LIVERPOOL INVESTMENT LETTER

June 2019

Cardiff Business School
Ysgol Busnes Caerdydd

Julian Hodge Institute of Applied Macroeconomics

supported by

HODGE

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

Editorial and Research Direction: Patrick Minford†.

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

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

† Cardiff Business School

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

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

ISSN 0951-9262

LIVERPOOL INVESTMENT LETTER

June 2019

CONTENTS

NEW GOVERNMENT — NEW OUTLOOK

With the resignation of Theresa May as Conservative leader, it is possible to forecast a new direction for UK policy under a new leader. Many point out that Parliament will not change without another election, but this misses the point that the original Conservative/DUP coalition behind the Lancaster House agenda can form again. A new leader can unite this coalition behind a pragmatic agreement with the EU. Much of the current agreement poses no difficulties. However, the future trade relationship needs to be agreed in advance, at least in principle, to avoid any risk of the notorious backstop coming into play. Many also say that the EU will not cooperate in this agenda. However, an absence of agreement could well lead to no deal with the EU facing the loss of the £29 billion UK contribution over the final two years of the 7-year EU budget. Parliament might well oppose no deal but it cannot stop the EU imposing it de facto. For the EU this is a major risk; with the new constellation of power both in the EU Parliament and in the new EU governing Council veering towards a more decentralised EU, doctrinaire positions of the past will give way to cooperative pragmatism.

Common-sense therefore suggests there will be a new Agreement that will get through Parliament. It will centre on a free trade agreement with the EU of the Canada+ type, to come into force at the end of the transition, with a ‘soft’ Irish border within it.

This will finally resolve the unending Brexit uncertainty and open up the post-Brexit policy agenda in the UK. With an EU FTA side by side with FTAs with the rest of the world the UK will move to comprehensive free trade relations; not with ‘either the EU or the rest’ but with ‘both the EU and the rest’. As we have said throughout, this will bring down UK prices and stimulate competition, with gains to GDP of around 4%. It will also open up a new regulatory agenda to strengthen innovation and competition, promising further gains in GDP. With the tax revenue from these gains, there will be scope for cuts in business and personal tax rates, as well as extra spending on public services. Furthermore, government can exploit negative real interest rates to run continued deficits raising debt in the short run, as part of a stimulus to push up demand and with it interest rates away from the zero lower bound.

Table 1: Summary of Forecast

	2016	2017	2018	2019	2020	2021	2022
GDP Growth[1]	1.9	1.8	1.5	1.9	2.0	2.1	2.3
Inflation CPI	1.1	2.6	2.4	2.2	2.1	2.0	2.0
Wage Growth	2.4	2.9	2.7	2.8	2.9	2.8	2.8
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	0.8	1.3	2.4	3.1	3.1
5 Year Interest Rate	0.7	0.6	1.2	2.5	3.3	3.8	3.8
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

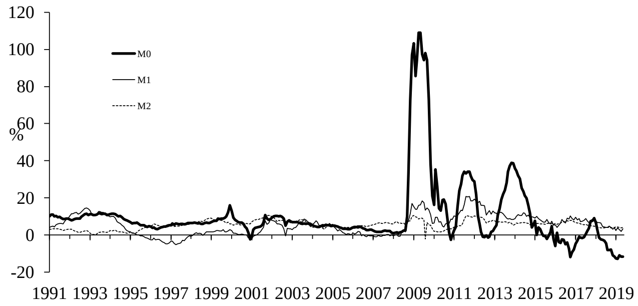
All this promises a radical change in the economic outlook towards faster growth.

The international background and Trump-China tariff war

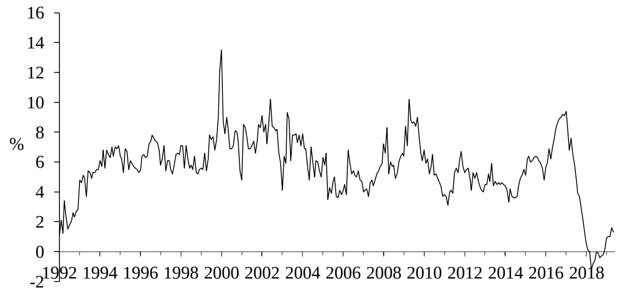
The tariff and sanctions war rumbling on is likely to slow the world economy. With the next US Presidential election due in November 2020, President Trump will want this settled soon; it must be hoped that China will agree to cooperate in adhering to WTO free trading norms so that there can be a reset of good world trading behaviour.

Any growth slowdown will not cause a world recession. With raw material capacity plentiful and prices low, the main cause of recession, which is materials running out, will be absent for the foreseeable future, so growth will carry on in the 3–4% range, which is sustainable for a decade at least.

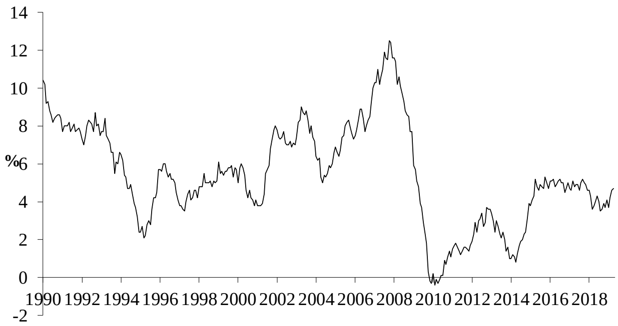
U.S.: Growth in Monetary Aggregates (Yr - on - Yr)



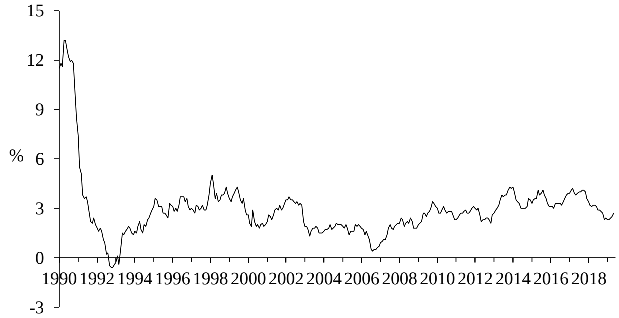
UK: Notes and Coins in Circulation Growth



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

The Japanese Economy Expands but Risks Remain

Japan's economy saw a surprise 2.1% year-on-year expansion in the first quarter of 2019, beating the expectations of economists who had anticipated either a flat line or a fall. GDP growth follows a revised 1.6% expansion for the October–December period of 2018.

Public investments rose 6.2% y-o-y for the first gain in five quarters, with the implementation of extra budget spending on anti-disaster measures in response to a spate of natural disasters last year. However, there are clearly still jitters in the private sector: the data found that capital expenditure fell 1.2%. "Due to the slowdown in overseas economies, mainly in China, sentiment among Japanese companies especially manufacturers, as well as households, is becoming more and more cautious," said a Cabinet Office official. Consumer spending, which accounts for 60% of GDP, edged down 0.4% y-o-y for the first fall in two quarters.

As for external trade, exports plunged by 9.4% y-o-y due to sluggish shipments of semiconductor production equipment and electronic devices to China, whose economy is showing more signs of slowdown due to the bitter exchange of retaliatory tariffs with the U.S. In trade statistics, exports have declined year-on-year for four months in a row to March. Japanese manufacturers that have relied heavily on exports to China are being forced to cut back on domestic output, mainly of electronic devices. What highlighted the sluggish domestic demand was the 17.2% y-o-y decline of imports — whose fall statistically pushes up GDP. The dip in crude oil and natural gas imports — key ingredients of domestic industrial output — has led to the steepest fall in imports since just after the collapse of Lehman Brothers in 2008. Consequently, a 0.4 percentage point gain from the previous quarter in external demand accounted for much of the 2.1% y-o-y GDP rise.

The GDP growth for the two consecutive quarters does not warrant any optimism over the course of the economy, as other indicators point to increasing signs that it may be losing steam as uncertainties prevail concerning overseas demand with the intensifying trade war between the US and China. "All of the most important components of GDP are negative," said Hiroaki Muto, chief economist at Tokai Tokyo Research Center. "The economy has already peaked out, so we are likely to have a mild recession", he said. "No one would object to delaying the sales tax hike". Takuji Okubo, chief economist for Japan Macro Advisors, a research firm said that is no reason to cheer, "as weak imports should signify weak domestic demand".

There is a series of alert signs over the economy. The combined net profits of companies listed in the first section of the Tokyo Stock Exchange for the 12 months to March fell 7.3% for the first decline in three years — and the steepest fall since Prime Minister Shinzo Abe returned to government in December 2012. Listed companies reportedly expect to post a 3% fall in their combined net profits in the year to last March, the first such decline in three years. Moreover, a key composite index of economic indicators in March, released last month, showed that the state of the economy is "worsening" for the first time in more than six years. The last time the same description was used was in January 2013 — right after Prime Minister Shinzo Abe's return. Earlier the government claimed that the extended boom cycle on Abe's watch had become the longest in postwar Japan. But the March index is yet another indication that the boom may have stalled and the economy may have entered a downward path — although there are mixed views of the longer-term trend.

Nevertheless, government officials remain bullish that the strong fundamentals of the economy remain unchanged. True, the labour market continues to be the tightest in decades, with the average ratio of job openings to job seekers in fiscal 2018 to last March rising for the ninth year in a row to 1.62, the second-highest since comparable data became available. There is a close watch on whether the government will change its assessment "that the economy is on a path of moderate recovery" in its next monthly report. Meanwhile, speculation continues that the slowing economy may prompt the government to once again postpone the consumption tax hike to 10%, although officials are right to deny that the economy is facing a major economic shock to the tune of the 2008 Lehman shock — without which the Abe administration has vowed to go ahead with the tax hike as planned in October.

The government's official assessment of the economy aside, the growing uncertainty in overseas demand, with no end yet in sight to the trade war between the world's largest and second-largest economies, makes it incumbent on Japan to take more steps to spur domestic demand to shore up its economy. After six years of Abenomics, in which the Abe administration and the Bank of Japan have explored mainly fiscal and monetary steps to revive the economy, the options may be narrowing in these policy areas. It's time that more emphasis was placed on structural reforms and deregulation to explore fresh avenues of the economy's growth.

MARKET DEVELOPMENTS

In spite of the tariff war turbulence, world growth will continue. Fiscal expansion exploiting current negative real interest rates will push interest rates away from the zero bound, lowering bond prices. This is still an environment favouring the long term prospects of equities.

Table 1: Market Developments

	Market Levels		Prediction for May/Jun 2020	
	May 3	**Jun 10**	**Previous Letter**	**Current View**
Share Indices				
UK (FT 100)	7381	7220	9757	9617
US (S&P 500)	2940	2816	3290	3151
Germany (DAX 30)	12413	11981	20394	18846
Japan (Tokyo New)	1618	1530	2066	2030
Bond Yields (government)				
UK	1.12	0.86	3.00	3.00
US	2.51	2.11	3.80	3.80
Germany	−0.09	−0.30	1.00	1.00
Japan	−0.07	−0.11	0.10	0.10
UK Index Linked	−1.83	−1.96	1.00	1.00
Exchange Rates				
UK ($ per £)	1.31	1.27	1.32	1.32
UK (trade weighted)	79.86	77.47	76.1	76.1
US (trade weighted)	101.06	101.76	102.5	102.5
Euro per $	0.89	0.89	0.88	0.88
Euro per £	1.17	1.13	1.16	1.16
Japan (Yen per $)	111.25	108.01	112.5	112.5
Short Term Interest Rates (3-month deposits)				
UK	0.83	0.89	2.10	2.10
US	2.62	2.55	3.00	3.00
Euro	−0.35	−0.33	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	−3.68	10.21
Germany	3.30	1.6	1.7	54.00	0.74	61.34
Japan	1.90	0.5	1.2	31.00	−8.00	26.60
UK indexed[2]	−1.69		2.2	5.00		5.15
Hong Kong[3]	2.60	5.6	2.1	−17.00	−3.68	−10.38
Malaysia	3.30	4.8	2.1	43.00	−3.68	49.52
Singapore	3.50	2.7	2.1	10.00	−3.68	14.62
India	1.40	8.0	2.1	19.00	−3.68	26.62
Korea	1.10	2.9	2.1	−23.00	−3.68	−20.78
Indonesia	2.20	5.4	2.1	26.00	−3.68	32.02
Taiwan	2.80	2.1	2.1	12.00	−3.68	15.62
Thailand	3.20	3.8	2.1	27.00	−3.68	32.42

Bonds: Contribution to £ yield of: −

	Redemption Yield	Changing Nominal Rates	Currency	Total
UK	0.86	−21.40		−20.54
US	2.11	−11.90	−3.68	−13.47
Germany	−0.30	−13.00	0.74	−12.56
Japan	−0.11	−2.10	−8.00	−19.21

Deposits: Contribution to £ yield of:

	Deposit Yield	Currency	Total
UK	0.89		0.89
US	2.55	−3.68	−1.13
Euro	−0.33	0.74	0.41
Japan	0.00	−8.00	−8.00

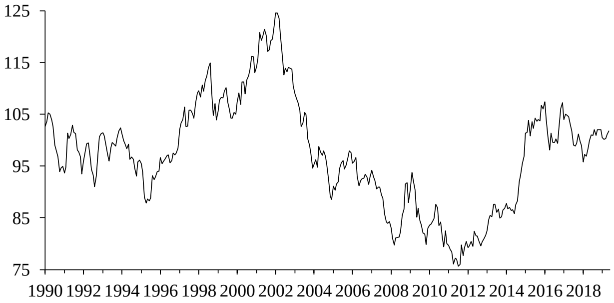
[1] Yields in terms of €s or $s can be computed by adjusting the £-based yields for the expected currency change.
[2] UK index linked bonds All Stocks
[3] Output based on China.

Table 3: Portfolio(%)

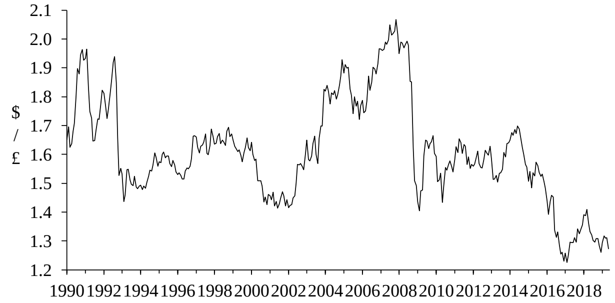
	Sterling Based Investor		Dollar Based Investor		Euro Based Investor	
	May Letter	Current View	May Letter	Current View	May Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-	-	-	-	-
German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

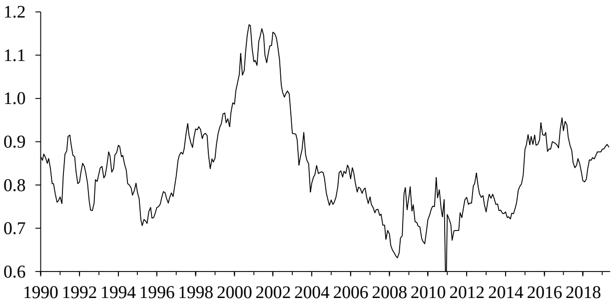
US : Trade Weighted Index
(Bank of England 1990 = 100)



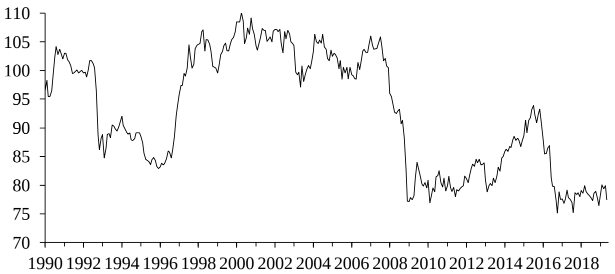
UK: Dollars Per Pound Sterling



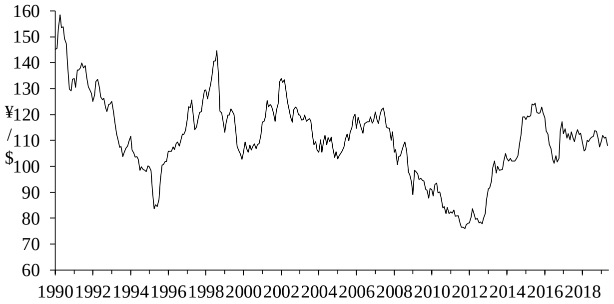
Euro per US dollar



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

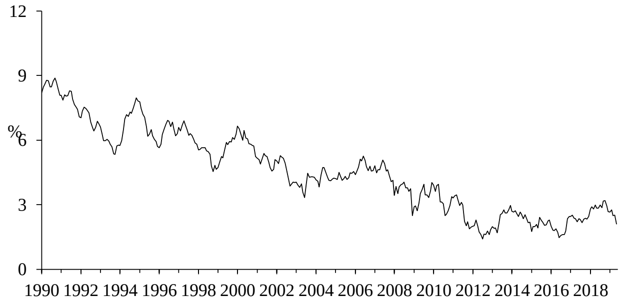


Japan : Yen Per U.S. Dollar

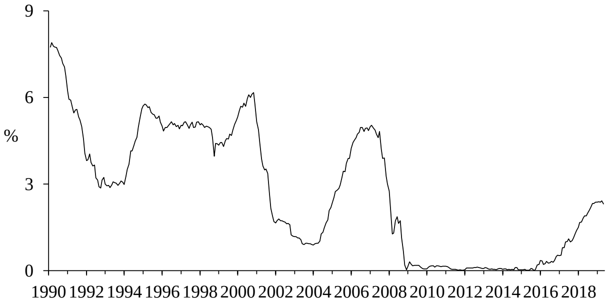


GOVERNMENT BOND MARKETS

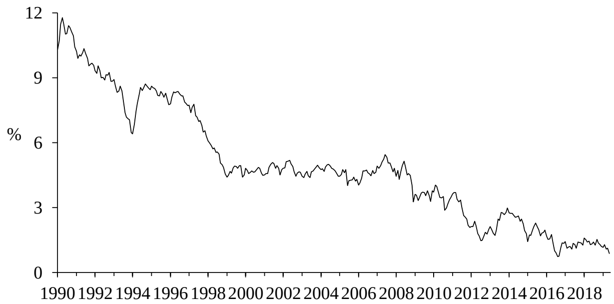
U.S.: Yield on Long-Term Government Bonds



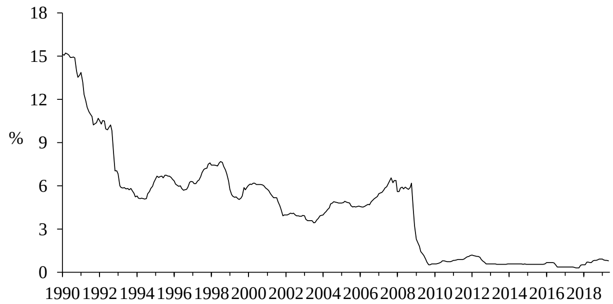
U.S. : 3-Month Treasury Bill



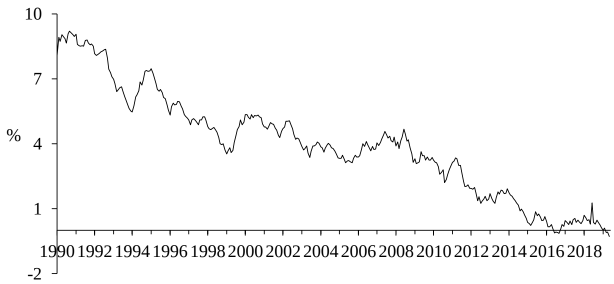
U.K.: Yield on Long-Term Government Bonds



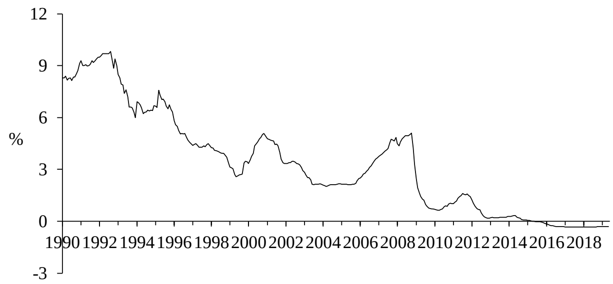
U.K. : 3-Month Certificate of Deposit Rate



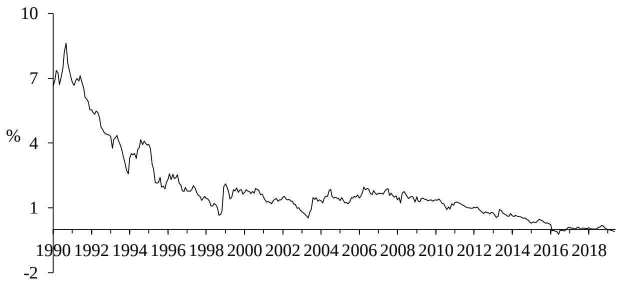
Germany: Yield on Public Authority Bonds



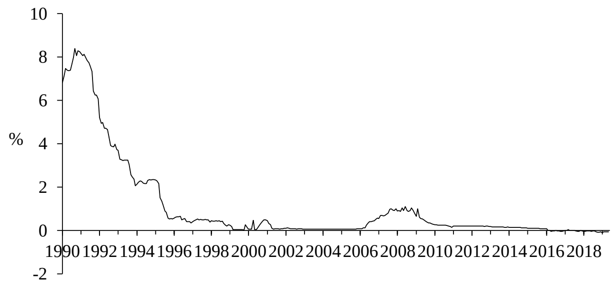
Germany : 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

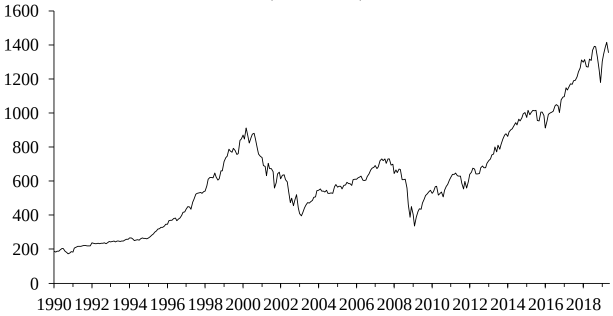


Japan : 3-Month Money Market Rate

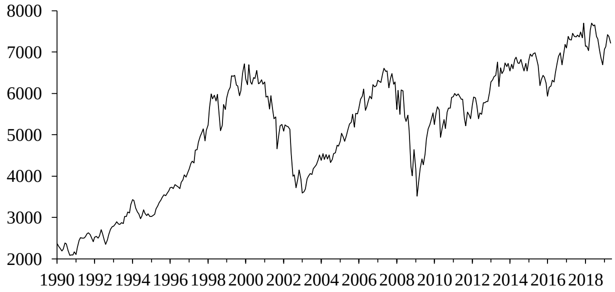


MAJOR EQUITY MARKETS

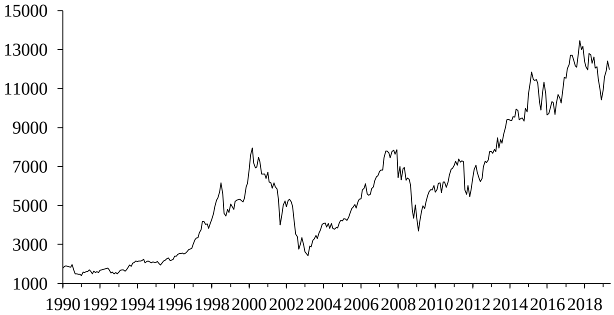
U.S. : S & P 400 Industrial
(1985=100)



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



Germany : DAX 30



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

EMERGING MARKETS

Anupam Rastogi

India

Indian Prime Minister Narendra Modi has decisively won a mandate for a second term. The question is whether he'll use this victory to fulfil the economic reforms he failed to deliver in his first five years. His choice of cabinet ministers suggests that he has kept the nation's interest ahead of any rule or dogma. His choice of merit in selecting a known career diplomat as foreign minister suggests that he wants to play a bigger role on the world stage.

Arresting the slowdown and reviving the economy is the first challenge for the new government as world trade is slowing down and the US-China world trade is slowing world demand. Choosing a technocrat as a finance minister shows that Mr. Modi is not going to let go of fiscal consolidation either. He is keen to steer the economy well through the troubled waters of falling world trade and the Sino-US trade dispute. His bifurcation of many ministries suggests that his focus, in the next five years, will be strengthening of the economy. In short, the last five years were about consolidation and tackling cronyism. The next five years will be about growth.

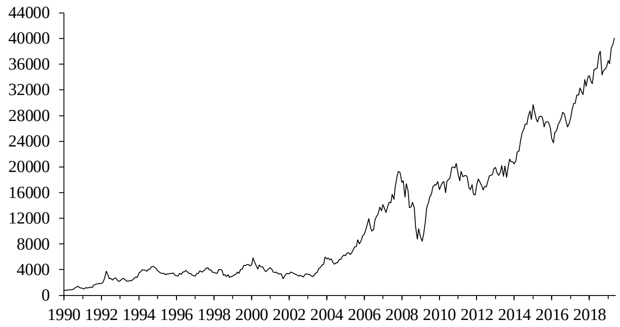
It is expected that the much awaited land and labour reforms would be taken up in the next two years as he still does not enjoy a majority in the upper house of the parliament. The majority would come through in the next 18 months as some of the upper house MPs retire and new ones get elected from state legislatures where BJP has majority.

The BJP has set in motion to take care of vulnerable section already and set to invite more foreign investment in manufacturing to provide jobs for young people languishing on unproductive farms.

Mr. Modi, in the past, has never been an unbridled pro-market reformer. He is firmly a statist. Being a control freak, he uses public sector units to improve themselves and deliver his election promises. In the recent past, New Delhi has acted more like Beijing and taken steps to tamp down dominant foreign companies and foster the growth of homegrown startups. Earlier this year, Amazon and Flipkart were forced to comply with new e-commerce rules, changing the way foreign companies sell inventory to customers, disrupting their operations.

India's GDP growth, during the fiscal 2018–19 was 6.8%, marginally lower than earlier estimate of 7%. Due to base effect, 4Q FY19 GDP growth decelerated to 6.3% from 6.6% in previous quarter. But, the Central government's full year fiscal deficit for FY19 stood at 3.39% of the GDP, against a revised estimate of 3.4%, mainly on account of an increase in non-tax revenue and lower expenditure. The government

India: BSE Sensitive



has cut back on capital expenditure by around Rs 130bn to save the fiscal deficit target and let go the GDP growth as it affected overall investments in FY19.

The full Budget, likely to be presented in July, would spell the new government's economic priorities. It was often said that India needs a low and stable inflation. Today, India has low and stable inflation. But corporate executives want a "good inflation", meaning an environment where money illusion helps them a bit of pricing power while keeping labour happy in giving them wage incentives regularly.

The central bank's Monetary Policy Committee, after raising rates twice in 2018, has now cut rates by 75 basis points so far this year. This would give a boost to demand, given that inflation is comfortable and expedite investment demand in the economy.

The headline inflation will be around 3.9% for FY20, as the monsoon is expected to be normal and crude prices remain stable.

India's exports rose marginally by 0.64% in April to $26 billion while imports increased by 4.5% to 41.4 billion compared to a year-ago. The lacklustre performance is a reflection of the postponing of new initiatives by the corporate sector until a new government is installed.

The announcement of a stable government has turned the Indian equity market as the best performing emerging market but a global slowdown and liquidity shortage remain the biggest concerns. The market would not be able to buck the trend in long term.

	18–19	**19–20**	**20–21**	**21–22**	**22–23**
GDP (%p.a.)	7.0	7.3	7.6	7.6	7.6
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 month of May purchasing managers' index for manufacturing fell back into contraction — returning to the same level as December. Declines in new export orders have deepened. Beijing is likely to respond with more fiscal and monetary support. There is no doubt now that the Chinese economy is suffering, especially in the manufacturing sector, from the trade war. China's manufacturing purchasing manager index (PMI) dropped to 49.4 versus 49.9 forecasts and non-manufacturing PMI fell below the expected 53.5 mark.

Factory production, retail sales and investment in fixed assets all slowed in April as well as in May. China hopes that domestic spending by its own citizens will minimize the economic damage of its trade fight with the U.S. Yet demand from consumers and factories is looking shaky.

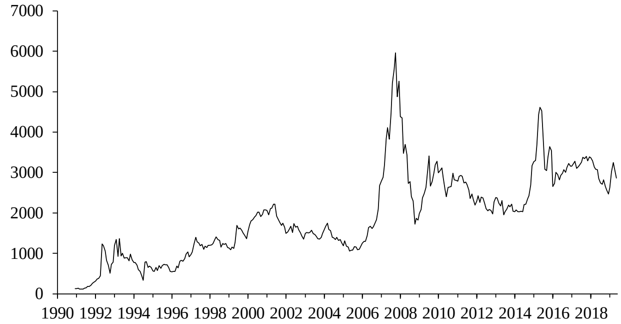
China's consumer inflation accelerated to the fastest pace in six months, driven by surging food prices, while producer prices escaped from near the deflation zone. Food prices in China are sensitive to pork prices and swine flu has impacted pork prices in China. The consumer price index rose 2.5% last month from a year earlier after gaining 2.3% in March. Inflation pressure may not be a big concern in China's monetary policy this year as long as the consumer price growth doesn't hit the official target of 3%.

President Trump's continuing pressure on China and increasing tariff rate hike to 25% — a huge increase over the 10% already levied on about $200 billion worth of Chinese imports — is unsettling the Chinese economy. With China accounting for 40% of the gross domestic product in developing economies, the yuan is weakening. Despite efforts by the central bank to stem the fall, the currency is likely to depreciate beyond the closely watched threshold of 7 per dollar at which the currency last traded in April 2007. This would have adverse implications for both China's debt as well as the economy's rate of growth.

The U.S. again refrained from labelling China a currency manipulator when the Treasury Department of the US issued its semi-annual foreign-exchange report to the Congress. That decision leaves one of President Donald Trump's campaign promises unfulfilled but avoids further escalation in the U.S.-China trade war. A bearish sentiment on China's currency is growing due to trade tensions and signs of a stuttering economy. The offshore yuan, which crossed 6.9 per dollar, had weakened about 2.6% in May. As the Yuan edges lower, the chances of intervention from the PBoC is growing, particularly given that the recent rhetoric from the central bank is that they will not let the currency weaken past 7. Throughout 2015, the PBoC had intervened through draining almost $1tn of its US Dollar reserves in order to stem capital outflows.

This time, however, China may let it drop because economic conditions warrant it and the policy response encourages it. Even in China, fundamentals can't be ignored indefinitely.

China: SSE Composite Index



Korea: Composite Index

Dashing hopes of a quick agreement on trade relations with China, US President Donald Trump's administration has imposed punitive tariffs on another US$200 billion of Chinese goods. Now that the Chinese government has responded with new tariffs on US$60 billion of US products, the United States is threatening tariffs targeting yet another US$300 billion of Chinese imports.

The American and Chinese presidents are expected to meet again at the next G-20 in Japan at the end of June. There is a slender hope that there may be some breakthrough, but do not hold your breath.

	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.)	300	280	260	240	200
Rmb/$(nom.)	6.8	6.9	7.0	7.1	7.1

South Korea

The trade war between the US and China and slowing global demand are hurting economic activity. South Korea's economy contracted in the first quarter due to a slump in exports and the chip sector. We maintain our GDP forecast of 2% and 2.5% in 2019 and 2020 respectively. The state-run think-tank, the Korea Development Institute, in a bi-annual economic outlook report has lowered its GDP forecast to 2.4% for 2019 compared to its earlier forecast of 2.6%. It expects South Korea to grow 2.5% in 2020 as well.

The government is stepping up fiscal stimulus to spur growth. This year's national budget has already called for the biggest spending increase in a decade, and a roughly $6 billion extra-budget spending is also waiting for approval from the parliament.

Consumer-price inflation is slowing sharply to 0.7% this year from 1.5% in 2018, before likely rebounding to 1.5% in 2020. Core inflation, which strips out volatile food and energy prices, is forecast to average 1.2% this year. The projected inflation forecasts are well below the central bank's annual 2% target. Overall price pressure remains largely subdued amid weak consumer and business spending in the country.

South Korea's central bank left the policy interest rate steady at 1.75% in its May 30 meeting but a split vote in the decision sends a signal that the bank was shifting to a dovish footing as the intensifying Sino-U.S. trade war and slowing of world trade have bolstered the case for more stimulus.

South Korea's exports in May fell 9.4% from a year earlier for a sixth consecutive month from a year earlier, as expanding trade friction between the major economies darkened the prospects. Imports reduced 1.9% in May as well. The bleak May trade data from South Korea, the world's sixth-largest exporter, is the latest evidence of cooling global economy amid the prolonged trade friction between the United States and China.

The Bank of Korea believes that the won had fallen too rapidly in too short a time period, and that the currency's weakness was excessive relative to South Korea's economic fundamentals. With weakening world trade there is little respite for won in short-term.

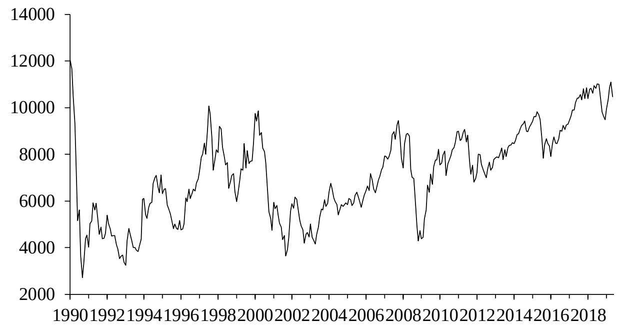
	18	**19**	**20**	**21**	**22**
GDP (%p.a.)	2.7	2.0	2.5	2.7	2.7
Inflation (%p.a.)	1.5	1.1	1.5	1.5	1.5
Current A/c(US$ bill.)	86.0	80.0	78.0	70.0	70.0
Won/$(nom.)	1130	1190	1200	1200	1200

Taiwan

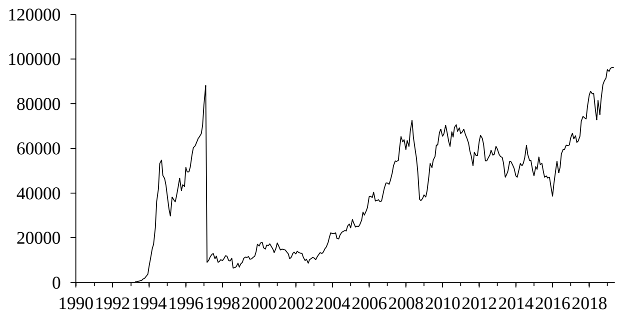
The US-China trade dispute continues to impact the island nation's economy. We maintain our GDP growth rate of 2.1% in 2019. The government has reduced their forecast for full-year growth to 2.19% from a previous estimate of 2.27%. While GDP under Tsai has been healthy, private investment has not been forthcoming in the past two years. The outlook may turn positive this year as Taiwanese companies with facilities in China shift their investment back home amid the escalating U.S.-China trade war. Sixty-one companies have agreed to invest NT$310 billion ($10 billion) in Taiwan so far this year. The government aims to increase those investments to NT$500 billion by the end of the year.

Taiwan's inflation has remained below 2% for much of the past decade but faster gains for certain key items, such as food, give the public the impression that the overall prices are rising faster than they are.

Taiwan: Weighted TAIEX Price Index



Brazil: Bovespa



New Taiwan dollar reached 28-month lows of 31.4 to the US dollar. It may remain under pressure until the trade dispute gets settled and shifts in production capacities stabilizes.

Taiwan's national security chief, David Lee, met White House national security adviser, John Bolton, in May. The meeting was the first since the island and the United States ended formal diplomatic ties in 1979. The meeting was viewed by Taiwan as a sign of support from the Trump administration.

With one year to go in her first term of four years, Tsai can boast of a good economic and financial record. But she could end up being Taiwan's first one-term president when voters go to the polls in January's election. Her low-key administration does not enthuse voters any more.

	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

The delayed fiscal reforms, weak investment and rising unemployment have taken their toll. Brazil's economy most likely shrank in the first quarter of this year for the first time since 2016. The economy expanded by 1.1% in both 2017 and 2018 and was expected to grow fast after the presidential election last year. Real GDP in Brazil is approximately 8% below its December 2013 cycle peak and only 3.5% above the December 2016 cyclical trough. We expect economic activity to shore up in the coming quarters and be 1.2% in 2019. One reason that the economy is growing more slowly is that many Brazilian businesses and investors have been waiting for the government to get a bill passed in Congress which would have overhauled the country's insolvent pension system. The uncertainty is affecting business decisions related to new hiring and investment plans.

Annual consumer price inflation in Brazil rose to 4.93%, the highest since February 2017. The weakened real has hit Brazilian consumers hard. Even though global oil prices have fallen in the past 12 months, fuel has become more expensive in Brazilian currency as it is set in U.S. dollars. That means drivers are paying 6% more at the gas pump. This is also raising fears of a repeat of last year's crippling truckers strike, when drivers blocked highways around the country and shut down deliveries of supplies to shops, factories, hospitals and other places. Consumer prices are also hit by heavy rains in some areas where fruit and vegetable production take place. However, we expect inflation to end the year below the central bank's 4.25% target. As expected, the central bank left its key Selic rate at the record low of 6.5%, where it has been since March 2018.

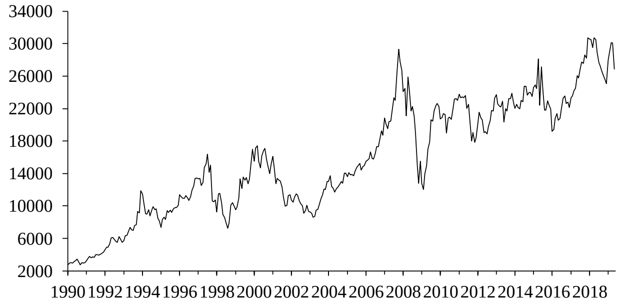
Brazil posted a surprise current account deficit of $62 million in April, compared to an expected $450 million surplus, due to the services deficit of $3 billion and other services-related income of $1.1 billion. International capital continued to flow into Brazil, with foreign direct investment has hit its highest level since 2001.

Brazilian President Jair Bolsonaro's slow-moving effort to get a pension scheme of the country overhauled has disappointed people. Students and teachers took to the streets across Brazil to protest spending freezes. According to the Brazil's National Student, the freeze will cripple federal universities and hinder academic research in the country.

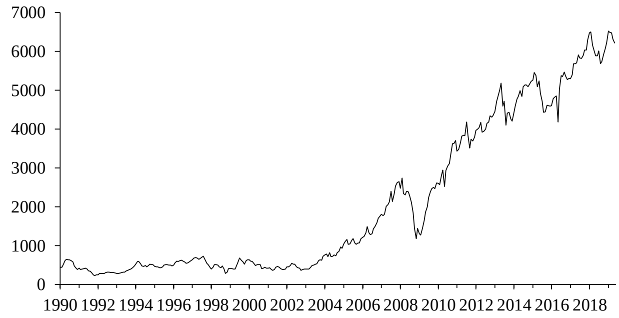
	18	**19**	**20**	**21**	**22**
GDP (%p.a.)	1.1	2.0	2.2	2.5	2.5
Inflation (%p.a.)	3.8	4.0	4.2	4.2	4.0
Current A/c(US$ bill.)	-14.6	-16.0	-16.0	-16.0	-16.0
Real/$(nom.)	3.8	3.9	4.0	4.1	4.1

Other Emerging Markets

Hong Kong: FT-Actuaries

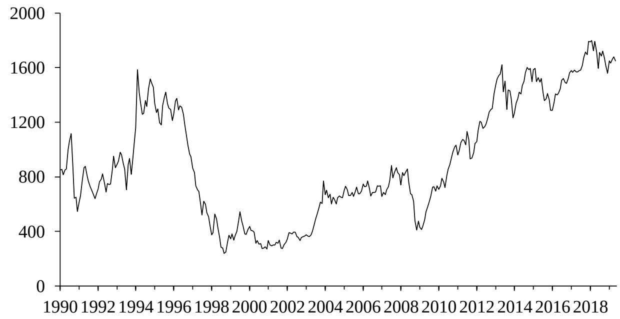


Indonesia: Jakarta Composite

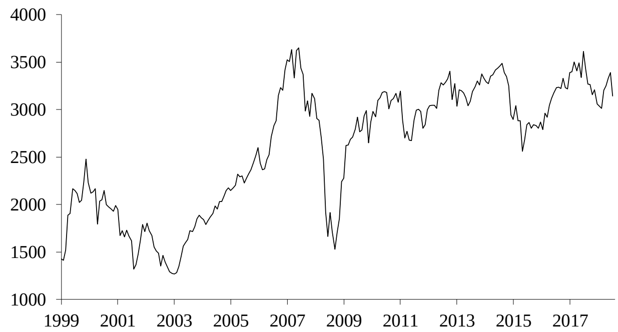


Malaysia: FT-Actuaries (US$ Index)

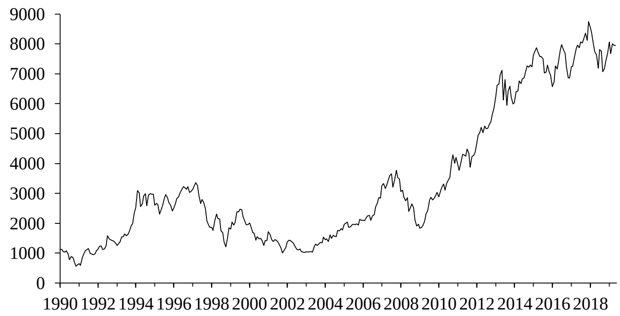
Thailand: Composite Index



Singapore: Straits Times Index

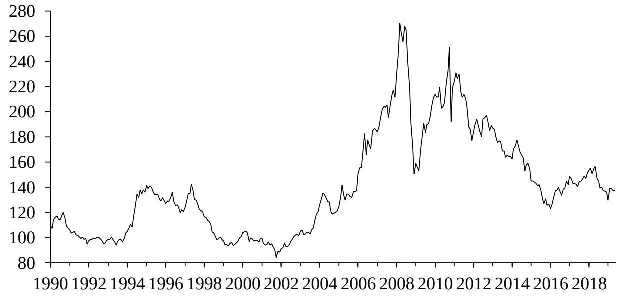


Philippines: Manila Composite

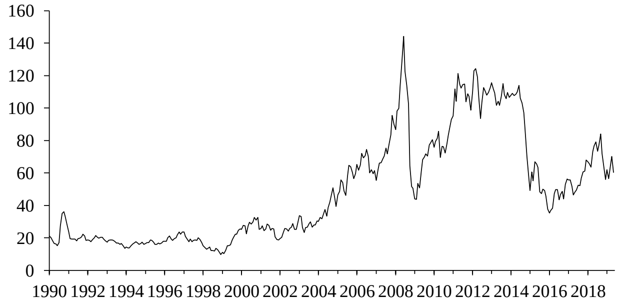


COMMODITY MARKETS

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

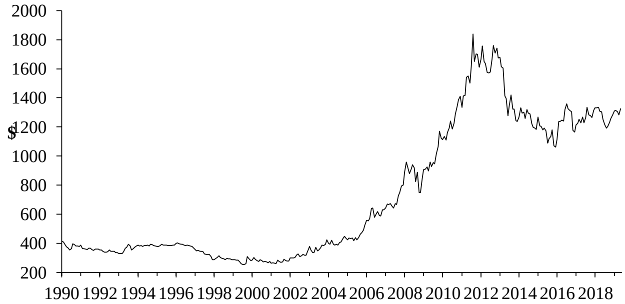


Oil Price: North Sea Brent (in Dollars)

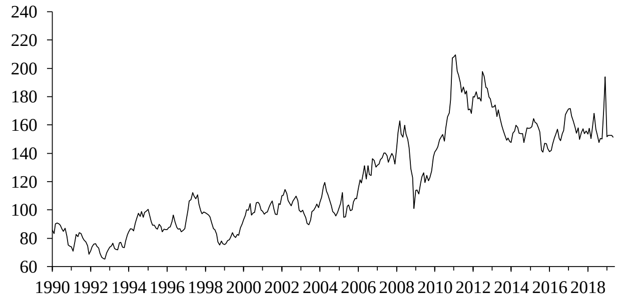


Commodity Price Index (Sterling)
(Economist, 2000=100)

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	2.4	1.2	0.8	78.5	76.7	-1.5	3.4	-0.5
2019	2.2	2.5	1.3	76.6	74.6	-0.7	2.9	0.5
2020	2.1	3.3	2.4	76.1	74.3	0.4	2.7	1.4
2021	2.0	3.8	3.1	76.3	75.1	1.1	2.6	0.9
2022	2.0	3.8	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	2.4	1.0	0.7	79.3	77.7	-1.7	3.4	-1.1
2018:3	2.5	1.0	0.9	78.0	75.9	-1.3	3.3	-1.1
2018:4	2.3	1.8	1.0	77.6	75.4	-1.2	3.1	-0.3
2019:1	2.2	2.5	1.1	77.2	75.4	-1.0	2.9	0.5
2019:2	2.2	2.5	1.3	76.6	74.4	-0.8	2.9	0.5
2019:3	2.2	2.5	1.4	76.4	74.4	-0.6	2.9	0.5
2019:4	2.2	2.5	1.5	76.3	74.3	-0.5	3.0	0.5
2020:1	2.1	3.0	2.1	76.1	74.3	0.1	2.8	1.0
2020:2	2.1	3.0	2.1	76.2	74.3	0.1	2.8	1.0
2020:3	2.0	3.5	2.1	76.1	74.3	0.1	2.6	1.5
2020:4	2.0	3.8	3.3	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	2.7	2.2	0.8	142.6
2019	273.2	2.8	2.1	0.8	143.4
2020	281.0	2.9	1.9	0.7	144.6
2021	288.9	2.8	1.6	0.7	145.7
2022	297.0	2.8	1.3	0.6	146.9
2018:1	264.6	3.0	2.3	0.8	142.9
2018:2	263.4	2.6	2.2	0.8	141.8
2018:3	268.4	3.1	2.1	0.8	143.5
2018:4	267.0	2.3	2.1	0.7	142.3
2019:1	272.0	2.8	2.0	0.7	143.7
2019:2	270.7	2.8	2.0	0.7	142.6
2019:3	275.8	2.8	2.0	0.7	144.3
2019:4	274.5	2.8	2.0	0.7	143.0
2020:1	279.9	2.9	2.0	0.7	144.8
2020:2	278.6	2.9	2.0	0.7	143.8
2020:3	283.5	2.8	2.0	0.7	145.5
2020:4	282.1	2.8	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	162.3	777336.9	443745.6	302292.1	198857.7	-65371.5	102187.0
2018	164.6	788057.2	447703.5	309777.2	199983.9	-71893.1	97213.6
2019	167.6	802696.2	454303.6	310600.3	200602.7	-62943.8	99862.6
2020	171.0	818972.8	460685.5	316674.7	201938.2	-58117.3	102210.3
2021	174.6	836108.1	467804.4	321816.8	203070.4	-52020.5	104566.0
2022	178.6	855103.2	475356.9	327523.1	204308.6	-44936.8	107148.0
2017/16	1.8		0.6	0.8	0.4		0.6
2018/17	1.4		0.9	3.2	0.6		-2.8
2019/18	1.9		1.5	0.3	0.3		2.8
2020/19	2.0		1.4	2.0	0.7		2.4
2021/20	2.1		1.5	1.6	0.6		2.3
2022/21	2.3		1.6	1.8	0.6		2.5
2018:1	163.4	195600.5	111071.3	74328.3	51436.3	-17532.1	23703.2
2018:2	164.1	196413.8	111520.6	78149.0	49061.0	-18806.3	23510.5
2018:3	165.1	197609.1	112343.6	79434.8	49642.5	-18437.4	25074.5
2018:4	165.7	198433.9	112768.1	77865.2	49844.0	-17117.3	24925.4
2019:1	166.4	199235.8	112806.5	76347.5	50526.0	-15756.7	24688.2
2019:2	167.1	200032.9	113132.9	77285.3	50009.7	-15591.0	24802.8
2019:3	168.1	201273.4	113952.7	78293.8	50056.5	-15900.9	25126.9
2019:4	168.9	202154.1	114411.5	78673.8	50010.4	-15695.2	25244.6
2020:1	169.9	203369.8	114363.4	78191.7	50860.0	-14689.5	25354.4
2020:2	170.5	204186.2	114717.5	79020.4	50335.5	-14421.8	25465.2
2020:3	171.4	205199.1	115569.5	79774.3	50315.1	-14836.7	25624.4
2020:4	172.2	206217.7	116035.1	79688.3	50427.6	-14169.3	25766.2

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	1.9	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	2.4	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	–2.0	–1.2	–0.8	0.3
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	0.8	1.3	2.4
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	–0.8	0.5	1.3
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	1.2	2.5	3.3
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	75.8	74.9	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