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Flaws in the monetary policy strategy of the Bank of England in 2020-21. What policies can we expect in 2023?

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October 2022

"Monetary policy is not about interest rates. It is about the rate of growth of the quantity of money." **Milton Friedman, interviewed on NBC's Meet the Press, October 24, 1976.**

The Bank of England's Framework: Aggregate Demand/Aggregate Supply

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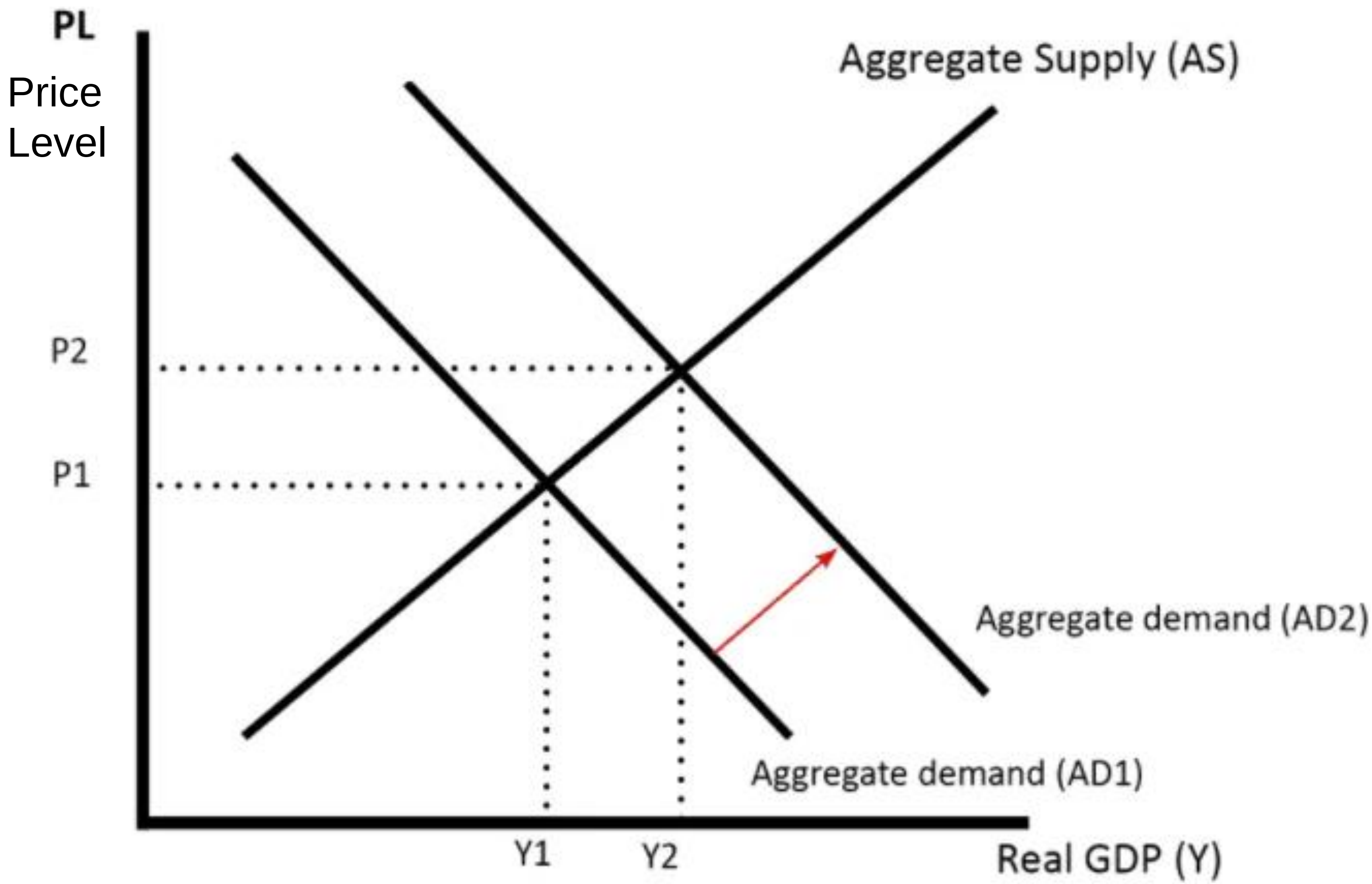
Figure 1. Textbook Version of Aggregate Demand and Aggregate Supply



Widely Differing Measures of the Output Gap

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Figure 2. UK Output Gap Measures from Various Sources (% of Potential GDP)

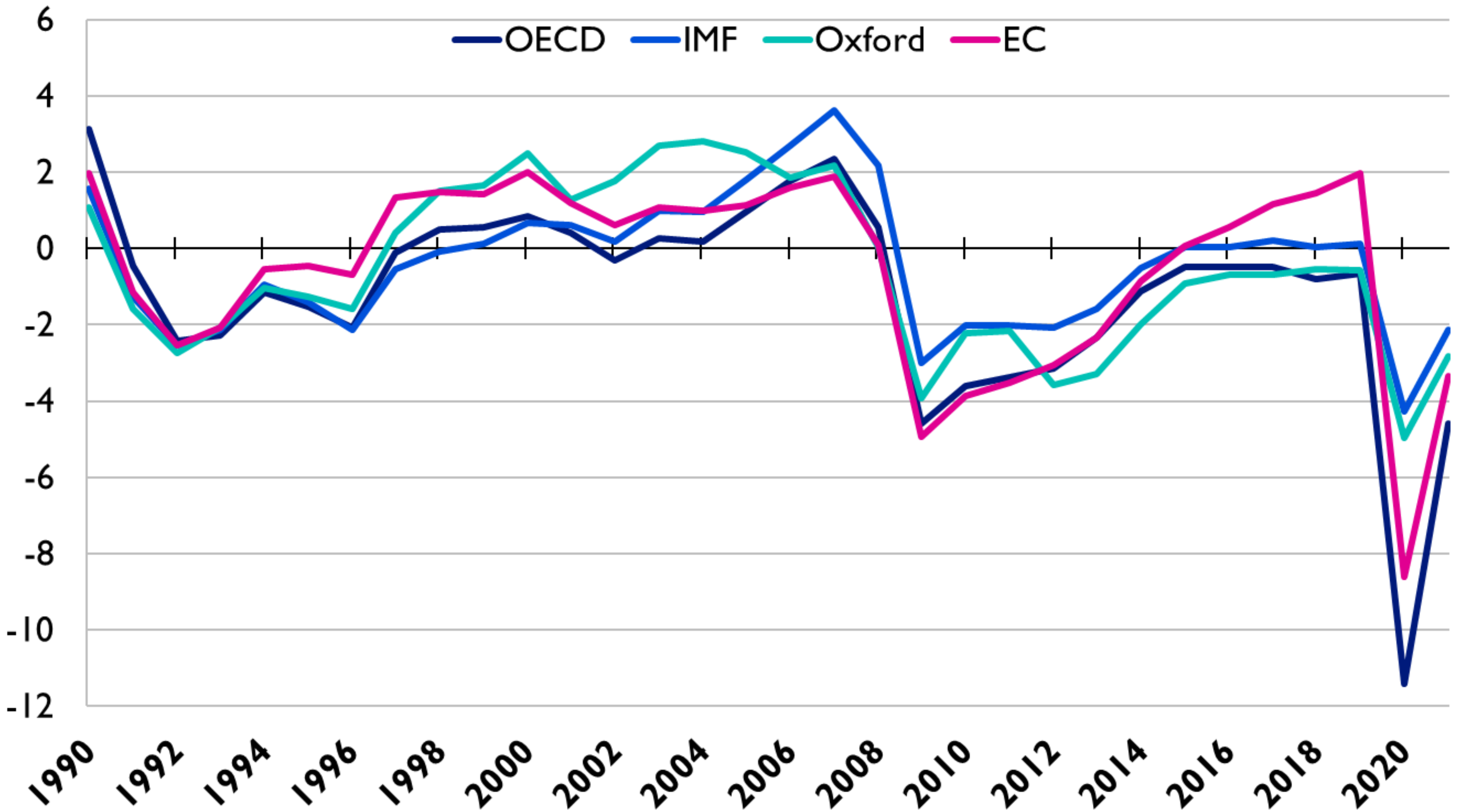
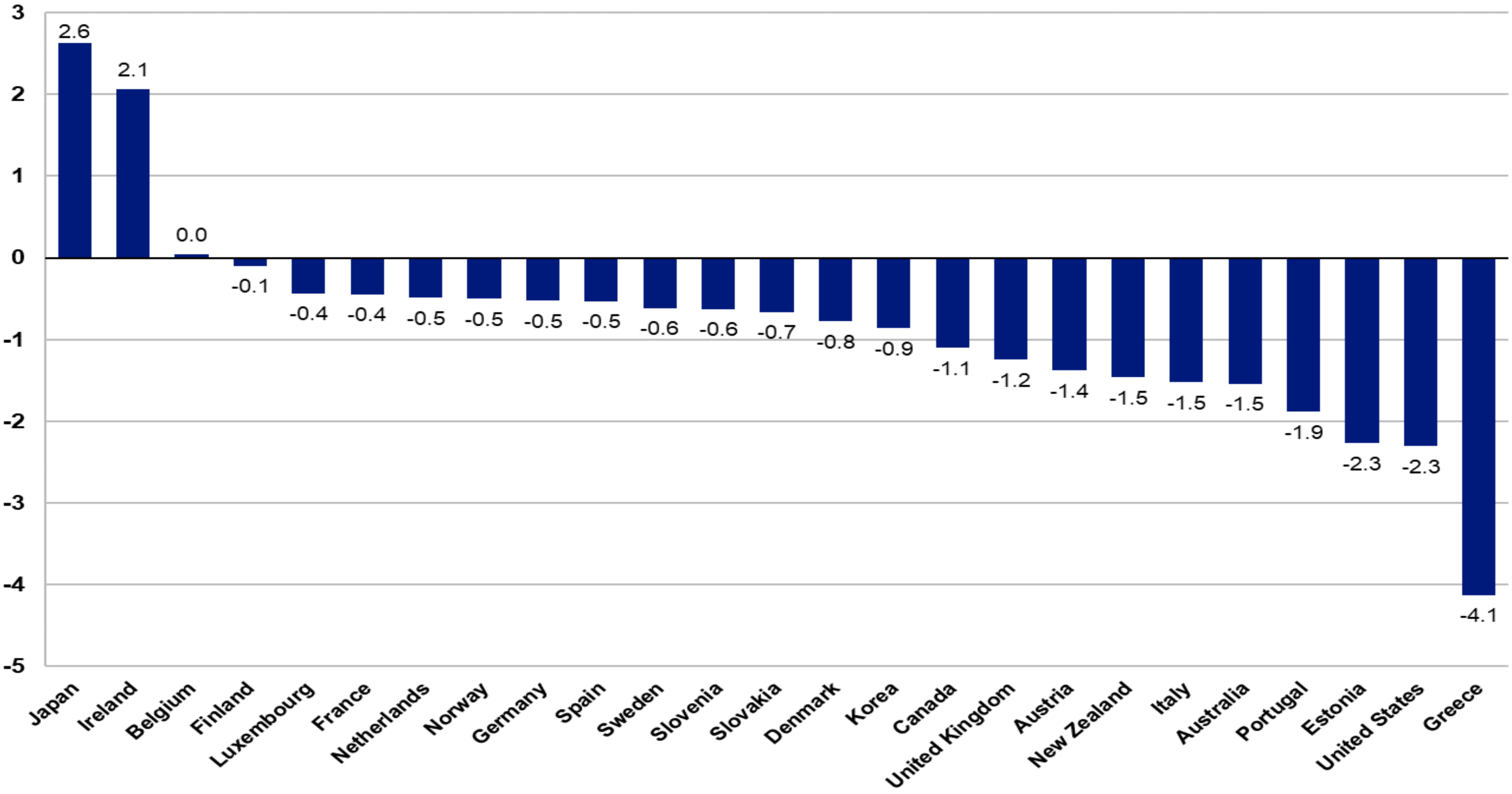


Figure 3. Output gap difference between OECD and IMF estimates (% of 2021 real GDP)



Mistakes that Central Banks can Make by Relying on Interest Rates

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Central Bank:	Raises Rates	Lowers Rates	No Change in Rates
Expected Result	Demand for loans falls, credit growth declines. Money growth slows.	Demand for loans rises, credit growth increases. Money growth increases.	The economy maintains "steady state" growth with inflation unchanged.
The "Wrong" Result	**Demand for loans is strong with market rates rising above policy rates. Money growth does <u>not</u> slow.**	**Demand for loans is weak with market rates falling below policy rates. Money growth does <u>not</u> increase.**	**Money growth slows or speeds up even with no change in the policy rate, due to market rates rising or falling.**

Matrix of possible monetary mistakes

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Figure 5. Cases when interest rate policies have gone wrong

	SUCCESSFUL POLICIES When CB Leads the Market	UNSUCCESSFUL POLICIES When CB Acts in Line with the Market or Follows the Market
CB Raises Rates	Tightens monetary conditions AND Reduces Money Growth	MCIs tighten, BUT Money Growth remains unchanged Examples: US in 1965, 1984-85 and 1994-95
CB Lowers Rates	Eases monetary conditions AND Increases Money Growth	MCIs ease, BUT Money Growth remains unchanged or declines Examples: Start of GFC when interest rates were reduced to zero bound, but UK money growth collapsed

Broad money growth creates a ceiling for nominal GDP

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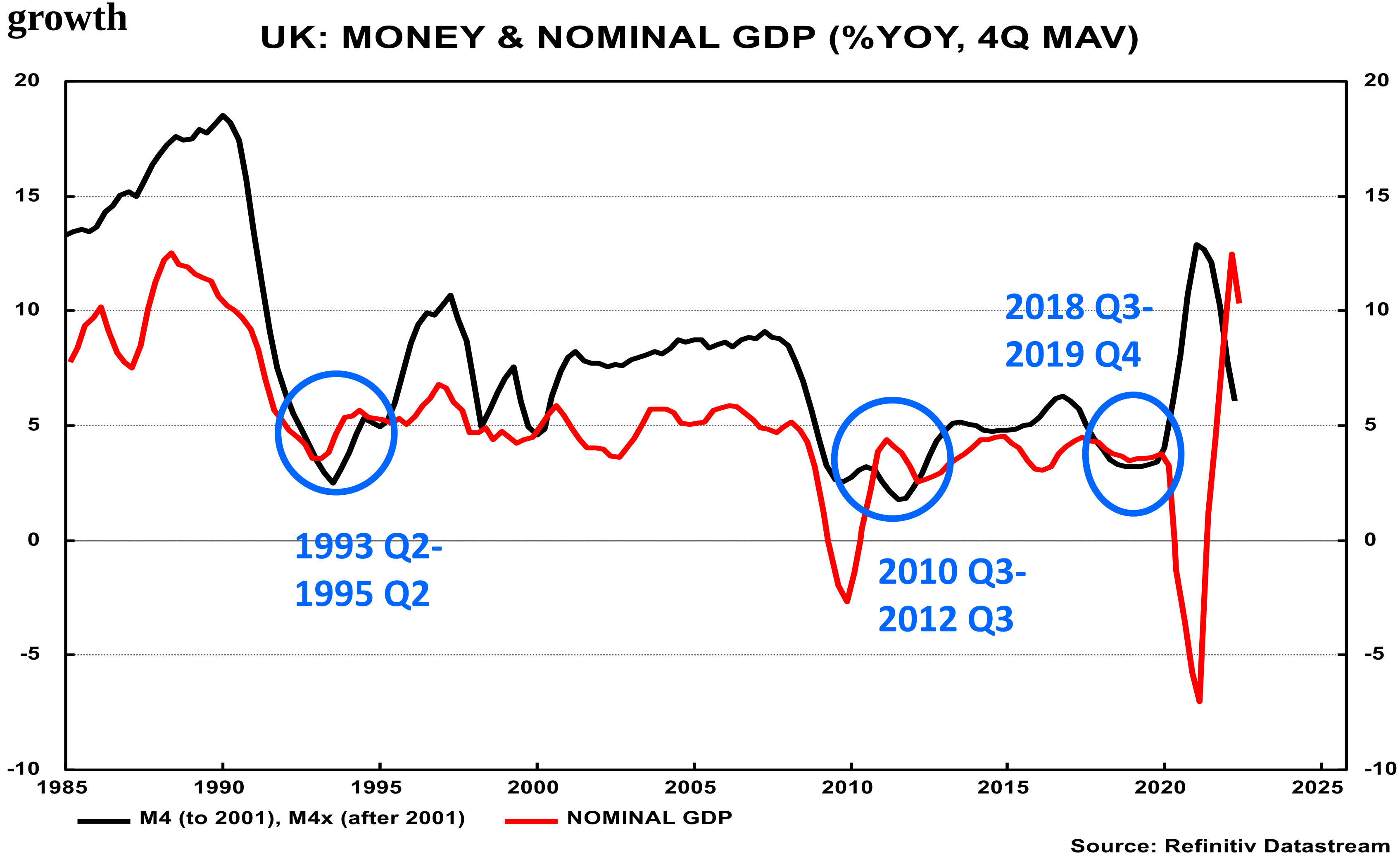
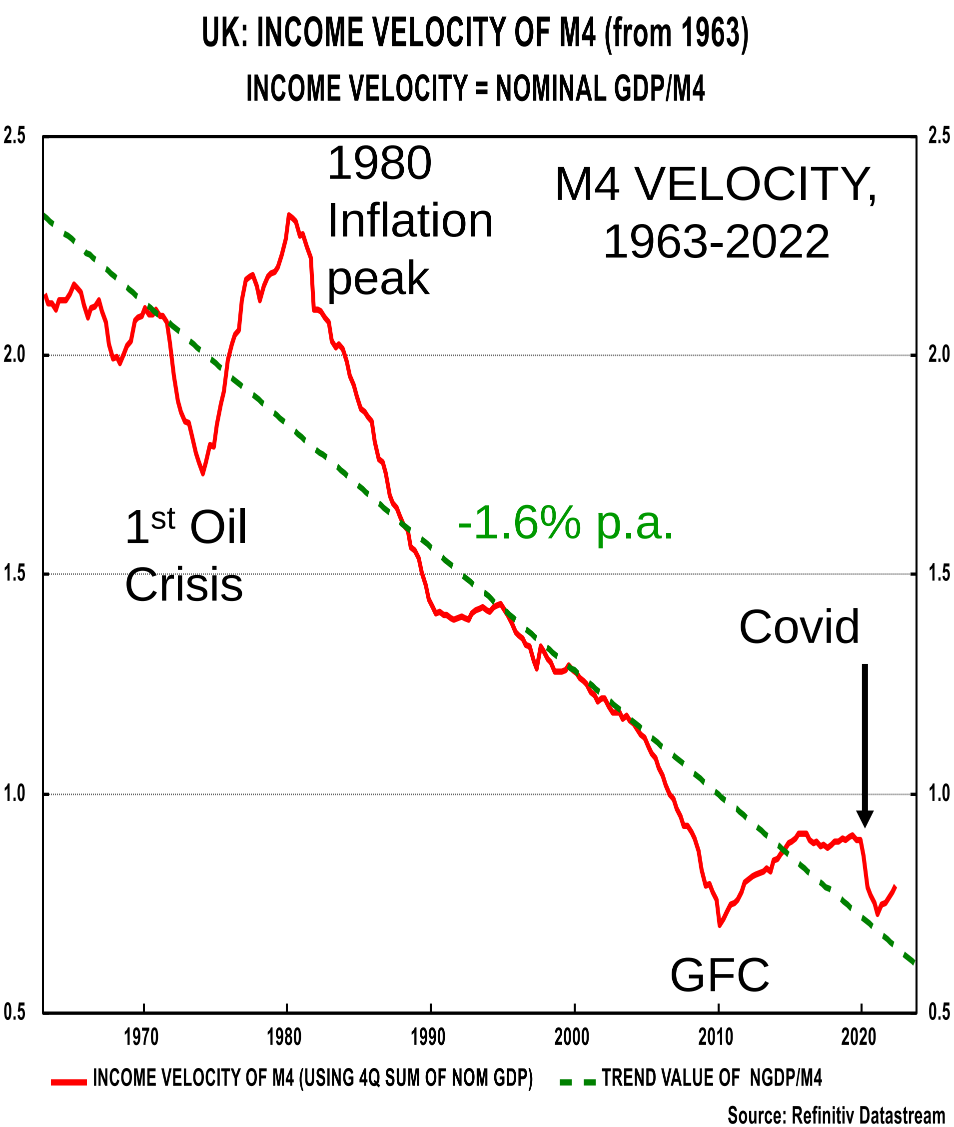
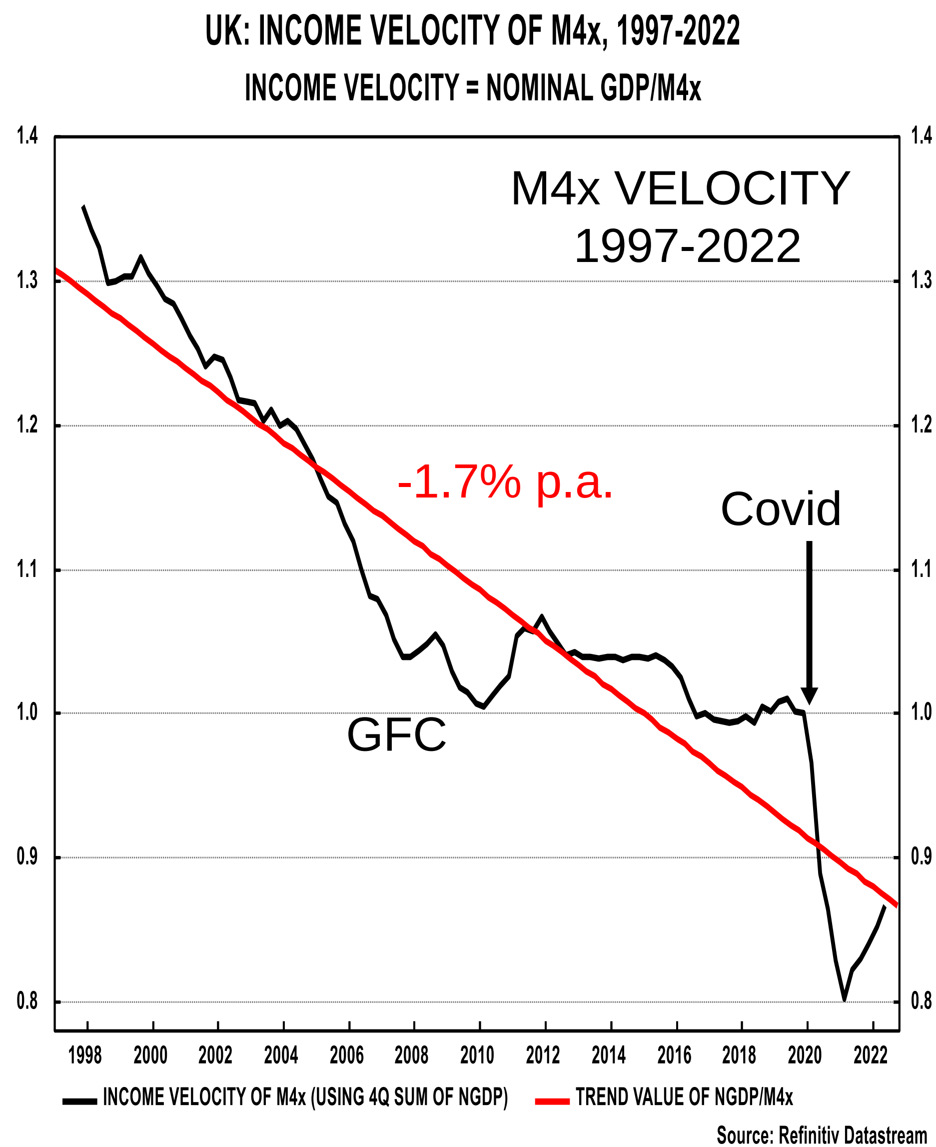
Figure 6. Annual 1.3% declines in velocity mean M4x growth always exceeds NGDP growth

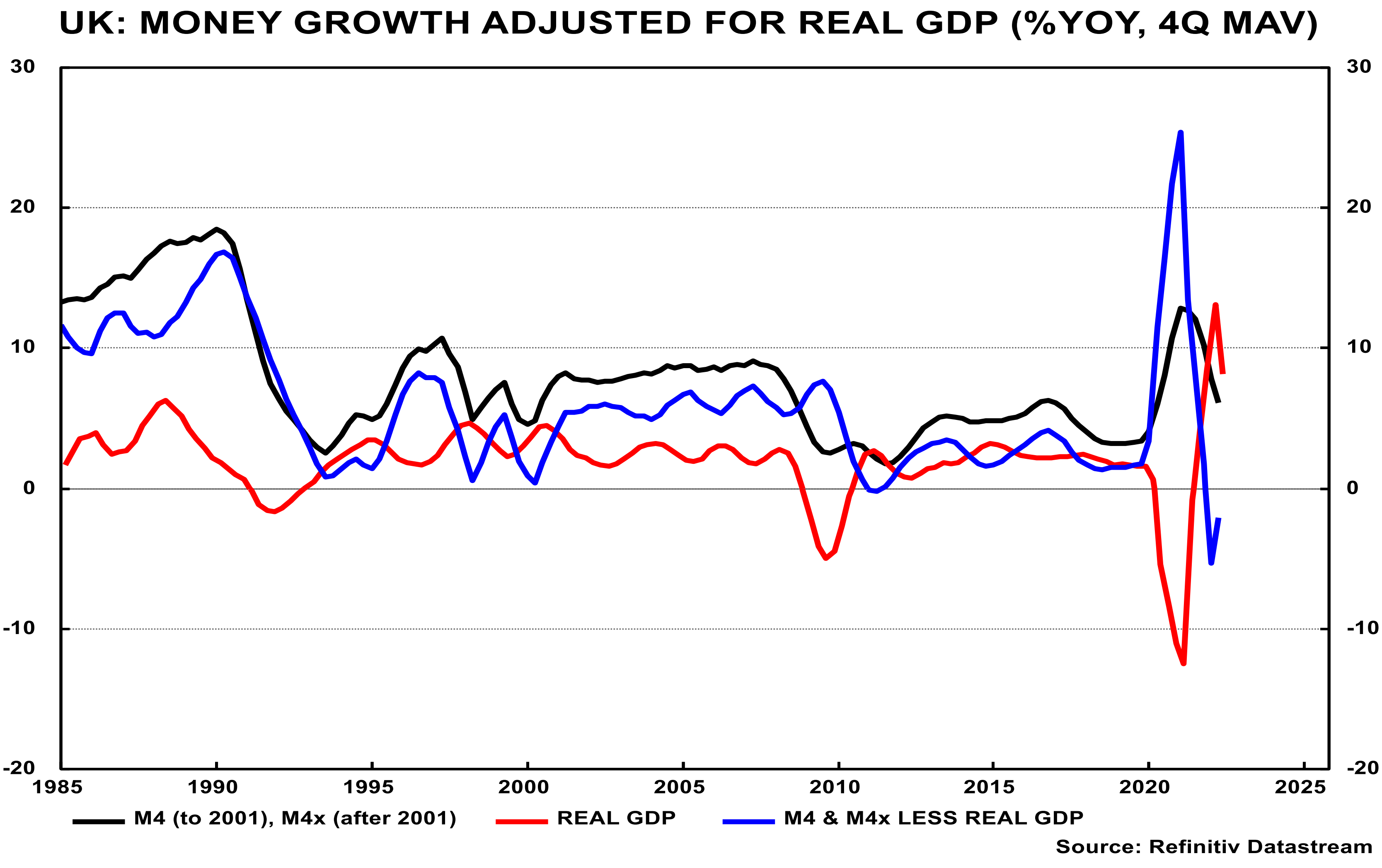


The Downward Slope of UK Income Velocity





Adjusting Money Growth for Real GDP



Adjusting Money Growth for Real GDP and Velocity

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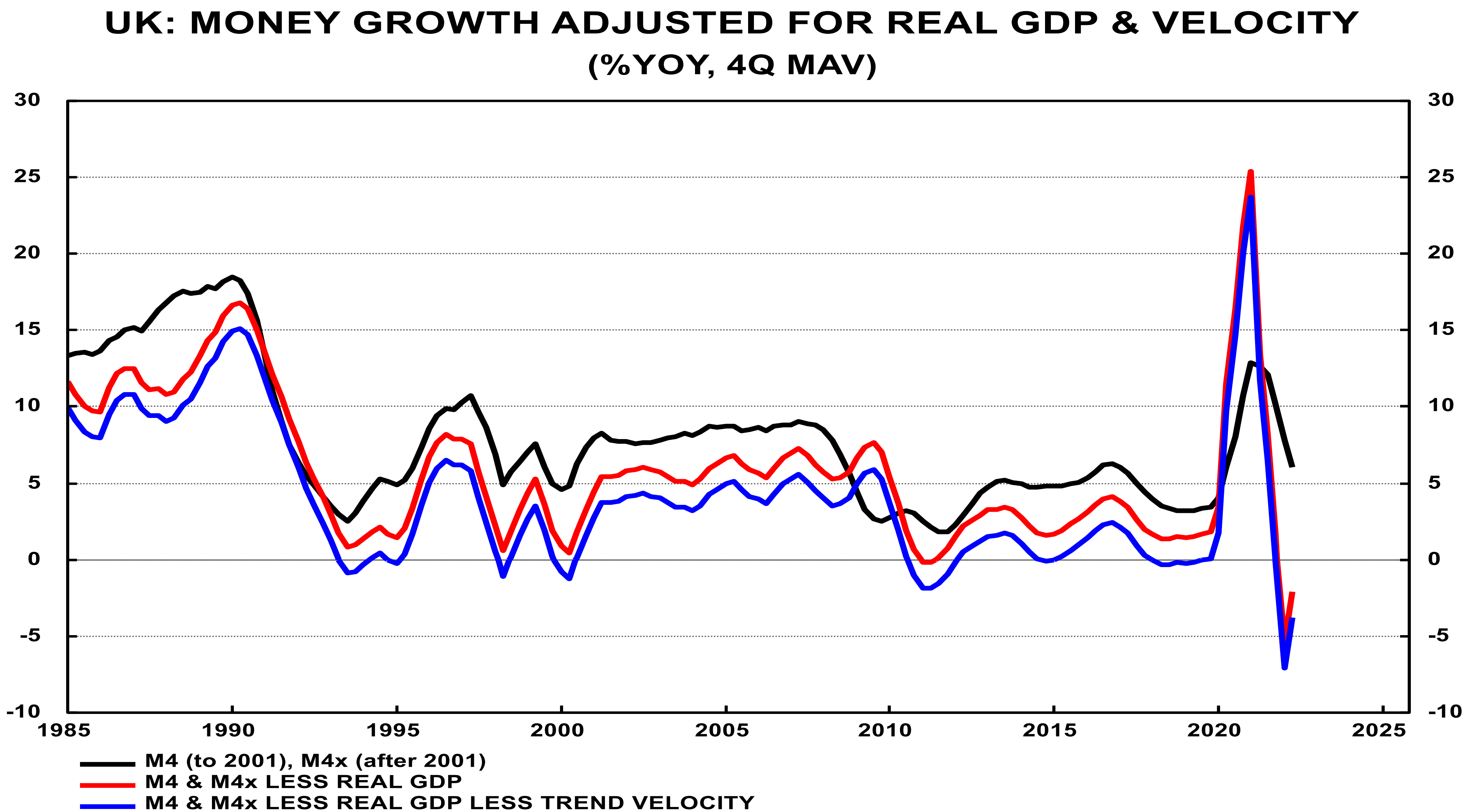

Source: Refinitiv Datastream

Adjusting Money Growth for Real GDP, Velocity and CPI Target

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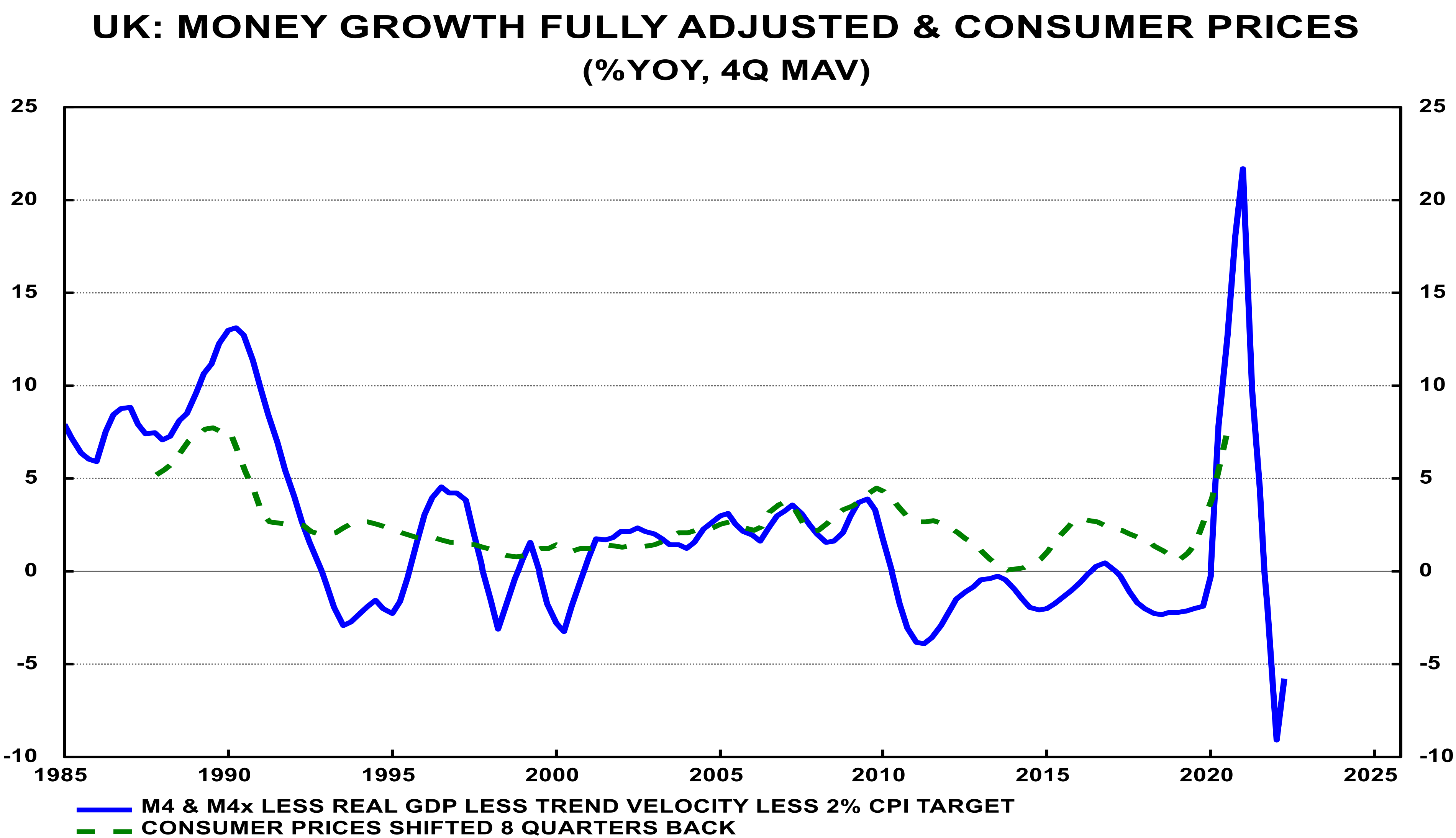

Source: Refinitiv Datastream

The BOE Accounted for 88% and banks 33% of M4x Created during the Covid Pandemic [$\Delta M4x = \Delta BC + \Delta R + \text{Other (net)}$]

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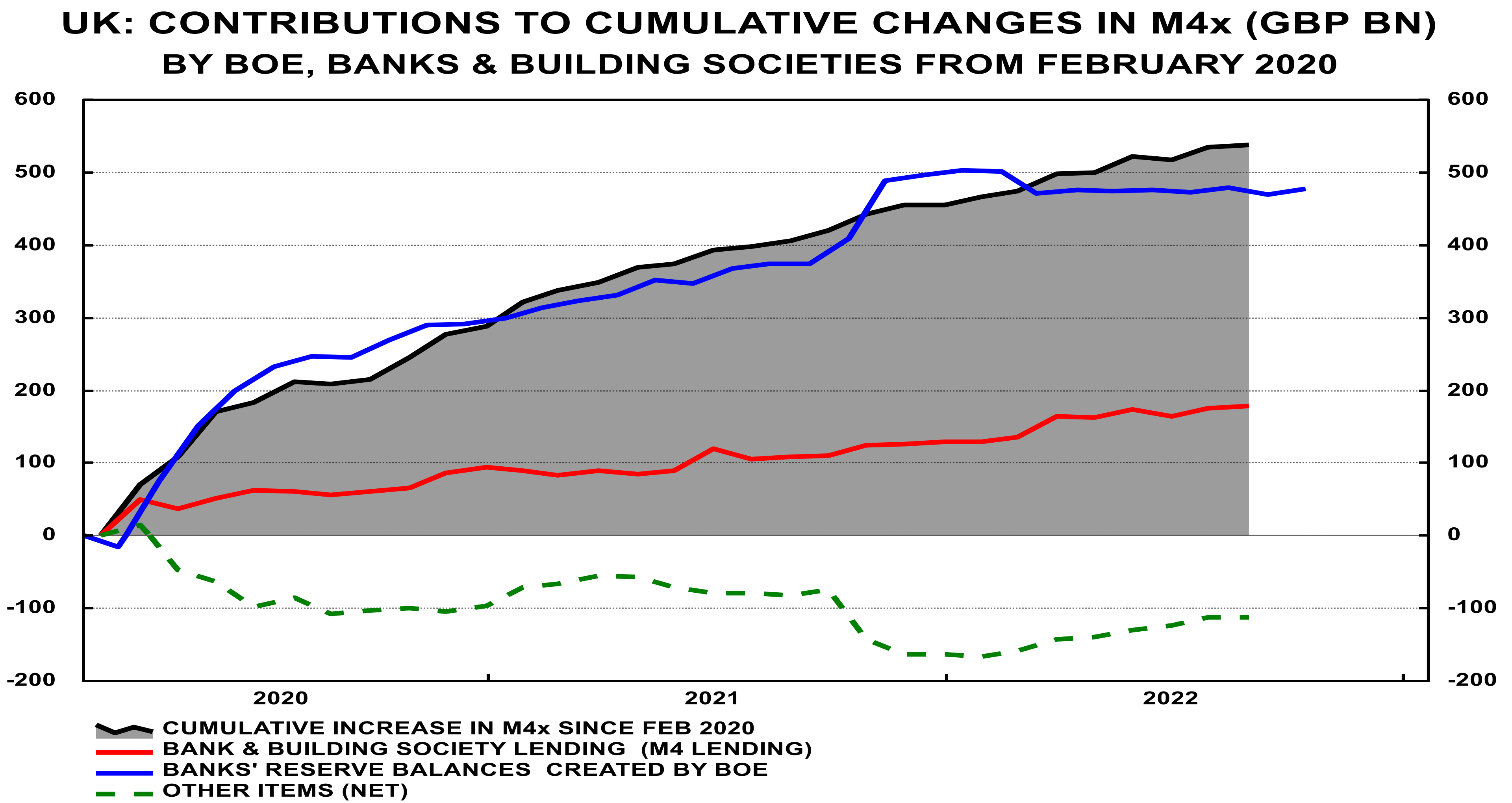

Source: Refinitiv Datastream

How will the Gap between M4x and Nominal GDP be Closed?

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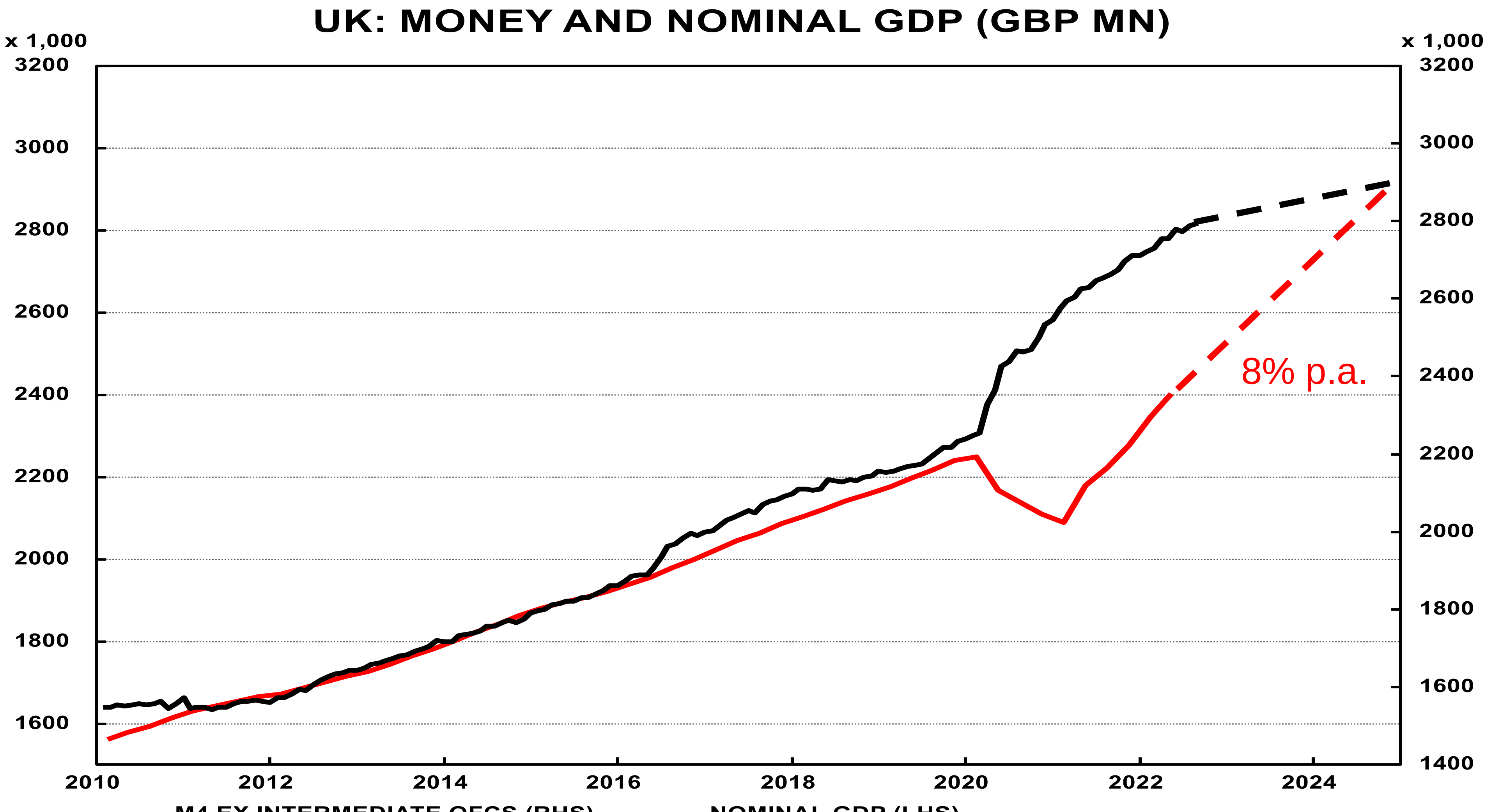
Figure 12



Source: Refinitiv Datastream

Scenario for Evolution of Variables in QTM, 2020-2025

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Figure 13

QTM symbols:	Δ M	Δ V	Δ y	Δ P	Cumulative Money Growth from 2019	Cumulative Price Increase from 2019
2015	3.9	-0.8	2.4	0.7		
2016	7.4	-3.1	2.2	1.9		
2017	4.9	-0.6	2.4	1.8		
2018	2.8	0.7	1.7	1.7		
2019	3.9	-0.1	1.6	2.1	100.0	100.0
2020	13.7	-17.1	-11.0	6.2	113.7	106.2
2021	6.6	1.3	7.5	0.2	121.2	106.3
2022	4.0	2.8	0.0	8.0	126.0	114.8
2023	3.0	5.5	-1.0	7.0	129.8	122.9
2024	6.0	5.7	2.0	5.1	137.6	129.1
2025	6.0	-1.5	2.0	2.0	145.8	131.7

Necessary Conditions for Central Banks to Conduct QT without a Liquidity Crunch

Central Bank

Assets	Liabilities
Government Securities (1)(-)	Reserve Deposits of Banks (4)(-)
	(1)(-) Treasury Deposits (2)(+)

Commercial Bank Balance Sheets

Assets	Liabilities
Reserve Deposits at Central Bank (4)(-)	(3)(-) Deposits (6)(+)
Vault Cash (Notes & Coin)	Net Worth
Loans (5)(+) Investments	

Balance Sheets of Non-Bank Public

Assets	Liabilities
Bank Notes & Coin	Loans (5)(+) om Banks
(3)(-) Deposits (6)(+)	Bond Issues
Government Securities (2)(+)	Net Worth
Other Assets	

Broad Money ↑ (Bank Notes & Coin, Deposits)

Summary of QE Unwinding, or QT

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- **QE was needed after the debt crisis of 2008-09…**
- **…because banks were not lending,**
- **…and therefore not creating enough credit to generate adequate money growth.**

- Reversal of QE, i.e., QT will require gradual reduction of Fed or BOE balance sheet
- To reverse the QE purchases…
- …It is only necessary for assets at the Fed (or BoE) to mature…
- …No need to sell securities.

- **However, even run-offs of maturing assets will cause Treasury deposits at central bank to decline, in turn requiring larger Treasury auctions of new securities …**
- **…which will result in reduced deposits at non-banks…**
- **…and therefore reduced growth or declines in M2 in US (or M4x in UK).**

- **To prevent a decline in broad money supply it will be important…**
- **…that banks are creating new or offsetting credit growth by lending, thereby creating new deposits.**

- Source: Invesco as at May 8, 2017.

Summary and Conclusion

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- Excessive money creation during the pandemic has resulted in Britain's worst episode of inflation since 1990-91. The backdrop to this strategic error in monetary policy is the Bank of England's aggregate demand/aggregate supply framework together with the MPC's failure to focus on broad money (M4x) as a key indicator of monetary policy.
- An alternative way to operate monetary policy is urgently needed. Reliance on income velocity, the ratio of nominal GDP to broad money, which has a stable downward trend of 1.7% p.a. could be used to generate an improved monetary growth outcome.
- If broad money growth was maintained in the range 4-6% p.a., there is ample empirical evidence that this would permit 1-2% real GDP growth together with an inflation rate close to the 2% target.
- The current approach to monetary policy has already produced a massive overshoot of money growth on the high side during the pandemic. There is a significant risk that it will produce a corresponding serious undershoot on the downside after QT begins in November.
- The result of an overshoot on the downside would be a major setback to asset prices followed by a more severe recession than is already likely to occur as a result of the erosion of household's real income by inflation.
- Inflation was already baked in for 2022 and 2023 due to the excess of M4x growth in 2020 and 2021. I forecast average annual CPI inflation to be 8% in 2022, 7% in 2023, and 5% in 2024.

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