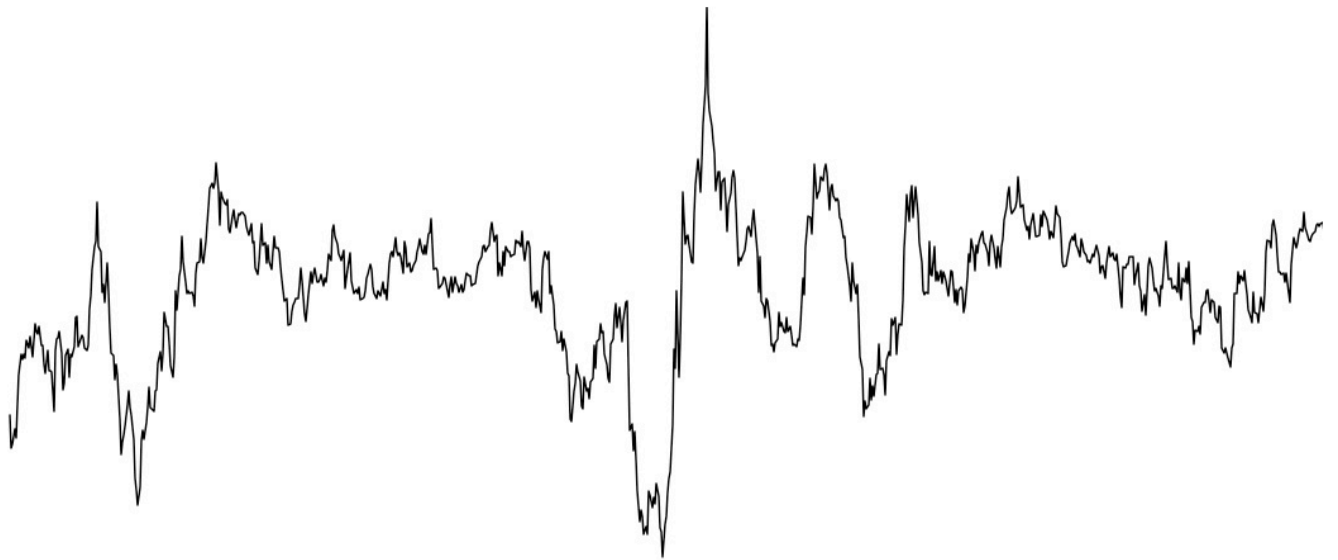


ALPHA SOURCES

OCTOBER 5, 2021



WANTED: A THEORY OF INFLATION

The more I think about the current debate about inflation, the more I am inclined towards the following remarkable conclusion.

We currently do not have a good framework to explain inflation, neither cyclically nor structurally. Perhaps more appropriately, the old consensus among economists and policy-makers on what inflation is, how it arises, and what to do about it has been severely challenged, if not shattered entirely. In a post-pandemic world of a clear, and almost textbook, inflationary mismatch between demand and

supply, this has created the odd situation in which everyone is talking about inflation, and more recently inflation expectations, concluding that [it either doesn't matter](#) or that [we don't understand how inflation works in the first place](#). Nowhere is this clearer than in the debate about whether presently high inflation is [transitory or not](#). The thrust of this discussion has as much to do with the main interlocutors convincing each other that high inflation doesn't matter, as it is about agreeing on what, in fact, transitory means.



A THEORY OF INFLATION?

Friedman (in)famously said that "inflation is always and everywhere a monetary phenomenon", but anyone who's worked with, and analysed, actual inflation data almost surely wouldn't start there. Broadly speaking, I think we can distinguish between three broad styles of inflation frameworks; the two first are cyclical, the final is structural. In the study of business cycles, and in particular through the seminal work of U.S. economists Victor Zarnowitz and Geoffrey H. Moore—building on the original work conducted by Wesley Clair Mitchell and Arthur F. Burns—inflation is a lagging indicator.

This is to say that shifts in inflation tend to lag growth in the coincident indicator, most often GDP or a monthly activity indicator such as industrial output or retail sales. This is best understood as an empirical observation in the same way as it is an empirical observation that private investment in housing, or changes in hours worked often are leading indicators for GDP.

In this framework, the main analytical approach is careful observation and recording of past business cycles, with the aim to form hypotheses on how future business cycles will play out. As

you might imagine, if we want to predict where the economy is going, lagging indicators aren't afforded much attention. This, in itself, is an interesting point in the context of inflation targeting central bankers. When analysts sometimes joke that monetary policymakers are driving while looking in the rear-view mirror, this is, in fact, exactly what they're doing in the context of the type of business cycle analysis just described.

That said, the idea, and empirical observation, that inflation often lags in the general business cycle ties in with simple theory and economic intuition about what the underlying drivers of inflation are. Businesses do not raise prices just because they observe that demand in one period is higher than they expected. They wait, just as they wait before lowering them in response to a dip in demand.

This notion that prices are "sticky" is a well described phenomenon in economics. Similarly, and important for what comes next, the labour market can be viewed through the same lens. Businesses don't rush to take on new workers in response to a brief spell of above-average activity, just as well as they will be reluctant to get rid of workers



on the first sign that demand for their products or services are waning. After all, if demand picks up again quickly, they will be under-staffed, facing expensive costs to rehire. Similarly, if they hire too quickly, they could end up with excess capacity. This simple tale of prices and labour serves as a bridge to a more theoretical approach to inflation, which ultimately forms the basis of the full-fledged New Keynesian Phillips Curve model, which has given rise to a number of inflation-driven policy rules, the most famous of which is the Taylor Rule.

In this world, inflation is the result of a mismatch between supply and demand, which gives rise to two forms of inflation, demand-pull and cost-push inflation. In the former, inflation is created by demand outstripping supply, and in the latter, higher inflation is driven by a tightening supply side. In practice, both of these may be operating at the same time, and it isn't always easy to see where on begins, and the other ends.

A Phillips-curve driven interest rule, for example, really is a special case of responding to cost-push inflation. In this framework, a reduction in unemployment, and in particular a fall below the so-called Nairu, generates an increase in wages which in turn pushes up inflation via the input cost channel. More

generally, a classic dual mandate Taylor rule is one which in the central bank's nominal interest rate is a direct function of the distance between current inflation and its formal target and the distance between the current level of unemployment and Nairu.

Finally, we have to consider secular drivers of inflation that are not easily captured via business cycle indicators. These include productivity, globalisation, demographics, and institutional quality, and the political economy itself. The main question for investors and policymakers at any given point in time is whether these drivers, on balance, are disinflationary or inflationary. This isn't easy to observe. To me, it seems as if we're now edging towards a regime that is more inflationary than the one we've have in the past three decades, but that, in the end, is difficult to falsify.

SEE NO EVIL, HEAR NO EVIL

To understand the current discourse on inflation effectively is to realise that we're now in a regime where the trade-off between growth, unemployment and inflation has shifted. More specifically, the idea that inflation is a problem, and something policymakers need to respond to, preferably early and forcefully has been relegated in favor of a focus on employment and growth. **In the modern par-**



lance, the (politically) correct view is now overwhelmingly that running the economy hot is the right thing to do. More generally, the inflationary bias of the political economy has increased.

It is important to understand that this shift hasn't happened out of nowhere. It is a change tied to the *empirical* reality that central banks have struggled to hit their inflation targets, and that unemployment has fallen to levels far below historical estimates of Nairu, without generating anything resembling real GDP growth-limiting wage and consumer price inflation.

In this sense, it is not a surprise that MMT, or some version thereof, is the talk of the town. After all, this is a theory that specifically rejects the New Keynesian inflation/unemployment trade-off, and which offers up little or no explicit framework for understanding, let alone, predicting inflation.

For investors, the story above invites a number of possible conclusions. The most obvious one to me is to call the consensus' bluff. When economists and policymakers conclude with confidence that inflation is transitory, or emerge from the proverbial closet proclaiming that they never believed in inflation expectations in the first place, they're really doing one thing

more than the other. Specifically, they're just as much professing allegiance to the politically correct view of the day, as they're making a sound analytical argument for why inflation is going to be transitory. After all, how do they know?

The more general question for investors is whether any of the old theories on inflation, including Friedman's old adage, really are as defunct we we're being told. **It's difficult to tell, but my shout is that investors should now act as if inflation is an imminent and under-priced risk.**

I mean something very specific about this. **The idea that investors writ large are short volatility in effect is equivalent to the idea they're short inflation.** Crucially, the response to this reality should not be some version of the martyrdom practiced by the so-called perma-bears. But rather the cool and collected realization that almost no matter what you within a framework of traditional asset allocation will leave you short these two market factors.

Once this is understood, investors can go looking for specific ways to minimize or hedge this exposure. Last year, I speculated that value stocks might be one way, but there are others too. Investors should spend some time looking for them.