

Understanding Inflation Policy, 2021

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I will not predict an inflation level, nor will I anticipate inflation's impact on the stock market over the next 12 months. Instead, here are some conceptual matters to help understand what might unfold.

MONETARY TARGETS

Just as after the financial crisis and Great Recession of 2007-2009, many commentators, and some professional economists, now predict a damaging level of inflation to result from Central Bank policy, combined with deficit spending, in the wake of the 2020-2021 pandemic. While critics in the earlier case cited sharp increases in the monetary base (currency and bank reserves), current monetarists, including Steve Hanke and Tim Congdon, cite increases in much broader money supply indicators (eg, M4 – which includes most short-term, liquid assets). M4 is indeed up sharply over the last several months, so perhaps critics will be proven correct this time; but that will depend upon events that have not yet arrived and decisions that have not yet been made.

Federal Reserve Chair Jerome Powell and Treasury Secretary Janet Yellen have commented publicly that they believe current inflationary pressures are manageable, and may even aid in recovery from the slowdown. Paul Krugman has argued (NYT, May 6 and May 13, 2021) that recent price jumps can be attributed to pandemic-linked supply bottlenecks and other temporary factors. And *Bloomberg* reported on May 21, 2021:

For a sign that accelerating inflation may be fleeting, look to the housing industry, Conor Sen writes for Bloomberg Opinion. Rising prices are starting to cool demand, anecdotal evidence suggests builders are starting to take a pause, and lumber prices have responded. A start-and-stop growth environment is unlikely to sustain a higher level of inflation.

In the 1920s, John Maynard Keynes argued that inflation was a monetary phenomenon. While Keynes wrote different things at different times, many Keynesian economists focused on interest rate management as the essential policy tool for managing inflation and growth. The “Taylor rule”, proposed in 1992, has also deployed interest rate management to stabilize price and growth performance. Highlighting a different policy lever, Milton Friedman argued in the 1950s and 1960s that changes in money supply would lead “with long and variable lags” to changes in price levels. By the 1980s and 1990s, however, many or most international monetary authorities were targeting inflation levels directly rather than locking into interest rates or tracking money supply indicators. Late in his life, Friedman adapted his view to agree

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that central banks could target inflation directly rather than seek to stabilize an intermediate variable.²

Consider a bit of algebra. Imagine that we must solve for several economic variables using simultaneous equations – so that a change in one variable affects all of the others. Now choose the variables: one or more interest rates, one or more money supply indicators, a variable for the velocity of money (an indicator of perceived uncertainty and demand for liquidity); also, one or more inflation indicators, a rate of real GDP growth (RGDP), a rate of nominal GDP growth (NGDP), an exchange rate indicator. We can add more variables if we want to test for other relationships: eg, the fiscal deficit or the current account balance. The first group is for intermediate variables – interest rates, money supply, velocity. The second group are end-variables – the rate of inflation, the rate of economic growth, exchange rates. Policy-makers must answer for performance in reaching end-variables; intermediate variable targets are subordinate.

It has long been clear that central banks could target an outside standard as an end-variable, hence that a currency's value could be fixed to another currency or to a gold or silver price – whereby we get a sterling standard, a gold standard, etc. What we have learned in recent decades is that monetary policy can also target an inflation indicator; and we can ask, still more recently, if we can target an inflation indicator, why not a growth indicator? Or a hybrid of the two?

What took so long? Some targets are not useable; solving equations for some variables may bring damaging volatility to the behavior of others. Eg, an aggressive target of 3 or 4 percent annual growth in RGDP in the US or UK might be reachable only by accepting a growing rate of price increases. An inflation target, or an NGDP target might lead to exchange rate instability that some would deem excessive. (For example, NGDP growth in the US was anemic during the first half of 2008, which suggests that monetary policy was restrictive; but the dollar fell to an all-time low against the euro in July 2008, evidence, by that measure, that US money may have been too easy.³) But an NGDP growth target has the advantage of facilitating more inflation when the economy is weak, and encourages a tighter policy when the economy is growing more rapidly. An NGDP target can help a monetary authority to achieve the old central bank objective of “leaning against the wind.”⁴

In August 2020, the Federal Reserve announced that it would revise its “fixed” inflation target (set for at least the last decade at 2 percent annually, a target usually undershot in practice,) to an “average” inflation target (AIT), still set at 2 percent annually. In some recent months – using the Fed's preferred core inflation indicator -- US price inflation has exceeded the 2 percent rate,

² Lars E. O. Swenson (2008), “What Have Economists Learned About Monetary Policy in the Last 50 years?” p. 3. <https://larseosvensson.se/files/papers/Buba%20709.pdf>. Friedman died in 2006.

³ The 2008 policy question deserves another paper. It is discussed, not quite adequately, in Clark Johnson, “Reasserting Monetary Policy: Sumner's Nominal GDP Targeting and Beyond”, *Applied Economics and Finance*, Mar 2017. <http://redfame.com/journal/index.php/aef/issue/view/91>

⁴ Inter alia, see George Selgin, *Less Than Zero: the Case for a Falling Price Level in a Growing Economy* (Cato, 2018); and Scott Sumner, “The Case for Nominal GDP Targeting” (Mercatus, October 2012) <https://www.mercatus.org/publications/monetary-policy/case-nominal-gdp-targeting>

and perhaps the 3 percent rate. *The Economist* (April 17, 2021) challenged Fed officials on the implementation of AIT:

A new monetary-policy framework it adopted in August dictates that it should push inflation temporarily higher than its target after recessions, to make up lost ground. The problem is that nobody knows by how much or for how long it wants inflation to overshoot after the pandemic. With the risks of an inflationary episode greater than they have been in years, the ambiguity is an unfortunate additional source of uncertainty.https://www.economist.com/leaders/2021/04/17/the-fed-should-explain-how-it-will-respond-to-rising-inflation?itm_source=parsely-api

The Fed resists announcing that nominal GDP is an important policy target – perhaps because it was not so many years ago that it formally announced an inflation objective, and it hopes not to appear inconstant? In any event, announcing an NGDP target would in fact overcome the ambiguity implicit in an AIT. As the real growth component of NGDP grew, the Fed would be committed to reducing the inflation component. Quite plausibly, the Fed is now working with an unannounced NGDP target.

Surely relevant in estimating near-term inflation prospects is that we consider another end-variable: the dollar exchange rate. The dollar has been nearly flat from 1.21 to the euro on December 31, 2020 to the identical rate on June 12, 2021. Over the same period, the dollar fell by just over 3 percent against sterling, while rising by 6 percent against the Japanese yen; these are almost routine fluctuations. There is no data from FX markets to suggest that unusual US inflation (or deflation) is imminent. This evidence is quite different from that for volatility during the Great Recession: a 20-odd percent drop in the dollar-euro value from late 2007 into July 2008, followed by a dollar recovery of the same proportion from that date into November 2008.

For the moment, the Federal Reserve appears to retain control.

CAPITAL FLOWS AND FISCAL DEFICITS

In an important new book, *Trade Wars are Class Wars*⁵, authors Matthew Klein and Michael Pettis argue that current account surplus countries, led by China and Germany, under-consume relatively to national income because of the way income is distributed domestically. This argument is a reversal of the conventional view that the US over-consumes and under-saves. But Klein-Pettis are on solid ground inasmuch as trade deficits -- including for the US over several decades -- and surpluses are “nearly always” induced by financial transfers.⁶ The authors bring together consideration of growth and inflation on one side with discussion of damage from income inequality (“class wars”) on the other. Their study deserves a longer review than it will get here, but I offer a conclusion and an inference.

⁵ Matthew C. Klein and Michael Pettis, *Trade Wars are Class Wars: How Rising Inequality Distorts the Global Economy and Threatens World Peace* (Yale, 2020).

⁶ Robert Mundell, “Trade Balance Patterns as Global General Equilibrium: The Seventeenth Approach to the Balance of Payments,” in Mario Baldassarri, Luigi Paganetto, Edmund S. Phelps, *International Economic Interdependence, Patterns of Trade Balance and Economic Policy Coordination* (St. Martins, 1992); p. 49.

When China or Germany (or Japan, the Netherlands, or any country seeking to add to its national reserves⁷) consume less than they produce, large amounts of savings look abroad for placement and safe harbor, just as large amounts of surplus product look for markets. As the US dollar is the *de facto* world currency, the equivalent of hundreds of billions of dollars of foreign savings seek refuge every year in US dollar instruments – preferably treasury or government agency issues. The inflow of finance to the US (and, to a lesser extent, to Britain, France, Canada and Australia) makes it inevitable that these countries will consume more than they produce, hence that they will run current account deficits. Problematic consequences for deficit countries have included 1) a flood of manufacturing imports⁸; 2) skewing of income toward financial sectors that manage the capital transfers; and 3) lots of capital sloshing around that will increase debt-to-income ratios in deficit countries, and be drawn into speculative vehicles, eg subprime mortgages in the US prior to 2008.

To “fix” this global imbalance would require pressure on China, Germany and others to redistribute more income down to households. For China, Klein and Pettis suggest increased dividends from state-owned enterprises to be paid to employees, a wealth fund, recognition of property rights, an income tax for higher-earners, lower consumption taxes, and an end to the hukou system (which restricts movement and re-location.) For Germany, they recommend higher inheritance taxes, lower taxes on most labor, and regulatory integration with the European Union – including with what have been deficit countries within the bloc. For both, the authors recommend fiscal deficits that should be used to direct savings to domestic purposes. (The authors propose an international conference, call it Bretton Woods II, to accomplish this.) If we do not see the kind of reform that would fix systemic imbalances, the US might soon look for ways to discourage or block massive capital inflows. Current trade imbalances result from these capital movements – not the other way around -- so any effort to address the problem through the usual “trade” negotiations will fail.

Absent such reform, the US could explicitly provide more of the debt instruments that are in such international demand (including for the purpose of augmenting national reserves across much of the developing world); that is, the US might run larger budget deficits. Very low, even sub-zero interest rates on US and several European treasury securities suggest that supply of such securities does not meet global demand. Klein-Pettis note that there is now no shortage of funds for corporate or other private sector outlays, and indeed that corporations, net, are spending less than they generate in cash flow, and are often using excess cash to repurchase

⁷ Also: during 1999-2013, the world’s currency reserves grew from \$1.9T to 11.6 T, the bulk of it held in dollars; to grow reserves at such a rate required constraint on domestic expenditure in much of the world. *Stastica*. “Development of Global Currency Reserves from 1995 to 2019.” <https://www.statista.com/statistics/247281/development-of-foreign-exchange-reserves-worldwide/>

⁸ Take a stylized example. Imagine a world with two countries, US and CH, each with 100 units of production (50 each of goods and services) and 100 units of consumption. Now imagine that CH doubles production to 200, but its domestic consumption stays at 100 units. CH then exports 100 units of capital to US – which absorbs the capital and increases its consumption to 200. It is easier for CH to export goods than to exports services, so most of the increased capital in the US will go to consuming imported goods. The US as a whole is better off; it consumes more goods, and, because it is richer than previously, also demands more services. Consequently, a portion of the 50 units of production capacity in the US that previously went to producing goods will shift to providing services. Some US workers who previously produced goods will have lost their jobs. The magnitude and composition of these shifts will vary from one situation to the next. Also see, eg, Ronald McKinnon (2013), “The US Savings Deficiency, Current Account Deficits, and Deindustrialization: Implications for China”; in *Journal of Policy Modeling*, Vol. 35, Issue 3.

stock. They cite evidence that US private equity firms are unable to deploy trillions of dollars.⁹ Hence, they argue, this is not the time to funnel massive international savings into private sector projects in deficit countries. It would be more stabilizing, and better for longer term growth, if the US were to run larger fiscal deficits and hence use proceeds – as suggested above for China and Germany -- to upgrade infrastructure and to counter growing income inequality.

Whether or not anyone in the Biden Administration is using such an argument to justify growing fiscal deficits, this is the direction US fiscal policy is moving. Some will imagine massive fiscal deficits as a harbinger of inflation to come. Indeed, the longer-term impact of growing deficits is problematic; one hopes that action will be taken as indicated to moderate capital flows, and hence to reduce demand for US government securities. But in the short- and medium-term, there will be little pressure to monetize US government debt because so many foreign central banks, national wealth funds and individuals want to hold it.

A premise in Klein-Pettis is that systemic aggregate demand is stagnant because international manufacturing capacity is abundant and income distribution tilts away from consumption. Skepticism is in order: the authors often under-state the importance of monetary factors. Indeed, they see both the US depression after 1929 and the Japanese slowdown in the 1990s as driven at least in part by post-boom income rebalancing – rather than by the contractionary monetary policies in place in each case, and that are cited by most observers.¹⁰ This part of Klein-Pettis' argument recalls the stagnationist case in the final pages of the *General Theory*, where John Maynard Keynes embraced a Marxian-like argument about the decline in the rate of profit in mature economies.¹¹ But the problem in the early 1930s was lack of demand because of inadequate monetary reserves and constrained money supplies, not some secular decline in opportunities for profit. And since the 2007-2009 Great Recession, central banks have had trouble reaching their price inflation targets, and have fallen well short of what reasonable targets might be for nominal GDP growth.

This sets up consideration of monetary and debt dynamics that Klein and Pettis perhaps intend – but do not elaborate. The authors note that growing inequality is often accompanied by growing debt ratios – and they cite evidence from the US in the 1920s.¹² The premise is that those with higher incomes did more saving, and -- relative to income – less consumption. More recent evidence suggests that a savings glut at the top of the income and wealth pyramid in the US is leading to growing indebtedness among the “lower 90 percent.”¹³ The problem, given growing inequality, is that the only way consumption growth can keep pace with growth in national income is by having higher-propensity consumers take on new debt – indeed by increasing debt-to-national income ratios. By the same reasoning, were economic growth

⁹ Klein-Pettis (2020); p. 79-80.

¹⁰ For the Great Depression, see *inter alia* J.M. Keynes, *Treatise on Money* (1930); Ch. 37, Section iv.; H. Clark Johnson, *Gold, France, and the Great Depression, 1919-1932* (Yale, 1997); Scott Sumner, *The Midas Paradox: Financial Markets, Government Policy Shocks, and the Great Depression* (Independent Institute, 2015). For Japan in the 1990s, see Milton Friedman, “Reviving Japan”, *Hoover Digest*, 1998, No. 2. <https://www.hoover.org/research/reviving-japan>

¹¹ Keynes, *General Theory of Employment, Interest and Money* (1936). Keynes does not mention Marx, but he does suggest that the marginal efficiency of capital (ie, expected returns on investment,) might fall to close to zero; p. 375.

¹² Klein-Pettis (2020), p. 81.

¹³ Rebecca Stropoli, “How the 1 Percent’s Savings Buried the Middle Class in Debt”, *Chicago Booth Review*, May 25, 2021. <https://review.chicagobooth.edu/economics/2021/article/how-1-percent-s-savings-buried-middle-class-debt>

instead to be led by the lower 90 percent – by those with higher propensities to consume – consumption could increase while the ratio of consumer debt to national income would decline. Here is an added case for adopting policies that will lead to some redistribution of income and wealth in the US and elsewhere.

Given current income distribution, savings patterns and capital flows pump up debt ratios, and thereby increase financial fragility – that is susceptibility to financial default and instability. If this conclusion is correct, it raises concern that monetary expansion under conditions of high, or growing, income inequality will have a cost in generating financial breakdown – as Klein-Pettis believe it did in 2007-2008.

Getting back to inflation, my conclusion is that US government deficit spending is likely not to be a separate factor boosting price increases now, or in the foreseeable future. The world wants to hold US government debt! My inference is that weak aggregate demand for the past decade or more is, in part, a consequence of contractionary monetary policy on the part of the Federal Reserve, the European Central Bank (ECB) and other central banks. A bit of inflation, perhaps consistent with the Fed's current AIT guidelines, might be a necessary (or, at least, collateral) complement to boosting demand.

IOER AND DEFLATION

Understanding current monetary policy requires a moment of attention to the consequences of paying interest on commercial bank deposits (that is, excess reserves,) held at the central bank.

The Federal Reserve, ECB and Bank of England now operate with “floor” systems, rather than a corridor system, for guiding overnight interest rates.¹⁴ In a corridor system, the unsecured overnight market rate (called the fed funds rate in the US) is higher than whatever interest rate banks can earn by placing funds on reserve at the central bank. In a floor system, the interest rate on excess reserves (IOER) is as high or higher than the fed funds rate. The difference between the market rate and the central bank rate is the “corridor.” The Federal Reserve had used a corridor system since its founding in 1913; it began to pay interest on excess reserves (IOER) at a level as high as or higher than the fed funds rate only in October 2008, thereby collapsing the corridor into a floor system. The fed funds market, which used to be the venue for banks to meet their reserve requirements on a day-to-day basis, is now much shrunken. Banks can earn as much or more by placing reserves with the Fed as they can by lending funds to other banks – all with zero credit risk and no monitoring of interbank counterparts.

The Federal Reserve balance sheet grew from less than \$1 T in 2008 to about \$8 T in May 2021, after nearly doubling during the pandemic from March 2020. The gross increase reflects “quantitative easing” (QE) – the Fed's aggressive open-market purchase of treasury and agency securities. But most of the increase in central bank assets has been matched on the liability side by increases in commercial bank deposits. Placing deposits at the central bank stops the reserve multiplier (and hence monetary expansion) in its tracks; the impact on market liquidity of placing excess reserves with the Fed is the equivalent of performing a central bank open-market sale – it is deflationary. What is the purpose of an open market purchase if it anticipated

¹⁴ George Selgin, *Floored! How a Misguided Fed Experiment Deepened and Prolonged the Great Depression* (Cato, 2018) is an outstanding reference on the topic.

ahead of time that it will be offset by a commercial bank deposit at the Fed? Answer: it would allow the Fed to change the maturity structure of the federal debt, for example by replacing 20-year bonds held by the public with 6-month bills. Or it could replace treasuries in its own portfolio with mortgage-backed or other agency securities – thereby giving a boost to the mortgage-backed market.¹⁵

Consequences of the floor system have thus included giving the central bank a larger role in the allocation of credit than was ever intended. In immediate context, the link between Fed balance sheet management and monetary policy is more tenuous than it was before October 2008. By most accounts, implementation of IOER slowed the recovery from the 2008 -2009 nadir.¹⁶ Indeed, it was presented in 2008 as a contractionary policy – a way to keep the fed funds rate from sinking. (That was misguided; in October 2008, the US needed an expansionary monetary policy to move beyond the financial crisis.) These consequences of the floor system have been disappointing. The main reason central banks have maintained it appears to be that reducing balance sheets to pre-October 2008 size would require them to take losses on their ever-growing inventory of government security assets.

What did *not* happen in 2008-2009, or more recently as we recover from the covid pandemic, was a “helicopter drop” of new money.¹⁷ The IOER rate has closely tracked rises and falls in the effective fed funds rate over the last several years, meaning that much of the money injected through from QE has been effectively withdrawn. Ongoing QE operations have led to increases in narrow and broad money indicators, (as noted) including M4, despite the floor system. But monetary policy will move into a truly expansionary mode if, and only if, quantitative easing continues and the IOER is reduced to a level well below the market fed funds rate, thereby restoring a corridor system. Restoring an active fed funds market would end the deflationary mechanism implicit in IOER policy.

CONCLUSIONS

1. Central banks are able to target inflation rates without long lead times; the Federal Reserve is capable of responding if, and when, unexpected price trends appear.
2. US current account deficits reflect excessive savings abroad, especially in China and Germany, and consequent massive capital flows to the US. US government debt issuance can provide securities demanded nationally and internationally, without inflationary consequences.
3. The Fed’s current operating method – use of a floor system for interest rate management – carries a deflationary bias that has slowed economic growth since its adoption in 2008, and should be discontinued.

¹⁵ Ben S. Bernanke, *The Federal Reserve and the Financial Crisis: Lectures by Ben S. Bernanke* (2013).

¹⁶ Selgin (2018); pp. 90-91.

¹⁷ A “helicopter drop” has more technical definitions, but is generally an aggressive, deliberate increase in the quantity of money. The reference is to a metaphor introduced by M. Friedman.