## The Best of Recent Economic Research

By Kerry Pechter Wed, Mar 8, 2017

The six academic papers cited here identify several points where, even when we don't realize it, macroeconomics and personal finance intersect.



Will robots save the U.S. from dreaded "secular stagnation?" Is the loss of manufacturing jobs linked to the rate of single mothers in America? When corporations save more, do households save less?

These and other questions are the subjects of five working papers from the National Bureau of Economic Research (NBER)—and one research brief from the Center for Retirement Research at Boston College—all of which you'll find summarized below in this installment of *RIJ*'s Research Roundup series.

These papers cover very different topics—chatbots, disappearing manufacturing jobs, household savings rates, the dollar as reserve currency, job transitions for older workers, a book about financial regulation—but together the papers identify the points where, even when we don't realize it, macroeconomics and personal finance intersect.

"Secular Stagnation? The Effect of Aging on Economic Growth in the Age of Automation" by Daron Acemoglu, Pascual Restrepo (NBER Working Paper No. 23077, January 2017).

With the new confidence on Wall Street, it's easy to forget that not long ago economists were predicting the start of an era of "secular stagnation." That term refers not to stagnation outside the religious community but to non-cyclical economic stagnation, especially in developed countries with aging populations.

In their new paper, economists Daron Acemoglu of MIT and Pascual Restrepo of Boston University predict that robots will forestall stagnation by raising productivity and compensating for the departure of the Boomers from the workplace. Chatbots, industrial droids, and artificially intelligent devices will compensate for the growing shortage of human labor and prevent the economy from sagging over the next few decades, they argue.

The two economists analyzed data from the International Federation of Robotics on industrial robots across a range of industries for 49 countries. The analysis "reveals a strong correlation between...the change in the ratio of the population above 50 to those between 20 and 49, and the change in the number of robots (per million of labor hours) between the early 1990s and 2015," they wrote.

"If anything," they wrote, "countries experiencing more rapid aging have grown more in recent decades. We suggest that this counterintuitive finding might reflect the more rapid adoption of automation technologies in countries undergoing more pronounced demographic changes."

"When Work Disappears: Manufacturing Decline and the Falling Marriage-Market Value of Men" by David Autor, David Dorn, Gordon Hanson (NBER Working Paper No. 23173, January 2017).

On his path to the White House, Donald Trump tapped into the frustration of Americans whose economic prospects have been hurt by the offshoring of manufacturing jobs to China and elsewhere. New economic research points to a precise source of at least part of that frustration.

In "When Work Disappears: Manufacturing Decline and the Falling Marriage-Market Value of Men," Autor (MIT), Dorn (University of Zurich), and Hanson (University of California, San Diego) found the following:

- When manufacturers relocate production facilities outside of U.S., fewer male high-school graduates in the affected communities find high-paying work and fewer females marry the under-achievers (but do have children by them). The result is an increase in drug abuse and single parenthood in those communities.
- Though the paper doesn't address? retirement security directly, it links offshoring to unemployment and single parenthood. Those factors can undermine the process of education, wealth-building and employer-sponsored savings that sets people up for a secure retirement later in life.
- Manufacturing employment is clearly shrinking in the U.S., the paper points out. In 1990, 21.8% of currently employed men and 12.9% of employed women ages 18-39 worked in manufacturing. By 2007, those numbers had shrunk to 14.1% and 6.8% respectively—declines of 35% among men and 45% among women.

- Manufacturing jobs tend to pay men more than women, and the authors assert that, for those adhering to "gender identity norms," marriages are more frequent where men earn more than women, and that women would rather be single parents than be married to men who earn less.
- "A decline in male earnings spurs some women to curtail both motherhood and marriage while spurring others to exercise the option of single-headedness," the authors wrote. "Conversely...a decline in female earnings raises the relative attractiveness of male partners, which encourages fertility and marriage while single motherhood becomes a less attractive option."

## "The Global Rise of Corporate Saving" by Peter Chen, Loukas Karabarbounis Brent Neiman (NBER Working Paper No. 23133, February 2017).

These three economists found that, in an historical role reversal, corporations now save more than households do.

In the last three decades "the sectoral composition of global saving has shifted," wrote Chen (University of Chicago), Karabarbounis (University of Minnesota) and Neiman (University of Chicago-Booth School of Business). "The corporate sector...transitioned from being a net borrower to being a net lender of funds to the rest of the global economy.

"Whereas in the early 1980s most of investment spending at the global level was funded by saving supplied by the household sector, by the 2010s nearly two-thirds of investment spending at the global level was funded by saving supplied by the corporate sector.

"Global corporate saving has risen from below 10% of global GDP around 1980 to nearly 15% in the 2010s," they observed. "This increase took place in most industries and in the large majority of countries, including all of the 10 largest economies."

Causes of this shift included global declines in the real interest rate, the price of investment goods, and corporate income taxes and the increase in markups," the authors wrote. "Further, firms have tax incentives to buy back more shares as saving increases and this leads? to an improvement in the corporate net lending position."

Multinational firms save the most. "Firms in the group with more than one percent of their income earned abroad display a saving rate that is roughly 4 to 6 percentage points higher than firms with less than one percent of their income earned abroad. Surprisingly, this difference mainly reflects a higher share of gross operating surplus in value added—likely

reflecting lower labor shares— rather than differences in taxes or dividends," according to the paper.

Households have less to save—and presumably less to save for retirement. "The improvement in the corporate net lending position has direct implications about household saving behavior," the authors wrote. According to their model, the change in the corporate net lending position relative to GDP [implied] a decline in household saving relative to GDP of about 6 percentage points," which they said is similar in value to the actual decline.

"Exchange Arrangements Entering the 21<sup>st</sup> Century: Which Anchor Will Hold?" by Ethan Ilzetzki, Carmen M. Reinhart, Kenneth S. Rogoff (NBER Working Paper No. 23134, February 2017).

On the 2016 campaign trail, there was apocalyptic talk about a U.S. debt crisis, about the chance that the Chinese would stop buying our bonds, and about the possibility that the U.S. might default on its bonds or negotiate to repurchase them at less than par value.

A very different, and less alarming, macroeconomic view of the dollar and the U.S. debt emerges from a recent paper from the well-known Harvard writing team of Rogoff and Reinhart, assisted here by Ethan Ilzetzki of The London School of Economics and Political Science.

In "Exchange Arrangements Entering the 21<sup>st</sup> Century: Which Anchor Will Hold?" they argue the dollar is, if anything, more important today than when it succeeded the British pound as the world's reserve currency at the end of World War II.

"The dollar's dominance as an anchor/reference currency appears to be at least as great as it was under Bretton Woods [1945-1971]," the authors wrote. "Indeed, by other metrics, its global role has expanded even further following the collapse of the ruble zone. The euro is a distant second."

Rogoff and Reinhart co-wrote 2009's controversial bestseller, "This Time Is Different," which argued that a large national debt impedes future growth. In this book, they explain that our large trade deficits and our large national debt largely reflect the burden (and privilege) that the U.S. bears (and enjoys) in providing the world's reserve currency. The dollar has only become more central, they add, since the collapse of the Soviet Union in 1989 – 1991 and the Asian debt crisis of the late 1990s.

The dollar supplied much-needed liquidity to the world during the fast-growing '50s and

'60s. "Given that the world's gold supplies were not increasing as fast as the demand for reserves [at that time], an expanding share of the world's reserve assets came to be paper denominated in U.S. dollars," the authors wrote.

"The rest of the world's appetite for dollars could be met by the U.S. issuing more dollar debt and selling it to the rest of the world. In the balance of payments, this would require the U.S. to run sustained current account deficits, but more importantly, a fiscal deficit."

Conversely, "to maintain the official dollar/gold parity, the U.S. would have had to restrict its supply of dollars and cease to borrow from the rest of the world, that is run a current account surplus, which in the context of the time meant running a fiscal surplus."

In short, the benefit of having the world's reserve currency came with the burden of satisfying the world's growing demand for liquidity and at the cost of domestic deficits and inflation.

"How Job Changes Affect Retirement Timing by Socioeconomic Status" by Geoffrey T. Sanzenbacher, Steven A. Sass and Christopher M. Gillis (Center for Retirement Research at Boston College, February 2017).

Late-career job changes have become more common in recent years, but does job-hopping at age 53 or 55 (as opposed to staying put) increase or decrease a person's chances of still being in the workplace at age 65?

At a time when more people need to work longer (perhaps because they under-saved), this question has become more significant. So researchers at the Center for Retirement Research looked into it.

"Since workers presumably change employers to improve their well-being, moving to a job that they consider better could extend their careers," the CRR's authors wrote. "On the other hand, job-changing could reduce job security because tenure protects older workers against involuntary job loss, and workers who change jobs risk a bad match. Changing jobs thus could increase the risk of a layoff and an early labor force exit."

Using data from the Health and Retirement Study(HRS), a biennial survey that follows respondents who are ages 51-61 when they enter the study, the researchers found that, indeed, people who switch jobs voluntarily in their 50s are more likely to be in the workforce at age 65 than people who don't change jobs.

"Workers with at least some college who voluntarily changed jobs were 10.9 percentage points more likely to be in the labor force until age 65. For less-educated workers, the effect was 7.5 percentage points," the analysis showed. The authors conceded that some of the people who left their jobs "voluntarily" might have been "nudged" into quitting. But if that were the case, they said, it would only strengthen the findings.

"Changing employers involves risks and not all older workers can move to a better job," they concluded. "But for those who can, a voluntary job-change is associated with a large and statistically significant increase in the likelihood of remaining in the labor force to age 65, regardless of the worker's educational attainment."

## "The End of Alchemy: A Review Essay by Roger E.A. Farmer" (NBER Working Paper No. 23156, February 2017).

If you don't have time to read "The End of Alchemy," Mervyn King's book (W.W. Norton, 2016) about the Great Financial Crisis (and how to prevent the next financial crisis), you might instead read a recent review of the book, by UCLA economist Roger E.A. Farmer.

In "The End of Alchemy," King, who was Governor of the Bank of England from 2003 to 2013, argues that a central bank, in the future, should maintain the stability of the banking system by serving as the "Pawnbroker For All Seasons" instead of the Lender of Last Resort. Farmer summarizes King's proposal as follows:

Under the PFAS, the central bank would require banks and other private financial intermediaries that might need liquidity from the central bank in times of crisis to:

- Deposit adequate collateral with the central bank *in advance*. All deposits would be backed either by cash or by guaranteed contingent claims on reserves held at the central bank.
- Second, the cost of liquidity provision would be mandatory and paid up front.
- And third, the financial institutions that benefit from emergency liquidity provision would be required to bear the cost in advance.
- The solution should be implemented gradually, over 20 years, to allow banks to gradually increase their ratios of equity to assets.

Farmer, the author of books on the financial crisis as well as economics textbooks, believes that "The End of Alchemy" overlooks a big problem: The fact that "most of the people we are trading with through the purchase and sale of financial assets have not yet been born."

That is, transactions that fit today's circumstances might be disastrous for people in 10

years. Central banks, representing perpetual governments, are the only institutions that can protect them from that risk.

"The fact that stock market booms and crashes are rational from the perspective of the individual does not mean that they are rational from the perspective of society. The market can remain irrational for longer than you and I can remain irrational. The market can remain irrational for longer than George Soros or Bill Gates can remain solvent," Farmer wrote.

"But the market cannot remain irrational for longer than the U.S. Treasury can remain solvent. A national central bank, backed by the ability of the treasury to levy taxes on future generations, could make the trades that our children and our grandchildren would make if they were able."

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