Economics from the Top Down

new ideas in economics and the social sciences

The American Housing Crisis: A Theft, Not a Shortage

Blair Fix

October 23, 2024

The U.S. has a shortage of 7.3 million rental homes affordable and available to renters with extremely low incomes.

— National Low Income Housing Coalition

If mainstream economics teaches us one lesson, it's that when something becomes unaffordable, it's because of a shortage. And that brings me to the US housing crisis. In America, housing is getting less affordable. So there must be a short supply, right?

Not necessarily. You see, shortage is not the only route to unaffordability. There's also . . . *theft*.

Here's how it works. Suppose that on your way to buy groceries, you get robbed. With your wallet gone, you can't afford food. But that's not because groceries are in short supply. In fact, the opposite is true. As you sit empty handed, the grocery store sits full of stock. So then why can't you buy food? Obviously because you *have no money*!

Back to homes. Surely we can't blame the unfolding housing crisis on widespread theft?

Actually, we can . . . with the caveat that the theft has been mostly approved — even *championed* — by the law. Starting in the 1980s, Americans embarked on a bold experiment with income redistribution. Money was systematically taken from the poor and handed to the rich. The result was opulence for the elite and grinding austerity for the less fortunate.

True, this legalized theft has been happening for decades. But in the last few years, the experiment has reached an impasse. Look to city streets to see the end game. There, the poorest Americans litter the sidewalks — untouchables in a land of plenty.

So what is to be done?

For reactionaries, the solution is straightforward: after the crime, you punish the victims. Are homeless folks cluttering your park? Ban them from entering! Ship them somewhere else! Make destitution illegal!

For anti-poverty advocates, the solution is obviously less heartless. And yet these well-meaning groups often euphemize the truth. When poor folks are too destitute to afford housing, the problem gets framed as a 'shortage' of affordable homes. In other words, the solution to poverty is to build subsidized housing.

Now don't get me wrong, building affordable housing is a worthy goal. But it's also a band-aid that leaves an open wound untreated. It's like saying to the victim of an armed robbery, "Sorry your money was stolen. Here are some food stamps for the groceries you can no longer afford." Of course, what the theft victim actually wants is to *get their money back*. That way, there's no need for subsidized food.

Likewise, what poor folks want, above all, is to *not be poor*. And much like reversing petty theft, there is a simple way to undo widespread poverty. Give back to the poor the money that was taken from them.

Now here's the kicker. By returning this stolen money, the US housing crisis would evaporate. No, I'm not kidding. If the United States were to undo its experiment with rampant inequality and return the distribution of income to the levels found in 1970, the housing crisis would *disappear*. On this fact, the math is unequivocal.[1]

Of course, it's no small task to end the housing crisis with Robin-Hood redistribution. Still, the job of doing the seemingly impossible starts by acknowledging that the task is, in fact, *possible*. So join me in a subversive thought experiment. Let's gaze at what the United States *could* be like, had it never embarked on the path to neoliberal hell.

[1] I suspect that the same reasoning will hold in other countries experiencing a housing crisis. (Canada, I'm looking at you.) It's largely a problem of poverty, not of shortage. But I'll leave this investigation for the future.

A housing crisis . . . but where is the shortage?

Before we get to our subversive thought experiment, let's first deal with the elephant in the housing-crisis room: the notion of a *shortage*.

Notice how anti-poverty groups (like the NLIHC) use careful language to describe the unfolding crisis. It's driven, they say, by a 'shortage of affordable homes for renters with extremely low incomes'. This diagnosis is essentially correct, although it wraps the problem in euphemism. In today's America, the folks at the bottom of society are too poor to afford rent.

What's *not* correct, though, is to insist that the housing crisis is being driven by a widespread housing shortage. There's simply no evidence that this is true.

To make the case, let's put on our economist hats and look at housing prices. Although mainstream economists are wrong about many things, they are correct that widespread shortages should lead to price spikes. Of course, that doesn't mean that every price spike is a sign of a shortage. But it does mean that absent price controls (or government rationing), shortages should be visible via market prices.

Here's where things get puzzling. Despite plain-sight proof that many Americans can't afford a decent place to live, housing prices themselves show little sign of a widespread shortage. In fact, looking only at prices, it's hard to spot *any* evidence for the unfolding housing crisis.

As an example, take the price of houses. Since 1970, the average US house has sold for about 5.9 times the average American's annual income. Figure 1 plots the data. Around this middle-ground price, there have been ups and downs. As of 2022, Americans are living through a house-price upswing. But this uptick is well within the historical norm. In fact, looking only at this house-price data, there's little sign of an unfolding crisis.

Turning to the price of rent, the situation is even more puzzling. Since 1970, the median price of rent has been *falling* relative to the average American income. Figure 2 tells the story. Yes, there was a slight rent spike during the early stages of the pandemic. But again, this uptick was well within the historical norm, and hardly warrants being called a 'crisis'.

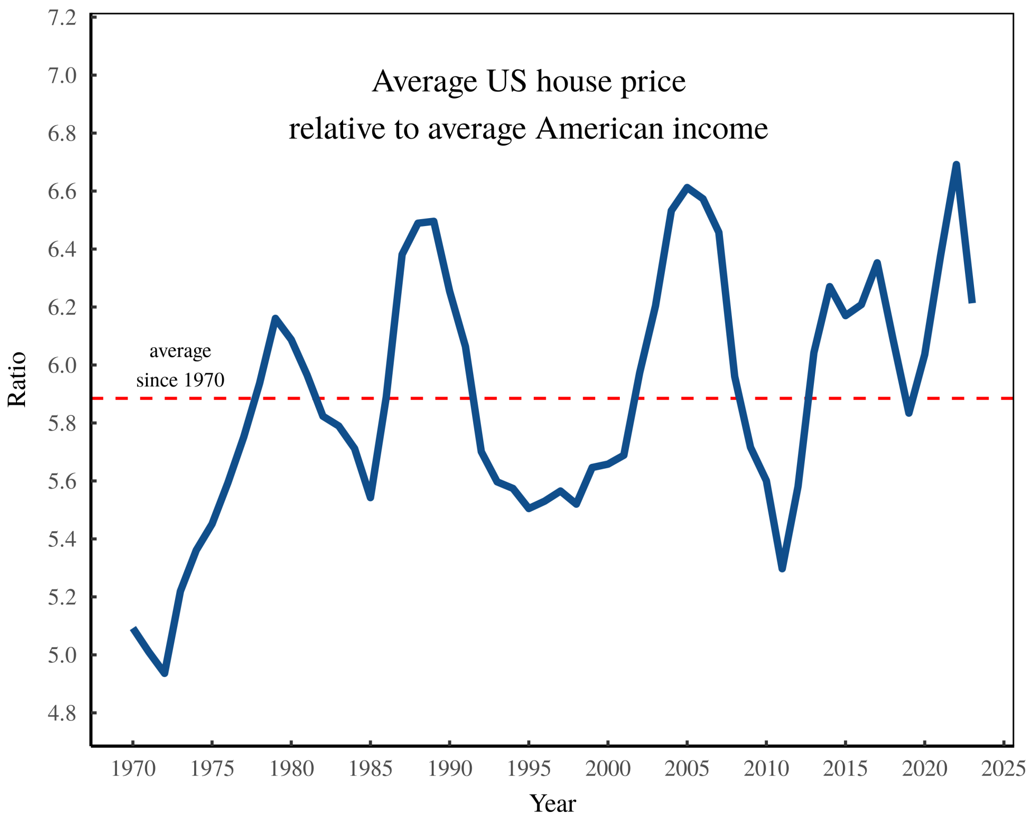

Figure 1: A non-crisis in house prices

The line plots the price of the average US home, pegged against the average American income. Circa 2022, it's difficult to see signs of an unfolding 'housing crisis'. Sources and methods

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So we have a mystery on our hands. Looking only at price data (relative to average income), it's difficult to find signs of a widespread housing shortage. In fact, for the average American, today's housing prices seems quite unremarkable. So are we *imagining* the housing crisis?

When the average misleads

No, the housing crisis is *not* imaginary. Instead, what *is* imaginary is the concept of an 'average income'.

Here's what I mean. An average is a mathematical concept that *defines* a central tendency, even when such a tendency *doesn't exist*. For example, suppose that Alice and Bob have an average lifespan of 50 years. Now, it could be that both individuals die at 50, indicating a real central tendency. But it

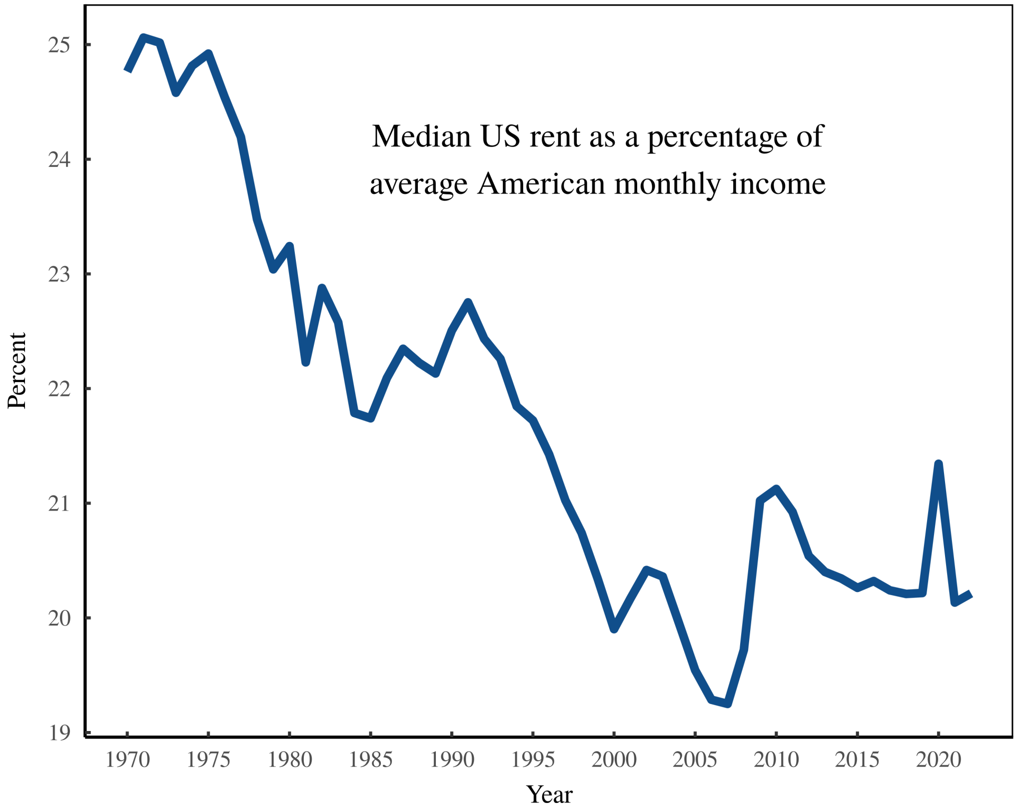

Figure 2: A non-crisis in rent

The line shows the median price of US rent, pegged against the average American monthly income. Other than a brief price spike during the pandemic, there's little sign of an unfolding housing crisis . Sources and methods

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could also be that Alice dies at 100, while Bob dies at birth. Either way, their average lifespan is 50 years. But in the latter case, the 'average' defines a central tendency that is misleading.

It's for this reason that scientists who study public health don't exclusively look at the average lifespan. They also look at indicators like infant mortality.

Turning to income, the situation is similar. The average can mislead. You see, it's mathematically possible for the average income to *increase* at the same time that *poverty* gets more severe. As it turns out, in today's American, that is exactly what's happening.

Rising rates of house poverty

The unfolding housing crisis is a problem not of supply, but of grinding *poverty*. A growing number of Americans cannot afford a decent place to live. On this fact, the statistics are exceedingly clear.

Let's start with the ability to buy a home. Relative to the *average* American income, house prices are well within their historical norm. (See Figure 1.) But beneath this average lurks a story of crisis. Among the least fortunate Americans, incomes have collapsed. And that means a growing number of people are 'house poor' — their income is less than what's needed to buy a typical house.

Figure 3 shows the rise in American house poverty. Here, I've plotted the portion of Americans whose annual income is less than 5% of the average house price. True, these folks might find a ramshackle home that's cheap enough to buy. But for a decent house, they'll likely find the purchase price hard to finance. Since 1970, the cohort of house-poor Americans has nearly tripled in size, with a particularly large spike in the last few years.

Turning to rates of *extreme* house poverty, the situation is even more dire. Figure 3-extreme shows the contours of the crisis. Here, I've plotted the portion of Americans whose annual income is less than 1% of the average house price. In 1970, only one in a hundred Americans belonged to this cohort. But by 2022, the ranks of extremely house-poor Americans had swelled *thirteen-fold*. It's here, at the very bottom of society, where the housing crisis lives.

Skyrocketing rates of rent poverty

Now to the related concept of *rent poverty* — the portion of Americans who will find it difficult to pay the median rent. Here too, the poverty rate is expanding.

Figure 5 shows the jump. The blue line plots the portion of Americans who have a monthly income that's less than the median price of rent. Since 1970, the size of this cohort has more than doubled, with much of the increase happening after 2020.

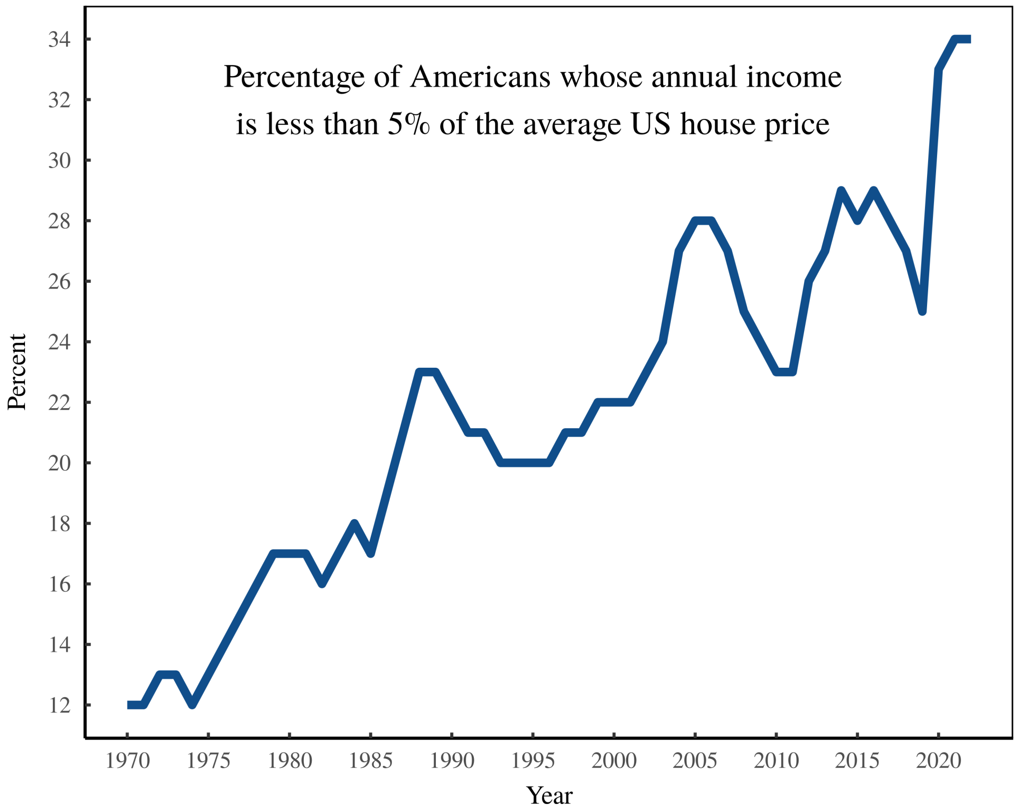

Figure 3: Rising rates of house poverty in America

This chart measures the number of Americans who are 'house poor' — those whose annual income is less than 5% of the average house price. Sources and methods

When we dive deeper into the depths of rent poverty, the situation gets even worse. For example, consider folks who are so poor that their monthly income is less than 20% of the median rent. Since 1970, the ranks of this poverty-stricken cohort have swelled *eleven-fold*, with a particularly large jump in the last few years. Figure 5-extreme paints the picture.

To summarize, the unfolding housing crisis is brazenly evident when we look in the right place. And that place is the *bottom* of American society, where incomes have collapsed relative to the price of housing. In short, the housing crisis is a catastrophe of grinding poverty, in which a growing number of Americans live with rags in a land of riches.

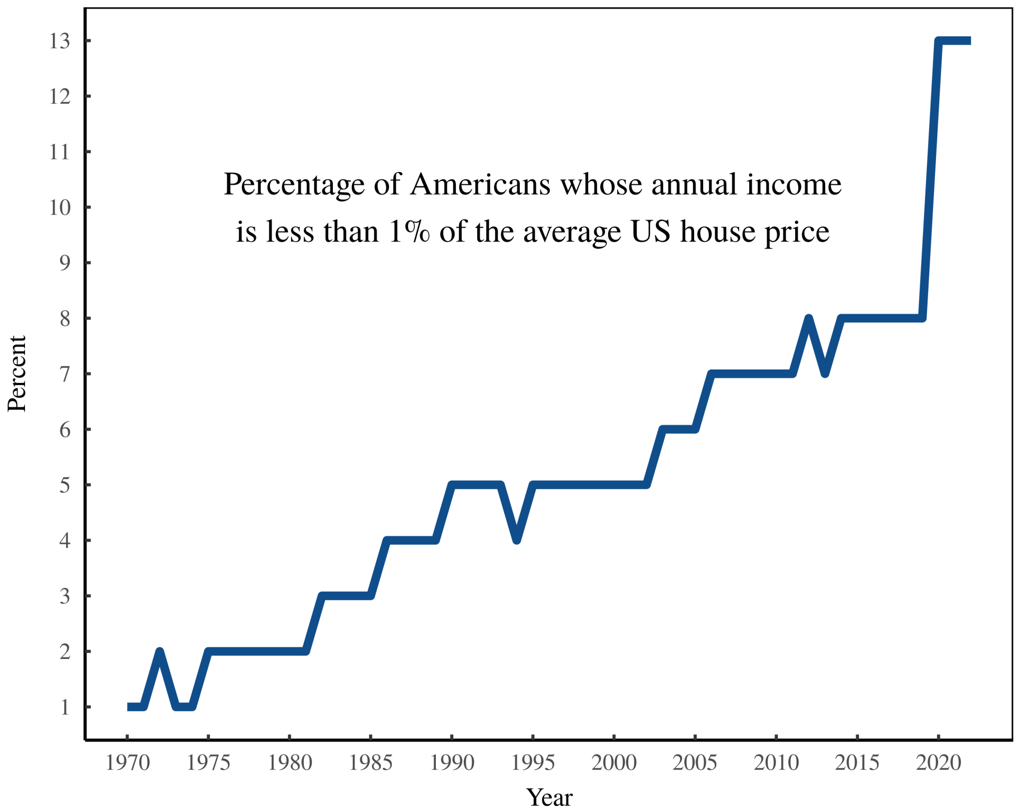

Figure 4: Exploding rates of extreme house poverty in America
This chart measures the number of Americans who are 'extremely house poor' — those whose annual income is less than 1% of the average house price. Sources and methods

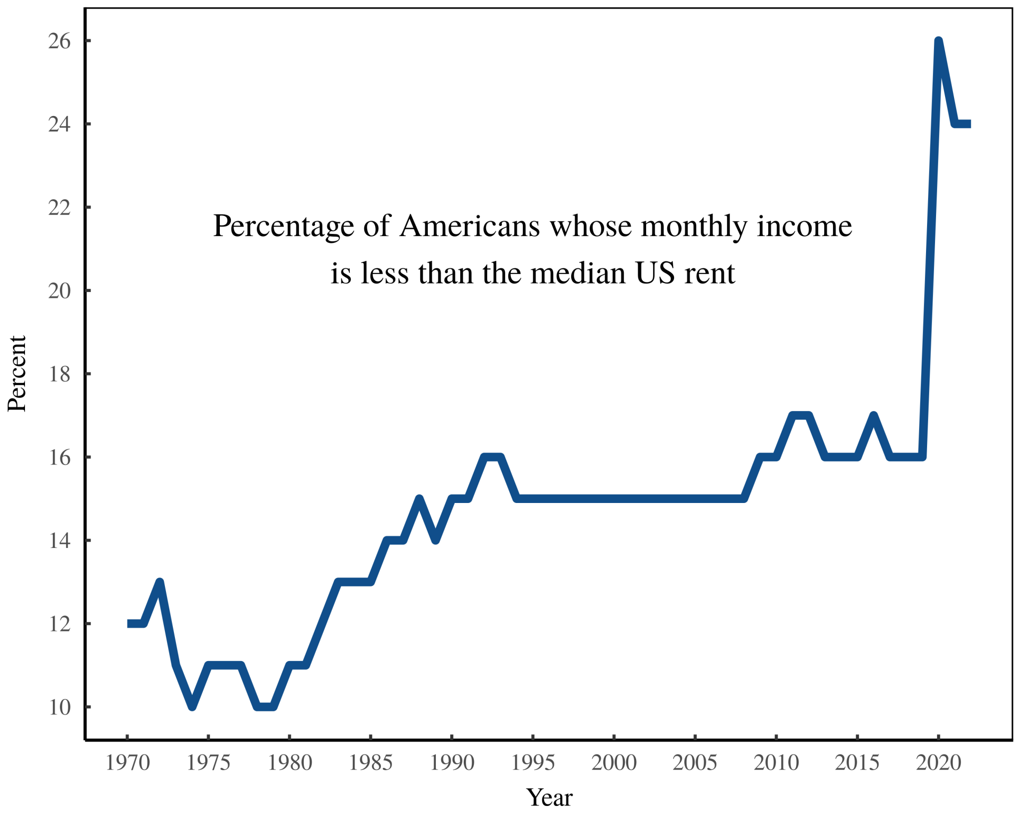

Figure 5: Expanding rates of rent poverty in America

This figure shows the rate of 'rent poverty' — the portion of Americans whose monthly income is less than the median US rent. Sources and methods

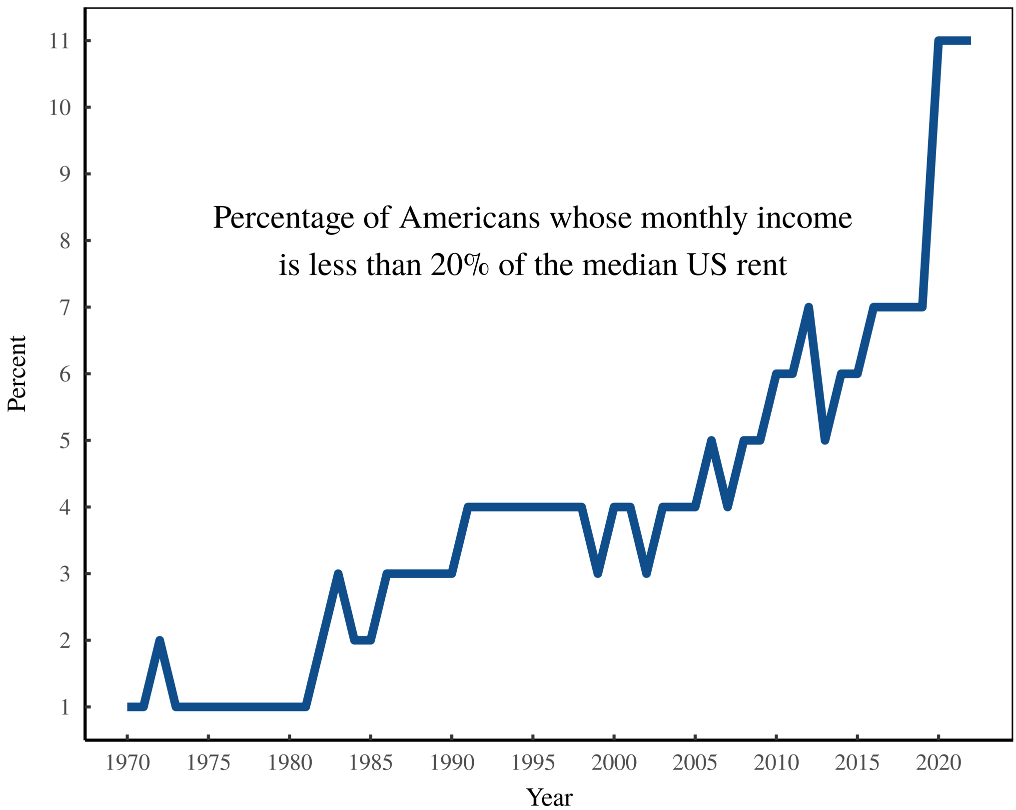

Figure 6: Spiking rates of extreme rent poverty in America

This blue linen shows the rate of 'extreme rent poverty' — the portion of Americans whose monthly income is less than 20% of the median US rent. Sources and methods

A fork in history

Now that we know where the US housing crisis lives, what is to be done to solve the problem?

There are many options, ranging from punishing the victims to building subsidized housing. But the best option — and oddly, the one that is the least discussed — is to simply give back to the American poor the money that was taken from them.

To see how this solution could work, let's return to 1970 and imagine a fork in history. In the real world, the US is about to embark on a decades-long experiment with neoliberalism. Top marginal tax rates will be slashed, unions will be smashed, and regulations will be turned to ash. As a consequence of this free-market fealty, income will be systematically taken from the poor and handed to the rich. The result, shown by the blue curve in Figure 7, is an inexorable rise in American income inequality.

Now suppose that this neoliberal experiment never happened. Suppose that in an alternative timeline, Americans choose to keep post-war welfare policies intact. Top marginal tax rates remain high, unions stay strong, and the social safety net remains robust. As a result, this alternative America continues to enjoy 1970 levels of income inequality, as shown by the red curve in Figure 7.

Because this alternative history is a thought experiment, I'll leave the political details sketchy. (How did America take this other path? I have no idea!) However, I will pin down two mathematical facts. In our alternative America, the following remain the same as in the real world:

1. Average American income grows *exactly* like in the real world.
2. The average price of housing behaves *exactly* like in the real world.[2]

(For the math behind this thought experiment, see the appendix.)

Cutting to the chase, the point of this thought experiment is to see if the present-day housing crisis could be solved by redistributing income. Of course, the prospect of taking money from the rich and handing it to the

[2] You could argue that if income gets redistributed, then housing prices will also change. And in some sense, that's true. If you alleviate extreme poverty, then you'll kill the demand for derelict rentals. And by taking money from the rich, you'll also reduce the demand for mansions. In short, by squeezing income towards the center, you'll also squeeze the price of housing towards the center. This squeeze, however, shouldn't have much affect on the *average/median* price of housing, which is what we're concerned with here.

Figure 7: A fork in American history

In the United States, income inequality rose steadily from the 1980s onward (as shown by the blue line). But, at least on paper, it's easy to imagine a version of the US in which this experiment didn't' happen. For example, the red line imagines a world in which US income inequality remained fixed at the levels found in 1970. If the United States had taken this alternative path, would there still be a housing crisis today? Sources and methods

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poor will cause reactionaries to cry 'socialism'. And that is exactly why my thought experiment evokes a fork in *American* history. Sure, a return to 1970 levels of income inequality may seem radical in the current political climate. But socialism it is not.[3]

[3]In mainstream American society, the prospect of 'socialism' looms like a bogeyman — a system where freedom dies and the government controls everything. It's odd, really. To the freedom-loving American, building public roads is not 'socialism', even though it's a form of collective action. Nor is public education 'socialism', even though it's state funded. But public healthcare *is* somehow 'socialism', as is progressively taxing the rich. It doesn't make much sense. But then gain, ideology never does.

Rising rates of house poverty, alleviated

Now to the results. In an alternative America marked by 1970 levels of inequality, what happens to the present-day housing crisis?

The answer is that it *vanishes*.

Let's run through the numbers. In the real world, the portion of house-poor Americans (folks whose annual income is less than 5% of the average house price) has nearly tripled since 1970. The blue curve in Figure 8 retells the story.

So what happens in our alternative timeline? In this world, the rate of American house poverty remains roughly steady (as shown by the red curve). The result is that by 2022, our alternative timeline has a house-poverty rate that's less than *half* that of the real world.

Turning to rates of extreme house poverty, the effects of mitigating inequality are even more spectacular. Figure 8-extreme runs the numbers.

In the real world, the portion of extremely house poor Americans — those with an annual income less than 1% of the average US house price — rose *thirteen-fold* from 1970 to 2022. The blue curve shows the catastrophe. But in an alternative America with constant 1970 levels of inequality (the red curve), this crisis never happens. Instead, the rate of extreme house poverty remains over *six times lower* than in the real world.

Rising rates of rent poverty, eradicated

Now to rates of rent poverty, which in the real-world US, have risen dramatically since the pandemic. So what happens in our alternative timeline, marked by 1970 levels of income inequality? The answer is that in this world, rising rent poverty gets *eradicated*.

Figure 10 runs the numbers. In the real-world (blue curve), the rate of American rent poverty more than doubled from 1970 to 2022. But in our alternative world (red curve), the rate of rent poverty actually *falls*. By 2022, it reaches levels that are *three times lower* than the real world.

Turning to rates of extreme rent poverty, the (counterfactual) gains are even more stupendous. Figure 10-extreme does the math.

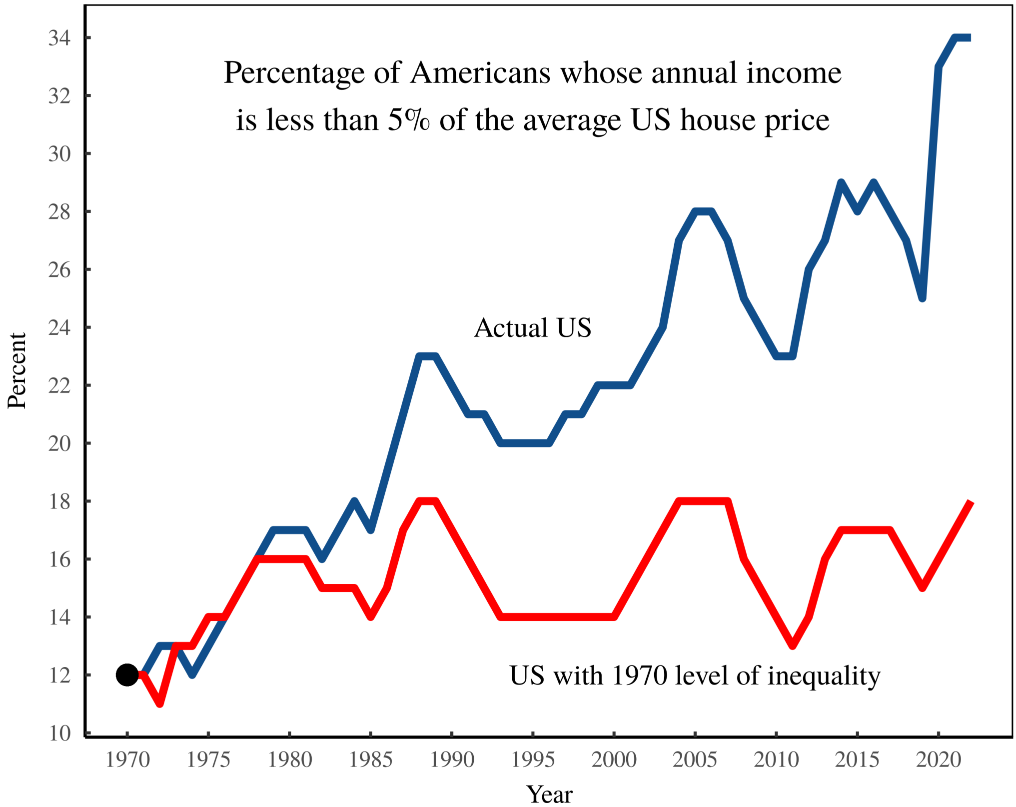

Figure 8: Rising house poverty, alleviated

Each curve shows the percentage of Americans who are 'house poor' — those with an annual income is less 5% of the average US house price. The blue curve shows how this house-poverty rate grew in the real world. The red curve shows how the house-poverty rate (doesn't) grow in a US marked by constant, 1970 levels of income inequality. Sources and methods

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In the real-world US, the rate of extreme rent poverty increased eleven-fold from 1970 to 2022. But in our alternative US, this rate doesn't budge. In short, by returning the distribution of income to 1970 levels, America could cut the rate of extreme rent poverty by a factor of *eleven*.

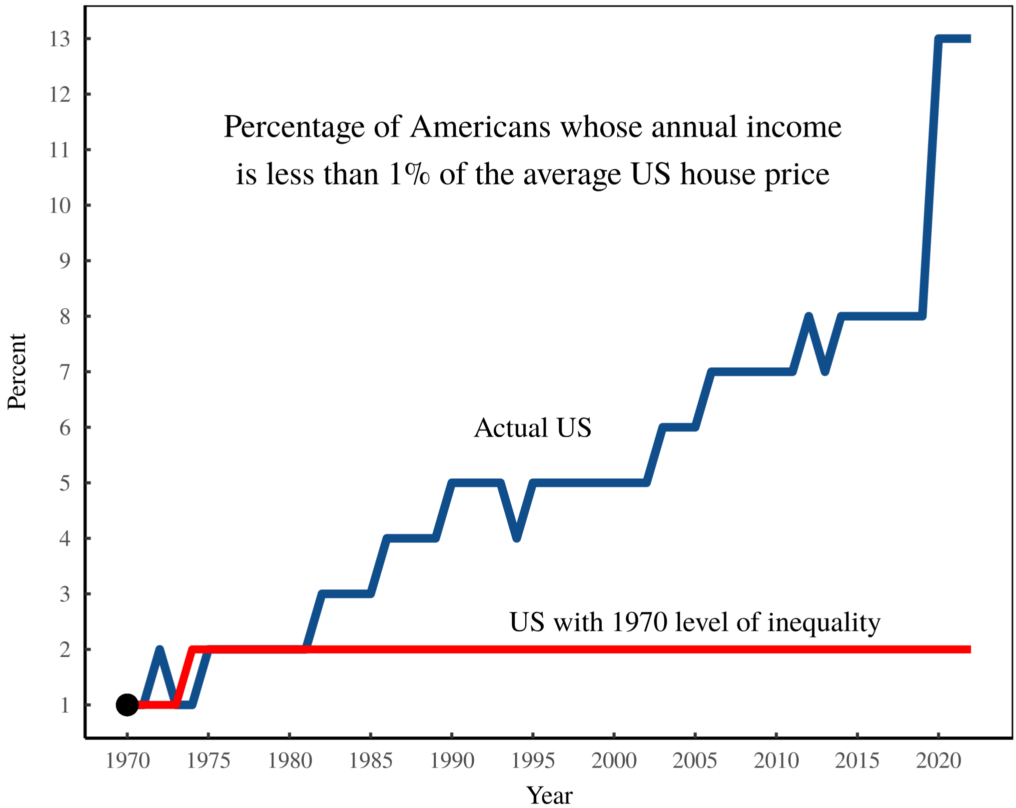

Figure 9: Extreme house poverty, nearly vanquished

Each curve shows the percentage of Americans who are 'extremely house poor' — those with an annual income is less 1% of the average US house price. The blue curve shows how this extreme house-poverty rate grew in the real world. The red curve shows how the extreme house-poverty rate (doesn't) grow in a US marked by constant, 1970 levels of income inequality. Sources and methods

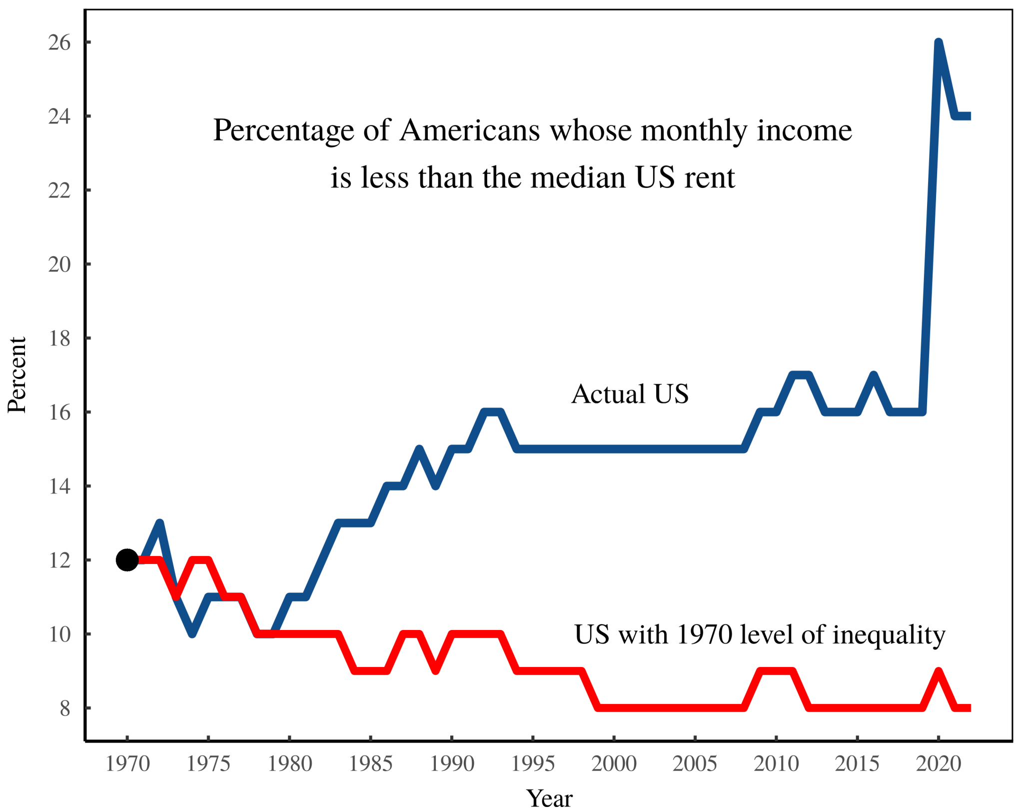

Figure 10: Rising rent poverty, eradicated

Each curve shows the percentage of Americans who are 'rent poor' — those with an monthly income is less the median US rent. The blue curve shows how this rent-poverty rate grew in the real world. The red curve shows how the rent-poverty rate shrinks in a US marked by constant, 1970 levels of income inequality. Sources and methods

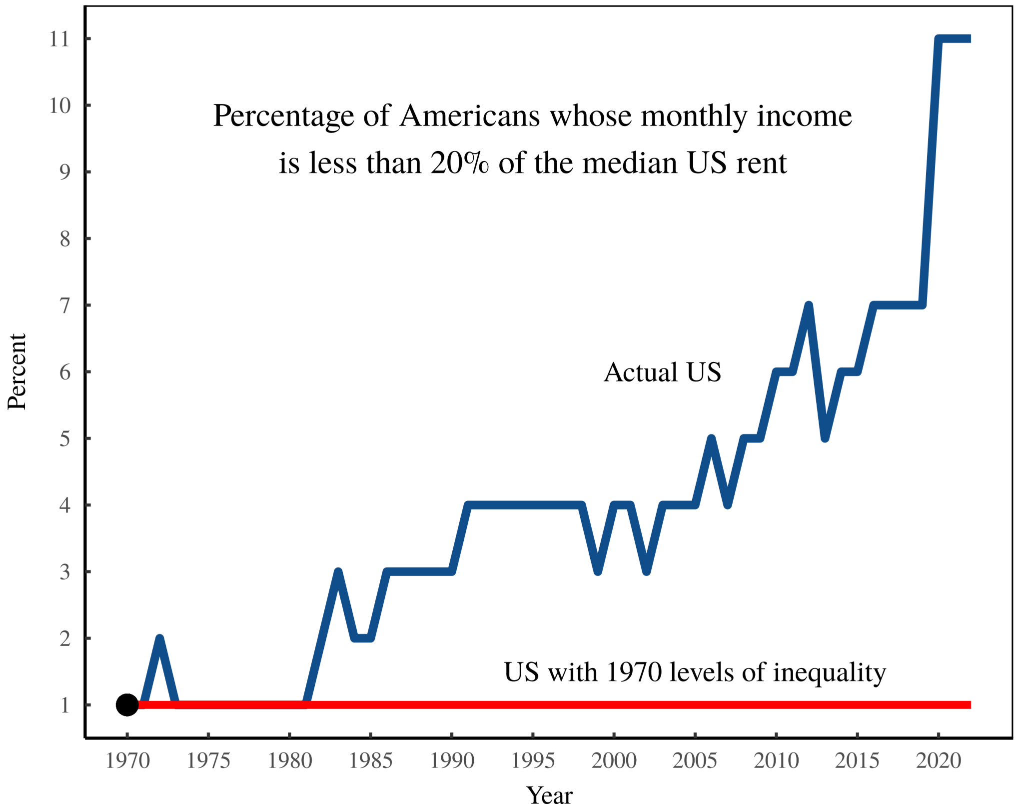

Figure 11: Extreme rent poverty, all but eliminated

Each curve shows the percentage of Americans who are 'extremely rent poor' — those with an monthly income is less the 20% the median US rent. The blue curve shows how this extreme rent-poverty rate grew in the real world. The red curve shows how the extreme rent-poverty rate stays constant in a US marked by constant, 1970 levels of income inequality. Sources and methods

Bold but possible

By returning income inequality to the levels found in 1970, the United States could reduce the rate of extreme house poverty *sixfold*, and cut the rate of extreme rent poverty *eleven-fold*.

These numbers are so large that they sound magical. But that's the thing about returning stolen money. It's a concrete action that, as if by magic, makes people less poor. And when folks are less poor, they can better afford housing.

Sarcasm aside, my point is that the unfolding housing crisis is a catastrophe of poverty that can be solved by reducing inequality. Take money from the rich and hand it to the poor, and the housing crisis will solve itself. And let's not call this policy 'socialism'. Let's call it a return to the 'Great Society' (the inverse of MAGA).

To be fair, boldly redistributing income is a big ask that's unlikely to happen in the short term. Which is why anti-poverty groups are wise to lobby for the smaller ask of subsidized housing. That said, subsidizing rent is like handing food stamps to the victims of theft. It's less bad than doing nothing. But if we want to *eliminate* rising rent poverty, there is a better solution. Give back to the American poor the money that was stolen from them.

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Creating an alternative America

Here's the math behind my fork-in-history thought experiment. It begins with a full-blown description of the real-world US distribution of income. I've plotted the data in Figure 12. Here, each colored line plots the (nominal) income of a particular percentile. The black line shows the average American income.

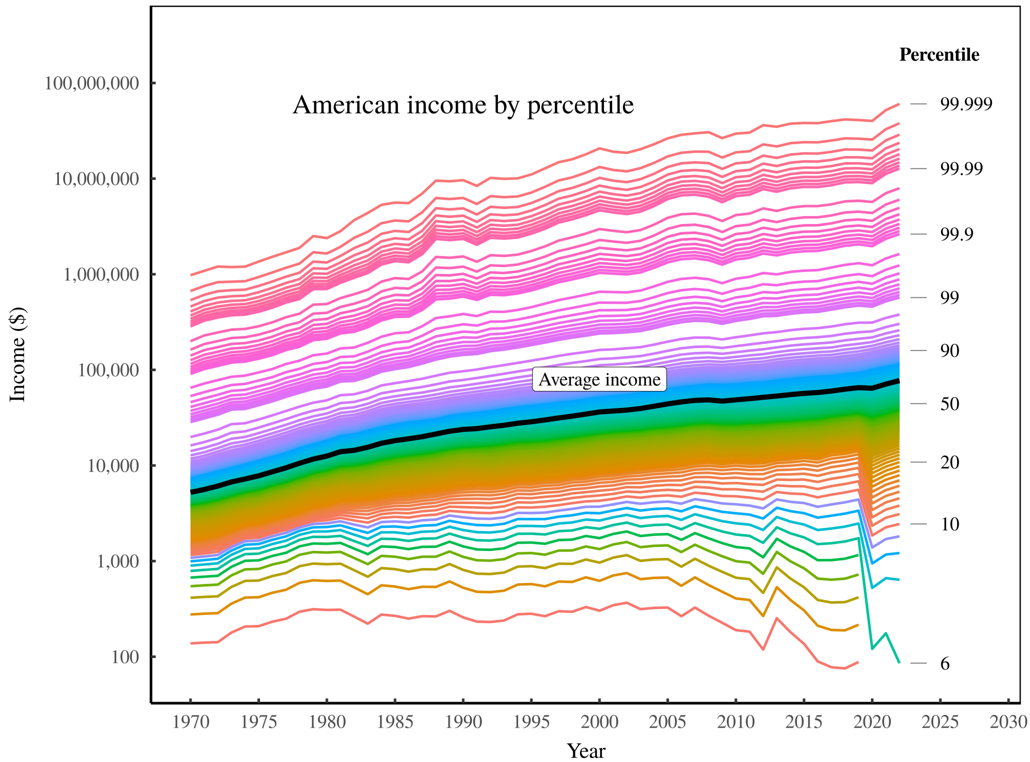

Figure 12: Individual income by percentile in the real-world US

Each colored line shows the individual (nominal) income of a particular US income percentile, plotted since 1970. The black line shows the rising average income. In this chart, rising inequality appears as a 'fanning out of the colored lines', indicating that the rich got richer, and the poor got poorer. Note that the vertical axis uses a log scale. Sources and methods

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This data is what I used to construct the analysis in Figures 1 to 5-extreme. To infer rates of house poverty, I count how many percentiles have an income that's less than the average US house price. To infer rates of rent poverty, I do the same thing, but with the median price of rent.

Now to the alternative US, marked by constant, 1970 levels of income inequality. To model this world, I take real-world income data from 1970, and then scale it up over time according to the real-world growth of average US income. Figure 12-70 illustrates what happens. Instead of the fanning out of incomes seen in the real world (Figure 12), we get an orderly march. Importantly, in this thought experiment, the average income grows exactly as it does in the real world.

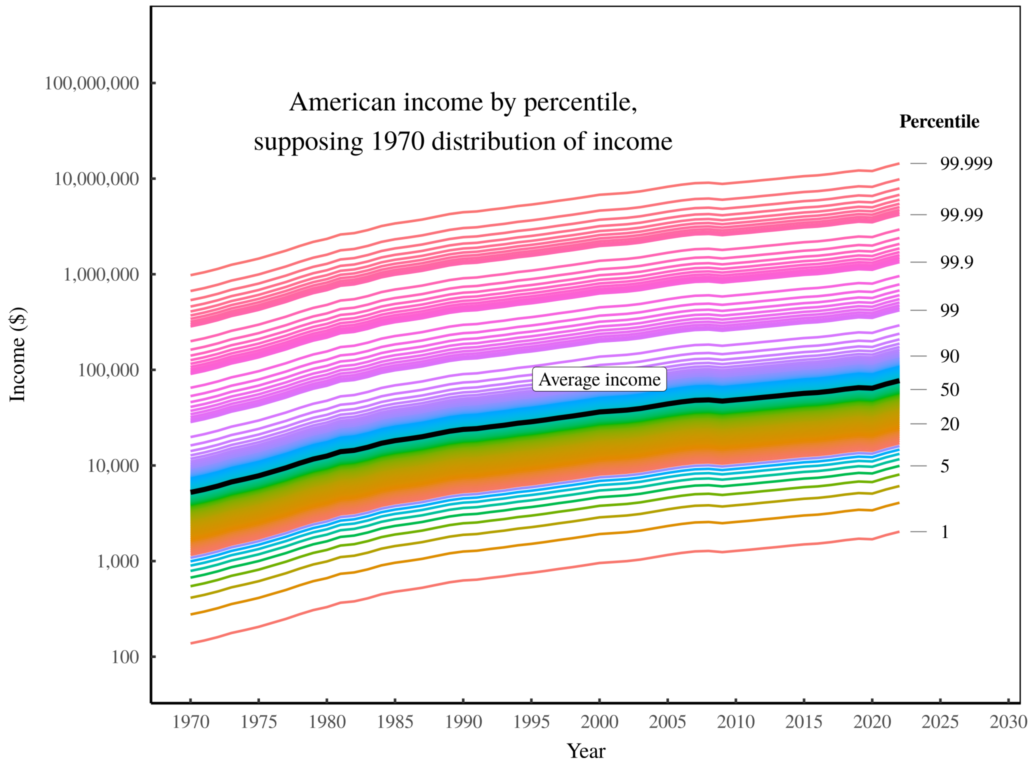

Figure 13: Individual income by percentile in a counterfactual US, marked by a 1970 distribution of income

This chart shows the results of a thought experiment in which average American income grows exactly as it did in the real world, yet the *distribution* of income remained fixed at levels found in 1970. The colored lines show the resulting income of various percentiles. Note that the vertical axis uses a log scale. Sources and methods

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To get alternative-world rates of house poverty and rent poverty, I take the counterfactual income data and compare it real-world data for the price of houses and rent. The resulting poverty rates — plotted in Figures 8 to 10-extreme — are so different from the real world that they seem impossible. But that's only because at the bottom of US society, the real-world scale of poverty is astonishing.

Figure 14 illustrates. Here, the red curve shows the real-world income of the 5th percentile of Americans. If the data is to be believed (and I have no reason to doubt it), the poorest Americans have recently seen their incomes implode. But had the US mitigated inequality, keeping it at the levels found in 1970, this implosion would not have happened. Instead, the income of the American 5th percentile would have climbed continuously (blue curve). This stark difference reminds us that inflicting poverty is a social *choice*.

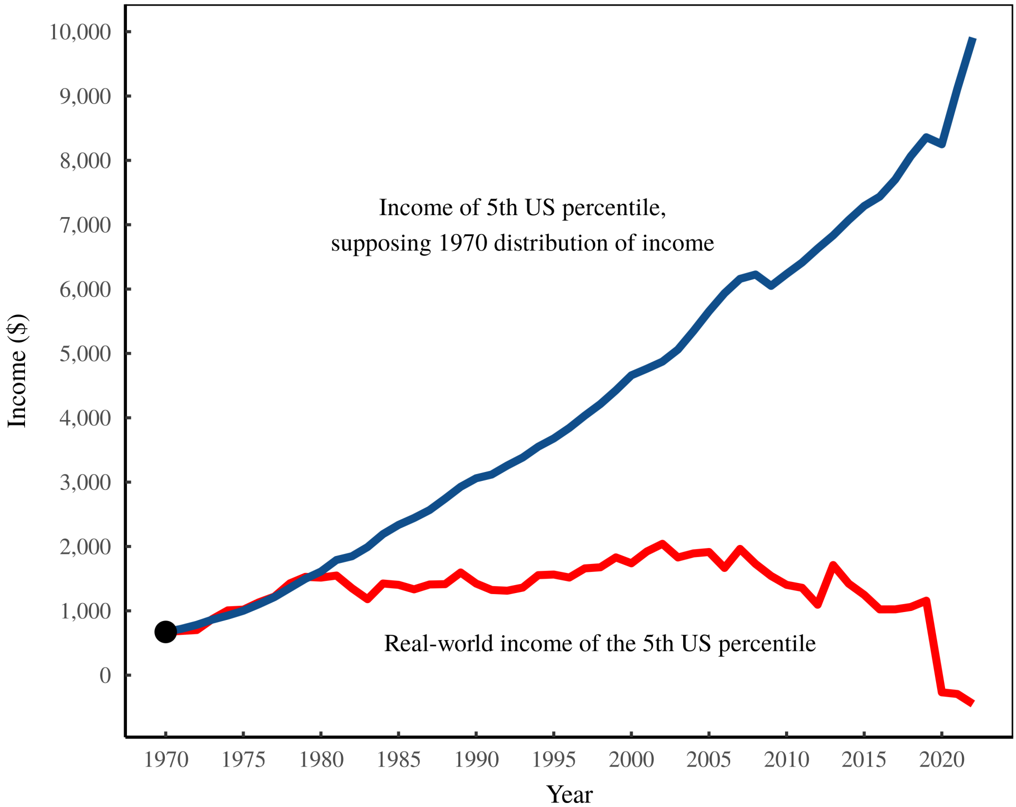

Figure 14: What could have been — the income of the 5th US percentile
The red line shows the real-world income of the 5th percentile of Americans — income that has collapse since 2020. The blue line shows what this income *would* have been had the average American income grown like the real world, yet the distribution of income remained fixed at 1970 levels. This alternative outcome is so different from the real world that it is almost surreal. Sources and methods

The trouble with price indexes

To measure changes in the price of rent, my first instinct was to head to the Bureau of Labor Statistics and use one of its many 'price indexes'. Unfortunately, I soon ran into trouble. Here's why.

When government agencies calculate price indexes, the official doctrine is to incorporate a measure of 'quality', as follows:

$$\text{price index} = \frac{\text{nominal price}}{\text{commodity quality}}$$

So if a commodity gets twice as expensive while also getting twice as 'good', the price index will *stay the same*.

But wait. If price indexes are ostensibly about 'prices', why do they mix in measures of quality? Well, it's because government agencies buy into neoclassical economics. In other words, their goal is measure the price of a commodity relative to the *utility* that it delivers to consumers. Never mind that this utility is unobservable. Government agencies simply define it into existence. (See Jonathan Nitzan's PhD thesis for a deep unraveling of this neoclassical insanity.)

The consequence of this quality-change method is that there can be dramatic differences between a commodity's *price index* and the movement of its *actual price*. As it turns out, this is exactly what happens with the price of rent.

Figure 15 illustrates. The blue curve shows the actual (nominal) value of the US median rent, which increased by a factor of 50 from 1940 to 2022. In contrast, the red curve shows the average price of rent, as measured by the BLS price index. According to this BLS data, the price of rent increased by only a factor of 16 over the same period.

Why the discrepancy in measurement? In a word, *quality*. Evidently, the BLS thinks that from 1940 to 2022, US rental properties got about *3 times better*. And maybe they did. Still, there are problems. First, measures of quality change are inherently subjective. Second, when it comes to measuring affordability, quality is irrelevant. If you can't afford an apartment, it doesn't matter how 'nice' that unaffordable apartment is, since you won't be living in it.

Sources and methods

Average US house price

Data for average US house price is from FRED, series `ASPUS` — average sales price of houses sold in the United States.

US average income

I calculate US average income using GDP per capita, with data from FRED series `A939RC0Q052S`.

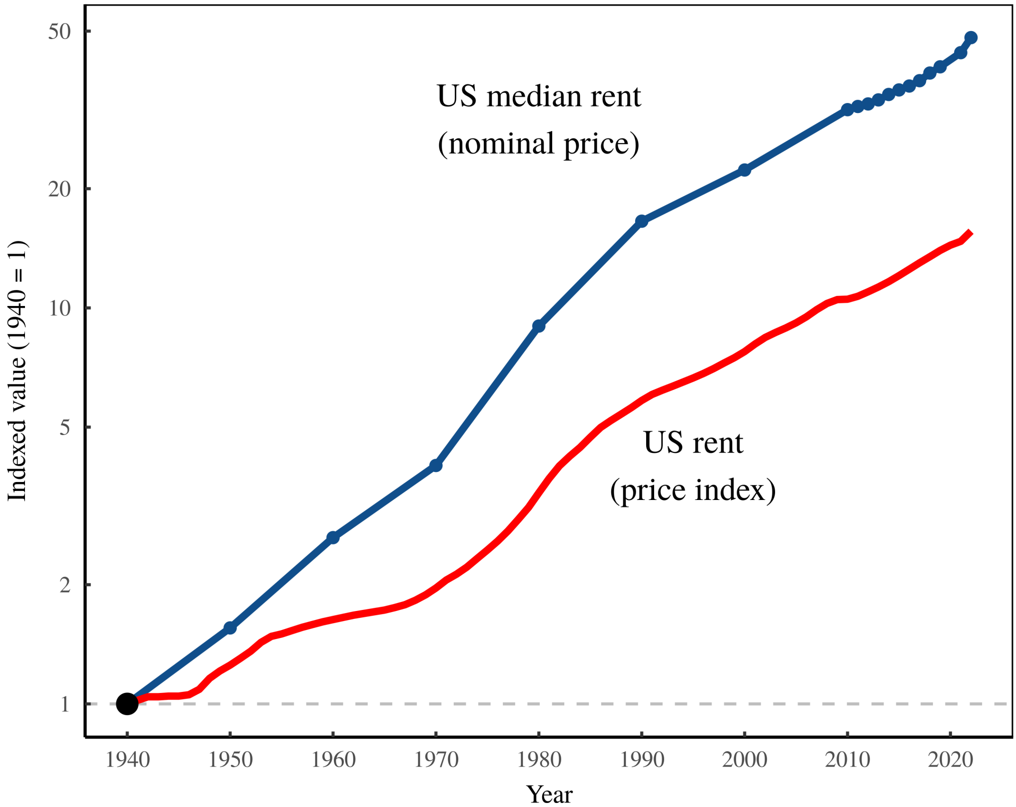

Figure 15: Diverging measures of the 'price' of rent

This figure shows two ways of measuring the price of rent. The blue curve shows data for the nominal price of rent, obtained from the US census. The red curve shows the official rent price index from the BLS (downloaded from FRED). Why does the data differ? Because the price-index data includes a measure of apartment *quality*.

US median rent

Data for US median rent is from the US Census. Data from 1940 to 2000 can be downloaded here. More recent data is available here.

Why use this Census data instead of the more easily available price-index data from the Bureau of Labor Statistics? That's simple. The Census data reports the *nominal* (median) price of rent. However, the BLS price-index data mixes in a measure of apartment 'quality' change. (See my rant above.)

When analyzing affordability, this quality change component is unhelpful.[4] That's because if you can't afford housing, it doesn't matter how 'nice' that unaffordable housing is. Either way, you won't be living in it.

US distribution of income

Data for the US distribution of income is from the World Inequality Database (WID), which reports the following:

- income thresholds by percentile, series `tptincj992`
- income shares by percentile, series `sptincj992`

(My calculation of the US Gini index requires both income-threshold and income-share data. The rest of the analysis is based solely on the income-threshold data.)

To make the WID data compatible with official government data, I normalize it (the WID data) so that the average income is equivalent to US nominal GDP per capita (using data from FRED series A939RC0Q052SBEA).

Further reading

NLIHC. (2024). The gap: A shortage of affordable homes. *National Low Income Housing Coalition*. https://nlihc.org/sites/default/files/gap/2024/Gap-Report_2024.pdf

[4] I question if measures of quality change are *ever* helpful when they are intrinsically mixed with measures of price. In other words, I'd much prefer it if government agencies kept their measures of price change separate from their (very subjective, very dubious) measures of quality change. I doubt, however, that they will listen to me.