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Inequalities
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Inequalities: The Economic Foundation

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Abstract Inequality takes many forms, but it starts with inequality of wealth and incomes. From that flows inequality is social mobility, life expectancy, educational attainment and even happiness. And the inequality of wealth and income is very extreme – both withing countries and between rich and poor countries. The gaps are hardly narrowing, if at all. Behind extreme inequality is the concentration of the bulk of wealth in the form of the ownership of productive capital in just a few adults in the world – no more 1% of 8bn people. That concentration has arisen because of the economic structure of the capitalist mode of production as it has spread across the world in the last century. While that basic structure remains in place, redistribution policies for income and wealth will be inadequate. A fundamental change in the social and economic formation of modern economies is required.

Keywords Inequality. Income. Wealth. Capital. Economy.

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Economic inequality is the foundation of all forms of social inequality. Inequality of personal wealth and income is high between countries and within countries. It has risen in the last 40 years. Wealth begets more wealth and so drives more inequality in wealth and income. There are three main theories of the cause of economic inequality: the mainstream neoclassical; the distributional; and the Marxist. All recognize that rising income from increased capital concentration is at the heart of economic inequality. But only the latter sees that as a consequence of the structure of the capitalist economy and the ownership of the means of production. The mainstream offers no significant solutions for curbing or reducing inequality; while redistribution solutions are inadequate. Only a change in the economic and social structure of modern economies could provide the foundation for an irreversible reduction in economic and social inequality.

Social inequality takes many forms: inequality of incomes and wealth; inequality between genders and in the household; inequality due to ethnicity, disability and health; and in life expectancy and age. There is inequality in all aspects of social needs in housing, transport, communications, education and medical support.

But all these forms of social inequality are, in the last analysis, due to economic inequality – defined as inequality among humans in the amount of personal wealth they own and in the incomes they receive. The inequality in these categories is a result of the workings of the market economy, where ownership of the means of production of goods and services that humans need is in the hands of a tiny minority. That small minority can therefore obtain the lion's share of personal wealth in the world within each country they live in and from that they can extract the largest share of income derived from the wealth of society.

1 Inequality of Wealth Between Countries

Most discussions on inequality, whether between nations globally or within nations, take place around income. Data and papers on inequality of income are profuse, particularly on the rise in most major economies since the 1980s and the cause of it.[1] But discussion and analysis of inequality of wealth does not get so much attention. Yet, in all economies, wealth is significantly more unequally distributed than income.

1 See bibliography.

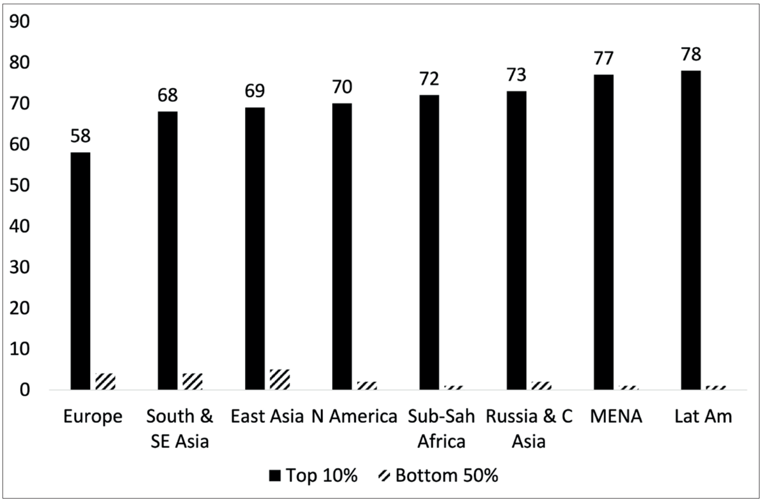

Chart 1 Share of total household wealth by region (%). Source: WIR 2022. `https://wid.world/methodology`

The *World Inequality Report (WIR)* 2022 shows that the world has become more unequal in wealth in the last 40 years.[2] In 2021,

> after three decades of trade and financial globalisation, global inequalities remain extremely pronounced… about as great today as they were at the peak of Western imperialism in the early 20th century.[3]

The global concentration of personal wealth is extreme. According to the WIR, the richest 10% of adults in the world own around 60-80% of wealth, while the poorest half have less than 5%. The top 10% in Latin America capture 77% of total household wealth versus 1% for the bottom 50%. In Europe, the top 10% own 58% of total wealth versus 4% for the bottom 50% **[chart 1]**.

This is a similar result to another important survey of global wealth. According to the UBS *Global Wealth Report*, 1% of all adults in the world own 44.5% of all personal wealth, while more than 52% have only 1.2%.[4] The 1% are 59m adults, while the 52% are 2.8bn.

2 Produced by the World Inequality Lab, run by Thomas Piketty and a group of over 100 analysts from around the world, the report has the most up-to-date and complete data on the various facets of inequality worldwide: global wealth, income, gender and ecological inequality.

3 The World Inequality Report 2022: `https://wir2022.wid.world/`.

4 The authors are James Davies, Rodrigo Lluberas and Anthony Shorrocks.

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The vast majority of rich and very rich people live in the so-called 'Global North'. Inequalities between nations have declined slightly since the end of the cold war, but this is mainly due to the rise in living standards in China. The underlying story of inequality of wealth remains. If you own a property to live in and, after taking out any mortgage debt, you still have over $100,000 in net assets, you are among the wealthiest 10% of all adults in the world. That's because most adults in the world have no wealth to speak of at all. And apart from the phenomenal rise of China, personal wealth and power remains in the rich bloc of North America, Europe and Japan with add-ons from Australia. Just as this bloc rules over trade, GDP, finance and technology, it has nearly all the personal wealth.

The extremes of inequality in personal wealth are revealed in the table below. Globally, in 2000 median average wealth was $1590 per person, just 5% of mean average wealth, startling proof of inequality. That measure of inequality was reduced a little to 10.2% of the mean average in 2022, but still very low. The difference between median and mean average growth was lowest in China and India, but this ratio has worsened in the last 20 years **[chart 1]**.

2 Inequality of Wealth Within Countries

Inequality of wealth has also been rising *within* most countries. In 1912, Italian sociologist and statistician Corrado Gini (Gini 1997) developed a means of measuring wealth distribution known as the Gini index or coefficient: its value ranges from 0 (or 0%) to 1 (or 100%), with the former representing perfect equality (wealth distributed evenly) and the latter representing perfect inequality (wealth held in few hands). And when you use the Gini index for both income and wealth for each country, the difference is staggering.

Take a few examples. The Gini index for the US is 37.8% for income distribution (pretty high, globally), but the Gini index for wealth distribution is 85.9%! Or take supposedly egalitarian Scandinavia. The Gini index for income in Norway is just 24.9%, but the wealth gini is 80.5%! It's the same story in the other Nordic countries. The Nordic countries may have lower than average inequality of income, but they have higher than average inequality of wealth.

Here are the top ten most unequal societies in the world in terms of personal wealth **[chart 2]**.

You might expect to find some of these countries listed here in the top ten: i.e. they are very poor or ruled by dictators or military. But the top ten also includes the US and Sweden. Indeed, the US stands out as the leader in the top G7 advanced economies in terms of wealth (and income) inequality.

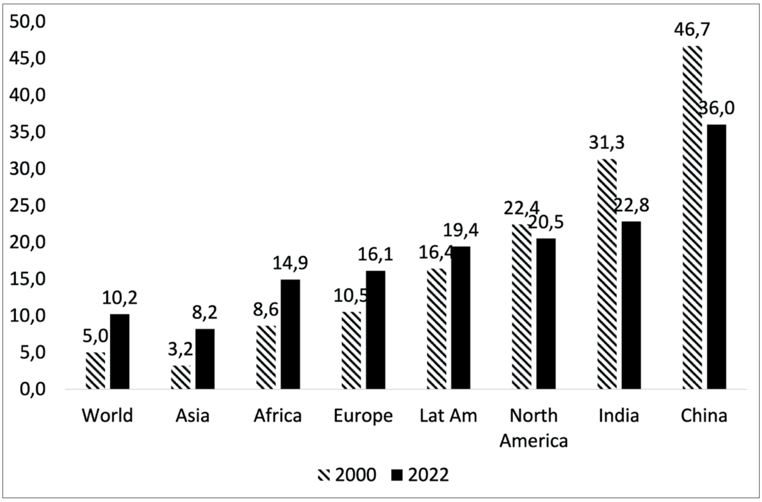

Chart 1 Ratio of median to mean average wealth. Source: UBS Global Wealth Report 2023

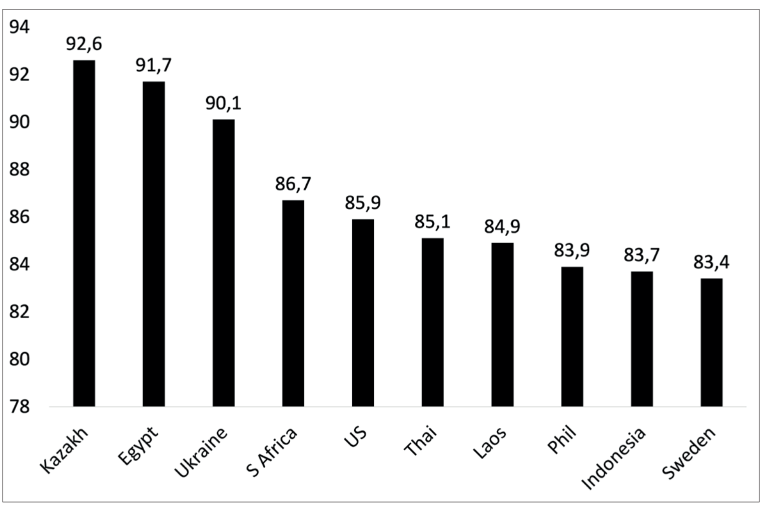

Chart 2 Wealth Gini index (%). Source: World Economic Forum

In the US, wealth has become increasingly concentrated in the hands of the super-rich (Saez, Zucman 2014). The top 0.01% of American households have 5.5% of all personal wealth; the top 1% have staggering 35.1% and the top 10% have 73.4%, according to the latest US Federal Reserve survey 2023 on consumer finances. There remains, however, a discrepancy for the top 0.01%: it's 9.3% in Saez and Zucman (2020) vs 7.1% in Smith et al. (2021).

Moreover, more wealth begets more wealth. The Bank of Italy (2016) found that the wealthiest families in Florence today are descended from the wealthiest families of Florence nearly 600 years ago. The same families are still at the top of the wealth pile starting from the rise of merchant capitalism in the city states of Italy through the expansion of industrial capitalism and now in the world of finance capital.

The majority of billionaires that accumulated wealth in 2022 did so through inheritance as opposed to entrepreneurship (*Billionaire Ambitions Report* 2023). In the US, $150.8 bn was inherited by 53 heirs in 2022, exceeding the 84 new self-made billionaires' total of $140.7 bn. "This is a theme we expect to see more of over the next 20 years, as more than 1,000 billionaires pass an estimated $5.2 trn to their children", said Benjamin Cavalli (*Global Wealth Management* 2023).

And talking of the shockingly high inequality of wealth in 'egalitarian' Sweden, research (Black et al. 2019) from there reveals that good genes don't make you a success but family money, or marrying into it, does. People are not rich because they are smarter or better educated. It is because they are either 'lucky' and/or inherited their wealth from their parents or relatives (like Donald Trump). This Swedish study found that "wealth is highly correlated between parents and their children" and

> comparing the net wealth of adopted and biological parents and that of the adopted child, we find that, even prior to any inheritance, there is a substantial role for environment and a much smaller role for pre-birth factors. (Black et al. 2019, 6)

The researchers concluded that

> wealth transmission is not primarily because children from wealthier families are inherently more talented or more able but that, even in relatively egalitarian Sweden, wealth begets wealth. (6)

In the twenty-first century, inequality of wealth has risen significantly. Indeed, the wealth of the 50 richest people on earth increased by 9% a year between 1995 and 2021, with the wealth of the richest 500 rising by 7% a year. Average wealth grew by less than half that rate, at 3.2% over the same period. The growth rate in net household wealth among the poorest half of the world's population was 3-4% a year between 1995-2021. The poorest half of the world's population captured only 2.3% of overall wealth growth 1995-2021. The top 1% obtained growth in wealth averaging 3-9% a year and took 38% of total wealth growth 1995-2021. The top 0.01% of adults increased their share of personal wealth from 7.5% in 1995 to 11% now. And the billionaire population increased their share from 1% to 3.5%.

Inequality of wealth around the world may have reached an irreversible tipping point. The UK-based House of Commons Library (Byrne 2018) reckons that, if current trends continue, the richest 1% will control nearly 64% of world's wealth by 2030. Based on 6% annual growth in wealth, they would hold assets worth approximately $305 trillion, up from $140 trillion today. This follows a report released earlier this year by Oxfam (Hardoon 2017), which said that just eight billionaires have as much wealth as 3.6 billion people – the poorest half of the world.

The two years of the pandemic have only accelerated inequality. During the first waves of the Covid-19 pandemic, global billionaires' wealth grew by $3.7 trn. According to World Health Statistics (2022), this amount is "almost equivalent to the total annual spending on public health by all governments in the world before the pandemic – approximately $4 trn". Since 2020, the richest 1% have captured almost two-thirds of all new wealth – nearly twice as much money as the bottom 99% of the world's population (Christensen et al. 2023).

In a new study of Italian inheritance tax records (Acciari et al. 2021), researchers found that the wealth share of the top 1% (half a million individuals) increased from 16% in 1995 to 22% in 2016, and the share accruing to the top 0.01% (the richest 5,000 adults) almost tripled from 1.8% to 5%. In contrast, the poorest 50% saw an 80% drop in their average net wealth over the same period. The data also revealed the growing role of inheritance and life-time gifts as a share of national income, as well as their increasing concentration at the top. The huge wealth of a few individuals is getting larger because it can be passed onto relatives with little or no taxation.

We can break personal wealth down into two main categories: property wealth and financial wealth. A larger section of the population has property wealth, although this is very unequally distributed. But financial wealth (stocks and shares, bonds, pension funds, cash etc) is the province of a tiny number of people and so is even more unequally distributed. The richest 1% of US households now own 53% of all equities and mutual funds held by American households. The richest 10% own 87%! Half of America's households have little or no financial assets at all – indeed they are in debt (Federal Reserve 2022). Due to the huge rise in the prices of property and financial assets over the last 20 years, fuelled by cheap credit and reduced taxation, this concentration of personal wealth has increased sharply.

But the concentration of personal wealth in the advanced capitalist economies is nothing compared to what is happening in the poorer nations of the world. A study compared the inequality of wealth in South Africa against similar 'emerging economies' (Chatterjee et al. 2020). Extreme wealth inequalities in South Africa have got worse, not better, since the end of the apartheid regime. Today, the top 10% own about 85% of total wealth and the top 0.1% own close to one-third. South Africa continues to hold the dubious honour of having the worst wealth inequality among the major economies of the world. The South African top 1% share has fluctuated between 50-55% since 1993, while it has remained below 45% in Russia and the US and below 30% in China, France, and the UK.

3 Income Inequality Between Countries

Even though inequality of personal wealth is more extreme, income inequality is still very high. The global economy has doubled since the end of the Cold War, yet half the world lives under $5.50 a day, primarily because the benefits of growth have largely gone to the wealthiest.

The WIR finds that the richest 10% of the global population currently takes 52% of global income, compared with just an 8% share for the poorest half. On average, an individual from the top 10% of the global income distribution earned $122,100 (£92,150) a year in 2021, whereas an individual from the poorest half of the global income distribution makes just $3,920 a year, or 30 times less! Indeed, the share of income presently captured by the poorest half of the world's people is about half what it was in 1820, before the great divergence between western countries and their colonies. Almost half of the people in the global top 1% are Americans. Depending on the year, 10-11% of the richest Americans are in the global top 1%.

The share of global income going to the top 10% highest income holders in the world has fluctuated at around 50-60% over the last 200 years and was at its highest in 2000. The share of income going to bottom 50% of income holders has averaged no more than 10% over 200 years and was near a low of 7% in 2020. Global income inequality has always been high and shows no appreciable downward trend in the last 100 years.

Mostly everyone who is interested in global inequality has come across the famous elephant graph, originally developed by Branko Milanovic and Christoph Lakner using World Bank data (Lakner, Milanovic 2015). The graph charts the change in income that the world's population has experienced over time, from the very poorest to the richest 1%. The elephant graph suggests that the biggest gains in income have gone to the middle-income percentiles of the world's population, followed by the top world incomes [chart 3].

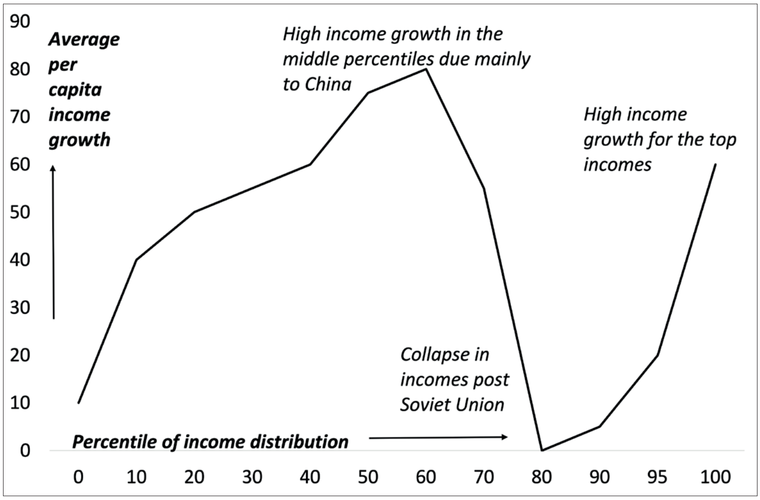

Chart 3 The elephant graph: growth in average per capita income 1988-2008. Source: World Inequality Database

The British think-tank Resolution Foundation analysed the elephant chart (Corlett 2016). The Resolution Foundation found that faster population growth in countries like China and India distort the graph. There is not really any elephant shape. A revised analysis that removes the effect of different population growth shows that the lower income groups did see real incomes rise since the late 1980s, although nowhere near as much as the top 5-10% of income earners.

4 Inequality of Income Within Countries

If we look within countries, then the share of income going to the top 1% of earners has risen substantially since the 1980s everywhere. According to the World Inequality Database, in Russia, the income share of the top 1% fell suddenly after the Russian Revolution of 1917, and stayed low during the Soviet period. After the breakup of the Soviet Union, it took just a decade for the top 1% income share to reach higher levels than during the days of the Tsars.

In the UK, the rich did very well in the nineteenth century. However, in the twentieth century, the income share of the top 1% fell steadily, reaching a low-point in 1980 (7%). Since 1980, it has risen substantially again. In the US in the 1800s, the top 1%'s income share was lower than in many European countries. Like the UK, the US had decreasing inequality in the post-WW2 period. But since the 1980s there has been a dramatic increase in the top 1% income share. In 2021, the share is higher than in 1820.

Social Democratic Sweden saw a significant decline in income inequality during the first half of the 20th century, but again, since the 1980s inequality has risen. China was highly unequal until the 1949 revolution but then inequality rose sharply after the opening-up of the economy in the Deng period from the 1980s. In Brazil the very high inequality of income has hardly altered in 200 years. India's inequality of income was relatively low until the last 30 years and now it matches that of Brazil, much higher than China.

That's the rich end of the income scale. At the poor end, McKinsey (2016) found that in 2014, between 65-75% of households in 25 advanced economies were in income segments whose real market incomes – from wages and capital – were flat or below where they had been in 2005. According to the latest report by the US Census Bureau, households at the 10th percentile – those poorer than 90% of the population – are poorer than they were in 1989. The 3.4% of income that households in the bottom fifth took home in 2015 was less than the 5.8% they had in 1974. Indeed, there are still 43.1 million people living in poverty in the US. The US poverty rate has hardly budged since the 1980s.

In contrast, CEO pay has skyrocketed 1,322% since 1978 (Mishel, Kandra 2021). CEOs were paid 351 times as much as a typical worker in 2020. In 2020, the ratio of CEO-to-typical-worker compensation was 351-to-1 under the realized measure of CEO pay; that is up from 307-to-1 in 2019 and a big increase from 21-to-1 in 1965 and 61-to-1 in 1989. CEOs are even making a lot more than other very high earners (wage earners in the top 0.1%) – more than six times as much.

There is substantial evidence that income inequality in America rose throughout the late 20th and early 21st centuries (Piketty et al. 2018). The top 1% of taxpayers' share of after-tax-and-transfer income rose from 9% in 1960 to 15% in 2019.[5]

5 Auten and Splinter (2023) at the US Treasury department reckon that inequality has barely budged, with the top 1% receiving 9% of after-tax income in 2019, up only slightly from 8% in 1960. Both studies use official tax data, so the difference in results is due to the imputation assumptions adopted for income gained by the rich but not taxed. After studying both research results, William Gale et al. (2023) at the Brookings Institution conclude that "the preponderance of evidence suggests that income inequality has increased, both in the US and in other countries".

5 The Causes of Economic Inequality

We can discern from the data that high inequality in wealth is closely correlated with high inequality in income. Using the World Economic Forum (WEF) index, there is a positive correlation of about 0.38 across the data: the higher the inequality of personal wealth in an economy, the more likely that the inequality of income will be higher **[chart 4]**.

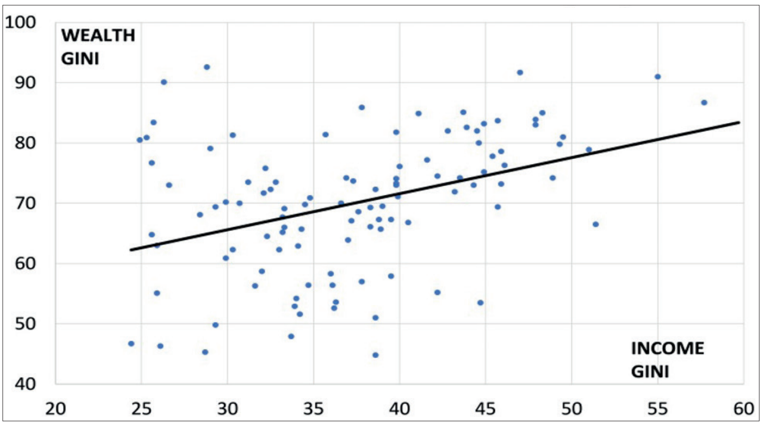

Chart 4 Relation between wealth and income inequality – a country database.
Source: World Economic Forum Global Competitiveness report, author's calculations

The question is which drives which? This is easily answered. More wealth begets more income. A very small elite owns the means of production and finance and that is how they usurp the lion's share and more of the wealth and income.

There are three main theories of income distribution in modern economies. First, there is the hypothesis of a wave of rising and then decreasing inequality as developed by Simon Kuznets. The second are distribution theories e.g. Thomas Piketty's theory (2014) of unfettered capitalism that, left to its own devices, maintains an unchanged rate of return and sees the top earners' share of capital income increasing to the point that it threatens to swallow the entire output of the society. Then there is Marxist theory that inequality of wealth and income is due to the increasing concentration of ownership of capital.

6 Mainstream Theories

Nobel laureate economist Simon Kuznets (1955) argued that as an economy develops, a natural cycle of economic inequality occurs, represented by an inverted U-shape curve called the Kuznets curve **[chart 6]**.

According to Kuznets, an economy develops, inequality first increases, then decreases after a certain level of average income is attained. When an economy becomes mature, there is democratisation and various redistribution mechanisms such as social welfare programs. Then countries move back to a lower level of inequality.

The Kuznets curve is not borne out in reality. During the rapid economic growth between 1965 and 1990 in eight East Asian countries inequality decreased; and when growth slowed after the 1990s inequality of income rose. The Kuznets curve is turned upside down.

In 2007, Ben Bernanke, the then head of the US Federal Reserve, discussed why there were inequalities of wealth and income in the US (Bernanke 2007). He argued that it was basically down to education; and with equality of educational opportunities for all, inequalities of outcome in income; health, life expectancy etc can be reduced. However, the OECD published a report that concluded a young person's educational attainment, future earnings and life expectancy depend more than anything else on whether that youngster was born into a rich or poor family. The ability to improve on your parents' status and wealth if they are poor is very low in France, Italy, the UK or the US (it's slightly better in the Nordic countries, Australia and Canada). The OECD found that the more your parents earn or own, the better the children will do. This matters much more than the school that kids go to or the job opportunities there are in their area – indeed, children's chances of going to a good school or college or their future earnings depend most on their parents' status.

Greg Mankiw, author of the most widely used textbook on economics by university undergraduates argued that the top 1% had a rising share of income in the last 40 years because of the growing gap between the skills and education of workers. 'Skill-biased technical change' has increased the demand for skilled labour and so incomes for the skilled have risen faster than the unskilled. Moreover, the skills and cleverness of the 1% are inherited: "smart parents are more likely to have smart children". It is an irreversible genetic inequality.

But genetic differences are not the same as inheritance. Genes may be passed on, but there is no reason why large incomes or wealth should be passed on from parent to child. The top 1% of income earners can perpetuate their income status for their children, not because of their genes but because they can pass on their income and wealth.

Clearly, inequalities of income and wealth are partially due to better education and skills for individuals to earn more money or gain higher income levels from work. And there are many other factors

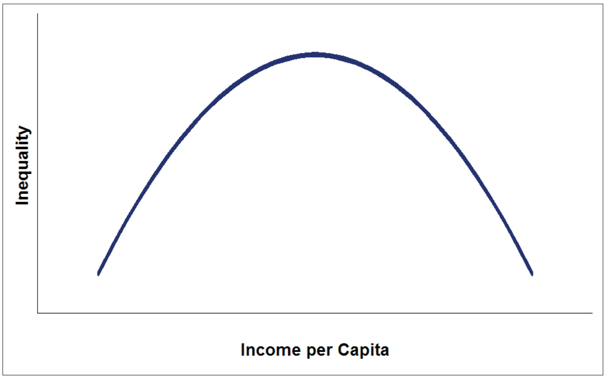

Chart 6
Kuznets curve.
Source: Kuznets

that have driven up inequality of incomes in the advanced economies since the 1980s: the collapse of unions and the transfer of manufacturing jobs to the global south.

Automation is an important one. Many workers – particularly, men without college degrees – have seen their real earnings fall sharply. Acemoglu et al. (2022) finds that more than half of the increase in inequality in the U.S. since 1980 is at least related to automation, largely stemming from downward wage pressure on jobs that might just as easily be done by a robot. Automation under capitalism means significant job losses among those without educational qualifications (education is now more and more expensive) and hits the lowest paid.

7 Distribution Theories

Tony Atkinson was the founding father of modern research into inequality. Atkinson (2013) dismissed these mainstream economic explanations as "neoclassical apologia". The biggest rises in inequality took place *before* globalisation and the automation revolution got underway in the 1990s. Atkinson pinned down the causes of inequality to two. The first was the sharp fall in direct income tax for the top earners under neoliberal government policies from the 1980s onwards. The second was the sharp rise in capital income (i.e. income generated from the ownership of capital rather than from the sale of labour power). The rising profit share in capitalist sector production that most OECD economies generated since the 1980s was translated into higher dividends, interest and rent for the top 1-5% who generally own the means of production.

Thomas Piketty (2014) looked at the accumulation and distribution of wealth over the last 200 years. He found a rise of income going to capital in the form of profits, rent and interest. The central issue was a distributional one (Roberts 2015). The net rate of return on capital (r) outstrips the growth of net national income (g). This inequality r > g implies that “the past will tend to devour the future” (Piketty 2014, x) : wealth originating from the ownership of capital grows more rapidly than wealth stemming from income from work. Even an “apparently small gap between the return on capital and the rate of growth can in the long run have powerful and destabilising effects on the structure and dynamics of social inequality” (77).

Emmanuel Saez and Gabriel Zucman (2019) show that currently America’s 400 billionaires pay less in all taxes relative to their incomes than the bottom 50% of wage earners.

> The US tax system is not progressive. For the top 400 income holders(billionaires) the effective tax rate is 23% while it is 25-30% for working and middle classes. America’s tax system is now technically ‘regressive’ and is “a new engine for increasing inequality. (10)

Saez and Zucman argue that there are three main drivers of declining progressivity: the collapse in capital taxation; allowing tax avoidance loopholes and outright evasion and; globalisation with tax havens and competition to reduce taxes for foreign investment.

8 Marxist Theories

Marx’s view on the reason for inequalities of personal wealth and income was not dissimilar to that of Piketty. But he considered that any distribution of the means of income and wealth was only a *consequence* of the distribution of the conditions of production. The capitalist mode of production rests on the fact that the material conditions of production are in the hands of non-workers in the form of property in capital and land, while the masses are only owners of their personal condition of production, of labor power.

Following Marx, Ian Wright (2005) dismisses the mainstream causes of rising inequality. Instead, the causes of rising inequality must be found in the very nature of the capitalist mode of production. As Wright puts it, “capitalism is a system in which one economic class systematically exploits another. And its economic exploitation – not housing, tax policies or low wages – that is the root cause of the economic inequality we see all around us”.

Wright develops a model of capitalism that is based on this principle of entropy in a market economy.

> Maximising entropy under the single constraint of conservation of money yields an exponential distribution of wealth. So the first cause of inequality is what Adam Smith called the higgling and haggling of the market. Since people are free to trade, entropy increases and the distribution of money becomes unequal? (32)

	1918	1929	1945	1973	1979	2007	2012
Tax-units (%)							
Capitalist class	9.1	7.6	2.5	1.0	0.8	1.8	1.4
Managerial class	28.8	19.4	8.1	10.6	13.3	16.8	14.2
Working class	62.1	73.0	89.5	88.4	85.9	81.5	84.4
Income share (%)							
Capitalist class	38.3	39.7	16.7	7.7	7.4	23.3	22.1
Managerial class	29.3	25.0	18.8	26.5	30.2	31.9	31.8
Working class	32.3	35.3	64.5	65.8	62.4	44.8	46.1
Average income ratios							
Capitalist class to Working class	8.1	10.8	9.3	10.5	12.4	23.9	29.0
Capitalist class to Managerial class	4.2	4.1	2.9	3.1	3.9	6.9	7.0
Managerial class to Working class	2.0	2.7	3.2	3.3	3.1	3.5	4.1

Table 1 Summary class statistics US 1918-2012. Source: Mohun 2016, 358

but "markets are not the only cause of the inequality we see in capitalism". The other aspect is exploitation of labour for a profit. Capitalists accumulate profits as capital.

> Firms follow a powerlaw distribution in size. And capital concentrates in the same way. A large number of small capitals exploit a small group of workers, and a small number of big capitals exploit a large group of workers. Profits are roughly proportional to the number of workers employed. So capitalist income also follows a powerlaw. The more workers you exploit the more profit you make. The more profit you make the more workers you can exploit. (32)

Wright's analysis accords nicely with the empirical evidence. Simon Mohun (2016) showed that Marx's class analysis, which rests on the ownership of the means of production (between the owner of the means of production and who exploits those who own nothing but their labour power), remains broadly correct, even in modern capitalist economies like the US. He found that the working class – i.e. those who depend on wages alone for their living – still constitute 84% of the working population. Managers earnings high wages constitute the rest, but only 1.4% can live off rent, interest, capital gains and dividends alone. They are the real capitalist class **[table 1]**.

This group gained most during the last 30 years of rising inequality. Their income has risen in the post WW2 period from 9 times the average income of the working class to 29 times, while managers' incomes have risen from 3.2 times to 4.1 times workers' income. So rising inequality is primarily the result of income coming from capital, not work.

Marx's general law of accumulation of capital is that, over time, capital as represented as the stock of fixed assets owned by capitalists (structures, equipment, technology patents etc), would rise relative to the cost of employment of human labour. This offers a good gauge of the underlying concentration of capital (Marx 1867) **[chart 7]**.

One study shows how far that has gone in the recent period. Three systems theorists at the Swiss Federal Institute of Technology (Vitali et al. 2011) developed a database listing 37 million companies and investors worldwide and analysed all 43,060 transnational corporations and share ownerships linking them. They built a model of who owns what and what their revenues are, mapping out the whole edifice of economic power. They discovered that a dominant core of 147 firms through interlocking stakes in others together control 40% of the wealth in the network. A total of 737 companies control 80% of it all. This is the inequality that matters for the functioning of capitalism – the concentrated power of capital. The main cause of rising inequality has been a growing concentration and centralisation of wealth, not income. And it has been in the wealth held in the means of production and not just household wealth that has generated a power law in inequality at the top.

The view of mainstream economics is that the so-called 'developing' or 'emerging' economies would over time close the gap in terms of wealth and output per person – and also in terms of human well-being (eg in education, health and general prosperity). This would be achieved by following the example of the major industrialised and urbanized economies represented by the G7 top economies or those within the OECD club. The theory was that through a combination of private enterprise, competitive markets and free trade and capital flows from the rich to the poor, the economies would eventually 'converge'. That theory has not been vindicated by any significant reduction in the gap between rich and poor countries globally – as the evidence above on wealth and income per person shows.

The UN has created a human development index (HDI) which attempts to measure progress in wider terms by including in its index not just economic growth but also life expectancy, educational advancement and other components of economic prosperity (REF). Are the HDIs of the rich and poor countries converging?

If we look at the largest so-called emerging economies by population, including the BRICS (Brazil, Russia, India, China and South Africa), as you might expect, China has achieved the greatest improvement in its HDI of all countries. From a lowly 0.48 in 1990, China's HDI reached 0.77 in 2021, a rise of 59%. Compare that to India, which started pretty much at the same HDI level as China but reached only 0.63 in 2021, a rise of 46%, but still way lower than China **[table 3]**.

If we exclude China and India, then the world average was 19pts behind the OECD average in 1990. In 2021, the gap was 17pts. So there has been hardly any progress in closing the gap in 30 years. And the countries of the Global South chosen here are mostly the

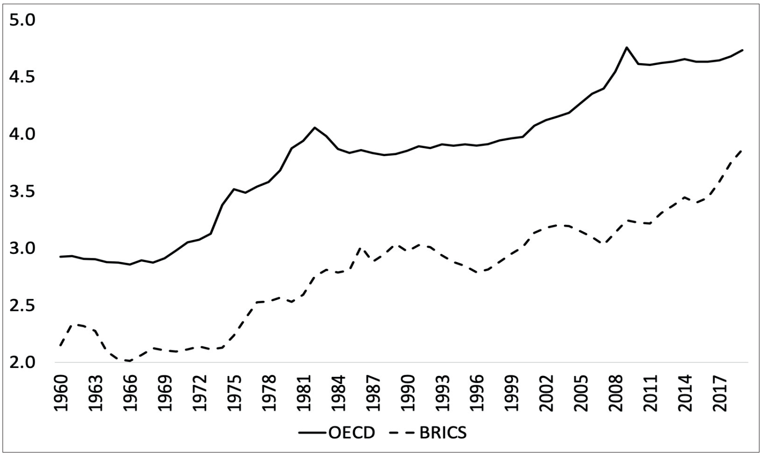

Chart 7 Rising organic composition of capital (ratio of stock of fixed assets over employee compensation) = rising concentration of capital. Source: EWPT 7.0 series, author's calculations

	1990	2000	2010	2021
US	0,872	0,891	0,911	0,936
Russia	0,743	0,732	0,796	0,822
Brazil	0,610	0,679	0,723	0,754
China	0,484	0,584	0,691	0,768
India	0,434	0,491	0,575	0,633
OECD	0,795	0,84	0,875	0,899
World	0,601	0,645	0,697	0,732

Table 3 Human development indexes 1990-2021. Source: Human Development Report 2022

best performers, not the poorest and weakest. Despite the greatest period of growth in international trade and capital flows, called by mainstream economics the 'Great Moderation' or 'globalisation', there has been minimal convergence between the top economies and the rest.

Indeed, divergence is now operating since the COVID pandemic. Every year a few different countries experience dips in their respective HDI values. But a whopping 90% of countries saw their HDI value drop in either 2020 or 2021, far exceeding the number that experienced reversals in the wake of the global financial crisis.

The mainstream theory of economic development cannot explain this. The World Bank concludes that the main limitation to ending extreme poverty and reducing global inequality is the failure of a transfer of resources from the rich countries to the poor.

The World Bank explained it this way:

> Suppose that the real GDP growth for the developing world as a whole is 5% per year. If 10% of this growth accrued to the 21% of the developing world's population who are extremely poor, and this 10% was distributed equally, extreme poverty would end in one year. (World Bank 2006)

And yet, far from resources being transferred from the rich to the poorer countries to reduce global poverty, the opposite is the case. According to UNCTAD (2020),[6] net resource transfers are from developing to developed countries, averaging $700bn a year, even after taking into account foreign aid assistance.

Contrary to mainstream theory, free international trade does not lead to economic convergence but to increased transfers of profit, interest and rent from the poorer, less technically developed economies to the richer, more developed economies. International trade takes the form of 'unequal exchange' from trade and financial flows. According to various authors the transfer of value from the periphery to the G7 bloc is equivalent to approximately 1% of GDP each year and 10% of export revenues (Carchedi, Roberts 2020). Ricci (2021) finds that there was a transfer of $865 billion in 2007 (1.9% of GVA and 9.1% of exports); Liang and Su (2021) estimate $563bn in 2014 (1.4% of GDP); and Hickel, Sullivan and Zoomkawala (2021) $2.2trn in 2018 (7% of GDP) or $62trn at constant prices since 1960!

Developing countries have forked out over $4.2tn in interest payments alone since 1980 – a scale that dwarfs the aid that they received during the same period (REF). Another big contributor is the income that foreigners make on their investments in developing countries and then repatriate back home. But by far the biggest chunk of outflows has to do with unrecorded – and usually illicit – capital flight. Developing countries have lost a total of $13.4tn through unrecorded capital flight since 1980. Most of these outflows take place through the international trade system. Basically, corporations – foreign and domestic alike – report false prices on their trade invoices in order to spirit money out of developing countries directly into tax havens and secrecy jurisdictions, a practice known as "trade misinvoicing". Currently, international development assistance is a little over $100 billion a year, five times less the annual income flows out of the poor countries to the rich.

The World Bank estimates that 60% of low-income countries are heavily indebted and at high risk of debt distress. Debt burdens are crushing many developing countries. Amid the biggest surge in global interest rates in four decades, developing countries spent a record

6 https://unctad.org/publication/trade-and-development-report-2020.

$443.5 billion to service their external public and publicly guaranteed debt in 2022, the World Bank's latest International Debt Report shows (World Bank 2023). The increase in these costs has shifted scarce resources away from critical needs such as health, education and the environment.

9 Ending or Reducing Inequality

Given these explanations for inequality of income and wealth in modern economies, what policy actions are possible to curb or reduce inequality?

The Kuznets hypothesis suggests that nothing can or needs to be done about inequality as it is a necessary part of economic development and will naturally recede as economies mature and as education, skills and technology expands. The Piketty hypothesis argues that on the contrary inequality will rise in modern economies, so governments must intervene to reverse that process. Piketty advocates an annual tax on the top 1% of wealth holders; progressive taxation of incomes, an end to tax evasion and avoidance schemes by the rich; the closure of 'tax havens' in countries, a global minimum tax on corporate profits among other measures.

The redistribution theorists' main proposal to reverse rising inequality of wealth and income advocated by the authors is a wealth tax. Saez and Zucman estimate that with a 10% wealth tax above $1 billion, US wealth inequality can return to its 1980 level. This would also generate revenue to pay for health and education services. For example, the wealth tax proposal of Democrat candidate Elizabeth Warren starting at 2% above $50m of wealth to 10% for billionaires would raise 1% of GDP and would eventually "abolish billionaires gradually". If there was a 90% top rate, it would "abolish billionaires now".

But there is a weakness in Saez and Zucman's policy proposals. They only deal with redistributing income and wealth after the event. But rising wealth and income inequality is not due to regressive taxation in the main, but to the structure of investment, production and income in the capitalist economy, namely the exploitation of labour by capital.

Income inequality from wages and profits (market income) has been high – in the US with a gini coefficient of 0.45-0.55. It has been ameliorated by redistribution policies of taxation and social benefits, but inequality in personal disposable income is still high 0.35-0.40 and rising. The lower the inequality of market incomes, the lower the inequality of disposable incomes – but the former drives the latter (IMF Fiscal Monitor 2017) **[chart 8]**.

The Marxist view is that policies aimed at reducing inequality by taxation and regulation, or even by boosting workers' wages, will not achieve much change while inequality of wealth stems from the

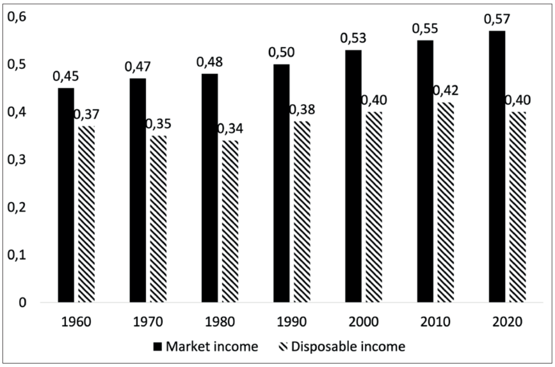

Chart 8
US inequality of income Gini coefficients. Source: World Inequality Database

concentration of the means of production and finance in the hands of a few. The Marxist model argues that the policy target should not be solely or even mainly a redistribution of unequal wealth and income. The policy target should be the removal of private ownership of the means of production and its replacement by common ownership. The distribution of income and wealth cannot be changed in any material way until the system is changed.

The issue is the abolition of the mode of wealth generation, not 'after the event' alteration of income and wealth distribution. As Marx put it when discussing wage inequality (Marx 1865), "to clamor for equal or even equitable remuneration on the basis of the wages system is the same as to clamor for freedom on the basis of the slavery system". Equality in the sense of "*to* each according to ability or effort or contribution" should be replaced with equality in the sense of "*from* each according to ability, *to* each according to need".

What flows from economic inequality are the other modes of social inequality. Poverty and inequality are linked (Roberts 2023). Both are the result of exploitation of labour by capital nationally and globally. What that means is that policies aimed at reducing inequality of income by taxation and regulation, or even by boosting workers' wages, will not achieve much impact while there is such a high level of inequality of wealth and when that inequality of wealth stems from the concentration of the means of production and finance in the hands of a few. UN Rapporteur on global poverty, Philip Alston (2020) concluded that "using historic growth rates and excluding any negative effects of climate change (an impossible scenario), it would take 100 years to eradicate poverty".

As income inequality in the USA increased over the past four decades, socioeconomic gaps in survival have also increased (Bor et al. 2017). Life expectancy has risen among middle-income and high-income Americans, whereas it has stagnated among poor Americans and even declined in some demographic groups. Growing survival gaps across income percentiles reflect an increasingly strong association between low income and poor health. Rising inequality including unequal access to technological innovations, increased geographical segregation by income, reduced economic mobility and increased exposure to the costs of medical care have reduced access to health support among low-income Americans. There is a widening gap in mortality rates that can be connected to increased inequality of income and wealth (Case, Deaton 2023).

Economic inequality is caused by the monopoly over the means of production, the ownership of property and the control of finance that is in the hands of the 1%. Without changing this, it will not be possible to curb or end the other forms of social inequality in any significant way.

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