LIVERPOOL INVESTMENT LETTER

October 2021

Cardiff Business School

Ysgol Busnes Caerdydd

Julian Hodge Institute of Applied Macroeconomics

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

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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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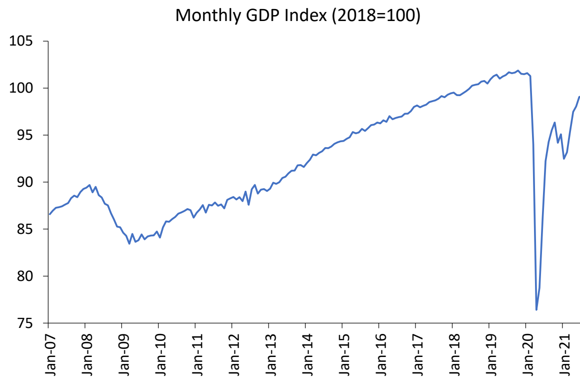
THE LATEST STATE OF THE ECONOMY AND LABOUR MARKET

The economy is recovering rapidly from Covid, now that the lockdown restrictions have been largely removed.



The labour market is in some turmoil as the million or so still on furlough are re-absorbed into the surging vacancies now of the same order. Particular occupations, like HGV drivers, are in acute shortage, while others which we hear less about are likely to be in excess supply as furloughed workers come back, with the furlough scheme now being ended. Wages are rising at 4–5% on an underlying basis while unemployment is staying low. Productivity per hour has grown 2.6% in the past eighteen months, as firms cope with these pressures.

The Brexit programme needs to stay on track

We have seen a lot of disruption recently as the UK moves towards its new relationships with the rest of the world post-Brexit and also as the Covid restrictions unwind. It is vital that these new relationships are relentlessly pursued. For example, the labour market is already reacting well to the Brexit environment where easy access to unskilled EU workers is denied by the new immigration rules emphasising skill needs. Productivity as we have seen has risen 2.6% in the past eighteen months, as firms have had to cope with a tightening labour market by better use of labour and new methods of working. Market forces are also now working in favour of unskilled workers as the tap of cheap unskilled EU workers has been turned off. Economising on these workers is now as important a managerial task as doing so on skilled workers has always been.

Then we need to push on with free trade agreements around the world following the successful conclusion of the Australian one, ignoring all the special pleading for protection that invariably pours out as barriers are brought down. These FTAs will bring down the cost of imports, improve living standards and drive up productivity in competing UK industries, besides opening up foreign markets to our exporters. This will also force down the prices of the EU products we buy, improving our balance of payments.

Table 1: Summary of Forecast

	2018	2019	2020	2021	2022	2023	2024
GDP Growth[1]	1.3	1.4	-9.9	8.1	8.2	2.4	2.1
Inflation CPI	2.4	1.8	1.0	1.8	5.0	4.0	3.0
Wage Growth	3.0	3.5	1.6	5.6	4.5	4.3	4.2
Survey Unemployment	4.1	3.8	4.5	4.9	5.0	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	-48.4	-36.0	-24.3	-17.0
PSBR (£bn)	39.3	49.1	311.2	135.2	57.0	41.5	22.7

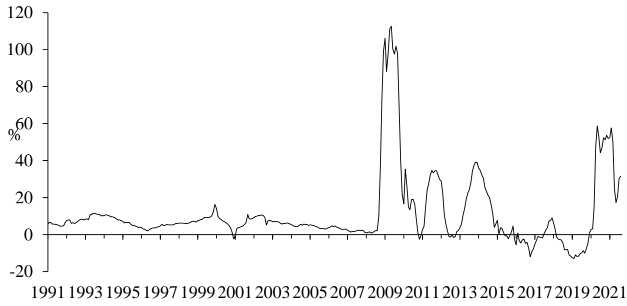
[1]Expenditure estimate at factor cost
[2]Sterling effective exchange rate, Bank of England Index (2005 = 100)

We concluded the Brexit agreement with the EU, including the awkward N Ireland protocol, on the assumption that pragmatic border arrangements would be agreed with the EU, in which the agricultural trade within Ireland would not be disturbed while UK trade with N Ireland, which does not go near the EU would be seamlessly treated at the border. Unfortunately, it seems that France has decided to push the EU to be difficult over this, perhaps in retaliation for the Aukus agreement and the damage it perceives this does to its defence industry and its Pacific interests. Apparently it is arguing that the EU should abandon the Brexit agreement if the UK invokes Article 16 over the protocol, which Lord Frost has said we will do unless pragmatic relations are put in place. However, it would be a big mistake for the EU to do so. The last thing the EU needs is a breakdown of the Brexit agreement, with, for example, tariffs being levied in a reprise of 'No Deal'. Tariffs with Brexit Britain would damage EU producers who would have to cut their prices in the UK market to absorb them; but they would give HM Treasury a tidy sum. French and Irish farmers would be hit particularly badly. Meanwhile our producers, newly integrated into the world market by our FTAs, will simply pass on the EU tariffs to EU consumers.

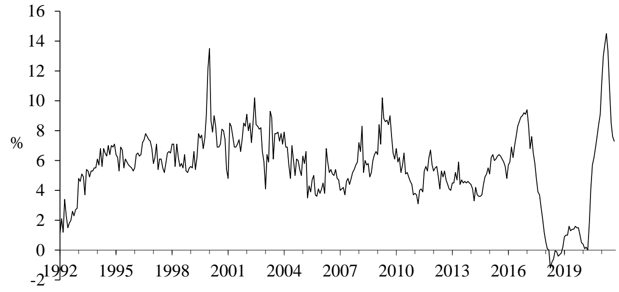
We signed the Brexit agreement rather than go for No Deal, with its net tariff advantage, out of a desire to be good neighbours. However, if the EU decides to be an uncooperative neighbour, willing to upset the Good Friday Agreement by infuriating the N Ireland unionists, then the good neighbour policy lapses as one-sided; and we are back to the No Deal standoff.

Brexit is already showing the beginnings of its long term dividends. Besides the gains in the labour market and in FTAs, the rapid development of vaccines showed how nimble regulation and strategically targeted state aid can bring huge returns. The recent report on regulatory reform by Sir Ian Duncan-Smith's taskforce has pointed the way to further big gains through overhauling the mass of over-intrusive EU regulation still in force. There can be no compromises over the ongoing enactment of Brexit; that is where our long term future lies.

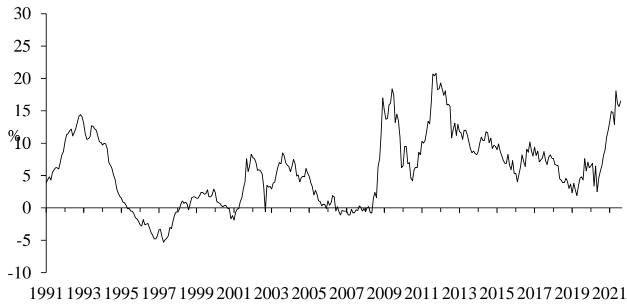
U.S.: Growth in M0 (Yr - on - Yr)



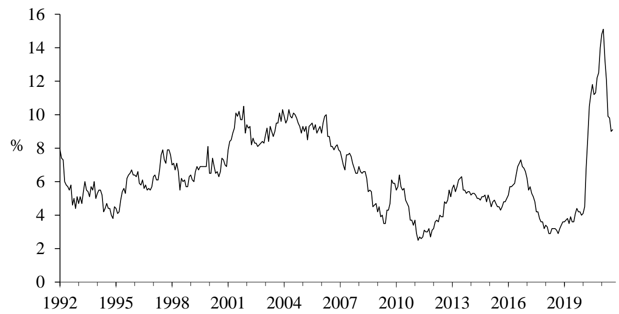
UK: Notes and Coins in Circulation Growth



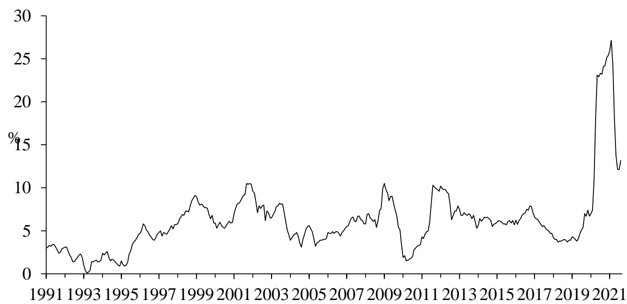
U.S.: Growth in M1 (Yr - on - Yr)



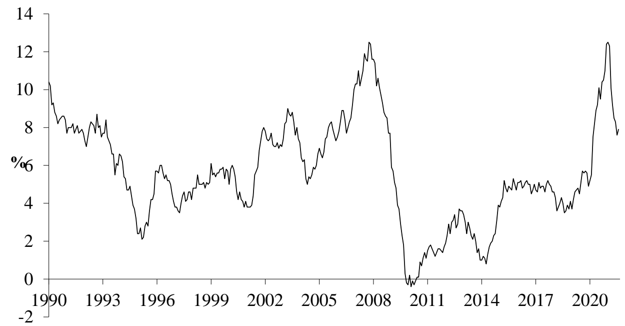
UK: M4 Growth



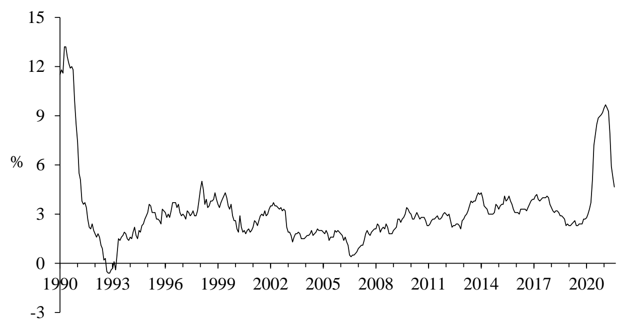
U.S.: Growth in M2 (Yr - on - Yr)



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

Monetary Policy and the LDP Election

Japan's next prime minister will have to appoint a replacement for Bank of Japan (BOJ) Governor Haruhiko Kuroda, who since the spring of 2013 has been running an aggressive yen-printing operation as he seeks to raise the country's stubbornly flat inflation rate to 2%. His term is coming to an end in April 2023, and who will be Kuroda's replacement is a question that had vexed Yoshihide Suga ever since he became prime minister one year ago. Suga recently announced he would effectively step down as president of the ruling Liberal Democratic Party (LDP) and thus as Japan's prime minister. This means he also stepped away from the task of determining who will guide the BOJ through the post-Kuroda era. That burden is now falling to the newly elected LDP president Fumio Kishida. It is unlikely that Kishida, the next prime minister, will insist that the current monetary easing be immediately reversed, but different thinking about the current situation in the medium to long term will inevitably emerge.

Market participants believed that the debate in the LDP election provided a chance to re-examine monetary policy, as well as "offer a clearer picture of who the new prime minister would envision as BOJ governor," said Yuji Saito of Credit Agricole Bank. The new prime minister will also be left to finish the current administration's homework — namely how to handle the policy accord released by the government and the BOJ in January 2013. The joint statement was released shortly after Abe took office in December 2012, and it has been left unchanged for the past eight years. The document states that the government and the BOJ will improve their policy coordination to achieve 2% inflation "at the earliest possible time." In contrast with central banks in the US and Europe, which have begun to reduce their quantitative easing out of inflationary concerns, the BOJ's 2% target remains out of sight. "The joint statement has played a major role in supporting Japan's economy," said Kuroda, who will become the bank's longest-serving governor. "The BOJ intends to continue conducting monetary policy appropriately in line with the statement".

How has monetary policy been under Governor Kuroda? When Kuroda took the helm, in March 2013, then Federal Reserve Chair Ben Bernanke was fretting over plans to taper bond buying. Mario Draghi at the European Central Bank was saving the euro with "whatever it takes," and Mark Carney was still months away from joining the Bank of England. Kuroda has learned from and outlasted them all. When COVID-19 shuttered huge swathes of the global economy early last year, many of his pioneering policies were adapted by the latest generation of central bankers to keep businesses from failing and help lower borrowing costs for record government stimulus. During his term, he has evolved from a quantitative easing idealist to a policy-tinkering realist. In particular, his grand vision of achieving 2% inflation in around two years is a distant memory, with even the BOJ's own forecasts showing it will fall to his successor to reach that mark. "He has used all the tools in the arsenal, including new ones, to help sustain demand and growth," said Olivier Blanchard, former chief economist at the International Monetary Fund. "This was not quite enough to get inflation back up, but this is the most the BOJ could do."

One of the key reasons Kuroda is still around is that BOJ stimulus has done plenty to keep politicians and investors happy. Through massive asset buying and interest rate control, the bank has helped weaken the yen, boost corporate profits, prop up the stock market and keep the government's oversized borrowing costs down. These positives gave the Abenomics growth strategy of former Prime Minister Shinzo Abe a successful veneer. Kuroda's habitual talking up of stimulus power and his readiness to act have also removed much of the political pressure that BOJ officials felt before his arrival. Still, the impact of Abenomics has left some heavyweights in the ruling party feeling uneasy. Former foreign minister and LDP leadership candidate Fumio Kishida has hinted that growing inequality in Japan partly stems from asset holders benefiting from the central bank's buying binge. "We shouldn't be congratulating him just because he's going to be the longest serving governor," said Mari Iwashita, chief market economist at Daiwa Securities. "Kuroda has done things that cross the Rubicon so many times. If you launch a massive easing campaign you should also be the one to tidy it up before you leave office." The negative side effects on markets and banks have driven a discreet winding back of some of his stimulus that stretches back to 2016, dividing Kuroda's tenure at the bank into two phases. Both periods draw on measures designed by the bank's technocrats including Masayoshi Amamiya, now deputy governor.

One thing Governor Kuroda cannot be blamed for is the failure of fiscal policy to push the economy away from the zero lower bound, as is gradually happening now in the US and the UK. Fiscal policy in Japan has regularly tightened with raised consumer taxes just as it was getting traction. This is a problem the incoming prime minister must get hold of.

After three years of the bazooka-sized purchases that launched Abenomics, Kuroda realized that bonds alone couldn't buy inflation. He then rattled markets with a surprise shift to negative interest rates, before settling on yield curve control in September 2016. That was a solution that limited bond buying to an amount sufficient to keep 10-year yields around zero. Even during the pandemic year of 2020, the BOJ's net bond purchases only came to ¥22.4

trillion — little more than a quarter of Kuroda's earlier target of ¥80 trillion. Still, while the rest of the world frets about inflation, prices have been falling again in Japan since spring 2020. And unless he can work with Japan's next leader to generate some price momentum in the twilight of his term, that'll be an inescapable part of his legacy. "Gov. Kuroda pioneered some innovations, such as yield-curve control. But they were not fully effective," said Maurice Obstfeld, another former chief economist at the IMF. "The best one can say is that things could have been worse."

The main failing in Japanese policy has been on the fiscal side, with fiscal policy unable to push the economy away from the zero lower bound, as in the US and the UK. Every time fiscal policy got near traction consumer taxes were raised reversing its thrust. As we know monetary policy reinforces the ZLB; only fiscal policy can drag Japan out of it.

MARKET DEVELOPMENTS

Inflation and interest rates look set to rise, so that the investment market is gradually normalising and getting away from the zero lower bound. Equities should be supported by rising activity.

Table 1: Market Developments

	Market Levels		Prediction for Sep/Oct 2022	
	Aug 30	Oct 5	Previous Letter	Current View
Share Indices				
UK (FT 100)	7148	7011	11597	12662
US (S&P 500)	4529	4300	5966	5603
Germany (DAX 30)	15887	15037	26673	25773
Japan (Tokyo New)	1950	1974	2585	2645
Bond Yields (government				
UK	0.56	1.14	1.50	1.50
US	1.28	1.55	3.00	3.00
Germany	–0.42	–0.17	0.00	0.00
Japan	0.03	0.08	0.10	0.10
UK Index Linked	–2.53	–2.29	1.00	1.00
Exchange Rates				
UK ($ per £)	1.38	1.36	1.30	1.30
UK (trade weighted)	81.61	81.22	78.8	78.8
US (trade weighted)	100.33	101.68	100.5	100.5
Euro per $	0.85	0.86	0.88	0.88
Euro per £	1.17	1.17	1.14	1.14
Japan (Yen per $)	119.91	110.86	107.5	107.5
Short Term Interest Rates				
UK	0.63	0.63	1.50	1.70
US	0.19	0.18	1.00	2.00
Euro	–0.49	–0.54	–0.50	–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	4.44	36.73
Germany	3.30	1.8	1.6	68.00	2.25	76.95
Japan	1.90	1.5	0.5	32.00	7.33	43.23
UK indexed[2]	–2.53		5.0	16.00		18.71
Hong Kong[3]	2.60	5.2	5.0	–15.00	4.44	2.24
Malaysia	3.30	6.9	5.0	59.00	4.44	77.74
Singapore	3.50	5.0	5.0	52.00	4.44	71.44
India	1.40	5.5	5.0	2.00	4.44	18.34
Korea	1.10	2.2	5.0	–16.00	4.44	–2.46
Indonesia	2.20	4.8	5.0	21.00	4.44	37.14
Taiwan	2.80	3.5	5.0	27.00	4.44	42.74
Thailand	3.20	4.1	5.0	23.00	4.44	38.64

Bonds: Contribution to £ yield of: –

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	1.14	–3.64		–2.50
US	1.55	–14.55	4.44	–8.57
Germany	–0.17	–1.71	2.25	0.37
Japan	0.08	–0.20	7.33	7.21

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.63		0.63
US	0.18	4.44	4.62
Euro	–0.54	2.25	1.71
Japan	0.00	7.33	7.33

[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.

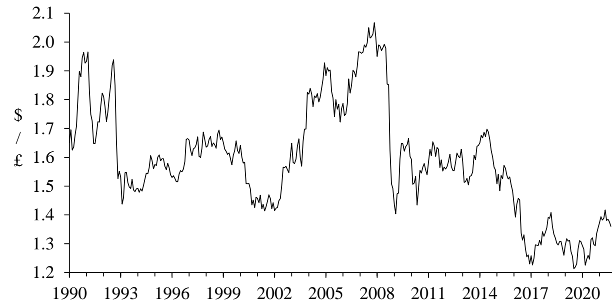
Table 3: Portfolio(%)

	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	September Letter	**Current View**	**September Letter**	**Current View**	**September 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)	-	-	-	-	-	-

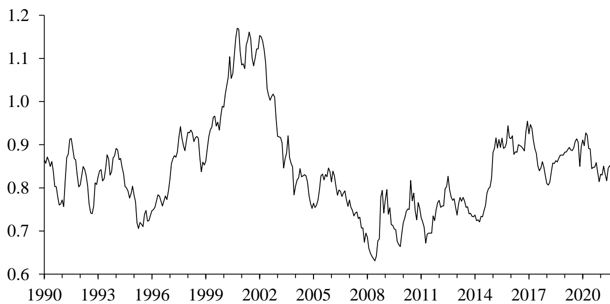
INDICATORS AND MARKET ANALYSIS
FOREIGN EXCHANGE MARKETS

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

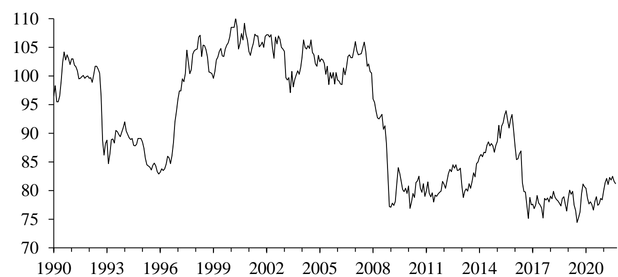
UK: Dollars Per Pound Sterling



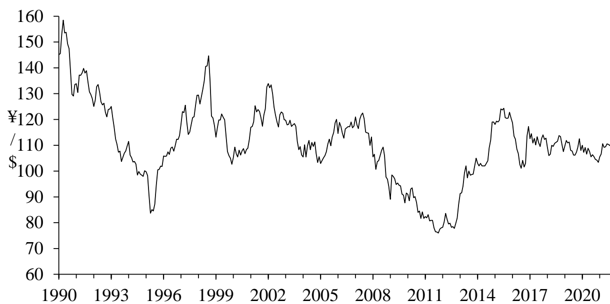
Euro per US dollar



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



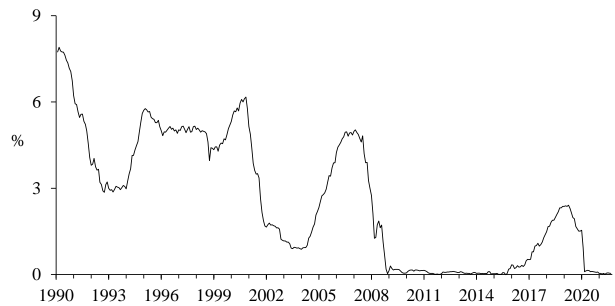
Japan : Yen Per U.S. Dollar



GOVERNMENT BOND MARKETS

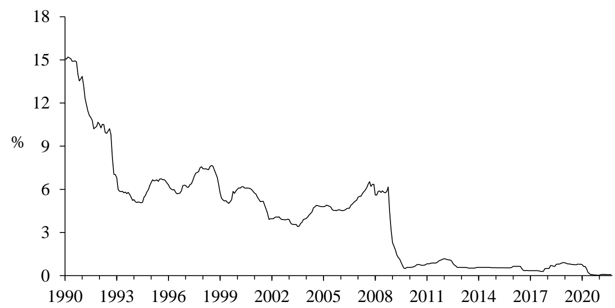
U.S.: Yield on Long-Term Government Bonds

U.S. : 3-Month Treasury Bill

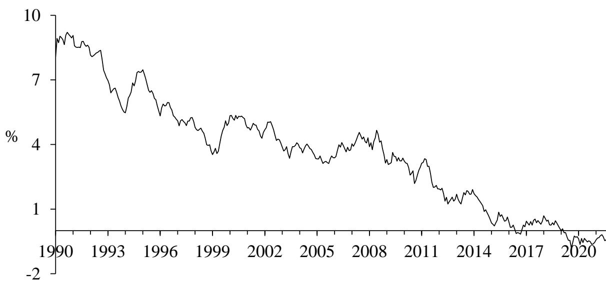


U.K.: Yield on Long-Term Government Bonds

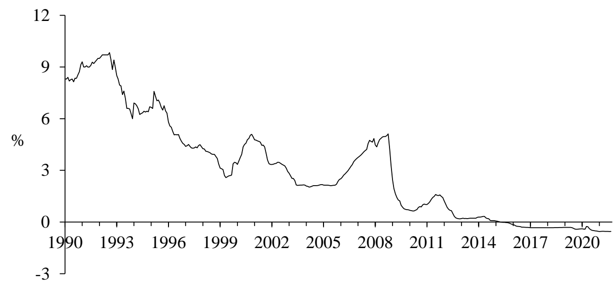
U.K. : 3-Month Certificate LIBOR Rate



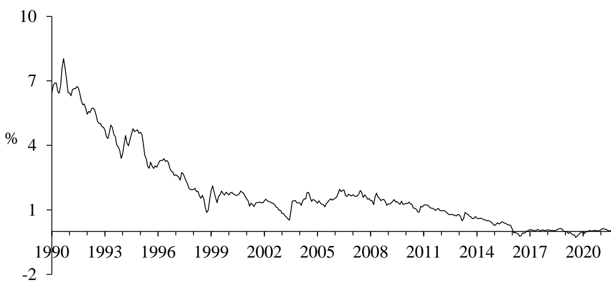
Germany: Yield on Public Authority Bonds



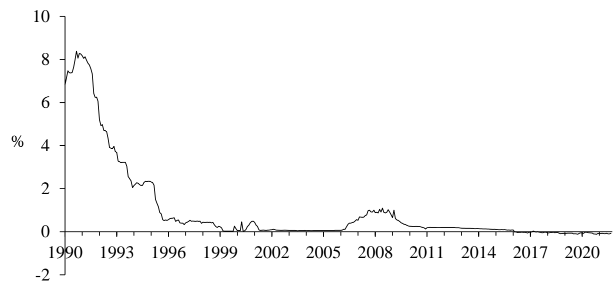
Germany : 3-Month Interbank Deposit Rate



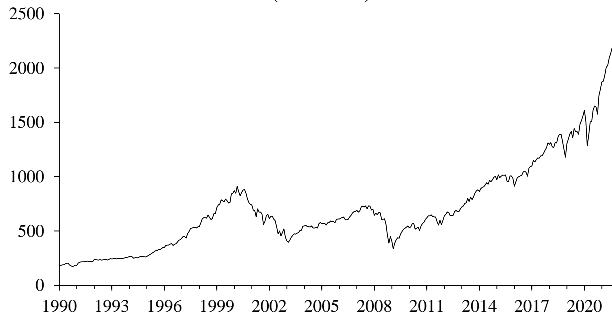
Japan: Yield on Long-Term Government Bonds

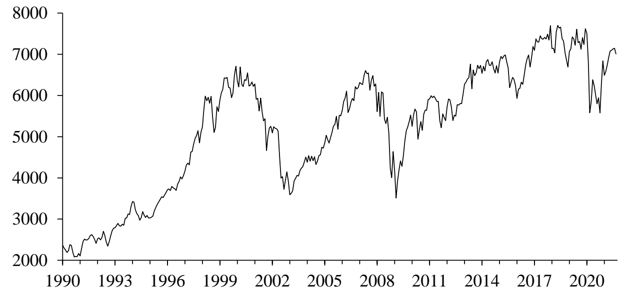


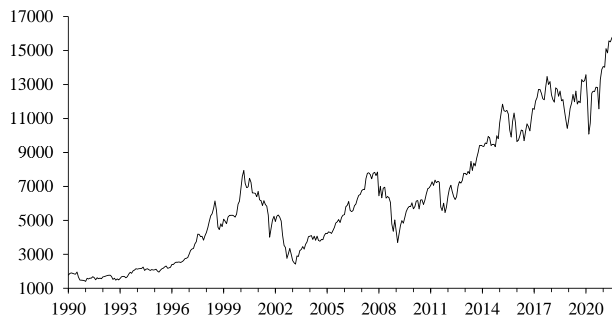
Japan : 3-Month Money Market Rate



MAJOR EQUITY MARKETS







EMERGING MARKETS

Anupam Rastogi

India

India's economy is signalling its readiness to accelerate, as its services sector resumed expansion and manufacturing activity retaining growth momentum in August. The monthly expansion in services and manufacturing activity coincided with relatively low new Covid-19 cases and a pick up in the pace of vaccinations — more than 900 million doses have been administered so far in the nation of 1.3 billion people. More than one-quarter of the eligible population is fully vaccinated and 40% of the eligible population has got one vaccine. Almost the whole of the population will be vaccinated by the end of the year. Business activity, exports, consumption and industrial activities are growing. India's indirect tax collection for September supports the Purchase Managers' Index (PMI) report, up by 23% over a year ago and up 4.5% sequentially. It has surpassed pre-Covid levels. Advance tax collection during the second quarter of the fiscal year grew over 50% over the equivalent period in 2020–21, providing the government with additional spending power to fuel economic recovery after the disruption caused by the second Covid-19 wave earlier this year.

The PMI came in at 53.7, higher than August's 52.3 figure. We are not revising our GDP growth forecast as it had predicted the acceleration of growth on the basis of information available in June.

India's retail inflation in August marginally eased to 5.3%, staying within the Reserve Bank of India's comfort zone for a second month. Inflation based on the Consumer Price Index (CPI) was 5.59% in July and 6.69% in August 2020. This Reserve Bank of India's (RBI) comfort range is 2-6%. Inflation has been above the medium-term target of 4% for nearly two years. Inflation is expected to drift lower over the remaining months of 2021 on base effects and ebbing food prices. The RBI — which slashed its key interest rate by a cumulative 115 basis points last year — is expected to keep its policy unchanged until at least April as it prioritises growth over inflation.

India's merchandise exports jumped 21.35% to $33.44 billion in September on a year-on-year basis, mainly due to better performance by key sectors like engineering goods and petroleum products. In September, merchandise imports stood at $56.38 billion, an increase of 84.75% compared to the year-ago period. This resulted in a trade deficit of $22.94 billion as gold imports jumped nearly 750% to $5.11 billion.

India's current account balance recorded a surplus of US$6.5bn or 0.9% of GDP in Q1FY22 after registering a deficit for two consecutive quarters. Imports bore the brunt of renewed COVID-induced restrictions during the virulent

India: BSE Sensitive

second wave, which in turn hampered domestic demand. This has resulted in a higher-than-expected current account surplus. Healthy foreign capital inflows, on the other hand, resulted in Balance of Payments (BoP) recording a surplus of US$31.9bn in Q1FY22 — the second highest record surplus.

In the coming months import growth is expected to outpace exports in the wake of a) easing lockdown restrictions, b) increasing pace of vaccinations, c) rising crude oil and other commodity prices, and d) a favourable base. Consequently, we expect the current account deficit at balance to slip into deficit again in FY22, with our estimate pegged at 0.7% of GDP.

The INR is getting support from a gradual pace of normalisation, continued economic recovery, comfortable current account situation and renewed foreign capital inflows into debt markets. Moreover, adequate foreign exchange reserves (US$639bn as on September 17th) is expected to curtail the volatility and limit the depreciating bias. However, the Indian rupee will gradually depreciate versus the US dollar over the next quarters.

While the high valuation of Indian stocks is a risk, visible and less volatile corporate earnings growth suggests the bourse's premium relative to other emerging nations will remain in place.

The central government's production-linked incentive scheme (PLI) has become the fulcrum of Make in India with a triple objective — attract FDI, help domestic manufacturers scale, and make the country globally competitive in exports. The government approved an outlay of 259.38 billion rupees for the automobile sector, which generates the bulk of India's manufacturing GDP. The industry appreciates it. The GM and Ford Motor Company may have exited the country but many auto manufacturers, globally, are looking to de-risk their supply-chains. PLI, some argued, has arrived just in time.

	19–20	20–21	21–22	22–23	23-24
GDP (%p.a.)	4.0	-7.3	10.0	5.5	5.7
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

China's manufacturing purchasing managers' index fell to 49.6 in September, the first time since February 2020. This was the third straight month of weakening economic numbers. But, the positive signal came from China's service sector. China's official non manufacturing PMI, which includes the services and construction sectors, bounced back to 53.2 in September, compared with 47.5 in August. We maintain our forecast of GDP growth of 8% and 5.2% for 2021 and 2022 respectively. Expectation of lower economic growth in China, as electricity shortages worsen in the country is unlikely to materialise.

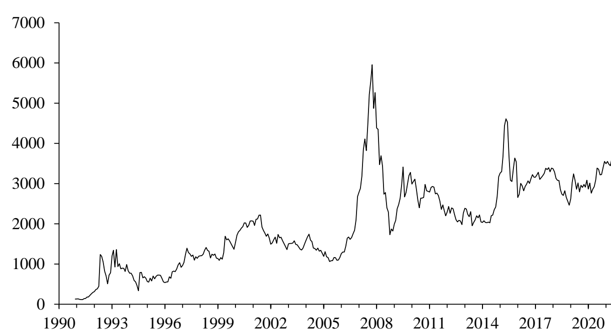
Vice Premier Han Zheng, who supervises the nation's energy policies, has ordered state owned energy companies "to increase coal supplies by all means." China's economic planning agency, the National Development and Reform Commission has reaffirmed that it would increase coal production, import more coal, increase domestic gas production and pass through some higher energy costs to end-users. The domestic shortfall of coal occurred due to an unofficial Chinese ban on imports of coal from Australia, previously a major supplier.

China's factory-gate inflation accelerated to a 13-year high, adding to the pressure on global consumer prices which have been pushed up by a commodities boom, soaring shipping costs and an uneven economic recovery from the pandemic. Producer prices in China rose 9.5% in August from a year earlier. The surge in PPI was largely due to the rising prices of products such as coal, chemicals and steel. However, the gains in PPI aren't being passed through to Chinese consumer inflation as yet. Hence, China's consumer price index (CPI), rose by 0.8% in August from a year earlier, down from 1% in July. China will continue its "normal" monetary policy for as long as possible and has no need to purchase assets according to Yi Gang, governor of the People's Bank of China.

Exports are expected to have risen 17.1% in August from a year earlier, compared with growth of 19.3% in July. Imports likely rose 26.8% last month year-on-year, compared with 28.1% growth in July.

China's fragile economic recovery from the pandemic is facing a new challenge — a relentless rally in the U.S. dollar. The U.S. currency's surge is helping the yuan record its largest gain in eight months on a trade-weighted basis in September. Unlike past episodes of China-related worries, there are no signs of capital outflows this time.

The regulatory shift by the Communist Party has sent shockwaves around the world. Some investors now consider Chinese shares too risky while others see industries that still stand to profit. Communist Party is willing to forsake short-term growth for long-term stability. It had set a much lower GDP target of 6% expansion for the year in the month of March. Policymakers are far more interested in the quality of economic growth than its pace.



U.S. securities regulators have started a countdown that will force many Chinese companies to leave American stock exchanges, after a long impasse between Washington and Beijing over access to the companies' audit records. The action will accelerate the decoupling of the world's two largest economies and affect investors that own securities in more than 200 U.S.-listed Chinese companies with a combined market value of roughly $2 trillion.

China finds itself in bad light as the World Bank has shelved its annual survey on Doing Business ranking, because of some untoward lobbying by China. The survey, first published in 2003, "measures aspects of business regulation affecting small domestic firms located in the largest business city of 190 economies". It covers a wide range, from registering a business to resolving bankruptcy. This massive undertaking involves nearly 50,000 experts across the globe, and its conclusions guide perhaps billions of dollars of investment. But an independent investigation by the law firm WilmerHale has concluded that former World Bank CEO Kristalina Georgieva and other leaders pressured staff to improve China's Doing Business 2018 ranking. Ms. Georgieva, now managing director of the International Monetary Fund, has said the accusations are "false and spurious." She also claims to have stopped an effort by ex-World Bank President Jim Yong Kim's office to improve China's position by including Hong Kong's data with the mainland's ranking.

	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	6.5	6.7	6.7

South Korea

South Korea's GDP growth forecast is maintained to expand 4% and 3% in 2021 and 2022. Our forecast takes into account the impact of Covid-19 worldwide. The Bank of Korea has turned very bearish and expects potential GDP growth at 2.2%. We expect GDP growth to lose momentum but not this much.

As of now the inflation index does not include housing cost. The central bank is of the opinion that it is time to review the inflation index to include rising housing costs. The move is aimed at curbing record-high household debt and surging property prices that have become a risk for the economy. Apartment prices in the capital region surrounding Seoul, home to about half of the country's population, jumped 13.11% this year through August. In August, the BOK raised the policy rate by a quarter percentage point to 0.75% from a record low of 0.5%, marking the first pandemic-era rate hike. We expect the BOK to raise rates in the coming months or next year, with the base rate at 1.25% by end-2022.

South Korea's export growth slowed in September, mainly due to fewer working days, but still remained solid on brisk demand for semiconductors and other goods.

Overseas shipments expanded for the 11th straight month to rise 16.7% on year to $55.8 billion, following August's revised 34.8% jump, according to the trade ministry. Imports rose 31% to $51.6 billion after a 44% rise in August, resulting in a trade surplus of $4.20 billion.

The South Korean Won has depreciated from the last four months and may fall to 1,200 per dollar by December as exports moderate and the dollar strengthens on expectations for a tighter U.S. monetary policy. The Won has lost more than 6% since end-May as the dollar gained and South Korean authorities tightened restrictions to curb a rise in virus infections. Stock outflows have added to the pressure, with overseas investors withdrawing $7.9 billion from local equities in the last 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	1130	1100

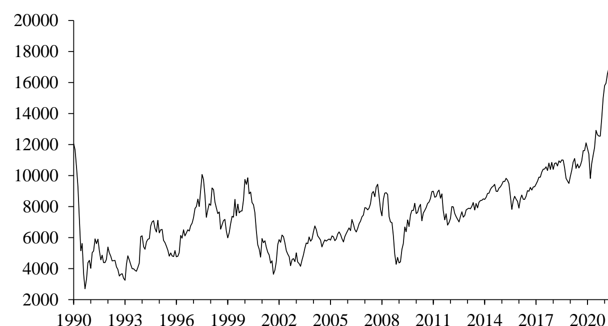
Taiwan

We maintain our GDP growth forecast of 5.9% for Taiwan's economy in 2021 and 3.7% in 2022. Taiwan is benefitting from orders being shifted to the island as China's power curbs disrupted the country's exports. Taiwan is set to reap the rewards of the post-pandemic rebound in global trade and U.S. efforts to reduce economic ties with China all through next year.

Inflation in Taiwan has remained moderate. The consumer price index is expected to grow by 1.5% in 2021. In the

Korea: Composite Index

Taiwan: Weighted TAIEX Price Index



moderate inflation and an uncertain economic recovery environment, the central bank is sticking to its loose monetary policy. Taiwan's central bank left its benchmark rate unchanged in September. Taiwan has kept its key interest rates at the same level for over a year, after the central bank cut rates in March 2020 for the first time in nearly four years at the peak of the pandemic's economic impact. Its discount rate is at 1.125%. It also maintained the secured loan rate at 1.50% and kept the unsecured loan rate at 3.375%.

For the export dependent island economy, overseas shipments of over $30 billion each month is the "new normal". Exports have topped that level 12 of the last 13 months.

The Taiwan dollar's exchange rate with the U.S. dollar has been stable this year without large fluctuations.

Taiwan plans to significantly increase military spending in the next five years, according to a draft bill that calls for new outlays on weapons systems that would better equip the island to repel an attack by China. The proposal, unveiled by Taiwan's cabinet, calls for the allocation of the equivalent of about $8.7 billion over the next five years to fund the acquisition of homegrown precision missiles, high-performance naval ships and weapons systems for existing warships.

The new spending would be on top of Taiwan's annual military-related budget, which is set to grow 4% in 2022 to a record $15.1 billion.

	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

With Brazil's unemployment rate falling between May, June and July as the economy is recovering. Notwithstanding benefits derived from the rising commodity prices, we maintain our GDP growth forecast for Brazil in 2021 and 2022. Our forecast is marginally bullish compared to Brazil's central bank forecast of 4.7% and bearish 2.1% in 2021 and 2022 respectively.

Inflationary pressures have increased significantly, with the Extended National Consumer Price Index 15 (IPCA-15) reaching 10.1% in September. A global commodities rally, the worst drought in almost a century and a weakened currency have contributed to sharp price rises for everything from food to fuel, hitting millions of people in Brazil. Consumer inflation remains high. Industrial goods price increases — due to higher input costs, supply restrictions and redirecting of services demands towards goods — have not subsided and are likely to remain at the elevated level in the short run. Environmental factors have also contributed in Brazil. A lack of rainfall across southern and central states has depleted reservoirs on which the country relies for the hydroelectricity generation that provides the bulk of its power supply, forcing utilities to switch on more expensive thermal plants. We expect inflation to slow down to 4.5% in 2022.

The Central Bank of Brazil has responded to this by tightening monetary policy. It increased the Selic rate by

100bp to 6.25% on 22 September and expects a similar 100bp increase in October in battle against runaway prices. In September, it had raised interest rates for the fifth consecutive time this year to contain inflation that has touched double digits. We would not be surprised if the Selic rates hit 8.25% by the end of 2021.

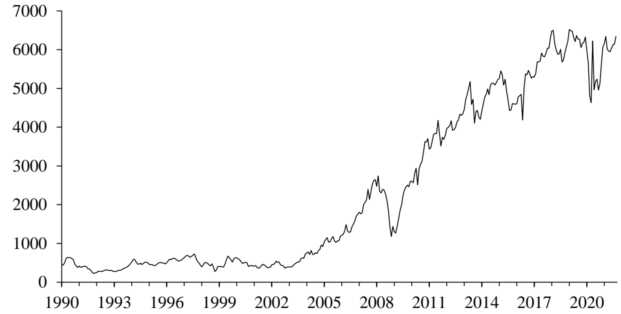
Brazil's trade surplus narrowed in September as exports declined and imports rose. Exports increased 33% over September 2020 to $24.28 billion, but imports rose faster by 52% to $20 billion, shrinking the surplus. The country recorded a surplus of $4.3 billion in September, after a surplus of $7.7 billion in August. Brazilian exports fell to $24.3 billion last month, from $27.2 billion in August, while imports increased to $20 billion from $19.5 billion a month earlier. Brazilian Real remained stable as rise in selic rates protected the currency.

	19	20	21	22	23
GDP (%p.a.)	0.8	-4.5	5.0	2.2	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	5.1	5.3	5.4

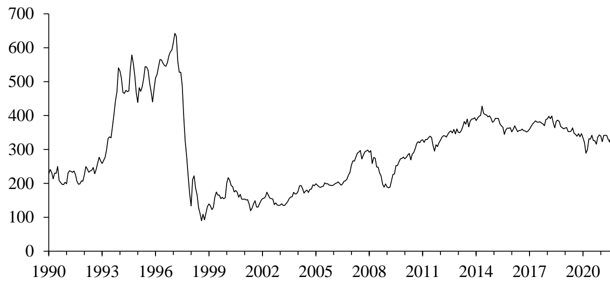
Other Emerging Markets

Hong Kong: FT-Actuaries

Indonesia: Jakarta Composite

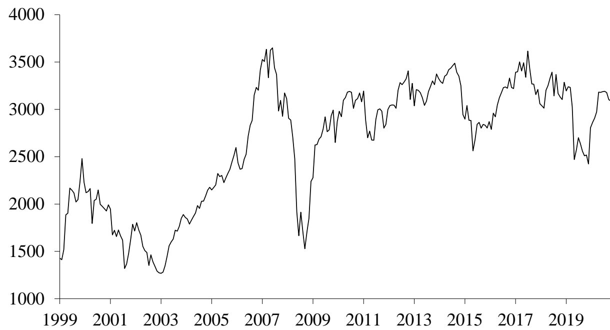


Malaysia: FT-Actuaries (US$ Index)



Thailand: Composite Index

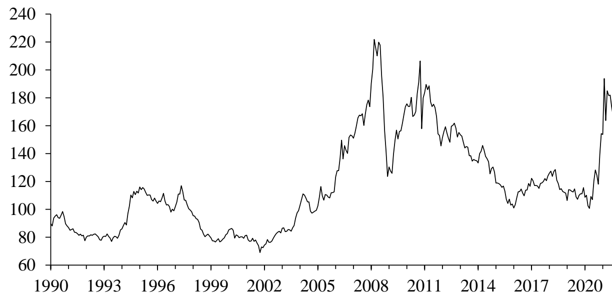
Singapore: Straits Times Index



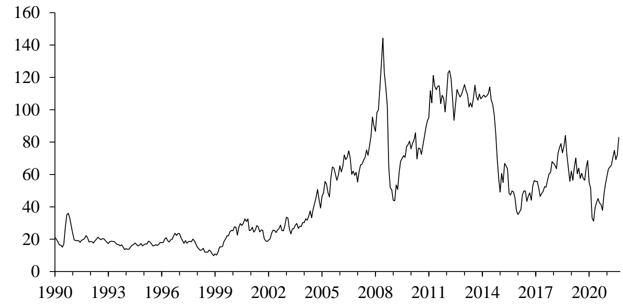
Philippines: Manila Composite

COMMODITY MARKETS

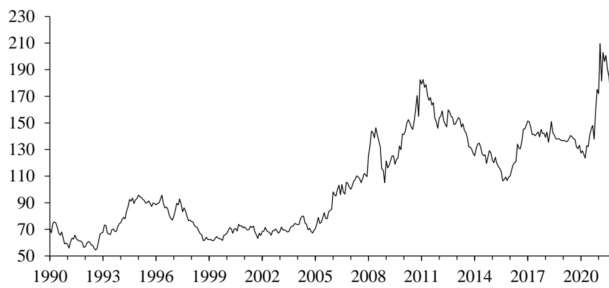
**Commodity Price Index (Dollar)
(Economist, 2015 = 100)**



Oil Price: North Sea Brent (in Dollars)

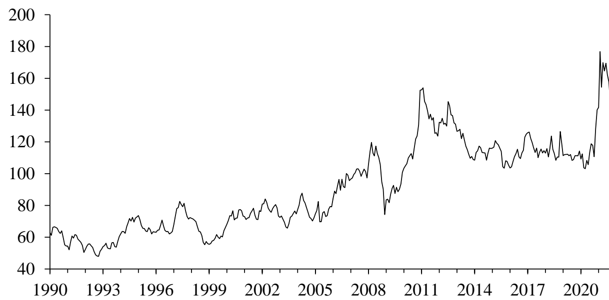


**Commodity Price Index (Sterling)
(Economist, 2015 = 100)**



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	-1.1	1.7	-1.2
2021	1.8	0.4	0.1	81.3	77.2	-3.8	3.0	-3.4
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
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	-1.1	1.3	-1.2
2020:3	0.8	-0.1	0.1	77.6	72.2	-1.4	1.3	-1.6
2020:4	0.8	0.0	0.1	78.0	72.6	-1.7	1.4	-1.8
2021:1	0.8	0.2	0.1	80.7	76.2	-2.7	1.4	-2.6
2021:2	1.9	0.4	0.1	81.7	77.6	-3.4	3.4	-3.1
2021:3	2.0	0.6	0.1	81.8	78.2	-4.2	3.5	-3.7
2021:4	2.1	0.6	0.2	80.9	77.0	-4.8	3.6	-4.4
2022:1	4.9	1.0	1.0	78.9	77.3	-3.8	5.4	-3.8
2022:2	5.0	1.5	1.5	78.6	77.3	-3.0	6.5	-3.0
2022:3	5.0	1.6	1.7	78.3	77.3	-2.6	6.3	-2.7
2022:4	5.1	2.0	2.0	79.0	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	292.1	5.6	4.9	1.5	154.0
2022	308.0	4.5	5.0	1.5	154.7
2023	324.4	4.3	3.6	1.0	156.7
2024	338.1	4.2	2.8	0.7	158.5
2020:1	279.7	2.7	4.0	1.1	150.0
2020:2	270.1	-0.2	4.1	1.2	145.9
2020:3	279.3	0.2	4.8	1.4	149.4
2020:4	288.5	3.7	5.2	1.6	154.2
2021:1	292.5	4.5	4.9	1.5	155.5
2021:2	287.3	7.3	4.7	1.4	152.1
2021:3	289.9	5.4	5.0	1.5	152.0
2021:4	298.7	5.4	5.0	1.5	156.3
2022:1	309.3	4.6	5.3	1.6	156.9
2022:2	299.2	4.5	5.2	1.6	150.7
2022:3	306.5	4.4	5.0	1.5	153.0
2022:4	317.3	4.6	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	162.5	778073.6	444342.1	284477.5	211515	-29463.4	132797.6
2022	175.6	841052.4	466406.2	314412.8	224219.9	-23606.4	140380.1
2023	179.9	861289.7	480436	311994.5	230959.3	-18606.2	143493.9
2024	183.6	879371.3	493915.4	309800.3	237826.1	-15888.6	146281.9
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		4.7	14.6	6.6		6.7
2022/21	8.2		5.0	10.5	6.0		5.7
2023/22	2.4		3.0	-0.9	3.0		2.2
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	160.8	192473.4	107095.9	69800.1	51382.3	-3072.4	32732.5
2021:3	164.8	197260.7	112801.7	72236.3	52872.3	-6616.9	34032.7
2021:4	170.9	204652.5	118768.1	71210.6	56177.5	-6969.8	34533.9
2022:1	173.6	207782.3	111591.7	87937.4	54146.0	-11003.8	34889.0
2022:2	175.0	209522.6	113522.4	79320.0	54465.4	-2829.7	34955.5
2022:3	176.4	211199.0	115432.9	80187.0	56071.4	-5098.5	35393.8
2022:4	177.5	212548.6	125859.2	66968.4	59537.0	-4674.4	35141.6

[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	1988.4	311.2	-58.2
2021	5.9	2297.8	135.2	-48.4
2022	2.2	2549.3	57.0	-36.0
2023	1.5	2707.0	41.5	-24.3
2024	0.8	2846.1	22.7	-17.0
2020:1	-0.9	549.4	-5.0	-18.7
2020:2	27.0	437.6	118.0	-11.9
2020:3	14.5	514.8	74.8	-15.3
2020:4	13.8	519.8	71.9	-12.3
2021:1	9.0	516.1	46.5	6.5
2021:2	6.1	544.4	33.1	6.5
2021:3	6.3	559.1	35.2	6.6
2021:4	5.7	585.2	33.3	6.7
2022:1	5.3	611.9	32.6	7.0
2022:2	2.1	622.7	13.3	7.1
2022:3	2.4	632.2	15.2	7.3
2022:4	2.4	639.8	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	8.1	8.2
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	1.8	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	–1.1	–3.8	–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	–1.2	–3.4	–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