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Money Market Fund Reactions to Very Low Interest Rates

The Federal Reserve's ultra-low interest rate policy has had important effects on money market funds (MMFs) and on the asset management industry more generally. Zero and near-zero rates have reduced the profitability of MMFs. Almost universally, these funds have reduced investor fees in an attempt to deliver more return for their customers, [Marco Di Maggio](#) and [Marcin Kacperczyk](#) report in **The Unintended**

Consequences of the Zero Lower Bound Policy (NBER Working Paper No. 22351). Many MMFs have moved into riskier assets, and some have exited the market.

Fund closures have broad implications. Within the asset management industry, they force a reallocation of resources within mutual fund families to other funds, particularly bond funds. More broadly, companies that traditionally borrow through the assets held by money market funds find it more difficult to raise capital, at least for a time.

The researchers study the responses of MMFs to five Federal Open Market Committee announcements which sig-

naled that the target rate would be kept near zero for some time. Almost all MMF managers significantly trimmed the fees

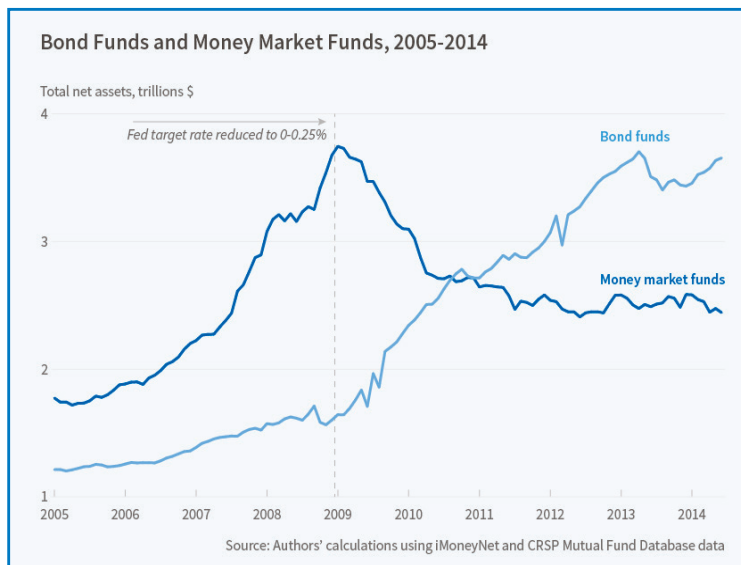
they charged investors. This subsidy averaged a not-insignificant \$27 million per fund, for a total of some \$7.3 billion.

percentage of their assets in MMFs were more likely to take on risk and less likely to exit. By contrast, funds affiliated with

Some money market funds responded to low interest rates by holding riskier investments; other funds closed.

a bank or insurance company were more likely to exit than to take on more risk.

Fund families that shut down their



MMFs were significantly more likely to open new bond funds than those families that did not close their MMFs. These fund families typically assigned their managers to other MMFs or to bond funds.

The study finds that the changes within the MMF industry ripple out to the broader economy, at least temporarily. For example, the researchers found that six months after an MMF closed, the

leverage of nonfinancial firms whose debt had been held by the now-closed fund was significantly reduced in comparison to similar firms that had borrowed from still-active MMFs. By a year after fund closure, however, these effects

On average, MMFs also took on more risk. Independent funds — those unaffiliated with a bank or insurance company — were more likely to take on additional risk to improve the yield. Fund families with a higher-than-average per-

were no longer evident.

The researchers conclude that their “results highlight an important chan-

nel for transmission of monetary policy that has been completely overlooked by the academic literature, but one that is

extremely relevant for practitioners and policy makers.”

—Laurent Belsie

Tuskegee, Trust in Doctors, and the Health of Black Men

The “Tuskegee Study of Untreated Syphilis in the Negro,” conducted in the mid-20th century in Macon County, Alabama, is one of the most infamous medical experiments in American history. Conductors of the study allowed hundreds of unwitting black men to suffer needlessly for decades and sometimes die in agony, despite the availability of proven and effective medical treatments.

In **Tuskegee and the Health of Black Men** (NBER Working Paper No. 22323), [Marcella Alsan](#) and [Marianne Wanamaker](#) find evidence that the suffering associated with this experiment extended far beyond the tragic test subjects. They find that public revelations in 1972 of the study’s existence led to a deep mistrust of the medical community among black males, many of whom afterward shunned hospital and physician interactions. The researchers estimate that life expectancy at 45 for black men fell sharply and that the life expectancy gap between black and white males significantly widened.

Over the years, numerous studies have shown that the health of American black males is significantly worse than that of men in other ethnic, racial and demographic groups. African-American men have shorter life expectancy than

white males and higher death rates from conditions such as cancer and heart disease. Previous studies have attributed these disparities to various factors, includ-

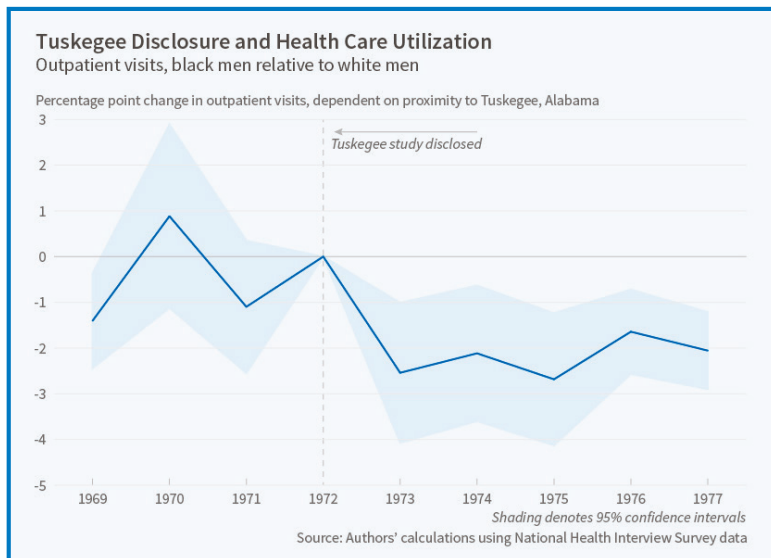
ing poverty, inferior education, higher unemployment and underemployment, and lack of health insurance. Some have also suggested that mistrust of the medical system was a factor, but the existence and long-term effect of that mistrust has not previously been tracked or quantified.

the true aim of the study, asserting instead that they were helping the men and telling some they had been diagnosed with “bad blood.” Medical researchers not only delib-

Disclosure of the Tuskegee syphilis study in 1972 coincided with increases in medical mistrust and mortality among black males.

erately withheld from the men proven treatments, such as penicillin, but also actively discouraged the test subjects from seeking medical advice elsewhere. In exchange for hot meals and promises to pay for their burial expenses, for 40 years the subjects allowed the study’s principals to examine them, draw blood, conduct spinal taps, and ultimately to perform autopsies.

In 1972, the study came to an abrupt halt after its disclosure by news media sparked public shock and outrage. The sudden stop created a distinct before-and-after point around which the researchers could compile and compare historical data regarding medical trust, treatments, and results. Their data on



The federally funded Tuskegee study followed the lives of about 600 largely poor black males, the majority of whom had syphilis, from 1932 to 1972. The goal was to trace the course of untreated syphilis. Researchers never told the test subjects

medical trust are drawn from the General Social Survey, while medical behavioral data come from the National Health Interview Survey. They also obtained annual mortality data by race, gender, age group, and causes from the Centers for

Disease Control and Prevention.

Focusing on black males between the ages of 45 and 74, the researchers describe changes in racial mortality and health care utilization gaps after 1972. Their main finding is that the disclosure of the syphilis study was associated with a sharpening of these racial differences along a continuous geographic gradient from Tuskegee, Alabama. In the years following disclosure of the study's tactics, they find significantly

lower utilization of both outpatient and inpatient medical care by older black men in close geographic and cultural proximity to the study's subjects. The reduction in health care utilization paralleled a significant increase in the probability that such men would die before the age of 75. The researchers also document heightened medical mistrust, as measured in 1998, among black men in closer proximity to Tuskegee, Alabama.

The researchers estimate that life expectancy at age 45 for black men fell by up to 1.4 years in direct response to the 1972 disclosure of the Tuskegee study. This decline in longevity could explain approximately 35 percent of the 1980 life expectancy gap between black and white men. The disclosure of the Tuskegee project appears to have stalled, or even reversed, a pre-1972 trend toward narrowing of the racial health gap.

— Jay Fitzgerald

Financial Impacts of Medicaid Expansion under the ACA

Extension of Medicaid eligibility under the Affordable Care Act (ACA) has not only shielded low-income Americans from out-of-pocket medical costs, but has also improved their overall financial health. That's the finding of a study by [Luoja Hu](#), [Robert Kaestner](#), [Bhashkar Mazumder](#), [Sarah Miller](#), and [Ashley Wong](#) on **The Effect of the Patient Protection and Affordable Care Act Medicaid Expansions on Financial Well-Being** (NBER Working Paper No. 22170).

The consequences of an episode of poor health cascade far beyond the sickbed. The researchers note that uninsured individuals who need hospital care can experience reduced access to credit and elevated bankruptcy risk, along with unpaid medical bills. In this national study, the researchers find that Medicaid expansions “significantly reduced the number of unpaid non-medical bills and the amount of non-medical debt sent to third-party collection agencies.”

A Supreme Court ruling that was a setback for ACA proponents provided a control group for the study. The original

New York and Equifax covering 2010 through 2015 — a period that begins four years prior to Medicaid expansion

Those who became eligible for Medicaid have less non-medical debt and are in better financial health.

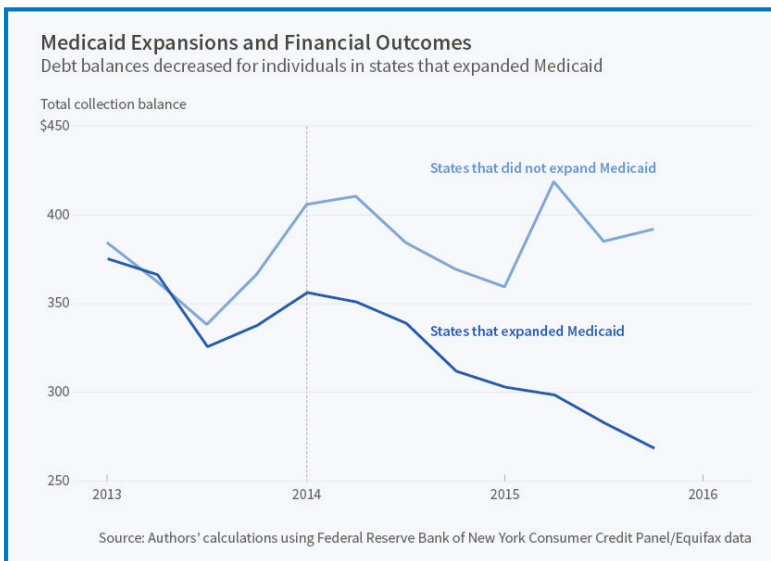
legislation called for all states to expand Medicaid to income-eligible adults under 65. The high court ruled that states could opt out, which 21 had done as of the end of 2015.

and ends two years after it. After controlling for other factors that influence personal financial health, they compared residents of states that expanded Medicaid with those of states that did not, focusing on zip codes with the highest concentration of uninsured adults under age 65 who met the federal income standard for Medicaid.

Using estimates from the study, the researchers calculated the impact of the Medicaid expansion on those who gained coverage and found that the expansion reduced their non-medical debt in collection by \$600 to \$1,000.

To measure financial well-being, the researchers drew on national credit report data from the Federal Reserve Bank of

When the researchers calculated the effect on individuals who experienced an illness that required hospitalization or admission to an emergency



room, expansion of Medicaid reduced debt by an estimated \$1,400 to \$2,300. The impact was more pronounced among

older than younger age groups.

The researchers found no significant change in other measures of debt, such as

credit card balances, in the years following Medicaid expansion.

—Steve Maas

Social Networks and Housing Markets

After the last decade's housing market crash, scholars, analysts, and policy makers stepped up efforts to better understand how households' attitudes toward the housing market, such as their optimism or pessimism, influence house price fluctuations. While some have argued that market mood swings play a key role in the trajectory of sales and prices, it has been hard to quantify that influence or to pinpoint its sources.

In **Social Networks and Housing Markets** (NBER Working Paper No. 22258), Michael Bailey, Ruiqing Cao, Theresa Kuchler, and Johannes Stroebel explore whether discussions with mem-

bers of one's social network about the housing market can influence one's decision about whether to buy a home, and at what price to do so. They find that the housing market experiences of a person's friends can have large effects on that person's housing market beliefs and housing investment decisions, even if these friends live far away.

To measure individuals' housing market beliefs, Facebook conducted an online survey of some of its users in Los Angeles County, the most populous county in the United States. The survey

was conducted in November 2015, and yielded 1,242 responses from 113 L.A. zip codes. The researchers analyzed the

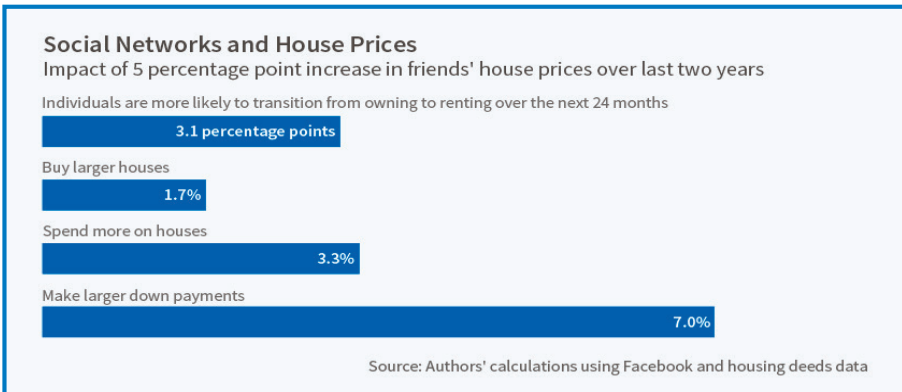
Social networks, even if spread over great geographic distances, can have large effects on members' housing investment decisions.

responses, and found that individuals whose friends experienced larger recent house price increases considered local property a more attractive investment,

The final data contained anonymized demographic, social network, and housing market data for 1.4 million individu-

als and 525,000 housing transactions.

The researchers found that a 5 percentage point larger house price increase over the previous 24 months in the communities where an individual's friends lived raised that individual's likelihood of moving from renting to owning by 3.1 percentage points over the next 24 months. Such a price increase was also associated with



with bigger effects on the beliefs of those respondents who regularly discussed such investments with their friends.

The researchers then compiled anonymized social network data from Facebook, combined with public housing deeds and assessor records, in an effort to analyze the relationships between the home price experiences of a person's friends and four actual housing decisions: whether to rent or own, the square footage of properties bought, the price paid for a particular house, and the leverage chosen to finance the purchase.

a 1.7 percent increase in the average size of the home purchased, a 3.3 percent increase in the amount paid for the house, and a 7 percent larger down payment. When someone's friends experienced less-positive house price changes, those individuals were more likely to become renters, and more likely to sell their property at lower prices.

The researchers conclude that their findings "can contribute to our understanding of the geographic contagion of house price shocks."

—Jay Fitzgerald

Teacher Specialization and Production of Human Capital

Industrial production methods utilizing highly specialized labor have raised the quality of manufactured goods while substantially reducing their costs. This success has encouraged school reform advocates to suggest that schools might benefit by shifting to specialized teachers. The advocates contend that specializing in a narrow subject range would reduce teacher workload and boost student achievement because teachers would have more time to master their subject and to focus on lesson planning.

In **The ‘Pupil’ Factory: Specialization and the Production of Human Capital in Schools** (NBER Working Paper No. 22205), **Roland G. Fryer, Jr.** reports on results of a randomized field experiment testing that theory. At the end of two school years that began in 2013–14, students in Houston public elementary schools with specialized teachers lagged approximately one month behind students in schools with non-specialized teachers. The lags for students with special needs and for students with younger teachers were considerably larger. Students in schools with specialized teachers also had lower attendance and a higher probability of suspension due to poor behavior.

The sample included 50 schools. Half of the schools used specialized teachers. Half were control schools, which maintained the status quo. Students in the schools that were included in the experiment, both with and without specialized teachers, were less likely to be white or Asian, more likely to be economically disadvantaged, and had lower test scores in math and reading than in other schools in the city of Houston. According to Fryer, “the

results estimated are likely to be more applicable to urban schools with higher concentrations of minority students.”

The teacher specialties were math, science, social studies, and reading. Principals

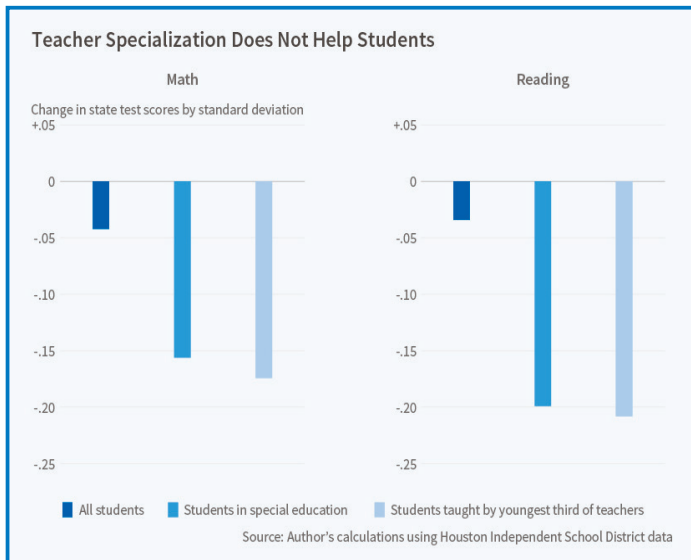
In a field experiment in Houston public schools, after two years students with specialized teachers lagged about a month behind those with non-specialized teachers.

assigned teachers to subjects based on average teacher value-added measures, classroom observation, or recommendations. Specialized teachers were not allowed to teach both math and reading. Other com-

scores in math and reading. Schools were randomized by ranking them by the sum of their mean reading and math test scores in the previous two years. They were grouped into pairs by going down the list in order.

Then the schools in each pair were randomly assigned to the specialized or to the control group.

Different specifications did not change the negative result for specialization. It was



robust to several sensitivity tests. It remained negative whether high- or low-stakes test scores were used to measure outcomes, was unchanged when tested for the effects of student attrition from specific schools, and apparently was not the result of unknown differences in individual schools.

According to data from a teacher survey, teachers in specialized schools were less likely to report providing students with individual attention. Because specialized teachers

teach more students, they may find it more difficult to get to know each student and to tailor lessons to the needs of individual students in a particular class. As a result, the gains from specialization may have been outweighed by the losses caused by inefficient teaching choices for specific students. The author concludes by emphasizing that these results “provide a cautionary tale about the potential productivity benefits of the division of labor when applied to human capital development.”

Data on individual students included standard demographic variables, behavior and attendance records, English proficiency, state math and reading test scores, and nationally normed Stanford 10 subject

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—Linda Gorman

Cash for Carbon: Payments for Conservation Reduce Deforestation

Trees absorb carbon dioxide through photosynthesis; they store the carbon in their biomass and release it when they die and decompose, or are burned as fuel. Worldwide, deforestation accounts for up to 15 percent of carbon emissions, second in carbon production only to the burning of fossil fuels.

In **Cash for Carbon: A Randomized Controlled Trial of Payments for Ecosystem Services to Reduce Deforestation** (Working Paper No. 22378), [Seema Jayachandran](#), [Joost de Laat](#), [Eric F. Lambin](#), and [Charlotte Y. Stanton](#) analyze a United Nations-funded Payments for Ecosystem Services (PES) pilot program in Uganda. The program conducted a randomized trial in 121 villages from 2011 to

2013. Households in 60 villages were paid to refrain from cutting down trees, while those in 61 villages were not. The program put a significant dent in the pace of deforestation in the test area. Satellite imagery showed that tree cover declined by about five percent less in villages where incentives were offered, as compared with the control group.

The researchers found no evidence that participants shifted tree cutting to land not covered by PES agreements.

They also determined that landowners who had previously planned to keep their forests intact were not disproportionately enrolled in the program. In

Paying landowners to conserve their forests slows deforestation at relatively low cost.

fact, 85 percent of enrollees reported having felled trees in the three years prior to the program.

Only about a third of eligible households signed up for the program. The researchers suggest that participation

that the program's benefits would be double its costs in payments to landowners and administrative expenses.

Because rural Ugandans are poor,

the payments needed to compensate them for protecting the forest—and reducing CO₂ emissions—are inexpensive in global terms. The researchers conclude that “per ton of averted CO₂, this program is considerably less expensive than most alternative policies in place in the U.S. to reduce carbon emissions, such as hybrid and electric car subsidies.” They also suggest that offering permanent incentives to discourage

deforestation could offer more bang for the buck, although such programs need to be tried and evaluated.

The researchers tentatively estimate the cost of permanently preventing a ton of carbon dioxide emissions using forest preservation subsidies at \$3.10. By comparison, the U.S. Environmental Protection Agency estimates the social cost per ton of carbon emissions at \$39 in 2012 U.S. dollars.

—Steve Maas

Paying Landowners Reduced Deforestation in Uganda

Decline in tree cover over two-year span

Treatment villages	2-5%
Control villages	7-10%

Source: Authors' calculations from the Payments for Ecosystem Services program

would have been much higher had the program been better publicized, and had the communication dispelled fears that it was a ploy to confiscate land.

Since the program was short-term, the households could be expected to make up for postponed deforestation after it was over. But even delaying deforestation benefits the environment, the researchers note, though how much depends on the pace of renewed tree-cutting. Assuming a four-year catch-up period, they estimate

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