

# Inflation and Interest Rates

1. Inflation – mainstream assumptions and their implications
2. Fact check – interest rates, inflation, growth – correlations and causation
3. MMT insights – origin of prices
4. Summary - conclusion
5. Market power and myth preservation

# How do economists define inflation?

- 1. Inflation: increase in the price of a basket of goods and services**
- 2. Whose inflation?**
- 3. Nothing on the origin of prices: lost in the mists of time**

# Mainstream Mantra



1. Higher rates reduce demand, less spending and investment, greater saving, stronger currency, smaller money supply: higher rates can control inflation.
2. Natural interest rate: NAIRU
3. Inflation quite rare: nearly always supply side shortage

# Mainstream Inflation Basket Challenge

**Five approaches to inflation**

**But policy reveals they assume one cause and same solution**

# Assumptions of Monetarism and Inflation Targeting

## 1. Demand pull

- Workers have too much market power – wages pull up prices
- Reduce the money supply to cause unemployment

## 2. Phillips Curve - Buffer Stock of Unemployed

- Raise interest rates

# Relationship Between MS and Prices

## Inconsistent

United Kingdom	1977	1978	1979	1980	1981	1982	1983	1984	1985
Money Supply	68.89	79.33	90.82	75	94	106	117	131	146
Gov Debt	80	96	108	114	119	143	155	167	178
Inflation Rate	14.9%	7.5%	11.4%	18.0%	11.9%	8.6%	4.6%	5.0%	6.1%
ST interest rate	7.7%	8.5%	13.0%	15.1%	13.0%	11.4%	9.6%	9.3%	11.6%

# Whatever the Scenario: Tinker with Interest Rates

## 3. The ruse of Rational Expectations?

## 4. Redistribution- Market Power

- Essential and non-essential sectors
- Profit share v wage share
- Obsess with union power/monopoly

## 5. Cost Push:— ignored or exacerbated

# Interest Rates - Correlation & Causation - Empirical Research

**1. Negative Correlation:** 1% increase in rates : inflation down by 1/10 of 1%

## **2. Positive Correlation**

CB raises rates in response to inflation = a positive correlation.

As per Fisher, as inflation rises, lenders may raise nominal rates to preserve a real return on loans

## **3. Lower rates v higher rates**

Little difference between countries that lower interest rates and those that raise rates:

if anything, lower rates, down = slightly lower inflation

## **4. No correlation**

### **Supply side shortage – eventually clears**

*Blair Fix: Interest Rates and Inflation: Knives Out Blair Fix February 21, 2023 economicsfromthetopdown.com*

## **5. Historically: lower rates do not correlate with increased growth or increased inflation**

*Vague, Richard. The Paradox of Debt: A New Path to Prosperity Without Crisis. Tychos*



# Interest Rates and Nominal Growth

## Positive Correlation

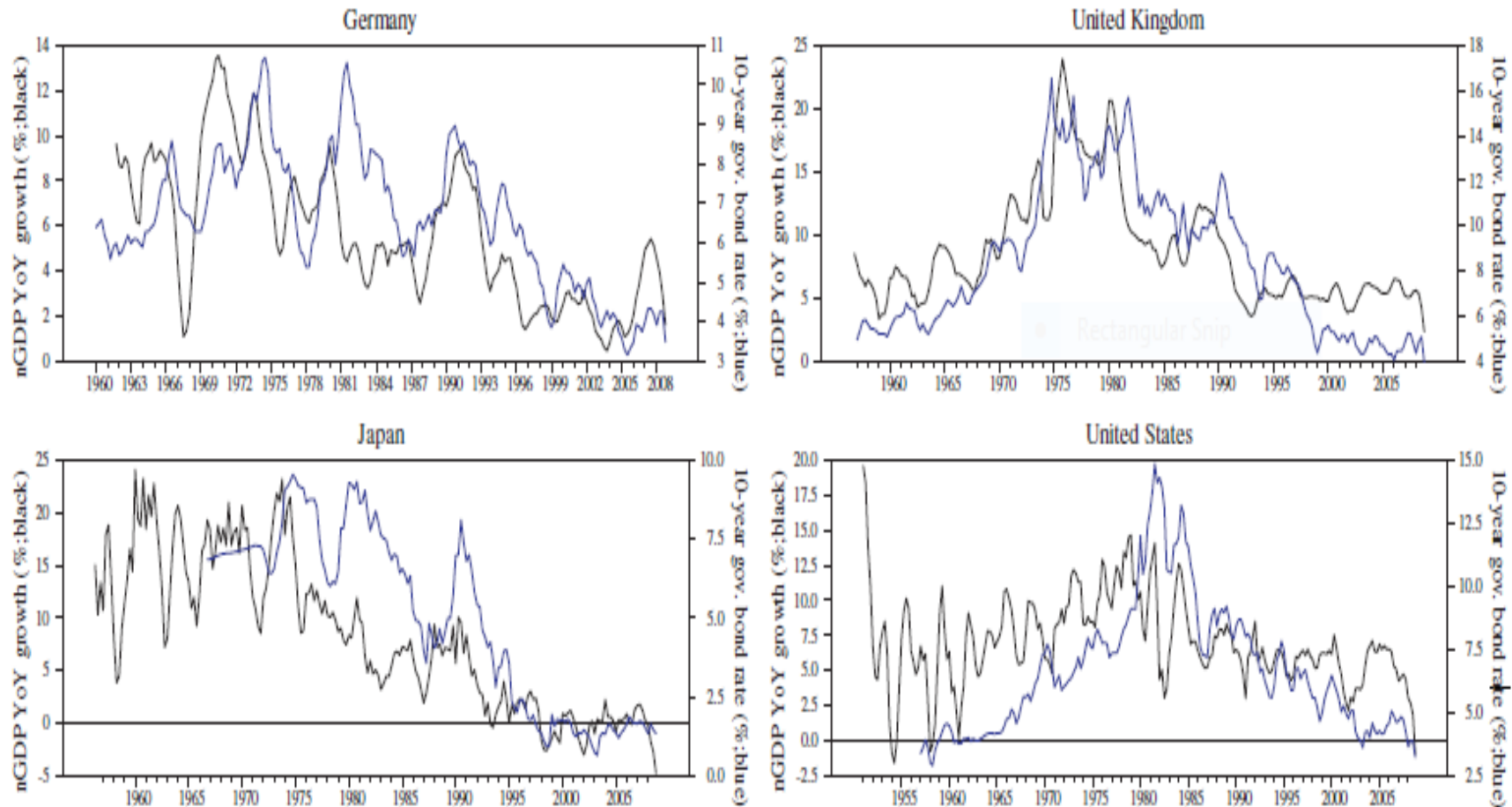


Fig. 1. Nominal GDP growth vs. 10-year government bond rates.

# Post Ukraine: Interest Rates & Inflation

<b>Japan</b>	Growth	2020	2021	2022	2023
	GDP	539,808	552,571	559,970	592,168
	Gov Deficit	(48,933)	(34,062)	(23,062)	(23,033)
	Money Supply	1,135,968	1,178,209	1,212,830	1,240,987
	Gov Debt	1,330,256	1,329,636	1,324,556	1,356,411
	Inflation Rate	0.0%	-0.2%	2.5%	3.3%
	ST interest rate	0.0%	-0.1%	0.0%	0.0%
<b>Spain</b>					
	GDP	1,119	1,222	1,346	1,462
	Gov Deficit	(113)	(82)	(64)	(53)
	Money Supply	1,382	1,465	1,517	1,518
	Gov Debt	1,346	1,428	1,503	1,575
	Inflation Rate	-0.3%	3.1%	8.4%	3.5%
	ST interest rate	-0.4%	-0.5%	0.3%	3.4%
<b>United Kingdom</b>					
	GDP	2,104	2,284	2,506	2,687
	Gov Deficit	(274)	(180)	(114)	-
	Money Supply	2,808	2,980	3,069	3,022
	Gov Debt	2,228	2,405	2,516	2,637
	Inflation Rate	0.9%	2.6%	9.1%	7.3%
	ST interest rate	0.3%	0.1%	2.0%	5.0%
<b>United States</b>					
	GDP	21,323	23,594	25,744	27,356
	Gov Deficit *	(3,020)	(2,904)	(1,194)	(1,975)
	Money Supply	19,097	21,501	21,309	20,754
	Gov Debt	27,768	29,637	31,439	34,022
	Inflation Rate	1.2%	4.7%	8.0%	4.1%
	ST interest rate	0.5%	0.1%	2.2%	5.2%
EAI	Oil (USD/barrel)	£ 36.86	£ 65.84	£ 93.97	£ 76.10

# MMT - The Origin of Prices

1. The government spends tax credits
2. We need the government's money & government needs our labour
3. Prices set by what you must do to get hold of currency  
£4 million on one tank, or £80million on twenty tanks.  
£76 million add to the money supply. Tank still £4 million
4. Govt. deficits increase our wealth and crowd in investment
5. Interest on govt. bonds is an injection not a drain/burden.

# Government Pricing, Not the Price of Money, Determines Prices

1. Government has the monopoly
2. Government sets prices
3. If private sector demands higher prices the government can refuse to pay more.
4. Government sets value of currency as it purchases: markets set relative prices.
5. Inflation requires a state policy of continuously paying higher prices.

Recommendation: Warren and Phil Weimar Paper.

# Forward Prices

***“A continuous increase in the term structure of prices faced by economic agents today, for the purchases and sales at future delivery dates.”***

*A Framework for the Analysis of the Price Level and Inflation, Warren Mosler, 10/23/2021:*

Forward price = current/spot price + carry costs

Interest rate is a carry cost - “money” has a time value

# **Interest Rates with Fixed/Pegged Exchange Rate**

## **Example: Argentina**

- 1. Raise rates to prevent devaluation**
- 2. Interest on bonds buys US dollars**
- 3. Devaluation**
- 4. Vicious spiral**

# Argentina

Year	Nominal GDP Growth	Nominal GDP	Government Debt to GDP			Private Debt to GDP	Net Exports to GDP	Interest Rates	Inflation Rate	M2 to GDP
				Non-financial Corporations	Increase NFC Debt			Lending		
2022	77.9%	82,436,434	85%	14,754,478	74%	22%	3%	52.40%	72%	19%
2021	70.3%	46,346,227	80%	8,479,301	28%	23%	2%	35.56%	48%	20%
2020	26.2%	27,209,814	104%	6,630,506	34%	30%	1%	29.39%	42%	22%
2019	46.2%	21,558,444	90%	4,939,236	49%	28%	7%	67.25%	54%	17%
2018	38.3%	14,744,811	85%	3,304,819	74%	29%	1%	48.52%	34%	21%
2017	29.6%	10,660,229	56%	1,902,096	58%	25%	-3%	26.58%		20%
2016	38.2%	8,228,160	53%	1,204,870	36%	21%	-2%	31.23%	-	20%
2015	30.0%	5,954,511	49%	886,812	41%	21%	-2%	24.92%	-	19%
2014	36.8%	4,579,086	41%	630,371	14%	19%	0%	24.01%	-	19%
2013	26.9%	3,348,309	39%	551,434	30%	23%	-2%	17.15%	11%	20%

# Factors

1. Higher rates reduce investment?
2. *Lower interest engender increased borrowing? no compelling evidence (Vague)*
3. Over a 100 year period, growth with low inflation, higher when rate of growth of government debt is faster than rate of growth of private debt. (Tychos)
4. Is borrowers' reduction in spending offset by savers spending more?

*Marginal Propensity to Spend of Savers versus Borrowers*

*The size of the government debt & size of private debt*

*Ratio of Variable Rate to Fixed Rate debt and duration of loans ( USA 30 yr fixed)*



# Volcker Squeeze

*“If, at the end of the day we need to raise taxes, we should raise taxes”*

USA					
Year	Inflation	Real Govt. Surplus	Interest Rate	Real GDP Growth	Real Debt Growth
1977	6.50%	<u>2.7%</u>	5.5%	4.7%	<u>6.2%</u>
<b>1978</b>	<b>7.63%</b>	<b><u>4.5%</u></b>	<b>7.9%</b>	5.3%	<b><u>2.8%</u></b>
<b>1979</b>	<b>11.25%</b>	<b><u>8.9%</u></b>	<b>11.2%</b>	2.2%	<b><u>-2.4%</u></b>
<b>1980</b>	<b>13.55%</b>	<b><u>9.9%</u></b>	<b>13.4%</b>	<b>-4.8%</b>	<b><u>-0.2%</u></b>
<b>1981</b>	<b>10.33%</b>	<b><u>7.1%</u></b>	<b>16.4%</b>	<b>1.9%</b>	<b><u>0.1%</u></b>
<b>1982</b>	<b>6.13%</b>	<b><u>0.6%</u></b>	<b>12.2%</b>	<b>-1.9%</b>	10.0%
1983	3.21%	-3.2%	9.1%	5.5%	14.5%



*“The Standard of Living of the Average American has to decline”*

USA	Interest Rate	Inflation Rate	Inflation adjusted real % change household credit	Inflation adjusted real % change in NFB credit	Govt Debt/ Surplus % GDP	Private Debt to GDP
1986	8.3%	1.90%	9.37%	5.55%	-3.90%	119%
1985	9.9%	3.55%	14.26%	3.36%	-2.10%	113%
1984	12.0%	4.30%	8.09%	6.76%	-1.40%	107%
1983	10.8%	3.21%	6.91%	1.79%	-3.20%	103%
1982	14.9%	6.13%	<b>-1.46%</b>	<b>-1.74%</b>	<b>0.60%</b>	102%
1981	18.9%	10.33%	<b>-2.85%</b>	<b>-1.64%</b>	<b>7.10%</b>	99%
1980	15.3%	13.55%	<b>-4.04%</b>	<b>-1.91%</b>	<b>9.90%</b>	101%
1979	12.7%	11.25%	3.72%	3.36%	<b>8.90%</b>	101%
1978	9.1%	7.63%	9.08%	5.44%	<b>4.50%</b>	98%
1977	6.8%	6.50%			<b>2.70%</b>	97%

## Higher Rates = Prices Up

1. raise costs to firms, who pass them on
2. add to housing costs
3. add to forward pricing (increase the term structure of prices)
4. *if* they cause investment to fall, worsen supply side shortages = lower productivity = higher prices
5. banks, under state licence, lend more money when prices go up, unless forbidden to do so.

Exception: *if* the national debt is bigger than private debt, higher rates may add to net demand and lower prices

Alan Blinder = lower prices

## Lower Rates = Prices Down

1. reduce business costs: no pass on
2. reduce housing costs
3. reduce forward pricing (lower the term structure of prices)
4. *if* they encourage investment in new tech they increase productivity, bearing down on prices
5. may cause asset price inflation  
Solution: credit guidance

**Interest rates at best a placebo,  
at worst malign.**

# Market Power: Myth Preservation

## Sectoral Interests: Debtors v Creditors

1. Debtors can benefit
2. Higher rates pass the burden of inflation from the wealthier to the poorer
3. Savers benefit from asset price inflation
4. Bear down on labour costs: Ignore market power of oligopoly/capital
5. Profit Share v Wage Share - Ignored
6. Weber & IMF: Price wage spiral: Sellers' Inflation

# Neo-Tubby Governors: Flying Blind with Mainstream Lenses?



*I've got the handbag Rachel*

*(Apologies to Wray, Papadimitriou and Bob Dylan)*



*They've been shooting in the dark too long*

*When something's not right, it's wrong:*

*Will we be lonesome if they go?*