LIVERPOOL INVESTMENT LETTER

August 2019

Cardiff Business School
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Julian Hodge Institute of Applied Macroeconomics

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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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CONTENTS

THE POLICY CHALLENGE WITH MONETARY POLICY A BUSTED FLUSH

It is no wonder that Andrew Bailey has been making speeches about the need for continued Bank independence. Monetary policy has failed comprehensively both here and around the world.

Look at the record. First in the noughties western central banks allowed a big credit boom. Then when it predictably hit the buffers of resource constraints and caused big bank losses, instead of injecting enough liquidity into the banks to make sure of their survival, they feebly — and apparently under political pressure — allowed Lehman to go under, and so caused the Financial Crisis. Then, just when they needed to get banks up on their feet, lending strongly for the recovery, they hit banks with a huge regulative whammy, requiring big rises in expensive equity capital. The recovery and credit growth duly stalled and the deflationary trend took over, with interest rates down to zero. Since then central banks have twisted and turned, rolling out QE, which has made it an easy financial world for governments and big companies, and a tough world for SMEs (loans to them force extra high capital needs) and savers. The result has been weak growth and rising monopoly power, with falling productivity growth.

It is a terrible mess and a dreadful record. Why indeed trust central banks after this? They have brought popular discontent and frustration onto the capitalist system, piling pressure on politicians who favour free markets to keep out the socialist Corbyns and Warrens of this world.

How to get out of this mess? With monetary policy powerless until interest rates get back up to normal levels where world savings do not dwarf world investment, we need a period where fiscal policy is highly expansionary, to shift the world balance back towards a savings shortage and drive up rates. Fortunately, this is the approach both of Trump and Johnson; so both the US and the UK are now embarking on sizeable deficits, with 'austerity' well buried. Unfortunately, the EU is gripped by German fiscal orthodoxy — macroeconomics is barely understood by German politicians, and where they do get some glimmerings, regarded as the work of the devil, and specially designed to transfer German money to foreigners. So, the chances of fiscal expansion in the EU are nil. In Japan too, policy is inert — monetary policy powerless as here and fiscal policy hamstrung by a huge public debt/GDP ratio of 245%; as it is almost entirely domestically held by Japanese households happy to hold money and saving heavily due to ageing, this is not a problem, but the Abe government sees it as one.

Table 1: Summary of Forecast

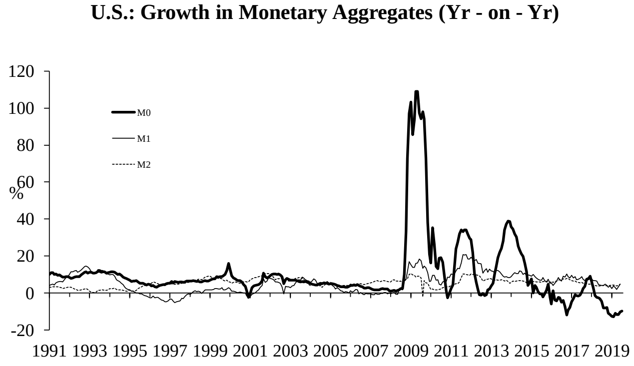
	2016	2017	2018	2019	2020	2021	2022
GDP Growth[1]	1.9	1.8	1.4	1.6	2.0	2.1	2.3
Inflation CPI	1.1	2.6	2.5	2.0	2.1	2.0	2.0
Wage Growth	2.4	2.9	3.1	3.1	3.1	3.0	3.0
Unemployment (Mill.)[2]	0.8	0.8	0.8	0.8	0.7	0.7	0.6
Exchange Rate[3]	82.1	77.4	78.5	76.6	76.1	76.3	75.6
3 Month Interest Rate	0.5	0.4	0.7	0.9	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

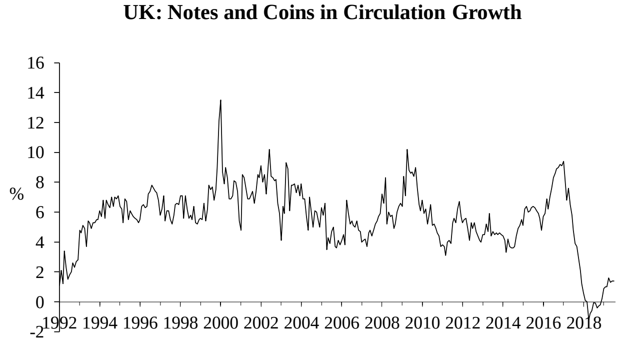
[1]Expenditure estimate at factor cost
[2]U.K. Wholly unemployed excluding school leavers (new basis)
[3]Sterling effective exchange rate, Bank of England Index (2005 = w

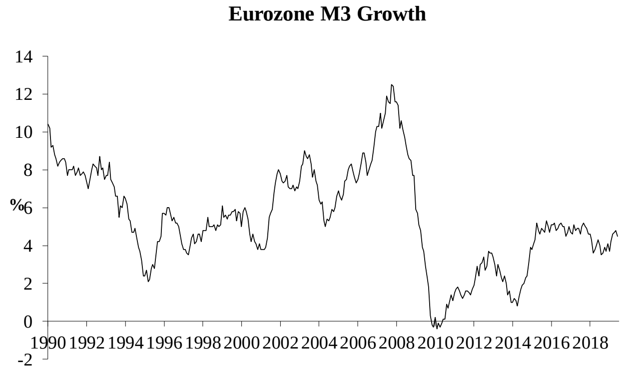
So as so often, the world now depends on the Anglo-Saxons: this time pulling it out of the zero interest world with fiscal activism, so that monetary policy can rise from the ashes.

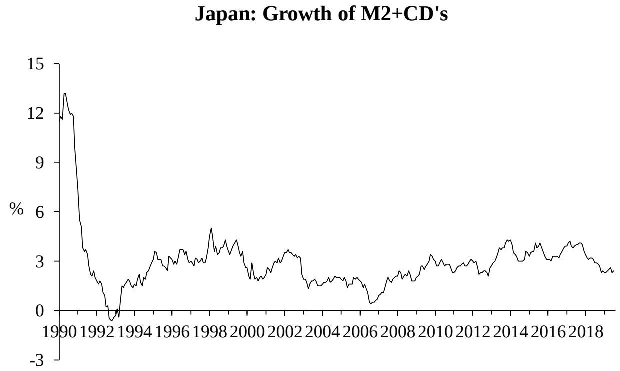
When this happens, there will need to be new leadership at central banks; and it will have to be in tune with popular opinion, after this terrible crisis debacle. It must be very doubtful that they will keep their independence. With so little demonstrated competence, why do they deserve to?

Whoever leads them, central banks will need to follow monetary rules that are guaranteed to stop future crises. We have done research on these rules. We think a highly effective one would both stabilise prices at some steady level and also react strongly to demand shocks, aiming to keep output close to some steady growth path. In this new policy world interest rates would need to vary aggressively in response to boom and slump, much as they did over the long runs of history before the unusually quiet 1990s. With monetary policies like this, crises such as we have just had should be relegated to the footnotes of history, instead of dominating history as in the recent decade.


U.S.: Growth in Monetary Aggregates (Yr - on - Yr)
M0
M1
M2
%
120
100
80
60
40
20
0
-20
1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019


UK: Notes and Coins in Circulation Growth
%
16
14
12
10
8
6
4
2
0
-2
1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018


Eurozone M3 Growth
%
14
12
10
8
6
4
2
0
-2
1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018


Japan: Growth of M2+CD's
%
15
12
9
6
3
0
-3
1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018

FOCUS ON JAPAN

Francesco Perugini

Abe Wins Upper House Election

Prime Minister Abe's Liberal Democratic Party (LDP) and its partner Komeito have won 69 of the 124 seats up for grabs in Japan's Upper House election last month. Given the 70 seats they hold in the uncontested section of the chamber, this amounts to a simple majority of the total 245 seats, so the ruling coalition fell short of the two-thirds "super majority" needed to bring amendment to the nation's pacifist constitution. "We've won a majority in this election. At the minimum, that's an instruction to 'get on and debate it', so I hope the debate in the Diet on constitutional reform will make progress," Abe said at a press conference.

The result cements the status quo in Japanese politics, with Mr Abe's government firmly in charge of both houses of parliament. It also showed the difficulty Japan's divided opposition has in mounting a challenge at a moment when the economy is improving and the country is embroiled in a dispute with South Korea over wartime history, as well as difficult trade talks with the US. "It's clear the ruling parties have won a majority," said Akira Amari, a close ally of Mr Abe who ran the election campaign for his LDP. "Our next goal is to match the 56 seats we won three years ago."

With the election behind it, the Abe administration now has a number of politically sensitive issues coming down the pipeline. There's the ongoing dispute between Japan and South Korea over Japan's decision to revise its export control laws, as well as other outstanding historical disputes. In addition, the US and Japan are looking to enter the next round of negotiations toward a US-Japan free trade agreement. A possible reshuffle of the prime minister's cabinet may be in the works as well, which could affect how some of these negotiations pan out. On the economic front, there are several issues to be addressed too. Japan's fiscal situation is the worst among advanced nations. Abe is looking to further increase Japan's consumption tax from 8% to 10% later this year, which can be domestically unpopular for an economy that continues to stagnate and a population that continues to age. Therefore, it is imperative to steadily carry out reforms in fiscal spending and revenue, thus ensuring a path to putting fiscal balance on a sound footing. Spending cuts are indispensable to resolving a huge amount of fiscal deficit. Reining in social security spending, which accounts for one-third of the national budget, is the biggest task to be tackled.

Abe's economic prescription of unprecedented monetary easing combined with government spending and regulatory reform has achieved only partial success since he returned to office in 2012. In the five years from 2012 — when Abe returned to power — to 2017, Japan's nominal GDP grew 10.9% and an additional 2.51 million people found jobs. Since 2015 onward, the number of people on regular full-time employment rose by 1.35 million. Corporate profits expanded 1.7 times over the five-year period, while the number of bankruptcies fell by 28%. The unemployment rate hovers around 2.5% — the lowest level among major industrialized economies. The inflation rate has reached around 1%, making it certain that Japan is no longer in a state of deflation.

However, warning signals are flashing over the economy following an extended boom cycle. "One factor is that the boom cycle has already lasted over a fairly long period. What's more, there are growing fears over the course of the world economy due to the trade conflict between the United States and China", said Heizo Takenaka, a professor emeritus of Keio University, who served as economic and fiscal policy minister in the Cabinet of Prime Minister Junichiro Koizumi from 2001 to 2005. The government estimated that Japan's economy would grow 1.8% in fiscal 2018. As it turned out, growth for the fiscal year came to only 0.7%. The government initially forecast a 1.3% growth for fiscal 2019, but that target was deemed extremely difficult to achieve in view of the slowdown in China and its Asian neighbours as well as the consumption tax hike planned in October.

Under these circumstances, a grave problem may arise. The demand-supply gap can begin to expand again, adding deflationary pressure on the economy. A key agenda of Abenomics has been to overcome deflation, and inflation has somehow been pushed up to the positive territory. However, the current conditions threaten to cancel that achievement. To prevent that from happening, the administration needs to exert political leadership to carry out larger-scale policies than have been implemented to push forward structural reforms such as deregulation — where Abenomics has so far been lagging — and aggressive fiscal measures.

The Abe administration has secured a stable political footing, but is now confronted with major challenges in its economic policies. The question is whether the administration can launch a new policy initiative to change the economy's landscape. That is indeed what's required of the administration of Abe, now in his third three-year term as LDP president, to avoid becoming a lame duck.

The fundamental problem Japan and Abe faces is that 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. This only leaves fiscal policy as an instrument to raise demand, and help to push interest rates up away from the zero bound. 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 Abe government to enact. In fiscal policy it is held back by its massive public debt ratio (now close to 250% of GDP) and continuing deficits. But it needs to view this more as a factor that could help to push up interest rates if fiscal policy became more expansionary. This is what is needed. Hence it needs to stop its plan of raising the consumption tax and instead increase its deficit until interest rates rise again while the economy hits capacity raiding inflation. Difficult times and ongoing stagnation require new thinking.

MARKET DEVELOPMENTS

What with Trump's tariff war and zero interest rates, world growth is weak and prices deflationary. But US and UK fiscal expansionism shine like good deeds in a naughty world. With raw materials in large excess supply, the resulting demand expansion should not hit resource buffers for a long time; interest rates should rise at last. So, equities still dominate bonds for prospective returns.

Table 1: Market Developments

	Market Levels		Prediction for Jun/Jul 2020	
	Jul 3	Aug 8	Previous Letter	Current View
Share Indices				
UK (FT 100)	7609	7286	10136	9705
US (S&P 500)	2996	2938	3352	3288
Germany (DAX 30)	12616	11845	19845	19633
Japan (Tokyo New)	1580	1499	2096	1989
Bond Yields (government)				
UK	0.69	0.44	3.00	3.00
US	1.95	1.65	3.80	3.80
Germany	−0.45	−0.45	1.00	1.00
Japan	−0.15	−0.22	0.10	0.10
UK Index Linked	−2.02	−2.10	1.00	1.00
Exchange Rates				
UK ($ per £)	1.26	1.21	1.32	1.32
UK (trade weighted)	76.54	74.44	76.1	76.1
US (trade weighted)	100.98	101.77	102.5	102.5
Euro per $	0.89	0.89	0.88	0.88
Euro per £	1.11	1.08	1.16	1.16
Japan (Yen per $)	107.77	106.22	112.5	112.5
Short Term Interest Rates (3-month deposits)				
UK	0.77	0.77	2.10	2.10
US	2.39	2.20	3.00	3.00
Euro	−0.29	−0.43	0.00	0.00
Japan	0.05	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	2.1	2.1	29.00		36.80
US	1.99	1.9	2.1	7.90	−8.79	5.10
Germany	3.30	1.6	1.7	54.00	−3.57	57.03
Japan	1.90	0.5	1.2	31.00	−15.22	19.38
UK indexed[2]	−2.10		2.1	5.00		5.01
Hong Kong[3]	2.60	5.6	2.1	−17.00	−8.79	−15.69
Malaysia	3.30	4.8	2.1	43.00	−8.79	44.41
Singapore	3.50	2.7	2.1	10.00	−8.79	9.51
India	1.40	8.0	2.1	19.00	−8.79	21.31
Korea	1.10	2.9	2.1	−23.00	−8.79	−25.89
Indonesia	2.20	5.4	2.1	26.00	−8.79	26.91
Taiwan	2.80	2.1	2.1	12.00	−8.79	10.51
Thailand	3.20	3.8	2.1	27.00	−8.79	27.31

Bonds: Contribution to £ yield of: −

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	0.44	−25.60		−25.16
US	1.65	−16.50	−8.79	−23.64
Germany	−0.45	−14.50	−3.57	−18.52
Japan	−0.22	−3.20	−15.22	−18.64

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.77		0.77
US	2.20	−8.79	−6.69
Euro	−0.43	−3.57	−4.00
Japan	0.00	−15.22	−12.22

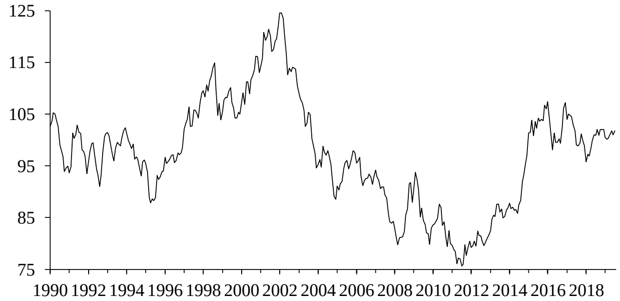
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

Table 3: Portfolio(%)

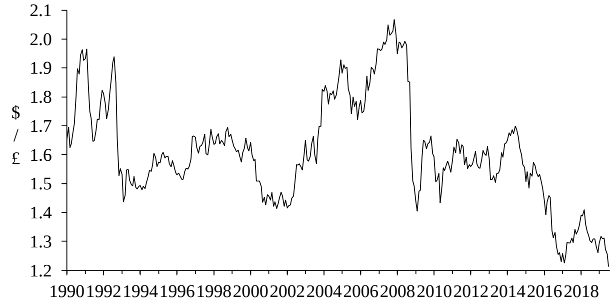
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	July Letter	Current View	July Letter	Current View	July Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-	-	-	-	-
German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

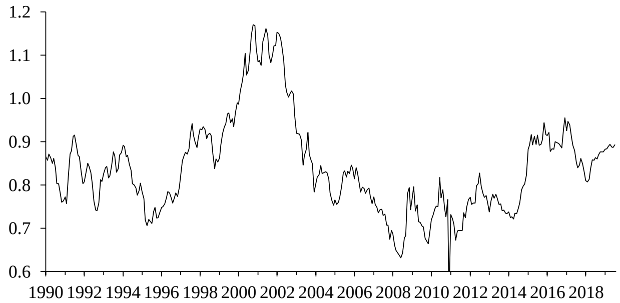
US : Trade Weighted Index
(Bank of England 1990 = 100)



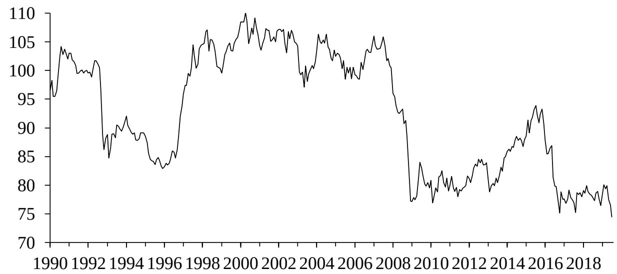
UK: Dollars Per Pound Sterling



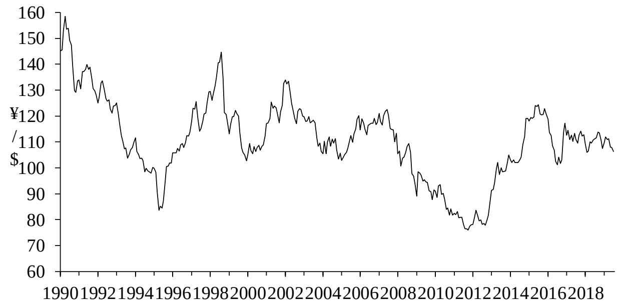
Euro per US dollar



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

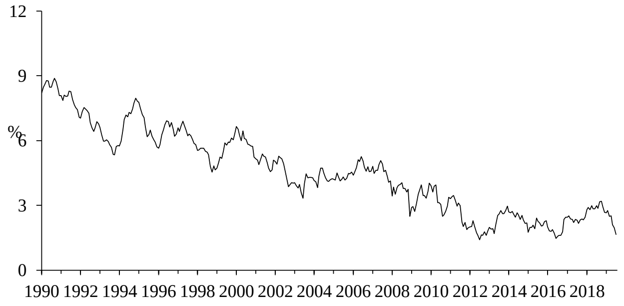


Japan : Yen Per U.S. Dollar

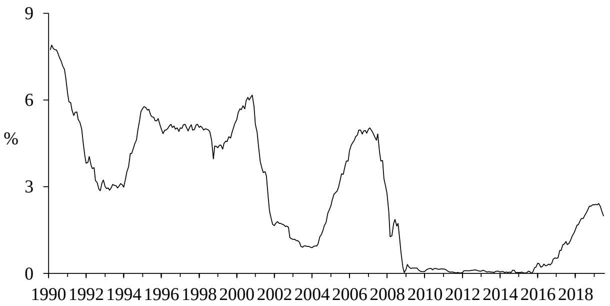


GOVERNMENT BOND MARKETS

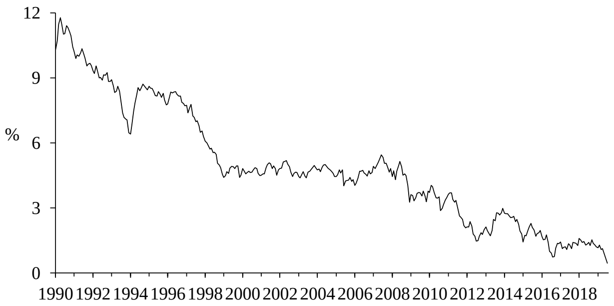
U.S.: Yield on Long-Term Government Bonds



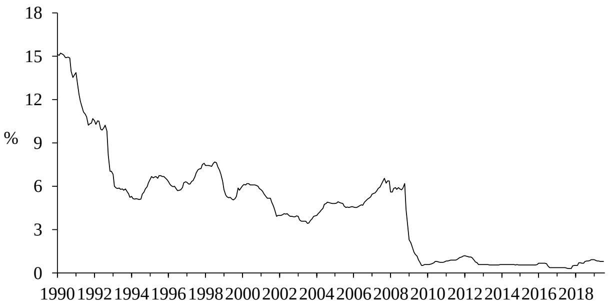
U.S. : 3-Month Treasury Bill



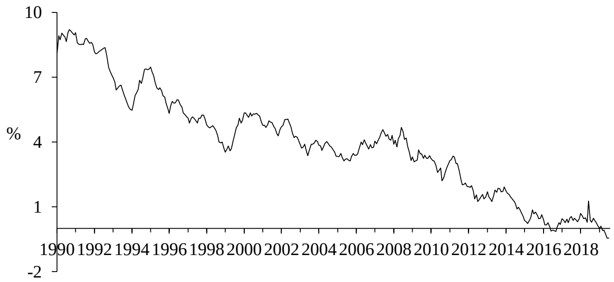
U.K.: Yield on Long-Term Government Bonds



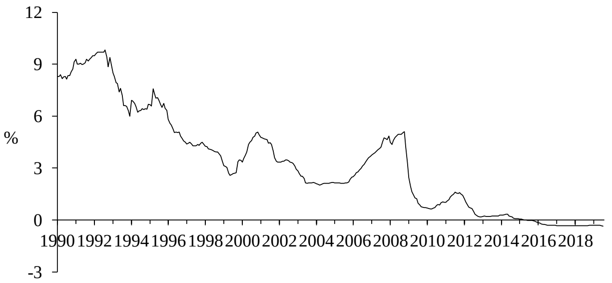
U.K. : 3-Month Certificate of Deposit Rate



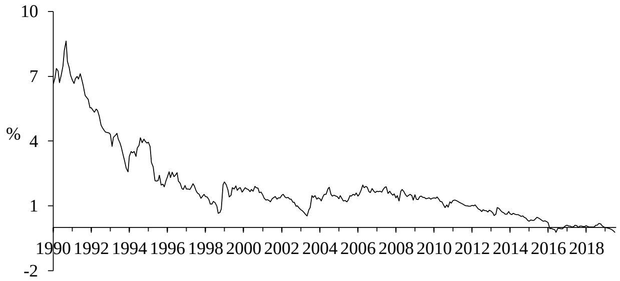
Germany: Yield on Public Authority Bonds



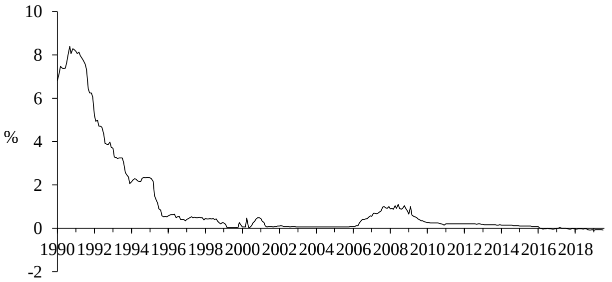
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

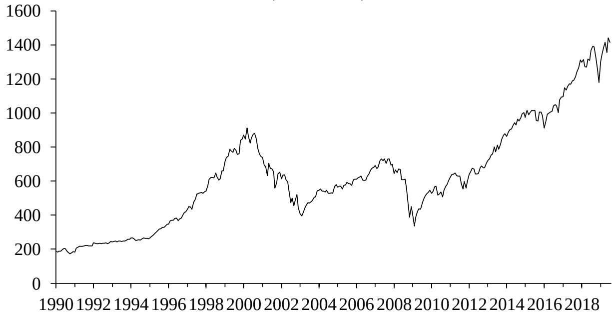


Japan : 3-Month Money Market Rate

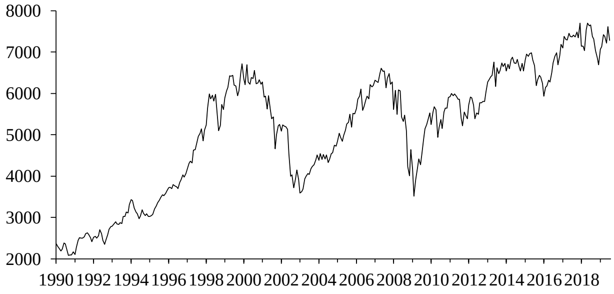


MAJOR EQUITY MARKETS

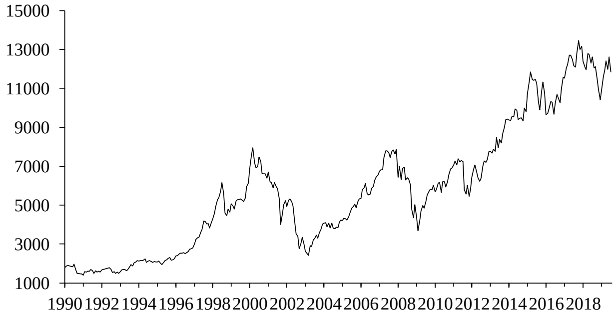
U.S. : S & P 400 Industrial
(1985=100)



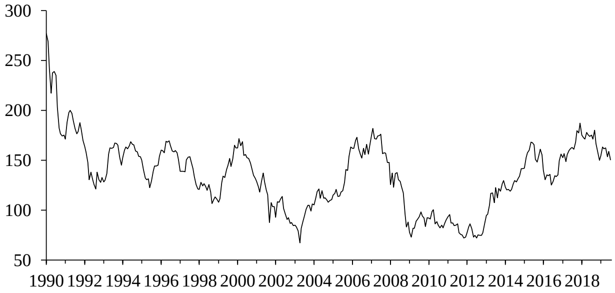
U.K. : FTSE-100 Index
(10 April 1962=100)



Germany : DAX 30



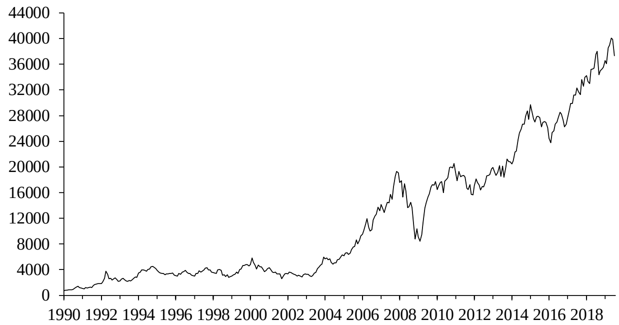
Japan : Tokyo S.E. New
(1985=100)



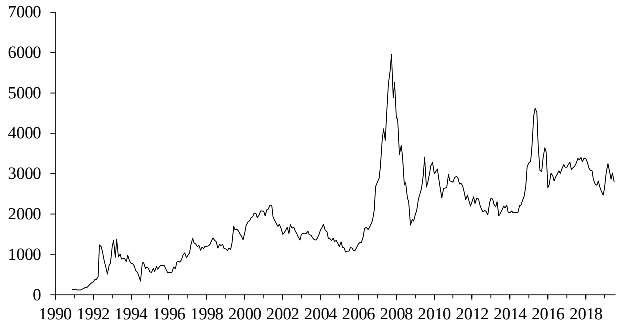
EMERGING MARKETS

Anupam Rastogi

India: BSE Sensitive



China: SSE Composite Index



India

The International Monetary Fund has decreased their forecast of growth for India in 2019 and 2020 by 0.3% for both years, saying its GDP will now grow respectively at the rate of 7% and 7.2% reflecting a weaker-than-expected outlook for domestic demand. India will still be the fastest-growing major economy of the world. Asian Development Bank has also pared its Indian growth forecast. This is in line with the estimates by the Reserve Bank of India (RBI) as well as the finance ministry. GDP growth in India in the fourth quarter of 2018–19 slowed down more than expected to 5.8% from 6.6% in the previous quarter.

The monsoon has been normal so far and agriculture is expected to grow at a healthy rate in 2019–20. This would kick start private consumption. There is a pall of gloom spread over the country as the budget of the newly elected government had no sops for the market and ultra-rich have to pay additional income tax.

However, the government is hopeful that the several structural reforms undertaken in the last five years would improve productivity and thereby contribute to a high GDP growth going forward. Several big-ticket infrastructure projects that are in the pipeline would be completed in the next two-three years.

India’s central bank has lowered its key lending rate three times this year, but the benefits aren’t being passed on to borrowers, as financial firms are still reluctant to lend as they struggle with bad loans. As a result, Indian consumers and companies have been spending less over the past year. A pair of defaults and failures by nonbank lenders in India has cut down on consumer and business credit.

The RBI expects retail inflation to be around 3% for the April to September period of 2019–20 and is expected to cut policy rates for the fourth consecutive time in August.

India’s exports shrank for the first time in nine months in June as global trade tensions hit shipments and the country braced for the impact of the US withdrawing some benefits. Exports shrank 9.7% in June to $25 billion while imports declined 9.06%. The trade deficit narrowed to $15.3 billion from $16.6 billion a year ago. India has benefitted modestly from the US-China trade war by exporting more items to China. The rupee is fairly stable around Rs 69 to a dollar.

The markets are in a tizzy as tax changes in the budget are going to put certain category of foreign investors in a higher tax bracket. Foreign Portfolio Investors have pulled out more than US$ 2 billion from domestic equities in the month of July making the Indian stock market the worst equity performer among the emerging markets.

One of the initiatives of the government is to turn to international markets, which could have positive knock-on effects for corporate borrowers. But in all likelihood, the proposal is going to be shelved. The idea was that sovereign bond issuance improves the ability of corporations to issue debt in international markets, allowing investors to better price private-sector debt and aid liquidity. That reduces yields and corporate bid-ask spreads.

	18–19	**19–20**	**20–21**	**21–22**	**22–23**
GDP (%p.a.)	6.8	7.0	7.2	7.3	7.4
WPI (%p.a.)	3.9	3.9	4.0	4.0	4.0
Current A/c(US$ bill.)	-70.0	-64.0	-64.0	-65.0	-65.0
Rs./$(nom.)	79.5	69.5	71.0	72.0	72.5

China

The economy grew by 6.2% in the second quarter, down from 6.4% in the period before. The growth was helped by real estate investment in June. It rose 10.1% from a year earlier. China’s trading partners and financial markets are closely watching the health of the world’s second-largest economy as the Sino-U.S. trade war gets longer and costlier, fuelling worries of a global recession. The talks in the last week of July showed a wide chasm between the US and

China. Retaliatory measures taken by one party after another and discovery of secret military pacts by China suggests that the trade war is likely to escalate into an ugly cold war.

The Chinese economy is still in the middle of a downturn cycle. The worst hasn't come yet as there is slack domestic demand and government has reduced subsidies to the industry. It seems that the country's state-led growth model is running out of gas. A recession or crisis is not imminent, but demographic changes will slow down the economic growth sooner than expected.

Expansionary fiscal policy and largely accommodative monetary policy may stabilize economic growth in the second half of 2019. In June 2019, the Chinese government issued new rules allowing local governments to use special-purpose bonds as project capital for certain infrastructure investments, widening their financing options and thereby supporting infrastructure investment.

Food prices in June were up 8.3%, accelerating from May's 7.7%. Combined, the gains in fruit and pork prices boosted the CPI to 1.2%. The producer price index (PPI) — an important barometer of the industrial sector that measures the cost of goods at the factory gate — came in at zero in June, down from a 0.6% rise in May. Beijing may be forced to further loosen monetary policy, even though that could push up debt levels. After staying roughly stable last year, debt reached 247% of China's $13 trillion economy at the end of March, up 5 percentage points from the end of 2018.

China's exports and imports both fell in June. Exports fell by 1.3% year-on-year after tariffs on US$200 billion of Chinese goods were raised from 10% to 25% by Washington in May. Imports, meanwhile, continued to slump, falling 7.3% in June to US$161.8 billion, according to the government sources.

Mr. Li promised a "broadly stable" value of yuan. He reiterated Beijing's stance that China wouldn't competitively devalue the currency. The yuan is roughly flat this year against the U.S. dollar after weakening in May when trade talks fell apart. The offshore yuan rate is approximately 6.9 per US dollar.

Cybersecurity proposals by China have made U.S. businesses worried that the draft regulations represent additional barriers to the Chinese market, a concern that has complicated U.S.-China trade talks.

The new rules and standards, floated over the past two months, are considered draconian by many countries. To make things worse, China has asked the US to remove its "black hand" from Hong Kong. Beijing had previously been less specific in blaming other countries for demonstrations that have drawn hundreds of thousands of people concerned with proposed legal changes that would erode the city's autonomy.

Korea: Composite Index

	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	60	40	20	0
Rmb/$(nom.)	6.8	6.9	7.0	7.1	7.1

South Korea

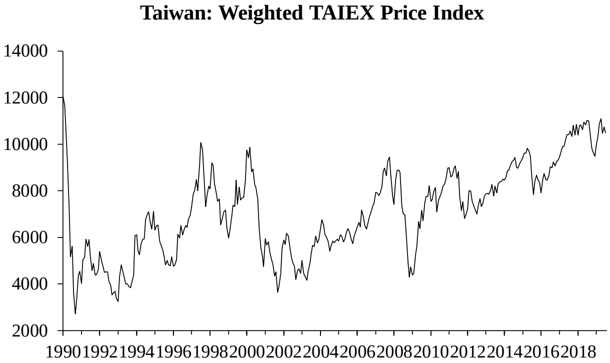
South Korea's economic growth picked up strongly in the second quarter largely due to the government's active spending and increase in exports to the US. Gross domestic product grew by 1.1% in the quarter ended in June from the preceding quarter — the fastest pace since the third quarter in 2017. Year-on-year, the economy expanded 2.1% in the second quarter, faster than a 1.7% gain in the previous three months. Industrial output fell by 2.9% year on year in the month of June, which was worse than the 1.5% contraction expected in the month. The government is also stepping up fiscal stimulus with a roughly $6 billion extra spending, awaiting approval from the legislature, after it already made the biggest national budget increase in a decade for this year.

Inflation remained well below the 2% target. The central bank has lowered its inflation forecasts to 0.7% for this year. The Bank of Korea cut interest rates the seven-day repurchase rate to 1.5% from 1.75%for the first time in three years.

Merchandise exports returned to growth of 2.3% in the April-June period after a 3.2% contraction in the first quarter. But export prospects remain uncertain as Japan has curbed chip and display production materials shipments to South Korea, which is related to a diplomatic row over the compensation of forced labour during World War II. What began as an obscure, tech-supply trade fight between Tokyo and Seoul has now erupted into a boycott mushrooming across South Korea, a backlash targeting Japanese apparel, travel and electronics. Most South Koreans are avoiding Japan-made products.

	18	19	20	21	22
GDP (%p.a.)	2.7	2.0	2.5	2.7	2.7
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	1190	1200	1200	1200

Taiwan



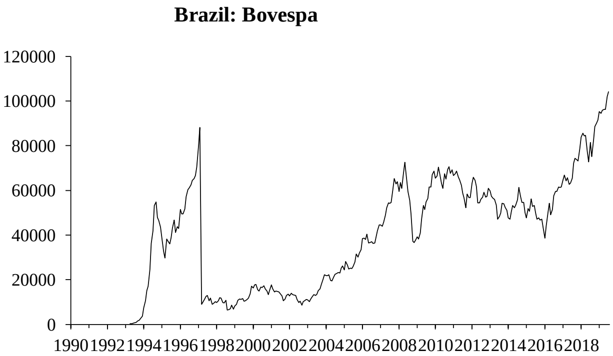
We maintain our forecast for Taiwan's 2019 economic growth rate at 2.1% as the outlook for the domestic economy remains healthy, despite uncertainties arising from trade conflicts among some of the world's major economies. As many China-based Taiwanese businesses have invested more at home amid the trade dispute between the United States and China since the second half of 2018, imports of capital equipment in the first half of 2019 have seen a growth of 15.8% year-on-year, with machinery and semi-conductor production facilities posting growth of 20% and 40%, respectively. This indicates that investment at home has been warming up, with investment from the government and private sector, both set to expand noticeably this year. Government investment is expected to increase by 10.15%.

Unlike other Asian central banks, Taiwan's central bank is in no hurry to ease its monetary policy further. Its rate stands at 1.375%. Taiwan CPI inflation is low at 0.86% year-on-year.

Taiwanese export orders reduced for the eighth month in a row. The speed of reduction is slowing slightly from the start of the year, but it's falling nonetheless. Taiwan's exports to the U.S. rose amid the U.S.-China trade war.

	18	19	20	21	22
GDP (%p.a.)	2.6	2.1	2.4	2.4	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



Brazil's economy shrank 0.2% in the first quarter and continues to be on downward path in the second quarter as well. The economy has been struggling to recover from its worst recession on record in 2015 and 2016. However, the International Monetary Fund expects economic growth of 0.8% in 2019. In order to give a fillip to the economy, President Jair Bolsonaro will give Brazilians as much as 30 billion reais ($8 billion) in funds, normally set aside for the unemployed in an effort to spur the country's moribund economy. Additionally, as much as 12 billion reais will be released from the funds in 2020. With unemployment above 12% and little investment from government and business, there is little hope for economy to grow.

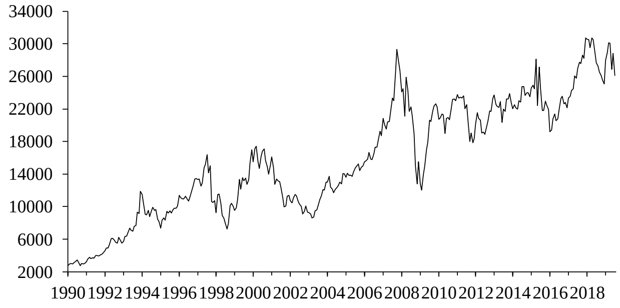
The inflation target for 2019 is 4.25% with a tolerance range between 2.75% and 5.75%. Inflation may undershoot the target. Hence, Brazil's central bank has cut its benchmark interest rate to a new low of 6%. We expect further cuts of 0.25 percentage points in this year's Central Bank's Monetary Policy Committee (Copom) meetings in September and October. Thus, the Selic rate will be 5.5% by the end of the year.

The mood is changing in the country and for good. The lower house of Brazil's Congress has passed by a wide margin a sweeping pension reform aimed, at ensuring fiscal stability for years to come. The bill, the centrepiece of Mr. Bolsonaro's plan to revive the Brazilian economy, alters the constitution and so must still be approved by the lower house in a second vote before it is sent to the Senate. Each vote requires a three-fifths majority for approval. The government has estimated the overhaul could save Brazil's pension system as much as $265 billion over 10 years. That would reduce Brazil's ballooning budget deficit and would avoid a potentially deep fiscal crisis in the country.

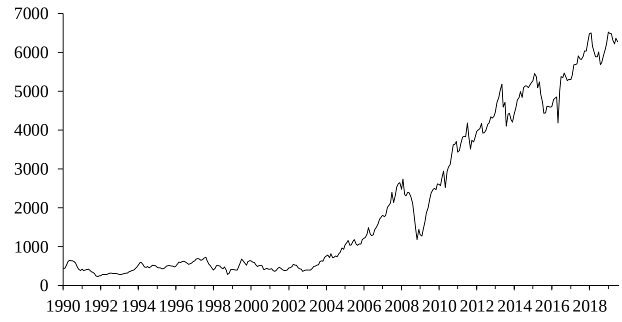
	18	19	20	21	22
GDP (%p.a.)	1.1	0.0	2.2	2.5	2.5
Inflation (%p.a.)	3.8	4.0	3.9	4.0	4.0
Current A/c(US$ bill.)	-14.6	-16.0	-16.0	-16.0	-16.0
Real/$(nom.)	3.8	3.9	4.0	4.1	4.1

Other Emerging Markets

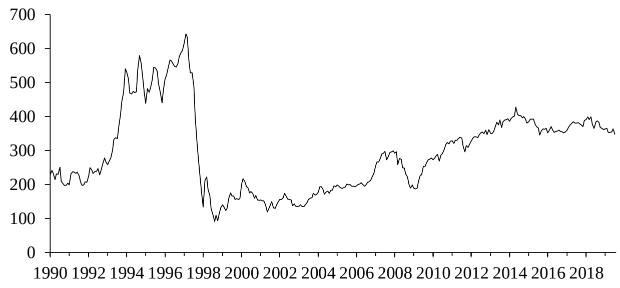
Hong Kong: FT-Actuaries



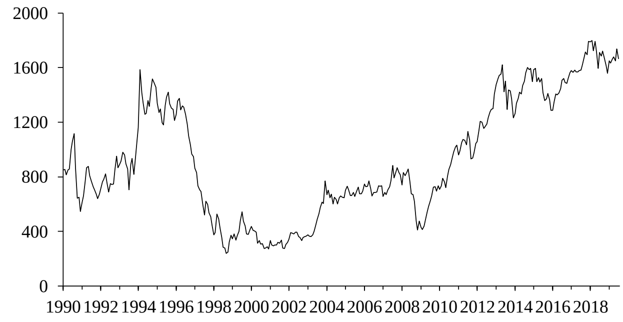
Indonesia: Jakarta Composite



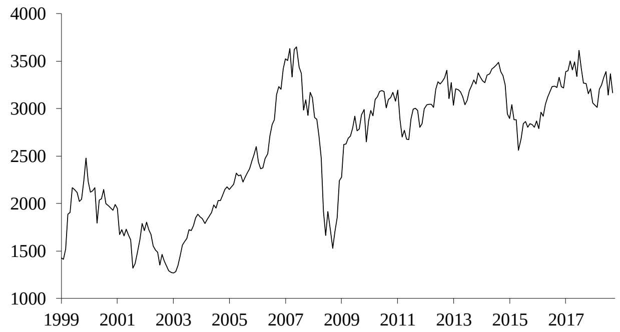
Malaysia: FT-Actuaries (US$ Index)



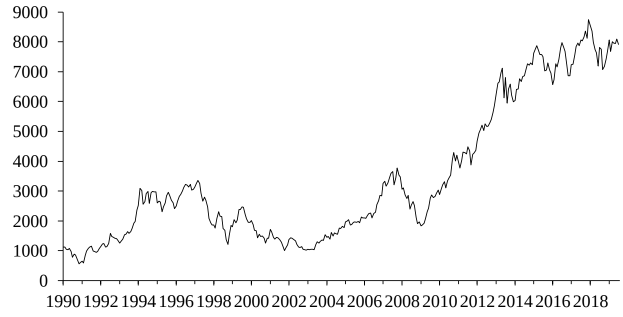
Thailand: Composite Index



Singapore: Straits Times Index

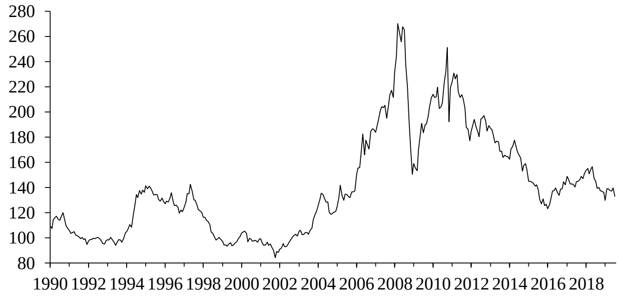


Philippines: Manila Composite

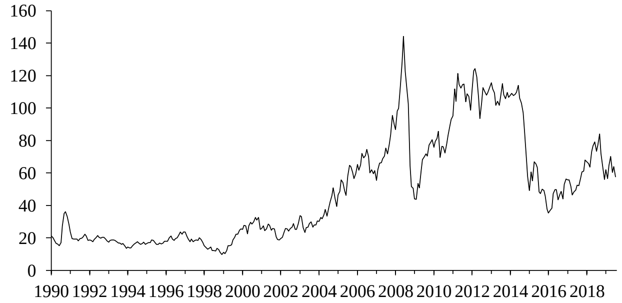


COMMODITY MARKETS

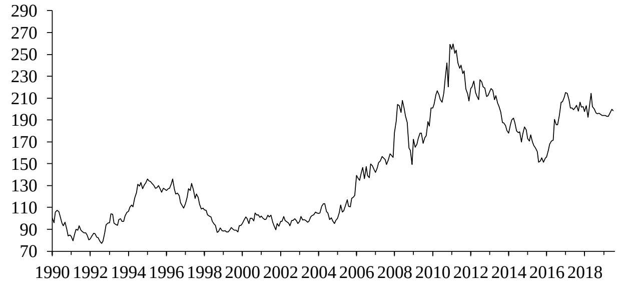
Commodity Price Index (Dollar)
(Economist, 2000=100)



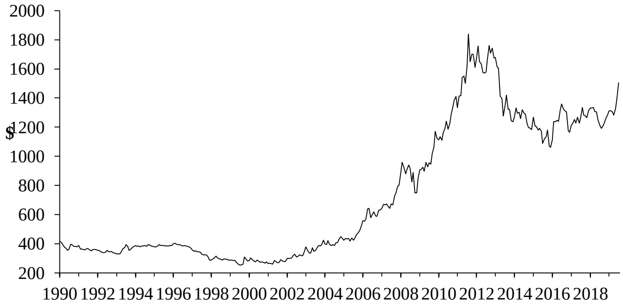
Oil Price: North Sea Brent (in Dollars)



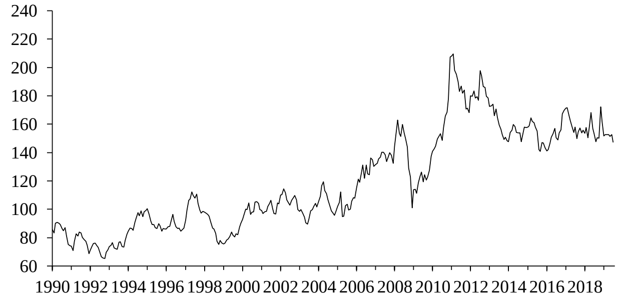
Commodity Price Index (Sterling)
(Economist, 2000=100)



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