LIVERPOOL INVESTMENT LETTER

August 2023



Julian Hodge Institute of Applied Macroeconomics



LIVERPOOL RESEARCH GROUP IN MACROECONOMICS

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

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

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LIVERPOOL INVESTMENT LETTER

August 2023

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INFLATION IS FALLING NOW, IF MORE SLOWLY THAN EXPECTED

As we said in the last Letter, inflation's downward progress in the UK will take its own path; the lags in every economy are a bit different because the economy's structure and the paths of other shocks differ across economies. It made no sense for the Bank and government to panic in the face of the longer lag in inflation's fall, especially as wholesale price inflation was already below 3%. With the latest inflation rate in June falling below 8% (the fullest index including housing, rose just over 7%), and wholesale price inflation down to 0.1%, these authorities have recovered themselves a bit; markets now expect a lower interest rate trajectory, which at last makes some policy sense.

At the same time, the government has understood from the Uxbridge by-election that net zero policies are far too costly to ordinary people and are being resisted. Some rethinking is at last going on. As inflation completes its fall towards 2%, we must hope this rethinking will extend to the other aspects of fiscal policy, namely taxes, whose brutal raising is not merely unpopular but also damaging to growth and so also to debt solvency. Sense on these fiscal aspects too is long overdue; self-flagellation via tax increases is not merely painful but highly damaging to economic and fiscal prospects — a bit like leeching in ancient times. We really do know better.

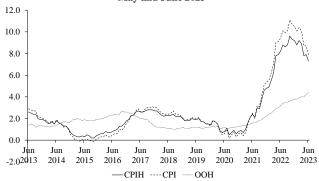
Our forecast cannot yet take this change of heart by the Sunak government as its central baseline, so our forecast shows short term resilience as interest rates level off but still no longer term growth.

Table 1: Summary of Forecast

	2019	2020	2021	2022	2023	2024	2025
GDP Growth ¹	1.4	-11.0	7.5	4.2	-0.4	2.0	2.0
Inflation CPI	1.7	1.0	2.5	9.1	6.4	3.2	2.0
Wage Growth	3.5	1.6	5.8	6.0	6.4	3.4	3.0
Survey Unemployment	3.8	4.5	4.5	3.6	3.5	2.8	2.8
Exchange Rate ²	78.3	78.2	81.5	79.4	78.1	77.4	76.8
3 Month Interest Rate	0.8	0.2	0.1	1.8	4.4	4.0	3.0
5 Year Interest Rate	0.6	0.1	0.4	2.3	4.3	4.0	3.0
Current Balance (£bn)	-63.3	-67.5	-34.3	-93.9	-24.2	-14.7	1.5
PSBR (£bn)	64.3	312.7	122.3	150.5	125.9	59.4	2.8

¹Expenditure estimate at factor cost

Annual CPIH and CPI inflation rates eased between May and June 2023

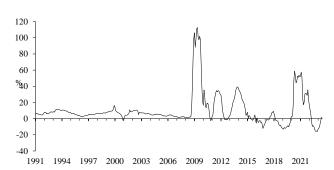


Source: Consumer price inflation from the Office for National Statistics

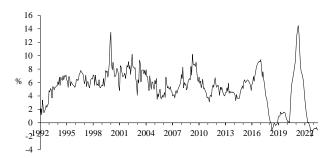
²Sterling effective exchange rate, Bank of England Index (2005 = 100)

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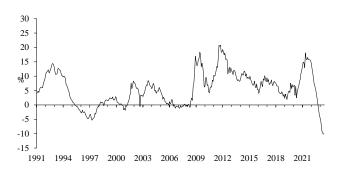
U.S.: Growth in M0 (Yr - on - Yr)



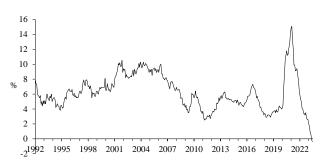
UK: Notes and Coins in Circulation Growth



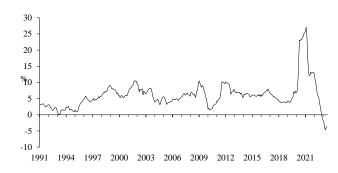
U.S.: Growth in M1 (Yr - on - Yr)



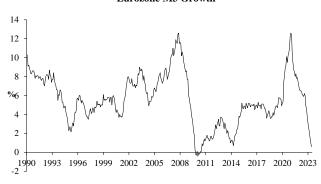
UK: M4 Growth



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



Eurozone M3 Growth



Japan: Growth of M2+CD's



FOCUS ON JAPAN

Francesco Perugini

Japanese inflation re-accelerates

Japan's core consumer inflation re-accelerated in June and stayed above the central bank's 2% target for the 15th straight month, data showed late last month, adding to recent signs of broadening price pressures. Japan's headline inflation rose to 3.3% in June, outpacing the US figure for the first time in eight years and highlighting how the Asian economy is no longer an outlier in global inflation. Prices excluding those for fresh food gained 3.2% from a year ago, decelerating from a 3.4% rise in April. While the national data was consistent with the results of earlier figures for Tokyo showing the impact of a reduced levy on electricity prices, the reading still outpaced analysts' forecasts of a 3.1% increase. The "core-core" inflation rate — which tracks the prices consumers pay for a basket of goods, excluding fresh food and energy --- was even higher, at 4.2%. This shows that the main driver of inflation is not energy or fresh food prices, which tend to be volatile, but rather a wide range of other items.

Japan's consumer inflation is looking relatively persistent in a global context. The US inflation rate slid to a more than two-year low in June, while Britain's inflation rate slowed in the same month to the lowest in 15 months. Europe's headline inflation rate has almost halved from its 10.6% peak, and China faces the risk of deflation as its economic recovery sputters. Still, the new data increases pressure on the Bank of Japan (BOJ), which faces calls from investors to change its loose monetary policy. The BOJ is the only central bank with negative interest rates, and changes to this strategy would have major implications for global financial markets.

Indeed, Japan's data may complicate BOJ governor Kazuo Ueda's position as he continues to back the case for persistent monetary stimulus. The central bank is expected to hold its main policy settings in the near future, although a minority of analysts expect the bank to tweak its yield curve control (YCC) program. "The current strong reading of CPI doesn't mean the BOJ will make major policy changes," said Masamichi Adachi, economist at UBS Securities. "It's pretty clear that inflation will slow from here as import-driven price gains taper off," he said.

However, some economists believe that BOJ will maintain its current policy easing. "Demand-led inflation the BOJ wants to see is still absent — reinforcing our view that the central bank will maintain stimulus for quite a while yet," said Taro Kimura, an economist at Bloomberg Economics. Also, a recent survey by the Japan Center for Economic Research, a private research centre based in Tokyo, shows

that while private forecasters predict slightly higher price growth (2.6%) for FY 2023, they also expect inflation to fall back below target — to 1.7% — in 2024.

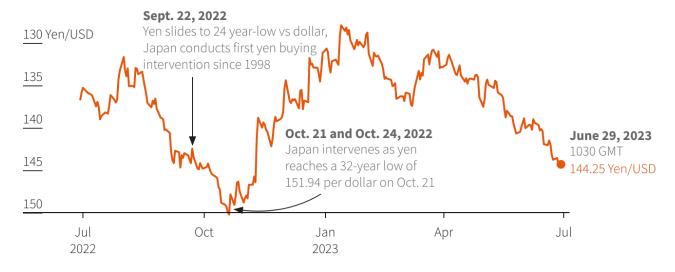
So far Mr Ueda has justified retaining an ultra-easy monetary stance on the premise that the recent pace of price gains is not sustainable. Moreover, this is the first time Japanese inflation has surpassed 2% since soon after the BOJ adopted its inflation-targeting framework in 2013. In fact, whereas inflation expectations are more or less anchored around 2% in the US, Japan has been in a deflation trap for decades; inflation expectations never came close to 2%. This has had serious consequences for Japan's economy. With the inflation rate stuck at (or below) zero, firms were unable to raise prices, even when costs rose, which prevented them from raising wages and left consumers extremely sensitive to any price changes. But recent price growth has gone some way toward changing that, spurring wage increases of 3%.

This is the first time Japanese inflation has surpassed 2% since soon after the BOJ adopted its inflation-targeting framework in 2013. In fact, whereas inflation expectations are more or less anchored around 2% in the US. Japan has been in a deflation trap for decades; inflation expectations never came close to 2%. Therefore, Mr Ueda might view today's inflation as an opportunity to break its deflationary equilibrium and raise inflation expectations to 2%. As noted by Takatoshi Ito, a former Japanese deputy vice minister of finance and a professor at the School of International and Public Affairs at Columbia University, "it is worth noting that, far from fearing a wage-price spiral, Japan would have to hope for 2–3% annual wage increases for years to come to reach 2% inflation. Moreover, given that inflation expectations tend to lag behind actual inflation, Japan must be willing to overshoot the target for some time, as former BOJ Governor Haruhiko Kuroda pledged to do back in 2016. By this logic, the last thing Japan needs is inflation-suppressing monetary-policy tightening."

Japan has maintained ultra-easy monetary policy for years. Since launching its quantitative and qualitative easing (QQE) policy in 2013, the BOJ has purchased more than 50% of outstanding government bonds. Moreover, the widening interest-rate gap between the US and Japan has caused the yen's exchange rate against the US dollar to depreciate sharply, from ¥115 in January 2022 to ¥150 in October 2022. The dollar exchange rate has remained in the ¥135-150 range ever since. In the next few months, the BOJ will undoubtedly face hard choices — and it is hard to see yet which way it will jump.

Yen watching

The yen touched a more than seven-month low versus the dollar on June 29, prompting concern about possible intervention in the currency market from the Bank of Japan.



Source: Refinitiv Eikon | Reuters, June 29, 2023 | By Pasit Kongkunakornkul

MARKET DEVELOPMENTS

With interest rates now more likely to level off and in the longer term fall somewhat from current peaks, returns in bonds are likely to improve.

Table 1: Market Developments

	Market Levels		Prediction for Jul/Aug 2024		
	Jul 7	Jul 31	Previous (
			Letter Vie	ew	
Share Indices					
UK (FT 100)	7257	7699	7409	7861	
US (S&P 500)	4418	4582	4736	4912	
Germany (DAX 30)	15603	16447	19848	20920	
Japan (Tokyo New)	2255	2323	3087	3180	
Bond Yields (governm	ent				
UK	4.68	4.33	4.00	4.00	
US	4.07	3.96	3.50	3.40	
Germany	2.65	2.47	2.20	2.20	
Japan	0.47	0.61	0.50	0.50	
UK Index Linked	1.12	0.93	1.00	1.00	
Exchange Rates					
UK (\$ per £)	1.28	1.29	1.20	1.20	
UK (trade weighted)	82.79	82.47	77.9	77.3	
US (trade weighted)	108.48	107.43	113.2	113.2	
Euro per \$	0.91	0.91	0.98	0.98	
Euro per £	1.17	1.17	1.18	1.18	
Japan (Yen per \$)	142.20	142.08	140.0	140.0	
Short Term Interest R	lates				
UK	5.46	5.50	4.00	4.00	
US	5.54	5.63	4.30	4.30	
Euro	3.61	3.73	3.00	3.00	
Japan	-0.03	-0.03	0.10	0.10	

Table 2: Prospective Yields ¹

Equities: Contribution to £ vield of:								
<u>.</u>	Dividend Yield	Real Growth	Inflation	Changing Dividend	Currency	Total		
	Tienu	Growth		Yield				
UK	2.10	1.1	3.0	-2.00		4.20		
US	2.00	1.2	3.0	3.00	6.74	15.94		
Germany	2.10	1.2	3.0	23.00	-0.77	28.53		
Japan	1.90	1.1	1.8	34.00	8.08	46.90		
UK indexed ²	0.66		3.0	16.00		19.93		
Hong Kong ³	2.60	3.0	3.0	-39.00	6.74	-23.66		
Malaysia	3.30	5.4	3.0	51.00	6.74	69.44		
Singapore	3.50	3.0	3.0	15.00	6.74	31.24		
India	1.40	6.5	3.0	10.00	6.74	27.64		
Korea	1.10	0.0	3.0	-48.00	6.74	-37.16		
Indonesia	2.20	4.5	3.0	19.00	6.74	35.44		
Taiwan	2.80	3.0	3.0	20.00	6.74	35.54		
Thailand	3.20	2.5	3.0	16.00	6.74	31.44		
Bonds: Cont	ribution to	£ yield	of:					
	Redemp		Changing	Currenc	ey	Total		
	Yield	d	Nominal Rates					
UK	4.3	3	3.29			7.62		
US	3.9	6	5.65	6.74		16.35		
Germany	2.4	.7	2.73	-0.77		4.43		
Japan	0.6	1	1.06	8.08		9.77		
Deposits: Co	ntribution	to £ yie	ld of:					
_	Depos		Currency	Total				
1.117	Yield	-		£ 50				
UK	5.5		6.71	5.50				
US	5.6		6.74	12.37				
Euro	3.7	-	-0.77	2.96				
Japan	-0.0	13	8.08	8.08				

 $^{^1}$ Yields in terms of εs 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(%)

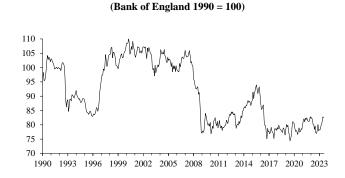
	Sterling Based Investor		Dollar Bas	ed Investor	Euro Base	d Investor
	July Letter	Current View	July Letter	Current View	July Letter	Current View
UK Deposits (Cash)	5	5	5	5	1	1
US Deposits	-	-	-	-	-	-
Euro Deposits	-	-	-	-	-	-
Japanese Deposits	-	-	-	-	-	-
UK Bonds	-	-	-	-	-	-
US Bonds	-	-	-	-	-	-
German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









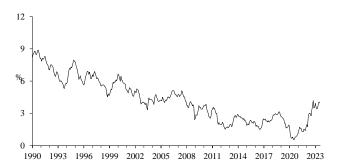
UK: Trade-Weighted Index



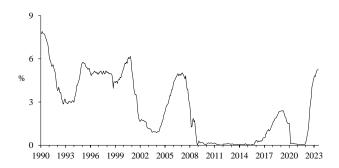
Japan: Yen Per U.S. Dollar

GOVERNMENT BOND MARKETS

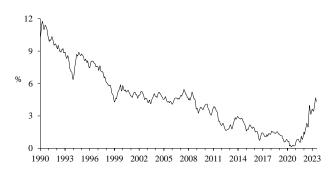
U.S.: Yield on Long-Term Government Bonds



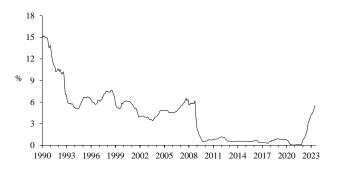
U.S.: 3-Month Treasury Bill



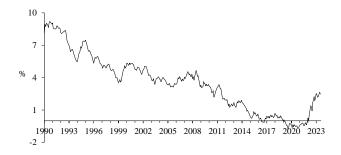
U.K.: Yield on Long-Term Government Bonds



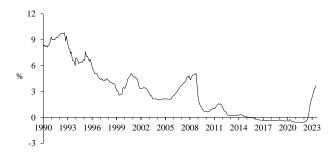
U.K.: 3-Month Certificate LIBOR Rate



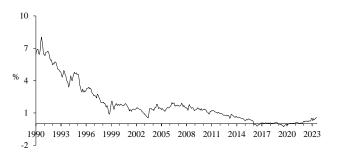
Germany: Yield on Public Authority Bonds



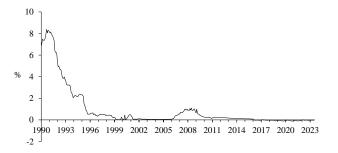
Germany: 3-Month Interbank Deposit Rate



Japan: Yield on Long-Term Government Bonds

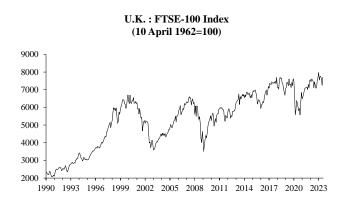


Japan: 3-Month Money Market Rate



MAJOR EQUITY MARKETS









EMERGING MARKETS

Anupam Rastogi

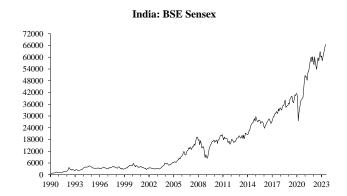
India

The S&P Global India Services Purchasing Managers' Index (PMI) stood at 58.5 in June 2023, marking the 23rd consecutive month of expansion in the sector. This growth was propelled by a robust increase in new business activities and a continued rise in job creation. Comparatively, the previous month had recorded a PMI of 61.2. Similarly, the Manufacturing Purchasing Managers' Index (PMI) achieved a reading of 57.8 in June, maintaining its position above the crucial 50-mark for two consecutive years, signifying sustained sectoral expansion. Over the long term, the India Manufacturing PMI will trend around 53.40 points in 2024 and 52.00 points in 2025. This projection implies a consistent growth trajectory for the Indian economy over the next two years. The strength of consumption is anticipated to remain steady in rural and urban areas due to favourable monsoon conditions. As a result, demand for consumer and white goods in rural regions is expected to surpass normal levels.

With most tax reforms already implemented, the government is well-positioned to exercise fiscal restraint and channel resources into extensive infrastructure projects. However, amidst the global economy facing headwinds and growing below its historical average of three percent, the Indian economy is projected to attain a growth rate of 6.5% in the fiscal year 2023–24. This growth trajectory is anticipated to continue in subsequent years as productivity improves. Notably, the IMF and the World Bank align with our maintained GDP growth rate of 6.5%, a projection that has remained consistent since June 2022 in this Letter.

Regarding consumer inflation, the rate reached 4.8% in June, remaining within the Reserve Bank of India's targeted range. Despite this, the central bank cautioned against complacency, citing a surge in food prices as evidence that the fight against inflation is ongoing. It indicates the central bank's cautious stance towards potential interest rate cuts. It is anticipated that headline inflation will increase to 6–6.5% in July and August, compared to June's 4.8%, before stabilizing in the 5–6% range for the remainder of fiscal year 2024. Our maintained projection places average headline inflation at around 5.3%, slightly higher than the RBI's June estimate of 5.1%.

Based on government-released export and import data, India's merchandise trade deficit narrowed to \$20.1 billion in June from \$22.1 billion in May. Weakness in major global economies contributed to lacklustre Indian exports. In June, services exports totalled \$27.1 billion, with imports reaching \$15.9 billion. For the April–June period, services and merchandise exports contracted 7.3% year-on-



year to \$182.7 billion, while imports declined by 10.2% to \$205.29 billion.

India's foreign exchange reserves have surged due to revaluation gains resulting from a weakened dollar and increased capital inflows. After experiencing declines for much of the previous year, this trend reversed in the current year, culminating in forex reserves reaching a 15-month peak of \$609 billion as of July 14th. Balance of Payments (BoP) indicators have also notably improved, with the current account deficit projected to remain below 2% of GDP. Equity capital flows have resumed, with India continuing to outpace its emerging market peers in attracting investments.

The corporate earnings report for the June quarter exhibited promising results, meeting or exceeding market expectations. Analysis of 456 companies revealed that aggregate net profits and revenues grew by 32% and 7.88%, respectively, compared to the previous year. This profit growth rate represents the most rapid pace of expansion in eight quarters.

The driving forces behind India's economic growth encompass a rising population with increased disposable incomes, China's economic deceleration, and the rapid digitization and financialization of savings. However, certain government policies occasionally impede the ease of conducting business, constituting a potential risk. Many investment banks have upgraded India to 'overweight' status, predicting the country's entry into a prolonged phase of economic prosperity.

India's endeavours to internationalise the Rupee are bearing fruit across many countries. The Reserve Bank of India has approved banks from 18 nations to establish Special Vostro Rupee Accounts for facilitating settlements in Indian rupees.

Additionally, the Indian Prime Minister has been actively promoting the country internationally, as evidenced by his successful visits to France and the U.S. in the past two

months. Utilizing its G20 presidency, the Government of India effectively showcases the nation's potential and influence.

	22-23	23-24	24-25	25-26	26-27
GDP (%p.a.)	7.0	6.5	6.6	6.7	6.8
WPI (%p.a.)	6.5	5.3	5.0	4.2	4.0
Current A/c(US\$ bill.)	-67.0	-60.0	-40.0	0.0	0.0
Rs./\$(nom.)	81.0	82.0	83.5	85.0	85.0

China

China's policymakers diligently work to stimulate economic growth, but their efforts yield limited results. In July, the government unveiled a comprehensive 20-point plan to boost consumption. However, China faces various challenges encompassing economic, geopolitical, and internal political issues, as highlighted by the unexplained absence of its foreign minister.

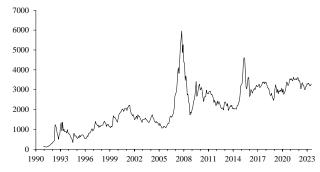
China's economy is currently operating on two distinct trajectories. While the property sector is acting as a drag and exports are experiencing a decline, the services and high-tech manufacturing sectors are thriving. Approximately one-third of Chinese provinces observed a decrease in investment during the first half of the year as local governments and companies curtailed expenditures.

A series of challenges loom over Beijing's economic outlook, including youth unemployment, deflationary pressures, and a prolonged slowdown in the housing market. These trends underscore the uncertainty surrounding China's ability to significantly contribute to a global economy grappling with persistent inflation and growth concerns.

While a formal recession is unlikely for China, a scenario reminiscent of the United States after the 2008 financial crisis is emerging which involves households and businesses avoiding new borrowing due to existing heavy debts and a lack of confidence in the future. Instead, they allocate new income towards repaying existing obligations. It poses challenges for policymakers to stimulate the economy through lower interest rates, as the impact on new investments and consumption is minimal. The root cause of the economic weakness appears to be a lack of confidence rather than liquidity or credit availability.

July's official manufacturing purchasing manager's index (PMI) stood at 49.3, marking the fourth consecutive month of contraction. The non-manufacturing PMI also experienced a decline, dropping from 53.2 to 51.5. Despite these challenges, Beijing is unlikely to initiate a broad fiscal stimulus due to underlying structural weaknesses. Overstimulating short-term demand could exacerbate debt accumulation and magnify imbalances, particularly in the housing construction sector. The top leadership's focus remains centred on achieving long-term sustainable economic growth.





China's Caixin manufacturing PMI fell to 49.2 in July, the lowest in six months, indicating contraction. Concurrently, China's home sales declined by a staggering 33% year-on-year. The Chinese government faces the delicate task of achieving its approximately 5% growth target while avoiding excessive stimulus that could lead to asset bubbles. Our projection maintains a 5% GDP growth rate for China in 2023, consistent with our forecast since February 2023, when China unexpectedly lifted all Covid-19 restrictions in the country.

In contrast to major economies grappling with controlling inflation without stifling growth, China is struggling with its economic difficulties. The country's recovery following the pandemic diverges from other major economies, and 2023 is shaping up as a challenging year for China. With zero inflation recorded in June, deflation has emerged as a significant risk, compounded by rising youth unemployment reaching over 21%.

Deflationary pressures are becoming more pronounced across China, intensifying pressure on Beijing to reignite growth and avoid a potential economic trap. High debt levels in the household and government sectors put China at risk of prolonged deflation, which could erode corporate profits, dampen consumer spending, and exacerbate unemployment. Parallels can be drawn between China's predicament and Japan's experience in the 1990s, marked by deflation and sluggish growth resulting from heavy debt burdens.

To counter deflation, the central bank has implemented several interest rate cuts to stimulate demand in an environment where inflation has largely disappeared. However, the risk lies in deflation persisting longer than anticipated, as falling prices discourage spending and create a self-reinforcing downward cycle.

China's leadership is extending support to the beleaguered private sector, but an overarching attitude still places the sector beneath state interests. Ongoing caution among private businesses and investors is influenced by long-term challenges such as a shrinking population and elevated levels of local government and household debt. China faces the problem of potentially being trapped in a middle-income stage while grappling with demographic and

economic challenges. Whether China will follow a Japanese model, spreading the aftermath of its financial bubble over an extended period of weak growth, or opt for a more abrupt transformation leading to a new economic model. The debt-driven growth highlighted in 2016 by an anonymous commentator in China's People's Daily has only increased in the subsequent seven years.

China's annual consumer-price inflation reached zero in June, while producer prices fell by 5.4% from a year earlier. In terms of trade, Chinese exports faced the sharpest annual decline in June since the early days of the pandemic in February 2020. Exports fell by 12.4% in dollar terms, accompanied by a 6.8% drop in imports, resulting in a trade surplus of \$70.6 billion.

The downward pressure on the yuan is expected to persist, driven by the People's Bank of China's inclination to cut interest rates to bolster growth. It contrasts with Western counterparts, which are likely to raise rates to combat inflation. This interest rate differential encourages capital outflows from China, contributing to yuan depreciation. A more hands-off approach by letting the market guide the yuan lower could benefit China's economy by boosting exports. However, it carries the risk of currency depreciation spiralling out of control.

The onshore yuan has depreciated by approximately 4.8% since the beginning of the year. The newly appointed central bank governor, Pan Gongsheng, assumes the role in a context where the top two positions at the People's Bank of China — governor and Communist Party secretary — are occupied by a single individual for the first time in five years. Unlike Western central banks, China's central bank is not independent and requires approval from the State Council before major actions, such as changing interest rates or currency interventions. Pan's approach is expected to lean towards intervention to curb yuan depreciation in the short term, aligning with the leadership's focus on economic stability. Chinese leader Xi Jinping's decision to replace the foreign minister after a brief tenure raises questions about China's opaque political system.

Janet Yellen, the U.S. Treasury Secretary, is endeavouring to mend fraying economic ties between the U.S. and China by emphasizing that the U.S. aims for engagement rather than estrangement. However, Yellen also criticized China's treatment of American companies during her visit to Beijing. China's recent export restrictions on critical minerals underscore its dominance in global mineral resources and its determination to leverage them in its rivalry with the U.S.

Around two-thirds of the world's lithium and cobalt are processed in China, and the export restrictions highlight the significance of diversified supply chains. The move could have long-lasting impacts on businesses and consumers, resembling the challenges faced during the Covid-19 chip crunch, which impacted industries and caused delivery



delays. The Critical Raw Materials Alliance (CRMA) estimates that China controls 80% of global gallium production and 60% of global germanium production. These minerals are not rare, but China's dominance stems from its ability to maintain competitive production costs. Manufacturers outside China are gearing up to start production in a few years, which could disrupt China's monopoly.

In summary, China's efforts to reignite economic growth are met with various challenges, including a bifurcated economy, deflationary pressures, and the risk of prolonged economic weaknesses. The country's approach to addressing these challenges will determine its trajectory in the global economy.

	22	23	24	25	26
GDP (%p.a.)	3.0	5.0	4.8	4.0	3.5
Inflation (%p.a.)	2.0	2.2	1.5	2.0	2.2
Trade Balance(US\$ bill.)	420.0	255.0	150.0	100.0	50.0
Rmb/\$(nom.)	6.8	7.2	7.4	7.6	7.8

South Korea

The South Korean economy exhibited a 0.6% quarter-on-quarter growth in the April–June period, building on a 0.3% expansion in the previous quarter. The year-on-year growth rate for the second quarter stood at 0.9%, continuing the trend from the revised 0.9% growth in the prior quarter. Our GDP growth forecast for 2023 remains at one percent. This projection is slightly lower than the Bank of Korea's estimate of 1.4% for the same year, which was revised downward from their initial prediction of 1.6%. Anticipating a gradual recovery, we predict a 2.5% growth in the economy for 2024. This growth trajectory will likely be subdued due to weak consumption, tepid global demand, elevated interest rates, and stricter fiscal policies.

The consumer price index experienced a 2.7% year-on-year increase in June, a moderation from the 3.3% rise observed in May. On a month-to-month basis, the headline index remained stable, in contrast to the 0.3% uptick in the previous month. South Korea's headline inflation reached its lowest level in 21 months in June, continuing a trend of easing inflation for five consecutive months.

The Bank of Korea, recognizing signs of economic deceleration, halted its rate increase campaign to combat inflation since February. The bank has maintained its policy rate for a fourth consecutive time as inflation pressures ease and economic growth weakens.

In June, the downturn in South Korea's exports exhibited a deceleration. Auto exports registered substantial growth, while the decline in semiconductor exports narrowed. This turnaround contributed to the country's first trade surplus since early last year. The Ministry's forecast predicts a 6.6% contraction in exports for 2023, while imports decreased by 11.7% to USD 53.11 billion, marking an improvement from the previous decline of 14%.

The South Korean won could receive support in the year's second half due to the global surge in artificial intelligence. This trend is expected to boost exports of Korean semiconductors, thereby enhancing the country's terms of trade. A shift in the semiconductor cycle will likely benefit the won's performance.

	22	23	24	25	26
GDP (%p.a.)	2.6	1.0	2.5	2.5	2.4
Inflation (%p.a.)	5.1	3.0	2.5	2.5	2.5
Current A/c(US\$ bill.)	50.0	40.0	35.0	30.0	30.0
Won/\$(nom.)	1450	1300	1300	1350	1400

Taiwan

Taiwan's economy experienced a 1.45% growth in the second quarter, rebounding from two consecutive quarters of contraction. This gross domestic product (GDP) improvement follows a 2.87% contraction in the first quarter, attributed to weakening global demand and decreased export orders from international clients. Our forecast maintains a 0.5% contraction in GDP for 2023, with a subsequent recovery projected for 2024. This cautious outlook is based on sluggish exports, manufacturer-led inventory adjustments, and heightened prudence in investment decisions.

The Consumer Price Index in Taiwan is projected to rise by 2.2% in 2023, primarily driven by increased demand for food, beverages, and recreational services. However, several significant uncertainties cast shadows over Taiwan's economic landscape. These include China's economic slowdown, potential repercussions from tightening monetary policies in major economies, and geopolitical risks. Among these, China's economic downturn holds the most substantial potential impact on Taiwan's economy.

The central bank is not expected to raise interest rates, despite indications from some directors of the Taiwan central bank suggesting possible rate hikes in September due to concerns about inflation.

Taiwan: Weighted TAIEX Price Index



Taiwan's exports remain subdued, primarily due to weak demand for its technology products amidst global challenges. The export of goods and services is anticipated to decline by 6% for the year, attributed to a slowdown in global trade growth and lacklustre global market demand for products other than computer chips.

Governor Yang Chin-long of the Central Bank cautioned that a substantial trade surplus with the United States could expose Taiwan to potential sanctions. The increase in exports to the U.S., as Chinese exports declined due to supply chain adjustments, has raised concerns. In the current geopolitical context, such warnings might be the usual protocol.

Taiwan's recent disaster response drills included simulated war games focused on a hypothetical Chinese invasion. This departure from the typical emphasis on natural disasters like typhoons and earthquakes underscores a shift in perception. The increased military activity by China near the island, along with global events such as the Ukrainian conflict, has prompted Taipei to prioritise preparedness and seek closer alignment with Washington's support.

Energy security has been an overlooked aspect of Taiwan's government strategy, despite importing nearly 90% of its energy needs. To address a potential geopolitical crisis with China, suggestions from experts include an increase in the purchase of liquefied natural gas from the U.S. It is believed that intervention by the U.S. Navy would be likely if a Chinese navy attempt to interdict a U.S.-flagged vessel, less so for ships from non-Western-allied nations.

	22	23	24	25	26
GDP (%p.a.)	2.5	-0.5	1.5	2.0	2.3
Inflation (%p.a.)	2.9	2.2	1.6	1.4	1.2
Current A/c(US\$ bill.)	90.0	65.0	60.0	60.0	60.0
NT\$/\$(nom.)	32.0	31.0	30.5	30.5	30.5

Brazil

Fitch, the U.S. credit rating agency, has projected that Brazil's GDP will experience growth of over 2% in 2023, driven by a robust performance in the fertilizer-intensive agricultural sector during the first half of the year. The strong agricultural output, coupled with a vigorous postpandemic recovery, is anticipated to bolster the economy throughout the remainder of the year. Nevertheless, caution prevails, and our GDP forecast for 2023 and 2024 remains at 2%. We anticipate the economy surpassing its long-term trend of 2% growth in 2025 and 2026. This projection is rooted in the dovish phase of the monetary stance and the potential for pension reforms to provide the Lula administration with the means to offer fiscal incentives to the manufacturing sector. Consumption is poised to receive continued support from a robust labour market, budgetary spending, and ongoing credit expansion. The IMF has also revised its growth projection for Brazil, raising it to 2.1% for 2023, up from the previous estimate of 1.2%.

In June, Brazil's annual inflation rate reached its lowest level since September 2020, as the statistics agency IBGE reported. The annual inflation rate slowed to 3.16% in June, down from 3.94% in May, surprising analysts' expectations. It prompted Brazil's central bank to initiate the unwinding of its highly restrictive monetary policy. The central bank's decision to lower the benchmark interest rate, the Selic rate, by 50 basis points to 13.25% has helped alleviate tensions between the Lula government and the autonomous monetary authority. Finance Minister Fernando Haddad commended the central bank's move, characterizing it as "encouraging" and contributing to a positive outlook on communication between the government and the central bank. As a result, our year-end rate forecast of the Selic rate is 12%.



Brazil's trade surplus contracted in June attributed to a greater decline in exports compared to imports. The country recorded a surplus of \$10.6 billion in June, following a surplus of \$11.4 billion in May. Brazilian exports decreased from \$33.1 billion in May to \$30.1 billion in June, while imports declined from \$21.7 billion to \$19.5 billion.

The Brazilian Real may experience some near-term support from accelerated economic growth and advancements in reform initiatives. The currency appreciated recently, partly due to progress made in key fiscal changes proposed by President Lula's government in Congress. The Brazilian Real is expected to gain value in the coming three months, although it is anticipated to hover around 5 per U.S. dollar over the next 12 months.

Fitch credit rating agency has upgraded Brazil's debt commitments' rating from BB- to BB, maintaining its external borrowings in speculative.

	22	23	24	25	26
GDP (%p.a.)	2.9	2.0	2.0	2.5	3.0
Inflation (%p.a.)	8.0	4.0	4.0	4.2	4.2
Current A/c(US\$ bill.)	-10.0	-12.0	-20.0	-10.0	-10.0
Real/\$(nom.)	5.2	5.0	5.0	5.1	5.2

Other Emerging Markets







1993 1996 1999 2002 2005 2008 2011 2014 2017 2020 2023

Malaysia: FT-Actuaries (US\$ Index)





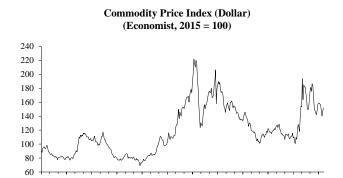
Singapore: Straits Times Index

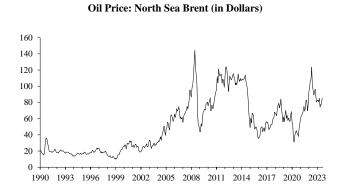


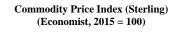
Philippines: Manila Composite



COMMODITY MARKETS



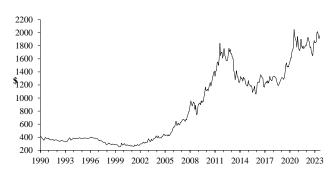




 $1990 \quad 1993 \quad 1996 \quad 1999 \quad 2002 \quad 2005 \quad 2008 \quad 2011 \quad 2014 \quad 2017 \quad 2020 \quad 2023$



Gold Price (in Dollars)



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



UK FORECAST DETAIL

Prices, Wages, Interest Rates and Exchange Rate Forecast (Seasonally Adjusted)

	Inflation %1	Short Dated	3 Month	Nominal	Real Exchange	Real 3 Month	Inflation	Real Short
	(CPI)	(5 Year) Interest Rates	Int. Rates	Exchange Rate (2005=100) ²	Rate ³	Int. Rates % ⁴	(RPIX)	Dated Rate of Interest ⁵
2020	1.0	0.1	0.2	78.2	72.9	-1.3	1.5	-1.4
2021	2.5	0.4	0.1	81.4	78.0	-6.4	4.1	-5.7
2022	9.1	2.3	1.8	79.7	81.8	-6.7	11.4	-6.2
2023	6.4	4.3	4.4	78.1	82.7	0.6	9.3	0.5
2024	3.2	4.0	4.0	77.4	84.2	1.6	4.6	1.6
2025	2.0	3.0	3.0	76.8	84.9	1.0	2.8	1.0
2022:1	6.2	1.4	0.8	82.3	81.9	-9.3	8.4	-8.7
2022:2	9.2	2.1	1.4	80.2	81.8	-8.0	11.5	-7.3
2022:3	10.1	2.8	2.0	78.2	81.7	-6.1	12.4	-5.3
2022:4	10.8	3.0	3.0	78.1	81.6	-3.4	13.9	-3.4
2023:1	10.3	4.0	4.2	78.0	81.1	-0.7	13.5	-0.7
2023:2	6.3	4.1	4.5	77.5	82.6	0.6	9.0	0.1
2023:3	5.0	4.5	4.5	77.9	83.7	1.1	8.4	1.1
2023:4	4.1	4.5	4.5	77.5	83.6	1.3	6.3	1.3
2024:1	3.5	4.0	4.0	77.9	83.5	1.2	5.5	1.2
2024:2	3.2	4.0	4.0	77.3	84.3	1.5	5.0	1.5
2024:3	3.0	4.0	4.0	77.3	84.5	1.8	4.0	1.8
2024:4	3.0	4.0	4.0	77.1	84.3	2.0	4.0	2.0

Consumer's Expenditure Deflator

Labour Market and Supply Factors (Seasonally Adjusted)

	Average Earnings		Unemployment (New Basis)	Millions	Real Wage Rate ⁴
	$(1990=100)^1$	Growth ²	Percent ³		(1990=100)
2020	279.1	1.6	4.5	1.3	149.7
2021	295.0	5.9	4.5	1.3	154.8
2022	314.5	6.0	3.6	1.0	150.2
2023	327.5	5.4	3.5	0.9	150.7
2024	338.9	3.4	2.8	0.7	151.0
2025	338.9	3.0	2.8	0.7	152.6
2022:1	308.5	5.9	3.7	1.0	154.8
2022:2	307.5	6.2	3.8	1.1	149.0
2022:3	315.5	5.8	3.7	0.9	149.0
2022:4	317.2	6.3	3.7	0.9	147.8
2023:1	323.9	5.9	3.8	1.0	153.8
2023:2	321.0	5.6	3.6	1.0	149.2
2023:3	329.3	5.0	3.4	0.9	150.4
2023:4	329.9	5.1	3.2	0.9	149.4
2024:1	335.9	3.9	2.9	0.8	154.4
2024:2	331.3	3.7	2.8	0.7	150.0
2024:3	339.2	2.9	2.8	0.7	150.3
2024:4	339.8	3.1	2.8	0.7	149.5

Whole Economy

Sterling Effective Exchange Rate Bank of England

Ratio of UK to other OECD consumer prices adjusted for nominal exchange rate

Treasury Bill Rate less one year forecast of inflation

Short Dated 5 Year Interest Rate less average of predicted 5 year ahead inflation rate

Average Earnings Wage rate deflated by CPI

Estimates and Projections of the Gross Domestic Product¹ (£ Million 1990 Prices)

	Expenditure	£ Million	Non-Durable	Private Sector	Public	Net Exports ⁵	AFC
	Index	'90 prices	Consumption ²	Gross Investment Expenditure ³	Authority Expenditure ⁴		
				Expenditure	Expenditure		
2020	149.0	713432.6	427576.4	244157.8	199232.3	-33095.4	124438.5
2021	160.2	767344.3	453969.6	258155.2	224537.2	-36883.0	132434.5
2022	166.8	798577.4	473683.2	257528.5	228362.6	-23838.4	137158.1
2023	166.1	795317.2	475719.5	248799.5	225311.5	-18632.0	135881.3
2024	169.5	811597.0	489778.6	243503.8	232154.4	-15890.1	137949.7
2025	172.9	827988.2	505714.4	242189.8	239194.3	-18456.2	140654.2
2020/19	-11.0		-10.1	-16.2	-4.8		5.0
2021/20	7.5		6.2	-1.0	4.8		6.4
2022/21	4.2		4.3	-5.6	3.1		3.6
2023/22	-0.4		0.4	-1.5	3.0		-0.9
2024/23	2.0		3.0	9.9	3.0		1.5
2025/24	2.0		3.3	-16.2	-4.8		2.0
2022:1	167.2	200167.8	118589.6	68746.5	56345.5	-9205.1	34308.7
2022:2	167.4	200403.4	118225.6	62024.6	57458.7	-2866.9	34438.6
2022:3	165.2	197801.6	118034.3	62937.1	56975.0	-6092.0	34052.8
2022:4	167.2	200204.7	118833.7	63820.2	57583.3	-5674.5	34358.0
2023:1	165.8	198481.4	118824.7	69129.5	55701.1	-11222.9	33951.0
2023:2	166.4	199201.0	118812.9	60935.7	56116.4	-2756.3	33907.7
2023:3	166.3	199048.6	118801.0	59953.0	56538.3	-2249.7	33994.0
2023:4	165.9	198586.2	119280.9	58781.4	56955.7	-2403.2	34028.6
2024:1	167.7	200740.0	120213.3	67069.4	57389.5	-9638.5	34293.7
2024:2	169.4	202819.3	122254.5	59537.5	57819.9	-2462.3	34330.3
2024:3	170.2	203787.8	123116.9	58859.8	58254.1	-1824.2	34618.8
2024:4	170.6	204249.9	124193.9	58037.1	58690.9	-1965.1	34706.9

Financial Forecast

	PSBR/GDP % ¹	GDP ¹	PSBR	Current
		(£bn)	(£bn)	Account
		, ,	Financial Year	(£ bn)
2020	15.6	2068.0	312.7	-67.5
2021	5.2	2412.6	122.3	-34.3
2022	5.6	2695.1	152.0	-93.9
2023	1.6	2831.6	45.9	-24.2
2024	1.3	2982.6	38.8	-14.7
2025	0.6	3133.2	19.6	1.5
2022:1	0.0	633.6	-0.1	-50.5
2022:2	6.4	656.3	41.9	-28.2
2022:3	4.0	660.4	26.5	-12.7
2022:4	8.1	685.2	55.5	-2.5
2023:1	4.1	693.1	28.1	-9.6
2023:2	1.9	696.3	13.2	-9.8
2023:3	1.8	700.8	12.3	-3.3
2023:4	1.5	709.8	10.3	-1.5
2024:1	1.4	724.8	10.1	-7.3
2024:2	1.4	732.3	10.0	-8.6
2024:3	1.3	739.4	9.8	0.1
2024:4	1.3	753.1	9.5	1.1

GDP at market prices (Financial Year)

GDP at factor cost. Expenditure measure; seasonally adjusted
Consumers expenditure less expenditure on durables and housing
Private gross domestic capital formation plus household expenditure on durables and clothing plus private sector stock building
General government current and capital expenditure including stock building

Exports of goods and services less imports of goods and services

WORLD FORECAST DETAIL

Growth Of Real GNP								
	2019	2020	2021	2022	2023	2024		
U.S.A.	2.2	-2.8	5.9	2.1	0.7	1.2		
U.K.	1.4	-11.0	7.5	4.2	-0.4	2.0		
Japan	-0.4	-4.3	2.2	1.0	1.1	1.1		
Germany	1.1	-3.7	2.6	1.9	-0.3	1.4		
France	1.9	-7.9	6.8	2.5	0.3	0.6		
Italy	0.5	-9.1	6.6	3.3	-0.1	0.3		

Growth Of Consumer Prices								
	2019	2020	2021	2022	2023	2024		
U.S.A.	1.8	1.3	4.7	8.0	3.9	2.5		
U.K.	1.7	1.0	2.5	9.1	6.4	3.2		
Japan	0.5	0.0	-0.2	2.5	2.1	1.2		
Germany	1.4	0.5	3.1	7.9	6.2	2.7		
France	1.1	0.4	1.7	5.4	4.0	2.0		
Italy	0.6	-0.1	1.9	7.6	5.0	2.4		

Real Short	Real Short-Term Interest Rates								
	2019	2020	2021	2022	2023	2024			
U.S.A.	0.2	-4.6	-7.1	-1.7	2.4	2.0			
U.K.	-0.7	-1.3	-6.4	-6.7	0.6	1.6			
Japan	0.1	0.3	-2.4	-2.1	-1.1	-1.4			
Germany	-0.9	-3.6	-8.5	-5.9	0.4	0.5			
France	-0.8	-2.2	-6.0	-3.7	1.1	0.8			
Italy	-0.3	-2.4	-8.2	-4.7	0.7	0.7			

Nominal S	Nominal Short-Term Interest Rates								
	2019	2020	2021	2022	2023	2024			
U.S.A.	1.5	0.1	0.1	2.2	4.9	4.0			
U.K.	0.8	0.2	0.1	1.8	4.4	4.0			
Japan	0.1	0.1	0.1	0.0	0.1	0.1			
Germany	-0.4	-0.5	-0.6	0.3	3.1	2.8			
France	-0.4	-0.5	-0.6	0.3	3.1	2.8			
Italy	-0.4	-0.5	-0.6	0.3	3.1	2.8			

Real Long	Real Long-Term Interest Rates									
	2019	2020	2021	2022	2023	2024				
U.S.A.	-2.2	-3.3	-2.1	1.3	1.5	1.2				
U.K.	-0.4	-1.4	-5.7	-6.2	0.5	1.6				
Japan	-1.1	-1.3	-1.7	-1.5	-1.1	-1.3				
Germany	-4.3	-5.0	-4.4	-0.9	0.1	0.0				
France	-2.6	-3.3	-2.9	-0.6	0.9	0.7				
Italy	-2.0	-3.3	-2.6	0.3	2.3	2.2				

Nominal Long-Term Interest Rates									
	2019	2020	2021	2022	2023	2024			
U.S.A.	1.9	0.9	1.6	3.8	3.6	3.2			
U.K.	0.6	0.1	0.4	2.3	4.3	4.0			
Japan	0.0	0.0	0.1	0.2	0.5	0.5			
Germany	-0.2	-0.6	-0.2	2.1	2.3	2.1			
France	0.1	-0.3	0.2	1.8	2.9	2.7			
Italy	1.4	0.5	1.2	3.0	4.4	4.2			

Index Of	Index Of Real Exchange Rate (2010=100) ¹									
	2019	2020	2021	2022	2023	2024				
U.S.A.	117.1	118.7	116.1	128.3	128.0	128.5				
U.K.	99.5	99.6	106.5	111.8	111.6	113.7				
Japan	77.0	77.8	71.0	59.9	59.2	59.3				
Germany	96.0	97.1	97.9	95.0	95.1	95.4				
France	93.9	94.7	94.0	89.6	89.5	89.0				
Italy	95.0	95.4	95.1	91.6	91.3	89.9				

Italy 95.0 95.4 95.1 91.6 91.3 89.9

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)								
	2019	2020	2021	2022	2023	2024		
U.S.A. ¹	122.52	124.77	119.77	127.34	126.90	127.40		
U.K.	1.28	1.29	1.37	1.22	1.21	1.24		
Japan	109.10	106.60	110.45	133.10	136.20	137.80		
Eurozone	0.89	0.87	0.85	0.95	0.98	0.99		

 $^{^1}$ The series for the USA is a nominal broad U.S dollar index (2010=100); the series for the UK is \$ per £

^{*} Forecasts based on the Liverpool World Model