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Your "Financial Shock" Wealth

Understanding money, inequality, and why the tax bill is important

Imagine that today you accidentally got overcharged \$1 somewhere, and a week from now they realized this and gave you your dollar back. On the whole, this might be annoying, but it probably won't be a big deal to you. Not having that dollar likely didn't affect your life in any material way; the "opportunity cost" you lost out on could probably be well-summarized by the interest rate on a dollar for a week.

That means that an unexpected expense of \$1 basically costs you \$1. If you got the dollar back later, you'd be more or less where you started.



"Money!," by Hans Splinter

Now imagine you got an unexpected expense of \$5,000, which you had to pay right now. Maybe your car broke down, or you got arrested and needed to bail out, or you had a medical emergency.

Depending on what your finances look like, this may be a bigger deal. If you've got \$5,000 sitting in the bank, you can probably deal with this: you pay the money and will need to start saving again, and if you got the \$5,000 back you'd basically be back where you started. The \$5,000 cost you \$5,000.

If you had to take out a loan for that money, you would find yourself paying some serious interest. If you had to take out a loan that took you a few years to pay back, that \$5,000 may well cost you \$10,000.

If you couldn't take out that loan, and ended up not being able to pay rent and got evicted, we're getting into much more serious territory. Can you afford first and last month's rent plus a security deposit, or is it going to take a while for you to get that together? Got a place to store all of your things while you're looking for a new place to live? If not, kiss them goodbye. Does your work, or your health care, or something like that rely on you having a stable address?

Suddenly, that \$5,000 may cost you a whole lot more. Possibly "everything you own." Possibly even your life.

If \$5,000 is something you could afford, ask yourself the same question again with \$100,000 (fire burn down your house?), with \$250,000 (cancer treatment and your health insurance kicked you off?). For everyone, there's some number which is the largest size of a financial shock they could weather.

This number is probably the truest measure of a person's real wealth: What is the largest unexpected financial shock you could sustain without the cost of that to you suddenly becoming ten times the original cost or more? That number isn't something easy to calculate; it depends on whether you have a family that can help you out, on your income, on whether that shock involves losing your job (and thus your health insurance, if you live in the US), on whether you have access to any other sources of security (including public assistance).

There are people for whom a shock that's reasonably likely to happen within a year — a car breakdown, a lost job, and so on — would be catastrophic, and there are people for whom catastrophic events happen much more rarely. Those are your two social classes.

But it tells you a lot more about someone's wealth than the total amount they have in the bank. After all, there are plenty of people with millions of dollars in assets and millions of dollars in debts — but they aren't worried about where their next meal is coming from, even if their "net wealth" is negative, while the person with \$20 in their

pocket and that's it has a lot more on their minds.

Sit down right now and run through some estimates for your own life. How big a financial shock could you take? What would happen if you were injured and couldn't work? What would happen if you lost your job?

Now mix in one more thought: How likely are each of these things? If a job loss would lead to big trouble, but your job is pretty secure, that's different than if the job loss would lead to big trouble and you know that layoffs are coming.

If you want to understand economic class in the Western World today, here's a simple rule of thumb: There are people for whom a shock that's reasonably likely to happen within a year — a car breakdown, a lost job, and so on — would be catastrophic, and there are people for whom catastrophic events happen much more rarely. Those are your two social classes. All of the economic changes of the past few decades can be summarized as a lot of people who were previously in the second group (first factory workers, then a lot more "middle-class" jobs) suddenly found themselves in the first group (thanks to everything from the mortgage crisis to job automation).

The Financial Pump

If we can think of our individual financial situations in terms of our "financial shock" wealth, what does that tell us about financial shocks that hit the population as a whole? Let's say something goes wrong in the economy. 20% of people are going to get hit with a \$1,000 shock. Maybe it's a tax increase, or a change in health-care laws, or a problem in some sector of industry; some 20% will get hit in this round, and a different 20% might get hit another time. (That's a \$60 billion shock total in the US, which is actually pretty small by the scale of most major financial events we've seen happen) Of those 20%, maybe 3/4 can't weather a \$1,000 shock. (That's not a crazy number; according to the Federal Reserve, as of mid-2016, 47% of Americans couldn't weather a \$400 shock.) For them, this shock is going to spiral and lead to a lot more losses; they're going to get a permanent negative impact from this, maybe affecting their future employment prospects, or their health, or their family. That means they'll be less able to weather the next shock, too.

Now let's do this over and over. Each time, a different group of people gets hit by the shock, and each time, some fraction of them gets knocked down an economic class. What you're doing is like taking a sieve full of rocks of different sizes and shaking it. Each time you shake, more of the small rocks will fall through. Anyone who barely survived one shake is just as much at risk from the next one; only people well above the size of any of the shakes remain safe.

What happens to the economy as a whole when this happens? To answer that, you'd have to figure out where the money goes.

But instead of trying to track where the money goes in every possible shock, there's a simpler way to answer this. (A Stokes' Theorem approach, for those of you who know the math) There's a certain amount of real wealth in the economy. (Not of printed dollars, but "things of value which could potentially be owned.") You can ask how much real wealth is being created by a process ("real things of value being made that weren't there before") and how much is being destroyed; the difference between those two is the net change in total real wealth. Anything that doesn't either create or destroy real wealth must just be redistributing it.

In these financial shocks, some of the losses people experience represent destruction of real wealth. The most obvious is when people's health suffers, or they die; this is just a plain loss, with some part of their future life simply being destroyed. It can also happen if things you own are wrecked, like if your possessions are left out in the rain when you're evicted. But not all of the losses represent that; for example, if you lose your home, the home still exists, and you still exist. No objects of value were destroyed, their ownership was just rearranged. And no wealth is being created in this process at all, since none of it is about people actually making new things or performing new services.

That means that in each of these shocks, some wealth is lost, and the rest is redistributed. We know where it's redistributed from — people who couldn't afford those shocks — and so we know that wherever it's redistributed to has to be people from outside that group, that is, people who could afford those shocks. Say, the bank that suddenly owns your home, or the person who buys it at a foreclosure auction for far less than its real value.

That is: Each financial shock will knock some set of people down a social class, destroy part of their wealth, and redistribute the rest among everyone else. Successive shocks will hit different groups of people, but ultimately everyone will be hit by a few, so the only people who won't get knocked down are the people who have enough "shock wealth" to survive them.

This is the plain and simple way that income inequality can be created in the absence of any external forces on an economy. No new gold rush has to open up and make a few people rich; no explicit banditry has to happen. Just one financial shock after another.

Financial shocks work like a pump or a bellows: You can return the handle to where it was when you started, but the air or water that was forced out doesn't go back in.

Cui bono?

It's pretty easy to answer "who benefits" from this: the people who can survive the shocks. But the benefit to them isn't just from their getting their hands on the "redistributed" wealth. It also comes from increased coercive power.

Let's say I want my employees to work longer hours without overtime, or set targets for them that they can't meet without dropping. If they could go elsewhere and get a better job, they would.

But if that better job might take them a week or two, or even a month or two, to find, that's going to be trickier for them. And if they can't afford the shock of losing a month's wages, they're not going to do that at all.

Situations — economic, legal, social — that give one person more coercive power over other people increase the effective value of that person's wealth, and decrease the value of the people's that they can coerce. It's because that basic principle that makes free markets work: "I trade with you, and now we're both better off; if we didn't both feel that way, we wouldn't have traded" only works when the second clause holds true. In particular, if I know that your failure to make a deal with me — not with the abstract market as a whole, but with me, right here, right now — is going to cost you a lot, then it doesn't matter what competitors are out there in the field. I can make you accept less for what you're offering.

To see a non-financial version of this: Consider laws banning sex work, or drugs, or things like that. If "what're you going to do, go to the cops?" is a legitimate thing someone could say to you, they have the power to do all sorts of things — rob you, cheat you, rape you, kill you — without risk. Unless you can afford to pay for your own protection of one sort or another, in which case that's an expense you have to pay which they don't. A power imbalance in one thing easily turns into a power imbalance in others, and people getting the right to expropriate you.

(Now add race to this picture. If the cops will listen to a white person but not a black one, a white person can get away with an awful lot of cheating black people. You could even expropriate an entire community, and transfer their wealth into your pockets... from which it might end up distributed across the white community as a whole, but never go back to that black community. If you ever wondered why average white wealth in the US is more than one hundred times average black wealth, that would be it right there. You don't need any "cultural differences" to explain it; just an asymmetric right to steal. Redlining was a way to turn this into a major extractive industry.)

So if we put this together, financial shocks very strongly benefit those who can survive them: they not only take wealth away from the ones who can't, and "redistribute" it to the winners, but they leave the losers even more vulnerable to economic exploitation, driving down their wages, reducing their ability to complain, and generally making the winners' wealth worth more.

This means that if you're in a position to survive shocks, and can orchestrate them as well, you have a lot of reasons to do that.

What undoes shocks?

Is this a one-way ratchet? Do the rich always get richer, the poor poorer? Not exactly. There are a few main things that can upend this.

The first if something genuinely starts to create wealth, and that new wealth doesn't only flow into the system to those who already have it. A new technology that increases overall productivity but doesn't specifically give a huge rate of return to having a large installed capital base — say, personal computers — can do that. It means that people who are able to profit from these changes, no matter where they were to begin with, can do so.

In the past few decades, that ability to profit has been closely tied with education: there's a reason it was marketed as a "great equalizer." Even though that's becoming much less true today (a college degree will get you exactly nothing on its own except for crushing debt), it's probably not a coincidence that a lot of wealth seems to be invested in making education either less accessible or (in the case of for-profit "universities") both profitable and less likely to lead to any actual changes in negotiating power for its recipients.

If we look at the great expansions of the middle class in Western history, these were subtle variations on the point. While new wealth was being created in these cases, it was also being expropriated from people seen as "outside" the society. The possibility of homesteading or yeoman farming that so shaped the early US, for example, was based on the existence of all this high-quality arable land that was suddenly "available." Of course, that "availability" was the product of thousands of years of cultivation of that land (virgin forest doesn't make good farmland!), followed by the Great Pandemic wiping out 95% of the population, followed by the US Army wiping out nearly everybody else, and doing so on-demand. Real wealth brought into a system by stealing it from someone else looks like wealth creation from the perspective of the subsystem that stole it, but just looks like a wealth transfer (with lots of attendant wealth destruction) from the perspective of the system as a whole.

(The rise of a middle class in Renaissance Europe was in no small part a consequence of the reopening of trade routes, part of which had to do with the formation of a society stable enough to allow inter-city travel without a supporting army, and part of which had to do with the sudden collapse of the economic strength of the Islamic world after the Mongol invasions. It's a complicated and interesting story, again combining some creation or real wealth and some very serious transfer. The economic boom for the survivors of the Bubonic Plague (after its various major outbreaks) was similar.)

The second thing that can undo a shock is if a shock is suddenly pointed in a different direction. Remember that, at the beginning of this, we talked about multiple kinds of shock. A \$5,000 expense isn't the same thing as a job loss or an injury, and those won't affect the same people. An epidemic certainly won't affect the same people, and the

"winners" of that shock are going to be the ones who happen to be more resistant to it. Some kinds of revolution are shocks deliberately aimed in the opposite direction, and losing one's head can be a nasty shock indeed.

(Note, however, that most revolutions ultimately aren't. The most common outcome of a revolution is a great deal of temporary violence, then whichever groups are best-organized seize power and quickly establish themselves as the new elites. This may repeat a few times if a few groups have comparable power, as was the case in Egypt a few years ago, when first the relatively well-organized Muslim Brotherhood became the only group capable of winning an election, and then the Army decided they liked it better the old way. Two classic examples of this are Russia and France: Russia had two revolutions in 1917, one in February which toppled the Czar and another in October where the Bolsheviks seized power, and France cycled through some extremely bloody times after 1789 before ending up with an Emperor in 1804. Meet the new boss, same as the old boss; there's a reason they call them "revolutions.")

You might ask if there's a third option, some kind of systematic equalization of resources across a society. It's a fair question, and the most that I can say is that there is not yet any demonstrated way to do this in large societies. In his book Throwing Rocks at the Google Bus, Douglas Rushkoff made a fairly compelling argument that wealth accumulation principally kicks off when there are stable ways to store wealth which don't decay over time. (Unlike, e.g., crops which tend to do so) Generally, the phenomena described above imply that power lets you get more power, including wealth; in economic terms, it means that there's always a positive "rate of return on wealth" (i.e., amount you can earn simply by already having money), and that except when there's a significant influx of new wealth, this can be made to exceed the "rate of return on income" (i.e., the amount you can earn by selling your labor) simply by repeated shocks which decrease the bargaining power of anyone who doesn't have enough wealth. (Thomas Piketty's Capital in the Twenty-First Century is essentially a study showing that while the rate of return on income exceeded that on capital between 1950 and 1975 in much of the West, that's been changing ever since.)

My grim suspicion is that this is actually pretty fundamental: power lets you acquire more power, and this means that no matter how evenly balanced a society begins, small fluctuations — even ones created by random outside events like storms and fires — will ultimately grow. Any mechanism which suppresses those fluctuations would itself create an asymmetry, as the people who can best control or manipulate that mechanism end up with the power.

But this doesn't necessarily imply that the fate of society must be catastrophic. In The Origins of Political Order, Fukuyama made an interesting observation: "True freedom tends to emerge in the interstices of a balance of power among a society's elite actors." That is, elite actors will exist in a society, but freedom and general economic well-being both tend to happen when those actors are sufficiently numerous that they can't align

with one another, and that competition between them gives other people more effective negotiating leverage in everything from their finances to their daily lives.

This was the insight which the political idea of a "balance of powers" tried to capture, and its successes and failures have largely reflected how easy or hard that is to achieve. An opportunity for the power to align with one another undoes this, and makes it easier to orchestrate shocks which further simplify the process of maintaining that alignment and that imbalance. But feudalism is not inevitable: shocks calculated to equalize power between elite actors may be more effective than shocks calculated to destroy elite actors altogether, because the latter creates a power vacuum which is quickly filled by a new set of elite actors, while the former creates a more stable balance of powers.

Conclusion

Your "financial shock" wealth, the size of the biggest financial shock you could weather without incurring much larger and irreversible losses, is probably the best measure of your financial stability. If that amount is smaller than a paycheck or two, you're largely at the mercy of your employer; the larger it is, the more negotiating leverage you have in your life. Financial shocks happen on a regular basis, both by random events ("flat tire") and systematic changes ("collapse of an industry"); each time these happen, people who can't survive the financial shock lose some chunk of their wealth, and much of that wealth gets redistributed among the ones who survived. This slowly and steadily (or sometimes quickly and dramatically) creates not just wealth inequality, but power inequality, and fundamentally undermines people's freedom and lives.

Because of this, even a "temporary" financial shock, like a tax bill passed and then repealed, can have lasting consequences. Each one of these can prove immensely profitable from those in a position to gain from them. They know this, and will work to create it. The question is, what we do in response.