LIVERPOOL INVESTMENT LETTER

April 2023

Cardiff Business School
Ysgol Busnes Caerdydd

Julian Hodge Institute of Applied Macroeconomics

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

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The Julian Hodge Institute was launched in autumn 1999 in a new collaboration between the Cardiff Business School of Cardiff University and Hodge. The aim of the Institute is to carry out research into the behaviour of the UK economy, and to study in particular its relationship with the other economies of Europe. The research has been particularly germane in recent years and has proved to be of significant social and political relevance as Europe has navigated the difficulties of the global financial crash, the Eurozone crisis and most recently the UK referendum on EU membership. The Liverpool Investment Letter is written by Patrick Minford, with the assistance of other members of the Group; in particular the emerging markets section is written by Anupam Rastogi, and the focus on Japan is written by Francesco Perugini. The Investment Letter is published monthly.

The Liverpool Research Group in Economics is pursuing a research programme involving the estimation and use of macroeconomic models for forecasting and policy analysis. The Group is now mainly based in Cardiff Business School, Cardiff University, and is indebted to the School and to the Hodge Foundation for their support. The Group's activities contribute to the programmes being pursued by the Julian Hodge Institute of Applied Macroeconomics. This Liverpool Investment Letter is typeset by David Meenagh and published on behalf of the group by Liverpool Macroeconomic Research Limited, which holds the copyright

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The government has done well in negotiating more practical trade arrangements for Northern Ireland, which we must hope lead to a generally better-functioning Trade and Cooperation Agreement with the EU; also in joining the Trans-Pacific Trade pact which will have strong long run effects in raising UK productivity and lowering consumer prices; finally too in pushing through the sunset bill for EU regulations. Unfortunately, taxes are still too high post-budget and holding back growth, which ironically will reduce public solvency.

THE PROSPECT FOR THE UK ECONOMY AND THE POLICY CHOICES AVAILABLE

The government has moved the economy forward in three major ways. First, it has improved relations with the EU by reaching an agreement on resolving the border problems in Northern Ireland in a pragmatic way; the sea border between NI and the rest of the UK had become a serious obstacle to goods for the NI internal UK market; the EU has now agreed to sensible border measures to remove this obstacle. We must hope that this breakthrough leads to less border friction under the Trade and Cooperation Agreement, the TCA, for the main UK-EU border; in principle under the TCA this should be a friction-less border as mandated under WTO rules.

The second breakthrough has come in the agreed UK accession to the Asian Trans-Pacific Free Trade pact, TPP for short. This finally moves forward the Brexit-planned free trade agenda. Given that both Mexico and Canada are part of this new free trade area, it would make sense for the other NAFTA member, the USA, to re-join it. This would emphasise the US's commitment to an open world trade order governed by the progressive processes endorsed by the new organisation, which seems likely to replace the WTO as the central authority for free trade arrangements among the fastest growing trading economies. We have estimated the long run GDP gain based from our trade models[1]; these models are consistent with UK long run facts, which reject the 'gravity' models proposed by Remainers. The TPP long run effect on GDP is set at a gain of 6% via its effect of lowering UK import prices of food and manufactures to world levels from the 20% higher levels enforced by EU protection. The TPP countries can be used to supply our needs for these goods at best world prices and we can divert our output to these markets at these prices; in turn this will force down consumer prices and the intense world competition will raise our home productivity.

The third breakthrough lies in the ending of the EU regulations still binding in the UK. The current Bill going through Parliament mandates the sunsetting of all remaining EU regulations. This will ensure that UK regulation is done by new UK processes supervised by UK law and regulators in consultation with UK industrial interests. The end year sunset deadline forces these bodies to work urgently to find optimal UK replacements. One of the major objectives of Brexit is to replace the EU's intrusive precautionary principle with the pragmatic common law principles under which experimentation is permitted to enable vigorous innovation. As long as EU regulations are left in place by default, their replacement is delayed by bureaucratic inertia. As nature abhors a vacuum, so the abolition of remaining EU regulations should stimulate the necessary consultations to produce new UK-based regulation.

[1]https://link.springer.com/article/10.1007/s11079-017-9470-z

Table 1: Summary of Forecast

	2019	2020	2021	2022	2023	2024	2025
GDP Growth[1]	1.4	-11.0	7.5	4.2	-0.4	2.0	2.0
Inflation CPI	1.7	1.0	2.5	8.9	5.0	3.2	2.0
Wage Growth	3.5	1.6	5.8	6.0	5.4	3.4	3.0
Survey Unemployment	3.8	4.5	4.5	3.6	3.5	2.8	2.8
Exchange Rate[2]	78.3	78.2	81.5	79.4	78.1	77.4	76.8
3 Month Interest Rate	0.8	0.2	0.1	1.8	4.4	4.0	3.0
5 Year Interest Rate	0.6	0.1	0.4	2.3	4.3	4.0	3.0
Current Balance (£bn)	-63.3	-67.5	-34.3	-111.2	-24.2	-14.7	1.5
PSBR (£bn)	64.3	312.4	132.4	156.6	124.9	59.5	3.2

[1]Expenditure estimate at factor cost
[2]Sterling effective exchange rate, Bank of England Index (2005 = 100)

The Need for a New Growth-based Agenda in Public Policy

As we argued in the last Letter, it is a great irony that the latest budget decisions, designed to underpin the UK's reputation for solvency, have in the event seriously undermined it by setting back growth prospects due to the raising of marginal tax rates. The raising of the Corporation tax rate to 25% and the ongoing erosion of real tax thresholds by inflation have both dragged more entrepreneurs into higher marginal tax rates. This reduces the entrepreneurial incentive to innovate, the key source of productivity growth. With the low growth resulting from the Budget measures, our projections, shown last time and repeated below, have the public debt/GDP ratio spiralling up above 150% by 2035.

Growth is also supported by our main public services, infrastructure, education, policing and health. Yet these are also being cut back by strikes and poor recruitment as public sector real wages fall; the government seems to believe that slowness to negotiate realistic wage settlements contributes to anti-inflation policy, much as in old-time 'incomes policies'. This is wrong; inflation is controlled by monetary policy, with fiscal policy and such direct wage intervention having no significant effect. All that such policies do is damage the economy, respectively by worsening recession and damaging public sector efficiency. Pubic sector productivity has declined sharply in recent quarters as a result.

It is unfortunate that the government is persisting in poor tax policies damaging to growth, just as it is improving policies on trade and regulation. It urgently needs to bring its tax policies into line with the economy's need for renewed growth.

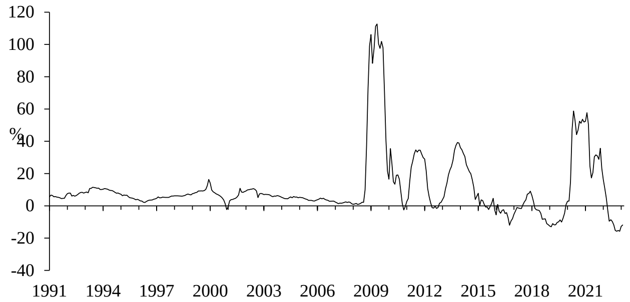
Public finance projections from 2025 to 2035

	Real GDP growth	Nominal GDP growth	Tax rate growth
New baseline	0%	1.7%	0% + £20b p.a from 2023/24

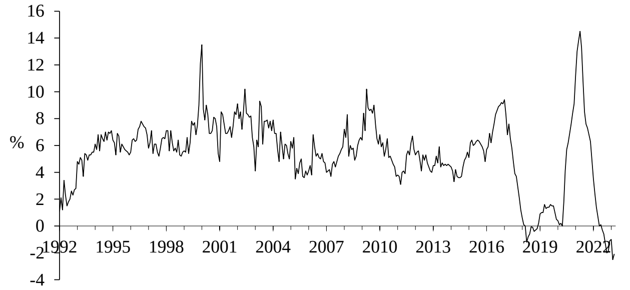
Table 2 Variant: New baseline Forecast

	Nom PSBR (£bn)	Nom GDP (£bn)	Nom Pub Spend (£bn)	PSBR/ GDP%	Spend/ GDP%	Nom Debt (£bn)	Debt Interest (£bn)	Debt/ GDP%	Net Taxes (£bn)	Net Tax Rate%
2019/20	64.3	2316.4	514.6	2.8	22.2	1621.0	46.7	70.0	497.0	21.5
2020/21	312.4	2068	482.5	15.1	23.3	1933.4	39.9	93.5	210.0	10.2
2021/22	132.4	2413.9	479.0	5.5	19.8	2065.8	61.3	85.6	407.9	16.9
2022/23	156.6	2674.6	664.4	5.9	24.8	2222.4	60.6	83.1	568.4	21.3
2023/24	104.9	2792.1	679.7	3.8	24.3	2327.3	62.4	83.4	637.1	22.8
2024/25	39.46	2940.6	671.5	1.3	22.8	2366.8	63.9	80.5	695.9	23.7
2025/26	26.2	2990.6	669.3	0.9	22.4	2392.9	64.3	80.0	707.4	23.7
2026/27	71.5	3041.4	725.9	2.3	23.9	2464.4	64.6	81.0	719.1	23.6
2027/28	124.2	3093.1	790.0	4.0	25.5	2588.6	65.1	83.7	731.0	23.6
2028/29	181.9	3145.7	859.2	5.8	27.3	2770.5	65.7	88.1	743.1	23.6
2029/30	245.6	3199.2	934.4	7.7	29.2	3016.1	66.6	94.3	755.3	23.6
2030/31	315.6	3253.6	1015.7	9.7	31.2	3331.7	67.8	102.4	767.8	23.6
2031/32	392.5	3308.9	1103.6	11.9	33.4	3724.2	69.4	112.5	780.6	23.6
2032/33	476.8	3365.1	1198.8	14.2	35.6	4201.0	71.5	124.8	793.5	23.6
2033/34	569.4	3422.4	1301.8	16.6	38.0	4770.4	74.2	139.4	806.6	23.6
2034/35	670.9	3480.5	1413.2	19.3	40.6	5441.2	77.7	156.3	820.0	23.6

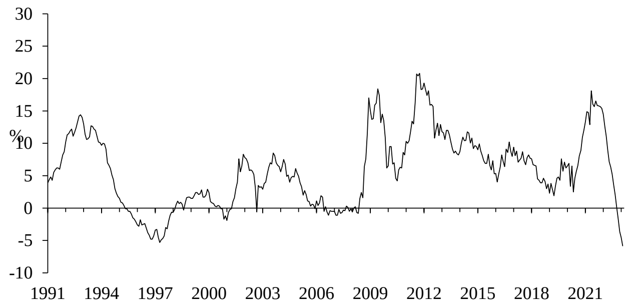
U.S.: Growth in M0 (Yr - on - Yr)



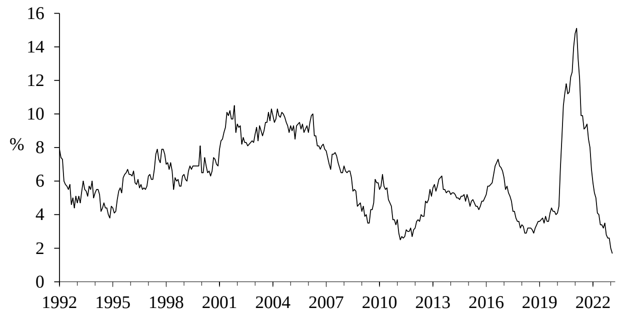
UK: Notes and Coins in Circulation Growth



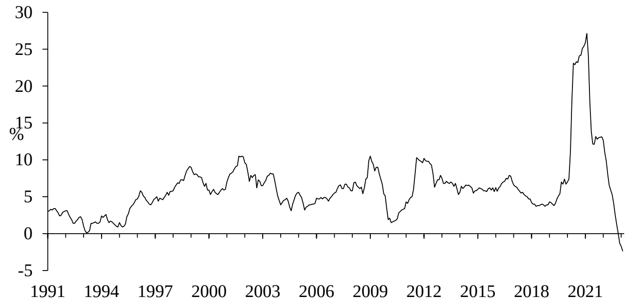
U.S.: Growth in M1 (Yr - on - Yr)



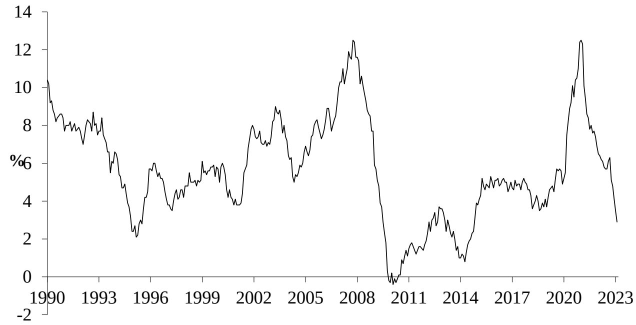
UK: M4 Growth



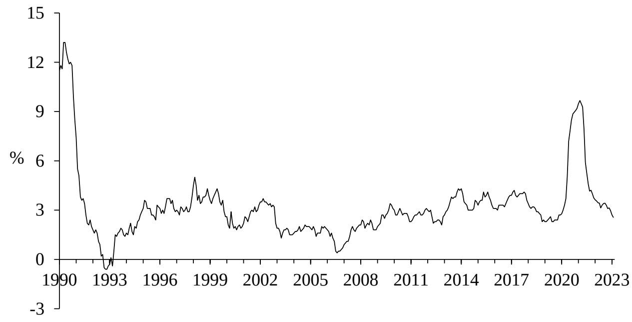
U.S.: Growth in M2 (Yr - on - Yr)



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

New Bank of Japan Has a New Governor

Last month Japan's parliament approved academic Kazuo Ueda as the next Bank of Japan (BOJ) governor. Ueda, 71, will be the first BOJ chief from academia in postwar Japan, taking over on April 9 from Haruhiko Kuroda, who has been at the helm for 10 years. The approval by the House of Councillors set the stage for the government to formally appoint Ueda, as the more powerful House of Representatives gave the go-ahead a day earlier. The nominees for deputy governors, Ryozo Himino, a former commissioner of the Financial Services Agency, and Shinichi Uchida, an executive director at the BOJ- were also endorsed by parliament. They will succeed Masayoshi Amamiya and Masazumi Wakatabe on March 20 for five-year terms.

Ueda is a monetary policy expert whose theoretical knowledge helped the BOJ introduce a zero-interest rate policy and embark on quantitative easing. He sat on the decision-making Policy Board between 1998 and 2005. Himino, 62, is an internationally minded financial regulator while Uchida, 60, has been in charge of policy design under Kuroda and knows the inner workings of the central bank.

The surprise selection of Ueda in February has been taken as an indication that Prime Minister Fumio Kishida wants a gradual departure from the "Abenomics" economy-boosting program that entailed powerful monetary easing as a major pillar. The new BOJ leadership has been lauded by analysts as well balanced, and mostly in line with previous BOJ Monetary Policy Board regarding inflation concerns (see figure below). For now, Ueda has been stressing the importance of maintaining monetary easing as the BOJ's 2% inflation target is not expected to be attained in a sustainable and stable fashion, a view echoed by his would-be deputies in confirmation hearings in February. He has also dampened market expectations that he will immediately scrap the BOJ's controversial yield curve control program, while keeping hopes alive for its future reworking or complete abandonment — under yield curve control, the BOJ sets short-term interest rates at minus 0.1%, while allowing 10-year Japanese government bond yields to trade around zero percent.

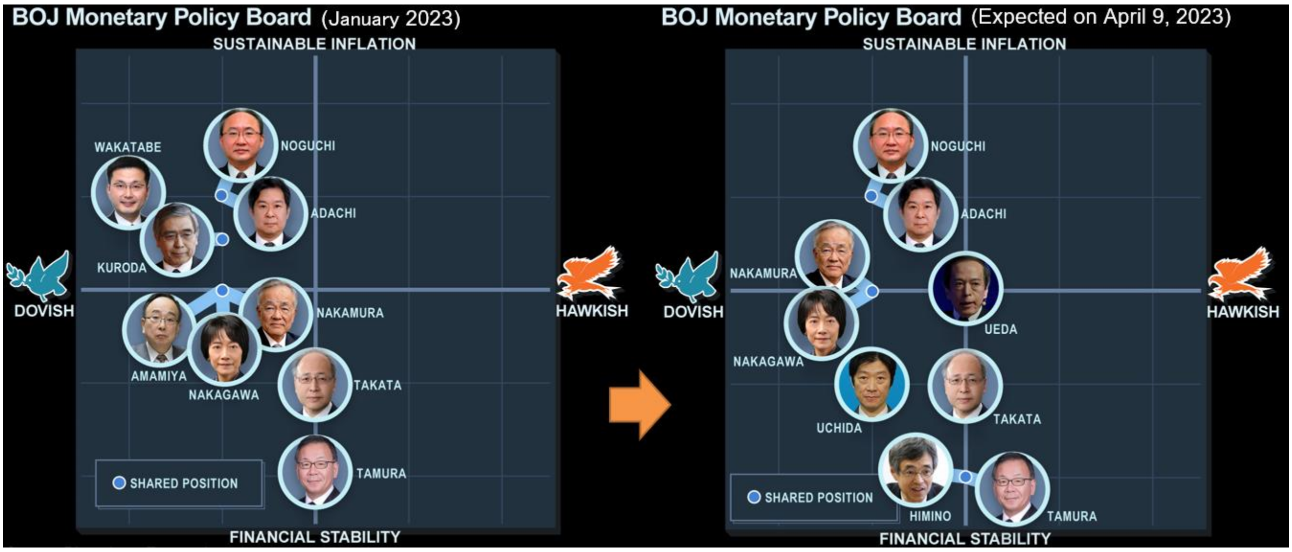
However, inflation has rocketed to a four-decade high in recent months, driven largely by energy prices, putting pressure on companies to lift wages to compensate for the hit to households. The core consumer price index (CPI), which excludes volatile fresh food but includes oil products, rose 3.1% in February from a year earlier. The pace of increase slowed sharply from a 4.2% rise seen in January, which was the highest reading since December 1981 when the Middle East crisis pushed Japan's inflation to 4%. As a result, inflation remained well above the Bank of Japan's 2% target as companies continued to pass on rising costs to consumers, keeping alive market expectations of a near-term tweak to its ultra-loose monetary policy.

March, which marks the end of the fiscal year for most Japanese companies, is a time when they formulate investment and operations strategies for the next period. Of nearly 500 major companies polled last month by Reuters, 82% said a continuation of global inflation was a concern for their business in the coming period. In the second most common response, 59% named the risk of a global recession. "The continued rise in input costs and higher electricity charges for our refrigeration units are likely to be major factors in squeezing profits," said a manager at a wholesaling company, who commented on condition of anonymity. Moreover, when company managers were asked about their expectations for increases in the consumer price index (CPI), the most common response, at 34%, was for a range of 1.6% to 2.0%. But a total of 43% selected ranges of 2.1% or higher, beyond the BOJ target.

BOJ Governor Haruhiko Kuroda has repeatedly said inflation will slow back below the bank's 2% target later this year as the effect of past rises in fuel and raw material costs dissipate. But what direction will the BOJ monetary policy take under new Governor Kazuo Ueda?

Will the BOJ continue to maintain the status quo? Or will it strengthen the flexibility of its monetary-policy framework — such as increasing the target range of the 10-year government bond yield or shortening the yield target for 5-year bonds — which could ultimately lead to greater normalization, including a removal of the yield curve control? So far Ueda asserted his intention to maintain Kuroda's current policy of trying to stably achieve a 2% inflation rate and continue current monetary easing until inflation rises as a result of steady growth in demand and wages rather than the current prevailing supply-side factors. What is clear is that the BOJ has a host of challenges to tackle: the extraordinarily swollen balance sheet, financial market distortions and lax fiscal discipline resulting from the many years of ultra-low interest rates. Moreover, the future of the world economy is uncertain — the US has just witnessed the failure of two banks, and others are under stress in Europe. Given these factors, it will not be easy for new BOJ Governor Ueda, in his words, to "drive quietly and safely" once he assumes the post.

The diagram below shows how the Board Composition will change in terms of its attitude to Inflation (implying a desire to push rates higher cet. par.) and Financial Stability (i.e. concern for possible bank failures which would point to keeping rates low, cet. par.). Each member's position is plotted against the two axes. Movement to the East implies a bias towards raising interest rates, while upward movement to the North implies a bias to lowering. On balance the average bias is moving to the South East, suggesting rates will tend to rise.



MARKET DEVELOPMENTS

World financial markets are still struggling with the transition to a new normal of higher interest rates. These have destabilised banks that loaded up with real estate and bond investments. Central bank monetary policies have been unstable since Covid; first far too expansionary, then highly contractionary. This sort of instability creates general instability, as explained by Milton Friedman years ago. Until stability returns with a new normal, investors should stay clear of bonds and invest in diversified equities offering real profit streams.

Table 1: Market Developments

	Market Levels		Prediction for Apr/May 2024	
	Mar 13	Apr 7	Previous Letter	Current View
Share Indices				
UK (FT 100)	7549	7742	7820	8020
US (S&P 500)	3891	4105	4016	4236
Germany (DAX 30)	14959	15598	17981	18749
Japan (Tokyo New)	2001	1965	2579	2533
Bond Yields (government				
UK	3.50	3.43	4.00	4.00
US	3.59	3.41	3.50	3.50
Germany	2.40	2.18	2.20	2.20
Japan	0.28	0.46	0.50	0.50
UK Index Linked	0.28	0.27	1.00	1.00
Exchange Rates				
UK ($ per £)	1.22	1.24	1.20	1.20
UK (trade weighted)	78.25	79.45	77.9	77.9
US (trade weighted)	108.70	107.47	113.2	113.2
Euro per $	0.93	0.92	0.98	0.98
Euro per £	1.13	1.14	1.18	1.18
Japan (Yen per $)	133.15	131.79	140.0	140.0
Short Term Interest Rates				
UK	4.34	4.44	4.00	4.00
US	5.14	5.20	4.30	4.30
Euro	2.98	3.08	3.00	3.00
Japan	–0.03	–0.03	0.10	0.10

Table 2: Prospective Yields [1]

Equities: Contribution to £ yield of:

	Dividend Yield	Real Growth	Inflation	Changing Dividend Yield	Currency	Total
UK	2.10	1.1	3.5	–1.00		5.70
US	2.00	1.2	3.0	–1.00	3.50	8.70
Germany	2.10	1.2	3.0	16.00	–3.30	19.00
Japan	1.90	1.1	1.8	26.00	–2.52	28.28
UK indexed[2]	0.51		3.5	16.00		19.78
Hong Kong[3]	2.60	3.0	3.0	–43.00	3.50	–30.90
Malaysia	3.30	5.4	3.0	47.00	3.50	62.20
Singapore	3.50	3.0	3.0	11.00	3.50	24.00
India	1.40	6.5	3.0	6.00	3.50	20.40
Korea	1.10	0.0	3.0	–52.00	3.50	–44.40
Indonesia	2.20	4.5	3.0	15.00	3.50	28.20
Taiwan	2.80	3.0	3.0	16.00	3.50	28.30
Thailand	3.20	2.5	3.0	12.00	3.50	24.20

Bonds: Contribution to £ yield of:

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	3.43	–5.67		–2.24
US	3.41	–0.87	3.50	6.04
Germany	2.18	–0.29	–3.30	–1.31
Japan	0.46	–0.30	–2.52	–2.45

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	4.44		4.44
US	5.20	3.50	8.70
Euro	3.08	–3.30	–0.23
Japan	–0.03	–2.52	–2.54

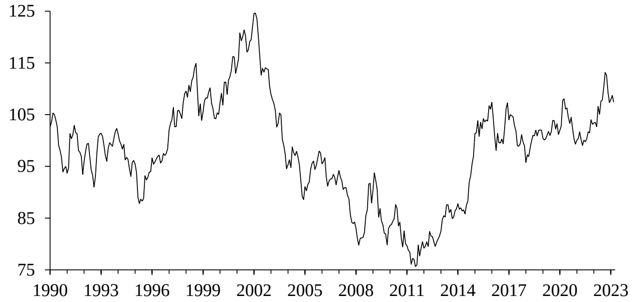
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

Table 3: Portfolio(%)

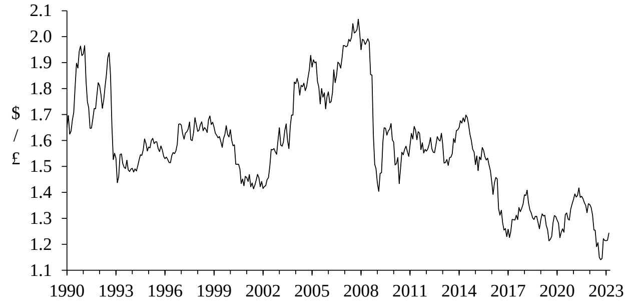
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	March Letter	Current View	March Letter	Current View	March Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-	-	-	-	-
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

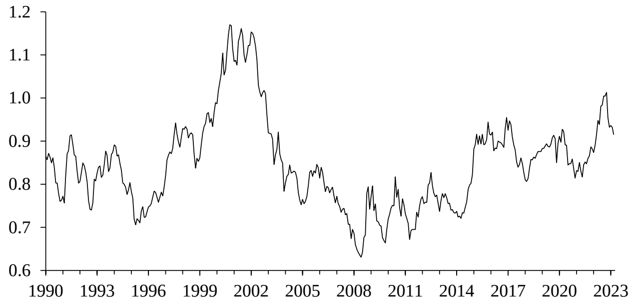
US : Trade Weighted Index
(Bank of England 1990 = 100)



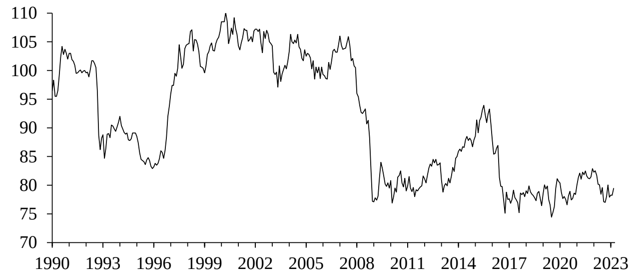
UK: Dollars Per Pound Sterling



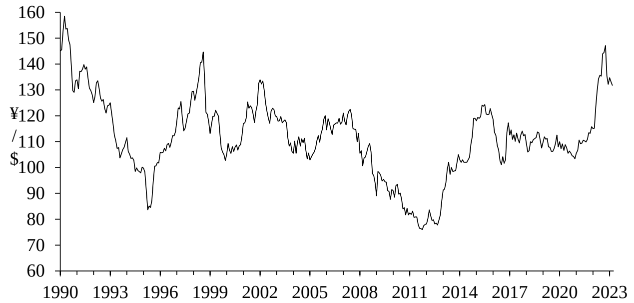
Euro per US dollar



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



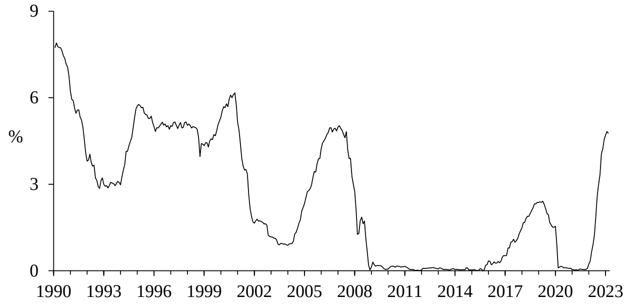
Japan : Yen Per U.S. Dollar



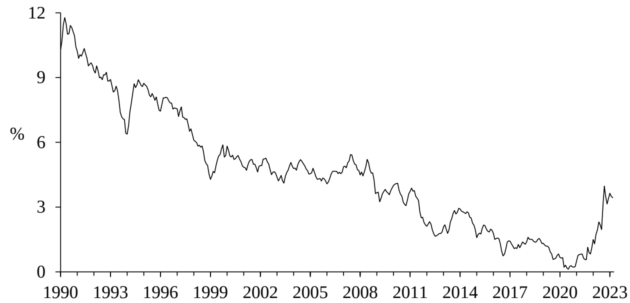
GOVERNMENT BOND MARKETS

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

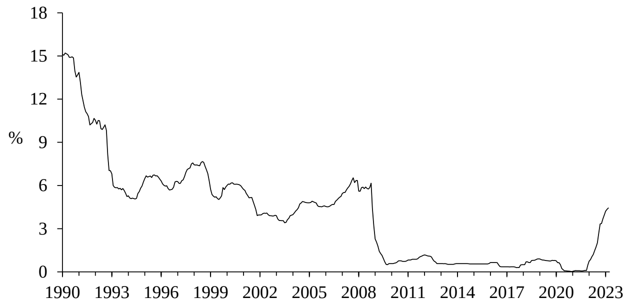
U.S. : 3-Month Treasury Bill



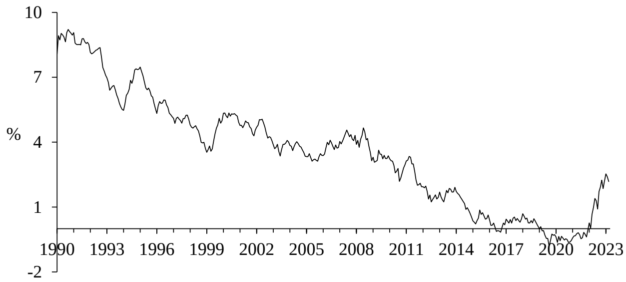
U.K.: Yield on Long-Term Government Bonds



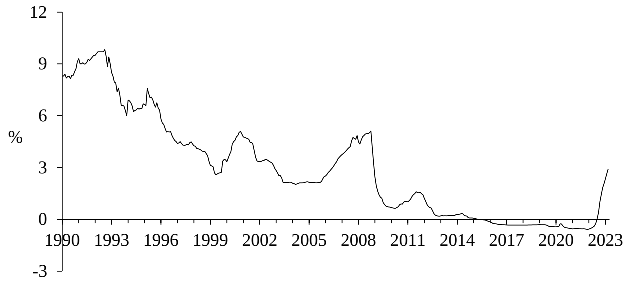
U.K. : 3-Month Certificate LIBOR Rate



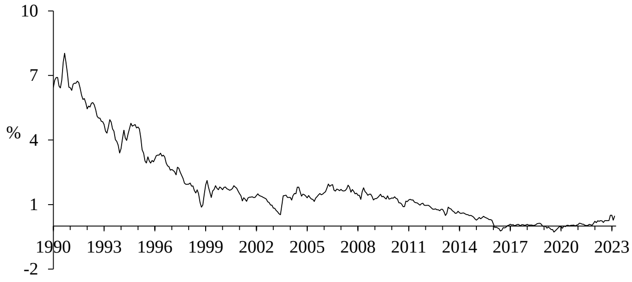
Germany: Yield on Public Authority Bonds



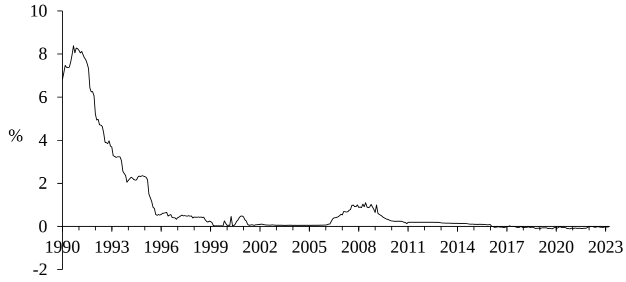
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

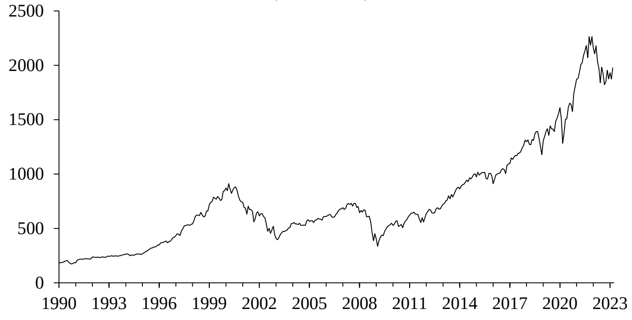


Japan : 3-Month Money Market Rate

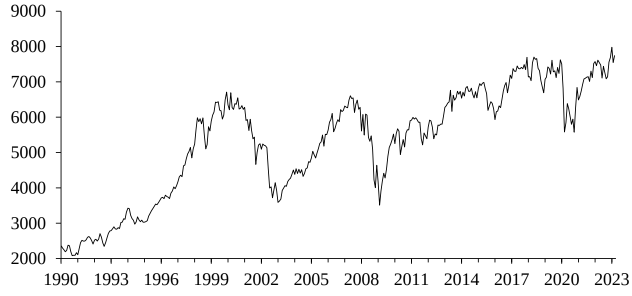


MAJOR EQUITY MARKETS

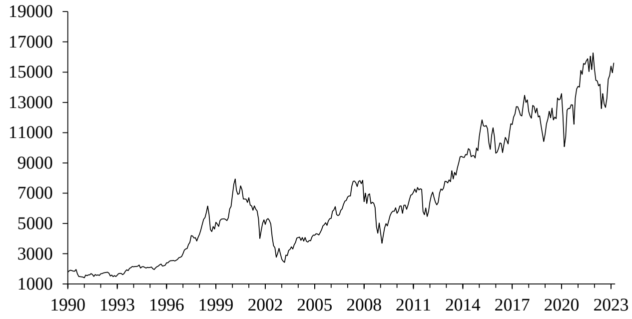
U.S. : S & P 400 Industrial
(1985=100)



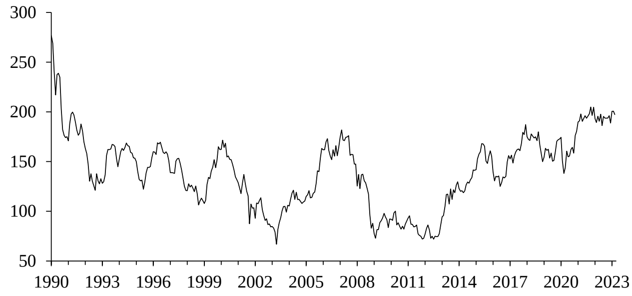
U.K. : FTSE-100 Index
(10 April 1962=100)



Germany : DAX 30



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



EMERGING MARKETS

Anupam Rastogi

India

India's economic growth remains on sound footing. India's gross domestic product (GDP) may grow 7% for 2022–23. In the current financial year 2023–24 and the next financial year, we are maintaining our forecast of 6.5% even though there is some indication that rural consumption may be hit due to below-normal monsoon. However, India will continue to be a fast-growing large economy globally. With inflation slightly higher than the upper bound of the targeted level of 6% and relative stability on the external account and in the financial markets, India's recovery post-Covid appears complete and sustainable with no side effects of stimulus policies adopted during the Covid pandemic.

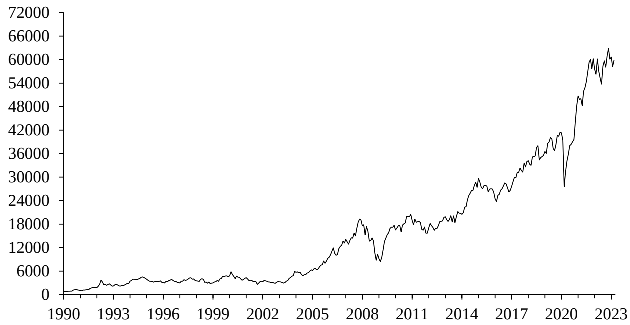
India's manufacturing sector expanded at its quickest pace in three months in March on improved output and new orders. The Manufacturing Purchasing Managers' Index compiled by S&P Global increased to 56.4 in March from February's 55.3. The manufacturing sector is being supported by the services sector as well. The India Services PMI rose to a 12-year high of 59.4 in February 2023 from 57.2 in the previous month. An increase in output is reflected in increased tax revenue. Indirect taxes revenue in March 2023 grew 13% on-year as the ongoing inflation, government initiatives on the technology front, and economic activity growth helped India keep the fiscal deficit under check.

Inflation is slowing down, but still, it is far above the 4% target set by the central bank.

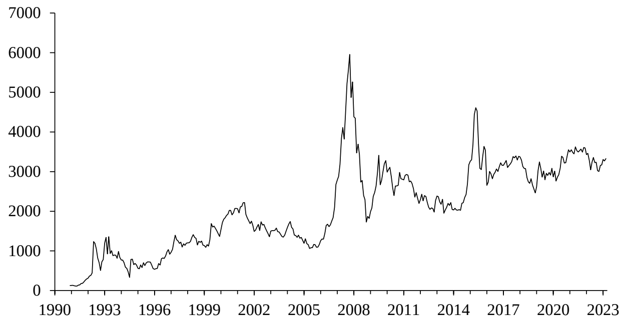
RBI Governor Shaktikanta Das announced that the central bank has decided to pause after a rate hike seen in the previous six consecutive policies. The Repo Rate is maintained at 6.50%. The Reserve Bank held its benchmark interest rate at 6.5%. The central bank has weighed in more in favour of economic growth than controlling inflation. The central bank has increased the repo rate by 250 bps since May 2022. The Consumer Price Index (CPI)-based inflation was 6.52% in January and 6.44% in February.

India's current account deficit (CAD) in the December quarter shrank to 2.2% of gross domestic product from 3.7% in the September quarter, primarily due to a narrowing of the merchandise trade deficit, coupled with robust growth in services and private transfer receipts. We expect the CAD to post $10–12 billion in the March quarter. The FY23 CAD is expected to be $77–80 billion (2.3% of GDP). India's record high in services exports during Q4 2022 is expected to offset the risks of slowing down the country's merchandise exports. We expect CAD to be less than 2% of GDP in FY24.

India: BSE Sensex



China: SSE Composite Index



India has unveiled a new Foreign Trade Policy (FTP), which seeks to boost the country's exports to USD 2 trillion by 2030 by shifting from incentives to remission and entitlement-based regimes. The government hopes to achieve equal contributions from the merchandise and services sectors.

The INR is expected to trade between 82 and 83 per dollar. The exchange rate is being supported by the hawkish stance taken by the central bank on retail inflation. The rupee weakened around 8% versus the US dollar in FY23. Still, it has fared better than many other currencies, such as the Chinese yuan, South Korean won, Malaysian ringgit, and Philippine peso. During FY24, the rupee will likely remain stable as CAD remains under control, and the procurement of discounted crude from Russia is a big positive.

	22–23	**23-24**	**24-25**	**25-26**	**26-27**
GDP (%p.a.)	7.0	6.5	6.5	6.0	6.2
WPI (%p.a.)	6.5	5.3	5.0	4.2	4.0
Current A/c(US$ bill.)	-100.0	-80.0	-80.0	-60.0	-40.0
Rs./$(nom.)	81.0	83.0	85.0	85.0	85.0

China

China's GDP growth is not rallying as expected. The China Caixin manufacturing purchasing managers index fell to 50.0 in March from 51.6 in February. It suggests a moderation of activity in the sector. New orders and output both declined. The government may increase fiscal stimulus after the weak GDP report for the first quarter. China's official purchasing managers index for nonmanufacturing sectors, which include services and construction, rose in March to 58.2 from 56.3 in February. The indicators suggest China's recovery continued through March as households and businesses adjusted to life after almost three years of Covid-19 controls that relied on mass lockdowns and frequent testing to crush the smallest virus outbreaks.

This year, the government has set a growth target of around 5%, which we expect to be achieved as the government wants to see a positive recovery trend and will seek to sustain it. Emphasis on domestic consumption will be the theme in the coming quarters.

Premier Li Qiang pledged to restore business confidence in the world's second-largest economy amid recent domestic difficulties and diplomatic tensions with the US.

China's annual consumer inflation slowed to the lowest rate in a year in February as consumers remained cautious despite the abandonment of strong pandemic controls late in 2022. Combined with the persistence of producer deflation, it suggests that fiscal stimulus has no obstacle.

The consumer price index (CPI) in February was 1% higher than a year earlier, rising slowly since February 2022. It is well below the target of 3% set by the government for 2023 in response to weaker demand and lower inflation.

China's central bank has lowered the amount of deposits banks have to set aside, for the first time in 2023, to kick-start economic growth this year. It has cut banks' reserve-requirement ratio (RRR) by 0.25 percentage points, bringing the weighted average RRR level for the banking system to 7.6%.

Exports fell 6.8% during January and February compared with the same period a year ago. Wednesday's figures suggest the slowdown in property is moderating, with smaller declines in investment and new home starts in January and February than in 2022. The housing sector is unlikely to add to growth this year.

China has attempted to discourage Japan from imposing significant curbs on exports of semiconductor manufacturing equipment as part of a fast-evolving geopolitical battle over access to the world's most advanced chips.

The Chinese currency is expanding its reach and is now seen as an antidote to what many views as Washington's weaponization of the global financial system. For the first time in the history of the Moscow Exchange, the yuan overtook the US dollar as the most traded currency last month, with a market share close to 40% of the trading volume. Russia's dependency on the yuan is increasing across the board. The percentage of Russian exports settled in the yuan grew from 0.4% to 14% in the first nine months of 2022. Yuan deposits have become available in all major banks, so the Russian households' yuan holdings jumped from zero to $6 billion: 11% of their foreign currency.

China retained the central bank Governor, Yi Gang. A sign of policy continuity. He Lifeng, a close Xi ally, was promoted to the vice premier, putting him in line to possibly replace Liu He as the top economic policymaker in the country.

	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	7.0	7.2	7.3	7.4

South Korea

The decline in world trade is impacting South Korean exports and GDP. South Korea GDP grew 1.3% in Q4 2022, and the GDP growth will remain weak in 2023. We expect GDP to grow by just 1% in 2023 compared to 2.6% in 2022.

South Korea's consumer inflation eased in March, led by weaker oil prices, but worries about global growth, monetary policy, and decisions by major oil producers have clouded the outlook. The central bank would hold rates as the economy is near the edge of a recession, and policymakers will be wary of overtightening in the face of a slowdown in global growth and overseas demand for its major exports, such as chips and consumer electronics.

The consumer price index was 4.2% higher in March than a year earlier, compared with gains of 4.8% in February. It was the slowest annual rise since March 2022. The mid-term target set by the bank is 2%. The BOK held interest rates steady after a year of uninterrupted hikes. Its commentary was dovish, and the monetary tightening may not resume if inflation followed an expected path toward moderation.

The Ministry of Trade, Industry and Energy and the Korea Customs Service announced on April 1 that South Korea's exports totalled US$55.13 billion (down 13.6% year on year), and imports totalled US$59.75 billion (down 6.4% year on year) in March, resulting in a trade deficit of US$4.92 billion. Exports fell for the sixth consecutive month, which hasn't happened since March to August

2020. Also, the trade deficit has lasted for 13 months, the first time in 25 years and nine months. South Korea's trade deficit for the first three months of this year is US$22.4 billion, while its trade deficit was US$47.8 billion in 2022.

The South Korean won, Asia's worst-performing currency this quarter, may come under pressure in April as overseas investors take dividends out of the country. The top 10 Korean companies will distribute approximately $3.5 billion to global funds. The currency could retest support around its 1,329 level, the low against the dollar touched in March.

	22	**23**	**24**	**25**	**26**
GDP (%p.a.)	2.6	1.0	2.5	2.5	2.4
Inflation (%p.a.)	5.1	5.0	3.0	2.5	2.5
Current A/c(US$ bill.)	50.0	40.0	35.0	30.0	30.0
Won/$(nom.)	1450	1300	1300	1350	1400

Taiwan

A slower world economy is impacting Taiwan's economy. A fall in exports is expected to pull down Taiwan's gross domestic product (GDP) growth in 2023 to below 2%. We expect GDP growth to be 1.8% in 2023 and 2% in 2024. There will be some support from domestic consumption to ensure it does not fall into recession.

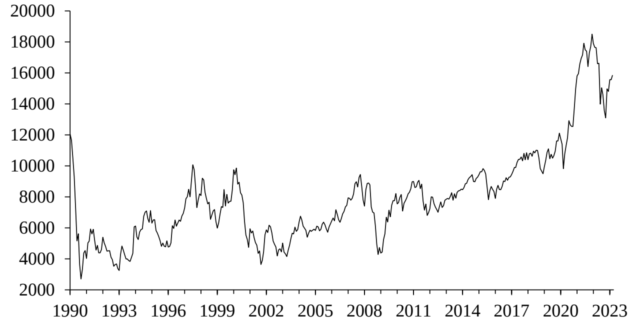
An average 11% hike in electricity tariffs, effective from April, and an increase in dining out costs and rents are all set to impact CPI in 2023. We expect inflation to peak at 2.2% in 2023. It is marginally higher than the inflation target set by the central bank.

The Central Bank of the Republic of China (Taiwan) raised its benchmark rate for a fifth consecutive quarter amid global monetary tightening. With the economy slowing sharply, having contracted 0.41% in the fourth quarter, the central bank has maintained its hawkish stance. It raised its benchmark discount rate by 12.5 basis points to 1.875% from 1.750%. It also increased the secured loan rate to 2.250% from 2.125% and lifted the unsecured loan rate to 4.125% from 4.00%. Since March 2022, the Taiwan central bank has raised its rates by 75 basis points, while the US Federal Reserve has boosted its rates by 475 basis points, and the slower pace adopted by the local central has widened the interest rate gap between the two countries.

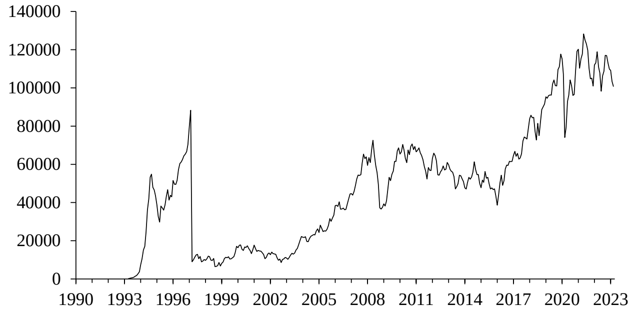
Taiwan President Tsai Ing-wen met American politicians in New York and House Speaker Kevin McCarthy in Los Angles in the face of threats from Beijing. Those who engage with her could trigger unspecified retaliation. The visit is expected to spark an angry response from Beijing.

Interestingly, when the House Speaker meets Taiwanese President Tsai Ing-wen, French President Emmanuel Macron is set to land in China on a three-day tour and meetings with Chinese President Xi Jinping to discuss Ukraine. It is a subtle way to tell Beijing it remains an ally of Western democracies. President Xi is leaving no stone unturned to develop a fissure in the West's alliance against the rise of China.

Taiwan: Weighted TAIEX Price Index



Brazil: Bovespa



	22	**23**	**24**	**25**	**26**
GDP (%p.a.)	2.5	1.8	2.0	2.3	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	30.5	30.0	30.5	30.5

Brazil

The Brazilian economy is expanding even though credit remains at an elevated level. We expect GDP to grow by 1% in 2023 compared to last year's 2.9% growth. The central bank expects the economy to grow marginally more at 1.2%. The bank's optimism is based on the previous quarter's positive service sector surprises. The improved estimates for the extractive industry have been considered.

Brazil's annual consumer inflation slowed to 5.6% in February, despite a marginal increase in monthly CPI compared to January.

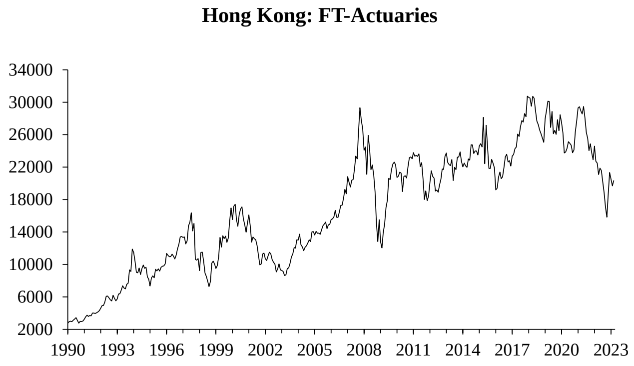
The central bank's monetary policy committee left the Selic rate at a six-year high of 13.75%. The bank began raising the rate in early 2021 from a record low of 2% to slow the pace of consumer price increases. Brazil's primary measure of inflation has since come down from an almost 19-year high of 12.13% in April 2022 to 5.6% in February 2023. A growing debate on a potential credit crunch due to high borrowing costs has not affected the central bank's resolve to control inflationary expectations.

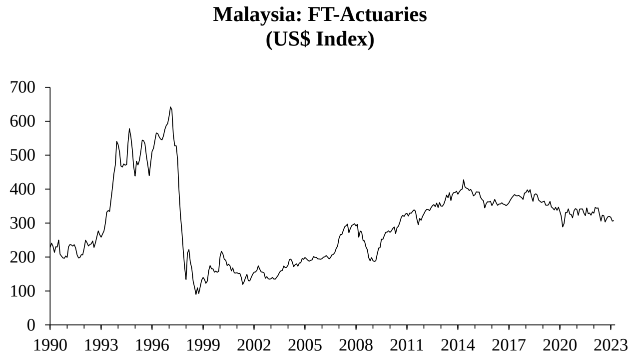
Brazil's trade surplus for February fell a larger-than-expected 35% from last year as exports, especially of oil, declined. The trade surplus of $2.8 billion was lower than the $3.1 billion estimated earlier.

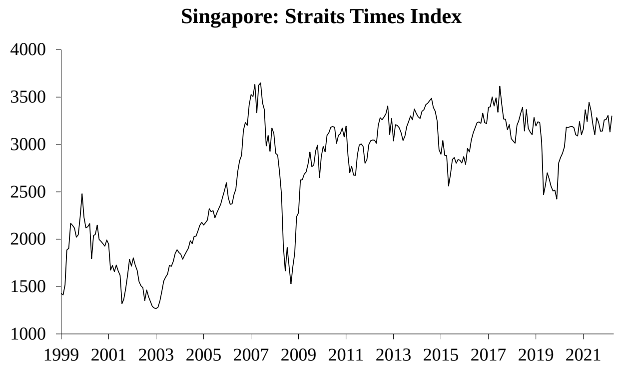
China and Brazil have agreed to a new trade deal to allow them to trade in their currencies, dropping the US dollar as an intermediary for bilateral trade. It will enable the two countries to conduct their trade and financial transactions directly, exchanging Chinese Yuan for Brazilian Real and vice versa. China is pushing hard to make the yuan acceptable in international trade. For Brazil, the deal represents a significant shift away from the traditional reliance on the dollar as the world's primary currency. The deal is expected to reduce costs and promote even greater bilateral trade. With a record USD 150.5 billion in bilateral trade last year, China is the country's biggest trading partner.

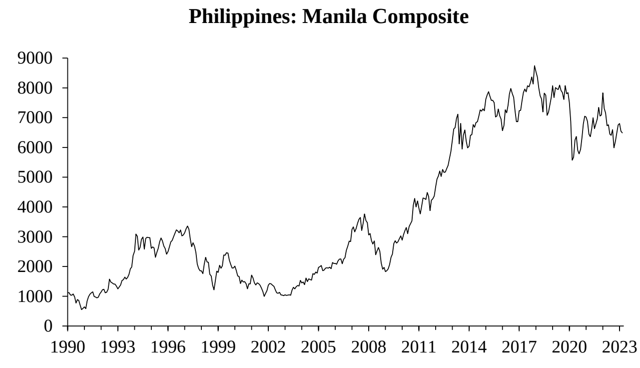
	22	**23**	**24**	**25**	**26**
GDP (%p.a.)	2.9	1.0	2.0	2.5	3.0
Inflation (%p.a.)	8.0	5.5	4.0	4.2	4.2
Current A/c(US$ bill.)	-10.0	-12.0	-20.0	-10.0	-10.0
Real/$(nom.)	5.2	5.3	5.4	5.5	5.5

Other Emerging Markets



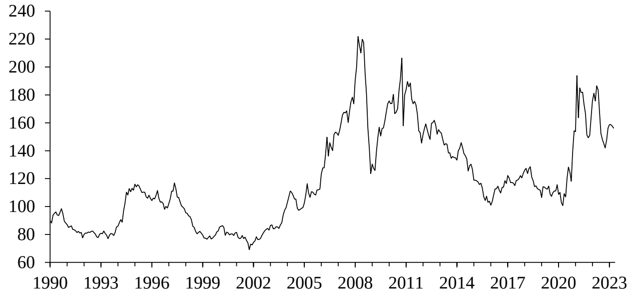




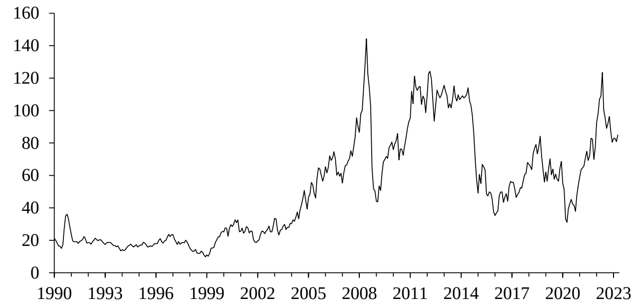


COMMODITY MARKETS

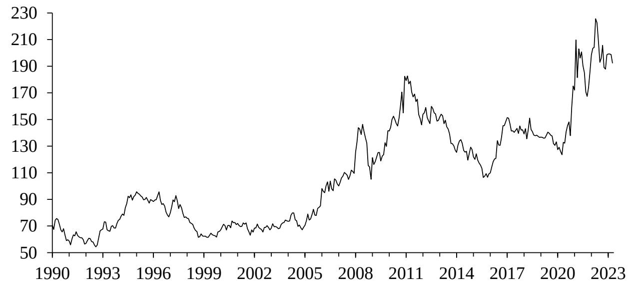
Commodity Price Index (Dollar)
(Economist, 2015 = 100)



Oil Price: North Sea Brent (in Dollars)

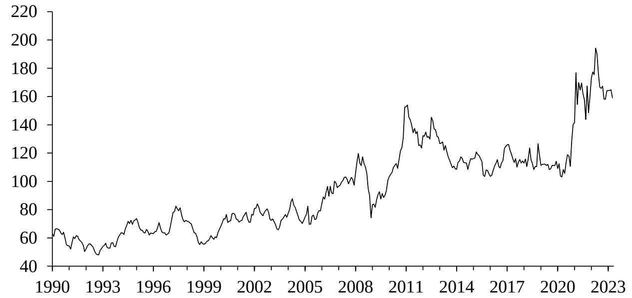


Commodity Price Index (Sterling)
(Economist, 2015 = 100)



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 %[1] (CPI)	Short Dated (5 Year) Interest Rates	3 Month Int. Rates	Nominal Exchange Rate (2005=100) [2]	Real Exchange Rate[3]	Real 3 Month Int. Rates %[4]	Inflation (RPIX)	Real Short Dated Rate of Interest[5]
2020	1.0	0.1	0.2	78.2	72.9	-1.3	1.5	-1.4
2021	2.5	0.4	0.1	81.4	78.0	-6.4	4.1	-5.7
2022	8.9	2.3	1.8	79.7	81.8	-5.5	11.4	-5.0
2023	5.0	4.3	4.4	78.1	82.7	0.7	8.1	0.6
2024	3.2	4.0	4.0	77.4	84.2	1.6	4.6	1.6
2025	2.0	3.0	3.0	76.8	84.9	1.0	2.8	1.0
2022:1	6.2	1.4	0.8	82.3	81.9	-8.4	8.4	-7.8
2022:2	9.2	2.1	1.4	80.2	81.8	-6.8	11.5	-6.1
2022:3	10.1	2.8	2.0	78.2	81.7	-4.7	12.4	-3.9
2022:4	10.7	3.0	3.0	78.1	81.6	-2.0	13.1	-2.0
2023:1	6.6	4.0	4.2	78.0	81.1	-0.3	11.0	-0.3
2023:2	5.5	4.1	4.5	77.5	82.6	0.8	9.0	0.4
2023:3	4.0	4.5	4.5	77.9	83.7	1.1	6.4	1.1
2023:4	4.0	4.5	4.5	77.5	83.6	1.3	6.0	1.3
2024:1	3.5	4.0	4.0	77.9	83.5	1.2	5.5	1.2
2024:2	3.2	4.0	4.0	77.3	84.3	1.5	5.0	1.5
2024:3	3.0	4.0	4.0	77.3	84.5	1.8	4.0	1.8
2024:4	3.0	4.0	4.0	77.1	84.3	2.0	4.0	2.0

[1] Consumer's Expenditure Deflator
[2] Sterling Effective Exchange Rate Bank of England
[3] Ratio of UK to other OECD consumer prices adjusted for nominal exchange rate
[4] Treasury Bill Rate less one year forecast of inflation
[5] 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)[1]	Wage Growth[2]	Unemployment (New Basis) Percent[3]	Millions	Real Wage Rate[4] (1990=100)
2020	279.1	1.6	4.5	1.3	149.7
2021	295.0	5.9	4.5	1.3	154.8
2022	314.5	6.0	3.6	1.0	150.2
2023	327.5	5.4	3.5	0.9	150.7
2024	338.9	3.4	2.8	0.7	151.0
2025	338.9	3.0	2.8	0.7	152.6
2022:1	308.5	5.9	3.7	1.0	154.8
2022:2	307.5	6.2	3.8	1.1	149.0
2022:3	315.5	5.8	3.7	0.9	149.0
2022:4	317.2	6.3	3.7	0.9	147.8
2023:1	323.9	5.9	3.8	1.0	153.8
2023:2	321.0	5.6	3.6	1.0	149.2
2023:3	329.3	5.0	3.4	0.9	150.4
2023:4	329.9	5.1	3.2	0.9	149.4
2024:1	335.9	3.9	2.9	0.8	154.4
2024:2	331.3	3.7	2.8	0.7	150.0
2024:3	339.2	2.9	2.8	0.7	150.3
2024:4	339.8	3.1	2.8	0.7	149.5

[1] Whole Economy
[2] Average Earnings
[3] Wage rate deflated by CPI

Estimates and Projections of the Gross Domestic Product[1] (£ Million 1990 Prices)

	Expenditure Index	£ Million '90 prices	Non-Durable Consumption[2]	Private Sector Gross Investment Expenditure[3]	Public Authority Expenditure[4]	Net Exports[5]	AFC
2020	149.0	713432.6	427576.4	244157.8	199232.3	-33095.4	124438.5
2021	160.2	767344.3	453969.6	258155.2	224537.2	-36883.0	132434.5
2022	166.8	798577.4	473683.2	257528.5	228362.6	-23838.4	137158.1
2023	166.1	795317.2	475719.5	248799.5	225311.5	-18632.0	135881.3
2024	169.5	811597.0	489778.6	243503.8	232154.4	-15890.1	137949.7
2025	172.9	827988.2	505714.4	242189.8	239194.3	-18456.2	140654.2
2020/19	-11.0		-10.1	-16.2	-4.8		5.0
2021/20	7.5		6.2	-1.0	4.8		6.4
2022/21	4.2		4.3	-5.6	3.1		3.6
2023/22	-0.4		0.4	-1.5	3.0		-0.9
2024/23	2.0		3.0	9.9	3.0		1.5
2025/24	2.0		3.3	-16.2	-4.8		2.0
2022:1	167.2	200167.8	118589.6	68746.5	56345.5	-9205.1	34308.7
2022:2	167.4	200403.4	118225.6	62024.6	57458.7	-2866.9	34438.6
2022:3	165.2	197801.6	118034.3	62937.1	56975.0	-6092.0	34052.8
2022:4	167.2	200204.7	118833.7	63820.2	57583.3	-5674.5	34358.0
2023:1	165.8	198481.4	118824.7	69129.5	55701.1	-11222.9	33951.0
2023:2	166.4	199201.0	118812.9	60935.7	56116.4	-2756.3	33907.7
2023:3	166.3	199048.6	118801.0	59953.0	56538.3	-2249.7	33994.0
2023:4	165.9	198586.2	119280.9	58781.4	56955.7	-2403.2	34028.6
2024:1	167.7	200740.0	120213.3	67069.4	57389.5	-9638.5	34293.7
2024:2	169.4	202819.3	122254.5	59537.5	57819.9	-2462.3	34330.3
2024:3	170.2	203787.8	123116.9	58859.8	58254.1	-1824.2	34618.8
2024:4	170.6	204249.9	124193.9	58037.1	58690.9	-1965.1	34706.9

1 GDP at factor cost. Expenditure measure; seasonally adjusted
2 Consumers expenditure less expenditure on durables and housing
3 Private gross domestic capital formation plus household expenditure on durables and clothing plus private sector stock building
4 General government current and capital expenditure including stock building
5 Exports of goods and services less imports of goods and services

Financial Forecast

	PSBR/GDP %[1]	GDP[1] (£bn)	PSBR (£bn) Financial Year	Current Account (£ bn)
2020	15.6	2068.0	312.4	-67.5
2021	5.6	2413.9	132.4	-34.3
2022	5.8	2674.6	156.6	-111.5
2023	4.5	2792.1	124.9	-24.2
2024	2.0	2940.6	59.5	-14.7
2025	0.1	3087.7	3.2	1.5
2022:1	1.6	633.5	10.1	-46.5
2022:2	7.5	655.7	49.1	-35.1
2022:3	3.6	662.9	23.9	-19.4
2022:4	8.5	686.5	58.4	-10.5
2023:1	3.8	669.5	25.2	-9.6
2023:2	4.7	688.4	32.5	-9.8
2023:3	4.6	694.7	31.8	-3.3
2023:4	4.3	708.7	30.4	-1.5
2024:1	4.3	700.3	30.2	-7.3
2024:2	2.3	723.6	16.3	-8.6
2024:3	1.9	732.9	14.1	0.1
2024:4	1.9	751.8	14.6	1.1

1 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.	1.4	–11.0	7.5	4.2	–0.4	2.0
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	1.0	2.5	8.9	5.0	3.2
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.	–0.7	–1.3	–6.4	–5.5	0.7	1.6
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	1.8	4.4	4.0
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.	–0.4	–1.4	–5.7	–5.0	0.6	1.6
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	0.4	2.3	4.3	4.0
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)[1]

	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	106.5	111.8	113.0	115.0
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

[1] 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.[1]	122.52	124.77	119.77	127.34	126.90	127.40
U.K.	1.28	1.29	1.37	1.22	1.21	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

[1] 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