LIVERPOOL INVESTMENT LETTER

September 2019

Cardiff Business School
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Julian Hodge Institute of Applied Macroeconomics

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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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THAT NO-DEAL BREXIT BECKONS

Historians will be baffled in future years when they read about the acute worries some Conservatives have expressed over a 'No-Deal' Brexit. What, they will ask, could have so fazed them about a simple shift of UK status to 'third country' (i.e. no longer in the EU)? 'Chaos' at UK ports? How so? That would be quite illegal behaviour by UK and/or French customs officials. Just this week the two authorities held a dress rehearsal of how no chaos would occur. After all, neither of them want to be impaled on thousands of civil court cases with businesses across the UK and the EU. This is the law of the land in both places.

We are now in the eye of the storm, with the Remainer Parliament trying its last throw of the dice to stop Brexit. For the refusal of 'No Deal' is proxy for refusing the referendum result; the hope is that out of this refusal will emerge no departure at all. However, the irony is that Parliament's 'shenanigans' will embolden the EU in its refusal to renegotiate the Withdrawal Agreement; this will make more certain a No Deal Brexit. It is highly probable that Boris Johnson will call an election for mid-October. His opponents are reluctant to have an election, understandably. But It seems hard for them to avoid one in practice, since currently no government can get a majority to govern with. That way he will fight on a platform of aiming to deliver the referendum result via a No Deal exit that will be orderly and deliver us into a third country status where we can sign our own trade deals and set our own regulations. He looks highly likely to win that election, with a popular coalition between the Tory middle class and the whole working class — an alliance that not even Mrs Thatcher could forge. For her the alliance was with the skilled working class only, who alone identified with her anti-union and anti-inflation agenda, along with the Tory middle class, who were more ambivalent. But today the Brexit alliance unites both groups in their entirety. For many years the Tory middle classes have quietly loathed rule by Brussels. But Brussels managed to unite the British working classes against them too by pushing mass unskilled immigration into the UK.

Table 1: Summary of Forecast

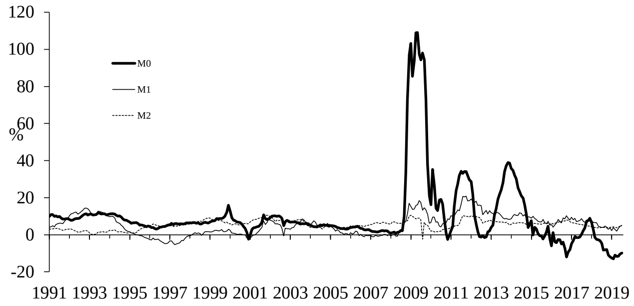
	2016	2017	2018	2019	2020	2021	2022
GDP Growth[1]	1.9	1.8	1.4	1.6	2.0	2.1	2.3
Inflation CPI	1.1	2.6	2.5	2.0	2.1	2.0	2.0
Wage Growth	2.4	2.9	3.1	3.1	3.1	3.0	3.0
Unemployment (Mill.)[2]	0.8	0.8	0.8	0.8	0.7	0.7	0.6
Exchange Rate[3]	82.1	77.4	78.5	76.6	76.1	76.3	75.6
3 Month Interest Rate	0.5	0.4	0.7	0.9	1.3	2.4	3.1
5 Year Interest Rate	0.7	0.6	1.0	1.4	1.6	2.5	3.4
Current Balance (£bn)	-90.9	-66.3	-62.9	-48.8	-41.2	-30.6	-18.4
PSBR (£bn)	45.1	39.4	30.9	22.3	6.9	-6.9	-18.5

[1]Expenditure estimate at factor cost
[2]U.K. Wholly unemployed excluding school leavers (new basis)
[3]Sterling effective exchange rate, Bank of England Index (2005 = w

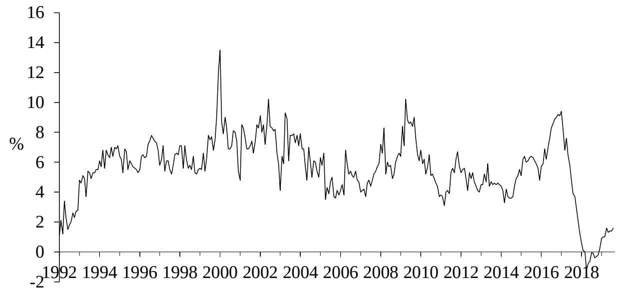
Boris Johnson is therefore now potentially cresting a wave which could well keep the Conservatives in power for two decades. He has had a baptism of fire, but his opponents seem condemned to be consumed — divided — in the fiery furnace of post-Brexit politics. He is fortunate to inherit strong public finances; and his free trade agenda will push up the growth rate for a decade and a half at least.

Our forecasts assume a Brexit occurring at the end of Q3, with an expansionary budget set for Q4. We have long now argued for strong budgetary expansion as a way to end the long deflation created by the Financial Crisis, and bringing to an end the Zero Lower Bound episode of monetary policy. 2019 should end on a positive note with interest rates and inflation rising at last; this tendency is likely to be strengthened by a further fall in the pound.

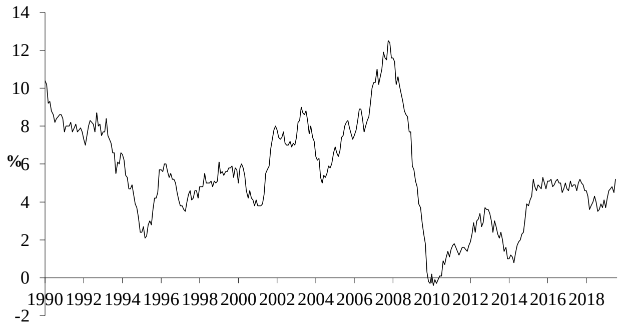
U.S.: Growth in Monetary Aggregates (Yr - on - Yr)



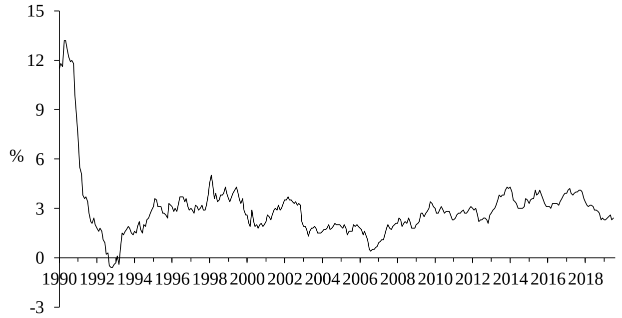
UK: Notes and Coins in Circulation Growth



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

Japanese GDP Growth Slows

Japan's economy grew at a faster-than-expected rate in the second quarter, official data showed earlier last month, helped by celebrations to usher in a new imperial era. GDP expanded 0.4% from the previous quarter beating analysts' median forecast of 0.1%. However, the figures marked a year-on-year slowdown following a revised 0.7% GDP gain for the January–March period.

Looking at demand components, private consumption, which accounts for about 60% of the economy, rose 0.6% from the previous quarter to mark the third straight quarter of increase, thanks to brisk demand for cars and air conditioners, a government official told reporters. Capital expenditure increased 1.5%, accelerating from a 0.4% rise in January–March and beating a median market forecast for a 0.7% gain, as companies invested in streamlining operations in the face of labour shortages. Office building construction and public works projects drove the strength in capital expenditure, analysts said, a sign the economy's resilience was underpinned by those sectors less affected by slowing global trade.

Even exports, which were expected to be weak due to the broadening fallout from the US-China trade war, fell just 0.1% after a much bigger 2.0% drop in January–March. Overall, domestic demand added 0.7 of a percentage point to GDP growth, more than offsetting the 0.3 points negative contribution from external demand, the data showed.

While Japan's Economy Minister Toshimitsu Motegi said the data supported the view that the economy would maintain a moderate recovery, analysts warn it may lose support from domestic demand after a scheduled sales tax hike in October. Unless global demand picks up by then, the economy would be without a driver of growth, they say. "The GDP data looks too good to be true, and may be inflated by one-off factors like a surge in government expenditure and leisure spending during the long holidays in May," said Yoshiki Shinke, chief economist at Dai-ichi Life Research Institute. "The timing of a pick-up in global demand is crucial. If this is delayed, that would spell trouble for the economy", he added.

There are already some signs of trouble in both domestic and external demand. Indeed, Japan's exports slipped 1.6% y-o-y in July, dragged down by China-bound shipments of car parts and semiconductor production equipment. "It'll be hard for exports to recover going forward, since there's no solution in sight for the US-China trade war, and the global economy and manufacturing remain weak", said Taro Saito, executive research fellow at NLI Research Institute. Analysts at Capital Economics also expect imports will continue to outpace exports as consumers are seen bringing forward demand ahead of a planned sales tax hike in October. "The upshot is that net trade may remain a drag on growth in the third quarter," the analysts wrote in a note to clients.

At the same time, consumer confidence slipped in July for the third month to hit the lowest since April 2016, suggesting that households could tighten their purse strings even before the sales tax hike rolls in. "Private consumption was supported by pent-up demand of durable goods ahead of the tax hike," said Hiroshi Miyazaki, senior economist at Mitsubishi UFJ Morgan Stanley Securities. "It's likely that domestic demand will weaken quite substantially from the October–December quarter onwards because of the sales tax hike", he added.

Firms also expect a slowdown. In a recent Kyodo News survey, nearly 70% of major Japanese companies view the domestic economy as having levelled off and 10% believe it has already started to contract. This shows that corporate sentiment has changed dramatically over the past year, as China's slowing economic growth in the wake of the trade war with the US has hurt Japanese companies with large business exposure to and manufacturing bases in China.

As a result, some analysts say the Bank of Japan (BOJ) could time its monetary easing to coincide with government plans to ramp up fiscal stimulus. "The BOJ could ease policy as part of a policy mix, though they aren't likely to do it soon," said Toru Suehiro, senior market economist at Mizuho Securities. "It'll need to see how (the economy) will be impacted by the sales tax hike." Naoya Oshikubo, senior economist at Sumitomo Mitsui Trust Asset Management, shares similar views. "Going forward, central banks are expected to continue easing, and the Chinese government will likely announce fiscal measures, resulting in a global economic recovery, which should help Japan maintain its momentum," Oshikubo said in a report.

The key to sustainable growth is a strong domestic demand after the planned consumption tax hike. The government is likely to plan additional fiscal stimulus measures to avoid larger downside risks than its current projection. Fiscal policy is indeed the instrument that could raise demand, with continuing fiscal deficit until interest rates rise again and the economy hits capacity, so raising inflation. Monetary policy is no longer effective at the zero bound: Quantitative Easing cannot drive interest rates any lower and its impact on demand is now very limited, if it is pursued further. Supply-side policy could also work if it engineered new opportunities for Japanese growth, spurring largescale investment; but this has proved too difficult for the government led by the Prime Minister Shinzo Abe to enact. In short, the Japanese economy continues to be held in a low-growth bind, which the BOJ's QE has proved unable to shift.

MARKET DEVELOPMENTS

The world economy is in a febrile state, with growth being inevitably slowed by the US-China trade wars. However, the slowdown will not tip into recession, and longer term capacity in raw materials remains abundant to support longer term growth. The environment remains favourable to equities, with fiscal policy expansionary in both US and UK, driving interest rates upwards.

Table 1: Market Developments

	Market Levels		Prediction for Aug/Sep 2020	
	Aug 8	Sep 4	Previous Letter	Current View
Share Indices				
UK (FT 100)	7286	7311	9705	9739
US (S&P 500)	2938	2938	3288	3287
Germany (DAX 30)	11845	12025	19633	18915
Japan (Tokyo New)	1499	1507	1989	2000
Bond Yields (government)				
UK	0.44	0.29	3.00	3.00
US	1.65	1.45	3.80	3.80
Germany	−0.45	−0.81	1.00	1.00
Japan	−0.22	−0.30	0.10	0.10
UK Index Linked	−2.10	−2.17	1.00	1.00
Exchange Rates				
UK ($ per £)	1.21	1.22	1.32	1.32
UK (trade weighted)	74.44	75.29	76.1	76.1
US (trade weighted)	101.77	103.89	102.5	102.5
Euro per $	0.89	0.91	0.88	0.88
Euro per £	1.08	1.11	1.16	1.16
Japan (Yen per $)	106.22	106.20	112.5	112.5
Short Term Interest Rates (3-month deposits)				
UK	0.77	0.77	2.10	2.10
US	2.20	2.17	3.00	3.00
Euro	−0.43	−0.48	0.00	0.00
Japan	0.00	−0.05	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	2.1	2.1	29.00		36.80
US	1.99	1.9	2.1	7.90	−8.26	5.63
Germany	3.30	1.6	1.7	54.00	−1.39	59.21
Japan	1.90	0.5	1.2	31.00	−15.49	19.91
UK indexed[2]	−2.10		2.1	5.00		4.93
Hong Kong[3]	2.60	5.6	2.1	−17.00	−8.26	−15.16
Malaysia	3.30	4.8	2.1	43.00	−8.26	44.94
Singapore	3.50	2.7	2.1	10.00	−8.26	10.04
India	1.40	8.0	2.1	19.00	−8.26	21.84
Korea	1.10	2.9	2.1	−23.00	−8.26	−25.36
Indonesia	2.20	5.4	2.1	26.00	−8.26	27.44
Taiwan	2.80	2.1	2.1	12.00	−8.26	11.04
Thailand	3.20	3.8	2.1	27.00	−8.26	27.84

Bonds: Contribution to £ yield of: −

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	0.29	−27.10		−26.81
US	1.45	−18.50	−8.26	−25.31
Germany	−0.81	−18.10	−1.39	−20.30
Japan	−0.30	−4.00	−15.49	−18.99

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.77		0.77
US	2.17	−8.26	−6.09
Euro	−0.48	−1.39	−1.87
Japan	−0.05	−15.49	−14.74

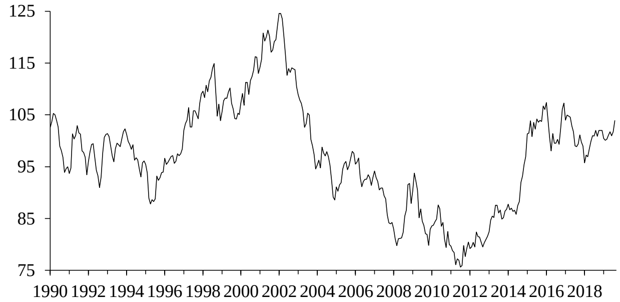
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

Table 3: Portfolio(%)

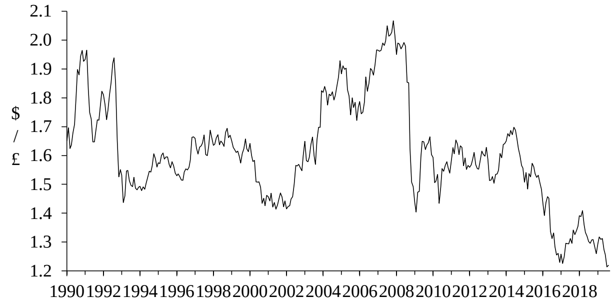
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	August Letter	**Current View**	**August Letter**	**Current View**	**August Letter**	**Current View**
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-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

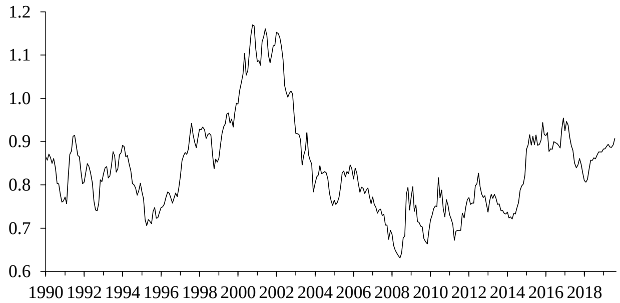
US : Trade Weighted Index
(Bank of England 1990 = 100)



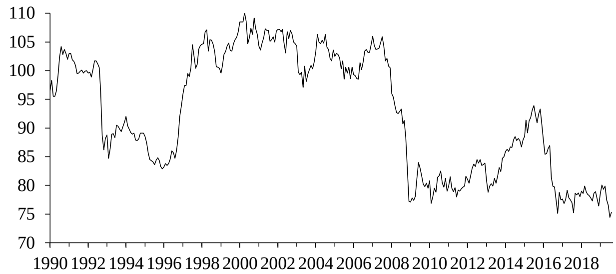
UK: Dollars Per Pound Sterling



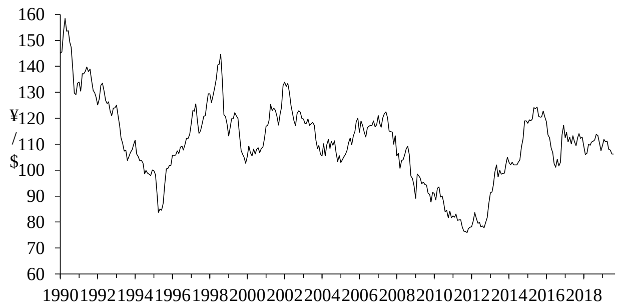
Euro per US dollar



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

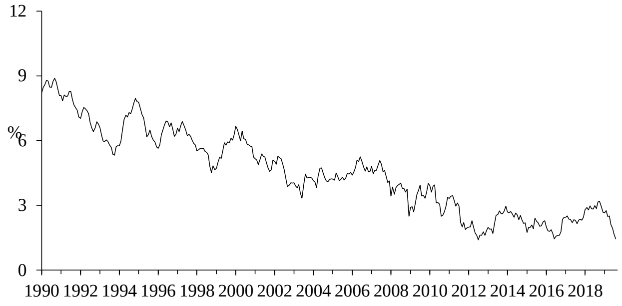


Japan : Yen Per U.S. Dollar

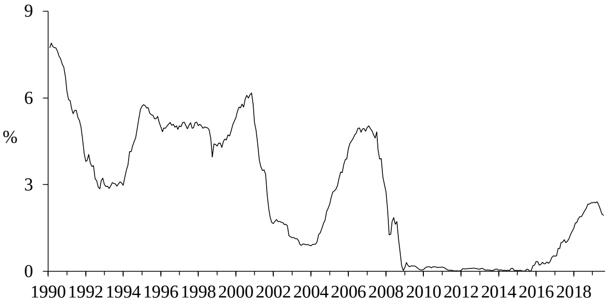


GOVERNMENT BOND MARKETS

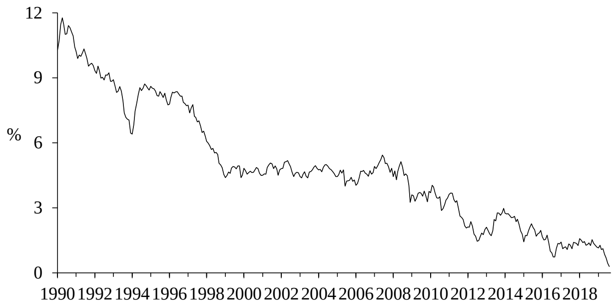
U.S.: Yield on Long-Term Government Bonds



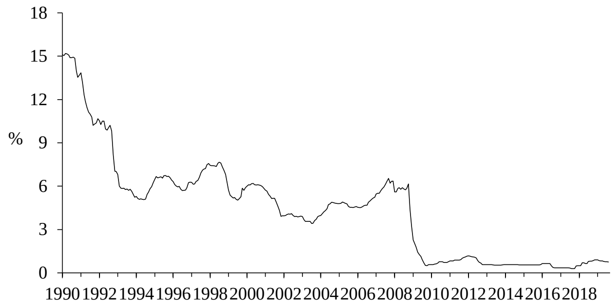
U.S. : 3-Month Treasury Bill



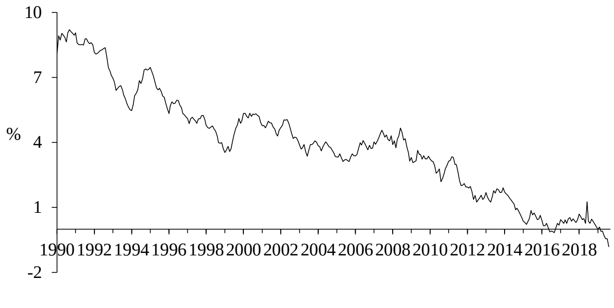
U.K.: Yield on Long-Term Government Bonds



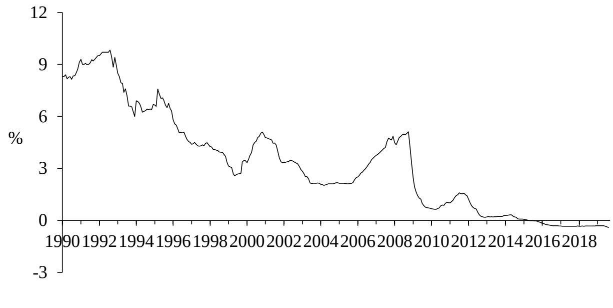
U.K. : 3-Month Certificate of Deposit Rate



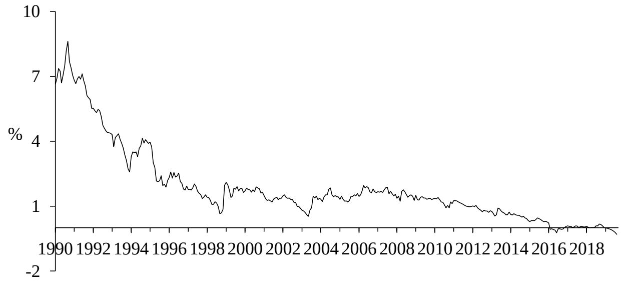
Germany: Yield on Public Authority Bonds



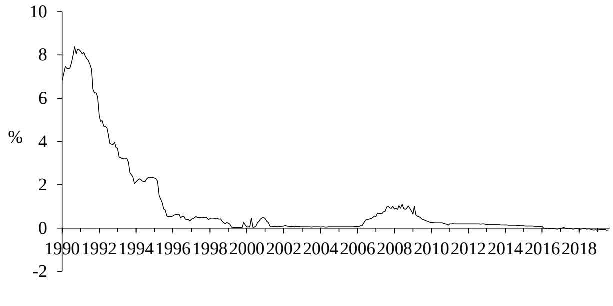
Germany : 3-Month Interbank Deposit Rate



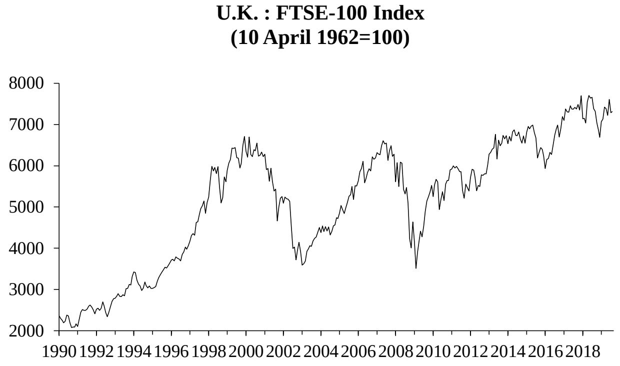
Japan: Yield on Long-Term Government Bonds

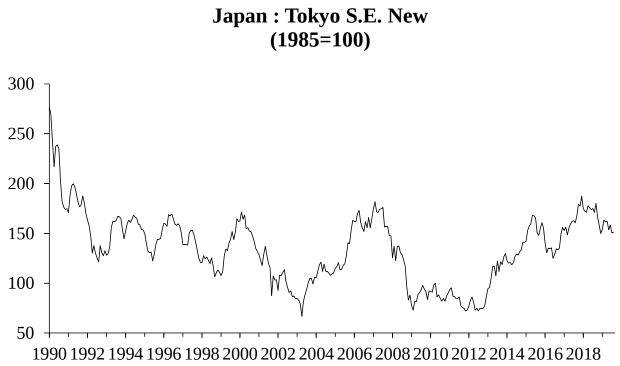


Japan : 3-Month Money Market Rate



MAJOR EQUITY MARKETS





EMERGING MARKETS

Anupam Rastogi

India

The Indian economy is passing through structural adjustments and getting unshackled as the new government under Mr. Modi is taking tough measures which have far reaching consequences for corporates. In particular, corporates should not assume that bank credit is never required to be returned. Full implementation of the destination tax — Goods and Services Tax — is elbowing out inefficient producers and helping large businesses and keeping the indirect collection on even keel. The government's long-term plan, with respect to the environment, in terms of using clean fuel and clean transportation has seen collateral damage to the automobile industry. To provide basic needs to poor people while keeping the fiscal deficit in check is becoming more and more difficult and challenging for the government. It tried by milking the super-rich which failed and it has reversed those policies for now. In fact, some incentives for 'job creators' are in the offing.

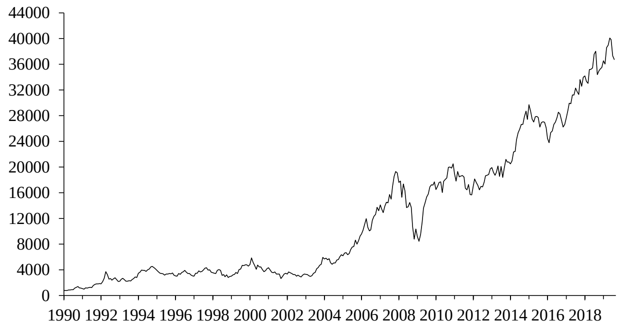
We have revised the country's FY20 gross domestic product (GDP) growth downwards to 6.8% from our earlier forecast of 7.1%. In the second quarter of 2019, GDP growth was 5%. In the last six months, private consumption, which has been the mainstay of aggregate demand came under pressure in urban as well as rural areas. Private corporate investment remained sluggish over the past few years as corporates adjusted to GST and other changes and to deleverage their balance sheet. We expect growth to recover to 7.4% in the second half of FY20, mainly on account of the base effect and a good monsoon which shall kick start rural consumption.

Food and crude oil prices, key drivers of inflation in the country, are currently benign and likely to remain so during the remainder of FY20. We expect inflation based on the wholesale price index and consumer price index to remain moderate at 3.2% and 3.8%, respectively, in FY20.

This will provide space to the Reserve Bank of India (RBI) to continue with its accommodative policy stance, providing scope for more rate cuts in the near term. The RBI cut the repo rate — its key lending rate — by 35 basis points to 5.40% on August 7 and kept the door open for lowering rates further by retaining an "accommodative" policy stance, and flagged worries over weakening growth prospects. This was the fourth repo rate cut in as many policies since February 2019.

India's exports growth turned positive in July, increasing 2.25%, while trade deficit narrowed to a four-month low of $13.4 billion. The trade deficit in July 2018 stood at $18.6 billion. The previous low was in March 2019, when this gap was at $10.9 billion. The government expects the current account deficit to decline to 1.9% of GDP in FY20 from 2.1% of GDP in FY19, aided by softer crude oil prices, and the rupee to average 72 against the dollar this year.

India: BSE Sensitive



The rupee has depreciated as the yuan was allowed to depreciate. The rupee is hovering around 72 against the US dollar. A weakness in the renminbi (yuan) increases the competitiveness of Chinese exports, as every dollar can import larger quantities of Chinese goods. At the same time, it puts competing countries under pressure, as their goods become relatively more expensive. However, as the Chinese currency fell sharply in August by over 3.7%, the rupee has also lost over 4.5% in August.

The government has eased FDI norms to become an important part of the global value chain. The Indian government is finally making a sensible bargain with the rest of the world: "Take our billion-plus customers, give us jobs."

Needing resources to fund an ever-expanding list of social programs for the poor, Prime Minister Narendra Modi's government has gone soft on the rich. Last month's budget proposal — "super-rich tax"— a 25% surcharge on the tax levied against incomes over 20 million rupees (about $275,000) and 37% over 50 million rupees. This took the effective tax rates up to 39% and 42.7%. The new taxes, which applied to foreign companies structured as trusts as well, battered financial markets. The benchmark Nifty fell nearly 6% after foreign portfolio investors pulled out more than $1 billion. To remove anti-rich perception, Mr. Modi declared, "Wealth creation is a great national service. Let us never see wealth creators with suspicion." The government reversed the super-rich tax and scrapped the absurdity of mandatory CSR spending. Mr. Modi dreams to double the size of India's economy to $5 trillion by 2024 and this cannot be done without the help of industrialists.

India has undertaken its biggest liberalization of single-brand retail in seven years. One major concession: Contentious local sourcing requirements will need to be met as an average for the first five-year period, not annually. It will help companies such as Apple Inc., Marks & Spencer, Ikea and H&M. India wants to be an exporter-friendly place.

Apart from trade, diversion in investment flows is an opportunity that India could benefit from, as manufacturers seek alternative origination destinations. US FDI into India jumped in 2018, accounting for 6% of total investment flows. There has been also notable pick-up in flows from China. Larger gains are likely in the medium-term as India's new FDI regulations work through.

The stock market is also adjusting to trade spats and expected slowdown of the world economy.

On the global front, tensions between the US and Iran, and fears of a messy Brexit have dampened investor sentiment. The pool of money flowing into emerging markets is getting reallocated to safe assets.

	18–19	**19–20**	**20–21**	**21–22**	**22–23**
GDP (%p.a.)	6.8	6.5	6.8	7.2	7.4
WPI (%p.a.)	3.9	3.6	3.8	3.9	4.0
Current A/c(US$ bill.)	-70.0	-64.0	-64.0	-65.0	-65.0
Rs./$(nom.)	79.5	69.5	71.5	72.5	73.5

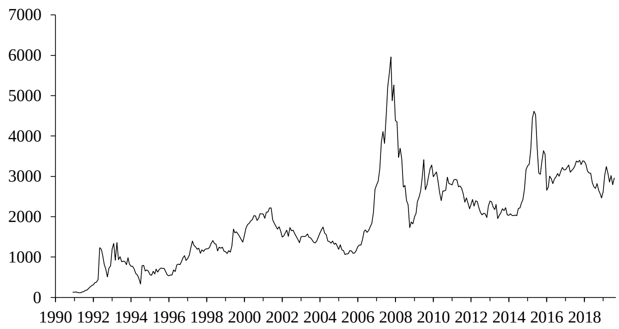
China

China's economy is under a cloud due to weak domestic conditions, accelerating tensions with the US and worsening global trade. But, China is doing all it can to push for domestic demand growth. Its main strategy to deal with the US is to weaken the yuan which ensures that Chinese exporters do not lose competitiveness in world trade. China is also shipping US-bound exports to other Asian countries to circumvent the tariffs. China hopes that adverse impacts on US agricultural produce and industrials, in 12 months' time, will force the Trump administration to soften its tough stance as the presidential elections come nearer and start worsening Trump's chances to get re-elected. Our understanding of the political economy of China suggests that China realizes that it has benefitted from the current liberal trade policies meant for developing countries and as it has become the second largest economy of the world, the same liberal polices cannot be applied to it now. As it has military ambitions, unlike Japan in 1990, it cannot be seen as being bullied by others.

China's GDP growth in the second quarter of 2019 slowed to 6.2%, the smallest gain since 1992. The Purchasing Managers' Index (PMI) increased to 50.4 in August from 49.9 in the previous month which suggests that the manufacturing sector's operating conditions are improving as

Beijing's strategy of stimulating growth by cutting 2 trillion yuan in taxes and fees is showing some sign of success. As more Chinese goods set to be hit with higher tariffs, we maintain our forecast of 6% for 2019 and 5.6% for 2020.

China: SSE Composite Index



China's producer prices fell into deflation for the first time in three years in spite of Beijing's efforts to shore up its slowing economy. The consumer price index rose 2.8% in July from a year earlier, compared with June's 2.7% growth. The government aims to keep consumer inflation under 3% for 2019.

Americans are divided over many of President Trump's policies, but the trade war with China is not one of them. Democrats and Republicans in Congress have agreed with his tough line and opinion polls show mistrust of China is growing across party lines. Therefore, China's leaders appear to have concluded that they won't secure an acceptable trade deal with President Trump. They are ready to wait for the next 18 months while inflicting maximum political damage — and hope a weakening U.S. economy delivers a new president. Regional economies are more exposed, particularly Taiwan, South Korea and Vietnam where a cumulative 40% of their total exports head to US and China.

China's yuan lost around 4% in its value in August to its lowest point in more than 11 years. This exacerbated trade tensions with Washington and the US administration has labelled China a "currency manipulator", which could trigger more retaliatory measures. President Trump had already angrily accused Beijing of weaponising the yuan after it slipped past the key level of 7 to the dollar in the month of August.

In the last week of August, President Trump announced that the U.S. and China would talk trade, following signs from Beijing that it wouldn't immediately retaliate against the latest tariff increase.

The People's Bank of China has called for a "rational" view on current headwinds. The policy makers are prepared for long-term conflicts. Former PBOC Governor Zhou Xiaochuan called for efforts to improve the yuan's global role to deal with the challenges of a dollar-denominated financial system. China's current account surplus is disappearing fast and it may start running deficits on current account soon.

Chinese President Xi Jinping's plan to turn China into one of the world's most advanced economies by 2050 is getting harder by the day. Mounting pressure from his U.S.

counterpart Donald Trump adds to a slew of structural challenges facing China's $14 trillion economy — including record debt levels, rampant pollution, and an aging population — the risk is that the country gets stuck in a "middle-income trap,'' stagnating before it reaches rich-world levels of development.

	18	19	20	21	22
GDP (%p.a.)	6.6	6.0	5.6	5.4	5.2
Inflation (%p.a.)	2.2	2.3	2.3	2.0	1.8
Trade Balance(US$ bill.)	50.0	60.0	40.0	20.0	0.0
Rmb/$(nom.)	6.8	6.9	7.1	7.3	7.3

South Korea

South Korea is facing an uncertain future as the trade conflict with Japan and barriers to trade imposed by both countries on each other's exports take effect. We expect South Korea's economic growth this year to be below 2% and may not improve much in the coming years.

In view of disappearing exports, South Korea offered a record yearly budget for next year to boost economic growth and tackle the effect from trade the spat with Japan. The 2020 budget was set at 513.5 trillion won (422 billion U.S. dollars), up 9.3% from this year's budget and the biggest-ever fiscal spending. In 2019 also, the budget of 469.6 trillion won (386 billion U.S. dollars) was up 9.7% from the previous year. The deadline for the budget approval from the National Assembly is December 2.

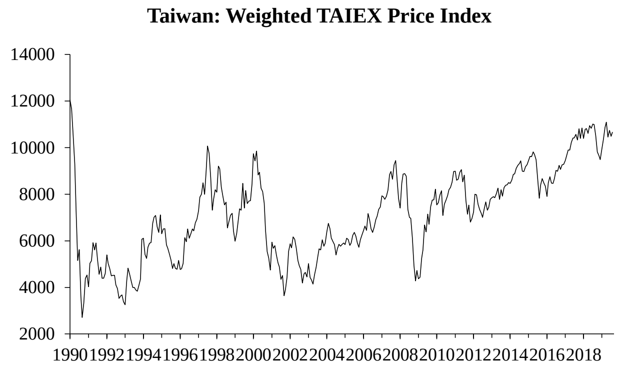
A composite consumer sentiment index, conducted by the central bank, fell to 92.5 in August from 95.9 in July, marking the lowest since January 2017 and the second lowest since the 2008–2009 global financial crisis. A reading below 100 means consumer sentiment is weaker than a long-term average, which currently covers 2003-2018.

Consumer price inflation stood at 0.6% in July in annual terms, far short of the central bank's 2% target and below this year's projection of 0.7%. The central bank cut its policy interest rate by 25 basis points to 1.50% at its July meeting.

The trade spat between Japan and South Korea may create delays all along the world's tech-supply chain. The two countries are also essential to Washington's efforts to persuade North Korea to relinquish its nuclear arsenal. We expect that the US will mediate between its two allies.

South Korea's exports tumbled for an eighth straight month in July. Exports shrank 11% in July from a year earlier. Imports in July fell 2.7% over a year earlier. Not surprisingly, South Korea's current account surplus posted the lowest in seven years in the first half of this year on the continued export fall. It was 21.77 billion U.S. dollars in the January–June period, down 24.7% from the same period of last year.

China's decision, to let the renminbi weaken, has weighed on foreign exchange rates across the region, particularly



those of export economies, whose goods would become less competitive in the global market if their respective currencies did not soften as well. South Korea's won has been hit the hardest since the broader trade war between the US and China kicked off, dropping 10.7% against the dollar since the US announced its first list of tariffs on Chinese goods in June last year. The won is trading at sub 1,200 level close to the lowest since 2016 for the Korean Won.

The Korean stock market is on a weak wicket, as the majority of Samsung Group affiliates declined after South Korea's top court overturned part of an appeal court ruling in the bribery case of the group's de facto chief Jay Y. Lee. The market will remain under cloud until this case is settled.

	18	19	20	21	22
GDP (%p.a.)	2.7	1.6	1.8	2.2	2.2
Inflation (%p.a.)	1.5	1.1	1.5	1.5	1.5
Current A/c(US$ bill.)	86.0	80.0	78.0	70.0	70.0
Won/$(nom.)	1130	1220	1240	1260	1260

Taiwan

The US-China trade war is having a positive impact on Taiwan as US companies are procuring more from Taiwan and Chinese goods are being trans-shipped from Taiwan. Taiwan has raised its growth forecast to 2.5% in 2019 and 2.6% in its first forecast for 2020. As we move ahead, demand for new technologies such as 5G and artificial intelligence would also underpin growth. Gross domestic product (GDP) growth was 2.4% in the second quarter from a year earlier.

China will stop issuing travel permits for individual leisure trips to Taiwan amid soured ties between the two governments, as Beijing wants to put economic and political pressure on the democratic government. This means that business travel and group tours would be the only way for many Chinese to travel to the island. The new curbs will impact Taiwan's travel sector and may hit the broader economy, as mainland Chinese visitors account for about a quarter of the island's total tourism arrivals, the bulk of whom are independent travellers. China likes to use its economic clout to advance its national interests, imposing punitive measures such as boycotts, trade restrictions and tourism curbs — as it has done to show its displeasure with Ms. Tsai.

Taiwan's inflation level continued to move up mildly in July, as the consumer price index rose 0.4% from a year earlier. The mild increase was due to higher prices of vegetables, fruit and tourism fees. We expect inflation to remain contained at sub 1% level in 2019 as well as in 2020.

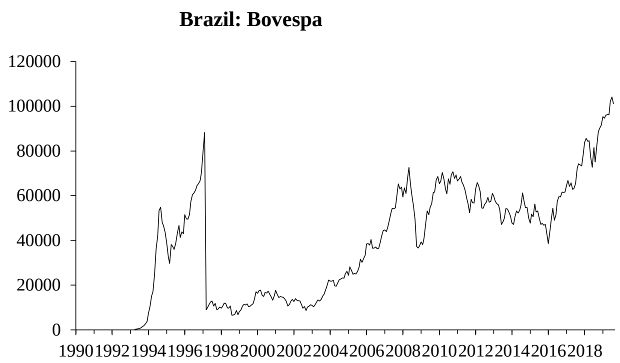
The Taiwan dollar remained steady around 31 to a US dollar.

	18	**19**	**20**	**21**	**22**
GDP (%p.a.)	2.6	2.5	2.6	2.6	2.2
Inflation (%p.a.)	1.2	1.0	1.0	1.0	1.0
Current A/c(US$ bill.)	68.0	70.0	71.0	70.0	60.0
NT$/$(nom.)	29.8	31.0	31.0	31.0	31.0

Brazil

The Brazilian economy is on the path of recovery as the structural reforms are climbing up the legislation ladder. However, it will take time for GDP growth to show up. We maintain no growth forecast for 2019 and 2% GDP growth next year as the lower inflation feeds into investment demand and improved consumer demand. Consumer confidence increased in August as the main consumer confidence index rose to 89.2 points from 88.1 in July.

We are maintaining inflation forecast for this year and next year to be around 4%. There is a high probability that given the weak state of the economy, inflation will turn out to be more muted. Central Bank President Roberto Campos Neto has signalled that inflation will undershoot the bank's forecasts. This will provide policymakers space to further reduce the benchmark Selic interest rate. The Selic is currently at 6%, the lowest level ever. A central bank survey shows that Brazilian inflation expectations for this year and next have fallen to new lows which has strengthened the market view that the central bank will cut interest rates again this year by at least 50 basis points to give a boost to a weak economy and as confidence grows about the pension reforms. The central bank cut its benchmark Selic interest rate to a fresh low 6% from 6.5% in July.



The pension bill, which amends the Constitution, still has to clear a second vote in the lower house and then two more votes in the Senate, but investors were encouraged by the broad support for the revamp in the first vote.

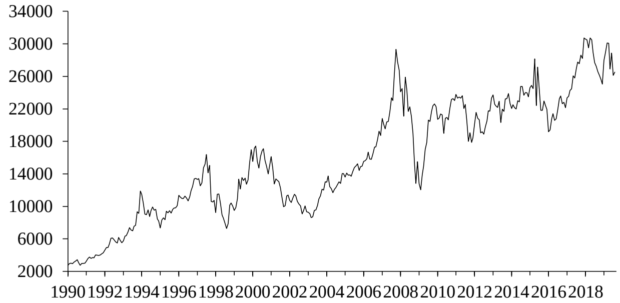
Brazilian President Jair Bolsonaro has been in the news due to the burning of the Amazon rainforest to an acrimonious fight with France's Emmanuel Macron. An operation to his knee will take him out of action for 10 days. He's had three operations since he was stabbed in the stomach while campaigning in September 2018. Besides reclaiming more land for agriculture for economic growth, Brazil does not want to cede control of the Amazon forest to an international tribunal as many countries have claimed that the Amazon basin is a global resource.

Brazil is in a rare sweet spot, benefiting from low interest rates, retreating inflation and the trade war between the U.S. and China. Brazil's benchmark Ibovespa stock index reached a record on July 10. A 26% return over the previous year has made the country the top emerging market, beating 32 others that lost 7% collectively. The performance was even more impressive considering Brazil's economy is barely growing.

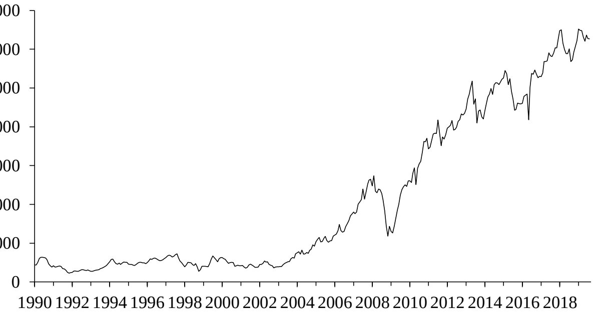
	18	**19**	**20**	**21**	**22**
GDP (%p.a.)	1.1	0.0	2.0	2.5	2.5
Inflation (%p.a.)	3.8	4.0	3.9	4.0	4.0
Current A/c(US$ bill.)	-14.6	-16.0	-16.0	-16.0	-16.0
Real/$(nom.)	3.8	3.9	3.8	3.9	4.1

Other Emerging Markets

Hong Kong: FT-Actuaries

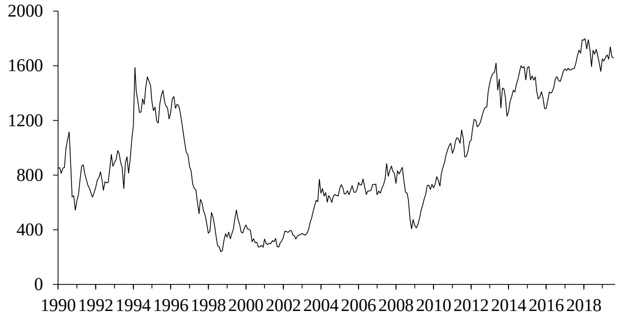


Indonesia: Jakarta Composite

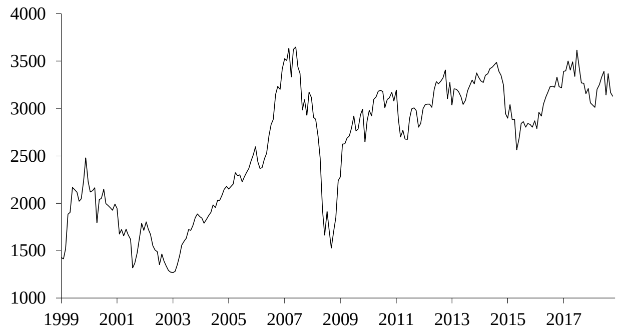


Malaysia: FT-Actuaries (US$ Index)

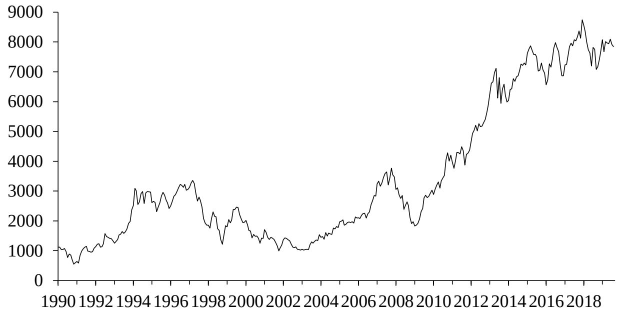
Thailand: Composite Index



Singapore: Straits Times Index

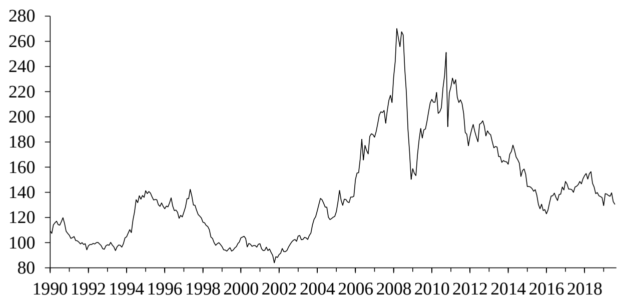


Philippines: Manila Composite

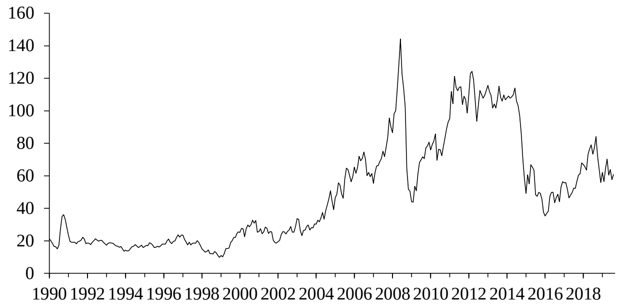


COMMODITY MARKETS

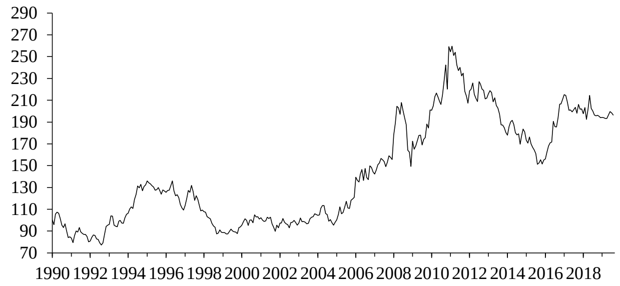
Commodity Price Index (Dollar)
(Economist, 2000=100)



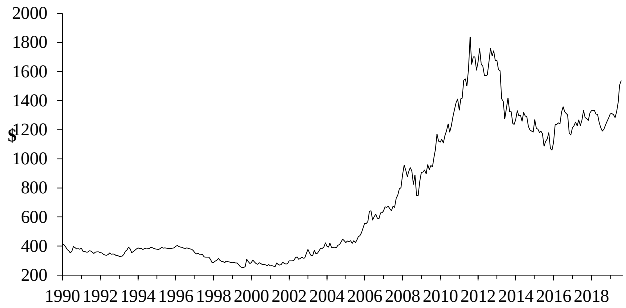
Oil Price: North Sea Brent (in Dollars)



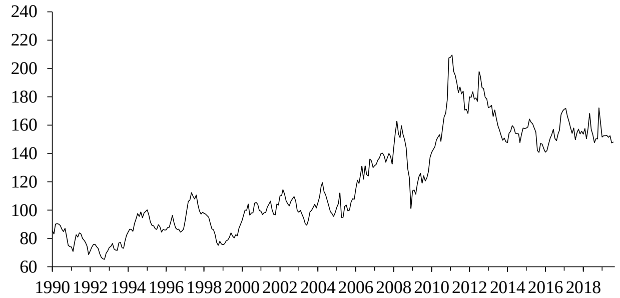
Commodity Price Index (Sterling)
(Economist, 2000=100)



Gold Price (in Dollars)



Commodity Price Index (Euro)
(Economist)



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]
2017	2.6	0.6	0.4	77.4	75.5	-1.6	3.8	-1.5
2018	2.5	1.0	0.7	78.5	76.7	-1.5	3.4	-0.5
2019	2.0	1.4	0.9	76.6	74.6	-0.7	2.9	0.5
2020	2.1	1.6	1.3	76.1	74.3	0.4	2.7	1.4
2021	2.0	2.5	2.4	76.3	75.1	1.1	2.6	0.9
2022	2.0	3.4	3.1	75.6	74.6	1.1	2.5	0.6
2018:1	2.5	1.0	0.5	79.2	77.9	-1.7	3.7	-1.1
2018:2	2.5	1.0	0.7	79.3	77.7	-1.7	3.4	-1.1
2018:3	2.5	1.0	0.8	78.0	75.9	-1.3	3.3	-1.1
2018:4	2.4	1.0	0.8	77.6	75.4	-1.2	3.1	-0.3
2019:1	2.1	1.4	0.8	77.2	75.4	-1.0	2.9	0.5
2019:2	2.0	1.4	1.0	76.6	74.4	-0.8	2.9	0.5
2019:3	2.0	1.4	1.0	76.4	74.4	-0.6	2.9	0.5
2019:4	2.0	1.4	1.0	76.3	74.3	-0.5	3.0	0.5
2020:1	2.1	1.5	1.1	76.1	74.3	0.1	2.8	1.0
2020:2	2.1	1.5	1.2	76.2	74.3	0.1	2.8	1.0
2020:3	2.0	1.6	1.3	76.1	74.3	0.1	2.6	1.5
2020:4	2.0	1.7	1.6	76.0	74.3	1.3	2.5	1.8

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)
2017	259.1	2.9	2.2	0.8	142.2
2018	265.9	3.1	2.2	0.8	142.6
2019	274.2	3.1	2.1	0.8	143.4
2020	282.6	3.1	1.9	0.7	144.6
2021	291.1	3.0	1.6	0.7	145.7
2022	299.8	3.0	1.3	0.6	146.9
2018:1	264.6	3.0	2.3	0.8	142.9
2018:2	266.3	2.8	2.2	0.8	141.8
2018:3	266.3	3.0	2.1	0.8	143.5
2018:4	266.3	3.5	2.1	0.7	142.3
2019:1	272.3	2.9	2.0	0.7	143.7
2019:2	274.4	3.0	2.0	0.7	142.6
2019:3	274.0	2.9	2.0	0.7	144.3
2019:4	276.1	3.7	2.0	0.7	143.0
2020:1	280.8	3.1	2.0	0.7	144.8
2020:2	282.9	3.1	2.0	0.7	143.8
2020:3	282.2	3.0	2.0	0.7	145.5
2020:4	284.4	3.0	1.9	0.7	144.2

1 Whole Economy
2 Average Earnings
3 Wholly unemployed excluding school leavers as a percentage of employed and unemployed, self employed and HM Forces
4 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
2017	163.3	781822.0	441518.3	307415.9	200522.0	-60310.0	107324.2
2018	165.5	792539.6	445984.1	319781.0	201140.2	-63640.2	110725.5
2019	168.2	805404.2	453119.8	326324.6	201447.8	-58242.8	117162.2
2020	171.5	821280.9	460369.7	333407.0	202656.5	-55242.8	119776.8
2021	175.1	838480.8	467735.5	343510.3	203872.4	-54230.9	122210.0
2022	179.1	857546.9	475219.3	347723.2	205095.9	-46650.6	125369.9
2017/16	1.8		0.6	0.7	0.1		-3.7
2018/17	1.4		1.0	4.0	0.3		3.2
2019/18	1.6		1.6	2.2	0.2		6.3
2020/19	2.0		1.6	2.2	0.6		2.2
2021/20	2.1		1.6	3.0	0.6		2.0
2022/21	2.3		1.6	1.2	0.6		2.6
2018:1	164.4	196809.2	110809.6	75521.2	51591.3	-14814.1	26298.9
2018:2	165.1	197627.5	111248.1	78876.0	49253.6	-16094.0	25656.2
2018:3	166.1	198830.2	112094.9	80893.8	49822.6	-16001.3	27979.8
2018:4	166.4	199272.8	111831.4	84490.1	50472.7	-16730.8	30790.6
2019:1	167.1	200092.8	112582.6	79927.5	51669.7	-14722.0	29365.1
2019:2	167.9	201028.5	113028.1	82320.0	49760.1	-15266.8	28782.1
2019:3	168.5	201759.7	113888.4	80427.4	49875.0	-13130.2	29276.1
2019:4	169.2	202523.3	113620.7	83649.7	50143.1	-15123.7	29738.9
2020:1	170.4	204031.8	114383.9	81327.8	51979.7	-13822.0	29823.9
2020:2	171.2	204988.8	114836.5	84335.8	50058.7	-14366.8	29831.2
2020:3	171.8	205741.0	115710.6	82502.0	50174.2	-12630.2	29980.0
2020:4	172.5	206519.4	115438.7	85241.3	50443.9	-14423.7	30141.7

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	Debt Interest (£bn)	Current Account (£ bn)
2017	2.0	2047.3	39.4	79.9	-66.3
2018	1.5	2117.0	30.9	80.0	-62.9
2019	1.0	2206.6	22.3	84.7	-48.8
2020	0.3	2297.2	6.9	91.0	-41.2
2021	-0.3	2394.8	-6.9	94.2	-30.6
2022	-0.7	2500.2	-18.5	95.4	-18.4
2018:1	-2.8	515.6	-14.3	20.2	-16.7
2018:2	3.3	518.6	16.9	19.7	-18.7
2018:3	0.7	527.9	3.8	19.8	-13.5
2018:4	1.9	532.3	10.2	20.1	-14.0
2019:1	0.0	538.2	0.1	20.4	-13.7
2019:2	2.2	541.9	11.9	20.7	-13.8
2019:3	1.7	548.8	9.2	20.9	-9.4
2019:4	1.5	554.3	8.3	21.2	-11.9
2020:1	-1.3	561.6	-7.1	21.9	-12.2
2020:2	1.3	565.4	7.5	22.0	-12.0
2020:3	0.9	570.9	5.1	22.1	-7.6
2020:4	1.0	576.9	5.5	23.5	-9.4

1 GDP at market prices (Financial Year)

WORLD FORECAST DETAIL

Growth Of Real GNP

	2015	2016	2017	2018	2019	2020
U.S.A.	2.9	1.6	2.2	2.9	2.6	1.9
U.K.	2.3	1.9	1.8	1.4	1.6	2.0
Japan	1.3	0.6	1.9	0.8	1.1	0.5
Germany	1.7	2.2	2.2	1.5	1.4	1.6
France	1.1	1.1	2.3	1.5	1.5	1.4
Italy	0.9	1.1	1.6	0.9	0.5	0.7

Growth Of Consumer Prices

	2015	2016	2017	2018	2019	2020
U.S.A.	0.1	1.3	2.1	2.4	2.1	2.2
U.K.	0.2	1.1	2.6	2.5	2.0	2.1
Japan	0.8	–0.1	0.5	1.0	1.1	1.2
Germany	0.3	0.5	1.8	1.8	1.8	1.7
France	0.0	0.2	1.0	1.3	1.3	1.5
Italy	0.1	–0.1	1.2	1.2	1.2	1.4

Real Short-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	–1.1	–1.6	–1.0	0.3	0.4	0.8
U.K.	–0.5	–2.1	–1.9	–1.3	–1.2	–0.7
Japan	0.3	–0.4	–0.9	–1.0	–1.1	–1.1
Germany	–0.6	–2.1	–2.2	–2.1	–2.0	–1.7
France	–0.3	–1.3	–2.2	–1.6	–1.8	–1.5
Italy	0.0	–1.5	–1.5	–1.5	–1.7	–1.4

Nominal Short-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	0.2	0.5	1.4	2.4	2.6	3.0
U.K.	0.6	0.5	0.4	0.7	0.9	1.3
Japan	0.2	0.1	0.1	0.1	0.1	0.1
Germany	–0.1	–0.3	–0.3	–0.3	–0.3	0.0
France	–0.1	–0.3	–0.3	–0.3	–0.3	0.0
Italy	–0.1	–0.3	–0.3	–0.3	–0.3	0.0

Real Long-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	0.2	0.3	0.6	0.8	1.2	1.4
U.K.	–0.7	–1.5	–1.5	–1.0	–0.6	–0.4
Japan	–0.4	–1.0	–1.1	–1.4	–1.4	–1.6
Germany	–0.9	–1.7	–1.5	–1.7	–1.3	–1.0
France	–0.2	–0.8	–0.8	–0.9	–0.8	–0.7
Italy	0.6	0.4	0.5	1.2	1.5	1.6

Nominal Long-Term Interest Rates

	2015	2016	2017	2018	2019	2020
U.S.A.	2.2	2.5	2.8	3.0	3.5	3.8
U.K.	1.3	0.7	0.6	1.0	1.4	1.6
Japan	0.3	0.0	0.1	0.0	0.1	0.1
Germany	0.6	0.1	0.4	0.2	0.6	1.0
France	1.0	0.7	0.8	0.7	1.0	1.2
Italy	1.6	1.7	1.9	2.8	3.3	3.5

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

	2015	2016	2017	2018	2019	2020
U.S.A.	93.0	94.0	94.5	94.8	95.0	95.2
U.K.	92.2	81.4	75.5	76.7	74.6	74.3
Japan	56.0	58.4	58.3	58.1	58.4	58.3
Germany	94.7	95.0	94.3	94.9	95.1	95.0
France	96.2	96.0	95.3	95.1	95.5	95.4
Italy	102.1	102.0	101.2	101.1	101.1	101.0

[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)

	2015	2016	2017	2018	2019	2020
U.S.A.[1]	103.08	101.91	102.20	102.40	102.50	102.50
U.K.	1.53	1.35	1.30	1.29	1.30	1.32
Japan	121.11	108.61	112.18	114.10	112.00	112.50
Eurozone	0.90	0.90	0.88	0.85	0.86	0.85

[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