Perspectives on Inflation, Monetary Policy, and the Bernanke Blanchard Paper

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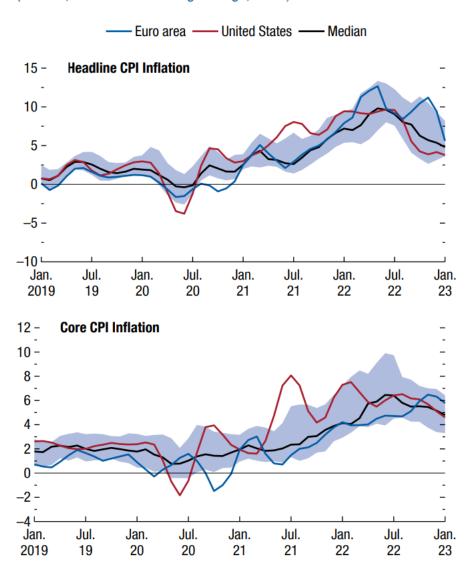
Persistent sustained surge in price inflation is a distinctive and distressing reality of the post pandemic *global* economy

Coincidence? - No Common factors ? - Yes

Core Inflation in the "G3"

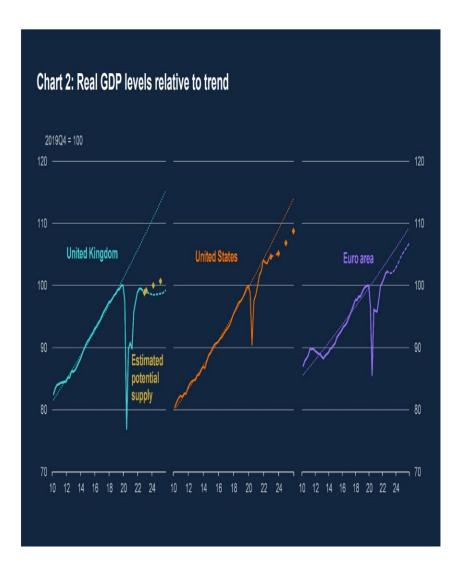


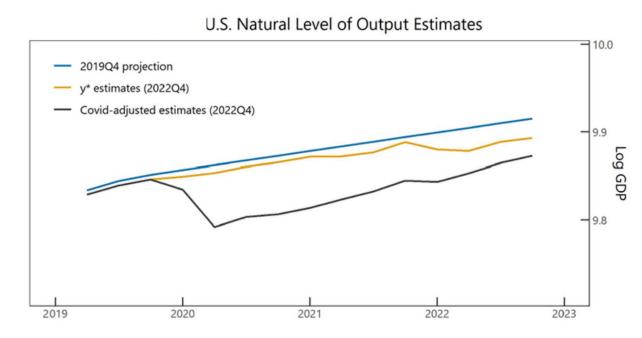
(Percent, three-month moving average; SAAR)



The figure shows the distribution of headline and core CPI inflation developments across 18 advanced economies and 17 emerging market and developing economies. Source: IMF

Common Factors – Decline in Post Pandemic Aggregate Supply Consistent with 2% Inflation Target





Source: Bank of England

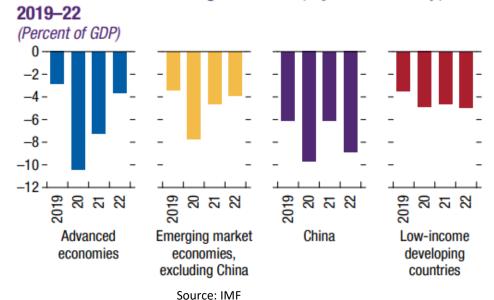
Common Factors – Fiscal and Monetary interventions in support of aggregate demand that proved to be...

Ex post too accommodative relative to post pandemic aggregate supply...

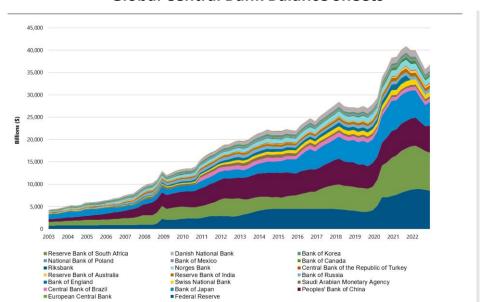
But according to critics were ex ante too accommodative even relative to pre pandemic aggregate supply assumptions

June SEP projected 2021 GDP growth of 7 % - it came in at 5.7% – not due to insufficient demand!

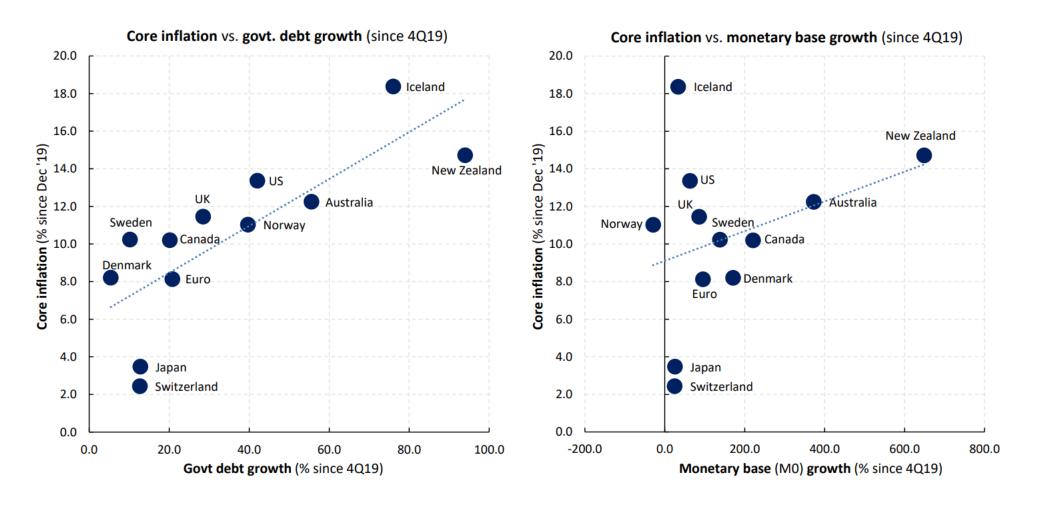
National Budget Balances, by Income Group,



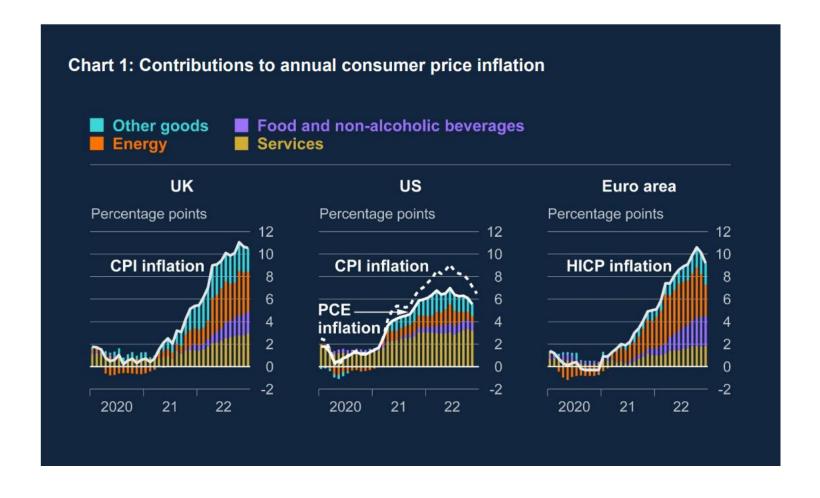
Global Central Bank Balance Sheets



Cross Country Variation in Government Debt Growth Correlated with Cross Country Variation in Inflation - much less with c.c. variation in monetary base



Common Factors – Large and Thus Far Persistent Changes in Sectoral Relative Prices Goods/Services...



Source: Bank of England

Some Facts about AE post pandemic inflation and central bank policy response*

Inflation in AEs is well above Inflation Targets now 3 years into the reopening

Core Inflation in AEs is well above Inflation Targets now 3 years into the reopening

NO AE Central Bank Began to Hike Rates until inflation exceeded target

Almost all AE Central Banks delayed rate hikes until Core Inflation Exceeded Target

These Central Banks Chose to "Fall Behind the Curve". Why?

Country	Core CPI Measure name	Ref Rate Name	month of first rate hike post pandemic	Core inflation before first rate hike	first month Core inflation above 2% + stayed	Core Inflation (most recent)	Headline Inflation (most recent)
USD	US Personal Consumption Expenditure Core Price Index YoY SA	Federal Funds Target Rate - Upper Bound	3/16/2022	5.42	3/31/2021	4.60	5.00
CAD	Bank of Canada Core Inflation Index Trimmed Mean YoY	Bank of Canada Overnight Lending Rate	3/3/2022	4.40	3/31/2021	4.40	4.30
NZD	RBNZ New Zealand CPI Sectoral Factor Model Tradable Core YoY%	Reserve Bank of New Zealand Official Cash Rate	10/6/2021	2.60	6/30/2021	4.90	6.40
NOK	Norway CPI Underlying (CPI-ATE) YoY%	Norway Deposit Rate Norges Bank Announcement Rate	9/23/2021	1.00	2/28/2022	6.20	6.50
EUR	Eurostat Eurozone Core MUICP YoY NSA	ECB Main Refinancing Operations Announcement Rate	7/21/2022	3.70	11/1/2021	5.70	6.90
CHF	Switzerland Core CPI YoY	Switzerland National Bank Libor Target	6/16/2022	1.70	8/1/2022	2.20	2.90
AUD	Australia CPI Trimmed Mean SA YoY	Australia RBA Cash Rate Target	5/3/2022	3.80	9/29/2021	6.60	7.00
GBP	UK CPI Ex Energy Food Alcohol & Tobacco YoY	UK Bank of England Official Bank Rate	12/16/2021	4.00	8/31/2021	6.20	10.10
SEK	Sweden Underlying Inflation Rate CPIF excluding Energy YoY%	Sweden Repo Rate (Decision Rate)	4/28/2022	4.10	1/31/2022	8.90	10.60

^{*}Japan is of course an AE but is excluded from the table since under Kuroda's QQE the BOJ wanted inflation to exceed the target (which is has) to anchor expectations at the 2 % target

Bank of Canada essay on Looking Through Supply Shocks

"Starting in mid-2021, as inflation started to rise globally, many central banks went through similar sequences of responses. First, they looked through the shocks in the sense of not reacting to rising inflation. This inert response was typically defended by pointing to the supply-side origins of the inflation as well as the likelihood that high inflation would prove to be temporary. However, when inflation shocks kept materializing, central banks pivoted to a much more aggressive policy stance. Policymakers then spent considerable effort defending the pivot as being necessary to anchor expectations in order to avoid igniting a wage-price spiral."

From Beaudry, Carter and Lahiri, Looking Through Supply Shocks versus Controlling Inflation Expectations: Understanding the Central Bank Dilemma, Bank of Canada Working Paper 22-41, September 2022

Failures of Monetary Policy Frameworks?

These AE Central Banks are all Inflation <u>Targeters</u> and the Fed adopted an evolution of IT in August 2020 with Flexible Average Inflation Targeting.

<u>So</u> if the documented inflation overshoots and the choices to fall behind the curve represent framework failure, they represent – at least for this episode - failures of IT and Fait

But I don't believe that is the case . I believe these ex post monetary policy errors were errors of tactics, not of strategy . Tactical misjudgments in fog of war.

What did the Fed Know and when Did they Lift Off?

The Fed had offered guidance it would follow a "taper hike shrink" sequence of policy normalization.

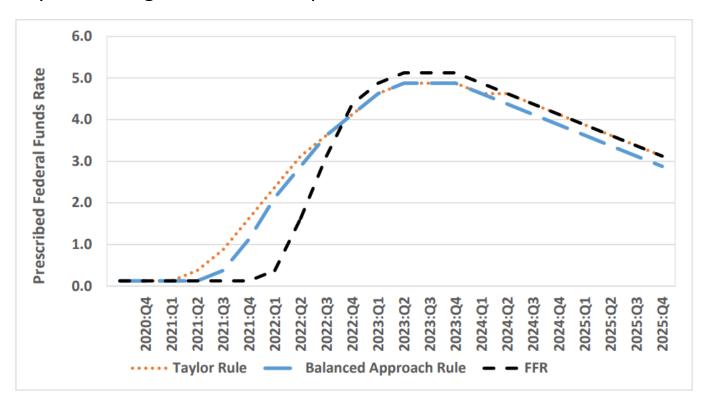
It chose to honor this and to delay lift off until the the QE taper concluded in March 2022

Delaying lift off until inflation reached 2 and unemployment reached U* (per September 2020 FOMC guidance) was a choice of policy tactics but was not required by the FAIT.

Moreover, even those stringent FG conditions were met by December 2021, just 3 months after TR signaled lift off in September 2021

I argued as VC in several speeches - Brookings (2020) - that the cleanest way to implement Fait would be to adopt the TPLT tactics of Bernanke (2019): lift off when inflation reaches target then revert to an inertial Taylor Type Rule to return inflation to target from above.

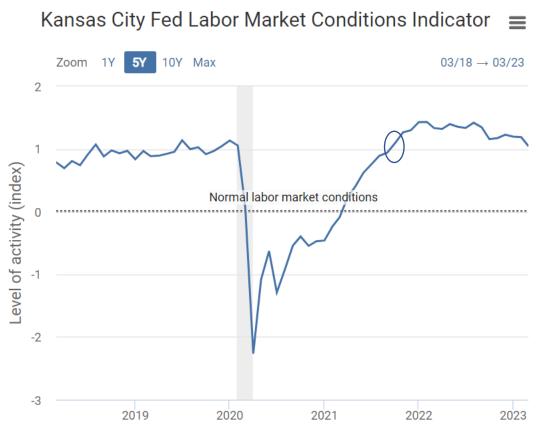
Taylor Rule signals lift off in September 2021. Fed Lifts off in March 2022



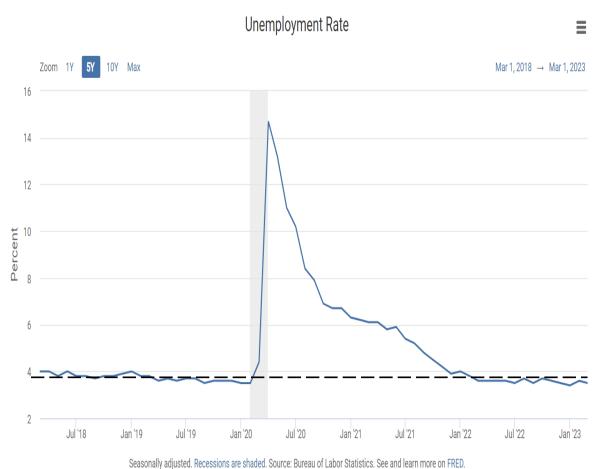
Inertial policy rules From Papell and Prodhan (2023), "The Fed is Following a Taylor Rule"

Between September 2020 and December 2022, authors use real-time inflation and unemployment data that was available at the time of the FOMC meetings. Between March 2023 and December 2025, they use inflation, unemployment, and real FFR in the longer-run projections from the December 2022 9EP.

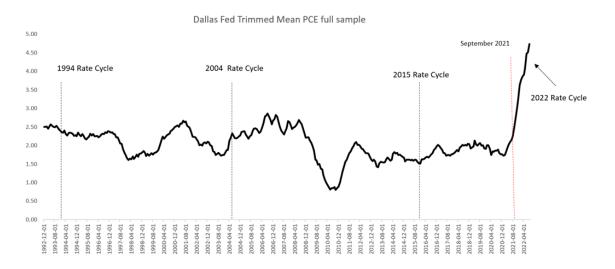
The Conditions for Lift off Laid out in the September 2020 FOMC Statement were Met by December 2021, just three months after they were satisfied for the Taylor Rule!





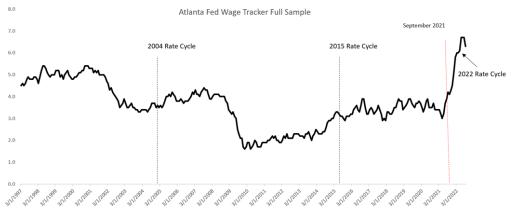


In the Third quarter of 2021, Broad Based Price and Wage Inflation "Went Hockey Stick".....

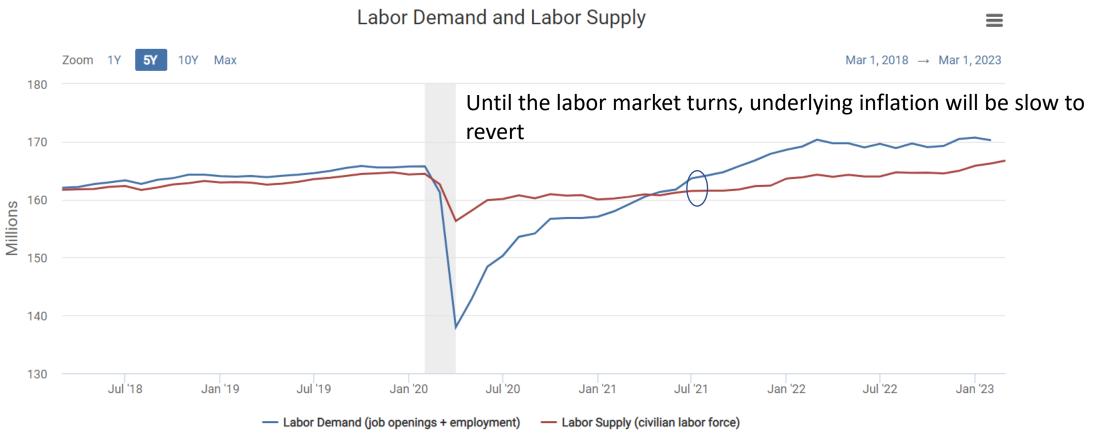


.....With level of real GDP 2 % below CBO Potential

..with u rate at 5 and prime age age LFP well below prior peak



....But V/U had already reached its Previous Peak by fall 0f 2021



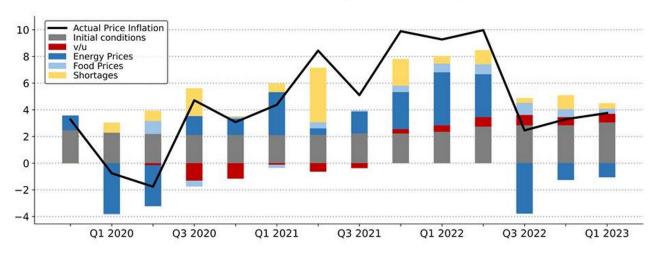
Seasonally adjusted. Recessions are shaded. Source: Bureau of Labor Statistics. See and learn more on FRED.

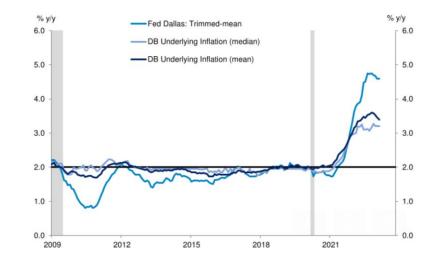
Finally, Some thoughts on the Bernanke Blanchard Paper

In the decomposition ...

- Most of the inflation overshoot in 2021 and early 2022 was "food, energy, shortages, and residual"
- Is residual picking up excess demand not captured by V/U?
- Fast forward, residual is now small and underlying inflation looks to be close to 4
- That comports with other models
- In terms of specification, authors could consider a version of model that restricts long run inflation expectations since 2010 to be anchored at say the average of the Umich survey. This then treats on recent variation as noise.

FIGURE 12. THE SOURCES OF PRICE INFLATION, 2020Q1 to 2023Q1





Thank You