LIVERPOOL INVESTMENT LETTER

November 2021

Cardiff Business School

Ysgol Busnes Caerdydd

Julian Hodge Institute of Applied Macroeconomics

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

Editorial and Research Direction: Patrick Minford[†].

Senior Research Associates: Kent Matthews[†], Anupam Rastogi, Peter Stoney.

Research Associates: Vo Phuong Mai Le[†], David Meenagh[†], Francesco Perugini, Yongdeng Xu[†], Zheyi Zhu[†].

[†] Cardiff Business School

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

ISSN 0951-9262

Disclaimer

The Liverpool Investment Letter is a publication intended to provide information to investors and investment managers acting on their own initiative. No responsibility can be taken by Liverpool Macroeconomic Research Limited for decisions made by our readers. Whilst every attempt is made to ensure the accuracy of the contents, no guarantee of such accuracy is given.

LIVERPOOL INVESTMENT LETTER

November 2021

CONTENTS

Page

The October Budget — A Conflicted Chancellor 3
The budget bore the stamp of a Treasury determined to reduce public debt rapidly, with Mr. Sunak uncomfortably saying he will lower taxes later. So he has put them up, intending to bring them down, just the sort of up-down inconsistency that public borrowing is there to avoid through 'tax-smoothing'. Better to keep them down until the fiscal outlook is clearer. Better still to have cut them in the interests of growth which would mean that the cut would pay for itself.

Focus on Japan 6

Market Developments 8
Summary and Portfolio Recommendations

Indicators and Market Analysis
Foreign Exchange 10
Government Bond Markets 11
Major Equity Markets 12
Emerging Equity Markets 13
Commodity Markets 19

UK Forecast Detail 20
World Forecast Detail 22

THE OCTOBER BUDGET — A CONFLICTED CHANCELLOR

The Chancellor, Rishi Sunak, claimed in his budget that there was a 'morality' behind low taxes and controlling the size of the state. Nevertheless, he pushed up the prospective UK tax take to over 36% of GDP, while projecting real growth of public spending of 3% per annum. His reasons for the spending rises are simply plain politics: Boris Johnson needs them to satisfy public opinion on the requirements of the NHS and other key public services, plus the levelling-up agenda. His reason for raising taxes was to satisfy short run budget rules on borrowing. The latest form the 'rules' have taken is that the current budget must be balanced over the forecast horizon.

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	6.5	4.2	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	1.5	4.5	5.0
5 Year Interest Rate	1.0	0.6	0.1	0.4	1.5	4.7	5.0
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)

These rules make no sense. The government, on behalf of the people it serves, must simply obey the arithmetic of the government budget constraint and so be solvent, which means that it must commit to raising in future taxation sufficient in present value to pay the interest on its debts. It can do this in numerous ways; there is nothing that compels it to balance the current budget at any pre-set point in time.

One implication of solvency is that the debt ratio will converge over time to some desirable level; i.e. from then on net borrowing/GDP reaches zero. Sensibly, the Chancellor emphasised this point and downplayed the current budget aspect. However, by the logic of solvency there is no case for raising taxes. Indeed, they will lower growth, which in turn would have helped the debt ratio downwards. In fact, as the rest of this chapter shows, there is a baseline downtrend in the debt ratio; also lowering taxes boldly would increase growth and push that trend down further. So there is no case for raising taxes now that is based on solvency considerations.

Turning to the latest OBR forecasts for the economy and public borrowing, they remain excessively gloomy. As we have noted before, this comes from the OBR's professional bias as the appointed 'keeper of the budget rules'. The OBR figures are below. As can be seen from our forecasts set out above, they are for much larger borrowing than ours. For example, borrowing in 2024–25 is £46bn in the OBR forecast, against £22.7bn. in ours. The discrepancy comes about partly from the OBR's pessimistic GDP outlook; GDP grows by 15.9% from 2020 to 2024, against our 20.9%. This 5% discrepancy has a massive effect on net revenue/GDP, the average net tax rate, as we explain above, implying a difference of 2.3% of GDP, or about £50 billion p.a. by 2024. On departmental spending we project slightly higher figures than the OBR, largely given them by the Treasury; we put it at 22.5% of GDP by 2024 against the OBR's 19.3%. Subtracting benefit spending projected by OBR at another 22.4% of GDP (so that total spending is 41.6% of GDP) from their gross revenue projection for 2024 of 39.8% of GDP implies an average net tax rate of only 17.4% against our 23%. So the OBR is greatly downplaying the way recovery will raise gross revenues and lower benefit payments. The reason for this seems to be that it uses a 'bottom-up' approach to estimating tax and benefits, using recent outturns and direct estimates from the Treasury. But this approach is likely to bias the net revenue estimates downwards because it is dominated by current numbers at the disaggregated level; this unprecedented recovery will change all these numbers from the top down.

Table 1.2: Changes to public sector net borrowing

	£ billion						
	Outturn	Forecast					
	2020-21	2021-22	2022-23	2023-24	2024-25	2025-26	2026-27
March 2020 forecast	54.8	66.6	61.5	60.2	57.9		
March 2021 forecast	354.6	233.9	106.9	85.3	74.4	73.7	
October 2021 forecast	319.9	183.0	83.0	61.6	46.3	46.4	44.0

Source: OBR, Economic and Fiscal Outlook, October 2021

We also see that the OBR has consistently been much too gloomy in its forecasts.

Table 1.3: Forecasts for the economy made in Spring 2021 by OBR, Liverpool and Independent Forecast Consensus

	OBR	Liverpool	Capital Economics	Consensus	Latest Est.*
GDP growth 2021	4.0	5.7	5.2	4.8	7.0
PSBR (£bn) 2021	234	140	204	232	183

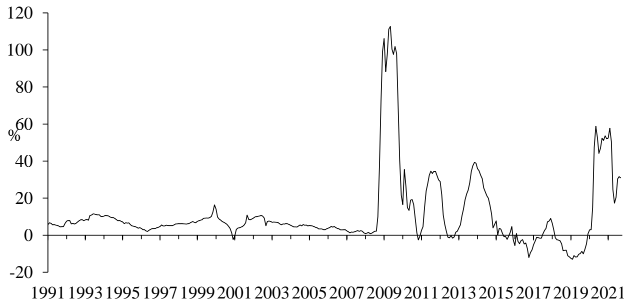
Source: OBR and HM Treasury 'Forecasts for the UK economy — a comparison of independent forecasts'
*GDP growth from Consensus October 2021. PSBR from OBR October 2021.

Of course, the present situation post-Covid is unprecedented so that there is huge unavoidable uncertainty. All the more reason not to raise taxes damagingly to growth until the true situation is revealed. This logic applied to Covid policy: taxes were not raised during the pandemic. So raising them in the aftermath makes no sense either, when the needs of recovery are paramount. If in the long run a persistent gap appears between interest payments and net revenues, then a long run reaction raising net revenue is warranted by solvency, which allows complete flexibility in the timing of

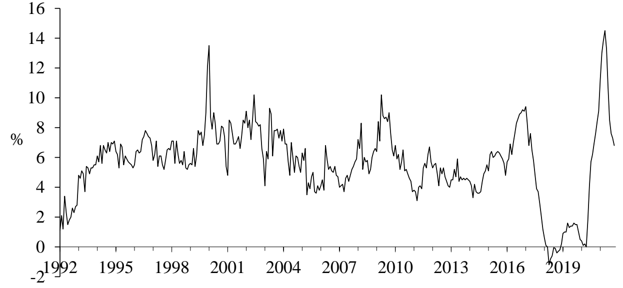
net revenue raising. It should be done when we really know what is needed; we should delay damaging the economy with higher taxes until, if and when, we are sure this damage is unavoidable.

To summarise, the Treasury, aided by the OBR, is too pessimistic about the outlook for the economy and the public finances. Even though there is massive uncertainty about these forecasts, it has pushed the government into raising taxes prematurely. The Chancellor says he aims to cut them later. But by then the damage to growth will have been done. Better to have held off from higher taxes now and supported growth. That would have maximised the chances of not needing to raise taxes in the long run, while keeping open the possibility of doing so if the economy's outturn forced it.

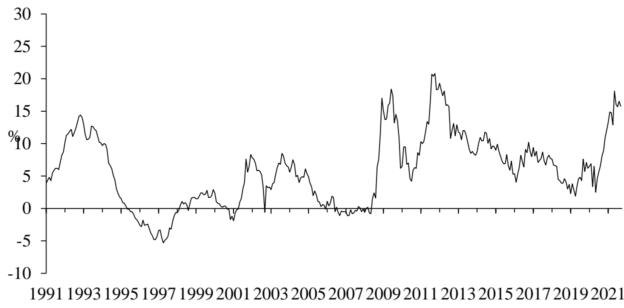
U.S.: Growth in M0 (Yr - on - Yr)



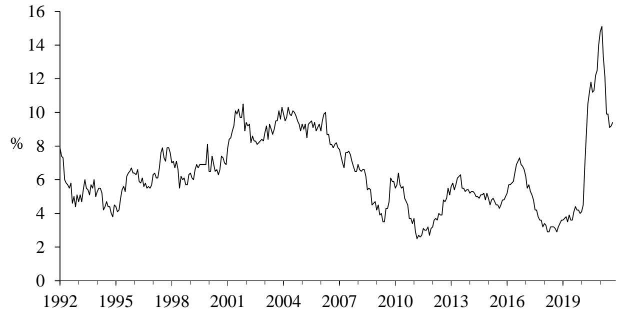
UK: Notes and Coins in Circulation Growth



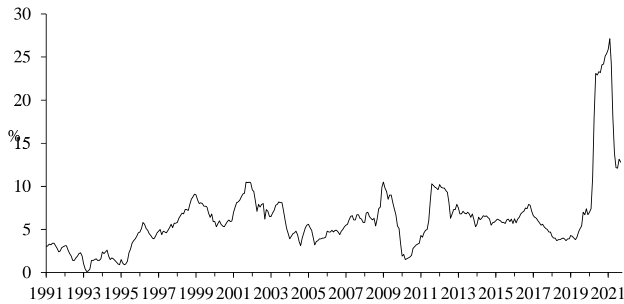
U.S.: Growth in M1 (Yr - on - Yr)



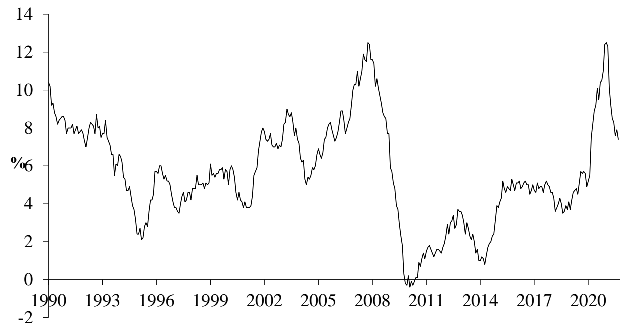
UK: M4 Growth



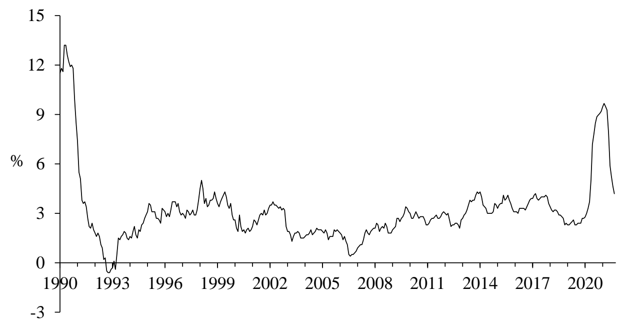
U.S.: Growth in M2 (Yr - on - Yr)



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

The Newly Elected Prime Minister

On October 4th Japan's parliament elected Fumio Kishida as the country's new prime minister, replacing the outgoing Yoshihide Suga, who held office for only a year. Kishida, a former foreign minister with an image as a low-key consensus builder, beat three contenders for LDP leader in the end of September party election, ensuring he clinched the post of prime minister as the LDP has a majority in parliament.

His first move was to dissolve the Lower House, calling for an election and declaring that he wanted a mandate from voters for his new government before getting to work. "We need to ask the public if I am fit to run the country", he said in his first speech to parliament as leader. His initial approval rating was indeed the lowest for a new administration since 2001 — according to a survey by the The Asahi Shimbun, a nationwide newspaper, his approval rating was only 45%. Kishida's poll decision was probably influenced by not wanting to repeat a mistake made by Suga, who did not call an election when his backing was still strong, analysts said. "I believe he aims to hold the election before the general atmosphere [towards the new cabinet] turns cold," said Zentaro Kamei, a senior fellow at the PHP Institute, a think tank based in Kyoto.

A week after his selection, Kishida unveiled a new cabinet featuring allies of Abe, so ensuring the influence of the latter's conservative base. Announcing his new Cabinet, Kishida had said that he would provide more opportunity for younger Diet members, and thirteen of the twenty members appointed will be taking up a Cabinet post for the first time.

Kishida's immediate task has been to rally support for a party weakened by Suga's perceived high-handed approach to pandemic measures and his insistence on holding the Tokyo Summer Olympics despite widespread opposition. However, one of the key roles for Japan's incoming prime minister will be boosting the economy after the coronavirus pandemic. Kishida says he wants to continue the economic reforms, known as "Abenomics", initiated by former prime minister Shinzo Abe, which focus on expansionary fiscal policies. He also wants to put together a massive stimulus package worth about ¥30 trillion yen ($269 billion) by the end of the year to help Japanese businesses hit by the economic damage wrought by the pandemic. In his speech on Monday, he said the government was considering cash payouts to the hardest hit.

Japan's new finance and economy ministers vowed to take bold policy action to revitalise the pandemic-hit economy. A sign that fiscal and monetary stimulus will remain intact under the new government. Also, finance Minister Shunichi Suzuki said he was told by Kishida to stick to bold monetary easing, flexible fiscal spending and a growth strategy to put a decisive end to deflation. "I hope the Bank of Japan strives to achieve its price target while ensuring markets and corporate funding remain stable," Suzuki told reporters at his first news conference. However, he also added that he could not say now how big the stimulus package could be, as that would depend on deliberations among policymakers and the ruling coalition. "Japan's fiscal state has become more severe due to the cost of dealing with the pandemic," Suzuki said, stressing the need to ensure Japan maintains market trust over its finances by laying a long-term path toward fiscal reform.

The new Prime Minister also told the panel of ministers he has set up to frame this programme to come up with 'urgent' economic proposals by early November to flesh out his signature "new capitalism" vision. The proposals will include promoting the development of advanced technology for digitalisation and decarbonisation and economic security issues including securing semiconductor supplies as "top priorities," Kishida said at the end of the first meeting of the panel. "We shared the view of aiming to improve productivity through growth strategies and increase the levels of people's income through redistribution of the fruits" of that growth, Kishida said, repeating his mantra of creating "the virtuous cycle of growth and distribution." The panel will also focus on issues such as expanding the middle-class through wage hikes and improving working conditions for nonregular employees and freelancers. He also wants the panel to push for tax benefits for companies that raise wages, further support for education and housing costs for families with young children and efforts to increase wages for nurses and nursing care and childcare workers.

Up to now government policy has failed to drive interest rates or inflation upwards and away from very low rates, basically because it has reversed its fiscal expansion periodically with a deflationary rise in consumption taxes. It needs now to show consistency in fiscal expansion to push up inflation and allow monetary policy to respond with higher interest rates. Japan has no solvency problem, because Japanese households save heavily into government debt and markets know that in the long run they are willing, if necessary, to pay higher taxes to service the public debt.

While Kishida plans look to revitalise the economy look promising, Japan's finances remain mired in red ink, with the combined long-term debts of the national and local governments exceeding ¥1,200 trillion. Kishida is saying little about fiscal soundness despite it supposedly being dear to his heart. Former Prime Minister Kiichi Miyazawa, who became finance minister in Prime Minister Keizo Obuchi's cabinet in 1998 said at the time: "Fiscal reconstruction should be achieved after the economy has gotten back on a recovery path." Miyazawa called himself "a Keynesian who

has come late," repeatedly implementing massive fiscal spending measures and piling up debt. Miyazawa hailed from the LDP's Kochikai faction, which Kishida currently leads. There is no doubt that Kishida is very aware of the traditions of his political grouping. So the question now is whether the Kishida government will mark a turning point in Japan's economic policy or not? Will the country move away from its previous goal of reducing the government's role in the economy and toward the Keynesian model of intervention to achieve desired outcomes? The first litmus test of Japan's future economic policy will be the package of a stimulus worth tens of trillions of yen by the end of the year. It should be examined thoroughly. If it pours money into areas that promote growth rather than just spending money for its own sake, Kishida's government will be welcomed.

MARKET DEVELOPMENTS

In spite of supply shortages, growth will be strong as the recovery continues and supply chains invest in more capacity. Interest rates will rise but equities are still well positioned.

Table 1: Market Developments

	Market Levels		Prediction for Sep/Oct 2022	
	Oct 5	Nov 5	Previous Letter	Current View
Share Indices				
UK (FT 100)	7011	7304	12662	13191
US (S&P 500)	4300	4698	5603	6121
Germany (DAX 30)	15037	16054	25773	27517
Japan (Tokyo New)	1974	2041	2645	2736
Bond Yields (government				
UK	1.14	0.89	1.50	1.50
US	1.55	1.48	3.00	3.00
Germany	–0.17	–0.26	0.00	0.00
Japan	0.08	0.06	0.10	0.10
UK Index Linked	–2.29	–2.58	1.00	1.00
Exchange Rates				
UK ($ per £)	1.36	1.35	1.30	1.30
UK (trade weighted)	81.22	81.12	78.8	78.8
US (trade weighted)	101.68	101.49	100.5	100.5
Euro per $	0.86	0.87	0.88	0.88
Euro per £	1.17	1.17	1.14	1.14
Japan (Yen per $)	110.86	113.46	107.5	107.5
Short Term Interest Rates				
UK	0.63	0.26	1.70	1.70
US	0.18	0.18	2.00	2.00
Euro	–0.54	–0.54	–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	3.63	35.92
Germany	3.30	1.8	1.6	68.00	2.02	76.72
Japan	1.90	1.5	0.5	32.00	8.69	44.59
UK indexed[2]	–2.53		5.0	16.00		18.42
Hong Kong[3]	2.60	5.2	5.0	–15.00	3.63	1.43
Malaysia	3.30	6.9	5.0	59.00	3.63	76.93
Singapore	3.50	5.0	5.0	52.00	3.63	70.63
India	1.40	5.5	5.0	2.00	3.63	17.53
Korea	1.10	2.2	5.0	–16.00	3.63	–3.27
Indonesia	2.20	4.8	5.0	21.00	3.63	36.33
Taiwan	2.80	3.5	5.0	27.00	3.63	41.93
Thailand	3.20	4.1	5.0	23.00	3.63	37.83

Bonds: Contribution to £ yield of: –

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	0.89	–6.14		–5.25
US	1.48	–15.16	3.63	–10.04
Germany	–0.26	–2.59	2.02	–0.83
Japan	0.06	–0.39	8.69	8.37

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.26		0.26
US	0.18	3.63	3.81
Euro	–0.54	2.02	1.48
Japan	0.00	8.69	8.69

[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.

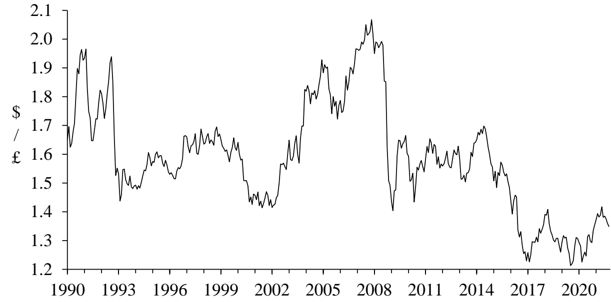
Table 3: Portfolio(%)

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

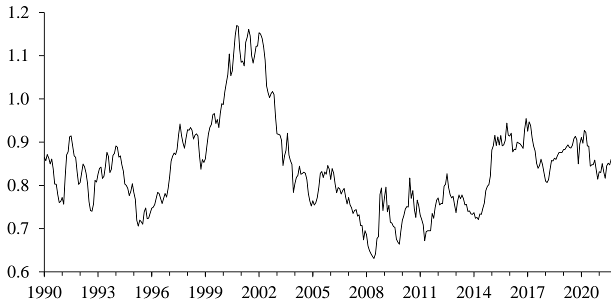
INDICATORS AND MARKET ANALYSIS
FOREIGN EXCHANGE MARKETS

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

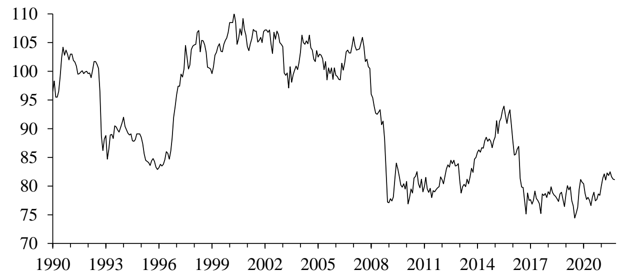
UK: Dollars Per Pound Sterling



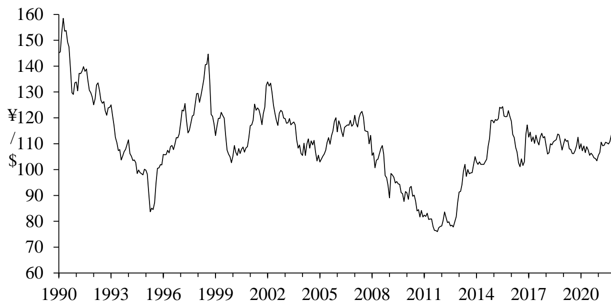
Euro per US dollar



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



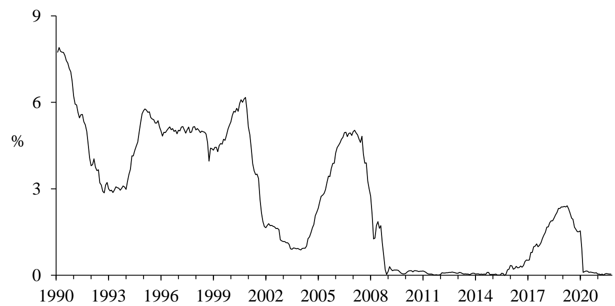
Japan : Yen Per U.S. Dollar



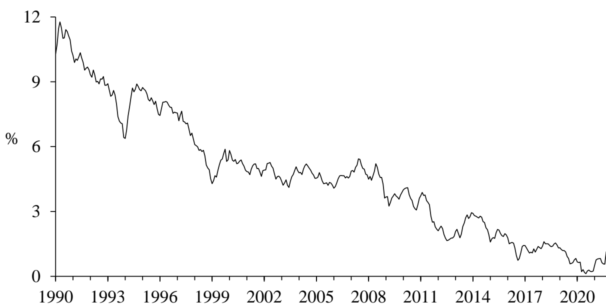
GOVERNMENT BOND MARKETS

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

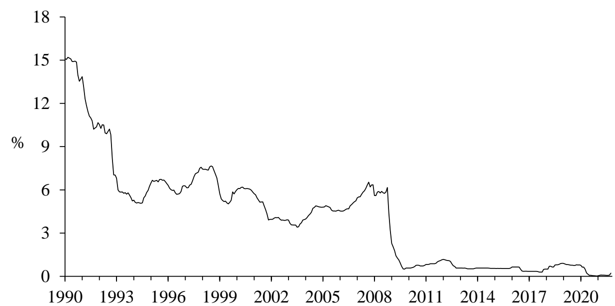
U.S. : 3-Month Treasury Bill



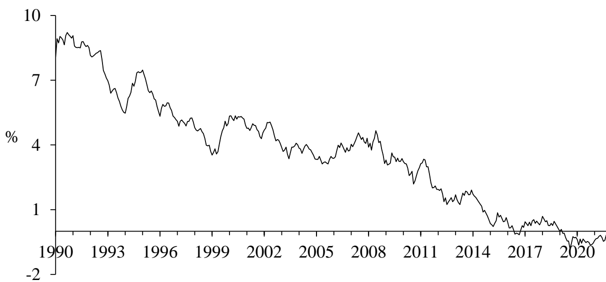
U.K.: Yield on Long-Term Government Bonds



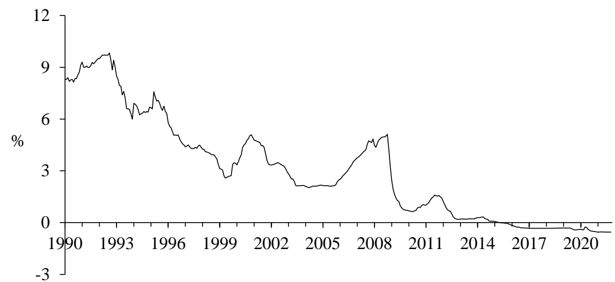
U.K. : 3-Month Certificate LIBOR Rate



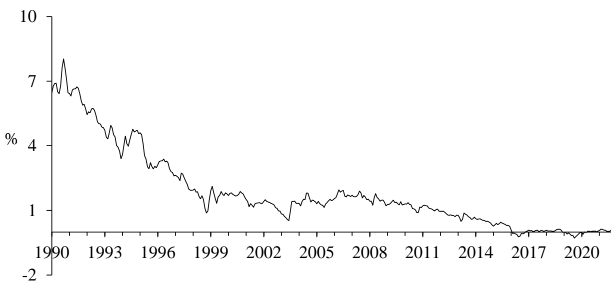
Germany: Yield on Public Authority Bonds



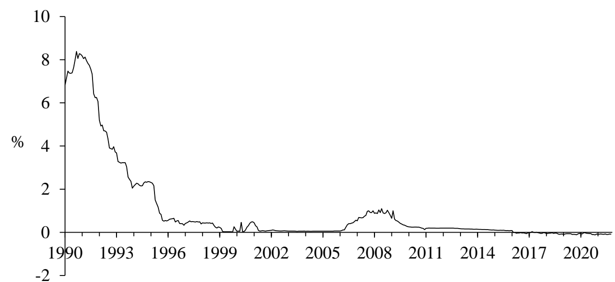
Germany : 3-Month Interbank Deposit Rate



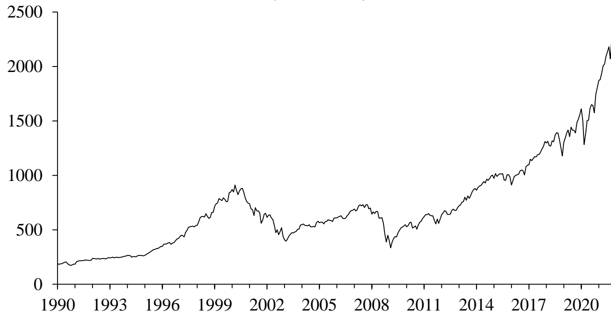
Japan: Yield on Long-Term Government Bonds

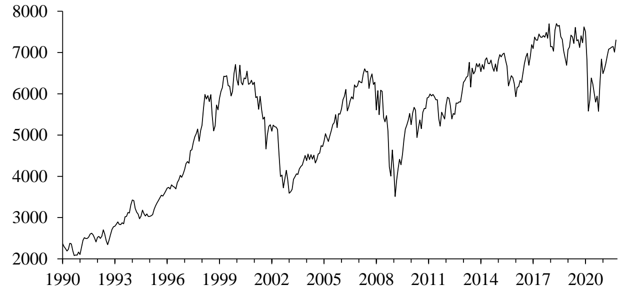


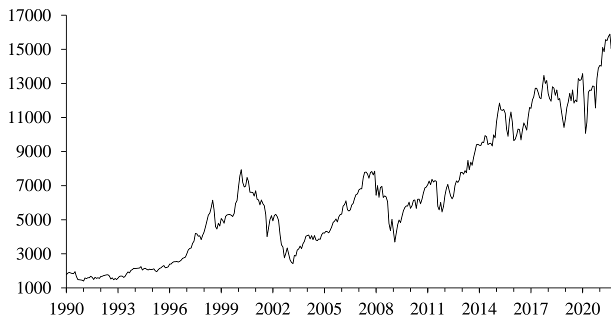
Japan : 3-Month Money Market Rate



MAJOR EQUITY MARKETS







EMERGING MARKETS

Anupam Rastogi

India

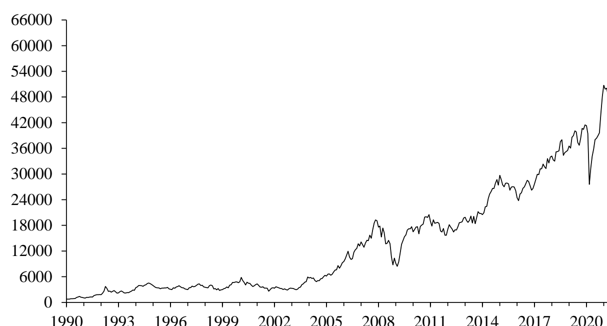
As the world is struggling with the rising cases of COVID 19, there is positive news trickling down from India. India is opening and growing at a break-neck speed. The mobility indicators, run by Google, are well above the levels seen before the pandemic. Despite global supply chains that have not yet fully recovered from the pandemic, there is still more growth in consumption activity to come. As the blame for the horrific Covid wave that India went through in April–May 2021 was apportioned to the government for its mishandling; the success of controlling it should also go to them as they vaccinated people on war footing. Moreover, it was Prime Minister Modi, himself, who ran a well-publicized vaccination campaign.

The Indian economy continues to recover gradually and further opening of contact-intensive segments of the economy would raise economic growth further. This is reflected in steady industrial recovery, strong non-oil imports, and robust manufacturing activity as signalled from record-high e-Way bills, GST collections and manufacturing PMI. The trend is expected to continue in the second half of fiscal year 2021–22, thanks to the realization of festive-led demand and high Government spending. Persistent supply-side disruptions, weakening global demand and rising commodity prices may weigh on the ongoing recovery but the industry is ploughing on. We continue to maintain our GDP growth estimate at 10% in FY 2021–22 and increase GDP growth to 6.5% in the next fiscal year.

The higher growth rate in the current fiscal year would largely be a result of the lower base of last year. In absolute terms, real GDP in 2021–22 would be marginally better than in 2019–20. Business sentiments have hit a two-year high in Q2 as Covid second wave eased off. Sentiments improved sequentially in Q2FY22 about production, domestic sales, exports, new orders, imports of raw materials, and pre-tax profits. The growth rate in the next fiscal year would also be influenced by the lower base of the first quarter of the current fiscal year, when economic activity was affected by the second wave of Covid-19.

The continuing export boom, along with the surge in tax revenue and falling inflation supported by the shrinking pile of bad debt which was dragging the banking system is another bright spot. The surging tax revenue is keeping the fiscal expansion on track without affecting fiscal deficit. The government programmes like Gati Shakti (integration of multi-modal connectivity to economic zones) and asset monetization, which are expected to generate growth momentum in the coming years.

India: BSE Sensex



Higher prices of crude oil and other commodities remain the risks but are unlikely to derail the economic growth. Good monsoons in the past three years have been a boon to the economy as it ensured rural demand to grow at a healthy pace.

India's annual retail inflation eased to 4.35% in September from 5.3% in the previous month. The RBI's Monetary Policy Committee (MPC) unanimously decided to keep the policy rates unchanged and to continue with the accommodative stance. The Reserve Bank of India Governor, Shaktikanta Das, was re-appointed as governor for another three-year term. This will ensure that monetary policy remains accommodative while government finds resources for its social programmes and investments from asset monetization. Moderate inflation will be a welcome news for the finance ministry as it comes close to achieving the fiscal deficit target for FY22.

India's exports (merchandise and services combined) in September 2021 grew 21.4% over the same period last year and a growth of 26% over September 2019. Imports in September 2021 grew 70% over the same period last year and a growth of 44.1% over September 2019. The trade deficit in September widened to $22.59 billion as against $2.96 billion in the same month last year. However, the widening trade deficit is unlikely to give a major trouble to the Reserve Bank of India as the trade surplus in services and inflow of foreign funds in stock and debt markets have provided a cushion. India's forex reserves crossed $639 billion at the end of September. The current account was at a surplus of $6.5 billion or 0.9% of GDP in the June quarter from a deficit of $8.1 billion in March quarter. The current account to GDP ratio is likely to post a deficit of 0.9–1.1% in FY22. This is due to the rising domestic demand resulting in higher import growth compared to that of export while the escalated global commodity prices could push the import bill upwards. The Indian rupee may, however, remain range bound as the risks from a strong dollar and higher global energy prices may partly be offset by the strong capital inflows.

India's privatization program represents a sweeping rollback of state control in what was once among the most public-sector-dominated economies outside the communist bloc. It is a sharp repudiation of India's first prime minister, Jawaharlal Nehru, and his daughter, Indira Gandhi.

The Nehru government nationalized life insurance in 1956. In 1969 Indira Gandhi took over 14 private banks. In the 1970s she nationalized general insurance and coal and grabbed the assets of foreign oil majors.

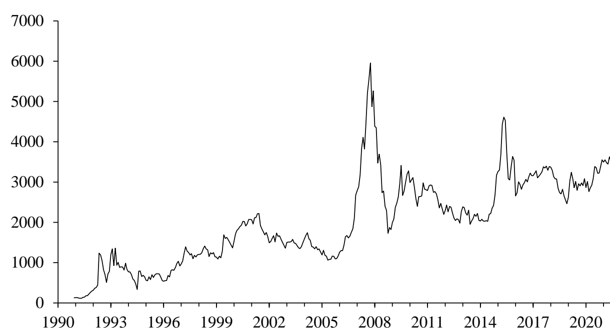
India's inclusion in JPMorgan's global emerging-market bond index could prompt $25 billion of inflows from foreign investors. Given India's large weight in the index, the process would likely be staggered over 10 months, similar to China's inclusion into GBI-EM in 2020. The eligible bonds under the so-called Fully Accessible Route, or FAR, which are free of any restrictions, will be large enough for a maximum 10% weight in the Government Bond Index - Emerging Markets Global Diversified that is followed by about $250 billion of assets under management.

Indian stocks have risen more than any other major market in the world this year and that is enticing millions of local investors to put their savings into equities, further buoying the market. The benchmark 30-share S&P BSE Sensex was up 28% this year and the Nifty 50 index was up 31%, with both finishing at closing record highs. Financial analysts expect equity performance to sustain because of improved domestic and global demand and government measures. Incentives for domestic manufacturing, consumption, and private investments are to drive markets in the next two years. The country's red-hot stock market contrasts sharply with its languishing Chinese counterpart. The Indian market has probably benefited from investors fleeing Chinese and Hong Kong stocks for a big Asian emerging market that still offers strong growth potential.

	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	-20.0	-10.0	-10.0
Rs./$(nom.)	73.0	75.0	74.0	75.0	76.0

China

The Delta variant puts China through one of its biggest Covid-19 outbreaks since it first closed off Wuhan in early 2020. New lockdowns and other strict controls are rippling across the country. China's zero-COVID policies is impacting economic growth in the short term and will have lingering disintegrating impact in the long-term. At present, the Chinese economy is facing several headwinds. The property sector is facing tighter policy measures, the energy crisis is deepening and the pandemic is unleashing unprecedented misery and cost. China's economic growth tumbled more than expected in the third quarter. Economic growth in China slowed to 4.9% year on year in the third quarter from 7.9% in the prior three months. The IMF has cut its China growth projections for 2021 and 2022 by 10 basis points each — to 8% and 5.6%, respectively. We maintain our growth forecast of 8% in 2021 and 5.2% in 2022. The widespread power shortfalls are delaying the recovery further.



China's official manufacturing purchasing managers index dropped to 49.2 in October, lower than September's 49.6 reading and the lowest since the outbreak of the pandemic in February 2020. The official non-manufacturing Purchasing Managers' Index (PMI) fell to 52.4 in October from September's 53.2. The 50-point mark separates growth from contraction on a monthly basis.

China's factory-gate prices grew at the fastest pace in almost 26 years in September. The divergence in two key measures of China's inflation — with producer prices heating up further and consumer prices cooling in September — highlights underlying strains in the economy. But the central bank is still focused on supporting growth, and lower CPI inflation gives it room for manoeuvre. For now, consumer inflation remains in check because of falling pork prices, helping to drive down food prices by 5.2% in September from a year ago. Core CPI, which strips out volatile items such as food and energy, was unchanged at 1.2%.

China's central bank kept its benchmark loan prime rate unchanged. The one-year loan prime rate (LPR) remained at 3.85% and five-year LPR at 4.65%. The last time the central bank cut the LPR was in April last year when the economy was hit by the pandemic shock.

China's exports grew by 28.1% in September from a year earlier, to US$305.7 billion — up from the 25.6% growth seen in August. Imports rose by 17.6% in September from a year earlier, to US$239 billion — down from the 33.1% growth in August. China's total trade surplus stood at US$66.8 billion in September, compared with a revised US$58.3 billion in August.

In the first nine months of the year, China's exports rose by 23.86% year on year to US$882.7 billion, down from the 30.4% growth, seen in the first half of the year and down from the 48.8% growth seen in the first quarter. Imports in the first nine months of the year rose by 26.5% year on year to US$701 billion, down from the 43.7% growth seen in the

first half of the year and down from the 27.6% growth seen in the first quarter.

The yuan has defied economic fundamentals for the time being. Rising exports, surging bond inflows and attractive carry trade returns, all points towards further gains in China's currency. The odds of a reversal are slim as a reduction of U.S. stimulus has been priced in while the fallout from China Evergrande Group's debt crisis may be contained. Overall, a stronger yuan is likely to spur more inflows and further boost demand for the currency, which would support Beijing's push to promote its use globally. However, it also risks undermining the competitiveness of China's exports in the long run. We believe the CNY is unlikely to continue appreciating in the medium and long term, considering the expected re-strengthening of the USD and reduction in China's trade surplus, and easing of China's monetary policy.

Washington and Beijing made incremental progress in their economic and trade talks, as Vice Premier Liu He and Treasury Secretary Janet Yellen spoke for the second time in four months. President Xi Jinping is having a secret meeting of ruling Communist Party in the second week of November to secure a third five-year term in power at the next year's twice-a-decade party congress. This would defy precedent since Mao's time. If the Party agrees to his third term, he would remain in power for another five years.

	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

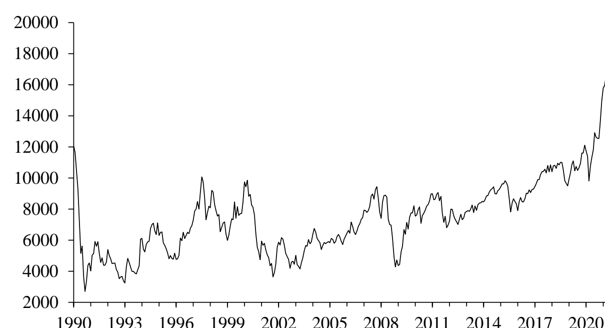
South Korea's economy slowed down in the third quarter as private consumption, construction and investment slowed down despite robust exports. Gross domestic product (GDP) grew a seasonally adjusted 0.3% in the third quarter, the slowest in five quarters and following a 0.8% rise in the preceding three months.

Private consumption, which generates nearly half of South Korean GDP, contracted 0.3% in the September quarter after a 3.6% rise in the second quarter, while construction and facility investments also swung to declines of 3.0% and 2.3%, respectively. Exports grew 1.5%, recovering from the June quarter's 2.0% contraction, on strong sales of semiconductors and petroleum products. Exports had grown 6.0% growth in the second quarter. The BOK expects GDP to grow 4% in 2021 after shrinking 0.9% last year.

Consumer prices rose 2.5% from a year earlier in August. It highlights growing price pressures in the economy as the recovery continues and was supported further by higher energy and food prices ahead. Inflation is growing more than the Bank of Korea's 2% target for a sixth straight month. South Korea's central bank kept interest rates steady at 0.75% after its first rate hike in nearly three years in August. Governor Lee Ju-yeol has retained a hawkish tone since May. According to him, "The bank can consider raising interest rates further at the next meeting should the economic recovery proceed as expected, while monitoring how changes in internal and external conditions affect the domestic economy and inflation."

Korea: Composite Index

Taiwan: Weighted TAIEX Price Index



South Korean exports are set for a 12th consecutive month of growth in October. Exports surged 24.0% in October from a year earlier. Exports are being propelled by post-lockdown recoveries in major markets, which pushed up demand for Korean chips and petrochemical products. Imports jumped at a faster 37.8% on-year, also accelerating from a 31% expansion in September.

The currency could fall to 1200 per dollar by December as exports moderate and the dollar strengthens as the U.S. Fed is changing its ultra-accommodative monetary policy.

The won has lost more than 6% since end-May as the dollar gained and South Korean authorities tightened restrictions to curb the rise in Covid 19 cases. Stock outflows have added to the pressure, with overseas investors withdrawing $7.9 billion from local equities the third quarter.

	19	**20**	**21**	**22**	**23**
GDP (%p.a.)	1.8	-1.0	4.0	3.0	2.5
Inflation (%p.a.)	0.4	0.5	2.0	1.4	1.0
Current A/c(US$ bill.)	60.0	70.0	60.0	40.0	40.0
Won/$(nom.)	1200	1070	1150	1170	1200

Taiwan

Taiwan's Gross Domestic Product (GDP) is likely to expand by 5.9% this year and 3.7% in 2022 as exports continue to grow and the domestic market also expands. The spur in

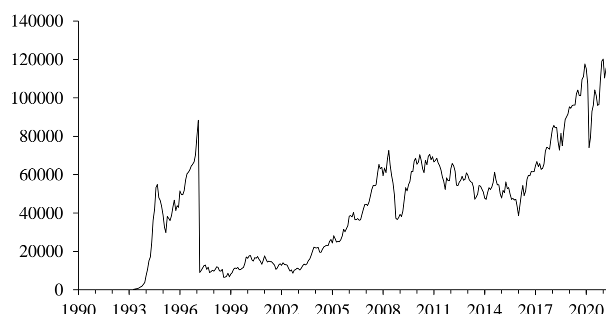
economic growth is the result of private investment and exports performing better than previously expected. The power supply problems in China, which was thought to have adversely impacted the economy, have largely dissipated.

The rising prices overseas have impacted domestic products and services. The Covid 19 epidemic, extreme weather and transportation bottlenecks are the main causes of rising prices. Businesses chose to pass on the higher prices to consumers. The restaurant sector has already announced price increases. We expect consumer prices to rise 1.5% this year and 1% in 2022. Taiwan's central bank said that it is watching inflation and there is no cause for alarm but added it will adopt "appropriate" monetary policies if needed. At its quarterly meeting in September, the central bank said it expected full year CPI to rise 1.7% in 2021 and then expand by a slower 0.92% in 2022. Taiwan's benchmark interest rate is 1.125%, its lowest on record, having been cut in March of last year as the COVID-19 pandemic began to bite. The central bank will hold its next quarterly meeting in mid-December.

Robust exports and trade surplus helped the Taiwan dollar overcome the dollar's strength and outperform Asian currencies in the January to September period. It's now fallen behind some of its peers as foreigners sold $2.3 billion of local equities in October, up from $440 million in September. The Taiwan dollar faces growing headwinds from foreign outflows. Taiwan's currency slumped to a six-month low in October on equity losses after rallying to a 24-year high in June. The currency is facing headwinds from the country risk. There were rampant rumours on the mainland of a coming conflict with Taiwan. The speculation got so heated that a social media account, controlled by the Chinese military, took the unusual step of publishing a pointed repudiation.

China sent about 150 warplanes into Taiwan's air defence identification zone (ADIZ), in a massive escalation of its military activity directed towards the island. Over the past two years, the People's Liberation Army (PLA) has increased its activity, with near-daily sorties into the ADIZ and frequent military drills in nearby maritime areas. President Tsai is on record that Taiwan would not be "adventurists" but would do "whatever it takes" to defend itself and warned the fall of Taiwan would see "catastrophic consequences" for the region. The island's premier, Su Tseng-chan, said Taiwan "must be on alert" to China's behaviour. "The world has also seen China's repeated violations of regional peace and pressure on Taiwan." Taiwan is deepening relationships with governments such the US, EU, Australia, Japan and India (even if they are not offering to restore ties just yet), and emphasizing its importance in the global economy, particularly as leading supplier of semiconductors — the chips that run the world.

The U.S. and China are engaged in a "strategic competition," as the Biden administration has put it, with Taiwan emerging as the focal point. But an ascendant view inside the administration seems to be that while China represents a serious economic, political, and technological challenge to American interests, it doesn't pose a direct military threat. However, Beijing has made clear it is willing to use force to take Taiwan. At present, China doesn't merely have the will to invade Taiwan, it increasingly may have the ability to pull it off. China has spent 25 years building a modern military in large part to bring Taiwan to heel. Finally, China may think its window of opportunity is closing. Many wars have started because one side thought it had a time-limited opening to exploit. This political risk will continue to linger in a foreseeable future.



	19	20	21	22	23
GDP (%p.a.)	2.0	3.1	5.9	3.7	3.0
Inflation (%p.a.)	1.0	-1.0	1.5	1.0	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

Growing fiscal uncertainty leading to higher country risk, greater depreciation of the Brazilian Real (BRL), worse prospects for inflation, and, ultimately, a higher neutral interest rate to fight inflation and to protect Real are taking a toll on economic growth. Brazil is following textbook examples of fighting inflation and trying to have a positive real interest rate by raising benchmark interest rates. Real interest rate is crudely defined as the central bank's Selic rate, minus the current consumer price index. Brazil's central bank has been the most aggressive in the world, raising interest borrowing costs consistently since March, to 7.75%. Policy makers target inflation at 3.75% this year and 3.5% in 2022.

Economic activity is already showing signs of a slowdown. We expect economic growth of just one percent in 2022 after growing 5% in 2021. Tightening of financial conditions is smoking out growth. With elevated benchmark interest rates economic activity will remain weak in 2022.

Consumer prices rose 1.2% in mid-October, the highest for the month since 1995. Annual inflation surged to 10.34%. Yet, policy makers target inflation at 3.75% this year and 3.5% in 2022. The rate hike is likely to impact real estate and the equity market while boosting Brazil's debt service burden. There exists a risk of recession next year if

commodity prices collapse due to rise in Covid 19 cases in China and Europe.

We expect consumer prices to be up 8.5% in 2021 and 4.5% in 2022. The central bank lifted the benchmark interest rate by 150 basis points to 7.75% on October 28 and will lift the rates to 8.75% at the end of this year and 9.5% in 2022. In a statement, policy makers wrote an identical hike would be fitting at their final meeting of the year, and that the pace would take inflation to target despite new fiscal risks. Final meeting of the central bank is scheduled on December 7 and 8.

The risk to BRL is skewed to the downside despite aggressive increase in interest rates.

The currency weakened more than 3% in the last week of October, adding pressure on inflation, as investors digested the proposed changes to the so-called spending cap — a rule that limits growth of the federal budget to the previous year's inflation rate. The carry trade, where currency traders used to park money in the BRL and safely make money from the "carry" or extra interest compared to currencies like the euro or yen is no longer profitable now.

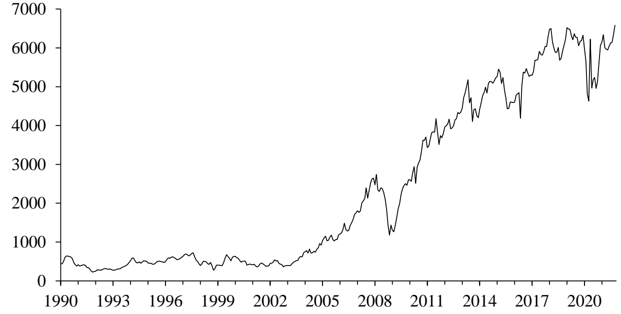
Brazilian President Jair Bolsonaro continues to face political headwinds ahead of elections next year. A Brazilian Senate investigative committee approved a report which calls for the president to be indicted for crimes related to his handling of the coronavirus pandemic.

	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

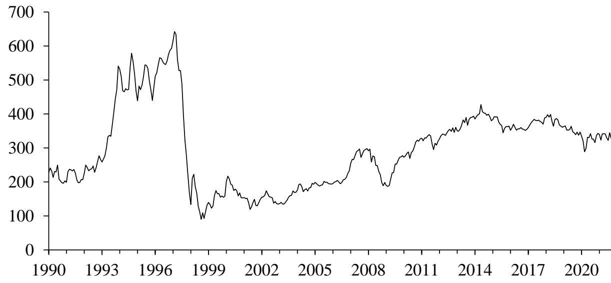
Other Emerging Markets

Hong Kong: FT-Actuaries

Indonesia: Jakarta Composite

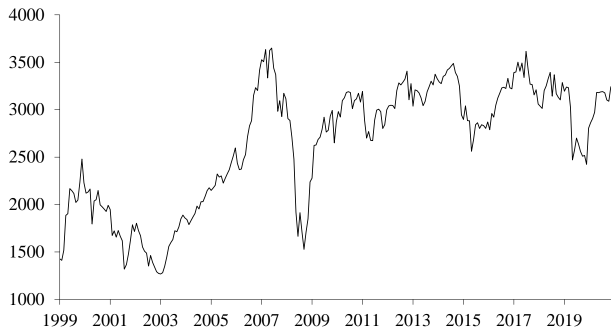


Malaysia: FT-Actuaries (US$ Index)

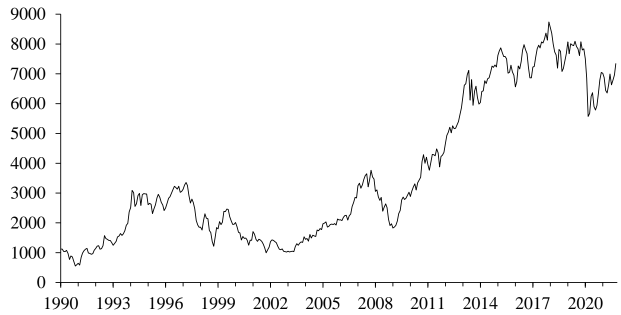


Thailand: Composite Index

Singapore: Straits Times Index

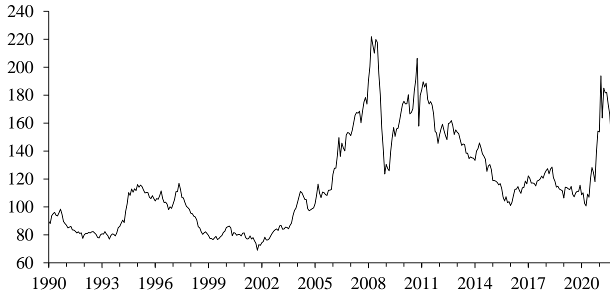


Philippines: Manila Composite

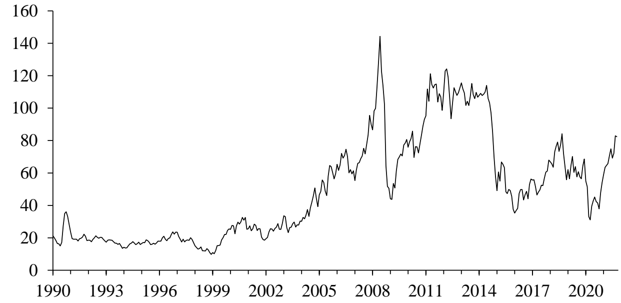


COMMODITY MARKETS

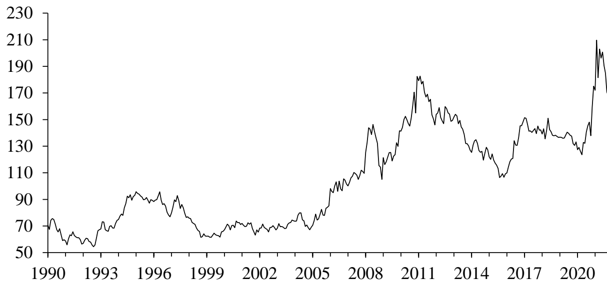
Commodity Price Index (Dollar)
(Economist, 2015 = 100)



Oil Price: North Sea Brent (in Dollars)

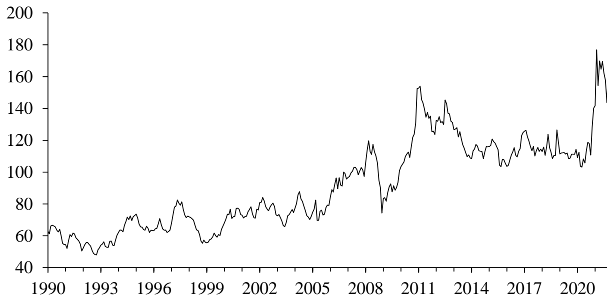


Commodity Price Index (Sterling)
(Economist, 2015 = 100)



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]
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	0.4	0.1	81.3	77.2	-4.1	3.5	-3.8
2022	5.0	1.5	1.5	78.7	77.6	-2.8	6.1	-2.9
2023	4.0	4.7	4.5	77.8	78.9	1.1	5.5	1.4
2024	3.0	5.0	5.0	77.5	80.0	2.6	4.6	2.6
2021:1	0.9	0.2	0.1	80.7	76.2	-3.2	1.4	-3.1
2021:2	2.1	0.4	0.1	81.7	77.6	-3.9	3.4	-3.6
2021:3	2.7	0.6	0.1	81.8	78.7	-4.5	4.5	-4.0
2021:4	3.5	0.6	0.2	79.8	77.0	-4.8	4.6	-4.4
2022:1	4.9	1.0	1.0	79.0	77.3	-3.8	5.4	-3.8
2022:2	5.0	1.5	1.5	78.7	77.3	-3.0	6.5	-3.0
2022:3	5.0	1.6	1.7	77.9	77.3	-2.6	6.3	-2.7
2022:4	5.1	2.0	2.0	78.1	78.4	-2.0	6.3	-2.0
2023:1	4.0	4.0	4.0	78.1	78.7	0.3	5.5	0.3
2023:2	4.0	5.0	4.5	77.9	78.7	1.0	5.5	1.5
2023:3	4.0	5.0	4.5	77.2	78.7	1.3	5.4	1.8
2023:4	4.0	5.0	5.0	77.3	79.7	2.0	5.4	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)
2019	275.7	3.5	3.8	1.0	148.8
2020	279.4	1.6	4.5	1.3	149.9
2021	297.2	6.5	4.6	1.3	155.9
2022	310.8	4.2	4.9	1.5	155.2
2023	323.9	4.2	3.6	1.0	155.5
2024	337.5	4.2	2.8	0.7	157.3
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	299.5	7.5	4.5	1.3	156.1
2021:4	307.6	6.7	4.6	1.4	158.9
2022:1	305.7	4.6	5.0	1.5	155.0
2022:2	303.4	4.7	5.0	1.5	152.9
2022:3	312.4	4.3	5.0	1.5	155.0
2022:4	321.6	4.6	4.7	1.4	158.0
2023:1	318.9	4.3	4.2	1.2	155.5
2023:2	315.6	4.0	3.6	1.0	152.9
2023:3	325.8	4.3	3.4	0.9	155.4
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	–2.8
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	1.5
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	–2.9
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	1.5
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