bond market and Fed reactions that provoke the inversion have been triggered by a rising wage share along with other factors.

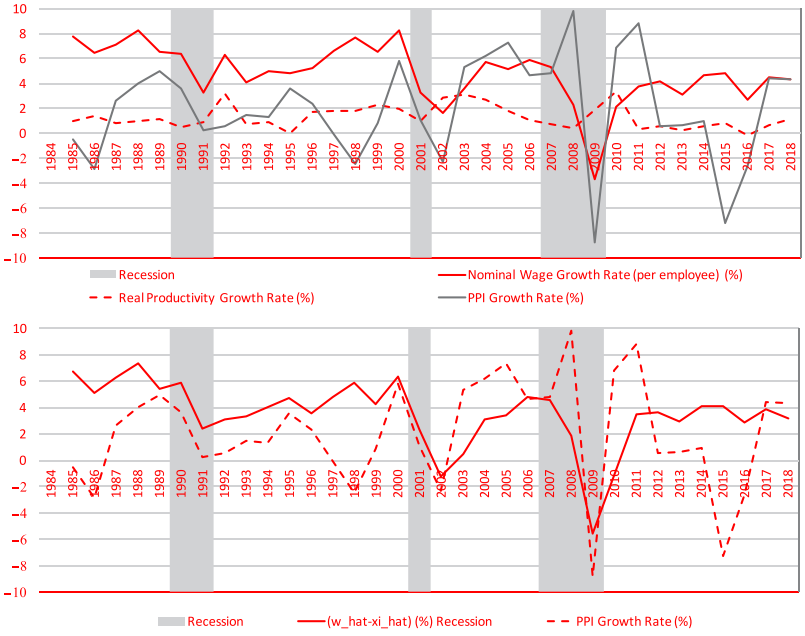

FIGURE 1.2 Wage and price inflation rates

world complications such as the drop in producer prices in 2015 that was due to collapsing energy costs). Peak growth rates of labor cost have gone down by more than 3 percentage points since the 1980s, pulling down price inflation. In turn, interest rates have declined, driving up capital gains in conjunction with rising profits (details in Chapter 3).

POLITICAL ECONOMY

It is helpful to look at these results against a political economy background. Two classics are relevant. One is Karl Polanyi's book on *The Great Transformation* (1944). W. Arthur Lewis (1954) on economic development provides a natural extension to economic duality as reflected in the structure of production. The American economy has been running the processes Polanyi and Lewis describe in reverse. For example, the macroeconomic capital/output ratio has fallen and the

profit share of output has gone up, contrary to the standard macroeconomic scenario. Reversing Lewis's narrative about economic development, employment and the structure of production have shifted toward sectors with low growth and levels of real wages and productivity. All these trends benefit households at the tip of the income distribution.

Polanyi's analysis is historically sophisticated and profound – we can only scratch the surface here. He discussed economic change beginning in the eighteenth century in terms of "fictitious commodities" including labor, land, and money (linked to world economic relations). For most economists these "commodities" are the usual macro variables, but Polanyi concentrated on how they are "embedded" in the socioeconomic system. The US economy is now splitting into separate dual zones in all three dimensions. At the macro level, distributions of labor income, land rents, and financial flows have become more unequal, reflecting the devolution of market power from labor to capital.

Polanyi also saw a dialectical process in the flourishing of what is now called free market economics or laissez-faire in the nineteenth century, which he said was "planned." Then a political response led to a "double movement" reasserting social concerns. The dialectic continued into the twentieth century with the rise and fall of Fascism. Growing incomes in the nineteenth century were almost destroyed by the upheavals of the twentieth. Now in the twenty-first century, the tide of laissez-faire is again in flood. In response to political forces, will it eventually ebb and fall in a new double movement? If it does, the relevant time frame must be measured in decades, not just years.

OTHER PERSPECTIVES

There are of course many other ways of analyzing distributional change. Detailed microeconomic factors are summarized in Chapter 5.

Regulatory and institutional factors helped hold wage increases below growth of productivity. They include austerity, both as a macroeconomic practice and as an ideology supporting anti-labor

interventions. Political conflict has been the linchpin of increasingly hostile National Labor Relations Board policies toward unions. Many states have their own right-to-work laws. Also entering are divide-and-rule employer tactics in "fissuring" labor markets, nonpoaching and noncompetition clauses in contracts, stagnant minimum wages (now sporadically increasing), and a low ratio of employment to population (now also rising). Changes in trade and technology have reduced labor's bargaining power (e.g., globalization and outsourcing). So have robots (the latest media fad). They are mostly important in the automobile industry, boosting inequality across states and regions. Perhaps 5–10 percent of jobs are at high risk from automation.

In product markets, profits have been supported by less aggressive antitrust intervention. Chicago economics led to an exclusive focus on price competition and the ideology of shareholder value maximization. Product market concentration has risen, and there are specific industry trends such as the emergence of platform companies. But information and relevant parts of retail sectors are less than 10 percent of GDP.

No matter how detailed, micro studies beg the question of how their findings generalize to the macro or sectoral level; for example, "superstar" firms are another recent fad. They occupy the "fat tail" of an earnings distribution typically skewed to the right. Their high productivity may drive down the average sectoral wage share. But then what are the institutional barriers that prevent workers in these firms from getting higher pay? We are back to wage repression. Recent studies suggest that there is substantial churn among superstar firms and sectors. They do not have "super" sustained productivity growth.

Rents are another mainstream trope. Since Ricardo, they are understood as deriving from demand for a service or asset controlled by some economic actor. But then, what is the source of demand? Will it grow faster than productivity, raising the profit share? Operating in the property market, the "real estate rental and leasing" sector generates more than 25 percent of total profits. Its own-profit share of

value-added is very high, over 90 percent. But its own-profit and value-added shares have increased slowly. The sector is not a big source of *rising* profit inequality.

On another front, highly paid executives are also said to receive their high incomes due to "rents." What is the source of demand? What is the institutional basis? Why is there increasing social acceptance of extremely high pay? Rules of the game and institutions matter. Certainly there is more US tolerance for outrageous pay now than in the past, but that can change, as it has before; for example, during the New Deal.

It remains to be seen if a double movement along Polanyi's lines can turn around adverse distributional trends as in the simulation results. It is difficult to imagine that democracy can be compatible with another fifty years of rising inequality.

1 Decades of Income Inequality

Economic inequality in the United States began an upward march around 1970. As of 2019, the pace may have slowed but any changes were far from reversing almost five decades of distributional deterioration.

Inequality's ascent can be tracked from two angles – income and wealth. This chapter will look at rising income disparity across households. Chapter 2 shows how income differences showed up macroeconomically. Chapter 3 addresses the distribution of wealth at the macroeconomic and household levels, and Chapter 4 examines the sectoral structure of production.

Income and wealth distributions are multidimensional, but American experience can be understood in terms of a three-way breakdown of households: the rich, represented by the top 1 percent in the size distribution of income, the middle class, and a large group more or less below the midline. The classes differ both in sources of income and the ways that they use it.

The top 1 percent comprises about 1.2 million households with incomes of a few hundred thousand up through millions of dollars per year. The Congressional Budget Office (CBO) data underlying this study direct attention toward this richest 1 percent in the size distribution of income.

The group just below is the "middle class." There is no hard-and-fast definition. Using the data organized by the groups in Figure 1.1, it is convenient to focus on 47 million households between the 61st and 99th percentiles of the income distribution. Their average (or mean) income is around $160,000, mostly from labor compensation as opposed to the top 1 percent's earnings from capital and other sources. They have positive saving and visible wealth.