LIVERPOOL INVESTMENT LETTER

July 2021

Cardiff Business School
Ysgol Busnes Caerdydd

Julian Hodge Institute of Applied Macroeconomics

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

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

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

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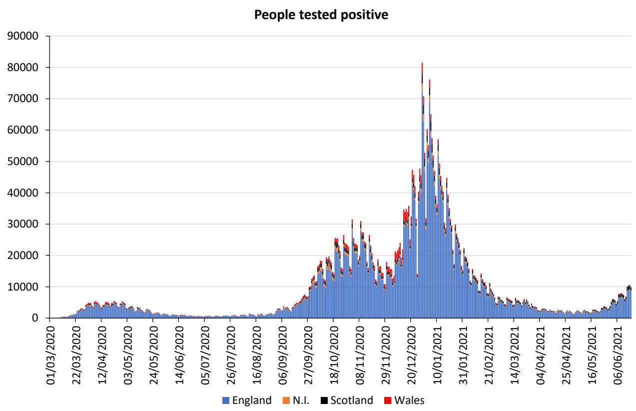
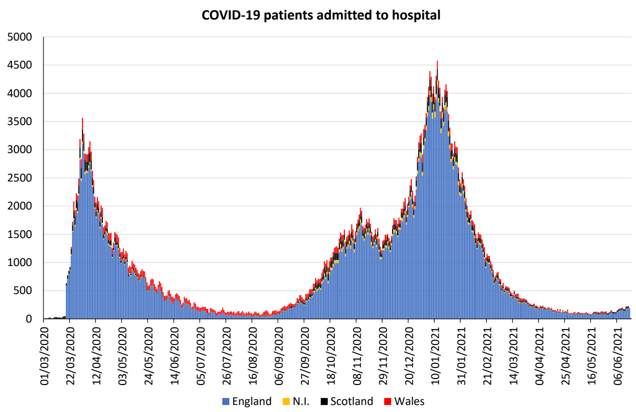
THE LATEST CORONAVIRUS SITUATION

In the following charts we show the latest situation over virus infections, hospitalisations and deaths in the UK and elsewhere. In the UK the key point is that deaths have fallen to virtually zero. While infections have risen with the spread of the new D-variant, which is more highly transmissible even than the Kent variant, the connection to a rise in deaths has been firmly cut by vaccination (which for a double jab of either the Oxford or the Pfizer vaccine is around 90% effective), and even hospitalisations have risen little.





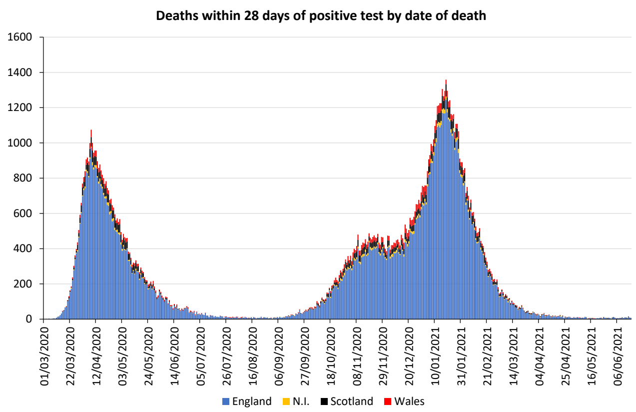
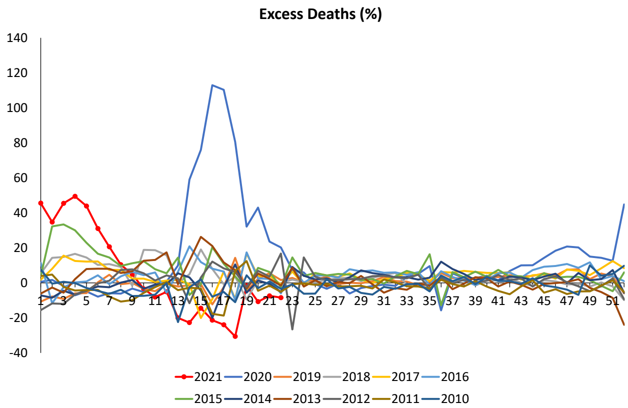
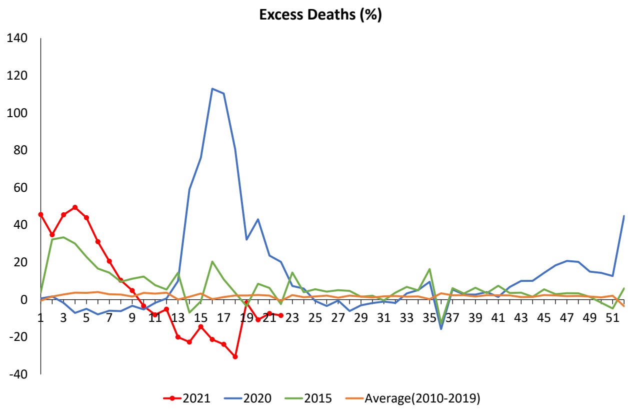


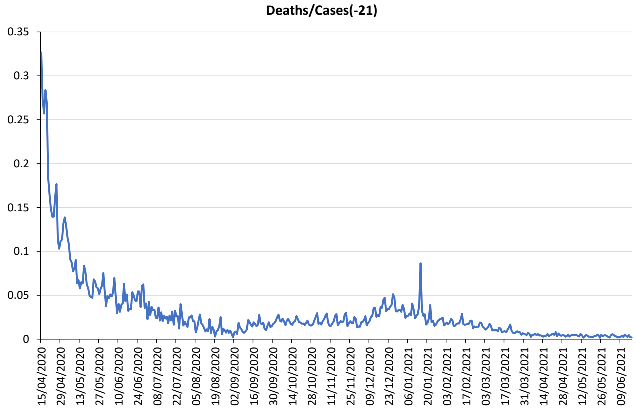
Table 1: Summary of Forecast

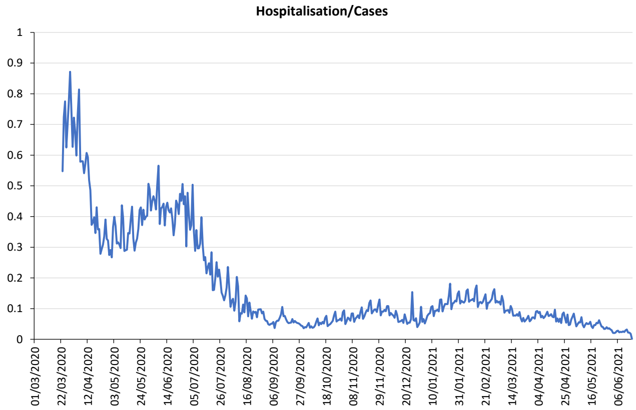
	2018	2019	2020	2021	2022	2023	2024
GDP Growth[1]	1.3	1.4	-9.9	7.8	8.5	2.5	2.1
Inflation CPI	2.4	1.8	1.0	1.7	5.0	4.0	3.0
Wage Growth	3.0	3.5	1.6	3.8	6.0	5.3	4.2
Survey Unemployment	4.1	3.8	4.5	5.4	5.1	3.6	2.8
Exchange Rate[2]	78.6	78.3	78.2	80.7	78.8	77.9	77.6
3 Month Interest Rate	0.4	0.8	0.2	0.1	1.5	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	-48.8	-36.0	-24.2	-17.0
PSBR (£bn)	39.3	49.1	311.2	137.5	57.0	41.5	22.7

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









The government delayed the final abolition of restrictions by a month on precautionary grounds, in case the spread worsened. But this looks like an excess of caution that will slightly damage the economy. It seems rather clear that vaccinations have firmly cut the link between infections and hospitalisation/death; the ratio of these last two to cases has dropped to virtually zero.

Other countries have had similarly low cases of infection and deaths — see Table 1 — and have reacted by further easing of lockdowns, in contrast to the UK's caution. This has paid off in terms of economic recovery which is going ahead widely. Nevertheless, the concern must be about the spread of the D-variant, which is around 10% in the US and similarly low in the EU. If this takes off in the US, the high rate of double vaccination should prevent a sharp rise in hospitalisation and death; but EU countries remain much more exposed to a setback due to the need for a renewed lockdown.

Table 1: Latest 28 days daily cases and deaths — US, Europe and UK

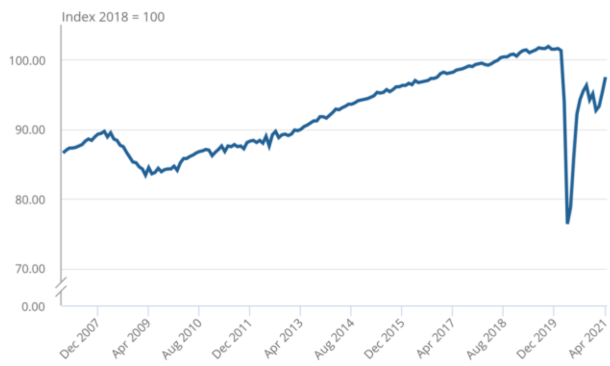
	Cases	Deaths	Deaths/Cases
US	14546.39	421.32	0.0290
UK	6271.68	9.18	0.0015
Germany	2522.46	107.71	0.0427
France	5290.85	72.39	0.0137
Italy	2099.57	69.86	0.0333
Spain	4183.25	34.93	0.0083

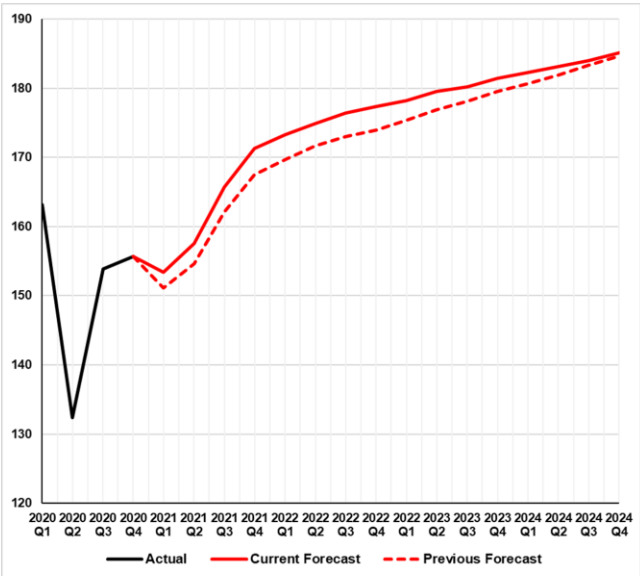
Whatever the outcome in the short term, policymakers here and elsewhere are now determined to move to 'living with Covid', and relying on vaccination to keep public health in reasonable shape with no more lockdowns, at least general ones.

As a result recovery is gathering speed. Here the wobbling V is firming up, with our latest quarterly forecast consistent with about 8% growth in 2021 YOY. Worldwide recovery is also well set and the latest PMIs are signalling YOY world GDP growth of around 3%.

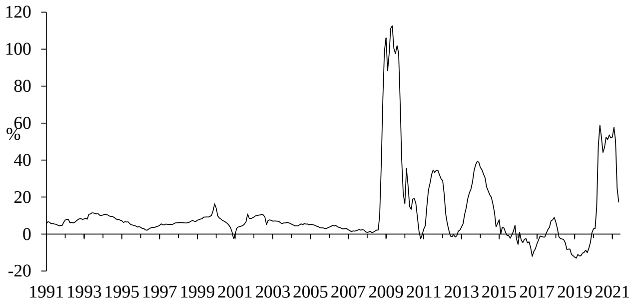
Figure 1: GDP is estimated to have grown by 2.3% in April 2021 as government restrictions affecting economic activity continued to ease

Monthly index, January 1997 to April 2021, UK, 2018 = 100

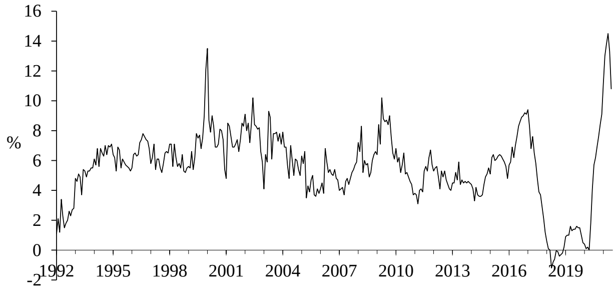




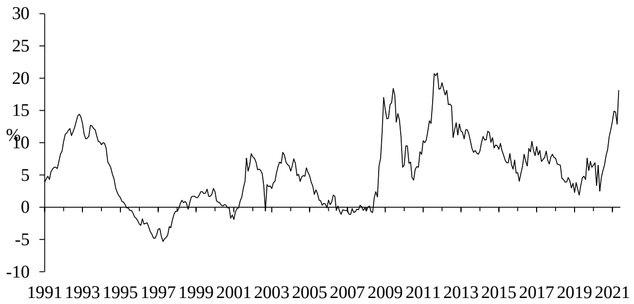
U.S.: Growth in M0 (Yr - on - Yr)



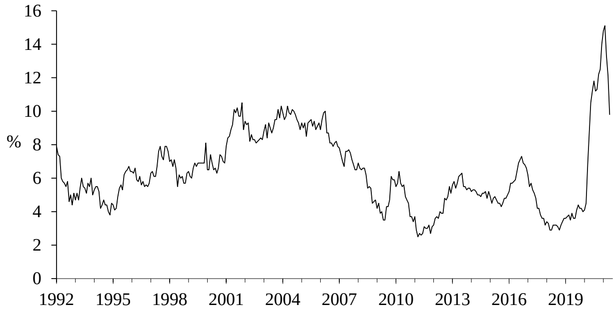
UK: Notes and Coins in Circulation Growth



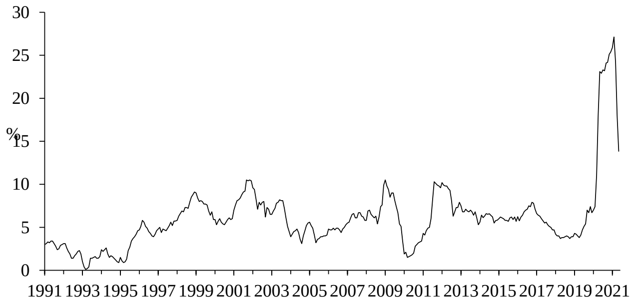
U.S.: Growth in M1 (Yr - on - Yr)



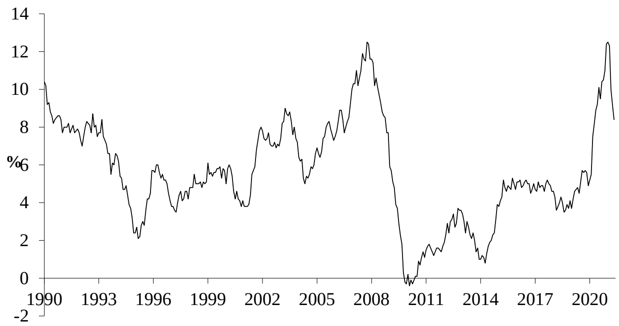
UK: M4 Growth



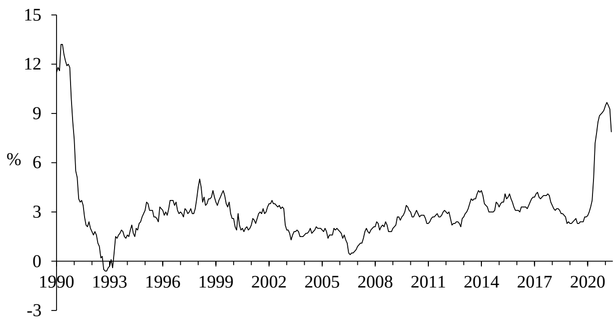
U.S.: Growth in M2 (Yr - on - Yr)



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

Japan's Consumer Prices Pick Up

Japan's inflation has edged into positive territory for the first time in 14 months as rising commodity costs have fed higher gasoline prices at the pump, according to data released just before the June 17-18 Bank of Japan (BOJ) monetary policy meeting. Consumer prices excluding fresh food increased 0.1% compared with a year earlier, lifted by a 20% jump in gas prices, the internal affairs ministry reported. Economists had predicted flat prices overall. Excluding fresh food and energy, consumer prices dropped 0.2% from the previous year, compared with a -0.3% forecast by economists. Overall inflation fell 0.1% from a year earlier. Analysts had predicted -0.2%.

As a result, the BOJ kept policy settings unchanged at the last June meeting and maintained its view the economy will gradually recover from the damage caused by the pandemic. But many board members remained gloomy on Japan's recovery prospects as the impact from the outbreak deepened, the minutes showed. "The impact of the pandemic was broadening to companies of all size and sectors. If corporate bankruptcies and closures increased, there was a risk Japan could slip back into deflation," a few board members were quoted as saying. Many members also said economic activity could be "severely curtailed" if there was a second wave of infections, the minutes showed. Japan lifted nationwide state of emergency measures in late May but has seen a renewed spike in infections in its capital Tokyo, stoking fears of a second wave that could hit an already weakened economy. Japan has reported over 25,000 cases, including nearly 1,000 deaths.

Now, central bankers around the globe are worrying about inflation, stoked by stimulus spending, rising commodity prices and consumer demand. However, in Japan, which has more experience with stimulus policies than any other country in the world, this small price rise and inflation is the furthest thing from anyone's mind. Instead, people have other concerns: low wages, low pensions, and low economic growth with few opportunities. "Inflation expectations are not rising in Japan because wages are not rising", says Yosuke Yasui, a senior economist at Japan Research Institute and former BOJ official. Wage increases depend on productivity, which in turn depend on human capital investment, he said: "The biggest problem for Japan is that it hasn't created enough quality jobs or stable positions that provide workers with new skills and wage increases".

For the past five years, the BOJ has been pursuing the promise of inflation overshoot, but it has not even approached its 2% target. Little has changed after the pandemic. Inflation has nowhere to go on the horizon, spending has grown slowly. Japanese households and companies firmly believe that inflation will remain near zero, which makes it almost impossible for the BOJ to achieve its goals. The Governor of the BOJ Haruhiko Kuroda said in a recent speech: "The formation of Japanese inflation expectations is not only affected by the observed inflation rate at the time, but also by past experience and norms established in the process."

The problem that has frustrated multiple prime ministers is that while Japan's government has been dizzyingly profligate the private sector is increasingly stingy. Former Prime Minister Shinzo Abe said in front of parliament in 2017 "My government will ... use every policy tool at its disposal to grow the country out of deflation". "Abenomics" launched in 2012, was a pro-business economic policy. It aimed to reverse Japan's deflationary trend with a three-pronged program: a big boost in government spending, massive debt purchases by the central bank, and pro-business initiatives like corporate tax cuts and free trade. Between 2012 and 2020, under Abe's tenure, nearly 5 million jobs were created, pushing down the jobless rate to as low as 2.2% in 2019 — a 27-year low. But three-quarters of these jobs are nonregular, short-term, easily expendable and outside the scope of training programs that are available to regular employees. Nonregular workers are vulnerable to recession and COVID-19. Their income is typically about 40% of regular employees.

The legacy of Abenomics is a widening gap that continues to dog the labour market, between well-off office workers and insecure part-timers. Removing this gap has been a key policy target for years, but there has been little progress. If anything, it became more entrenched under Abenomics. Prime Minister Yoshihide Suga, who came into office in September, has belatedly started addressing the issue, but economists expect the share of nonregulars in the labour force to eventually top 50%. In all this, the private sector never chose to copy the government's free-spending ways. Instead, over Abe's tenure, the corporate sector increased its savings by 56% by the year ended March 2020. "If the private sector doesn't spend, the government has to spend instead," says Kozo Yamamoto, a lower house member of the ruling Liberal Democratic Party and the architect of Abenomics. "The private sector is stuck in a deflationary mindset. That's why they don't make investment".

So, while in many major economies prices are rising, the risk of inflationary pressure in Japan are remote. The BOJ is right to stress that the quantitative and qualitative monetary easing program will continue until the goal of price stability or the bank's target for inflation of 2% is achieved.

MARKET DEVELOPMENTS

Inflation is rising but recovery will underpin equity prices. Interest rates will rise but in a lagging way. Real interest rates may not rise above zero for some time.

Table 1: Market Developments

	Market Levels		Prediction for Jun/Jul 2022	
	Jun 1	**Jul 6**	**Previous Letter**	**Current View**
Share Indices				
UK (FT 100)	7080	7101	11442	11475
US (S&P 500)	4202	4344	5824	6020
Germany (DAX 30)	15567	15511	25904	25811
Japan (Tokyo New)	1926	1955	2427	2463
Bond Yields (government				
UK	0.82	0.63	1.50	1.50
US	1.61	1.35	3.00	3.00
Germany	–0.19	–0.28	0.00	0.00
Japan	0.08	0.03	0.10	0.10
UK Index Linked	–2.15	–2.23	1.00	1.00
Exchange Rates				
UK ($ per £)	1.42	1.38	1.30	1.30
UK (trade weighted)	82.28	81.83	80.0	78.8
US (trade weighted)	109.05	100.05	102.5	100.5
Euro per $	0.82	0.85	0.88	0.88
Euro per £	1.16	1.17	1.14	1.14
Japan (Yen per $)	109.40	110.57	107.5	107.5
Short Term Interest Rates				
UK	0.63	0.63	0.30	1.50
US	0.18	0.19	1.00	1.00
Euro	–0.49	–0.49	–0.50	–0.50
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	54.00		65.20
US	1.99	2.4	2.3	33.90	5.86	46.45
Germany	3.30	1.8	1.6	63.00	1.99	71.69
Japan	1.90	1.5	0.5	24.00	8.47	36.27
UK indexed[2]	–2.15		5.0	10.00		12.77
Hong Kong[3]	2.60	5.2	2.3	2.00	5.86	17.96
Malaysia	3.30	6.9	2.3	85.00	5.86	103.36
Singapore	3.50	5.0	2.3	54.00	5.86	70.66
India	1.40	5.5	2.3	19.00	5.86	34.06
Korea	1.10	2.2	2.3	–7.00	5.86	4.46
Indonesia	2.20	4.8	2.3	41.00	5.86	56.16
Taiwan	2.80	3.5	2.3	44.00	5.86	58.46
Thailand	3.20	4.1	2.3	51.00	5.86	66.46

Bonds: Contribution to £ yield of: –

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	0.63	–8.67		–8.04
US	1.35	–16.50	5.86	–9.29
Germany	–0.28	–2.82	1.99	–1.11
Japan	0.03	–0.66	8.47	7.84

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.63		0.63
US	0.19	5.86	6.05
Euro	–0.49	1.99	1.50
Japan	0.00	8.47	8.47

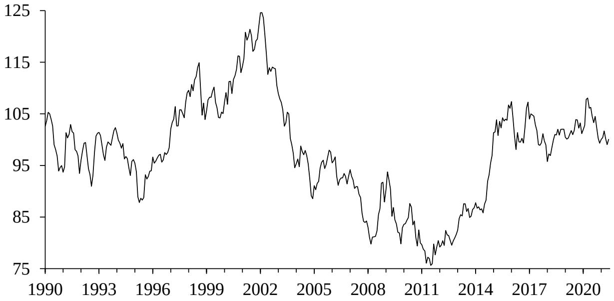
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

Table 3: Portfolio(%)

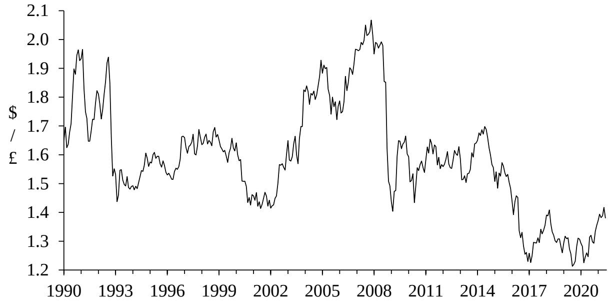
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	June Letter	**Current View**	**June Letter**	**Current View**	**June Letter**	**Current View**
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds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

INDICATORS AND MARKET ANALYSIS
FOREIGN EXCHANGE MARKETS

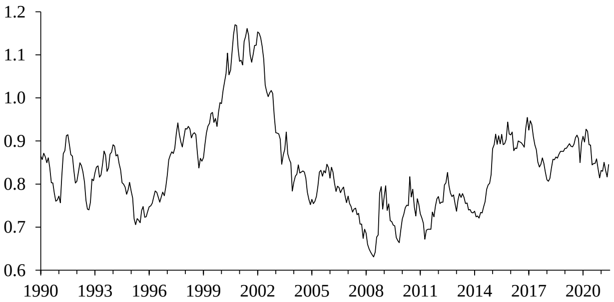
US : Trade Weighted Index
(Bank of England 1990 = 100)



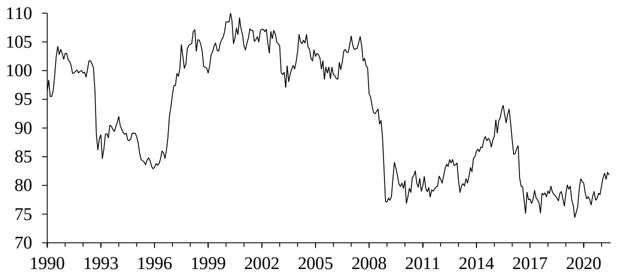
UK: Dollars Per Pound Sterling



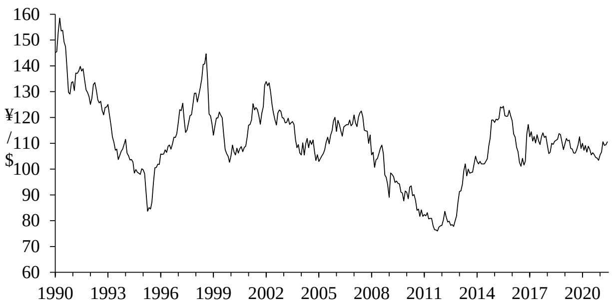
Euro per US dollar



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



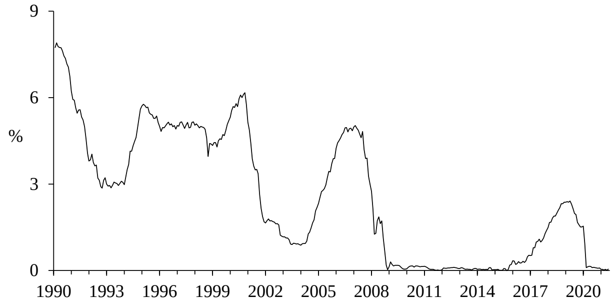
Japan : Yen Per U.S. Dollar



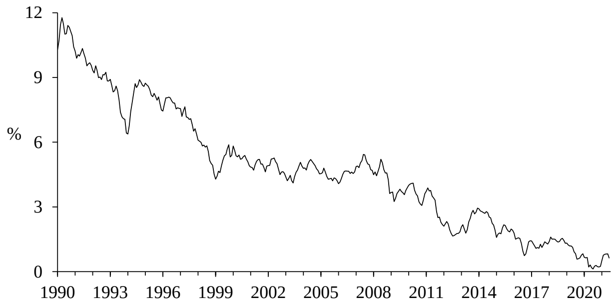
GOVERNMENT BOND MARKETS

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

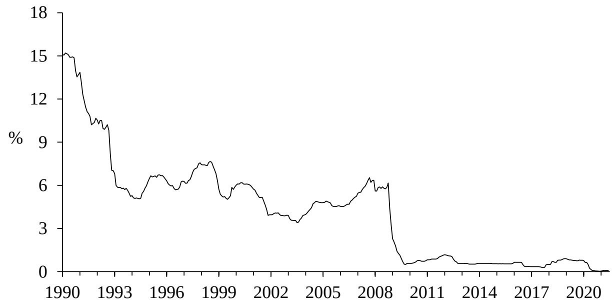
U.S. : 3-Month Treasury Bill



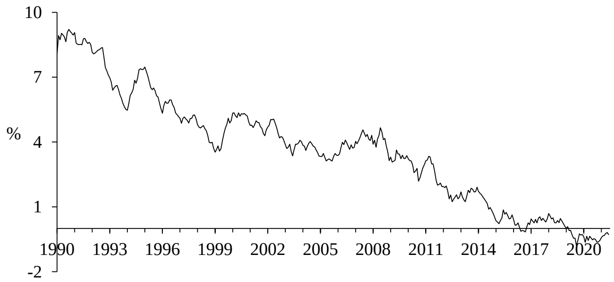
U.K.: Yield on Long-Term Government Bonds



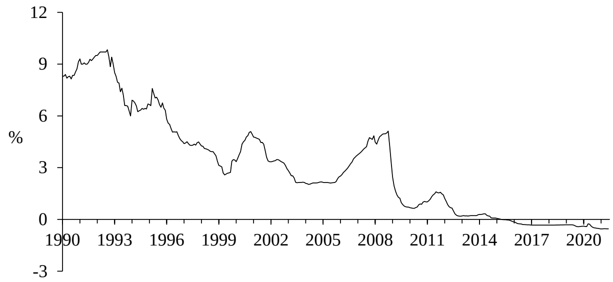
U.K. : 3-Month Certificate LIBOR Rate



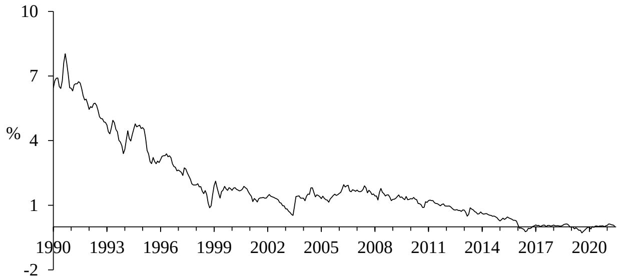
Germany: Yield on Public Authority Bonds



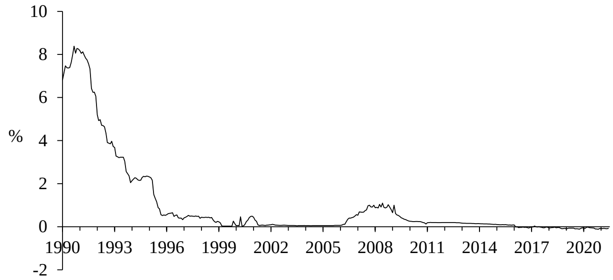
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

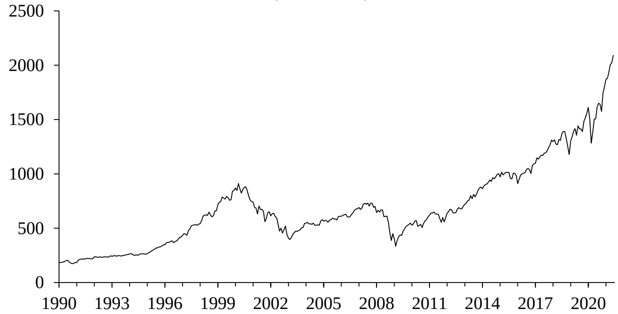


Japan : 3-Month Money Market Rate

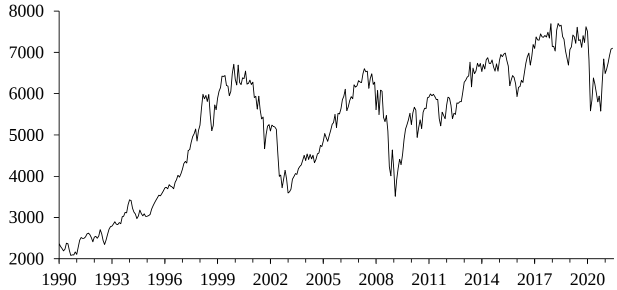


MAJOR EQUITY MARKETS

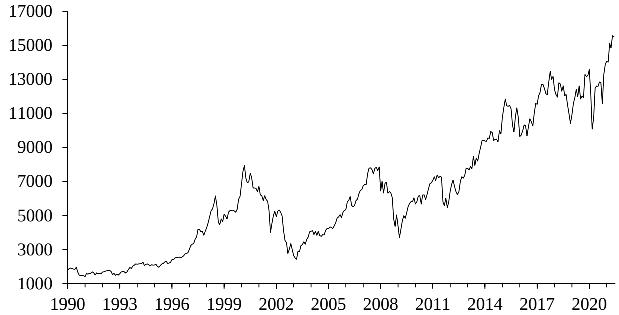
U.S. : S & P 400 Industrial
(1985=100)



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



Germany : DAX 30



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

EMERGING MARKETS

Anupam Rastogi

India

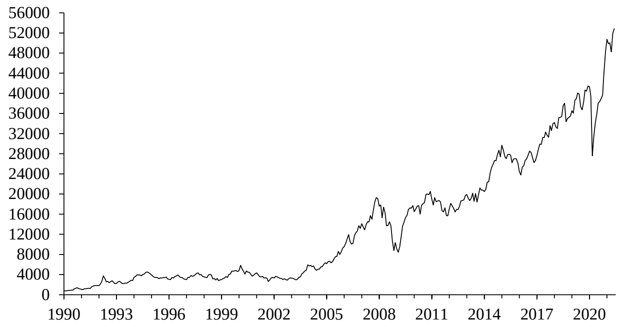
In India, the devastating second wave of COVID-19 has peaked and economic activity is accelerating. The Covid-19 positivity rate is around 2.5%, which has given confidence to policy makers to accelerate economic activity across the country. The campaign to vaccinate all people above 19 years old in the country is in full swing. The government is sending a message to all through all forms of electronic media that only vaccination can save India from the third wave of the pandemic.

Our forecast of GDP growth is more bullish than international agencies like World Bank and IMF as we expect economic activity to accelerate in the second half of the current fiscal year which ends in March. The lost momentum will be regained in the coming months. Moreover, high frequency data such as railways loading, electricity generation and bank credit support acceleration of economic activity across India. The April to June quarter bore the direct economic cost of the second wave, contracting 13% quarter-on-quarter, which is half the contraction in the same quarter last year. The rebound in the second quarter is underway. A full growth rebound is likely to come only in the second half of FY22, when a critical mass of the population is expected to be vaccinated. Bringing all of this together, we forecast GDP to grow 10% in FY22, following a 7.3% contraction in FY21. According to Moody's credit outlook report, India is expected to return to the pre-covid levels by the end of the year. India's GDP surpassed its pre-Covid-19 fourth-quarter 2019 levels. India's first-quarter GDP rose 1.5% quarter on quarter and year on year.

To kick start the services sector, the government announced a relief package. The stimulus will have a minimal impact on the fiscal deficit numbers because a large part of USD 84 million is credit guarantees. The actual cash outgo will be less than USD 20 million.

India's retail inflation shot up to six-month high of 6.3% in May, after easing to a three-month low of 4.23% in April. The RBI is mandated to maintain the crucial number at 4% in the medium term, with a 2 percentage point margin on either side as part of its inflation target. The wholesale price-based inflation soared to a record high of 12.94% in May on rising prices of crude oil and manufactured goods. While there were fewer supply chain disruptions during the recent pandemic lockdowns compared with last year, a general rise in inflation globally has elevated domestic price pressures. Higher global commodity prices including crude, edible oils and gold are clearly spilling over into consumer inflation in India. We expect an inflation rate of 6% for the current financial year. The central bank's focus now is on supporting a recovery with an accommodative stance.

India: BSE Sensitive



India's current account deficit (CAD) widened to a seven-quarter high of US$8.2bn in Q4FY21, marking the second consecutive quarter to report a deficit following a surplus in the previous three quarters. This was primarily led by a 21% QoQ (19% YoY) jump in merchandise trade deficit, caused by record-high non-oil imports during the quarter and higher crude oil prices, even as exports also registered a strong rebound amid improving global demand. Tepid foreign capital inflows and net outflows by NRIs — the first in 17 quarters — led to a sharp drop in capital account balance, partly offset by higher external commercial borrowings (ECB). Consequently, the Balance of Payments (BoP) surplus moderated sharply (-82% YoY) to a nine-quarter low of US$3.4bn.

We expect the current account balance to slip into deficit again in FY22 to the extent of 1% of GDP assuming average crude oil prices at $65/bbl. This, along with moderation in foreign capital inflows and a sooner-than-expected reversal in easy monetary policy conditions in the US, are expected to translate into a significantly lower BoP surplus this year.

Indian equities significantly outperformed the broader emerging markets, with the market Index ending the month 6.5% higher (YTD: 12.6%). Positive global trade conditions apart, a sharp drop in the daily Covid-19 caseload, robust corporate performance and marginally enhanced fiscal and monetary policy support helped the markets to rally further. The Indian stock market is likely to remain in bulls territory as analysts have reversed the earnings cut that took place during the first wave of the pandemic. The benchmark index earnings projections imply earnings growth of 40% and 14% for FY22 and FY23, respectively, one of the highest among the emerging market equities.

	19–20	**20–21**	**21–22**	**22–23**	**23-24**
GDP (%p.a.)	4.0	-7.3	10.0	5.5	6.0
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	76.0	78.0

China

The Chinese economy is growing at a stable rate of 8%. Some of the short-term indicators signal towards slowing down but it is mostly due to interruptions in the domestic supply chain caused by complete lockdowns in affected parts of the country. As the developed countries are coming out of the Covid-19 pandemic, demand for Chinese goods is growing. Political leadership is more concerned about securing an enhanced role for the country and recognition that China is second to none.

According to the World Bank forecast, China's GDP is expected to grow 8.5% this year, and slow down to 5.4% in 2022 and 5.3% in 2023. China's economic growth moderated in May as Chinese consumers turned cautious. Retail sales grew 12.4% in May compared to the 17.7% year-over-year growth rate in April. Chinese manufacturing sector activity slipped to a three-month low in June. IHS Markit's China manufacturing sector Purchasing Managers' Index dipped to 51.3 in June compared to May's reading of 52. Activity in China's services sector also moderated as COVID-19 curbs from a resurgence in cases in Southern China restrained a rebound in consumption. The official non-manufacturing Purchasing Managers' Index (PMI) fell to 53.5 in June from 55.2 in May.

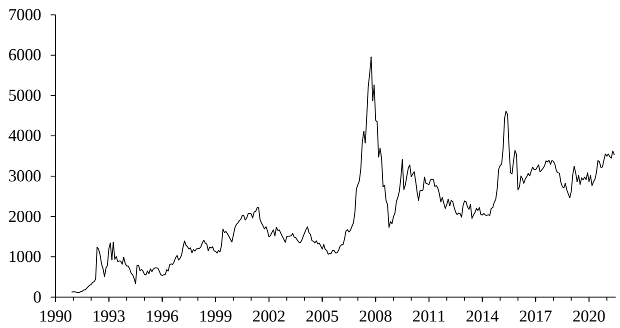
The producer price index (PPI) is expected to be around 8.8% in June. China's surging PPI poses a greater upside risk to the global inflation outlook than to China's own. A strengthening yuan is also feeding into global inflation. The consumer price index rose 1.3% in May from a year earlier, up from 0.9% in April. Beijing has set a 2021 CPI growth target of around 3%. We expect CPI to be below 2% in the coming quarters.

The People's Bank of China (PBOC), the central bank, is unlikely to trigger any shift in monetary policy. The PBOC has said it will make its monetary policy flexible, targeted and appropriate, while keeping interbank liquidity reasonable, as authorities seek to consolidate a post-COVID-19 economic recovery.

China's exports and imports are booming. China's imports grew at their fastest pace in 10 years in May, fuelled by surging commodity prices, while export in dollar terms grew 27.9% in May from a year earlier, slower than the 32.3% growth reported in April due to disruptions caused by Covid-19 cases at major ports in the country's south. Besides the impact of the Covid-19 cases in Guangdong, the global chip shortage has started to hit all of China's export items related to semiconductors. China posted a trade surplus of $45.5 billion for the month of May.

The yuan has depreciated a little to 6.46 per dollar from 6.38 per dollar. It has appreciated nearly 12% since May 2020. China's relatively attractive interest rates and recovering economy have spurred domestic and foreign investors to increase holdings of renminbi-denominated assets. Barring a

China: SSE Composite Index



surprise rate hike by the Federal Reserve, or a drastic relaxation of Chinese capital controls, a gradual appreciation of yuan is expected in our forecast. This is in line with the PBOC's action in recent times.

Chinese policy makers are discussing the possibility of fully doing away with birth restrictions by 2025, the end of the ruling Chinese Communist Party's current five-year economic plan. It is believed that China will begin by eliminating birth restrictions in provinces where the birth rate is the lowest before enacting nationwide changes.

While celebrating the 100th anniversary of the Chinese Communist Party on July 1 in Beijing's Tiananmen Square — a location reserved for the most important national events — the Party pointed out its many achievements in the field of economic growth, a high-tech military, including the world's largest navy, sophisticated modern cities with a vast, entrepreneurial middle class, and universities and research centres pitching for leadership in the key technologies of the century ahead. Within its ranks there is no sign of challenge to the authority of the top leader, Xi Jinping, and the party enjoys strong support among the Chinese public. By 2049, the 100th anniversary of the founding of the People's Republic, the CCP has declared that it intends to make China a "strong, democratic, civilized, harmonious and modern socialist country". Xi Jinping's strong message to the world is that China, "does not carry aggressive or hegemonic traits in its genes", but the days when it could be bullied by foreign powers have long gone. However, it does not square up with what he told to the world that any would-be foreign oppressors would have their heads cracked open against a "steel Great Wall." He has set the tone for a bolder, more defiant and nationalist China that's likely to push back hard against any "sanctimonious preaching" from the U.S. and Europe over human rights or other issues.

	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	6.3	6.2	6.0

South Korea

South Korea's government expects gross domestic product and inflation to grow at a faster clip than earlier. We are maintaining our earlier forecast of GDP growth of 4% and inflation at 2% for 2021. In 2022, the country's GDP is forecast to expand 3% and inflation is expected to average 1.4% on the back of worldwide recovery after the Covid-19 pandemic.

The growing inflationary expectations have been rationalized on the lower base achieved last year due to the collapse in prices. In June, inflation hit 2.6% from a year earlier. The central bank would like to manage inflationary expectations, otherwise it would put pressure on the bank to hasten its exit strategy. Inflation will remain moderate in the second half as the government is increasing imports of eggs and ramping up rice supplies.

The central bank is preparing to raise rates this year, as the economy recovers faster than expected. The Bank of Korea (BOK) Governor Lee Ju-yeol has announced that he is thinking of raising rates "within this year," though the exact timing and pace will depend on economic conditions. The BOK has four more policy rate-setting meetings this year in July, August, October and November. The bank has kept its policy rate at a historically low 0.50% since May 2020 to support economic growth, which had been badly hit by the Covid-19 pandemic.

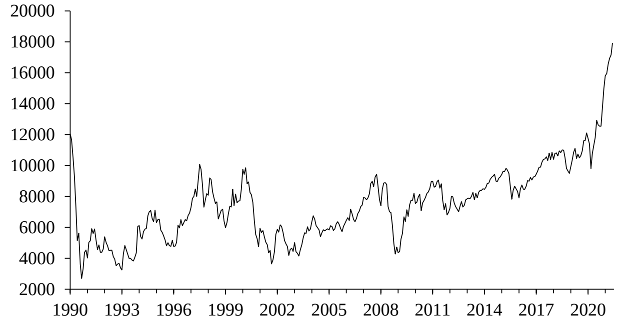
South Korea recorded a trade surplus of about $4.44 billion in June, a year-on-year increase of 51.5%. Exports are expected to grow18.5% to USD607 billion in 2021 and imports will grow 22.4% to USD572 billion. The country's exports kept rising for the seventh consecutive month through May on the back of the global demand recovery from the Covid-19 pandemic shock. South Korean exports grew by 39.7% year-on-year to $54.8 billion, driven by an increase in demand for chips and automobiles amid a recovery of commercial activity in the current context of the pandemic.

The Korean Won was steady in the past few months as monetary policy remains accommodative while budgetary support to the economy is being rolled out.

	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	1100	1100	950

Korea: Composite Index

Taiwan: Weighted TAIEX Price Index



Taiwan

Taiwan's GDP is forecast to grow 5.5% as its export partners' economies are rebounding and technology related exports are touching all time highs. This will be the highest growth since 2010, when the country's GDP grew 10.25%. The economy is getting traction from its strong exports on the back of recovering global demand in 2021, while emerging technologies such as 5G applications is expected to give an additional boost to outbound sales of 5G gear this year. But, the unexpected changes in the US Fed monetary policies and a tech competition between the United States and China could create uncertainty for the economy.

Taiwan's consumer price index (CPI) will likely grow 1.5% in 2021. In the first half of 2021, the CPI grew 1.5%. In view of the stable prices, the central bank left its key interest rate unchanged in June, for the fifth consecutive quarter, with the discount rate remaining at 1.125%, the lowest in the country's history. Monetary policy is accommodative and supports growth. The bank is tolerating a stronger Taiwan dollar, as its appreciation helps to offset some of the inflationary impact of surging raw material prices.

Taiwan's exports of merchandise and services are expected to grow 15.5% in 2021, while its imports are estimated to grow 16.25%.

China's grey-zone warfare is seen by some geopolitical experts as a run-up to an invasion of Taiwan. Though many rule out that possibility, as it could hurt China's economic interests. However, India, as a member of Quad, a group of US, Japan, Australia and India, has doubled its presence on its northern border. The US and Japan have been conducting war games and joint military exercises in the event of a conflict with China over Taiwan, amid escalating concerns over the Chinese military's assertive activity. China flew more than two dozen Chinese warplanes through the skies around Taiwan in June, the largest incursion of its kind this year. That came after the G-7 summit in the U.K. included in its communique a call for a "peaceful resolution" of the ongoing dispute between Beijing and Taipei, the latest sign that Taiwanese President Tsai Ing-wen's efforts to garner international support for the self-governing island are yielding results.

	19	20	21	22	23
GDP (%p.a.)	2.0	3.1	5.5	3.5	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	28.5	27.5	27.0

Brazil

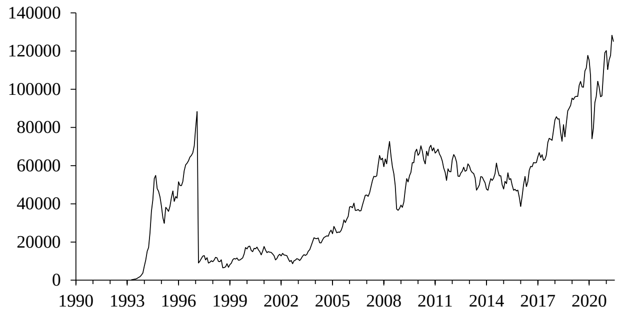
Brazil is all set to grow more than 5% in 2021 and will surpass its 2019 GDP which contracted 4.5% in 2020. Brazil's first-quarter GDP expanded 1.2% from the previous quarter and 2.3% from first-quarter 2020. The economy is expected to pick up in the second half of the year as the vaccination campaign gathers pace and restrictions are lifted more effectively. The picture of the Brazilian economy looks better.

Inflation is the challenge for the current year. It spiralled upward and international commodity prices remain the main source of pressure. Brazil's inflation is forecast to clock 6% in 2021 and 4% in 2022, above the targets of 3.75% and 3.5% for each year.

In order that inflationary expectations take hold in the country, the central bank has left the door open for a bigger increase to the benchmark interest rate in August, following three consecutive hikes of 75 basis points. The Selic benchmark lending rate is at 4.25% from a historic low of 2% set last year to shore up the economy during the pandemic. The degree of uncertainty for next year's inflation remains high amid concerns that rainfall may remain below historic averages once again.

Brazilian inflation jumped to its highest monthly rate for May in a quarter century and the annual rate scaled 8% for the first time in nearly five years.

Brazil: Bovespa



Brazil's worst water crisis in nearly a century is fuelling inflation expectations and posing an additional challenge for the central bank and for President Jair Bolsonaro's re-election bid. Electricity bills will increase as much as 15% next month as dangerously low water levels in hydroelectric reservoirs force the government to turn to more expensive power plants fuelled by natural gas, diesel or coal.

Brazil registered a trade surplus of USD37.5 billion during the first half of this year, the greatest surplus since 1997, when records began to be compiled. The surplus is higher by 68.2% in comparison with the first half of last year, when it came to USD22.3 billion. Exports in the January-May period of 2021 expanded by 35.8% hitting USD136.7 billion, whereas imports soared by 26.5% reaching USD99.2 billion.

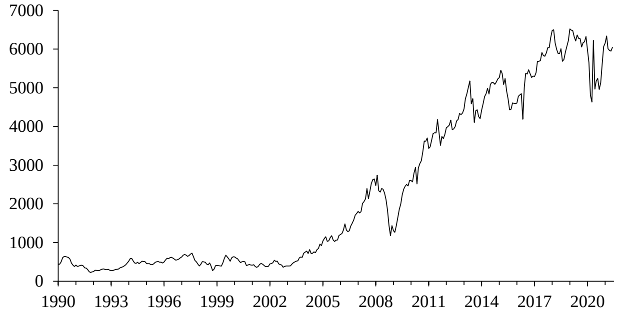
The Brazilian real was the only developing-world currency to gain against a strengthening US dollar after the country's central bank raised the selic rates for the third time this year and left the door open for more in August. The real is trading around five to a dollar and likely to stabilize around this for the rest of the year.

	19	20	21	22	23
GDP (%p.a.)	0.8	-4.5	5.0	3.0	3.0
Inflation (%p.a.)	4.3	4.5	6.0	4.0	4.0
Current A/c(US$ bill.)	-36.0	-7.6	-10.0	-16.0	-22.0
Real/$(nom.)	4.2	5.5	5.0	5.1	5.3

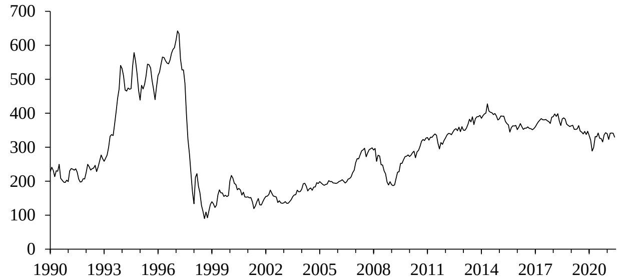
Other Emerging Markets

Hong Kong: FT-Actuaries

Indonesia: Jakarta Composite

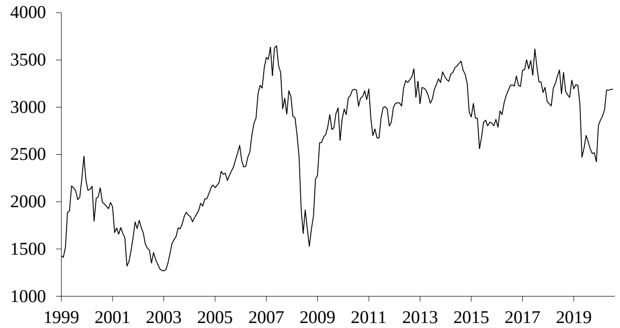


Malaysia: FT-Actuaries (US$ Index)



Thailand: Composite Index

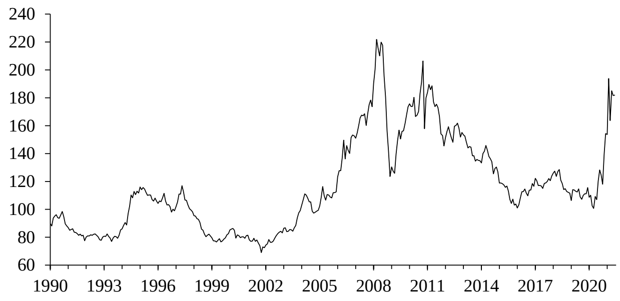
Singapore: Straits Times Index



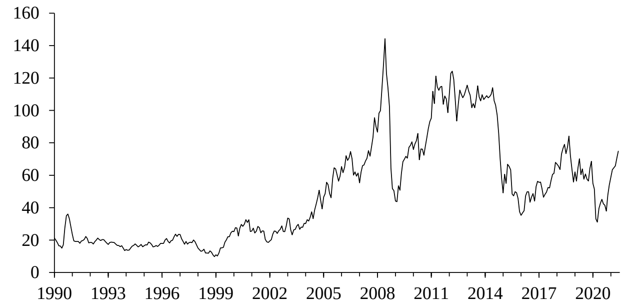
Philippines: Manila Composite

COMMODITY MARKETS

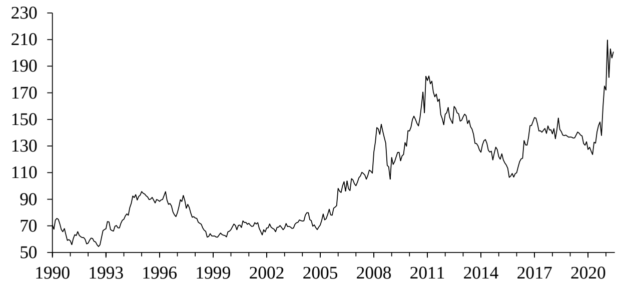
Commodity Price Index (Dollar)
(Economist, 2015 = 100)



Oil Price: North Sea Brent (in Dollars)

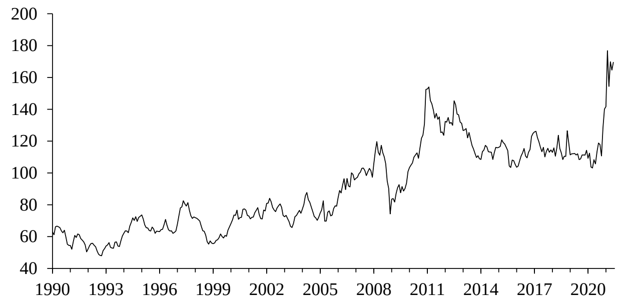


Commodity Price Index (Sterling)
(Economist, 2015 = 100)



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	-1.0	1.6	-1.2
2021	1.7	0.4	0.1	80.7	76.4	-3.7	2.4	-3.4
2022	5.0	1.5	1.5	78.8	77.6	-2.8	6.1	-2.9
2023	4.0	4.7	4.5	77.9	78.9	1.1	5.5	1.4
2024	3.0	5.0	5.0	77.6	80.0	2.6	4.6	2.6
2020:1	1.7	0.4	0.6	79.5	74.9	-0.2	2.7	-0.4
2020:2	0.8	0.0	0.1	77.6	71.9	-1.0	1.3	-1.1
2020:3	0.8	-0.1	0.1	77.6	72.2	-1.3	1.1	-1.5
2020:4	0.8	0.0	0.1	78.0	72.6	-1.6	1.1	-1.7
2021:1	0.8	0.2	0.1	80.8	76.2	-2.6	1.4	-2.5
2021:2	1.9	0.4	0.1	80.5	75.9	-3.4	3.0	-3.1
2021:3	2.0	0.6	0.1	80.5	76.5	-4.2	2.5	-3.7
2021:4	2.1	0.6	0.2	81.0	77.0	-4.8	2.6	-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	78.8	77.3	-3.0	6.5	-3.0
2022:3	5.0	1.6	1.7	78.4	77.3	-2.6	6.3	-2.7
2022:4	5.1	2.0	2.0	79.1	78.4	-2.0	6.3	-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	290.2	3.8	5.4	1.7	153.1
2022	307.8	6.0	5.1	1.6	154.7
2023	324.1	5.3	3.6	1.0	156.7
2024	337.8	4.2	2.8	0.7	158.5
2020:1	279.7	2.7	4.0	1.1	150.0
2020:2	270.1	-0.5	4.1	1.2	145.9
2020:3	279.3	0.4	4.8	1.4	149.4
2020:4	288.5	3.8	5.2	1.6	154.2
2021:1	292.2	4.5	4.8	1.4	155.5
2021:2	281.0	4.1	5.7	1.8	149.0
2021:3	288.8	3.4	5.5	1.8	151.4
2021:4	298.7	3.5	5.5	1.7	156.3
2022:1	309.0	5.7	5.5	1.7	156.9
2022:2	298.4	6.2	5.2	1.6	150.7
2022:3	306.4	6.1	5.0	1.5	153.0
2022:4	317.3	6.2	4.7	1.4	158.0

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	162.0	775948.8	444420.8	281634.5	211536.4	-29515.7	132127.2
2022	175.5	840400.5	466406.2	313570.9	224219.9	-23606.4	140190.1
2023	179.8	861137.1	480436.0	311736.0	230959.3	-18606.2	143388.0
2024	183.6	879262.0	493915.4	309499.8	237826.1	-15888.6	146090.7
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	7.8		4.8	12.8	6.6		6.2
2022/21	8.5		5.0	11.6	6.0		6.1
2023/22	2.5		3.0	-0.7	3.0		2.3
2024/23	2.1		2.8	-0.7	3.0		1.9
2020:1	163.4	195632.5	118032.8	72147.1	51656.8	-11632.2	34572.0
2020:2	131.6	157502.4	91565.8	47009.3	43743.5	429.6	25245.8
2020:3	154.0	184370.2	109964.7	64379.7	50846.1	-9700.7	31119.6
2020:4	156.1	186946.9	108054.2	71936.9	52938.0	-12501.5	33480.7
2021:1	153.4	183686.9	105676.5	71230.6	51082.9	-12804.4	31498.7
2021:2	157.6	188732.4	107095.1	65392.4	51382.2	-3077.5	32059.8
2021:3	165.7	198414.8	112878.2	73163.6	52892.3	-6663.8	33855.5
2021:4	171.3	205114.7	118771.0	71847.9	56179.1	-6970.1	34713.2
2022:1	173.3	207500.0	111591.7	87583.4	54146.0	-11003.8	34817.3
2022:2	174.9	209339.1	113522.4	79035.0	54465.4	-2829.7	34854.0
2022:3	176.4	211137.1	115432.9	80169.6	56071.4	-5098.5	35438.3
2022:4	177.4	212424.4	125859.2	66782.9	59537.0	-4674.4	35080.3

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	16.1	1987.9	311.2	-58.2
2021	6.0	2289.4	137.5	-48.8
2022	2.2	2547.0	57.0	-36.0
2023	1.5	2704.5	41.5	-24.2
2024	0.8	2843.4	22.7	-17.0
2020:1	-0.9	549.4	-5.0	6.5
2020:2	27.0	437.6	118.0	6.4
2020:3	14.5	514.8	74.8	6.4
2020:4	13.8	519.8	71.9	6.4
2021:1	9.0	515.6	46.5	6.5
2021:2	6.8	533.1	36.5	6.5
2021:3	6.4	559.3	35.7	6.6
2021:4	5.6	585.8	32.8	6.7
2022:1	5.3	611.2	32.5	7.0
2022:2	2.1	621.4	13.2	7.1
2022:3	2.4	631.9	15.2	7.3
2022:4	2.4	639.4	15.3	7.4

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	7.8	8.5
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	1.8	1.0	1.7	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	–0.2	–1.5	–4.9	–2.5
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	–2.3	–3.0	–2.8	–1.1
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	76.4	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