

## Markets and Inequality

I am also ignoring John's advice and writing a book on the new drivers of income and wealth inequality that you wouldn't have learned about if you took a standard macroeconomics course a few decades ago. In the latest chapter, I'm examining how new market trends may be exacerbating income and wealth inequality. One trend is our shrinking public markets, the other is prevalence of new actors in the markets.

The shrinking size of world equity markets impacts incomes and generates asymmetric risks for regular people. The number of public firms has fallen by 50 percent in the US over the past 20 years, and 41 percent in Germany over the past decade. This is primarily driven by two factors: increased M&A activity and the rise of private equity. Greater M&A activity results in higher market concentration; market superstars like Amazon and Facebook buy up potential competitors, reducing competition and innovation and creating monopsonies.

The reduction in public companies has also been driven by the rising availability (and attractive high yields) of private equity. As a result, fewer, typically older firms tend to get larger and more valuable, while young, small firms become less profitable and drop off exchanges. Fast rising upstarts are therefore harder to find, and they are the source of most job creation in developed economies.

Importantly, the average worker does not share in the additional equity created. Regular people can't invest in private equity other than marginally through a pension scheme. The opacity of private equity balance sheets is not an issue during good times when liquidity is abundant, but could result in widespread defaults in bad times. While regular people don't really benefit from the upswing, the blowback on the economy from defaults could feed through into higher unemployment that could impact low wage, low hour employees.

New actors in the markets such as passive and AI hedge funds can also create asymmetric risks for the bottom tier of the income distribution, exacerbating inequality. To be clear, these actors aren't actually all that new. Passive investing really started in the 1970s when the Vanguard Group set up index funds for individual investors and the first quant funds emerged in the 1990's. What's new is their dominance in the markets.

On an average day in US equity markets, 90 percent of trades are conducted by passive investors. These are generally long-only trades that are the ultimate in momentum trading. As Stock A performs well, every passive fund that is invested in the index has to buy more of Stock A to replicate the index, bidding Stock A up even higher. The same momentum trade occurs on the way down.

Most regular workers aren't invested in equity markets (though this has shifted moderately in the post Robinhood bonanza); the top 20% of the US income distribution owns 89% of all stocks, while the bottom 60% owns just 7%. This means the lower half of the distribution doesn't benefit much from the momentum trade on the way up. But on the way down, the stock market correction could be exacerbated by this momentum trade, with a deeper downturn and higher unemployment hitting more vulnerable workers. There is some research suggesting that financial

crises result in higher unemployment, but it is not a hard and fast rule—the stock market crash of 1987 shaved more than 20% off the market’s valuation without leading to a spike in unemployment. Still this is not the norm, as 1929 and 2008 suggest. Of course, Covid has also shown that financial markets can hit record highs while unemployment remains high.

AI hedge funds took over as the dominant form of institutional investing in 2016, representing around 35 percent of trading volume. On an average day, 90 percent of equity-futures trades and 80 percent of cash-equity trades are executed by algorithms.

Algorithms do not care why the markets move, only that they do. They look for trading strategies that are succeeding and adopt those strategies until a better one comes along, regardless of the underlying fundamentals. What happens when the strategy suddenly becomes to sell everything? As algorithms help drive the next bear market even deeper, the most vulnerable are hurt by a worsening downturn and job losses.

The challenge with this chapter is that we have only really had one bear market since these actors came to dominate the markets—March 2020. Not only was this not a typical downturn, but the policy response was swift and significant in order to short circuit the downward momentum trade. It’s therefore difficult to prove this theory with data, though the emergence of these trends, the momentum they generate and the implications for growth and unemployment can be documented.