LIVERPOOL INVESTMENT LETTER

December 2021

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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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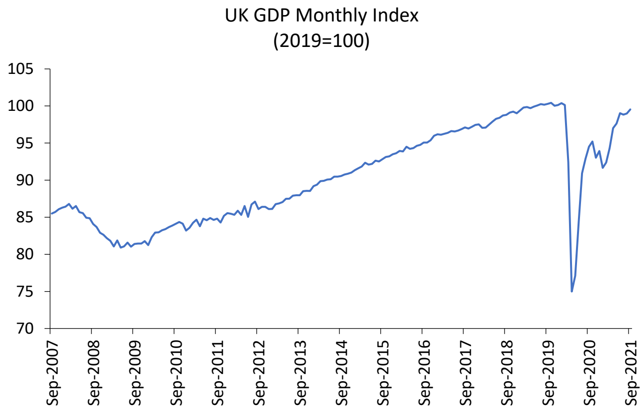
THE RECOVERY CONTINUES DESPITE OMICRON AND SUPPLY SHORTAGES

The economy is now within touching distance of its pre-Covid level, according to the latest ONS estimate



The latest Covid scare over the Omicron variant should not derail it. The government is now determined to 'live with Covid' and this includes new variants that will continue to pop up. Plainly there is a concern that it will spread fast, reinfecting people who had earlier variants. But it does seem that the vaccinations should protect against serious disease and hence hospitalisation, via the strengthening of T-cells, to which the omicron variant is as vulnerable as previous ones. If so then the government will not react with economy-damaging lockdown measures and one must hope, will also reopen travel.

If Omicron spreads faster than previous variants but is no more deadly or perhaps less deadly, as initial reports from South Africa suggest, it would conform to the evolution of previous viruses with which we have had to live, including previous coronaviruses that now produce the common cold.

Policy Confusion

Meanwhile in fiscal policy confusion reigns. The Chancellor proclaimed in his Budget that he would like to cut taxes, even while he was then busy raising them. As we pointed out at the time, this stance was illogical and self-contradictory. Optimal tax policy should be constant over time as it is damaging to raise tax early for today's businesses, in order to lower them more for tomorrow's; welfare is greatest if the tax rate is 'smoothed' over time and borrowing is used to achieve that.

Table 1: Summary of Forecast

	2018	2019	2020	2021	2022	2023	2024
GDP Growth[1]	1.3	1.4	-9.9	8.1	8.1	2.5	2.1
Inflation CPI	2.4	1.7	1.0	2.3	5.0	4.0	3.0
Wage Growth	3.0	3.5	1.6	6.4	4.3	4.2	4.2
Survey Unemployment	4.1	3.8	4.5	4.6	4.9	3.6	2.8
Exchange Rate[2]	78.6	78.3	78.2	81.3	78.7	77.8	77.5
3 Month Interest Rate	0.4	0.8	0.2	0.1	0.7	1.4	2.9
5 Year Interest Rate	1.0	0.6	0.1	0.3	1.1	2.5	3.0
Current Balance (£bn)	-82.9	-89.1	-58.2	-48.3	-35.9	-24.0	-16.7
PSBR (£bn)	39.3	49.1	306.6	179.5	57.8	42.0	23.0

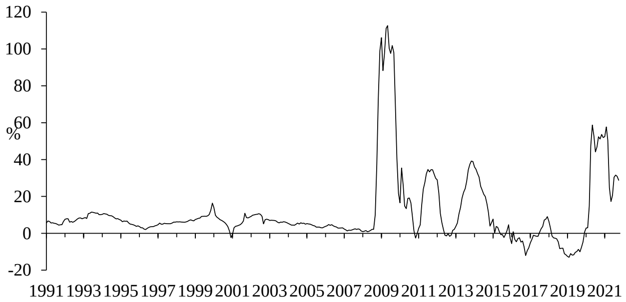
[1]Expenditure estimate at factor cost
[2]Sterling effective exchange rate, Bank of England Index (2005 = 100)

The latest news from Nos 10 and 11 Downing Street is that both Rishi Sunak and Boris Johnson would like to cut taxes in the next few years[1]. The problem is that they have not clarified how they would square this with the short termist rules on the PSBR being imposed by the Treasury and its ally the OBR, given that there are strong pressures to spend on public services and infrastructure. We have argued consistently that these rules make no sense; the only issue is long term solvency and that is enhanced by the better growth tax cuts will bring.

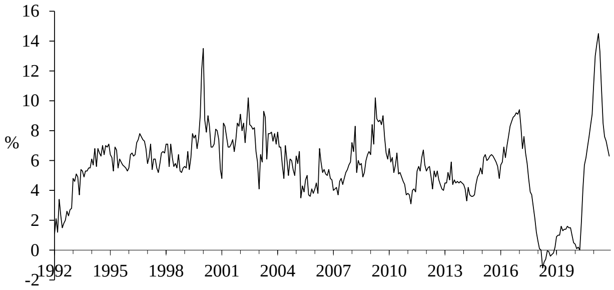
As the economy recovers fully into 2022, tax revenues will rise and benefit payments will fall, both sharply; accordingly the PSBR will fall in spite of spending pressures. We must hope this leads to a less short termist approach, with greater confidence to go for a bold tax-cutting agenda for growth. This agenda would be good not just for growth but also for levelling-up; our projections show that tax cuts will be a bigger tonic to the North than to the South, so helping to close the gap and level up the UK. Our latest forecasts suggest a good background for it.

[1]https://www.thetimes.co.uk/article/rishi-sunaks-plan-to-slash-taxes-c30wd5kzx

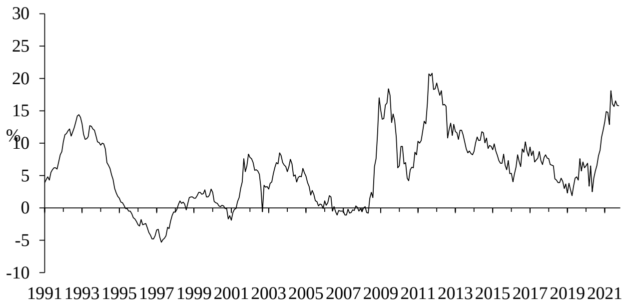
U.S.: Growth in M0 (Yr - on - Yr)



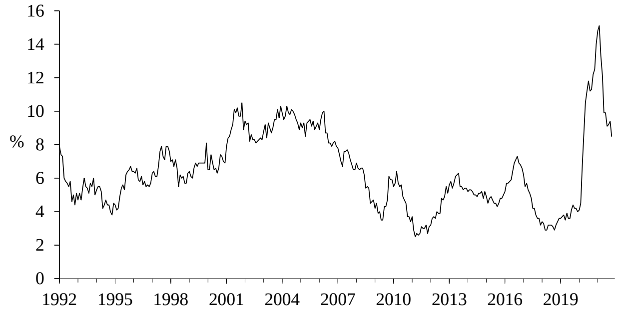
UK: Notes and Coins in Circulation Growth



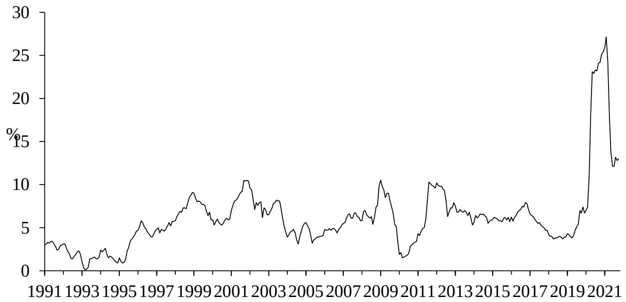
U.S.: Growth in M1 (Yr - on - Yr)



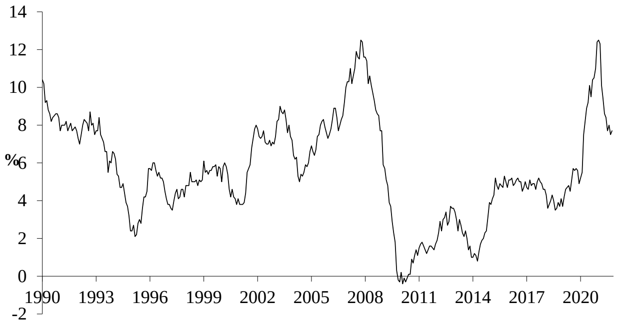
UK: M4 Growth



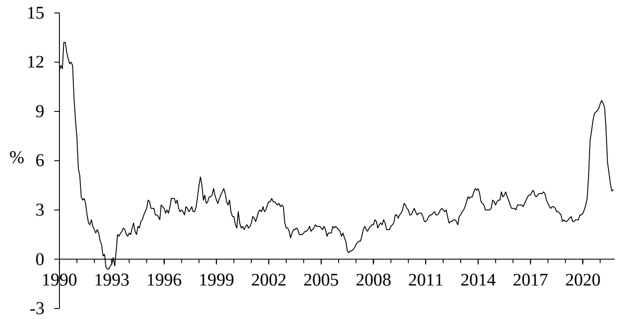
U.S.: Growth in M2 (Yr - on - Yr)



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

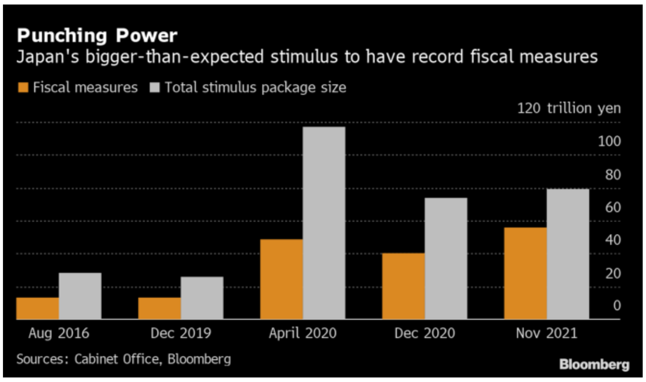
Francesco Perugini

Japan Unveils Record Stimulus Package

Japan's Prime Minister Fumio Kishida has unveiled a record-breaking stimulus package worth approximately ¥56 trillion Japanese ($490bn). The government will compile an extra budget by the end of this year to fund the stimulus programme to deliver necessary aid to the public quickly, the new elected Prime Minister Kishida told a meeting of government and ruling party executives late last month. "The package has more than enough content and scale to deliver a sense of security and hope to the people," Kishida told reporters.

The package will surpass the previous high set in 2020 in response to the coronavirus pandemic. The size of the stimulus, including private sector funds, will be ¥78.9 trillion (14.6% of GDP). Benefits for households and businesses have been raised in line with the distribution policy of Prime Minister Fumio Kishida. An increase in government bonds to cover the deficit is inevitable but talks on funding have been postponed. The main parts of the stimulus include compensation equivalent to ¥100,000 for children 18 and under, and a support grant of up to ¥2.5 million for businesses. Despite the huge spending, policies to boost economic growth over the medium to long term have yet to be announced. The package will amount to ¥43.7 trillion in national expenditures alone. Total fiscal spending, including that of local governments as well as investment and loans, is ¥55.7 trillion. Previously, the largest economic stimulus package was ¥48.4 trillion in April 2020. In December of the same year, the government injected another round of stimulus worth ¥40 trillion. These figures contrast to the economic stimulus after the 2008 Lehman crisis, which totalled ¥15.4 trillion. The size of spending is much bigger than the ¥30–Y40 trillion ($262bn to $350bn) estimated by markets, mostly due to huge pay-outs to households and firms hit by the pandemic. To fund the extra spending, Japan's cabinet has just approved a record ¥36.0 trillion yen ($314 billion) supplementary budget for fiscal 2021. Most of the extra budget will be financed by debt, adding a further blow to the country's fiscal health. The government also plans to use ¥6.1 trillion that was carried over from the fiscal 2020 budget.

Overall, Japan's new debt issuance for the current fiscal year through March 2022 is now estimated at ¥65.7 trillion yen. The figure is smaller than the about ¥108.6 trillion in the previous fiscal year, when the government compiled three extra budgets totalling about ¥73 trillion (13.5% of GDP) to fight the coronavirus pandemic, but fuels fear of a further deterioration in the nation's fiscal soundness, the worst among major developed nations (see the figure below). On the other hand, Japanese savings are very high and persistently have funded these deficits domestically, triggering no solvency concerns. With the zero bound prevalent and QE making it worse, there is a need for effective demand creation in the stagnant Japanese economy, thereby possibly driving inflation and interest rates off the zero bound.



The approval of the extra budget came as Japan has seen significantly lower numbers of new virus cases amid steady progress in the government's vaccine rollout, leading various restrictions on economic activities to be gradually eased. Moreover, Japan officially exited recession last month after three quarters of contraction and hopes to cement its recovery with the latest spending — which follows previous packages in April and June worth around ¥117 trillion each.

Through the fiscal package stimulus, Kishida, who took office on Oct. 4 and led the Liberal Democratic Party (LDP) to victory in the Oct. 31 general election, aims to lead the domestic economy to recover to pre-pandemic levels, while trying to meet his goal of redistributing wealth by increasing support for households and firms. In his policy speech to the Diet on October 8, Kishida cited the following four pillars for his redistribution strategy. Based on a "virtuous circle of growth and distribution" of wealth, this new economic policy is supposed to replace the much-lamented neoliberal approach, which is said to have contributed to growing economic inequity among the Japanese society.

Dubbed Kishidanomics, the new prime minister's ambitious plans have already led a number of Japanese economists to highlight the limitations of the economic reshuffling. Sato Motohiro, a professor of economics at Hitotsubashi University, points out that the plan currently lacks sufficient details about how the new administration will obtain the revenue required for the redistribution of wealth to be feasible, unlike Abenomics' so-called trickle-down effect. Kaya Keiichi, a columnist of Newsweek, similarly argues that Kishidanomics is elusive and, in effect, not that different from Abenomics. To cite one specific example, Kishida promised to reinvigorate Japan's pension system by encouraging part-time workers to join the system. Yet Kaya contends that even if all part-time workers were to pay pension fees, it would not be sufficient to support the expansion of the system in the long run.

Indeed, the economic and finance policies under the Kishida administration could be similar to those already seen under the Abe and Suga governments. Suzuki Shunichi, the minister of finance, pledged that he would stick to bold monetary easing, flexible fiscal spending, and a growth strategy, all of which had already been facilitated by Abenomics. Yamagiwa Daishiro, the minister in charge of economic revitalization, stated that the government would take all necessary measures to "revitalize the economy." Whether Kishidanomics is destined to be successful or not depends on the political will of the Japanese people. If Kishida's administration comes to be viewed as reneging on its promises, the public could quickly turn its back and begin looking for a more reliable replacement.

MARKET DEVELOPMENTS

Inflation and interest rates will rise, probably more than markets are now expecting. This will end the zero lower bound. Equities will be robust as the recovery in profits offsets the rise in the discount factor.

Table 1: Market Developments

	Market Levels		Prediction for Sep/Oct 2022	
	Nov 5	Dec 3	Previous Letter	Current View
Share Indices				
UK (FT 100)	7304	7122	13191	12863
US (S&P 500)	4698	4538	6121	5914
Germany (DAX 30)	16054	15170	27517	26001
Japan (Tokyo New)	2041	1958	2736	2624
Bond Yields (government				
UK	0.89	0.83	1.50	1.50
US	1.48	1.40	3.00	3.00
Germany	–0.26	–0.38	0.00	0.00
Japan	0.06	0.04	0.10	0.10
UK Index Linked	–2.58	–2.67	1.00	1.00
Exchange Rates				
UK ($ per £)	1.35	1.32	1.30	1.30
UK (trade weighted)	81.12	81.47	78.8	78.8
US (trade weighted)	101.49	104.01	100.5	100.5
Euro per $	0.87	0.89	0.88	0.88
Euro per £	1.17	1.17	1.14	1.14
Japan (Yen per $)	113.46	113.23	107.5	107.5
Short Term Interest Rates				
UK	0.26	0.63	1.70	1.70
US	0.18	0.17	2.00	2.00
Euro	–0.54	–0.59	–0.10	–0.10
Japan	0.00	0.00	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	3.60	2.6	5.0	73.00		84.20
US	1.99	2.4	5.0	22.90	1.66	33.95
Germany	3.30	1.8	1.6	68.00	2.39	77.09
Japan	1.90	1.5	0.5	32.00	6.64	42.54
UK indexed[2]	–2.53		5.0	16.00		18.34
Hong Kong[3]	2.60	5.2	5.0	–15.00	1.66	–0.54
Malaysia	3.30	6.9	5.0	59.00	1.66	74.96
Singapore	3.50	5.0	5.0	52.00	1.66	68.66
India	1.40	5.5	5.0	2.00	1.66	15.56
Korea	1.10	2.2	5.0	–16.00	1.66	–5.24
Indonesia	2.20	4.8	5.0	21.00	1.66	34.36
Taiwan	2.80	3.5	5.0	27.00	1.66	39.96
Thailand	3.20	4.1	5.0	23.00	1.66	35.86

Bonds: Contribution to £ yield of: –

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	0.83	–6.71		–5.88
US	1.40	–16.03	1.66	–12.97
Germany	–0.38	–3.81	2.39	–1.81
Japan	0.04	–0.58	6.64	6.10

Deposits: Contribution to £ yield of:

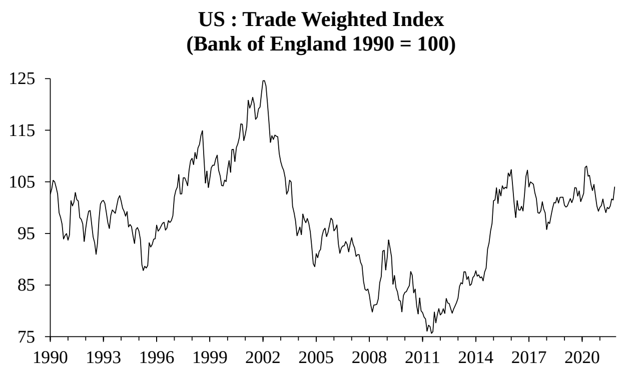
	Deposit Yield	Currency	Total
UK	0.63		0.63
US	0.17	1.66	1.83
Euro	–0.59	2.39	1.80
Japan	0.00	6.64	6.64

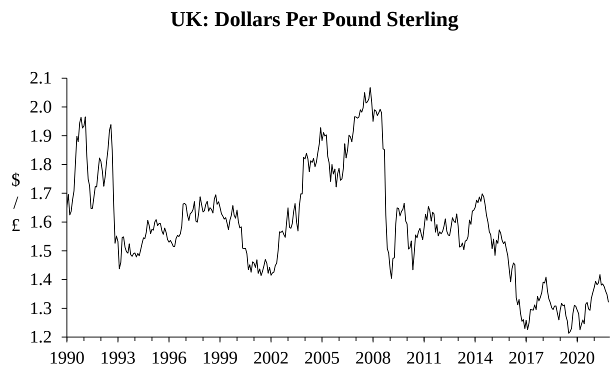
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

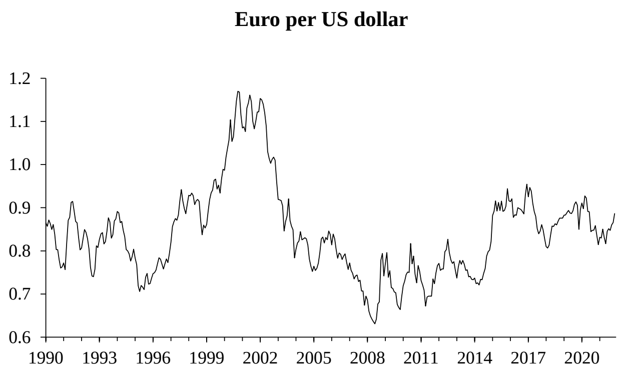
Table 3: Portfolio(%)

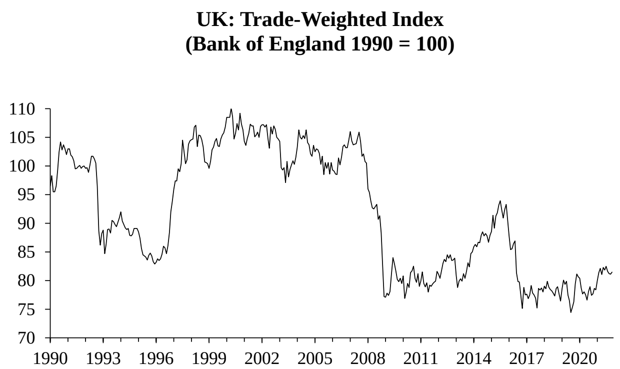
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	November Letter	Current View	November Letter	Current View	November Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-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

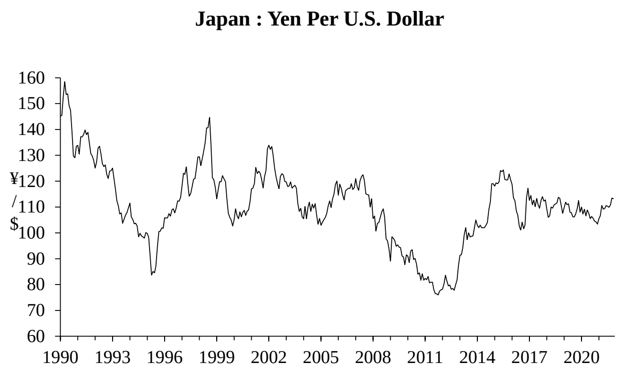
INDICATORS AND MARKET ANALYSIS
FOREIGN EXCHANGE MARKETS







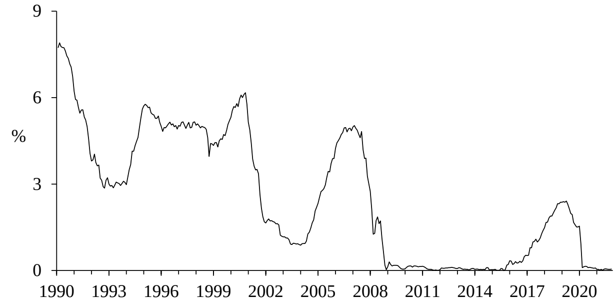




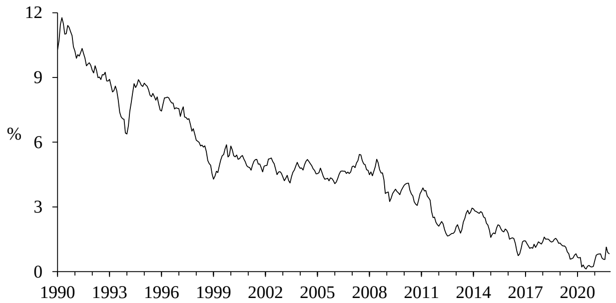
GOVERNMENT BOND MARKETS

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

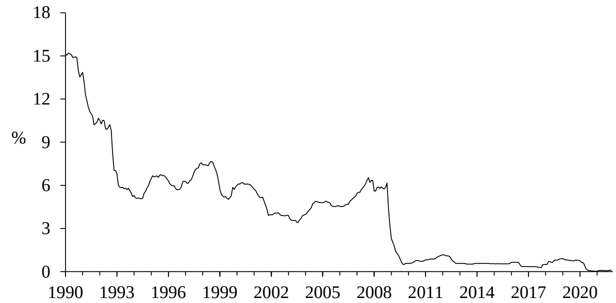
U.S. : 3-Month Treasury Bill



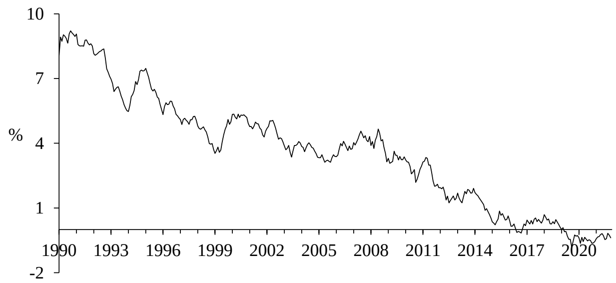
U.K.: Yield on Long-Term Government Bonds



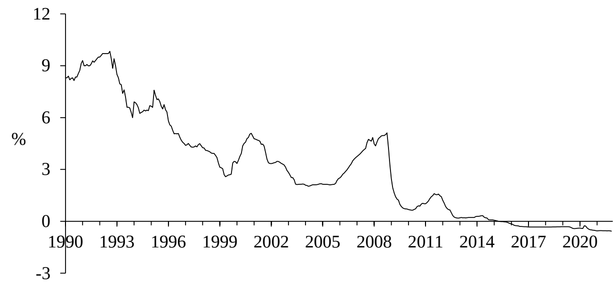
U.K. : 3-Month Certificate LIBOR Rate



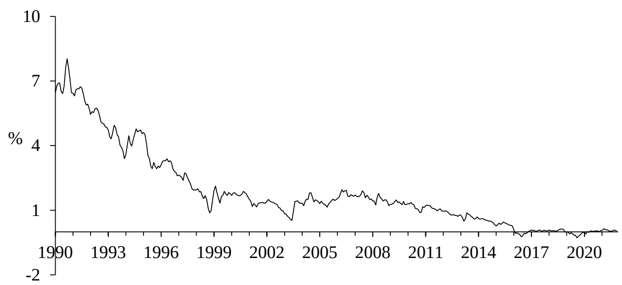
Germany: Yield on Public Authority Bonds



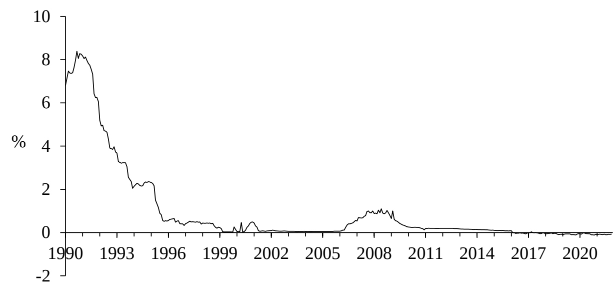
Germany : 3-Month Interbank Deposit Rate



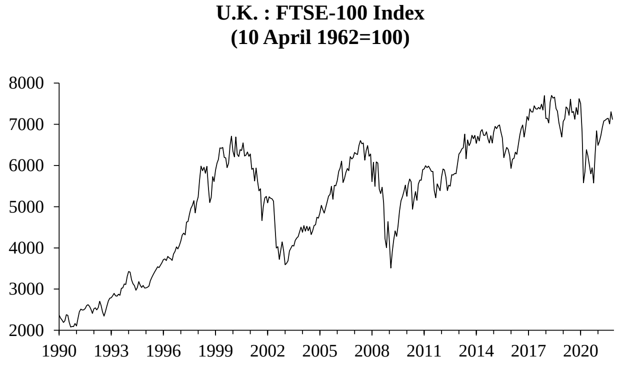
Japan: Yield on Long-Term Government Bonds

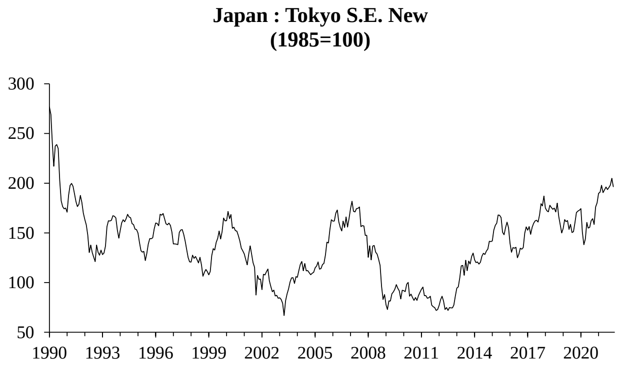


Japan : 3-Month Money Market Rate



MAJOR EQUITY MARKETS





EMERGING MARKETS

Anupam Rastogi

India

The Indian economy achieved a real GDP growth rate of 8.4% in the September quarter. The emergence of the Omicron variant of SARS CoV-2 is unlikely to impact growth in the coming fiscal year, though it may undershoot our forecast of 10% for the fiscal year 2021–22. With more than 50% of people fully vaccinated and 80% having vaccinated at least once, the vaccination programme is moving with gusto. July–September quarter GDP numbers showed that the economy was back to pre-COVID levels, even though private consumption lagged. The central government’s fiscal position too is better than in 2019, the last pre-pandemic year. Central bank data showed that bank lending to large industries is finally picking up. To top it all, India’s manufacturing PMI for November showed the highest reading in 9 months; its expansion was the fastest in Asia. PMI for services dropped moderately to 58.1 in November from a ten-and-a-half-year high of 58.4 in October.

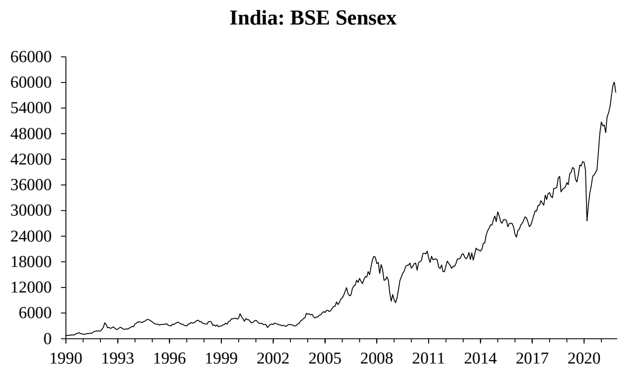
Festive sales and pent-up demand drove November goods and services tax (GST) revenue to ₹1.31 trillion, surpassing the previous month’s collection and clocking the second-best performance since the rollout of the new indirect tax system four years ago.

India’s retail inflation rate, which is measured by the Consumer Price Index (CPI), rose to 4.48% in the month of October 2021. For the fourth month in a row, CPI has been below the Reserve Bank of India’s six percent margin. But the central bank expects the consumer price index next year to be over 5%, which is above the bank’s comfort level.

The rising price of manufactured goods is captured by the wholesale price index (WPI) at 12.4% in October. WPI has been in double digits for seven months running, largely because of the upswing in global commodity prices.

But the Reserve Bank of India’s monetary policy committee kept its key lending rate steady at record lows as there exists slack in the economy and the ongoing catching up of activity, especially of private consumption, remained below its pre-pandemic levels.

India’s merchandise exports rose 26.5% year-on-year to $29.9 billion in November on better performance by key



sectors, while the trade deficit hit a record high of $23.3 billion as imports of crude oil and gold spiked. Imports in November were at $53.2 billion, an increase of 57.2% over the same month last year.

India’s merchandise exports in April–November 2021 were $262.5 billion, an increase of 50.7% over $174.2 billion in April–November 2020 and an increase of 24.3% over $211.2 billion in April–November 2019. Imports in April–November 2021 grew by 75.4% to $384.4 billion. Trade deficit stood at $122 billion during the eight-month period of this fiscal. As per the data, the trade deficit widened to an all-time high of $23.3 billion as gold imports grew by about 8% to $4.2 billion.

The country posted a record merchandise trade deficit of $23.27 billion in November compared with $10.19 billion a year ago. We expect FY22 current account deficit to be $45 billion or 1.4% of GDP, up from $35 billion earlier, and a large balance of payments (BoP) surplus remains on track.

The rupee remains stable around 75 against the US dollar. But, according to Reserve Bank of India data, overvaluation of the rupee in terms of REER of a 40-currency basket stood at 5.45% in October.

The Reserve Bank of India’s intervention policy is more guided by the yuan movement rather than the US dollar alone. The central bank is said to have informally aimed a benchmark level of 11.50 for CNY/INR.

	19–20	**20–21**	**21–22**	**22–23**	**23-24**
GDP (%p.a.)	4.0	-7.3	10.0	6.5	6.4
WPI (%p.a.)	3.6	5.5	6.0	5.5	5.3
Current A/c(US$ bill.)	-20.0	35.0	-45.0	-30.0	-30.0
Rs./$(nom.)	73.0	75.0	74.0	75.0	76.0

China

China's GDP growth for the full year of 2021 will surpass its target according to Chinese Vice Premier Liu He. Liu also said the government has strong confidence in China's economy next year. We expect China to post GDP growth of 8% in 2021. The economy is grappling with a series of challenges including surging raw material prices and property jitters. Activity in China's manufacturing sector contracted in November for the first time in three months, as demand remained subdued amid Covid-19 flare-ups despite a recovery in supply.

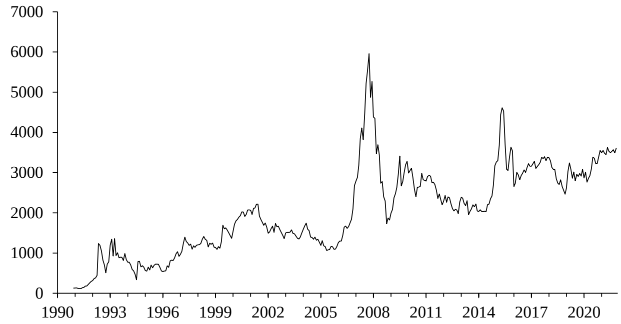
The Caixin China General Manufacturing Purchasing Managers' Index (PMI), which gives an independent snapshot of the country's manufacturing sector, fell to 49.9, in November from 50.6 the previous month. But China's official Manufacturing Purchasing Managers index for November rallied to 50.1, breaching the 50-point mark separating expansion from contraction for the first time since August. The service sector decelerated further, with business activity expanding at the weakest pace since February, excluding the sharp drop in August when the country was combating a Delta variant outbreak. We expect a weak recovery in 2022. The major drag to GDP growth comes from the real estate. This is policy induced as after many years pursuing an economic strategy dependent on a real-estate boom, Beijing is unwinding the sector. China's aggressive campaign to root out speculative real-estate activity could slow the country's growth rate for years to come. But exports are holding up and further significant policy support for the economy is forthcoming.

In typical Communist Party fashion, the unwinding may have started already without a formal announcement. Beijing expects this to be messy. President Xi Jinping intended some upheaval when he introduced stricter borrowing limits on developers last year. State-owned developers will absorb assets from distressed private competitors. The turmoil helps Mr. Xi's goal to consolidate economic control in the hands of state.

Economists expect Chinese authorities to boost fiscal and monetary support next year after a relatively restrained approach for most of this year. The People's Bank of China last week signalled an easing bias, while the State Council, China's cabinet, urged local governments to speed up spending.

We expect GDP growth to come in at 5.2% in 2022. The People's Bank of China will likely cut the interest rate on its one-year medium-term lending facility by 20 basis points and the reserve requirement ratio by 100-150 basis points by the end of 2022. This is because the Covid Zero approach is expected to last until late in 2022. The rate had been gradually diminishing since May. But rising energy bills and food supply chain disruptions have begun to stoke higher prices.

China: SSE Composite Index



China's exports and imports grew faster than expected in November, with both hitting records as external demand surged ahead of the year-end holidays and domestic production rebounded on an easing power crunch. Exports rose 22% in dollar terms from a year earlier to almost $326 billion, while imports grew almost 32% to about $254 billion.

China's yuan eased from a six-month peak against the dollar at the beginning of December. The probability of direct intervention by the central bank remains low, as recent CNY appreciation is largely fundamentally driven. The yuan is now at its strongest in more than three years versus the U.S. dollar.

Chinese President Xi Jinping's virtual summit with President Biden has not resulted in anything significant. A commission of security and economic experts convened by the US Congress recommended that the U.S. take more aggressive steps to dial back commercial ties with China due to heightened national security risks. That economic interdependency is particularly concerning now, the panel said, because of Mr. Xi's recent moves to "assert unassailable authority" over China's corporate sector, blurring the lines between ostensibly private Chinese companies and those that are officially state-run by the Chinese Communist Party. One of the panel's top recommendations is that Congress create an authority to screen — and potentially block — U.S. investments in China that could harm national security.

The Commission also said that Beijing has departed from its long-held minimalist nuclear posture and is now carrying out its most substantial effort to bolster its nuclear forces since first acquiring the weapon in the 1960s.

Chinese leader Xi Jinping, on the other hand, has formally etched his name alongside the revolutionary patriarch Mao Zedong and market reformer Deng Xiaoping. Ironically, the pandemic has been a facilitator for Xi's China to move inward and partly decouple with the west. The overarching objective of Xi Jinping is to strengthen and consolidate one-party rule and make sure that the CCP reign lasts forever.

	19	20	21	22	23
GDP (%p.a.)	6.1	2.3	8.0	5.2	5.0
Inflation (%p.a.)	2.9	2.5	1.8	2.0	2.0
Trade Balance(US$ bill.)	40.0	60.0	80.0	60.0	52.0
Rmb/$(nom.)	7.1	6.7	6.4	6.4	6.4

South Korea

South Korea's GDP grew 0.3% in the third quarter from the previous quarter and it is expected to grow 4% in 2021. Korea's manufacturing sector also improved, with the Purchasing Managers' Index edging up to 50.9 from 50.2 in October. The OECD has maintained its 2021 growth rate projection for the South Korean economy to 4% as well, even as it revised and lowered its projected growth rates for other major economies and the world. It expects South Korea's GDP in 2023 growing to 109% of its real GDP level for the pre-pandemic year of 2019. This puts it ahead of the projections for the US (108.3%), Germany (104.3%), the UK (103.2%), and Japan (101.5%) for the same period.

GDP growth gets a boost from the fiscal support to households and companies particularly affected by the pandemic. The assistance should remain in place until the economy has fully recovered.

Consumer prices rose 3.7% from a year earlier in November, which is above the Bank of Korea's 2% target for an eighth straight month. Inflation will probably remain above 3% until January and for the year 2021 it is forecast 2.5%. The Bank of Korea said it expects inflation this year to come in above its upward revision of just a week ago as consumer price gains exceeded all estimates in November, accelerating to the fastest pace since 2011.

The BOK expects inflation for 2022 to 2% which is little less than our forecast of 2.2% for next year.

South Korea raised interest rates for the second time in three months, expressing confidence in the global economic recovery while giving priority to moves to curb accelerating inflation and soaring household debt. The Bank of Korea increased its benchmark seven-day repurchase rate by 0.25 percentage points to 1%. We expect another rate hike by the BOK to 1.25% in January, and another in July, though much would depend on the virus situation.

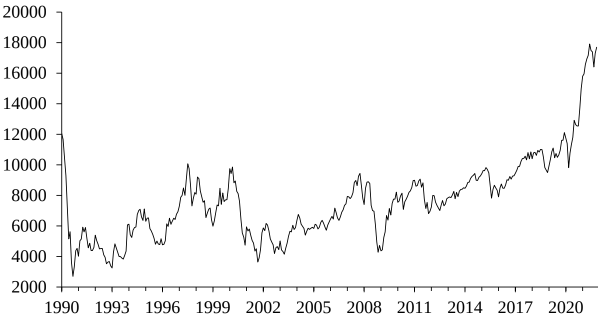
South Korea's exports are on track to post an annual record, buoyed by year-end holiday demand and higher product prices even as supply chain bottlenecks continued to pressure manufacturers.

Exports rose 32% in November from a year earlier to $60.4 billion. This was a 13th straight month in November despite challenges from persistent COVID-19 cases and global supply-chain disruptions.

Seoul has been one of the world's best-performing stock markets, with its value topping $1.6 trillion in August, according to data from the World Federation of Exchanges. But it has since been hit by rising interest rates, slowing global growth, a clampdown on household borrowing and concern that memory-chip prices may have peaked.

Korea: Composite Index

Taiwan: Weighted TAIEX Price Index



	19	20	21	22	23
GDP (%p.a.)	1.8	-0.9	4.0	3.0	2.5
Inflation (%p.a.)	0.4	0.5	3.8	3.0	2.5
Current A/c(US$ bill.)	60.0	70.0	60.0	40.0	40.0
Won/$(nom.)	1200	1070	1150	1170	1200

Taiwan

The strong global demand for the island's technology products buoyed by 5G, electric vehicles and high-end computing underpins Taiwan's strongest growth in GDP in more than a decade. The government has revised their outlook for full year gross domestic product growth to 6.09%, up from their most recent forecast of 5.88%. This would be the fastest pace of growth since the economy grew more than 10% in 2010 in the wake of the global financial crisis.

The consumer confidence index (CCI) fell 0.93 points in November from a month earlier to 73.33, its lowest level since January 2021, when it hit 71.98. This was the fourth consecutive month in November when CCI fell because of rising inflationary pressures. In October, the consumer price index (CPI) rose 2.58% from a year earlier, with the prices of fruit and vegetables rising 17.67% and 16.16% due to bad weather and fuel soaring 28.97% following a spike in international crude oil prices. This was the third month in a row for a long time when Taiwan experience CPI rising by more than 2%. Taiwan's government and central bank believes that the higher consumer prices are temporary. The high rate of inflation is unlikely to stay very long but deflationary phase is over due to changes in world trade and crude oil price scenario. This will lead the Central Bank to adjust its monetary policies.

Taiwan's exports for the month of November reached a record high, up 30.2% from a year earlier and the 17th month in a row of year-over-year growth.

Taiwan's exports for the first 11 months of the year totalled US$406 billion, an increase of 30% from last year, while imports reached US$346 billion, a 33.8% increase from a year earlier. The trade surplus so far this year totalled US$60 billion.

President Tsai's expectations that exports in 2021 will surpass US$400 billion for the first time ever, have come true. She expects continued growth in exports in the first quarter of 2022 because of the heavy investment Taiwanese companies have made in capital equipment this year.

In fact, surging exports and capital expenditure by companies has led to a spurt in economic growth so far this year. Private investment is to grow ~19% this year, which would be the highest since it rose more than 27% in 2010. Private investment is laying the foundation for the economy to grow strongly in the future.

Taiwan's foreign-exchange reserves hit a record at the end of last month. The reserves have increased to US$547 billion which is the fifth-largest foreign-exchange reserves in the world after China (US$3.2 trillion), Japan (US$1.28 trillion), Switzerland (US$1.004 trillion) and India (US$577.1 billion).

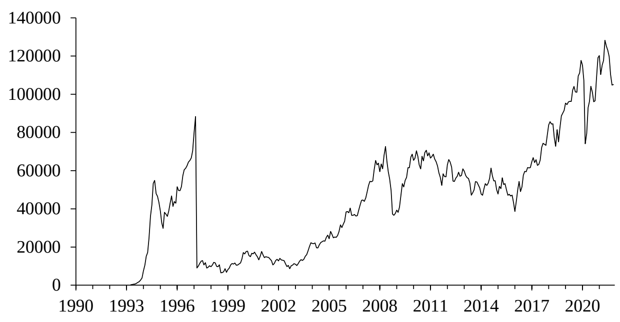
The US Secretary of State Antony Blinken has reasserted that allied nations would be prepared to "take action" if China uses force against Taiwan, though he again refused to say whether the Biden administration would be prepared to use the U.S. military in such a conflict. He said that the role of allied nations is to make sure that Taiwan has the means to defend itself because if it does, that is the best deterrent against any very, very, very unfortunate action that might be contemplated.

	19	**20**	**21**	**22**	**23**
GDP (%p.a.)	2.0	3.1	6.1	4.5	3.2
Inflation (%p.a.)	1.0	-1.0	2.5	1.8	1.0
Current A/c(US$ bill.)	70.0	71.0	90.0	100.0	65.0
NT$/$(nom.)	31.0	29.0	28.0	27.5	27.0

Brazil

The combination of the world's most aggressive monetary tightening in the last twelve months unleashed by the central bank to control the runaway inflation and the extreme weather conditions have led to the collapse in the GDP growth in Brazil. Unemployment stands above 12% and annual inflation is even now running at a five-year high. The recovery from the pandemic has been short-lived. Brazil is losing momentum despite the lifting of pandemic-related restrictions and an expanded vaccination drive. The recession does not auger well for President Jair Bolsonaro as he prepares for his re-election campaign.

Brazil: Bovespa



Brazil's economy ministry has cut its forecasts for GDP growth this and next year, while it raised its outlook for inflation. According to the government GDP is likely to grow by 5.1% this year and 2.1% in 2022. The ministry has blamed the tight monetary policy for the cut in the GDP outlook.

Brazil's central bank President Roberto Campos Neto said that inflation expectations for 2022 are rising and shifting "a bit" away from the bank's target. Brazil's central bank hiked its benchmark interest rate by a whopping 150 basis points for the second straight time to fight inflation even as the country is stuck in recession. It brings the Selic rate to 9.25%, the highest since mid-2017.

The Brazilian central bank is expected to revise downward its forecast for the country's GDP growth next year and expects inflation to peak soon and recede next year. According to Campos Neto inflation should have peaked in September, but the magnitude of energy price shocks kept the inflation rising.

Campos Neto was concerned about the current Omicron variant of the Covid 19 in Europe and its impact on the global economy. As more information about the variant comes in, we expect its impact to be lower than the turmoil caused by the delta variant.

Brazil's trade balance swung to a deficit in November from a surplus the previous month as exports declined and imports increased. The country recorded a deficit of $1.3 billion in November, after a surplus of $2 billion in October. Brazilian exports fell to $20.3 billion last month, from $22.5 billion in October, while imports increased to $21.6 billion in November from $20.5 billion a month earlier.

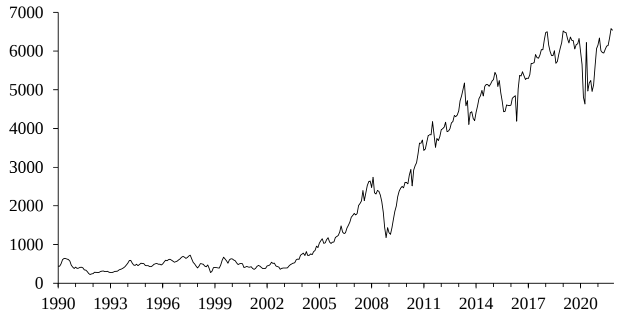
The real has weakened more than 9% in the last one year but has appreciated more than 2% in the last one week after the aggressive hike in the selic rates. The real trading at 5.5340 to USD seems to be at a fair value now.

	19	**20**	**21**	**22**	**23**
GDP (%p.a.)	0.8	-4.5	5.0	1.0	2.0
Inflation (%p.a.)	4.3	4.5	8.5	4.5	4.0
Current A/c(US$ bill.)	-36.0	-7.6	-10.0	-16.0	-22.0
Real/$(nom.)	4.2	5.5	5.2	5.5	5.5

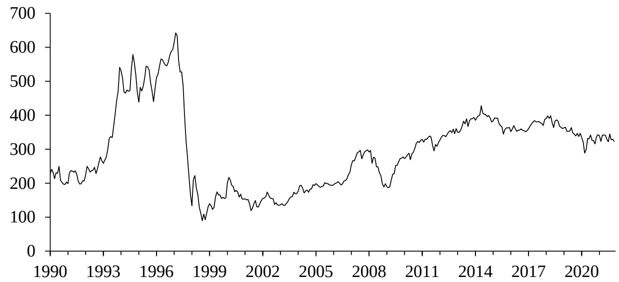
Other Emerging Markets

Hong Kong: FT-Actuaries

Indonesia: Jakarta Composite

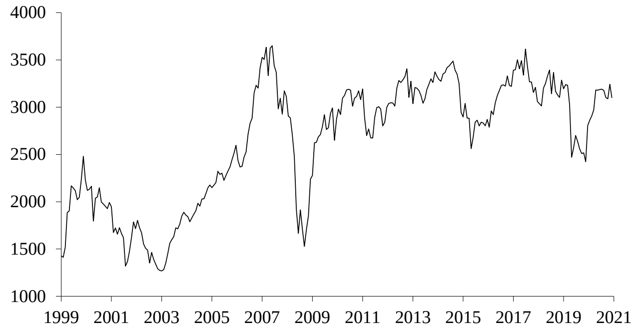


Malaysia: FT-Actuaries (US$ Index)

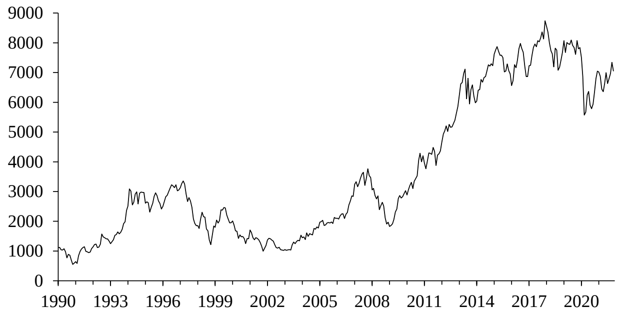


Thailand: Composite Index

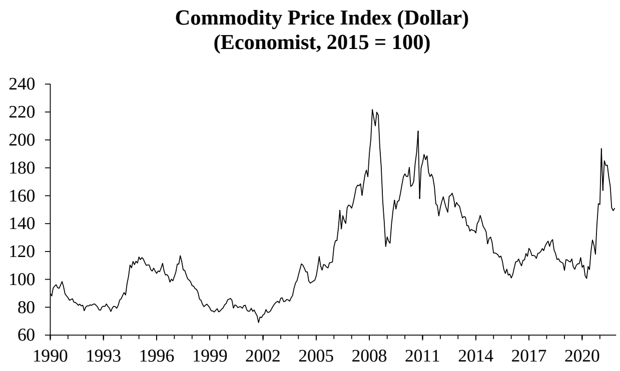
Singapore: Straits Times Index

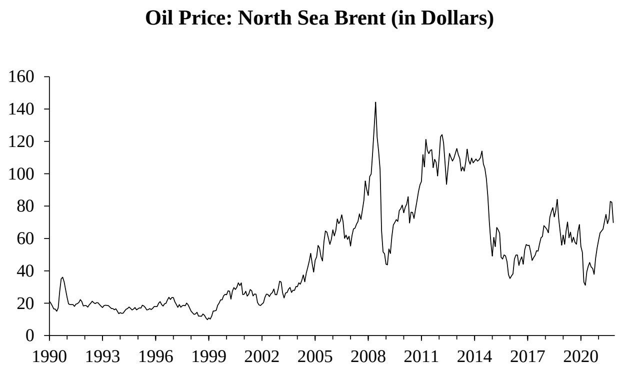


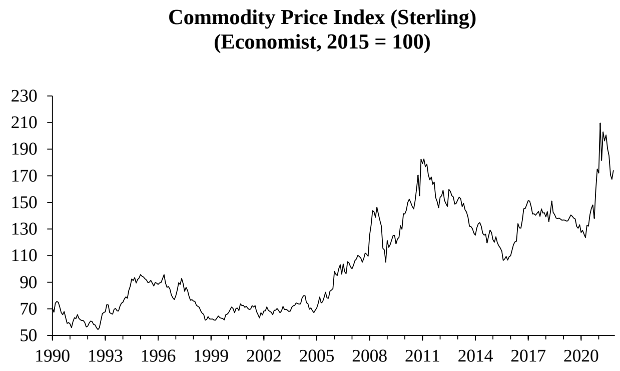
Philippines: Manila Composite

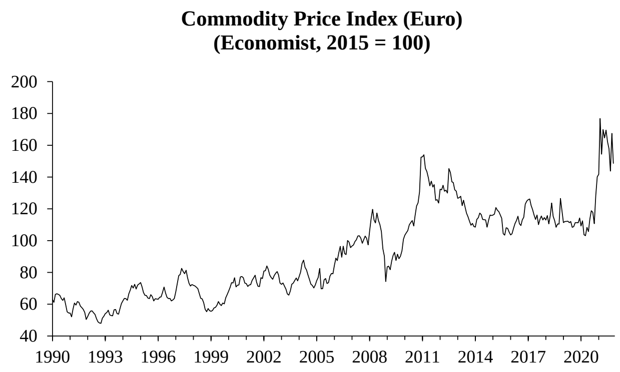


COMMODITY MARKETS









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]
2019	1.7	0.6	0.8	78.3	73.8	-0.7	2.6	-0.5
2020	1.0	0.1	0.2	78.2	72.9	-1.3	1.7	-1.4
2021	2.3	0.3	0.1	81.0	77.4	-4.1	3.5	-3.9
2022	5.0	1.1	0.7	78.5	77.6	-3.7	6.1	-3.3
2023	4.0	2.5	1.4	77.7	78.9	-2.0	5.5	-0.9
2024	3.0	3.0	2.9	77.5	80.0	0.5	4.6	0.6
2021:1	0.9	0.2	0.1	80.7	76.2	-3.1	-3.2	-3.1
2021:2	2.1	0.4	0.1	81.7	77.6	-3.6	-3.9	-3.6
2021:3	2.7	0.3	0.1	81.8	78.7	-4.3	-4.5	-4.0
2021:4	3.5	0.4	0.2	79.8	77.0	-4.6	-4.8	-4.4
2022:1	4.9	0.5	0.3	79.0	77.3	-4.3	-4.5	-3.8
2022:2	5.0	0.7	0.7	78.7	77.3	-3.8	-3.8	-3.0
2022:3	5.0	1.2	0.8	78.0	77.3	-3.1	-3.5	-2.7
2022:4	5.1	2.0	1.0	78.2	78.4	-2.0	-3.0	-2.0
2021:1	0.9	0.2	0.1	80.7	76.2	-3.1	-3.2	-3.1
2021:2	2.1	0.4	0.1	81.7	77.6	-3.6	-3.9	-3.6
2021:3	2.7	0.3	0.1	81.8	78.7	-4.3	-4.5	-4.0
2021:4	3.5	0.4	0.2	79.8	77.0	-4.6	-4.8	-4.4

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)
2019	275.7	3.5	3.8	1.0	148.8
2020	279.1	1.6	4.5	1.3	149.7
2021	296.9	6.4	4.6	1.3	155.8
2022	309.8	4.3	4.9	1.5	154.7
2023	322.8	4.2	3.6	1.0	155.0
2024	336.3	4.2	2.8	0.7	156.8
2021:1	292.1	4.5	4.7	1.4	155.3
2021:2	289.7	7.3	4.5	1.3	153.4
2021:3	298.4	7.1	4.5	1.3	155.5
2021:4	307.6	6.7	4.6	1.4	158.9
2022:1	305.6	4.6	5.0	1.5	155.0
2022:2	303.4	4.7	5.0	1.5	152.9
2022:3	308.5	3.4	5.0	1.5	153.0
2022:4	321.5	4.5	4.7	1.4	158.0
2023:1	318.8	4.3	4.2	1.2	155.5
2023:2	315.6	4.0	3.6	1.0	152.9
2023:3	321.7	4.3	3.4	0.9	153.4
2023:4	335.1	4.2	3.2	0.9	158.3

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
2019	167.8	803514.3	475369.3	308458.5	209136.4	-70959.7	118490.2
2020	151.3	724452.0	427617.5	255473.0	199184.4	-33404.9	124418.0
2021	162.4	777627.4	444381.6	283633.6	211525.7	-29492.9	132420.6
2022	175.4	840038.6	466406.2	313435.8	224219.9	-23606.4	140416.9
2023	179.8	861078.8	480435.9	311835.6	230959.2	-18606.2	143545.8
2024	183.6	879388.7	493915.3	309929.6	237826	-15888.6	146393.7
2019/18	1.4		0.3	3.1	3.0		-0.1
2020/19	-9.9		-10.1	-17.3	-4.8		5.0
2021/20	8.1		4.8	14.7	6.6		6.4
2022/21	8.1		5.0	10.3	6.0		6.0
2023/22	2.5		3.0	-0.7	3.0		2.2
2024/23	2.1		2.8	-0.6	3.0		2.0
2021:1	154.0	184353.8	105676.5	72020.2	51082.9	-12804.4	31621.4
2021:2	162.4	194420.4	107095.1	72112.9	51382.2	-3077.5	33092.3
2021:3	164.6	197032.5	112840.6	71592.3	52882.5	-6641.1	33641.8
2021:4	168.6	201820.6	118769.3	67908.2	56178.1	-6969.9	34065.1
2022:1	172.7	206742.0	111591.7	86810.8	54146.0	-11003.8	34802.7
2022:2	175.0	209536.1	113522.4	79377.2	54465.4	-2829.7	34999.2
2022:3	176.4	211205.9	115432.9	80227.8	56071.4	-5098.5	35427.7
2022:4	177.5	212554.5	125859.2	67020.0	59537.0	-4674.4	35187.3
2023:1	178.1	213197.6	114937.4	89248.4	55769.8	-11225.4	35532.6
2023:2	179.5	214921.0	116928.3	80420.1	56099.4	-2726.0	35800.8
2023:3	180.2	215792.9	118896.1	77386.1	57753.7	-2249.0	35994.0
2023:4	181.4	217167.2	129674.1	64780.9	61336.3	-2405.7	36218.4

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)
2019	2.3	2166.6	49.1	-89.1
2020	15.9	1990.1	306.6	-58.2
2021	7.9	2307.1	179.5	-48.3
2022	2.3	2562.1	57.8	-35.9
2023	1.5	2721.0	42.0	-24.0
2024	0.8	2859.9	23.3	-16.7
2021:1	8.7	517.9	44.8	-21.3
2021:2	11.6	549.3	63.5	-18.8
2021:3	8.2	563.3	46.0	-8.0
2021:4	6.2	585.7	36.3	-0.1
2022:1	5.5	608.8	33.7	-17.6
2022:2	2.1	622.7	13.4	-18.9
2022:3	2.4	636.2	15.3	-4.9
2022:4	2.4	648.6	15.6	5.5
2023:1	2.1	654.6	13.5	-18.3
2023:2	1.8	664.6	11.7	-19.0
2023:3	2.1	676.6	14.5	1.9
2023:4	1.2	689.6	8.0	11.5

1 GDP at market prices (Financial Year)

WORLD FORECAST DETAIL

Growth Of Real GNP

	2017	2018	2019	2020	2021	2022
U.S.A.	2.3	3.0	2.2	–3.5	5.7	4.0
U.K.	1.8	1.3	1.4	–9.9	8.1	8.1
Japan	2.2	0.3	0.7	–5.3	2.7	2.3
Germany	2.6	1.3	0.6	–5.4	3.5	3.8
France	2.4	1.8	1.5	–9.3	5.5	3.7
Italy	1.7	0.9	0.3	–9.0	4.1	4.0

Growth Of Consumer Prices

	2017	2018	2019	2020	2021	2022
U.S.A.	2.1	2.4	1.8	1.2	2.4	5.0
U.K.	2.6	2.4	1.7	1.0	2.3	5.0
Japan	0.5	1.0	0.5	0.0	0.0	0.5
Germany	1.5	1.8	1.4	0.5	2.0	1.6
France	1.0	1.8	1.1	0.5	1.0	1.1
Italy	1.2	1.2	0.6	0.0	0.8	0.9

Real Short-Term Interest Rates

	2017	2018	2019	2020	2021	2022
U.S.A.	–1.0	0.6	–0.5	–1.6	–1.0	0.0
U.K.	–2.0	–1.1	–0.7	–1.3	–4.1	–3.7
Japan	–0.9	–0.4	0.1	0.0	–0.4	–0.5
Germany	–2.1	–1.7	–0.9	–1.9	–2.2	–1.9
France	–2.1	–1.4	–0.9	–1.2	–2.0	–1.7
Italy	–1.5	–0.9	–0.2	–0.8	–1.5	–1.4

Nominal Short-Term Interest Rates

	2017	2018	2019	2020	2021	2022
U.S.A.	1.4	2.4	1.5	0.4	1.0	2.0
U.K.	0.4	0.7	0.8	0.2	0.1	0.7
Japan	0.1	0.1	0.1	0.0	0.1	0.1
Germany	–0.3	–0.3	–0.4	–0.4	–0.5	–0.1
France	–0.3	–0.3	–0.4	–0.4	–0.5	–0.1
Italy	–0.3	–0.3	–0.4	–0.4	–0.5	–0.1

Real Long-Term Interest Rates

	2017	2018	2019	2020	2021	2022
U.S.A.	0.4	0.9	0.1	0.3	0.8	1.0
U.K.	–1.8	–1.7	–0.5	–1.4	–3.8	–3.3
Japan	–0.6	–0.6	–0.6	–0.5	–0.6	–0.7
Germany	–1.2	–1.4	–1.9	–2.3	–2.2	–2.0
France	–0.6	–0.7	–1.4	–1.9	–1.7	–1.6
Italy	0.9	1.8	0.2	–0.6	–0.5	–0.3

Nominal Long-Term Interest Rates

	2017	2018	2019	2020	2021	2022
U.S.A.	2.4	2.9	2.1	2.3	2.8	3.0
U.K.	0.6	1.0	0.6	0.1	0.4	1.1
Japan	0.1	0.0	0.0	0.1	0.1	0.1
Germany	0.4	0.2	–0.2	–0.5	–0.3	0.0
France	0.8	0.7	0.1	–0.3	0.0	0.2
Italy	1.9	2.8	1.4	0.7	0.9	1.2

Index Of Real Exchange Rate(2000=100)[1]

	2017	2018	2019	2020	2021	2022
U.S.A.	94.5	93.5	96.3	96.2	95.5	94.9
U.K.	75.5	76.9	73.8	72.9	77.2	77.6
Japan	58.3	57.8	56.3	54.2	51.4	48.0
Germany	94.3	96.5	95.6	94.1	92.2	90.0
France	95.3	97.4	96.3	94.5	92.1	89.4
Italy	101.2	102.8	104.5	105.2	103.8	101.7

[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)

	2017	2018	2019	2020	2021	2022
U.S.A.[1]	101.68	101.96	104.31	106.43	101.34	100.53
U.K.	1.29	1.34	1.28	1.28	1.36	1.38
Japan	112.14	110.43	109.03	106.79	104.70	103.90
Eurozone	0.89	0.85	0.89	0.88	0.83	0.82

[1] The series for the USA is a trade weighted index (1990=100); the series for the UK is $ per £

* Forecasts based on the Liverpool World Model