

# LIVERPOOL INVESTMENT LETTER

November 2023



Cardiff Business School  
Ysgol Busnes Caerdydd

**Julian Hodge Institute of Applied Macroeconomics**



**LIVERPOOL RESEARCH GROUP IN MACROECONOMICS**

## LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

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ISSN 0951-9262

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# THE GOVERNMENT MUST STOP ITS OBSESSION WITH SHORT TERM FISCAL RULES AND FLAWED MEASURES OF THE DEFICIT SO AS TO AVOID LONG TERM INSOLVENCY DUE TO THE COLLAPSE IN LONG TERM GROWTH

Our projections of the government finances suggest that present policies are unsustainable because they cause zero growth. Here they are in Table 2 below. If you look at the last but two column showing the debt/GDP ratio, you can see that after current record tax rates bring the ratio down, it then reverses towards and past 100% again, climbing indefinitely. This is because zero growth stops tax revenue rising so spending is doomed to outstrip it — of course voters will not tolerate cutbacks in key areas like the NHS which devour increasing funding.

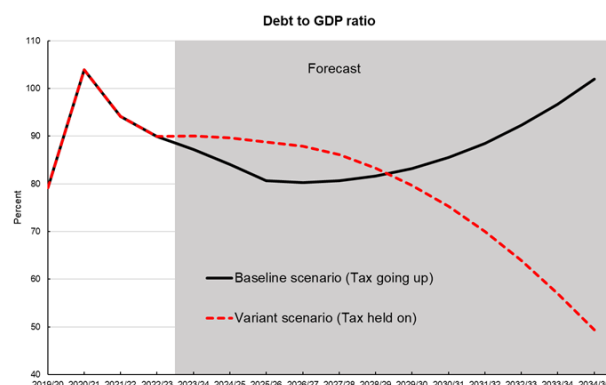
The policy alternative was clearly set out by Liz Truss, even if sadly its implementation failed against a sea of opposition, especially within the Bank and Treasury. This was to gear tax and other policies to create growth, even if in the short term the revenues were reduced. In the following chart we show how the debt ratio would move in this case. It rises in the short term before falling steadily later as growth raises tax revenues strongly. We show this in Table 3.

**Table 1: Summary of Forecast**

	2019	2020	2021	2022	2023	2024	2025
GDP Growth <sup>1</sup>	1.6	-10.4	8.7	4.2	0.4	1.9	2.0
Inflation CPI	1.7	0.9	2.5	9.1	7.5	3.5	2.0
Wage Growth	3.5	1.6	5.9	6.0	6.1	3.7	2.0
Survey Unemployment	3.8	4.5	4.5	3.7	3.8	2.9	2.8
Exchange Rate <sup>2</sup>	78.3	78.2	81.4	79.1	79.4	79.1	79.0
3 Month Interest Rate	0.8	0.2	0.1	2.0	5.0	4.3	3.0
5 Year Interest Rate	0.6	0.1	0.8	2.5	4.3	4.2	3.0
Current Balance (£bn)	-63.3	-67.5	-34.3	-93.9	-25.4	-14.7	1.5
PSBR (£bn)	64.3	312.9	121.1	130.5	95.6	38.3	23.5

<sup>1</sup>Expenditure estimate at factor cost

<sup>2</sup>Sterling effective exchange rate, Bank of England Index (2005 = 100)



**Table 2: Public Finances Baseline Forecast with Actual Tax Rises**

	Nom PSBR <sup>1</sup> (£bn)	Nom GDP (£bn)	REDL Spend <sup>2</sup> (£bn)	Pension Spend <sup>3</sup> (£bn)	Welfare Spend <sup>4</sup> (£bn)	Other Non-debt <sup>5</sup> (£bn)	Total Non-debt <sup>6</sup> (£bn)	PSBR /GDP % <sup>1</sup>	Spend /GDP %	Nom Debt (£bn)	Debt Interest <sup>7</sup> (£bn)	Debt /GDP %	Gross Taxes <sup>8</sup> (£bn)	Tax Rate %
2019/20	64.3	2316.4	320.8	41.0	227.0	254.5	843.3	2.8	36.4	1835.2	49.6	79.2	828.6	35.8
2020/21	312.7	2068.0	434.5	41.9	245.4	342.9	1064.7	15.6	51.5	2147.9	41.0	103.9	793.0	38.3
2021/22	122.3	2412.6	413.8	42.8	244.3	266.6	967.5	5.2	40.1	2270.2	72.5	94.1	917.7	38.0
2022/23	152.0	2695.1	415.5	46.3	259.9	335.6	1057.3	5.6	39.2	2422.2	114.7	89.9	1020.0	37.8
2023/24	45.9	2831.6	424.7	49.1	291.3	351.9	1117.1	1.6	39.5	2468.1	114.2	87.2	1185.4	41.9
2024/25	38.8	2982.6	447.4	50.6	306.9	376.9	1181.9	1.3	39.6	2506.9	113.4	84.1	1256.5	42.1
2025/26	19.6	3133.2	470.0	51.7	322.4	396.0	1240.0	0.6	39.6	2526.5	111.5	80.6	1331.9	42.5
2026/27	39.8	3195.9	488.8	52.7	335.3	411.8	1288.5	1.2	40.3	2566.2	109.7	80.3	1358.5	42.5
2027/28	61.4	3259.8	508.3	53.7	348.7	428.3	1339.0	1.9	41.1	2627.7	108.1	80.6	1385.7	42.5
2028/29	84.7	3325.0	528.7	54.8	362.6	445.4	1391.5	2.5	41.9	2712.4	106.6	81.6	1413.4	42.5
2029/30	109.8	3391.5	549.8	55.9	377.1	463.2	1446.1	3.2	42.6	2822.2	105.3	83.2	1441.7	42.5
2030/31	136.6	3459.3	571.8	57.0	392.2	481.8	1502.8	3.9	43.4	2958.8	104.3	85.5	1470.5	42.5
2031/32	165.4	3528.5	594.7	58.2	407.9	501.0	1561.8	4.7	44.3	3124.3	103.5	88.5	1499.9	42.5
2032/33	196.2	3599.1	618.5	59.3	424.2	521.1	1623.1	5.5	45.1	3320.5	103.0	92.3	1529.9	42.5
2033/34	229.2	3671.0	643.2	60.5	441.2	541.9	1686.8	6.2	45.9	3549.7	102.9	96.7	1560.5	42.5
2034/35	264.4	3744.5	668.9	61.7	458.8	563.6	1753.1	7.1	46.8	3814.2	103.1	101.9	1591.7	42.5

**Table 3: Public Finances Variant Forecast if No Tax Rises**

	Nom PSBR <sup>1</sup> (£bn)	Nom GDP (£bn)	REDL Spend <sup>2</sup> (£bn)	Pension Spend <sup>3</sup> (£bn)	Welfare Spend <sup>4</sup> (£bn)	Other Non-debt <sup>5</sup> (£bn)	Total Non-debt <sup>6</sup> (£bn)	PSBR /GDP % <sup>1</sup>	Spend /GDP %	Nom Debt (£bn)	Debt Interest <sup>7</sup> (£bn)	Debt /GDP %	Gross Taxes <sup>8</sup> (£bn)	Tax Rate %
2019/20	64.3	2316.4	320.8	41.0	227.0	254.5	843.3	2.8	36.4	1835.2	49.6	79.2	828.6	35.8
2020/21	312.7	2068.0	434.5	41.9	245.4	342.9	1064.7	15.6	51.5	2147.9	41.0	103.9	793.0	38.3
2021/22	122.3	2412.6	413.8	42.8	244.3	266.6	967.5	5.2	40.1	2270.2	72.5	94.1	917.7	38.0
2022/23	152.0	2695.1	415.5	46.3	259.9	335.6	1057.3	5.6	39.2	2422.2	114.7	89.9	1020.0	37.8
2023/24	125.9	2831.6	424.7	49.1	291.3	351.9	1117.1	4.4	39.5	2548.1	114.2	90.0	1105.4	39.0
2024/25	123.8	2982.6	447.4	50.6	306.9	376.9	1181.9	4.1	39.6	2671.8	113.6	89.6	1171.7	39.3
2025/26	109.9	3133.2	470.0	51.7	322.4	396.0	1240.0	3.5	39.6	2781.7	111.9	88.8	1242.0	39.6
2026/27	82.5	3258.5	488.8	52.7	335.3	411.8	1288.5	2.5	39.5	2864.3	110.5	87.9	1316.5	40.4
2027/28	52.7	3388.9	508.3	53.7	348.7	428.3	1339.0	1.6	39.5	2917.0	109.2	86.1	1395.5	41.2
2028/29	20.5	3524.4	528.7	54.8	362.6	445.4	1391.5	0.6	39.5	2937.5	108.2	83.3	1479.2	42.0
2029/30	-14.7	3665.4	549.8	55.9	377.1	463.2	1446.1	-0.4	39.5	2922.8	107.2	79.7	1568.0	42.8
2030/31	-53	3812.0	571.8	57.0	392.2	481.8	1502.8	-1.4	39.4	2869.7	106.2	75.3	1662.0	43.6
2031/32	-94.8	3964.5	594.7	58.2	407.9	501.0	1561.8	-2.4	39.4	2774.9	105.2	70.0	1761.8	44.4
2032/33	-140.3	4123.1	618.5	59.3	424.2	521.1	1623.1	-3.4	39.4	2634.6	104.1	63.9	1867.5	45.3
2033/34	-189.9	4288.0	643.2	60.5	441.2	541.9	1686.8	-4.4	39.3	2444.8	102.8	57.0	1979.5	46.2
2034/35	-243.8	4459.5	668.9	61.7	458.8	563.6	1753.1	-5.5	39.3	2200.9	101.4	49.4	2098.3	47.1

We have done these projections in the usual way the UK's public finances are reported, which is in money terms. This includes debt interest which also contains the inflation element on index-linked debt. In these long run projections inflation reduces the ratio of debt to money GDP as it enters nominal/money GDP. In the long run all the different measures of inflation are about the same.

However, in the short run they are not and getting a true picture of the evolving finances requires a different approach, whereby the true real cost of new debt is correctly measured. The true cost of public debt is the resource cost to taxpayers. This is the money cost of taxes divided by the consumer price index. The latter measures the money cost of one unit of consumption; this in turn is what the consumer sacrifices in utility by giving up this unit. So when we measure public spending and taxes, we should convert them into resource costs to taxpaying households by dividing their money costs by the consumer price index, the CPIH (CPI including housing costs) published by the ONS.

This resource cost of the public finances tells us what these finances imply for the amount of resources that need to be taken from households by the government now or in the future by paying off future debt. Expressed in this way the public accounts budget constraint can be written as:

Change in real debt = real G – real T + Real Debt interest +  
Change in real debt market value

By contrast the traditional money accounts are written:

Change in money debt = money G – money T + Money  
Debt interest

In the first case the 'real values' are all obtained by dividing by the CPIH, the best measure of consumer prices.

The real value of debt is then divided by real GDP, the volume of output, obtained from nominal GDP by dividing through by the measure of home output prices, the 'GDP deflator' which is the home cost of production, a totally different index from CPIH.

In the second case, the money debt is simply divided by nominal GDP, which is real GDP times the GDP deflator. But owing to the fact that CPIH and the GDP deflator diverge — often by a lot — in the short run, this creates mismeasurement; and this means people are misled about the true short run state of the finances.

To illustrate this mismeasurement, we show the accounts both ways in what follows.

In the Table below we show the traditional accounts in money terms and then in resource terms in 2022 prices, as correctly measured. We begin by repeating our Table showing the cash accounting of the public finances in our current baseline forecast, where taxes are projected to stay high and growth consequently drops to nil over the long term. This type of long term projection can be done as here in nominal terms, then expressed as a percent of nominal GDP, because over the long term all the price deflators move roughly in line.

However, we then show how these cash accounts need to be adjusted to give an accurate short run picture, using real resource accounting and to take account of market movements in the value of debt, as well as the differing movements in the price indices.

What these figures show is that real debt interest at recent inflation rates has been negative. This reflects the fact that inflation has exceeded nominal interest on non-indexed debt and on indexed debt has roughly equalled the 'inflation interest' (not exactly because indexing is to the

Retail Price Index, RPI, which differs from CPIH). From 2024/25 real debt interest rises somewhat as inflation falls, while nominal interest rates remain quite high; nevertheless the real interest rate remains subdued at around 2%.

Furthermore, the market value of government debt has fallen by nearly 40% since 2020, due to rising gilt yields — see chart below. This has lowered the debt/GDP ratio in current market value. Essentially, this arises because the DMO/Treasury managed to sell most of existing gilts at low interest rates prevailing during Covid; hence the market currently values these about 10% lower than face value.



Consequently, measured correctly debt/GDP will have fallen sharply in 2023/24 even though real GDP will barely change. In 2024/25 it falls further, with GDP set to grow 2% in real terms with recovery from the tight-money spell. This reveals clearly that the short run finances imply falling real debt/GDP, quite contrary to the picture painted by the official Treasury and OBR statements of a badly worsening debt/GDP ratio.

If we project the public finances over the long term under current high tax policies that imply zero growth, we find that the implied absence of revenue growth produces a rising debt ratio that undermines solvency. The Table below shows this outlook side by side with an assumed reversal of tax rises and its better growth outlook.

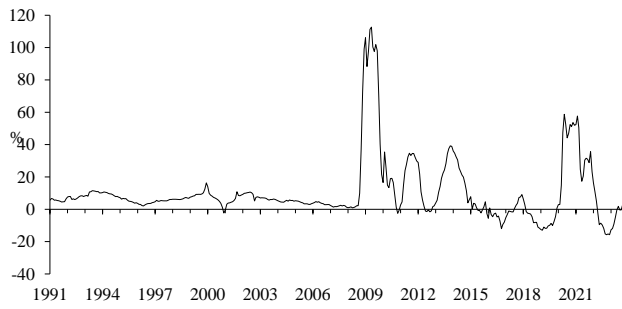
Money- £ billion	2022/23	2023/24	2024/25
G- government spending	1057.3	1117.1	1181.9
T- revenue	1020.0	1185.4	1256.5
Debt interest	114.7	114.2	114.2
ΔD- change in debt	152.0	45.9	38.8
Debt (incl. BOE)	2580	2626	2664
D/NOMGDP (%) - debt/GDP ratio	95.7	92.7	89.3
<b>Real £ billion at 22/23 prices (Assumes CPIH inflation 9.1% 22/23; 6.4% 23/24; 3.2% 24/25)</b>			
G	1057.3	1049.9	1145.3
T	1020.0	1114.1	1217.0
Real Debt interest	-105.7	-109.1	35.2
Δ Real D- change in real debt	-68.4	-173.0	-36.5
Real Debt	2580	2407	2370
Adjustment Mkt Value/Par*	0.93	0.93	0.93
Adjusted Real Debt	2399	2226	2189
Real Debt/Real GDP	84.7	87.6	75.8

\*market value/Par value — source ONS: series RYXY/BKPM on gilt values (respectively market value and nominal, Par, value). BoE bank reserve debt (about 800) stays at Par.

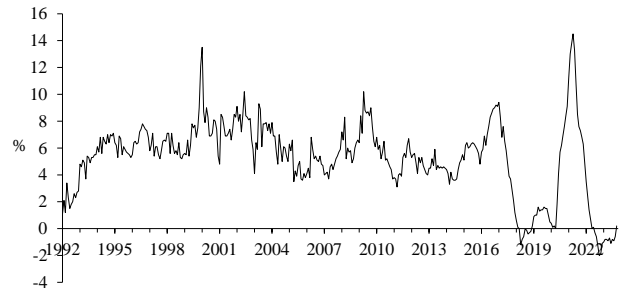
What all these figures show is that in resource terms debt is falling relative to GDP, far from spiralling out of control, but that with the zero growth resulting from the current high tax rates this will reverse and get steadily higher,

which should be avoided. The way to avoid it is to spur growth with lower taxes, as well as other pro-growth policies; and to ignore any short term rise in debt as ultimately reversible by rising tax revenues.

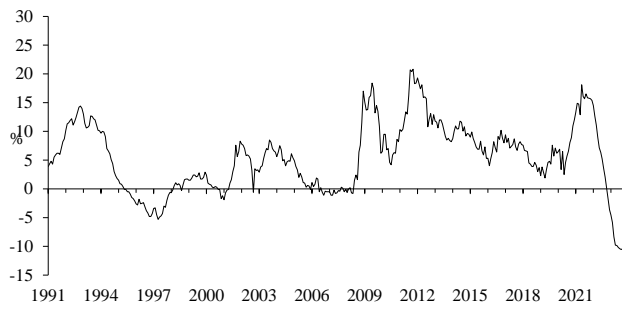
**U.S.: Growth in M0 (Yr - on - Yr)**



**UK: Notes and Coins in Circulation Growth**



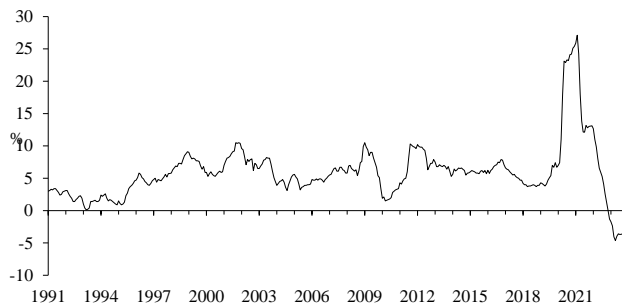
**U.S.: Growth in M1 (Yr - on - Yr)**



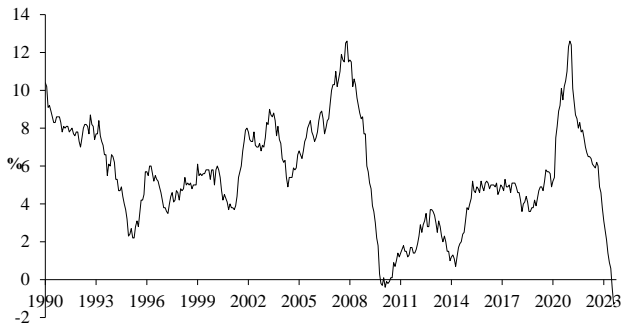
**UK: M4 Growth**



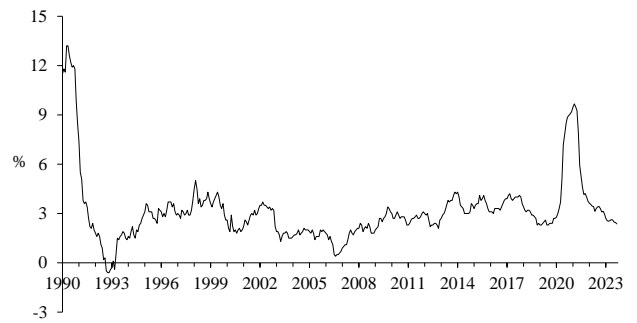
**U.S.: Growth in M2 (Yr - on - Yr)**



**Eurozone M3 Growth**



**Japan: Growth of M2+CD's**



## FOCUS ON JAPAN

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Francesco Perugini

### Japan is not the Third-Largest Economy Anymore

Last month the World Economic Outlook released by the International Monetary Fund predicted that in 2023 Japan's nominal GDP will be overtaken by Germany and the Japanese economy will slip from third to fourth place in the world, before falling to fifth when India surpasses it in 2026. According to the report, Japan's nominal GDP — that is, unadjusted for inflation — is expected to fall 0.2%, year-on-year, to \$4.23 trillion in 2023, while Germany's is forecast to expand 8.4% to \$4.42 trillion. The US, the world's largest economy, is expected to grow 5.8% to \$26.94 trillion. China's economy, the world's second largest, is forecast to shrink 1.0% to \$17.7 trillion.

The forecast highlighted the long-term weakness of the Japanese economy. Indeed, in 2000, Japan's economy was the second largest in the world, at \$4.96 trillion. At the time, its economy was 2.5 times bigger than that of Germany and 4.1 times bigger than China's. China overtook Japan and moved into second place in 2010. This means that if we look in terms of growth in nominal GDP, since 2000 Japan's cumulative growth was 10%, while China's economy ballooned by 1,160%. The Japanese growth rate was much lower than Germany's 90% or that of the US, at 160%, over the same period. In inflation-adjusted terms, Japan's GDP growth was 20%, which was slightly lower than that of the US and Germany.

Many economists believe that the sluggish growth of Japan's nominal GDP reflects Japan's failed efforts to revive the economy after Abenomics faltered, as well as its difficulty in returning the economy to an upward trajectory in the face of dampened domestic consumption and exports. Moreover, corporate profits and wages have been depressed for decades, and the problems have seemed likely to worsen as Japan's population shrinks and ages at a rapid rate, meaning fewer workers and consumers alike.

For many years, the country has worked to overcome its economic inertia with enormous government spending and super-low interest rates, which are meant to encourage companies and households to borrow and spend. But for years growth has remained weaker than hoped, and the country's mounting debt, combined with the yen's weakness, have put pressure on the Bank of Japan (BOJ) to rein in its largesse.

Year after year, the BOJ came under increasing pressure to ease further — to push a quantitative easing (QE) experiment that began between 2000 and 2001 into new monetary frontiers. Things got supercharged in 2013 when Haruhiko Kuroda was named BOJ governor. The central bank went on a multi-year buying binge, cornering the

government bond market. Stocks, too, through epic buying of exchange-traded funds. By 2018, the BOJ's balance sheet topped the size of Japan's entire economy — then roughly US\$4.9 trillion. Yet the last decade of hyper-easing merely exacerbated Tokyo's all-liquidity-no-reform problem. It generated record corporate profits, but it failed to incentivize CEOs to boost wages, invest big in innovation, increase productivity or take risks on promising new industries.

As for fiscal finance, Japan's debt began to swell in the 1990s when its finance and real estate bubble burst to disastrous effect. With stimulus packages and a rapidly ageing population that pushes up healthcare and social security costs, Japan's debt first breached the 100% of GDP mark at the end of the 1990s. Since then, the Japanese government have run fiscal deficits throughout business cycles, with repeated episodes of fiscal consolidation being interrupted or delayed by shocks. As a result, the public debt to GDP ratio reached about 240% of GDP in 2019 and is now approaching 260% of GDP.

Prime Minister Fumio Kishida is committed to putting economic growth before fiscal reform. Since he took office in October 2021, he has pledged to achieve a virtuous cycle of growth and redistribution under his “new capitalism” while suggesting that previous administrations' stimulus policies created social division and inequality. To revive the economy Kishida has also laid out a policy to cut income tax and instructed the ruling parties to discuss specific measures to do so. He apparently plans to feature the tax reduction, estimated to total as much as several trillion yen (over \$13 billion), in the upcoming economic stimulus package. He explained that the policy is aimed at bailing the country out of deflation, but the Japanese economy is on track to recovery from the coronavirus pandemic-hit downturns.

However, despite recent efforts by Japanese authorities, the economy is still growing at a slow pace. There is more to be worried about. According to a recent S&P Global Market Intelligence report, by 2030 Japan is going to be overtaken by India too. The report forecasts India's nominal GDP will rise from \$3.5 trillion in 2022 to \$7.3 trillion by 2030, making India the second largest economy in the Asia-Pacific region.

Of course, because virtually all the government debt is held internally and Japanese holders will not switch their savings into foreign markets, the high debt ratio does not threaten any run on Japanese government bonds. Then too much of this GDP overtaking in nominal terms is due to Japan's low, often zero, inflation compared with high rates elsewhere. Also, the weakness of the yen, due to the persistent policy of buying assets to drive down interest



rates, has reduced Japan's dollar GDP. Nevertheless, Japan's low GDP growth rate has been a major contributor and resisted all efforts, both fiscal and monetary, to revive

it. This continues to be the major challenge for government policy.

## MARKET DEVELOPMENTS

Central banks have over-tightened and will need to ease to avoid the risk of yet another financial crisis. This brings bonds back into contention with equities for investment returns.

**Table 1: Market Developments**

	Market Levels		Prediction for Sep/Oct 2024	
	Oct 13	Nov 6	Previous Letter	Current View
<b>Share Indices</b>				
UK (FT 100)	7600	7418	7759	7574
US (S&P 500)	4326	4366	4638	4680
Germany (DAX 30)	15187	15136	19317	19253
Japan (Tokyo New)	2309	2360	3161	3231
<b>Bond Yields (government)</b>				
UK	4.34	4.32	4.00	4.00
US	4.61	4.63	3.50	3.40
Germany	2.73	2.70	2.20	2.20
Japan	0.76	0.88	0.50	0.50
UK Index Linked	1.25	1.22	1.00	1.00
<b>Exchange Rates</b>				
UK (\$ per £)	1.21	1.24	1.20	1.20
UK (trade weighted)	80.79	81.16	77.9	77.3
US (trade weighted)	110.54	111.57	113.2	113.2
Euro per \$	0.95	0.93	0.98	0.98
Euro per £	1.16	1.15	1.18	1.18
Japan (Yen per \$)	149.68	149.74	140.0	140.0
<b>Short Term Interest Rates</b>				
UK	5.40	5.37	4.00	4.00
US	5.66	5.64	4.30	4.30
Euro	3.97	3.96	3.00	3.00
Japan	-0.03	-0.03	0.10	0.10

**Table 2: Prospective Yields<sup>1</sup>**

Equities: Contribution to £ yield of:						
	Dividend Yield	Real Growth	Inflation	Changing Dividend Yield	Currency	Total
UK	2.10	1.1	3.0	-2.00		4.20
US	2.00	1.2	3.0	3.00	3.16	12.36
Germany	2.10	1.2	3.0	23.00	-1.97	27.33
Japan	1.90	1.1	1.8	34.00	9.46	48.26
UK indexed <sup>2</sup>	1.25		3.0	16.00		20.22
Hong Kong <sup>3</sup>	2.60	4.8	3.0	-21.00	3.16	-7.44
Malaysia	3.30	4.0	3.0	37.00	3.16	50.46
Singapore	3.50	1.0	3.0	-5.00	3.16	5.66
India	1.40	6.6	3.0	11.00	3.16	25.16
Korea	1.10	2.5	3.0	-23.00	3.16	-13.24
Indonesia	2.20	5.0	3.0	24.00	3.16	37.36
Taiwan	2.80	1.5	3.0	5.00	3.16	15.46
Thailand	3.20	2.8	3.0	19.00	3.16	31.16
Bonds: Contribution to £ yield of:						
	Redemption Yield	Changing Nominal Rates		Currency		Total
UK	4.32	3.17				7.49
US	4.63	12.35		3.16		20.15
Germany	2.70	5.05		-1.97		5.78
Japan	0.88	3.80		9.46		14.14
Deposits: Contribution to £ yield of:						
	Deposit Yield			Currency		Total
UK	5.37					5.37
US	5.64			3.16		8.81
Euro	3.96			-1.97		1.99
Japan	-0.03			9.46		9.43

<sup>1</sup> Yields in terms of €s or \$s can be computed by adjusting the £-based yields for the expected currency change.

<sup>2</sup> UK index linked bonds All Stocks

<sup>3</sup> Output based on China.

**Table 3: Portfolio(%)**

	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	October Letter	Current View	October Letter	Current View	October Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-	-	-	-	-
German Bonds	-	-	-	-	-	-
Japanese Bonds	-	-	-	-	-	-
UK Shares	19	19	14	14	17	17
US Shares	14	14	19	19	16	16
German Shares	14	14	14	14	21	21
Japanese Shares	9	9	9	9	11	11
Hong Kong/Chinese Shares	4	4	4	4	4	4
Singaporean Shares	4	4	4	4	4	4
Indian Shares	4	4	4	4	4	4
Thai Shares	3	3	3	3	3	3
South Korean Shares	4	4	4	4	4	4
Taiwanese Shares	4	4	4	4	3	3
Brazilian Shares	4	4	4	4	3	3
Chilean Shares	4	4	4	4	3	3
Mexican Shares	4	4	4	4	3	3
Peruvian shares	4	4	4	4	3	3
Other:						
Index-linked bonds (UK)	-	-	-	-	-	-

# INDICATORS AND MARKET ANALYSIS

## FOREIGN EXCHANGE MARKETS

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**US : Trade Weighted Index  
(Bank of England 1990 = 100)**



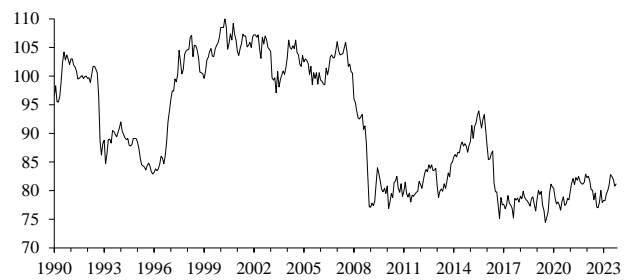
**UK: Dollars Per Pound Sterling**



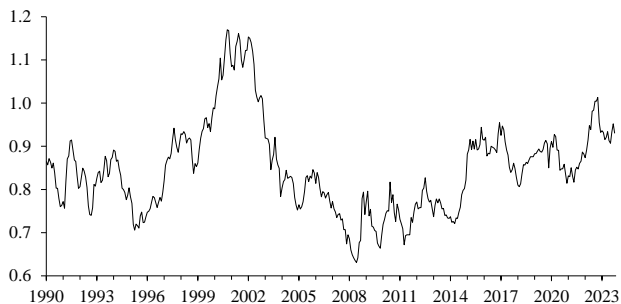
**Japan : Yen Per U.S. Dollar**



**UK: Trade-Weighted Index  
(Bank of England 1990 = 100)**



**Euro per US dollar**

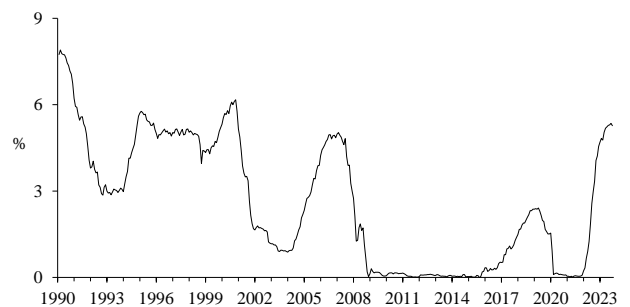


# GOVERNMENT BOND MARKETS

**U.S.: Yield on Long-Term Government Bonds**



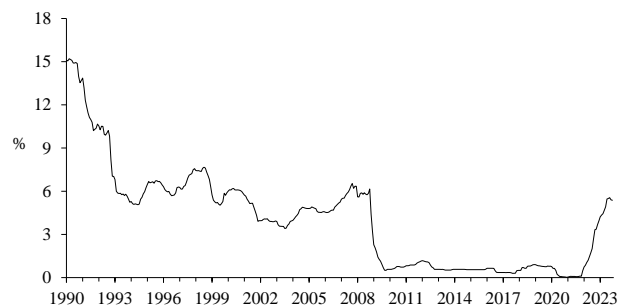
**U.S. : 3-Month Treasury Bill**



**U.K.: Yield on Long-Term Government Bonds**



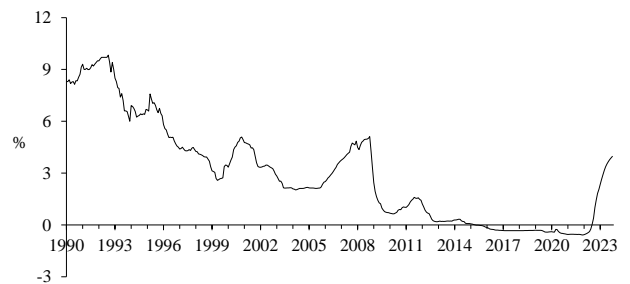
**U.K. : 3-Month Certificate LIBOR Rate**



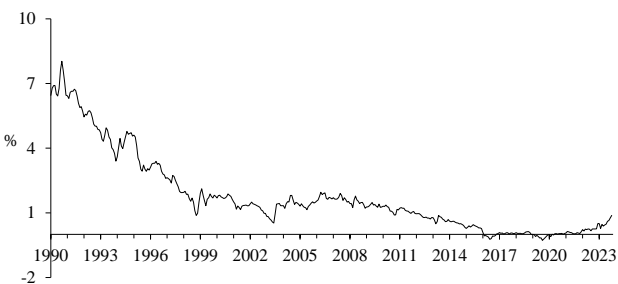
**Germany: Yield on Public Authority Bonds**



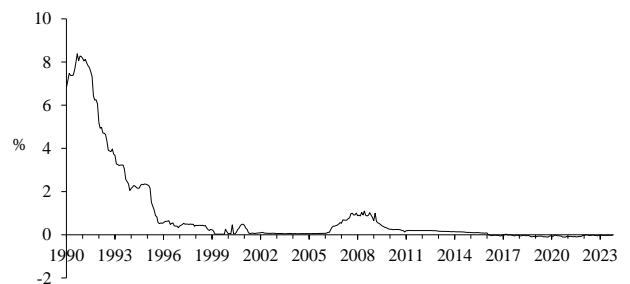
**Germany : 3-Month Interbank Deposit Rate**



**Japan: Yield on Long-Term Government Bonds**



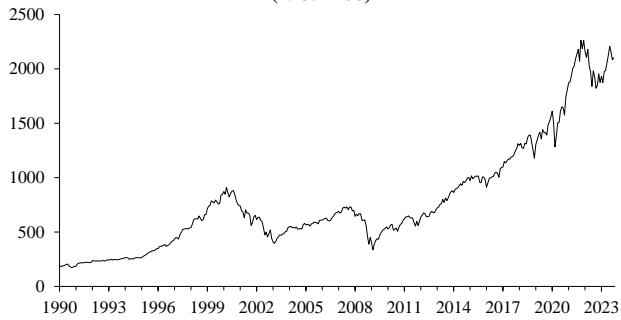
**Japan : 3-Month Money Market Rate**



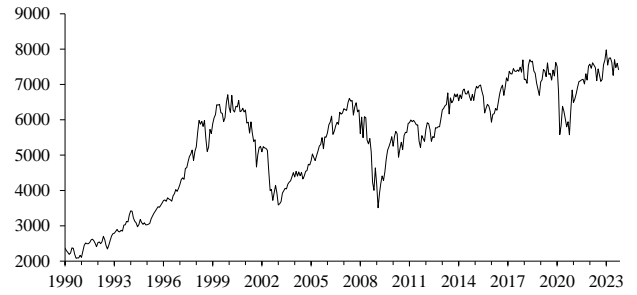
## MAJOR EQUITY MARKETS

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**U.S. : S & P 400 Industrial  
(1985=100)**



**U.K. : FTSE-100 Index  
(10 April 1962=100)**



**Germany : DAX 30**



**Japan : Tokyo S.E. New  
(1985=100)**



# EMERGING MARKETS

Anupam Rastogi

## India

The Indian economy continues to thrive, and the upcoming festival of lights, Deepavali, will reaffirm the economy's underlying strength. Furthermore, the results of the provincial government elections in December are poised to provide a clearer picture of the potential return of the BJP, the current ruling party, in the 2024 general election. India stands on a solid foundation of political stability, a burgeoning and youthful labour force, and a rapidly expanding middle class. These factors collectively make it a favoured destination for foreign equity investors.

India's Gross Domestic Product (GDP) is anticipated to register impressive growth, potentially reaching nearly 7% in the second quarter of FY24. This performance is expected to surpass the Reserve Bank of India's October projection of 6.5%. The country's economic trajectory is substantiated by buoyant high-frequency indicators such as Goods and Services Tax (GST) collections, power consumption, automobile sales, and credit expansion. As a result, India may likely ascend to a \$4 trillion economy by the close of 2023–24 and set its sights on achieving a \$10 trillion economy by 2030, with a dedicated vision to become the world's third-largest economy. The private sector's active participation plays a pivotal role in this endeavour.

Inflation in India demonstrated a favourable trend, declining from 6.83% in August to 5.02% in September. Notably, consumer price inflation fell within the central bank's target range of 4% (with a +/- 2% tolerance) for the first time in three months. This moderation in Consumer Price Index (CPI) inflation is a welcome relief to industries, as they anticipate potential interest rate cuts from the central bank soon.

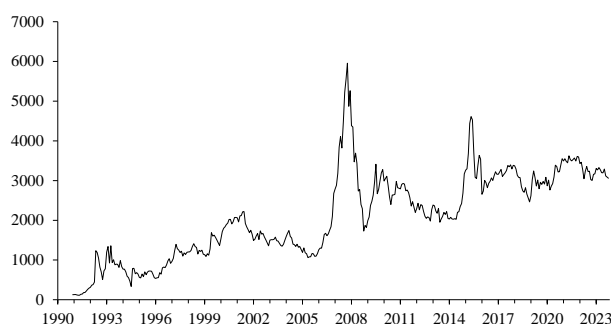
India's merchandise trade balance for September 2022 displayed a trade deficit of \$19.4 billion, a reduction from the previous month's \$26.7 billion. Exports showed resilience, with a marginal decline of 2.6% to \$34.5 billion, while imports registered a substantial decrease of over 15% to \$53.8 billion. These trends signal green shoots in the export sector, highlighting India's capacity to perform well despite global economic challenges. Sectors such as engineering goods, marine, electronics, ceramics, and pharmaceuticals have exhibited noteworthy export growth.

In the services sector, September witnessed exports totalling \$29.34 billion, while imports reached \$14.9 billion. For the April–September period of this fiscal year, exports contracted by 8.8% to USD 211.4 billion, while imports decreased by 12.2% to USD 327 billion. These figures underscore the ongoing resilience of India's

India: BSE Sensex



China: SSE Composite Index



services sector, even in the face of global economic uncertainties.

India's foreign exchange reserves experienced a significant upswing despite a noticeable withdrawal by foreign investors. As of the week ending on October 27, the country's foreign exchange reserves stood at an impressive \$586 billion, marking a notable increase of \$2.6 billion, as the Reserve Bank of India (RBI) reported. This surge in reserves further reinforces India's economic stability and resilience in the face of external pressures.

	22–23	23–24	24–25	25–26	26–27
GDP (%p.a.)	7.0	6.5	6.6	6.7	6.8
WPI (%p.a.)	6.5	5.3	5.0	4.2	4.0
Current A/c(US\$ bill.)	-67.0	-60.0	-40.0	0.0	0.0
Rs./\$(nom.)	81.0	83.5	85.0	86.0	86.0

## China

The trajectory of China's economic miracle has recently come under intense scrutiny, with a particular focus on the profound impact of President Xi Jinping's response to the global pandemic. It is increasingly evident that this exceptional response has catalysed a significant transformation in the economic landscape. However, it is essential to note that the erosion of the miracle commenced well before the pandemic's emergence, primarily due to the persistent structural imbalances that had already taken root.

The 'one-child policy' and the mounting local government debt are identified as the primary culprits behind this

transformative shift. President Xi Jinping's leadership has faced criticism for not effectively mitigating these structural deficiencies, which, in turn, has impeded the government's ability to address them comprehensively.

A noteworthy consequence of these developments is the palpable erosion of Western confidence in China. It has had a tangible impact on the willingness of Chinese citizens to partake in consumer spending and undertake entrepreneurial ventures. Moreover, the ongoing housing crisis remains a significant impediment, casting a shadow on the medium-term outlook. These factors, collectively, raise concerns that China may find itself entrenched as a middle-income economy, thereby complicating its quest for high-income status.

Pessimism in the real estate sector is a primary reason behind the International Monetary Fund's marked reduction in its 2024 growth forecast for China to 4.2%. Households have grown increasingly cautious about property purchases, driven by uncertainties stemming from liquidity constraints faced by developers, as well as concerns about project completions and property price stability. While specific sectors, including electric cars, microchip manufacturing, and renewable energy, continue to thrive, the property market's deep-rooted influence cannot be swiftly unravelled.

President Xi Jinping's recent stance that China can only prosper when the world prospers has initiated a limited opening of the Chinese market. Notably, the International Monetary Fund underscores that the growing fragmentation between China and the West is exerting a substantial drag on the global economic recovery in the present year. Consequently, some Western investment has redirected itself, flowing back to the United States or seeking opportunities in regions such as Mexico and India, which experienced a fourfold increase in investment for new factories and offices in comparison to China in 2022, as indicated by data from the United Nations Conference on Trade and Development.

Remarkably, despite the intricacies of these economic dynamics, China managed to register a 4.9% growth rate in the third quarter of the year, albeit decelerating compared to the previous quarter due to the base effect. October witnessed a consistent expansion in economic activities, marking the tenth consecutive month of growth, supported by the Chinese government's vigorous efforts to bolster economic expansion.

The Caixin Services Purchasing Managers Index, a private gauge of China's services sector, recorded an uptick to 50.4 in October from the preceding month's 50.2. However, the official gauge of China's manufacturing activity, following a brief expansion in September, unexpectedly contracted in October, falling below the threshold for contraction. The official manufacturing purchasing managers' index dipped to 49.5 in October from 50.2 in September. Similarly, the

non-manufacturing PMI, which encompasses both service and construction activities, receded to 50.6 in October, down from 51.7 in September.

Against this backdrop, we maintain our GDP growth forecasts for the next year at approximately 4.8%. Also, consumer and business confidence remains subdued, and the ongoing conflict in the Middle East between Israel and Hamas introduces uncertainty that impacts external demand for Chinese exports.

Of notable concern is the persistent deflationary pressure in China, with factory-gate prices showing an average decline of 3.1% in the first nine months of 2023 compared to the preceding year. Additionally, consumer prices exhibited an unexpected deceleration, nearly teetering on the brink of deflation in September, echoing concerns about soft demand. Deflation remains a tangible risk that warrants consideration in the overall economic outlook.

China opted to maintain its benchmark lending rates in October. The one-year loan prime rate held steady at 3.45%, with the five-year rate anchored at 4.2%. The central bank infused additional liquidity into the market to meet funding shortages through its key policy tools. Notably, the Standing Committee of the National People's Congress, the Communist Party-controlled parliament responsible for overseeing government borrowing, has eased norms on local government debt, presenting opportunities for fiscal adjustments.

A significant shift in global trade dynamics has transpired. For the first time in over four decades since its economic liberalization, China now conducts more trade with developing countries than with the combined entities of the United States, Europe, and Japan. This dramatic pivot highlights the growing divergence between China and the Western world, a trend propelled by mounting tensions encompassing trade, technology, security, and other complex issues. While there are tangible benefits, such as reduced dependence on Chinese supply chains and increased employment opportunities in the West, it is essential to recognize that this transition carries considerable risks, including the spectre of slower global economic growth. Many economists contend that the costs may outweigh the benefits for both Western nations and China.

Remarkably, China's exports of two rare minerals essential for semiconductor manufacturing plummeted to zero in August following Beijing's imposition of restrictions on overseas sales. It is of particular significance as China is a dominant producer, accounting for approximately 80% of the world's gallium and 60% of germanium. However, alternative producers and substitute materials are available, mitigating the immediate impact of this constraint.

From a currency perspective, the Chinese yuan exhibited stability in onshore trade, while its offshore counterpart



demonstrated strength amid a weakening U.S. dollar. The market's reception precipitated this positive response to the temporary pause in U.S. interest rate hikes. The People's Bank of China established the midpoint rate at 7.1796 per U.S. dollar in early November. Market participants eagerly await U.S. job data for further insights into future policy directions. We anticipate that the onshore yuan will trade within the range of 7.28 to 7.33 in November, bolstered by the ongoing economic recovery and determined efforts to stabilize the exchange rate.

Significantly, the Chinese yuan became the second most widely used currency in the global trade finance market in September, surpassing the euro. This noteworthy development marks the first time such data has been available in over six years, according to the Society for Worldwide Interbank Financial Telecommunication (SWIFT). China's share of global trade finance expanded to 5.8% in value last month, up from 4.82% in August.

In a different vein, the untimely passing of former Premier Li Keqiang could have instigated a public outpouring of emotions. However, orchestrated mourning functions ensured that it remained a subdued yet significant event. Many individuals perceive Li as a 'mirror image' of themselves, drawing parallels between their own restricted lives under President Xi's autocratic rule and Li's 'humiliated' existence as an inconspicuous premier. The sentiments surrounding Li's passing extend beyond mere mourning; they are, in essence, an introspective reflection on their own experiences.

Additionally, China's Vice President Han Zheng's participation in the U.N. General Assembly's annual high-level debate offers a glimpse into what can be anticipated from the meeting between President Joe Biden and Chinese President Xi Jinping on the sidelines of the Asia-Pacific Economic Cooperation summit in San Francisco in November.

	22	23	24	25	26
GDP (%p.a.)	3.0	5.0	4.8	4.0	3.5
Inflation (%p.a.)	2.0	2.2	1.5	2.0	2.2
Trade Balance(US\$ bill.)	420.0	255.0	150.0	100.0	50.0
Rmb/\$(nom.)	6.8	7.2	7.4	7.6	7.8

## South Korea

South Korea's economic outlook for 2024 appears promising, building on the momentum that gained traction in the second half of 2023. The country's potential growth rate, representing the maximum level of economic expansion achievable without triggering inflationary pressures, is estimated to be around 2%.

During the July–September quarter, South Korea's Gross Domestic Product (GDP) saw a 0.6% growth from the previous quarter, a stable increase primarily driven by the recovery of exports. Based on this performance, we maintain our economic growth forecast of 1% for 2023 and

**Korea: Composite Index**



anticipate a stronger growth rate of 2.5% for 2024. Bank of Korea Governor Rhee Chang-yong maintains a similar confidence, expecting the economy to grow by approximately 1.4% this year. There is also optimism that as the Chinese economy stabilizes, it will further bolster South Korea's growth momentum, benefiting from its trade ties with China. However, challenges persist, particularly with Beijing's export controls related to graphite, which have raised concerns among South Korean manufacturers reliant on China for this essential material used in electric-vehicle battery production.

Regarding inflation, South Korea experienced a seven-month high in October, significantly exceeding the central bank's target. Governor Rhee Chang-yong has expressed caution, particularly regarding higher oil prices. The consumer-price index showed a 3.8% increase from the previous year in October, compared to a 3.7% rise the last month. We anticipate inflation to reach 3.5% in 2023 and gradually subside to 2.5% in 2024.

The Bank of Korea kept its base interest rate steady at 3.5% during its October meeting for the sixth consecutive time, citing concerns about rising oil prices and conservative monetary policies in major economies. These challenges may ease as expectations of a soft landing for developed economies gain ground.

South Korea's exports experienced a 5.1% growth in October, marking their first year-on-year rebound in 13 months. This growth was driven by robust automobile exports and a recovery in the chip sector, resulting in a trade surplus of \$1.64 billion. After a year of contraction, the improvement in South Korea's exports reflects positive signs of global demand recovery.

South Korea's decision to ban stock short-selling until June 2024 is expected to delay its pursuit of an 'upgrade' to 'developed market' status from global index provider MSCI. This move allows regulators to enhance rules and systems actively. Currently classified as an 'emerging market (E.M.)' alongside India, China, and Taiwan in MSCI indices, South Korea's reforms to ease market access were maintained during MSCI's June review. MSCI indicated it would reconsider South Korea's reclassification after consulting with clients to evaluate the impact of the country's reform measures.

	22	23	24	25	26
GDP (%p.a.)	2.6	1.0	2.5	2.5	2.4
Inflation (%p.a.)	5.1	3.5	2.5	2.5	2.5
Current A/c(US\$ bill.)	50.0	40.0	35.0	30.0	30.0
Won/\$ (nom.)	1450	1340	1300	1300	1400

## Taiwan

Taiwan's economic resurgence has reached a crescendo, with its most robust growth in a year, providing a much-needed boost to the government ahead of a pivotal presidential election scheduled for January. From July to September, the nation's Gross Domestic Product (GDP) surged by 2.32% compared to the previous year, marking a remarkable rebound from the recessionary dip experienced in the second quarter.

The remarkable economic revival is primarily underpinned by the resurgence of consumer spending, injecting vigour into the Taiwanese economy. However, it's essential to acknowledge the challenges faced, notably the deceleration in China's growth rate and the realignment of global supply chains. These factors have left an indelible mark, causing a contraction of 14% in capital formation as Taiwan's major technology giants temporarily curtailed their investments in new facilities and infrastructure.

Inflationary pressures have also made their presence felt, with the consumer price index (CPI) surging by 2.93% year-on-year in September, representing the most substantial increase since January. The core CPI, a key indicator of underlying inflation trends, climbed by 2.48% during the same month. The Central Bank of the Republic of China (Taiwan) has maintained its policy rate at 1.875%, the highest level reached in eight years. This move aligns with the U.S. Federal Reserve's decision to keep its rates steady, with the central bank having increased its rates by 75 basis points since March 2022 to combat mounting inflationary pressures.

Taiwan's export sector, a crucial driver of its economy, experienced a noteworthy resurgence, with exports surging by more than 3% in September compared to the previous year. This remarkable turnaround ended a year-on-year falling streak, predominantly fuelled by the electronics component industry. Simultaneously, imports contracted by 12.2% in the same month, reaching \$28.5 billion, culminating in an impressive trade surplus of \$10.3 billion.

The Taiwan dollar has again established itself as a desirable carry-trade currency, regaining an edge over China's yuan. This development transpired in response to the People's Bank of China's actions to elevate borrowing costs for the yuan in offshore markets in August to safeguard its currency. Notably, China and Taiwan currently maintain some of the lowest policy rates in the region, trailing only Japan. This divergence arises as other central banks embark on aggressive rate hikes to counter mounting inflationary pressures.



The dynamics surrounding global security have implications for Taiwan's stability. Concerns have emerged among defence experts as the U.S. witnesses a depletion of its stockpiles of weapons and ammunition. This perceived weakness in the U.S.'s ability to defend Taiwan against a potential Chinese offensive adds a layer of complexity to the political landscape. The upcoming presidential election in January 2024 will undoubtedly influence China's stance and strategy towards Taiwan. China's array of potential approaches includes full-scale invasion, employing tactics like blockades, bombardments, and small-scale territorial seizures closer to Taiwan's borders. It is becoming apparent that Taiwan's economic and geopolitical landscape is at a pivotal juncture, with challenges and opportunities shaping its future trajectory.

	22	23	24	25	26
GDP (%p.a.)	2.5	1.5	1.8	2.0	2.3
Inflation (%p.a.)	2.9	2.2	1.6	1.4	1.2
Current A/c(US\$ bill.)	90.0	65.0	60.0	60.0	60.0
NT\$/\$(nom.)	32.0	32.2	32.0	31.5	31.0

## Brazil

The Brazilian economy is experiencing a robust growth momentum, surpassing earlier expectations. This surge can be attributed to measures implemented by President Luiz Inacio Lula da Silva's government to bolster households' disposable income. Furthermore, the economy is reaping the rewards of a flourishing agribusiness sector and extractive industries throughout the year. Our projections indicate that the economy is set to expand by 3% in 2023.

This favourable growth trajectory is leaving a positive imprint on employment in Brazil. The country's unemployment rate declined during the three months through September, owing to a rise in self-employed individuals. In this period, the jobless rate decreased to 7.7%, down from 7.8% in the three months ending in August and a notable improvement from 8.7% the same period the previous year.

Brazil has also been navigating inflationary dynamics. In mid-October, the annual inflation rate stood at 5.05% compared to the previous year. However, it's anticipated that inflation will moderate to 4.65% by year-end. The policymakers have remained resolute in their plans and recently delivered a third consecutive half-point reduction in interest rates during their November 1 meeting. The ongoing Israel-Hamas conflict has prompted the central bank to exercise caution in terms of rapidly reducing the cost of capital.

The central bank's rate-setting committee, Copom, unanimously lowered the Selic benchmark interest rate to 12.25%. Committee members expect further reductions of a similar magnitude in upcoming meetings. It's crucial to note that the overall extent of the easing cycle will be contingent on various factors, including inflation dynamics

and the output gap. The central bank emphasises maintaining a tight policy until the disinflationary process solidifies and inflation expectations align with targets.

Brazil celebrated a record trade surplus in October, propelled mainly by a decline in imports. Imports experienced a substantial 20.9% reduction to \$20.5 billion, reflecting lower volumes and prices. Reduced spending on fuels, fertilizers, and agricultural chemicals contributed to this decline. Conversely, Brazil's exports received a boost from a record agricultural harvest, with increased volumes compensating for year-on-year price decreases in several significant commodities, including oil and soybeans. In October, Brazilian exports amounted to \$29.5 billion, up from \$28.4 billion in September, while imports increased to \$20.5 billion from \$19.5 billion.

The Brazilian Real has remained sensitive to shifts in risk sentiment, with significant fluctuations earlier this year in USD/BRL. The country's trade surplus is among the factors contributing to the Real's potential for appreciation.

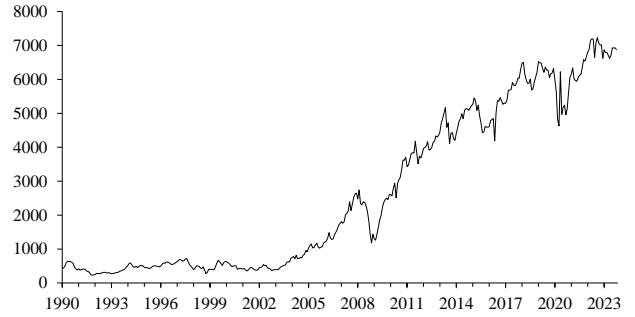
	<b>22</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>
GDP (%p.a.)	2.9	3.0	2.0	2.5	3.0
Inflation (%p.a.)	8.0	4.8	3.6	3.2	3.2
Current A/c(US\$ bill.)	-10.0	-12.0	-20.0	-10.0	-10.0
Real/\$(nom.)	5.2	4.9	4.8	4.8	4.8

## Other Emerging Markets

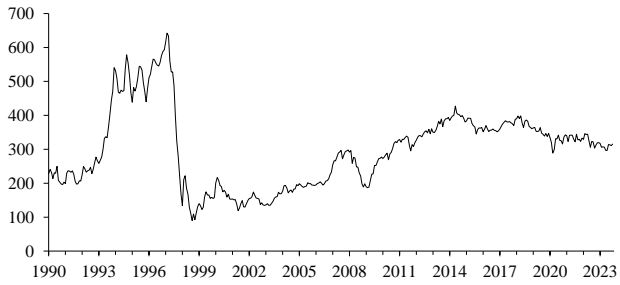
**Hong Kong: FT-Actuaries**



**Indonesia: Jakarta Composite**



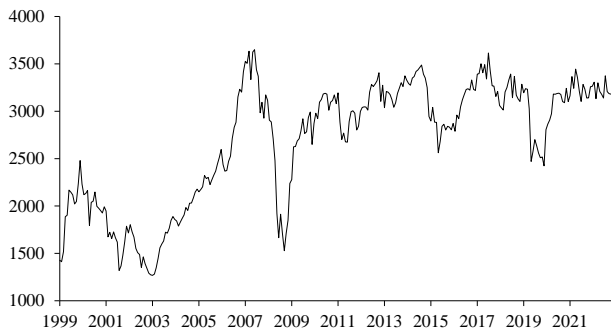
**Malaysia: FT-Actuaries  
(US\$ Index)**



**Thailand: Composite Index**



**Singapore: Straits Times Index**



**Philippines: Manila Composite**



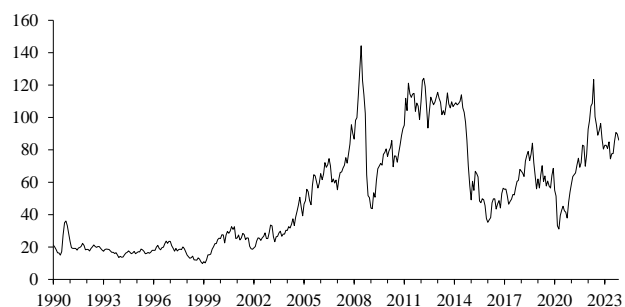
## COMMODITY MARKETS

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**Commodity Price Index (Dollar)**  
(Economist, 2015 = 100)



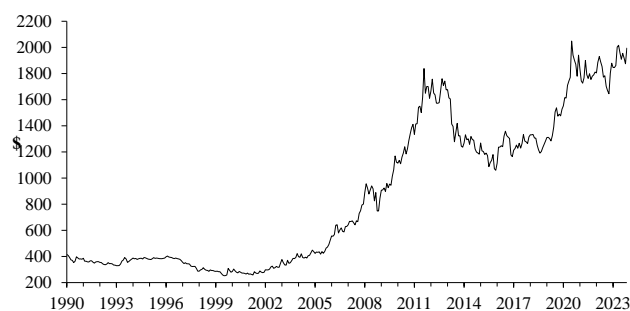
**Oil Price: North Sea Brent (in Dollars)**



**Commodity Price Index (Sterling)**  
(Economist, 2015 = 100)



**Gold Price (in Dollars)**



**Commodity Price Index (Euro)**  
(Economist, 2015 = 100)



## UK FORECAST DETAIL

### Prices, Wages, Interest Rates and Exchange Rate Forecast (Seasonally Adjusted)

	Inflation % <sup>1</sup> (CPI)	Short Dated (5 Year) Interest Rates	3 Month Int. Rates	Nominal Exchange Rate (2005=100) <sup>2</sup>	Real Exchange Rate <sup>3</sup>	Real 3 Month Int. Rates % <sup>4</sup>	Inflation (RPIX)	Real Short Dated Rate of Interest <sup>5</sup>
2020	0.9	0.1	0.2	78.2	72.9	-1.3	1.5	-1.4
2021	2.5	0.8	0.1	81.4	78.0	-6.4	4.1	-5.8
2022	9.1	2.5	2.0	79.1	82.4	-7.1	11.6	-6.7
2023	7.5	4.3	5.0	79.4	88.2	0.4	10.8	-0.3
2024	3.5	4.2	4.3	79.1	89.6	1.8	5.5	1.7
2025	2.0	3.0	3.0	79.0	89.9	1.0	2.8	1.0
2022:1	6.2	1.4	0.8	81.7	81.9	-9.4	8.4	-8.8
2022:2	9.2	2.1	1.4	79.2	81.8	-8.6	11.5	-7.9
2022:3	10.2	2.8	2.3	77.6	81.7	-6.7	12.4	-6.2
2022:4	10.9	3.6	3.6	77.9	84.1	-3.9	13.9	-3.9
2023:1	10.3	4.0	4.2	78.1	85.4	-1.8	13.6	-2.0
2023:2	8.5	4.1	5.2	80.2	89.4	0.4	11.2	-0.7
2023:3	6.1	4.5	5.2	80.3	89.1	1.2	10.1	0.5
2023:4	5.0	4.5	5.2	79.3	89.0	1.7	8.2	1.0
2024:1	4.5	4.3	5.0	79.0	89.5	2.1	7.3	1.4
2024:2	3.5	4.2	4.0	79.2	90.0	1.5	5.4	1.7
2024:3	3.0	4.1	4.0	79.2	89.1	1.8	4.6	1.9
2024:4	3.0	4.0	4.0	78.9	89.9	2.0	4.6	2.0

<sup>1</sup> Consumer's Expenditure Deflator<sup>2</sup> Sterling Effective Exchange Rate Bank of England<sup>3</sup> Ratio of UK to other OECD consumer prices adjusted for nominal exchange rate<sup>4</sup> Treasury Bill Rate less one year forecast of inflation<sup>5</sup> Short Dated 5 Year Interest Rate less average of predicted 5 year ahead inflation rate

### Labour Market and Supply Factors (Seasonally Adjusted)

	Average Earnings (1990=100) <sup>1</sup>	Wage Growth <sup>2</sup>	Survey Unemployment Percent	Millions	Real Wage Rate <sup>3</sup> (1990=100)
2020	279.1	1.6	4.5	1.3	149.7
2021	295.6	5.9	4.5	1.3	154.5
2022	313.3	6.0	3.7	1.0	151.0
2023	332.5	6.1	3.8	1.1	149.6
2024	344.7	3.7	2.9	0.7	150.0
2025	351.7	2.0	2.8	0.7	158.1
2022:1	308.8	5.7	3.7	1.0	154.6
2022:2	307.5	6.0	3.8	1.1	148.7
2022:3	316.3	5.9	3.6	1.0	149.0
2022:4	320.4	6.3	3.7	1.0	147.3
2023:1	327.0	5.9	3.8	1.0	147.8
2023:2	330.7	7.5	4.2	1.2	147.3
2023:3	334.3	5.7	3.8	1.1	148.4
2023:4	337.9	5.5	3.5	0.9	147.9
2024:1	342.5	4.7	3.0	0.8	148.2
2024:2	343.3	3.8	3.0	0.7	147.8
2024:3	345.0	3.2	2.8	0.7	148.7
2024:4	348.0	3.0	2.8	0.7	147.9

<sup>1</sup> Whole Economy<sup>2</sup> Average Earnings<sup>3</sup> Wage rate deflated by CPI

**Estimates and Projections of the Gross Domestic Product<sup>1</sup> (£ Million 1990 Prices)**

	<b>Expenditure Index</b>	<b>£ Million '90 prices</b>	<b>Non-Durable Consumption<sup>2</sup></b>	<b>Private Sector Gross Investment Expenditure<sup>3</sup></b>	<b>Public Authority Expenditure<sup>4</sup></b>	<b>Net Exports<sup>5</sup></b>	<b>AFC</b>
2020	150.6	721243.1	427576.4	250934.6	199232.3	-33095.4	123404.8
2021	163.7	783781.6	453975.6	276335.2	224535.7	-36903.3	134161.6
2022	170.6	816950.6	473683.3	277328.7	228365.7	-23824.9	138602.2
2023	171.3	820238.8	475727.6	275870.9	225318.2	-18636.0	138041.9
2024	174.6	836028.5	489782.5	270125.3	232155.7	-15892.2	140142.8
2025	178.0	852456.7	505723.0	269227.9	239198.4	-18462.8	143229.8
2020/19	-10.4		-10.1	-18.8	-4.8		4.1%
2021/20	8.7		7.3	11.9	13.4		8.7%
2022/21	4.2		4.7	1.1	1.9		3.3%
2023/22	0.4		0.4	-0.6	-1.3		-0.4%
2024/23	1.9		3.0	-2.1	3.0		1.5%
2025/24	2.0		3.3	-0.4	3.0		2.2%
2022:1	170.9	204558.1	118589.6	73715.5	56345.4	-9205.0	34887.4
2022:2	170.8	204429.6	118224.7	66135.7	57461.4	-2851.4	34540.8
2022:3	170.3	203859.4	118034.1	69576.5	56974.6	-6094.7	34631.1
2022:4	170.5	204103.5	118834.9	67900.9	57584.2	-5673.8	34542.7
2023:1	170.9	204663.7	118824.7	75780.7	55700.4	-11224.9	34417.2
2023:2	171.3	205143.0	118812.9	67471.5	56116.4	-2756.3	34501.5
2023:3	171.4	205180.1	118801.0	66568.6	56538.7	-2249.1	34479.1
2023:4	171.4	205252.1	119289.0	66050.1	56962.7	-2405.7	34644.0
2024:1	173.5	207731.3	120214.6	74503.9	57390.1	-9648.0	34729.3
2024:2	174.3	208671.2	122256.6	66012.3	57820.4	-2454.9	34963.2
2024:3	175.2	209768.4	123117.0	65434.6	58254.1	-1824.1	35213.2
2024:4	175.3	209857.6	124194.4	64174.6	58691.1	-1965.2	35237.3

<sup>1</sup> GDP at factor cost. Expenditure measure; seasonally adjusted

<sup>2</sup> Consumers expenditure less expenditure on durables and housing

<sup>3</sup> Private gross domestic capital formation plus household expenditure on durables and clothing plus private sector stock building

<sup>4</sup> General government current and capital expenditure including stock building

<sup>5</sup> Exports of goods and services less imports of goods and services

**Financial Forecast**

	<b>PSBR/GDP %<sup>1</sup></b>	<b>GDP<sup>1</sup> (£bn)</b>	<b>PSBR (£bn) Financial Year</b>	<b>Current Account (£ bn)</b>
2020	15.5	2090.9	312.9	-67.5
2021	5.0	2464.4	121.1	-34.3
2022	4.7	2767.3	130.5	-93.9
2023	3.3	2960.9	95.6	-25.4
2024	1.2	3108.5	38.3	-14.7
2025	0.7	3235.8	23.5	1.5
2022:1	0.0	646.4	-0.2	-50.5
2022:2	6.3	668.4	42.1	-28.2
2022:3	3.6	682.4	24.9	-12.7
2022:4	6.0	701.1	42.3	-2.5
2023:1	3.0	715.4	21.2	-10.8
2023:2	7.2	729.2	52.3	-9.8
2023:3	2.4	730.0	17.3	-3.3
2023:4	2.1	741.9	15.5	-1.5
2024:1	1.4	759.8	10.5	-7.3
2024:2	1.3	768.3	9.9	-8.6
2024:3	1.2	769.1	9.6	0.1
2024:4	1.3	781.8	9.9	1.1

<sup>1</sup> GDP at market prices (Financial Year)

## WORLD FORECAST DETAIL

### Growth Of Real GNP

	2019	2020	2021	2022	2023	2024
U.S.A.	2.2	-2.8	5.9	2.1	0.7	1.2
U.K.	1.6	-10.4	8.7	4.2	0.4	1.9
Japan	-0.4	-4.3	2.2	1.0	1.1	1.1
Germany	1.1	-3.7	2.6	1.9	-0.3	1.4
France	1.9	-7.9	6.8	2.5	0.3	0.6
Italy	0.5	-9.1	6.6	3.3	-0.1	0.3

### Growth Of Consumer Prices

	2019	2020	2021	2022	2023	2024
U.S.A.	1.8	1.3	4.7	8.0	3.9	2.5
U.K.	1.7	0.9	2.5	9.1	7.5	3.5
Japan	0.5	0.0	-0.2	2.5	2.1	1.2
Germany	1.4	0.5	3.1	7.9	6.2	2.7
France	1.1	0.4	1.7	5.4	4.0	2.0
Italy	0.6	-0.1	1.9	7.6	5.0	2.4

### Real Short-Term Interest Rates

	2019	2020	2021	2022	2023	2024
U.S.A.	0.2	-4.6	-7.1	-1.7	2.4	2.0
U.K.	-0.1	-2.3	-9.0	-5.5	2.5	2.3
Japan	0.1	0.3	-2.4	-2.1	-1.1	-1.4
Germany	-0.9	-3.6	-8.5	-5.9	0.4	0.5
France	-0.8	-2.2	-6.0	-3.7	1.1	0.8
Italy	-0.3	-2.4	-8.2	-4.7	0.7	0.7

### Nominal Short-Term Interest Rates

	2019	2020	2021	2022	2023	2024
U.S.A.	1.5	0.1	0.1	2.2	4.9	4.0
U.K.	0.8	0.2	0.1	2.0	5.0	4.3
Japan	0.1	0.1	0.1	0.0	0.1	0.1
Germany	-0.4	-0.5	-0.6	0.3	3.1	2.8
France	-0.4	-0.5	-0.6	0.3	3.1	2.8
Italy	-0.4	-0.5	-0.6	0.3	3.1	2.8

### Real Long-Term Interest Rates

	2019	2020	2021	2022	2023	2024
U.S.A.	-2.2	-3.3	-2.1	1.3	1.5	1.2
U.K.	-4.1	-4.8	-4.0	-0.9	2.0	2.2
Japan	-1.1	-1.3	-1.7	-1.5	-1.1	-1.3
Germany	-4.3	-5.0	-4.4	-0.9	0.1	0.0
France	-2.6	-3.3	-2.9	-0.6	0.9	0.7
Italy	-2.0	-3.3	-2.6	0.3	2.3	2.2

### Nominal Long-Term Interest Rates

	2019	2020	2021	2022	2023	2024
U.S.A.	1.9	0.9	1.6	3.8	3.6	3.2
U.K.	0.6	0.1	0.8	2.5	4.3	4.2
Japan	0.0	0.0	0.1	0.2	0.5	0.5
Germany	-0.2	-0.6	-0.2	2.1	2.3	2.1
France	0.1	-0.3	0.2	1.8	2.9	2.7
Italy	1.4	0.5	1.2	3.0	4.4	4.2

### Index Of Real Exchange Rate (2010=100)<sup>1</sup>

	2019	2020	2021	2022	2023	2024
U.S.A.	117.1	118.7	116.1	128.3	128.0	128.5
U.K.	99.5	99.6	103.7	100.7	101.1	100.7
Japan	77.0	77.8	71.0	59.9	59.2	59.3
Germany	96.0	97.1	97.9	95.0	95.1	95.4
France	93.9	94.7	94.0	89.6	89.5	89.0
Italy	95.0	95.4	95.1	91.6	91.3	89.9

<sup>1</sup> The real exchange rate is the domestic price level relative to the foreign price level converted into domestic currency. A rise in the index implies an appreciation in the real exchange rate.

### Nominal Exchange Rate

(Number of Units of Local Currency To \$1)

	2019	2020	2021	2022	2023	2024
U.S.A. <sup>1</sup>	122.52	124.77	119.77	127.34	126.90	127.40
U.K.	1.28	1.28	1.38	1.24	1.24	1.24
Japan	109.10	106.60	110.45	133.10	136.20	137.80
Eurozone	0.89	0.87	0.85	0.95	0.98	0.99

<sup>1</sup> The series for the USA is a nominal broad U.S dollar index (2010=100); the series for the UK is \$ per £

\* Forecasts based on the Liverpool World Model