Wealth Inequality in the Twenty-First Century

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Abstract

Since the 1980s, there has been an extreme divergence across wealth distributions within developed countries as wealth inequality has rapidly increased. As the inequitable distribution of wealth has reached staggering heights, levels of inegalitarian capital ownership not seen since the eve of World War I, it has had profound political, social, and economic consequences. Wealth and, in parallel, income inequality in the twenty-first century poses the most fundamental threat to the stability and legitimacy of advanced economies in the Global North, brought forth by a wide range of political economic realities: the extreme accumulation of wealth and resultant rising capital-income ratios; the increased share of capital income in national income and resultant decline of the labor share; high saving rates at the top of the distribution coupled with rising household debt at the bottom; slowing demographic and productivity growth; stagnant wages in line with a major decline in organized labor; increased economic instability as a result of financial deregulation; the decline of public wealth as a result of fiscal austerity and competition; and the rise of monopoly and monopsony power.
Introduction

It is insufficient to see rising wealth inequality as a purely economic phenomenon; after all, inequality is a result of conscious and deliberate social, political, and economic policies, systems, and institutions. Thus, I will attempt to address the inequitable distribution, and stratification, of wealth across class, race, and gender demos by analyzing the political, social, and economic dynamics that have led to our current situation. To do so requires an interdisciplinary approach that draws from sociology, economics, and history. First, a brief history of the study of economic inequality and its recent developments.

Research on economic inequality in the twentieth-century was primarily the domain of Simon Kuznets, of Kuznets Curve fame, work that primarily focused on income inequality. The Kuznets Curve seemingly showed the bell curve of income inequality, first rising during rapid industrial and technological advance and then falling during the interwar years of the twentieth century, to be an inevitable economic reality (Piketty, 2014). However, recent work has shown the bell-curve to be illusory, a curve which has been inverted by the recent explosion of wealth and income inequality, one which has come instead to resemble a U-curve spanning from the beginning of the twentieth century up through the beginning of the twenty-first century. As such, the work of contemporary economists such as Thomas Piketty, Tony Atkinson, and Gabriel Zucman has risen to the forefront of political and economic debate. As the concentration of wealth has increased, with wealth becoming ever greatly concentrated in a smaller and smaller amount of hands, there has been a rise in economic and political instability and insecurity.

Until the 2000s, the study of income inequality was primarily the domain of macroeconomists studying the share of labor in national income and labor economists studying wage disparities (Hirschman, 2016). Hirschman refers to these two fields as the “two dominant regimes of perceptibility” in the
analysis of income inequality.\textsuperscript{1} Within these two regimes, survey data was the primary method for analyzing the distribution of income within the field of labor economics, data which severely understated income at the very top of the distribution by “top-coding,” the practice of setting a top threshold and placing all incomes greater than that threshold into the same group. By relying on survey data, labor economists missed the rapid rise of the top .1 and .01 percent of the income distribution that began at the tail end of the 1970s. As for macroeconomists, a focus on synthetic summary measurements of inequality, such as that of Gini coefficients, ignored the specific characteristics of different groups along the distribution. As such, focusing on Gini coefficients led to misleading analysis of social welfare (Atkinson, 1970) and the inability to accurately assess the increasing divergence of incomes and wealth (Piketty, 2014).\textsuperscript{2}

While the rise of inequality that began in the 1980s was already showing up in tax data through the 1980s and 1990s, it wasn’t until the turn of the century that it became a focus of renewed interest and research. Research released in 2001 showed rapid increases in income inequality, especially at the top of the income distribution in the United States over the preceding two decades (Piketty & Saez, 2003). Interest was further fueled by coverage of the paper by Paul Krugman in New York Times Magazine, in which Krugman referred to booming inequality as the emergence of a “New Gilded Age.”\textsuperscript{3} With the increased visibility of income inequality, particularly in academia, came renewed interest in the study of wealth inequality, which lead to a proliferation of new work on the distribution of wealth in France (Piketty et al., 2006), Sweden (Roine & Waldenstrom, 2009), China (Piketty et al., 2017), India (Chancel & Piketty, 2017), and the United States (Saez & Zucman, 2016).

\textsuperscript{1} Hirschman looks at the production of knowledge, in particular the production of inequality knowledge, and how economic experts influence debates on policy. Hirschman (2016) concludes that economists “construct systems of observation that carefully track certain aspects of the economic system, while disattending to others.”

\textsuperscript{2} Piketty is particularly strong in his critique of the use of Gini coefficients, see Piketty (2014) pp. 266-67.

While Piketty and Saez’s paper in 2003 sparked interest and debate in academia, it wasn’t until the release of Piketty’s *Capital in the Twenty-First Century* in 2014 that the debate on both income and wealth inequality went mainstream. Following in *Capital’s* wake came glowing, if not reserved, reviews from renowned mainstream economists such as Paul Krugman, Lawrence Summers, and Martin Wolf, as well as op-eds in nearly all major newspapers and periodicals. Summers, like many neoclassical economists, praised the work for its rigorous empirical research, even going so far as to hold it up as a Nobel-prize worthy addition to the literature, while chiding Piketty’s theories on capital accumulation and his theory on the evolution of inequality. Krugman, for his part, declared it “the most important economics book of the year – and possibly of the decade,” while directing much of his attention on the return of “patrimonial capitalism” and the power of inherited wealth over wealth acquired by work. Writing in the *Financial Times*, Martin Wolf called it an “extraordinarily important book,” but nonetheless concluded that “Inequality cannot be eliminated. It is inevitable and to a degree even desirable.”

As for the left, Piketty was seen not as a Marx for the twenty-first century but rather another mainstream economist looking to curb and reform the harsher realities of capitalism but not willing to disavow it to any substantive degree, “While Piketty attacks the dominant economic form, capitalism, he never argues in an anti-capitalist way...Despite all coquetry, Piketty never misses a chance to distance himself from Marx’s ideas.” Meanwhile, reception outside of the United States and the United Kingdom was more tepid, with some French economists chalking the work’s popularity and acclaim up to the “Stiglitz and Krugman effect.”

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5 Krugman is mindful of not characterizing inequality as undesirable outright, instead he focuses his attention on unearned income and inheritance undermining the central tenet of market capitalism - merit.


While much work has been done in recent years to elucidate on economic inequality, there still exist greater questions as to the dynamics at play as to its increasing prevalence of inequality and the evolving tactics used in its legitimation. While most mainstream work has focused on a descriptive analysis of the issue within the perspective of neoclassical economics, along with possible policy prescriptions within the perspective of neoliberal politics, neither approach addresses a rather basic question, what ultimately has led to a world predicated on an ideology of capital accumulation in and of itself? One in which the primary motives of society and its members has been to maximize profits, drive economic growth, increase efficiency, and accumulate wealth, i.e. the so-called “logic of capital.”

A full analysis of the “logic of capital” is beyond the scope of this paper, and so this analysis will focus instead on the framework of Piketty’s Capital. Moving forward, there is still work to be done on understanding the underlying logic, ideology, and history of a system that has engendered irrevocable ecological destruction and unfathomable levels of social, political, and economic inequality. Work that is being carried out in earnest within the traditions of political economy and critical sociology. For now, I will focus on providing a descriptive analysis of the current economic situation around the world. Regardless of the critique from either the economic right or left, there is nearly unanimous consensus on the quality and usefulness of the historic data and framework for analysis that Piketty has assembled. Below, I will lay out the basis of this framework and the work of the World Inequality Lab to analyze current levels of wealth inequality around the world, along with the historical context for better understanding the evolution of wealth inequality over the course of the twentieth-century.

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Framework for Analysis

For this analysis, I rely on the empirical work and data series of Alvaredo, Chancel, Piketty, Saez, and Zucman (2018). The World Inequality Lab’s most recent release, the World Inequality Report 2018 (Alvaredo et al., 2018), provides the most comprehensive overview of wealth inequality in the world to date, and makes use of the data series compiled on WID.world and relevant papers released in an assortment of economics journals. Its mission is straightforward:

The World Inequality Report 2018 relies on a cutting-edge methodology to measure income and wealth inequality in a systematic and transparent manner. By developing this report, the World Inequality Lab seeks to fill a democratic gap and to equip various actors of society with the necessary facts to engage in informed public debates on inequality.

The World Inequality Lab also seeks "to relate macroeconomic phenomenon—such as nationalization and privatization policies, capital accumulation, and the evolution of public debt—to microeconomic trends in inequality focused on individuals' earnings and government transfers, personal wealth, and debt." While there is debate as to the validity of the authors' theories and conclusions, there is widespread consensus as to the quality of the data that the World Inequality Lab team has been able to assemble. I will use the data series assembled, and available freely, on WID.world to analyze the state of wealth inequality in the twenty-first century, across both space and time, as well as drawing from a wide array of literature as to the drivers of the disparate and stratified distribution of wealth. As “standard measures of inequality often rely on household surveys, which routinely underestimate the income and wealth of individuals at the top of the social ladder” (Alvaredo et al., 2018), the World Inequality Report relies on distributional national accounts. Distributional national accounts combine national wealth accounts, household wealth surveys, fiscal data, inheritance data, and wealth rankings (Alvaredo et al., 2016). To help us in this analysis, some basic vocabulary is in order.
Gross domestic product is a measure of output, the sum of goods and services produced per year within a given state. National income is the sum of domestic output and net foreign income. In the twenty-first century, income received from abroad and paid abroad are often equivalent, meaning net foreign income is often zero, making GDP a reliable indicator of national income. Output and income are nearly synonymous. In essence, national income is a measure of additional wealth created per year. That wealth is then distributed as labor wages and capital income. National income is comprised of capital income and labor income. For the purposes of this paper and analysis, capital is the sum of real and financial assets that have a market valuation. As Piketty (2014) states, "Capital is defined as the sum total of nonhuman assets that can be owned and exchanged on some market. Capital includes all forms of real property (including residential real estate) as well as financial and professional capital (plants, infrastructure, machinery, patents, and so on) used by firms and government agencies."

It is of note that "capital is not an immutable concept: it reflects the state of development and prevailing social relations of each society" (Piketty, 2014). Capital is for the most part privately owned, with net public capital generally around zero. Thus, national wealth is the sum of all real assets and financial assets, both private and public, less financial liabilities, i.e. debt, in a given state. National wealth is the sum of private and public wealth. Piketty's "First Fundamental Law of Capitalism" is a relationship between the share of capital income in national income, the rate of return on capital \( r \), and the capital-income ratio, expressed as \( = r \times x \). The capital-income ratio is the ratio of the stock of capital to the flow of income in a given year. Historically, the rate of return on capital has generally been around 5 percent (Piketty, 2014). Given the stock of national wealth, flow of national income, and average rate of return on capital it is possible to find capital's long-run equilibrium share of national income.

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9 The concept, and definition, of capital is thus dependent on a variety of factors within a given country, such as property rights, legal mechanisms, prevailing notions of the social contract, and so on. Social relations between those who own capital and those who do not can also be interpreted as power relations.

10 The structure of capital, and its ownership, whether public or private, is of political and social consequence. Understanding the structure and level of capital accumulation must also take into account institutions.
Furthermore, Piketty’s “Fundamental Force for Divergence” is simply a relationship between the rate of return on capital $r$ and the growth rate $g$. In this relationship, $r$ is the annual rate of return on capital whether that be in the form of profits, dividends, interest, or rents, and $g$ is the growth rate of the economy and the annual increase in output for a given country. For Piketty (2014), the expression $r > g$ is the "fundamental force for divergence." Piketty writes:

> When the rate of return on capital significantly exceeds the growth rate of the economy (as it did through much of history until the nineteenth century and as is likely to be the case again in the twenty-first century), then it logically flows that inherited wealth grows faster than output and income. Under such conditions, it is almost inevitable that inherited wealth will dominate wealth amassed from a lifetime's labor by a wide margin, and the concentration of capital will attain extremely high levels, levels potentially incompatible with the meritocratic values and principles of social justice fundamental to modern democratic societies.

As such, in a low growth regime, where productivity and income growth slow, past wealth takes on additional import and savings at the top of the distribution compounds wealth at a rate faster than incomes rise. From this all else follows. In the twenty-first century, if the annual rate of return on capital is in the range of 4 to 5 percent for real estate and 6 to 8 percent for equities, made possible by the free flow of capital across borders as it seeks to maintain returns, then capital accumulation proceeds unabated. Natural processes, insofar as “natural” denotes the logic of capital, in the private accumulation of capital invariably leads to ever greater concentration, and inequality in the distribution, of wealth. Without social or political intervention, divergence in the distribution of wealth will continue undisturbed.

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11 While beyond the scope of this paper, it is of interest that Piketty sees the accumulation of capital and the growth of wealth inequality primarily of issue because it seems to be incompatible with the notion of meritocracy in liberal democracies. This is a view espoused by other mainstream economists, as alluded to in the introduction, and the perspective taken by many who see inequality as an inevitable byproduct of a system in which work and ability is commensurately rewarded. As such, the lack of intergenerational socioeconomic mobility and the entrenchment of unearned income is first and foremost of issue for mainstream economists, and from that view all prescriptive policy measures flow.
Piketty (2014) also notes, "It is important to note that the fundamental \( r > g \) inequality, the main force of divergence in my theory, has nothing to do with any market imperfection. Quite the contrary: the more perfect the capital market (in the economist's sense), the more likely \( r \) is to be greater than \( g \)." While Piketty maintains throughout *Capital* that inequality is not inevitable, in the sense that social and political forces are sure to intervene once extraordinary levels of inequality are reached, he comes quite close to the conclusions of Marx on a number of occasions. As seen above, Piketty states this force of divergence is “almost inevitable,” and devotes a number of pages pushing back on the neoclassical notion that the elasticity of capital for labor is such that there exists an equilibrium level of accumulation whereby the capital income share can no longer cannibalize the labor share.

**The Capital-Income Ratio**

The capital-income ratio is calculated by dividing national wealth by national income, a stock divided by a flow. National wealth is composed of both public and private wealth. Public wealth is the total of public assets less public debt, while private wealth is total of private assets less private debt. In the twenty-first century, national wealth is indicative of the private wealth of a country, given that public wealth is negative or just barely positive in most developed countries. For Piketty (2014), the capital-income ratio is expressed by a simple relation of the capital-income ratio, the saving rate \( s \), and the growth rate \( g \) of a given economy: \( \frac{s}{g} \).

Capital accumulation is thus a function of the saving rate and the growth rate. To understand current economic reality, one must look at the dynamics between saving rates, economic growth, debt balances, and asset prices. Savings creates a volume effect, the greater the savings the greater the accumulated wealth (Alvaredo et al., 2018). In times of low growth, capital accumulation will tend to be greater, and if low growth rates present in concurrence with high saving rates, the accumulation will become ever greater.
For instance, if the economic growth rate of a country is 2 percent and its saving rate is 10 percent, the capital-income ratio will tend towards an equilibrium of 5, or 500 percent. As such, in slow growth regimes saving takes on increased importance and leads to increased levels of capital accumulation. Meanwhile, the capital-income ratio is also driven by price effects, whereby increases in asset prices leads to an increase in the capital-income ratio (Alvaredo et al., 2018). For instance, if real estate prices rise at greater rate than overall consumer prices, net wealth rises relative to national income on the whole. Thus, the capital-income ratio shifts according to both volume and price effects.

Here we can see how institutional policies affect the capital-income ratio, and thus capital accumulation. If, for instance, banks provide easy credit in the form of mortgages and drive increased homeownership, it will, in turn, increase housing prices. If, at the same time, there is a glut of capital searching for increased returns, it may very well make its way into the housing market chasing rapidly rising housing prices. As such, a virtuous cycle presents itself, whereby easy credit leads to asset price increases, capital chases the returns and pumps more investment into the market, and as a result increases prices, and capital gains, ever more. Resulting in the further rise of the capital-income ratio.

It is for this reason that the capital-income ratio fell significantly for the United States in the aftermath of the 2007-08 financial crisis, as housing prices plummeted, but not nearly enough to wipe out the gains accrued over the previous 30 years. The World Inequality Lab finds that volume effects, that is savings, accounted for 72 percent of private wealth accumulation in the United States from 1970 to 2010, while price effects, that is asset price inflation, accounted for 28 percent of private wealth accumulation.

Capital-income ratios can be informative in understanding impacts of saving, investment, and accumulation dynamics both within and across countries. An extremely high private wealth-income ratio, or a rapid increase in a short period, can be a sign of economic and financial instability. From the data, it becomes clear that rapid capital accumulation preceded both the Great Depression and the Great Recession. It is important to note that as an
economy becomes more capital intensive, that is to say a high capital-income ratio, where there exists a large amount of capital, there are decreasing returns to capital, there is a negative correlation.

In Japan, a glut of capital led to the rapid increase in asset prices during the 1980s which culminated in the bubble popping in 1990, while, as discussed above, in the United States a glut of capital, along with financial deregulation, easy credit, and financialization, resulted in the 2008 financial crisis.

Along with saving and growth rates, the composition of capital is also integral to an understanding of capital accumulation in the twenty-first century. Capital, once built on the primacy of agricultural land, has come to be dominated by real estate and financial assets. As for the capital stock itself, it is composed of nearly equal shares of real and financial assets in developed countries. Which is to say, that 50 percent of capital is composed of real assets such as real estate and 50 percent is composed of financial assets such as stocks. Meaning, on average, each individual's wealth is 50 percent real estate and 50 percent financial investments (Piketty, 2014).

Private national wealth can also be broken down per capita, the average wealth held for each individual within a country. While per capita wealth, i.e. average wealth, can serve as a general indicator of capital accumulation across space and time, it does not tell us much about economic reality within countries, due to extreme concentration at the top of the wealth distribution. For instance, per capita wealth in the United States was $323,462 in 2015, while median wealth was roughly $50,000. In the United States, the bottom 50 percent of the population, i.e. all of those who fall below the median, hold zero wealth on average (Piketty, 2014).

Those at the very bottom of the distribution typically are very heavily indebted, i.e. have more liabilities than assets, and thus have negative wealth. Averages do little to explain within country economic well-being and capital accumulation, except within group averages along the distribution,
due to heavily skewed wealth towards the top of the wealth distribution in nearly all developed countries, which will be discussed later.  

Looking back historically, in 1915 the capital-income ratio for the United States was 593 percent (Alvaredo et al., 2018). Meaning that the stock of national wealth was nearly 6 times that of national income. As for the other developed nations at the beginning of the twentieth century, the capital-income ratio for France was 695 percent, 611 percent for Germany, and 443 percent for the United Kingdom. National wealth reached its low in 1978 and has risen precipitously since; from 352 percent in 1978 to 482 percent in 2015 in the United States, from 378 percent to 591 percent in France, 374

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12 While the capital-income ratio itself also says nothing about inequality within a given country, it does help illuminate the significance of capital and the level of accumulated wealth, a level of which has significant effects on inequality and stability.

13 See WID.world.
percent to 444 percent in Germany, and 348 percent to 605 percent in the United Kingdom. The rise in national wealth was mitigated to a degree by the financial crisis in 2007, particularly in the United States, but since 2012 has restarted its climb.

As national wealth is the sum of private wealth and public wealth, the dynamics between public and private wealth plays an important role in long-term private accumulation. Over the past 40 years the share of public wealth in national wealth has shifted significantly. As a result, in 2015 the United States and the United Kingdom both held negative public wealth, while other nations held near zero. On average, governments hold more debt than assets. This is a relatively new trend, one that began in 1980 with the advent of deregulation and privatization and the rise of public debt, and thus a decrease in net public wealth, and has been a source of great consternation for economists and policy makers.

From 1980 to 2015, the public wealth-income ratio for the United States fell from 62 percent to -17 percent. While in France it contracted from 69 percent to 17 percent, in Germany from 100 percent to 17 percent, and in the United Kingdom from 102 percent to -24 percent. These are, in essence, transfers of wealth from public to private hands. In other words, wealth moving from democratic to private oversight. Across the world, we see the same trend, extreme private wealth accumulation at the expense of public wealth. Thus, with public wealth near zero, and in some cases negative, the rise in the capital-income ratio has come almost exclusively from private wealth accumulation.

As for Russia and China, private wealth has exploded to even greater degree, a resultant shift from command-and-control to market-oriented economies. Since the liberalization of the Chinese economy in 1978, China's capital-income ratio has risen from 372 percent to a breathtaking 710 percent in 2015. Private wealth has been accumulated to an unprecedented degree since Deng Xiaoping's reforms, with a private wealth-income ratio of 115

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14 See WID.world.
15 See WID.world
percent in 1978, the first year that data is available, rising to 487 percent in 2015. Meanwhile, its public wealth-income ratio has remained steady, hovering at around 200 percent in 2015.

There are, however, outliers to this phenomenon. Scandinavian countries have seen a less dramatic rise in private wealth accumulation and in the disparity between shares of public and private wealth in total national wealth. Historically, the Scandinavian countries have been less capital intensive than the other developed countries of the west. In 1980, the private wealth-income ratio for Denmark was 208 percent, 182 percent for Sweden, and 173 percent for Norway, the lowest in the world.¹⁶ At the same time, Sweden, the only country for which data on public wealth is available for this time period, had a public wealth-income ratio of 146 percent, meaning

¹⁶ See WID.world
national wealth was composed of nearly equal shares of public and private wealth in 1980.

Of additional note is the dynamic between public and private wealth in Norway. In 1980, its private wealth-income ratio was 174 percent and its public wealth-income ratio was 85 percent. By 2015, its private wealth-income ratio had risen to 263 percent, but remarkably its public wealth-income had risen to an even greater degree, from 85 percent to 373 percent, making Norway one of a handful of countries where public wealth exceeds that of private wealth. In absolute terms, in 2015 private wealth in Norway stood at 634 billion euros while public wealth stood at 897 billion euros, most of which is accounted for by Norway's sovereign wealth fund (Alvaredo et al., 2018).

While nearly all developed countries have seen a run-up in private wealth accumulation, observed as a marked U-curve over the course of the twentieth century, there are significant differences between countries. Italy's ratio, for instance, more than tripled from 1970 to 2015, while Germany's less than doubled. Japan saw the largest rise in the shortest period, with a private wealth-income ratio of 400 percent in 1978 rising to over 700 percent by 1990. Regardless, across the world we see the same general trend, extreme increases in private wealth accumulation and decreases in public wealth to near zero levels.

This reemergence of capital has come in lock-step with a general global shift towards market liberalization, financial deregulation, fiscal competition, and globalization. With public wealth near zero in most developed countries, the rise in the capital-income ratio has come almost exclusively from private wealth accumulation. As a result, capital accumulation is once again reaching the highs last seen during the Gilded Age. Overall, extremely high capital-income ratios in the range of 600 to 800 percent held steady during the Gilded Age and turn of the twentieth century until the outbreak of World War I in 1913, made a comeback through the 1920s up until the full onset of the Great Depression while suffering a massive blow from World War II, and

See WID.world

17 See WID.world

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fell to relatively low levels during the postwar period between 1945 to 1975, hovering around 200 to 400 percent, before making a serious comeback starting in 1980 to levels of around 450 to 700 percent in 2015.

Global Wealth Inequality Trends

While there has been much work, and discussion, on global income inequality over the past decade or so, wealth inequality has received less attention, no doubt due to the lack of comprehensive and robust data on wealth inequality both across and within countries. Relative to data on income, data on wealth, especially outside of the United States and the European Union, still leaves much to be desired. Nonetheless, it has been the focus of increased research in recent years and rapid progress has been made.

While not able to give a truly historical account of wealth in China, recent work of Thomas Piketty, Li Yang, and Gabriel Zucman (2017), allows us to look at the evolution of private and public wealth accumulation in China since 1978, as well as the distribution of wealth since 1995. As for the United States, there now exists a great deal of data going back through the nineteenth century on capital accumulation, as well as from 1913 as it pertains to wealth inequality (Saez & Zucman, 2017).

France presents the most comprehensive data, going back to the beginning of the nineteenth century, while there is now data available for the United Kingdom from the end of the nineteenth century on (Piketty, 2014). From these data series, a myriad of trends can be teased out, both as a matter of historical reality through the twentieth century as well as those that have developed since the mid-1970s.

It becomes clear that increased capital accumulation can lead to more crises domestically, as a glut of capital searches for higher returns, pushing up asset prices to artificial levels and driving additional household borrowing. As for global ramifications, increased global conflict has historically led to rich nations seeking out investment in, and exploitation of, poorer nations in the
pursuit of increased returns in times of high capital accumulation and slow growth. There are established links between imperial tendencies and colonial conquest with increased levels of capital accumulation and economic inequality (Hauner et al., 2017).

Globalization and free trade will most likely continue to drive global convergence between countries as there is ever greater diffusion of technology and knowledge leading to quicker wealth accumulation and faster economic growth for emerging economies relative to developed countries, while driving the continued divergence of wealth within countries and in terms of wealth’s global distribution, continuing a trend towards a global class of extremely wealthy cosmopolitan elite standing in opposition to the global class of the poverty-stricken.

Pushback against global political institutions and further economic and financial integration, such as the EU’s central bank and single market, could come in the form of reinvigorated nationalism and protectionism. Globalization, global financial capital mobility, education, and technological diffusion have all have leveled the playing field between emerging and rich countries to a degree. While within country inequality has been rapidly fueled by fiscal competition, i.e. tax cuts, financial deregulation, lax labor laws and antitrust enforcement, market consolidation and increased prevalence of market monopolies and oligopolies, emergence of monopsony power, rapid growth of financial services in gross domestic product, cutting and gutting of social programs, technological skill bias, wage suppression, offshoring of labor, extreme divergence in saving rates, and increased debt borrowing to fuel consumer spending in the hopes of propping up flagging economic growth.

As for convergence, emerging economies find it much easier to increase productivity, i.e. per capita output and thus gross domestic product, from a much lower baseline with the diffusion of new technology and increased education. Overall, all data indicates on the global level a small, yet not insignificant, rise in wealth inequality over the course of the past 30 to 40 years. Globally, the top 1 percent of the world population increased its share of total wealth from 28 percent in 1980 to 33 percent in 2015 and the top 10
percent share rose to over 70 percent of total wealth, while the bottom 50 percent of the world population owned roughly the same amount in 2015 as 1980, between 1 and 2 percent (Alvaredo et al., 2018). Of course, wealth has been, and continues to be, concentrated to a much higher degree than income, especially in the United States and Europe.

Overall, we can see different trends in the growth of average wealth, and thus wealth inequality. Average wealth per adult grew 1.9 percent per year between 1987 and 2017 on average across the world, while growing 2.6 percent for the top 1 percent, 4.7 percent for the top .01 percent, and a staggering 6.4 percent per year on average for the top 1/100 million (Alvaredo et al., 2018). Current trends also indicate the continued divergence of income, in turn, leading to ever greater concentration of wealth, across the global distribution, which will likely lead to acute increases in economic, political, and social instability and insecurity on the global stage. To make this trend clear, the World Inequality Lab estimates that by 2050 the global top 0.1 percent will own more wealth than the global middle class (Alvaredo et al., 2018). And for even further clarity, by 2030 it is possible the top 1/100 million, a group which is comprised of 50 individuals, could own 1 percent of wealth by 2050.

Of note, the growth of wealth along the global wealth distribution from 1987 to 2017 somewhat mirrors that of the Elephant Curve of global income growth. The Elephant Curve, brought to life by Branko Milanovic (2012) in a World Bank working paper, shows the bottom and the very top of the global income distribution on the receiving end of strong earnings growth, with the middle-class being all but squeezed out of growth over this time. In Milanovic’s telling, the era of globalization from 1988 to 2008 led to unprecedented gains for the bottom seventy percent of the global population in terms of earnings, with 40 to 80 percent increases in real income, pulling untold millions out of absolute poverty.

As such, the bottom 50 percent of the global wealth distribution saw real wealth growth to the tune of approximately 260 to 360 percent from 1987 to 2017, the elephant back, while the dip of the 50th to 99.9th percentile down to only 100 percent growth represents the elephant head and starting with
the beginning of the top 1 percent on up, the elephant trunk, becomes dramatic, with real wealth growth between 200 percent for the top .1 percent to 900 percent for the top 1/100 million.

Of course, it is important to note that these percentiles and deciles are static, and do not reflect the actual composition of each across time. For instance, the top decile in 2017 need not be, and most likely is not, composed of the same individuals as it was in 1987. With that being said, it does not mean that the distribution of wealth is not indicative of inequality in reality, quite the opposite, it captures relative inequality quite well without being wedded to static and absolute individual outcomes across time.

Moving forward, the growth in real wealth of the top 1 percent will be the main driver of growing global wealth inequality. Between 1980 and 2013, the top 1 percent captured 37.1 percent of all global wealth growth.
(Alvaredo et al., 2018). This group will continue to be the main source of divergence of the wealth distribution, eating ever further into the shares of the global middle-class.

**Wealth Inequality in China**

China presents a fascinating case in private wealth accumulation and inequality, given its shift from a communist to market-oriented socialist state that began in 1978. With the privatization of the housing market and liberalization of capital markets, both came to dominate in the composition of national wealth and led to the drastic rise in private wealth in China. Overall, the private wealth-income ratio in China rose from 100 percent in 1978 to 450 percent in 2014. At the same time, public wealth’s share of national wealth contracted from 70 percent to 35 percent as private wealth grew to account for 65 percent of total national wealth.

![Figure 4. Capital-Income Ratio in China](image)

*Source: WID.world*
While the doctrine of state socialism still officially holds in the Communist Party of China, given the composition of national wealth it is safe to say that the country has shifted to state-sanctioned capitalism, a shift that can be credited to the economic reforms of Deng Xiaoping. The level of privatization undertaken differs among industries, as the housing sector saw the most comprehensive reform from publicly to privately owned with the public housing stock dropping from 50 percent in 1978 to 5 percent in 2015. As for domestic equities, the state owned nearly 95 percent of all traded and non-traded equities in 1978, which has dropped to around roughly 70 percent in 2015.

However, public wealth still remains quite high relative to other developed countries in the twenty-first century. With China's public wealth-income ratio hovering around 200 percent in 2015, compared with the near 0 percent for many countries in the West. As such, public wealth in China is still higher than that of many of the developed countries during the postwar period of 1945-1975 when total capital accumulation was at its lowest. China's public wealth-income ratio is also still roughly two times greater than that of the Scandinavian countries, whose public wealth-income is currently on average roughly 100 percent, with the only major exception being Norway thanks to its sovereign wealth fund.

In China, as in the Western countries, capital has come to be composed of one-half housing and one-half financial capital. As such, the liberalization of the economy and its subsequent privatization has also given rise to financialization within the country. This is no surprise, given domestic equity markets, access to global capital markets, and asset price increases have helped China quickly gain parity with the West in terms of the role of finance in the economy.

Due to a general lack of data prior to 1995, it is not possible to track the evolution of wealth inequality in China across a long period of time as it is for the developed Western countries, but its evolution since 1995 is still informative. In 1995, wealth was split in a relatively egalitarian manner relative to the West; the top 10 percent of the distribution owned 40.8 percent of all wealth, the middle 40 percent owned 43.2 percent, and the
bottom 50 percent owned 16 percent. Given that prior to 1978, for all practical concerns wealth was owned publicly, it is highly likely that the divergence in the shares of wealth had begun diverging from the onset of liberalization.

But with 1995 as a starting point, wealth ownership has still diverged sharply. The wealth share of the bottom 50 percent was nearly cut by two-thirds from 16 percent in 1995 to 6.4 percent in 2015, of course in line with the general trend in capitalist societies for the bottom 50 percent to own nearly zero wealth. As for the middle 40 percent, its share of national wealth contracted by nearly half, from 43.2 percent in 1995 to 26.2 percent. Meanwhile, the top 10 percent share increased from 40.8 percent to 67.4 percent, with the largest gain going to the top 1 percent, which saw its share double from 15.8 percent to 29.6 percent. Once again, wealth flowed,
quickly and continuously, from the lower and middle-classes to the top 1 percent.

**Wealth Inequality in the United States**

It is clear that economic policy has historically had profound impacts on income and wealth inequality. New Deal policies brought about a decrease in wealth inequality in response to the Great Depression, with economic prosperity lasting until the early 1980s. At the same time, the decrease in wealth inequality observed by Kuznets from 1913-1948 also no doubt had to do with the implementation of progressive taxation policies from 1909-14 in the United States and Western Europe (Piketty, 2014). In hindsight, the optimism that was quickly embraced of a “Bell Curve” of inequality was unwarranted. Divergence in incomes again helps in an understanding of wealth inequality.

Income inequality was in decline from 1945 to 1980. During this period, the top decile claimed 30 to 35 percent of United States national income. Since 1980, income inequality has burgeoned to the point that the top decile claimed 42 to 47 percent of national income in the United States in the 2000s. At this rate, the top decile will claim 60 percent of national income by 2030. History is illustrative here. The relatively low level of income inequality in the middle of the twentieth-century, fueled by “severe wage compression” at the tail end of WWII, was also a result of shifting policy (Piketty, 2014).

Since 1980, the top centile, i.e. 1 percent, has been the main driver of growth of inequality, with their share of national income rising from 9 percent to 20 percent in 2010, while the next 4 percent rose from 13 to 16 percent and the next 5 percent rose from 11 to 13 percent. In terms of growth of national income over this same period, from 1980 to 2010, the top decile appropriated 75 percent of the growth, with the top centile claiming 60 percent of the growth alone.
To put this in real world terms, this means that in the US the top centile has an average income of 20 times the average income for the population on the whole if that top centile’s share of national income is 20 percent. This means that if the national average income, ie per capita, is $50,000 then the average income for the top centile is $1 million. That means that while average purchasing power has remained stagnant, the purchasing power of the top centile has more than doubled, rising from $450,000 to $1 million, with their average income rising from 9 times the national average to 20 times the national average.

If we take a look at the top thousandth, i.e. 0.1 percent, then the reality becomes even more stark. The top thousandth claimed 2 percent of national income in 1980, which rose to 8 percent in 2010. That is a four increase in purchasing power, meaning that the top thousandth saw their average income go from 20 times to national average to 80 times the national average. Which is to say that their purchasing power rose from $1 million to $4 million. Income helps drive divergence in wealth, especially capital income.

It is important to note at this point that these levels are likely understated, as they do not account for income that has not been reported on tax returns, and thus capital income that is not reported tax authorities and exists in tax havens. As has been shown by Torslov, Wier, and Zucman (2018), there exists a widening gap between the total capital income in national accounts and the amounts declared on income tax returns. With the Panama Papers and other recent revelations, it has become apparent that a large amount of wealth, and thus income from that wealth, is eluding taxation (Torslov et al., 2018).

Here we can also begin to see the consequences on financial stability from growing income inequality, as well as the impact on total national wealth and the capital-income ratio. Three peaks of the share of national income on the part of the top decile correlate with crises, followed by a rapid contraction of wealth, . The first was in 1914 at the outbreak of World War I, the second in the midst of the Great Depression in the early 1930s and on

As for 2008, a glut of capital in the 2000s was hunting for increased returns, which led to greater risk seeking in the form of subprime mortgages and securitization. It is impossible to overlook this reality, and it contests many theories that are often proffered without much substantiation as to the causes of the financial crisis of 2008. Linking this to the evolution of wealth inequality in the United States, the ebb and flow of inequality can be seen quite clearly.

Wealth inequality reached its peak in the United States in the late 1920s in the run-up to the stock market crash of 1929 and the proceeding Great Depression. In 1929, the top 1 percent of the wealth distribution accounted for 50.6 percent of wealth, the wealth share of the top 10 percent was 84.3

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Figure 6. Capital–Income Ratio in the US

[Graph showing capital–income ratio in the US from 1900 to 2010]

Source: WDI.world
percent, and the share of the bottom 90 percent was 15.7 percent (Saez & Zucman, 2016). This extremely inegalitarian distribution of wealth would soon see a rapid structural shift with the Great Depression, implementation of New Deal policies, and World War II.

Wealth was dealt successive blows from war and policy from 1929 up through the the 1980s. Beginning in the late 1930s, homeownership became the fundamental building block of wealth for the middle-class in America. As families purchased homes en masse during the postwar boom, homeownership helped fuel the rapid rise of the middle-class from 1940 to 1986. During this period, the bottom 90 percent saw its share of wealth rise from 22.4 percent to 36.4 percent. At the same time, the top 10 percent saw its share drop from 77.6 percent to 63.6 percent, and the top 1 percent saw its share contract from 37.9 percent to 25.1 percent.

Figure 7. Wealth Inequality in the US

Source: Saez & Zucman (2014)
The early to mid-1980s proved to be the high point for wealth equality until the trend began its reversal at the end of the decade. From 1986 to 2012, the bottom 90 percent saw its share contract once again from 36.4 percent to 22.8 percent. Meanwhile, the top 0.1 percent saw its share rise from 9.7 percent to 22 percent, the top 1 percent share rose from 25.1 percent to 41.8 percent, and the top 10 percent saw its share increase from 63.6 percent back up to 77.2 percent. By 2012, wealth inequality had nearly reached its 1929 levels and wiped out all the gains of the bottom 90 percent in relative terms.

In absolute terms, this means the top 160,000 households own nearly as much wealth as the bottom 144 million households in the United States. On average, households in the bottom 90 percent are worth $84,000, while households in the top 0.1 percent are worth on average $72 million. As for the super-rich, the top .01 percent are worth on average $371 million.

**Wealth Inequality in Western Europe**

Trends and patterns in the advanced economies of Europe follow closely those of the US. Wealth inequality contracted significantly in France between 1914 and 1984. In 1914, the top 1 percent’s share of wealth stood at 55%, marking a rapid fall down to 16 percent in 1984. Again, wealth in France was on the receiving of massive shocks throughout the twentieth century, including two World Wars, depression, bouts of rapid inflation, and major policy shifts that brought about nationalization, rent control, and increased taxation. France’s *trente glorieuses* from 1945 to 1975 brought unprecedented prosperity to nearly all classes and helped shrink the gap between the haves and the have-nots. During this period, the bottom 90 percent saw its share of wealth increase from 26 percent to 37 percent, and with the boom in wealth for the middle and lower-classes came a rapid rise in income, productivity, and consumption.

However, the prosperity would not last. In France, wealth inequality reached its nadir in 1984, two years before the US. In 1984, wealth was shared equally between the top 10 percent and the bottom 90 percent, with each
accounting for almost exactly 50 percent of wealth. However, by 2014 the top 10 percent had increased its share modestly to 55 percent, while the top 1 percent saw its share rise from 16 percent to 23 percent. In absolute terms, the bottom 50 percent are worth on average 25,500 euros while the top 1 percent are worth 4,703,000 euros.

As for the United Kingdom, wealth inequality also reached its peak in 1914, with the top 10 percent accounting for 92.6 percent of personal wealth and, within the top 10 percent, the top 1 percent owning a breathtaking 67 percent of all personal wealth. The UK saw a massive loss of capital as a result of World War I and World War II, and by 1984 the wealth share of the top 1 percent had dropped to a historical low of 15 percent.

Since 1984, wealth inequality has risen modestly in the United Kingdom. In 1984, the share of the top 1 percent, 500,000 Britons, rose from 15 percent
to 20 percent in 2012, who are worth on average 2,354,000 in 2017 euros. It is the top 0.1 percent who is primarily driving this divergence. The top 0.1 percent consists of 50,000 Britons who have seen their share of wealth double from 4.5 percent to 9 percent between 1984 and 2012.

Financialization has been pointed to as one of the main culprits in the rise of wealth inequality in the UK in the twenty-first century, as non-housing wealth has increased significantly since 1995.

Moving Forward

Economists, from Ricardo to Marx, were enamored with shares of output, income, and wealth. Passions of which waned at the end of the twenty first century, as the import of these distributions in economic thought and policy making became of but second or third order. Ricardo was interested in the
scarcity of land, for Marx it was industrial capitalism and the "principle of
infinite accumulation" whereby the never-ending private accumulation of
capital became more and more concentrated. The distribution of wealth is
one fundamentally about a conflict between labor and capital. Capital, in
times of low economic growth and deregulation, takes on significant
importance.

Over the course of the early twentieth century, shocks of war, depression,
and policy dealt a widespread blow to capital across the world. By the end of
World War II, wealth and income distributions had compressed significantly
and the post-war boom that followed in the United States and Western
Europe led to a relatively egalitarian distribution of economic growth,
wealth, income, and the emergence of a prosperous middle-class. However,
the warm glow of postwar prosperity that lasted from 1945 to 1975 faded
long ago.

Since the early 1980s, wealth inequality has been on the rise once again. At
its current rate, it will soon reach the extreme levels last seen during the
Gilded Age and the turn of the twentieth century. As Piketty’s magnum opus
details, in a slow growth regime wealth reproduces itself across generations.
The wealthy stay wealthy and the poor stay poor, while socioeconomic
mobility becomes a relic of the past.

It is in this environment that inheritance becomes more important than
labor, and past wealth and incomes at the top of the distribution drive
extreme disparities in economic well-being. With quasi-stagnant economies
quickly becoming the dominant theme of the twenty-first century, where
“secular stagnation” has taken root, wealth inequality looks only to rise even
further. How institutions, policymakers, academics, and electorates respond
will determine the trajectory of inequality in the twenty-first century.
References


