# **Research Roundup**

By Kerry Pechter Thu, Aug 26, 2021

Here are summaries of four research papers on topics ranging from the argument for a federal digital currency to the real causes of 'black swan' crises, and from the insurance-purchasing habits of the wealthy to the likely effect of Boomer decumulation on interest rates. Add fresh factoids to your cocktail-party banter supply.



In this month's edition of Research Roundup, we summarize four academic papers touching on topics ranging from behavioral finance to macroeconomics, and from an informed prediction about the future path of interest rates to speculation about the introduction of a Federal Reserve-sponsored digital currency.

If you believe that wealthy buy less insurance because they can live without it, that financial crisis are brought on by "black swans," that governments can't issue digital currency, or that Boomer decumulation will soften the economy, you may find surprises here. These studies aim to put conventional wisdom—or perhaps just straw men, depending on your views—to the test.

## Why the wealthy buy more insurance than expected

In theory, wealthier people should buy *less* insurance, because they can afford to set aside enough savings to "self-insure" against all kinds of risks, large and small, and thereby cut out the costs of the middleman—the life insurance or property/casualty insurance company. Those risk might include a fender bender, a roof crushed by a storm-felled tree, a "root canal" procedure or—in the case of annuities—outliving their savings. The rich can also afford a high deductible on their insurance policies, thereby keeping their premiums lower.

But research by a team at the University of North Carolina-Chapel Hill shows that "the wealthier have better life and property insurance coverage... This puzzling correlation persists in individual fixed-effects models estimated using 2,500,000 person-month observations," write Camelia M. Kuhnen, a professor of finance, and Michael J. Gropper, a doctoral candidate in finance, in "Wealth and Insurance Choices: Evidence from US Households" (NBER Working Paper 29069, July 2021).

"Whether we measure wealth by the value of financial assets, or by the value of the homes individuals own, we find that life insurance coverage as well as property insurance coverage

increase with wealth, controlling for the value of the insured asset. We estimate that a \$1 increase in financial wealth leads to an increase of 68 cents in a person's term life insurance coverage limit, and to an increase of \$2.25 in the coverage limit of their homeowners insurance policy."

In their study, the two looked at possible causes and effects of this phenomenon. It's not because the wealthy are pessimistic or risk-averse; optimism about longevity is correlated with higher wealth and higher ownership of term life insurance. "It is possible that the less wealthy do not trust financial products or institutions as much as their better-off counterparts, and thus do not purchase products like insurance. It is also possible that insurance products are being advertised more to those who are wealthier."

It may simply be that the wealthy have more risk exposures, more wealth to protect, or are better able to afford the expense of insurance.

#### 'Black swans' are the shadows cast by excessive credit

Financial crises do not appear randomly without warning, regardless of what the "black swan" theories say. "Irrational exuberance" and "animal spirits" don't explain them either. Instead, new research shows that they typically follow the over-creation of private-sector debt—not public debt.

"Crises are predictable with growth in credit and elevated asset prices playing an especially important role," write Amir Sufi of the University of Chicago and Alan M. Taylor of the University of California-Davis in "Financial Crises: A Survey" (NBER Working Paper 29155, August 2021). "An understanding of financial crises requires an investigation into the booms that precede them."

"The unconditional probability of a crisis is 2.5% (one in 40 years)... However, when the credit growth variable rises one standard deviation (s.d.) above its mean, the expected crisis probability almost doubles to 5% (one in 20 years), and at two s.d. above the mean the expected crisis probability is near 10% (one in 10 years)."

Causes of excessive lending cited in the paper:

**Deregulation.** Financial "liberalization, by opening a gate, enables other fundamental economic forces in the local or global economy to play out, creating the possibility of new or more elastic financial flows (intermediate claims, or leverage) relative to existing investment opportunities."

**Income inequality.** "The rise in top income shares since the 1980s has been associated with a saving glut of the rich. Furthermore, this saving glut of the rich has financed a large rise in household and government debt."

**Low interest rates.** "The credit booms that predict financial crises are associated with a low cost of debt, and a low cost of risky debt in particular... Crises are preceded by unusually low and falling credit spreads between higher and lower grade bonds. Riskier firms are able to finance themselves at a relatively lower cost during the credit booms that precede financial crises."

The bottom line is that we should be able to see financial crises coming. "The empirical evidence rejects the view that financial crises should be viewed as random events. Instead, they are predictable," Sufi and Taylor write. "Credit growth and asset price growth are key factors that predict financial crises, and these two factors have significant forecasting power."

### 'Central Bank Digital Currency' could be coming our way

Central Bank Digital Currencies (CBDCs) are digital or electronic versions of the liabilities (aka IOUs or money) issued by central banks. In most countries, CBDCs are still hypothetical. But China already has a "digital renminbi" and the Bahamas have a "Bahamian Sand Dollar."

In a speech last March, Fed chairman Jay Powell said, "Experiments with central bank digital currencies (CBDCs) are being conducted at the Board of Governors, as well as complementary efforts by the Federal Reserve Bank of Boston in collaboration with researchers at MIT."

CBDCs would allow ordinary Americans to have accounts at the Federal Reserve, as commercial banks do. By eliminating, or partly eliminating the middleman (banks) in the daily settlement of transfers between banks at the Fed, CBDC could make the payments process instant and cheaper for Americans. Banks may view it as a threat.

In a new paper, economic historian Michael Bordo of Rutgers University argues in favor of the development of CDBCs in the US. He calls the digitalization of money as momentous a turning point as the appearance of central banks in the 17th century, the shift from gold and silver coins to paper money in the 18th and 19th centuries, and the emergence of central bank monopolies over money in the 19th and 20th centuries.

In "Central Bank Digital Currency in Historical Perspective: Another Crossroad in Monetary History" (NBER Working Paper 29171, August 2021), Bordo claims a CBDC in the US would improve the efficiency of the monetary/financial system; neutralize competition from other virtual currencies that could threaten US monetary sovereignty; allow the Fed to set monetary policy by adjusting the interest paid on CBDC accounts, and "revolutionize international payments in the way that the first Atlantic cable did for capital flows and international payments in 1866."

On the other hand, Federal Reserve board of governors member Christopher Waller said on August 5 that he is "skeptical" of the need for a CBDC in the US. His <u>comments</u> at a meeting of the American Enterprise Institute have been posted at the Federal Reserve's website.

"Government interventions into the economy should come only to address significant market failures," Waller wrote. "The competition of a Fed CBDC could disintermediate commercial banks and threaten a division of labor in the financial system that works well. And, as cybersecurity concerns mount, a CBDC could become a new target for those threats."

## Boomer decumulation won't push interest rates higher

Demographic change, including the aging of populations in many countries, is expected to affect global financial conditions in the future. Economists have posed the question: If retirement saving by the Baby Boom generation led to historically low interest rates, will interest rates rise as Baby Boomers spend down their savings?

In "Demographics, Wealth, and Global Imbalances in the Twenty-First Century" (NBER Working Paper 29161, August 2021) four economists argue that it will not. "Our model predicts that population aging will increase wealth-to-GDP ratios, lower asset returns, and widen global imbalances through the twenty-first century. These conclusions extend to a richer model in which bequests, individual savings, and the tax-and-transfer system all respond to demographic change," wrote Adrien Auclert and Frederic Martenet of Stanford, Hannes Malmberg of the University of Minnesota and Matthew Rognlie of Northwestern University.

"There will be no great demographic reversal: through the 21st century, population aging will continue to push down global rates of return, with our central estimate being -123 basis points, and push up global wealth-to-GDP, with our central estimate being a 10% increase, or 47 percentage points in levels."

The study focused on expected changes in the <u>wealth-to-GDP</u> level in 25 countries. In the US, for instance, the total accumulated wealth of the population (including the current market value of financial assets) is about \$126 trillion, or about five times the annual Gross Domestic Product (\$22.7 trillion in mid-2021, annualized). Rich countries have high wealth-to-GDP ratios; poor countries have low ones. Hong Kong boasts the world's highest wealth-to-GDP ratio, at 8.4.

Observers have predicted "that aging will raise interest rates, decrease standards of living by impairing capital accumulation, or exert inflationary pressure as the number of consumers increases relative to the number of producers. These predictions are not borne out in our analysis," the authors said.

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