FEDERAL RESERVE

Winners and Losers from Monetary Policy

BY RENEE HALTOM

The Fed seeks to support the economy as a whole, but some redistributional effects are unavoidable

I feel like a lazy bum," lamented economics blogger Scott Sumner in a recent post. "This morning Ben Bernanke created $250,000,000,000 in new wealth before I'd even finished breakfast." The Bentley University professor argued that the Fed chairman's speech that morning had led to about a half percent increase in stock prices worldwide based on the hopes it created for further monetary easing. With it came a windfall for equity investors.

When the Fed injects money into the economy, the effects are not spread evenly. The first point of impact is the banking system, where the Fed trades newly created money for assets. The infusion of cash causes financial institutions to bid down lending rates, which pushes down other lending rates in the economy and, the Fed hopes, stimulates the economy as a whole. Interest-sensitive sectors, like manufacturing and real estate, tend to respond first, with the rest of the economy in tow. Some sectors, regions, and demographic groups might experience a bigger boost than others from Fed easing, or higher costs when the Fed tightens.

The Fed's most important effects on the economy — in carrying out its congressional mandate of price stability and maximum sustainable employment — might also affect households differently depending on whether they hold inflation-protected assets, have big debts that might be eroded by inflation, or have labor market skills that insulate them from a down business cycle.

None of these distributional effects are the *intent* of monetary policy. The Fed mandate means it must focus on broad indicators of economic performance. Any redistribution of wealth that occurs is an incidental but often unavoidable byproduct. If Fed policy is stable and predictable, its inadvertent redistributional effects will likely be kept at a minimum.

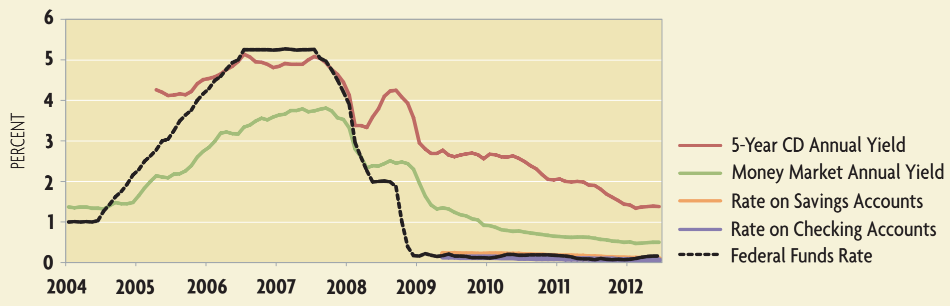
Low Rates Hurt Savers

Today's record-low rates may have helped boost financial markets, but one group of investors is not happy: savers holding liquid, cash-like instruments such as bank deposits, certificates of deposit (CDs), and money market deposit accounts. The return on these investments is a market interest rate, driven historically low by the near-zero interest rate policy that has prevailed since late 2008. Traditional bank deposits currently pay a hair above zero; money market accounts pay less than half a percent. A five-year CD pays less than 1.5 percent, compared to 5 percent before the financial crisis (see chart below). Household interest income has fallen by more than $400 billion since the Fed sharply cut rates during the financial crisis, a decline of about a third (see chart on next page).

That puts a squeeze on households that rely on interest income, such as seniors. They tend to have shifted into the type of safe, liquid assets that produce negligible returns in a low-interest rate environment. But seniors are affected differently based on where they stand in the wealth distribution. Lower-income retirees, like the poor of every age group, hold very little financial wealth to begin with. People over 60 in the bottom 40 percent of the wealth distribution tended to hold no more than $3,000 in financial assets, yielding less than 1 percent of their total income, according to research by Anthony Webb and Richard Kopcke at Boston College's Center for Retirement Research. They studied data from the University of Michigan's 2008 Health and Retirement Study (HRS), which surveys retirement-age households about all sources of income.

The richer portion of the over-60 age group — those ranking in the top 20 percent in wealth — get about half of their income from financial investments. But Webb says even they are spared from low rates because they tend to invest more heavily in stocks — at nearly three-quarters of their financial investments — than cash-like investments. "Stock prices fell a lot, but then came back, and dividends

Many Asset Returns Move with Fed Policy



SOURCES: Federal Deposit Insurance Corporation, Federal Reserve, *Wall Street Journal*, Haver Analytics. Monthly data, last observation July 2012.

have held up. So if you're a rich rentier living off your dividend income, your income really hasn't been affected" by low rates, he says. In fact, Fed policy has probably helped boost stocks and dividends.

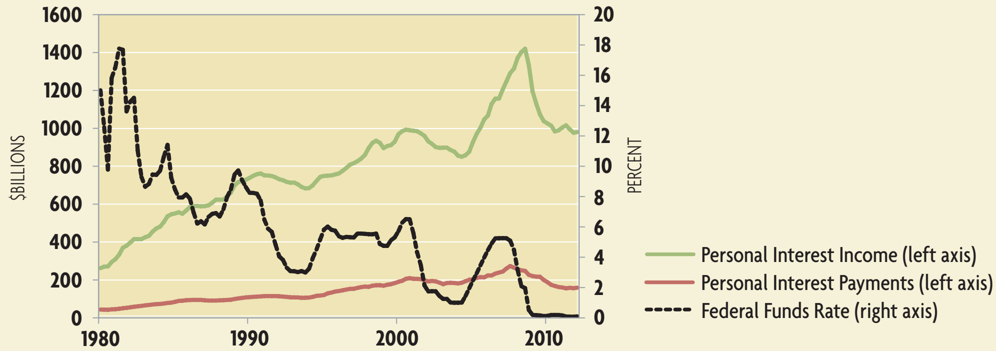
By Webb's calculations, the people over 60 who have really been burned by low rates are the middle to upper-middle classes, households in the 3rd and 4th quintiles of wealth that hold between roughly $30,000 and $160,000 in financial assets, yielding between 5 percent and 20 percent of their total income. They hold enough financial wealth for it to matter to their total bottom line, and have tended to invest very conservatively in cash and short-term investments for which the yield has basically gone to zero, Webb says. Still, losses on investments amount to less than 10 percent of their total income in most cases, according to the HRS. Instead, this group relies heavily on other sources of wealth in retirement such as Social Security, real estate, and pensions. On the other hand, the wealthiest 20 percent of people over 60 — for whom financial investments make up half of total income — lost up to one-fifth of their total income from investment losses during the recession through 2011.

As for the population including all ages, most households simply don't hold much of their overall wealth in assets that move directly with the fed funds rate. Checking, savings, CDs, money market deposit accounts, and call or cash accounts at brokerages consistently amount to around 5 percent of total household assets across the wealth spectrum, according to the Fed's Survey of Consumer Finances (SCF).

The SCF surveys 4,500 households, a nationally representative sample, every three years about their asset holdings and reports the data by age, income, wealth, and other characteristics. By that measure, families get a quarter of their net worth from other financial assets — stocks, retirement accounts, and other managed assets — and half from the nonfinancial assets of houses and equity in businesses. The returns on these assets are tied more to prospects for the overall economy than to Fed policy, though the latter influences the former. But that means their values have risen as interest income has fallen over the last several years.

Moreover, when interest rates fall, households are on the winning end of other transactions. As aggregate household income has fallen, their interest payments fell by an even greater percentage (see chart above). Some of that aggregate decline could be due to households having reduced their overall debt burdens in the aftermath of the recession, but it's also the case that low interest rates suppress household expenses for some of the largest purchases they make: durables that require financing, like appliances, cars, and houses. Rates on credit cards, car loans, personal loans, and mortgages have all fallen to historic lows in the last few years.

Interest Income Has Fallen with Fed Policy — But So Have Interest Payments



SOURCES: Bureau of Economic Analysis, Federal Reserve, Haver Analytics. Quarterly data, last observation 1Q 2012.

Households' portfolio choices mean two things for Fed policy: First, a good portion of the population is "far more interested in the Fed's ability to boost employment than in the Fed's ability to boost asset returns," as Webb puts it. And second, if low rates strengthen the economy as a whole, the Fed is "helping to improve the returns to savers," as Chairman Bernanke recently told Congress in defense of the effect of low rates on savers.

Inflation: The Cruelest Tax?

People tend to focus on the effect of nominal interest rates on asset returns, but it's real interest rates — rates adjusted for inflation — that matter. "Back in the 1980s, we had these wonderful high interest rates. But we also had less wonderful high inflation" that ate into returns, Webb points out.

In fact, inflation is where the Fed's effect on the economy is greatest over time. When the Fed does a one-time easing of policy, there's typically a boost to economic growth and inflation in the short run. Eventually, however, the effect on economic growth dies out, but the effect on the price level remains — that is, there has been a permanent increase in the price level and a one-time increase in inflation. Every other way in which the Fed affects the economy — through asset prices, market interest rates, and especially the business cycle — is for the most part temporary. After these effects of Fed policy work through the economy, changes to the money supply, and therefore the price level, are all that's left.

Many people assume that general inflation hurts lower income households most, and more than one politician in history has repeated the charge that it is the "cruelest tax." The rich would seem better equipped than the poor to protect themselves from inflation through access to inflation-protected financial instruments and financial advice. But the idea that inflation hurts the poor more than others "is a long-standing myth that must go back 50 years, maybe longer," says Alan Blinder of Princeton University who served as vice chairman of the Fed in the 1990s. For one thing, "the poor basically have no assets whose values can fall in real terms because of inflation," he says.

Monetary policy can have unintended — though often unavoidable — redistributional effects. If Fed policy is stable and predictable, those effects will likely be kept at a minimum.

It is true that rising food and energy prices disproportionately hurt the poor because they spend a larger proportion of their income on those necessities. But that is a different phenomenon than general inflation brought about by expansionary Fed policy. Commodity prices are affected primarily by global supply and demand conditions in those markets, and only indirectly by Fed policy, if at all.

There is one respect in which inflation does target the poor: They hold more cash as a fraction of consumption, leaving them vulnerable to an eroding currency. Wealthier households, on the other hand, tend to consume using other means like credit cards. In the United States, the middle and upper classes can get a free short-term loan by charging a purchase and then paying it off at the end of the billing cycle; the poor cannot. "If you have a credit card, you put up the cash later when the inflation rate is higher," says Gustavo Ventura at Arizona State University. "In real terms you are spending a tiny bit less by using a credit card." The 17 million adults who lack bank accounts in the United States are mostly minority and poor, according to the Federal Deposit Insurance Corporation. Even the poor who have bank accounts are less likely to use credit cards because it's a costly service. Since they are more restricted to cash, inflation acts like a tax on their consumption, Ventura and Andres Erosa at the University of Toronto found in a 2002 study.

But Ventura cautions that the effect is probably small. Today's poor have better access to credit cards and other means of payment than they had even a decade ago when the research was conducted. More important, inflation has been low and stable over the last 30 years, with prices having risen just 3 percent each year on average. "That's just not a big deal" in terms of the inflation tax on cash holdings, he says, especially considering that nominal wages have grown by multiples faster than prices.

Therefore, the redistributional impact of the relatively low and stable rates of inflation we tend to see today is likely to be small. The picture changes when inflation comes as a surprise. To the extent that existing lending agreements don't take account of unexpected inflation, it causes a potentially substantial transfer of wealth from lenders to borrowers, which research shows is more likely to hurt the rich, not the poor. Matthias Doepke and Martin Schneider, now at Northwestern and Stanford universities, respectively, analyzed the likely winners and losers from this effect in a 2006 study. Among broad sectors of the economy — households, governments, and foreigners — they calculated how exposed each group was to surprise inflation over the last 60 years based on their holdings of nominal assets whose values are subject to decay when inflation hits.

Given the portfolios those groups tend to hold today, the research of Doepke and Schneider suggests the household sector would gain slightly from surprise inflation due to its overall indebtedness, but with dramatically different results across ages and incomes. Once again, older people are more vulnerable due to the typical assets one holds toward retirement. Surprise inflation tends to transfer wealth from older, richer households — that are likely to have loaded up on savings and pared down debt — to the young. The wealthiest older people are most exposed to inflation since they hold relatively more long-term bonds, mostly through pension plans and mutual funds. Older people among the poor and middle class are also on the losing end of inflation, but less so because their dominant holdings are in shorter-term instruments such as bank deposits. The young, especially the middle class, stand to gain from higher inflation due to their substantial mortgage debt. But young, poor households also gain through what they owe in consumer credit.

These trends have changed over time. The household sector as a whole was the U.S. economy's major class of lenders before the 1980s, but that changed with the explosion of mortgage debt, which peaked in the late 2000s, and the substantial expansion of unsecured consumer credit. Foreigners have taken their place as capital has flown into the United States in recent years. "If the United States were to inflate now, then much of the cost would be borne by people in other countries," Doepke says. Today, an inflation surprise would be a boon for the government sector — the U.S. economy's major net borrower — and a tax on foreigners.

Taxing foreigners, in effect, through inflation to benefit domestic governments and middle-class households might sound like an opportunity for Fed policy. The fact that the latter groups are indebted following the financial crisis and recession has led some economists to argue that a bit of inflation would speed the economy's recovery by relieving those burdens. Even they tend to agree, however, that it's not a viable long-run strategy. "The basis for these gains would go away if you started to exploit them systematically," Doepke says. Lenders, both foreign and domestic, would adjust their expectations to a policy of opportunistic inflation, and would demand inflation protection from assets.

What that means is that the government's borrowing rates, for example, could be driven much higher. The effects of such an increase would be far-reaching; the average maturity of outstanding federal debt is only about five years, so that debt would soon have to be reissued at the higher rates. After accounting for the likelihood that future borrowing would be more expensive, inflation erodes government debt quite slowly, according to a 2011 study by Michael Krause and Stéphane Moyen at Germany's central bank.

Doepke and Schneider argued that the scope for redistribution is greater in recent years since both the assets and liabilities of households have grown larger. But there is one clear way for the Fed to avoid this redistribution altogether: "Focusing on low inflation basically minimizes redistribution that results from inflation," says Ventura. Contractionary policy to lower inflation might produce a windfall for long-term bondholders, for example, but a consistent, stable inflation rate allows financial market participants to incorporate the majority of price increases into contracts. That minimizes the more serious redistribution that results from inflation surprises.

Bearing the Brunt of Disinflation

When inflation reaches unacceptable levels, the Fed typically pursues contractionary policies — and with contraction can come a slowing of real economic activity and employment. The burden of disinflationary episodes tends to be borne disproportionately by the poor, minority, and young, who tend to be relatively less productive workers with fewer skills, and therefore are laid off first. This effect was visible during the Volcker disinflation, which lasted from October 1979 to the end of 1982. Willem Thorbecke at Japan's Research Institute for Economy, Trade, and Industry found in 1997 that the episode caused black unemployment to increase by 9.5 percent and Hispanic unemployment by 7.1 percent, while white unemployment increased only by 4.5 percent.

The basic numbers showing these employment flows are supported by decades of research. Blinder has co-authored several studies over the last 35 years arguing that, of the economic ills the Fed is charged with combating, unemployment is more likely to harm the poor than inflation. For example, he and Rebecca Blank, now acting secretary of commerce, found in 1985 that both poverty and income shares for the bottom 20th percentile of income move closely with the business cycle. "[H]igh unemployment is strongly and systematically regressive whereas high inflation has weak, if any, effects on the distribution of income," they wrote. The upside is that the effect works in reverse when the economy does well: A rising tide lifts the smallest boats most, an effect to keep in mind when the unemployed are "drafted to fight the war on inflation," they argued.

Central bankers are quick to caution that the effects of monetary policy on employment are inherently temporary — so while the effect on certain groups is important, it must be weighed against the substantial long-run benefits of price stability. But unemployment itself can have lasting effects. Rutgers University economist William Rodgers found in a 2008 study that spikes in the fed funds rate increase the length of unemployment spells at all durations, especially for blacks. Longer unemployment spells can negatively affect lifetime earnings, job tenure and experience, and reemployment prospects, he argued. To the extent that this occurs for any group, it adds to the costs of contractionary policy.

While these negative effects appear to fall more heavily on certain groups, Thorbecke argues that doesn't necessarily mean those effects should change Fed policy. "It is good to learn as much as we can about how monetary policy works. How does it affect asset prices? How does it affect small and large firms? How does it affect different groups in society?" But in terms of making policy, "the Federal Reserve faces constraints. Congress has given it specific targets, and the Fed needs to focus on these."

Instead, the distributional costs of monetary policy might imply a role for compensating disadvantaged groups through the more targeted tool of fiscal policy. Knowing the likely winners and losers from monetary policy could help to inform those types of policy decisions. For example, in their work showing that surprise inflation benefits the young and governments at the expense of the old and foreigners, Doepke and Schneider pointed out that if the federal government benefited from inflation, Congress would have a choice in how to allocate the gains. For example, it could reduce income taxes, which would benefit younger households further, or it could compensate the losers from the inflation, like older households, through greater safety net transfers. The average retiree gets about 30 percent of wealth from Social Security, which is indexed to inflation; thus, in one way, the government already compensates households that tend to be on the losing end of rising prices. (It's an imperfect mechanism in that reliance on Social Security falls as wealth — and the adverse effects of inflation — increases. The poorest 25 percent of retirees hold as much as 80 percent of their wealth in Social Security.)

Policy Choices with Blunt Tools

The largest redistributional effects from Fed policy appear to come in times of change: when inflation spikes suddenly; when it has to be brought down painfully; or when policy shifts unexpectedly, causing markets to reinterpret Fed objectives and reassess the economy's prospects. The Fed can best avoid those redistributive effects by keeping policy predictable and stable.

That doesn't mean there won't sometimes be uncomfortable circumstances in the short run, such as high unemployment existing in one demographic group while overall unemployment is at an acceptable level. The Fed often finds itself in an analogous position on the other side of its dual mandate: one in which average inflation is on target, but the prices of certain goods — goods that make up a larger proportion of poorer households' budgets, no less — are rising quickly. That's the case when prices for food and energy spike even though "core" inflation, which omits those prices, is on track. But outside of emergencies like the recent financial crisis, the Fed has essentially one blunt policy tool — interest rates — that has no direct influence over the price of one good relative to another, nor on unemployment rates for specific groups. That's why the Fed's mandate focuses on the broad economic indicators of *average* prices and *overall* employment and growth. By attempting to bring down unemployment for one group, the Fed could very well overstimulate the economy, raising inflation and throwing off its actual policy objectives.

In the long run, inflation is bad for almost everybody.

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"Someone said that a strong macroeconomy is the best welfare policy," Thorbecke says. Many studies have documented that, across countries and time, higher inflation is associated with more poverty and lower incomes at the bottom of the income distribution. There's not a lot the Fed could do about distribution even if it wanted to, Blinder says, unless Congress gave the Fed different kinds of tools, like tax and transfer policies. "But that's way beyond the purview of the central bank."

In other words, while there is little doubt that the Fed's policies have unintended distributional effects, that doesn't make monetary policy a suitable tool to pursue distributional goals. A host of economic research suggests that the Fed should focus on price stability and avoid unpredictable policy shifts. Those measures are favored primarily because of their long-term economic benefits, but they also tend to minimize the redistributional effects that can result from monetary policy. **RF**

Readings

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