Working Paper 130

Prospects and Risks for the Global Economy in 2019

Tanweer Akram



PROSPECTS AND RISKS FOR THE GLOBAL ECONOMY IN 2019

CPD Working Paper 130

Tanweer Akram



Publisher
Centre for Policy Dialogue (CPD) House - 6/2 (7th & 8th floors), Block - F Kazi Nazrul Islam Road, Lalmatia Housing Estate Dhaka - 1207, Bangladesh Telephone: (+88 02) 58152779, 9141734, 9141703, 9126402, 9133530 E-mail: info@cpd.org.bd Website: www.cpd.org.bd
First Published October 2019 © Centre for Policy Dialogue (CPD)
Disclaimer: The views expressed in this paper are those of the author alone and do not necessarily reflect the views of the CPD, Thrivent, and Thrivent Asset Management.
Tk. 95 USD 6
ISSN 2225-8175 (Online) ISSN 2225-8035 (Print)

Cover design *Avra Bhattacharjee*

Centre for Policy Dialogue (CPD) was established in 1993 as a civil society initiative to promote an ongoing dialogue between the principle partners in the decision-making and implementing process. Over the past 25 years, the Centre has emerged as a globally reputed independent think tank, with local roots and global reach. A key area of CPD's activism is to organise dialogues to address developmental policy issues that are critical to national, regional and global interests, with a view to seeking constructive solutions from major stakeholders. The other key area of CPD's activities is to undertake research programmes on current and strategic issues.

CPD's dialogues are designed to address important policy issues and to seek constructive solutions to these problems. In doing so, CPD involves all important cross-sections of the society, including public representatives, government officials, business leaders, activists of grassroots organisations, academics, development partners and other relevant interest groups. CPD focuses on frontier issues which are critical to the development process of Bangladesh, South Asia and LDCs in the present context, and those that are expected to shape and influence the country's development prospects from the mid-term perspectives. CPD seeks to provide voice to the interests and concerns of the low-income economies in the global development discourse. With a view to influencing policies, CPD deploys both research and dialogue which draw synergy from one another.

CPD's research programmes are both serviced by and intended to serve, as inputs for particular dialogues organised by the Centre throughout the year. Major research themes are: macroeconomic performance analysis; poverty and inequality; agriculture; trade; regional cooperation and global integration; infrastructure; employment, and enterprise development; climate change and environment; development governance; policies and institutions, and the 2030 Agenda for Sustainable Development.

CPD also conducts periodic public perception surveys on policy issues and issues of developmental concerns. With a view to promoting vision and policy awareness amongst the young people of the country, CPD is also implementing a Youth Leadership Programme. As part of its global networking initiatives, CPD hosts the secretariat of the *LDC IV Monitor*—an independent global partnership for monitoring the outcome of the Fourth UN Conference on the LDCs. CPD was also the initial convener and founding host of the *Southern Voice on Post-MDGs*, a network of 50 think tanks from Africa, Asia and Latin America, which seeks to contribute to the ongoing global discourse on the SDGs. CPD was the Secretariat of Southern Voice during January 2013—June 2019. At present, CPD hosts the office of the Chair of the network. At the national level, CPD hosts the Secretariat of the *Citizen's Platform for SDGs*, *Bangladesh*—a civil society initiative that include more than 100 Partner organisations, founded with an objective to contribute to the delivery of the SDGs and enhance accountability in its implementation process.

Dissemination of information and knowledge on critical developmental issues continues to remain an important component of CPD's activities. Pursuant to this, CPD maintains an active publication programme, both in Bangla and in English. As part of its dissemination programme, CPD has been bringing out CPD Occasional Paper Series on a regular basis. It may be noted in this connection that since November 2011, the Series has been re-introduced as **CPD Working Paper Series**. Research work in progress, background papers of dialogues, investigative reports and results of perception surveys which relate to issues of high public interest are published under this series.

The present paper titled **Prospects and Risks for the Global Economy in 2019** has been prepared by *Dr Tanweer Akram*, Director, Global Public Policy and Economics, Thrivent. He can be reached at: tanweer. akram@thrivent.com

Series Editor: Dr Fahmida Khatun, Executive Director, CPD

Author's Acknowledgements

The author benefitted from comments from *Dr Debapriya Bhattacharya*, *Dr Fahmida Khatun* and other participants at a workshop held at the Centre for Policy Dialogue (CPD). He is grateful to an anonymous referee for valuable suggestions. He also thanks *Ms Asmaul Husna* and *Ms Mary Rafferty* for their copyediting.

Abstract

The pace of global economic growth has slowed down in 2019. The slope of the United States (US) Treasury securities yield curve has become flatter. This is raising concerns about the risks of a global economic recession. The US and People's Republic of China have been the twin engines of global economic growth. Economic performance in both advanced countries and emerging markets is slowing. The US economy is expanding at a moderate pace. However, the recovery in the eurozone is stalling, while Japan faces protracted low inflation. The outcome of Brexit for the United Kingdom economy is uncertain. Monetary authorities in the US and eurozone have eased their target rates and other policies. In emerging markets, there is a clear divergence in performance. Risks to the global economy are tilted to the downside. There are several key long-term challenges for the world economy. This paper analyses current conditions in the global economy. It also examines the near-term risks and long-term challenges to the global economy. It proposes some policy actions to address the downside risks and long-term challenges.

Contents

Abstract Acronyms		v ix				
1. Introdu	ction	1				
2. Underly	ring Trends in Global Growth	3				
3. Recent	Performance of the US Economy	7				
4. Current	Conditions in the Eurozone and Japan	13				
5. Moneta	ry Policy and the Dynamics of Long-Term Rates in Major Advanced Economies	18				
6. Diverge	nce in Growth Performance in Emerging Markets	21				
7. China a	nd other Asian Emerging Economies	23				
8. Downsi	de Risks, Long-Term Challenges, Policy Responses and Upside Possibilities	27				
9. Conclus	ion	30				
Reference	S	32				
List of Tab	oles and Figures					
Tables						
Table 1:	The United States and the People's Republic of China are the twin engines of global economic growth	4				
Table 2:	The decline in the trend growth rate in the US	9				
Table 3:	The evolution of income dispersion and income inequality in the US	12				
Table 4:	Trend growth rates in real GDP in selected Asian emerging economies	26				
Table 5:	Trend growth rates in real GDP per capita in selected Asian emerging economies	26				
Figures						
Figure 1:	Equity upswings in major financial markets have continued	1				
Figure 2:	Volatility has risen in the bond market The slope of viold curve of US Treasury securities has flattened	2				
Figure 3: Figure 4:	The slope of yield curve of US Treasury securities has flattened The growth of retail sales in China has slowed down	2				
Figure 5:						

Figure 6:	Global industrial production is feeble	5
Figure 7:	Global trade has slowed and further trade frictions pose a risk	5
Figure 8:	Slowing industrial production in major advanced countries	6
Figure 9:	Business surveys point to faltering expansion in advanced countries	6
Figure 10:	The US economy has been adding jobs for the last nine years	7
Figure 11:	Decent job growth has resulted in low unemployment rates in the US	8
Figure 12:	US growth has been moderate, trending around 2 per cent since 2010	8
Figure 13:	Real retail sales in the US have been rising at a respectable pace	10
Figure 14:	Business investment in the US has remained weak in 2019	10
Figure 15:	Residential real estate prices have surpassed their previous peak	11
Figure 16:	Trade-weighted US dollar has appreciated since 2015	12
Figure 17:	The pace of activity in the eurozone has deteriorated	14
Figure 18:	Unemployment rates in the eurozone's periphery is still too high, but have been declining	14
Figure 19:	Greece is still in a depression	15
Figure 20:	Hard Brexit could harm the British economy	15
Figure 21:	Business investment intentions have weakened in the UK	16
Figure 22:	Nominal GDP is rising again in Japan	16
Figure 23:	Core inflation in Japan is markedly below its target	17
Figure 24:	Abenomics has raised the female labour force participation rate	17
Figure 25:	The Federal Reserve and the European Central Bank have eased monetary policy in 2019	18
Figure 26:	Major central banks' balance sheets are bloated	18
Figure 27:	Long-term interest rates in US and Canada have declined since the beginning of the year	19
Figure 28:	Long-term interest rates are still generally negative in the eurozone, but Italian interest	20
	rates have risen	
Figure 29:	Negative long-term interest rates in Japan	21
Figure 30:	Divergence in emerging markets' industrial production	22
Figure 31:	Industrial growth is positive in emerging Asia, but tame in other emerging markets	22
Figure 32:	Business surveys show that purchasing managers' view of emerging markets is mixed	23
Figure 33:	Brazil's economy took a big hit during 2015–2016, while the recovery has been slow and	24
	disappointing	
Figure 34:	Argentina's current account deficit is large	24
_	Growth in China is driven by domestic demand	25
_	China is experiencing rapid expansion of credit	25
Figure 37:	China's ICOR is quite high	26

Acronyms

BOC Bank of Canada
BOE Bank of England
BOJ Bank of Japan

BRICS Brazil, Russia, India, China, and South Africa

CBOE Chicago Board Options Exchange

ECB European Central Bank
GDP Gross Domestic Product

ICORIncremental Capital Output RatioILOInternational Labour OrganizationJGBJapanese Government BondMBSMortgage Backed Securities

MOVE Merrill Lynch Option Volatility Estimate

PMI Purchasing Managers' Index

UK United Kingdom
US United States
VIX Volatility Index

1. INTRODUCTION*

This paper analyses current conditions in the global economy. It assesses the prospects and risks for the global economy in 2019. Going beyond the current year, it examines some key long-term challenges to the global economy. It proposes some policy actions in response to these risks and challenges.

Major equity markets in advanced countries witnessed decline in 2018 (Figure 1). The decline in major equity indexes, such as S&P 500, FTSE 1000, DAX 30 and NIKKEI 225, occurred despite the ongoing expansion of economic activity in the major advanced countries. At the end of last year, there was a noticeable increase in the metrics of implied volatility in the major equity markets, such as the Volatility Index (VIX). In recent months, while equity prices resumed the upswing and volatility in

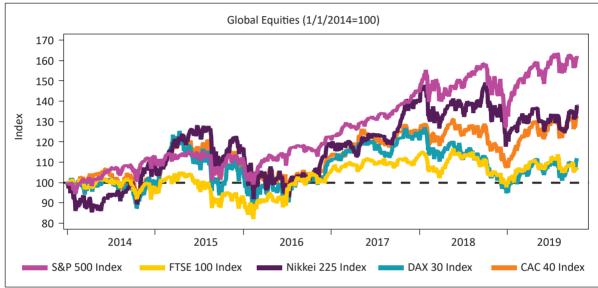


Figure 1: Equity upswings in major financial markets have continued

Source: Macrobond.

equity markets have abated, volatility in United States (US) Treasury securities across the yield curve² have risen (Figure 2). This has happened because investors are worried about the global economy and the pace of mid-cycle adjustments in monetary policy in the US. Investors are concerned whether the Federal Reserve will be forced to lower fed funds target rate to the effective lower bound. Investors do not know what is the effective lower bound for the fed funds target rate. The developments in global financial markets reflect investors' anxiety about the prospects of growth and their heightened concerns about downside risks for the global economy in the near future. About half of the earnings of the major US corporations comes from the domestic economy, while the remainder originates from the rest of the world. Hence, the swings in the US financial markets provide a useful gauge for investors' confidence about not just the US economy, but also the global economy.

The slope of the US Treasury securities yield curve has turned flatter (Figure 3), as long-term interest rates have declined in the past few months while short-term interest rates have risen with the Fed's

 $^{^{*}}$ The final manuscript of this working paper was prepared on 17 October 2019.

¹The Chicago Board Options Exchange's (CBOE) VIX is a measure of investors' expectation of volatility implied by S&P 500 Index options.

²The volatility of US Treasury securities is measured by Merrill Lynch Option Volatility Estimate (MOVE). It is a yield curve weighted index of the normalised implied volatility on 1-month Treasury options on US Treasury securities of 2-, 5-, 10- and 30-year tenures.

Volatility in Financial Markets, MOVE Index and VIX 95 32.5 90 30.0 85 27.5 80 25.0 75 22.5 70 20.0 65 17.5 15.0 60 55 12.5 50 10.0 45 7.5 2014 2015 2016 2017 2018 2019 ICE BofAML, MOVE Index, 3 months, lhs CBOE, S&P 500 VIX, rhs

Figure 2: Volatility has risen in the bond market

easing of monetary policy since the beginning of the year. A negative-sloped Treasury yield curve usually precedes the onset of a downturn. Incoming information from China, such as slower growth in retail sales (Figure 4), manufacturing activity, and reports of excess capacity also indicate a tepid pace of growth owing to trade tensions, somewhat tighter financial conditions, and caution in the private sector.

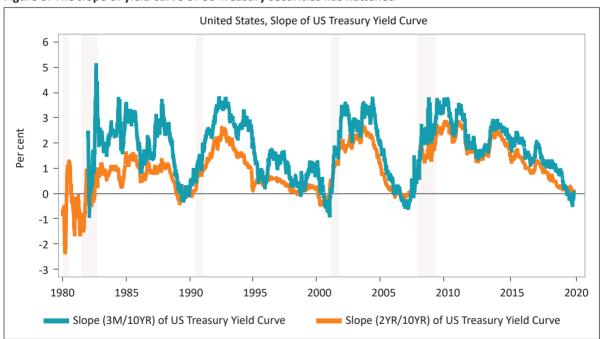


Figure 3: The slope of yield curve of US Treasury securities has flattened

Source: Macrobond.



Figure 4: The growth of retail sales in China has slowed down

1.1 An Outline of the Paper

This paper proceeds as follows. Section 2 of this paper provides an overview of underlying trends in global growth, with a focus on industrial production and international trade. Section 3 delves into some details of expenditure components of the US economy and its underlying trends. Section 4 considers current conditions in the eurozone and Japan. Section 5 discusses monetary policy of the major central banks and the dynamics of long-term interest rates in the key advanced countries. Section 6 explores the recent economic performance of the leading emerging markets, while section 7 looks closely at recent developments in China and other Asian emerging economies. Section 8 considers the near-term risks, the long-term challenges, and upside possibilities for the global economy. It proposed some policy actions to address near-term risks and long-term challenges. The concluding section, Section 9, summarises the discussion of the paper.

2. UNDERLYING TRENDS IN GLOBAL GROWTH

The global economy is growing at a moderate pace (Figure 5). The pace of expansion for the global economy last year was around its average of 3.5 per cent,³ but below the pace registered in the years immediately prior to the global financial crisis.

The US and People's Republic of China have been the twin engines of global growth. Table 1 provides the sources of global growth from top 10 contributing countries and rest of the world since the beginning of 21st century. Indeed, in current decade the US and China have been contributing to more than 45 per cent of global growth. China alone is the source of nearly one-third of global growth. India is also contributing meaningfully to the overall expansion of the global economy.

³World real gross domestic product (GDP) is measured here on a market exchange basis. For assessing global growth, real GDP should be measured using market exchange rates, whereas for assessing and comparing the standard of living and the level of poverty, real GDP should be measured on a purchasing power parity basis. But the World Bank's purchasing power parity measures have serious shortcomings (Reddy, 2008; Reddy and Lahoti, 2016).

World, IMF WEO, Estimate, Constant Prices, Change Y/Y 6 5 4 3 ъ 2 1 0 -1 1985 1990 2000 2010 1995 2005 2015 2020 2025 1980 GDP [mean 1980 -] GDP

Figure 5: The global economy is expected to expand at a moderate pace

Table 1: The United States and the People's Republic of China are the twin engines of global economic growth

	Countries' Contributi	on to Global Growth, per cent	
	USD at Co	nstant 2010 Prices	
Country	2000-2009	Country	2010-2017
China	24.8	China	28.8
United States	14.3	United States	16.6
India	5.3	India	6.9
Brazil	3.9	Japan	3.2
South Korea	2.4	Germany	3.2
United Kingdom	2.3	Turkey	3.1
Spain	2.1	United Kingdom	2.6
Australia	2.1	Indonesia	2.4
Indonesia	2.0	Canada	1.9
France	1.9	South Korea	1.8
Rest of the world	39.0	Rest of the world	29.6

Source: Author's calculation from World Bank data.

Global industrial production is growing but at a moderate pace in recent months. Industrial production is tepidly rising in both advanced countries and in emerging markets (Figure 6). Monitoring industrial production is useful because it is a leading indicator of economic activity even though the services sector dominates economic activity, particularly in the advanced countries. Industrial production is much more sensitive to the upturns and downturns of business fluctuations since the production of durable goods tends to vary more than services.

Global trade, as measured by the volume of world exports, has been contracting in the past several months. The slowdown in global trade is occurring in tandem with slower growth in global industrial

World, Industrial Production, SA 5.0 cent -5.0 per -15.0 10 per cent -5.0 -20 12.5 cent 2.5 per -7.5 2000 2005 2010 2015 2020 Global industrial production Advanced economies ■ Emerging & developing countries

Figure 6: Global industrial production is feeble

production (Figure 7). Increased trade frictions between the US and China, as well as other ongoing trade disputes between the US and its other major trading partners, pose a risk—not just to the US's major trade partners but also to small, open economies and the global economy as a whole because of integrated supply chains. Higher tariffs, non-tariff barriers and various modes of protectionism are likely to have adverse consequences on effective demand at global and regional levels and on business confidence.

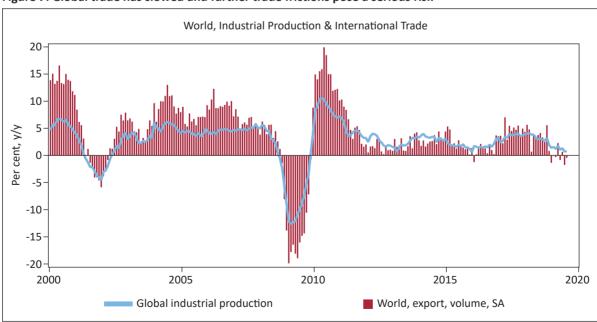


Figure 7: Global trade has slowed and further trade frictions pose a serious risk

Source: Macrobond.

Major Advanced Economies, Industrial Production, SA 8 6 Per cent, y/y 2 0 -2 -4 2014 2015 2017 2018 2019 2016 Euro Zone USA Japan

Figure 8: Slowing industrial production in major advanced countries

Growth of industrial production among advanced countries has slowed sharply (Figure 8). Whereas industrial production in the US is still expanding tepidly, industrial production in the eurozone and in Japan has been contracting in the recent months. Indeed, there is some risk of a protracted contraction of industrial production in the eurozone and Japan.

Analysis of incoming information shows that global industrial production and international trade have definitely slowed. Industrial production and international trade are very much integrated activities.

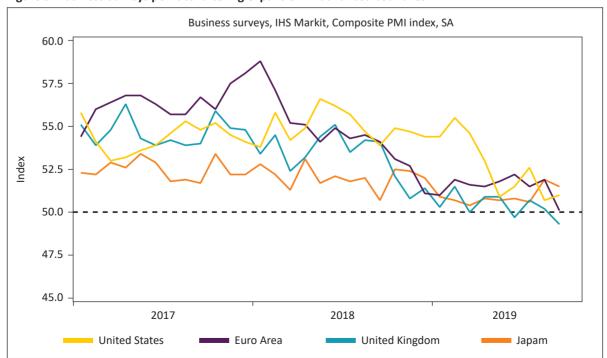


Figure 9: Business surveys point to faltering expansion in advanced countries

Source: Macrobond.

Trade and technology disputes between the US and China, and other trade disputes are taking their toll. Industrial production and international trade have been slowing down globally both in advanced countries and in emerging markets. Regional analysis shows widespread slowdown in industrial production and exports. The slowdown is particularly noticeable in the euro zone, Japan, emerging Africa and Middle East. Exports have weakened in USA, Japan, and emerging markets. Industrial production is declining in the euro zone, Japan and Latin America, while the pace of expansion has moderated markedly in the US and China.

Business surveys, such as the composite Purchasing Managers' Index (PMI)—a survey of procurement officers of both manufacturing and non-manufacturing corporations published by IHS Markit, a data, forecasting and consulting company, reinforce the view that the pace of expansion (Figure 9) in most advanced countries, including the US, eurozone, Japan and the United Kingdom (UK) is dwindling. The composite PMI is a diffusion index. A value above 50 indicates expansion, while a value below 50 implies contraction. Business surveys generally tend to provide a forward-looking picture of economic activity.

3. RECENT PERFORMANCE OF THE US ECONOMY

The US economy has been expanding and adding jobs for the past nine years (Figure 10). For the past several years, job growth has averaged more than 2 million per year. Decent job growth has

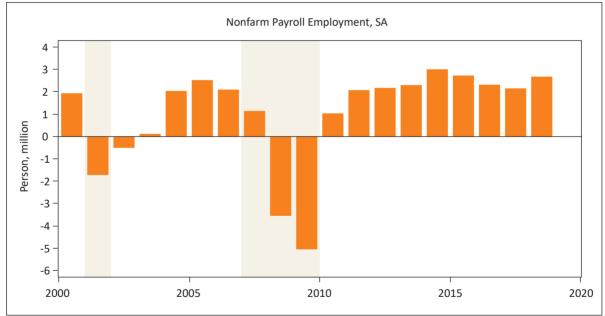


Figure 10: The US economy has been adding jobs for the last nine years

Source: Macrobond.

resulted in a decline in the unemployment rate. Both the official unemployment rate, known as the U-3 unemployment rate, and broader measures of slack in the labour market, such as the U-6 unemployment rate, have declined (Figure 11). The U-6 unemployment rate is the ratio of the unemployed, those employed part time for economic reasons, to the civilian labour force and all persons marginally attached to the labour force. Hence, it is a broader measure of slack in the economy compared to the official U-3 unemployment rate, which is simply the ratio of the unemployed to the

USA Official U-3 & U-6 Measures of Unemployment Rate, SA 18 16 14 12 Per cent 10 8 6 4 2 2000 2005 2010 2015 2020 U-3 unemployment rate U-6 unemployment rate

Figure 11: Decent job growth has resulted in low unemployment rates in the US

civilian labour force. Other indicators of the condition of labour markets, such as initial and continuing unemployment claims, and the rates of job openings, separations, and layoffs confirm the tightness of labour market in the US.

Akram and Swansen (2017) give an analysis of developments in the US labour market since the global financial crisis, and highlight some paradoxes, for instance the relative weakness of wage growth amid a tight labour market, though recently wage growth has modestly improved. The employment-to-population ratio and the labour force participation rate are still lower than before the crisis, though

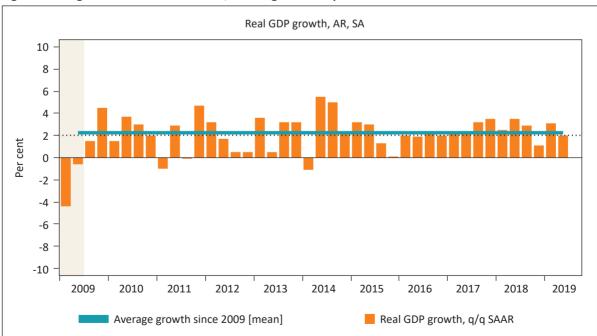


Figure 12: US growth has been moderate, trending around 2 per cent since 2010

Source: Macrobond.

these indicators have also risen lately. Most analysts, such as Aaronson *et al.* (2014), attribute the decline in the labour force participation rate in recent years primarily to the aging of the population. However, Dantas and Wray (2017) are sceptical of this explanation. They argue that the lower labour force participation rate is mainly due to the weakness of effective demand. The debate has not been settled.

The pace of growth in the US is better than the most other major advanced economies (Akram, 2016a). However, even for the US growth has been moderate, trending just slightly above 2 per cent since 2010 (Figure 12). The growth rate in the US since the beginning of this century is slower than the US's historical growth rate (Table 2). Indeed, since the beginning of the century, growth in the US has been slower than in the previous fifty years. The global financial crisis had pulled down the trend growth rate, which has remained so ten years after the end of the global financial crisis.

Table 2: The decline in the trend growth rate in the US

USA, Trends, Real GDP Growth and Real GDP Per Capita Growth Rates, 1950-2018, per cent				
Trend growth rate by decades	Real GDP	Real GDP per Capita		
1950-1959	3.1	1.3		
1960-1969	4.9	3.7		
1970-1979	3.4	2.4		
1980-1989	3.8	2.9		
1990-1999	3.6	2.4		
2000-2009	2.0	1.1		
2010-2018	2.2	1.5		
Trend growth rate by era				
1950-2018	3.1	2.0		
1950-1999	3.4	2.2		
2000-2007	2.8	1.8		
2009-2018	2.2	1.5		

Source: Author's calculation from Macrobond.

Consumer activity in the US has been supported by moderate real disposable income growth, a tight labour market, improvements in household balance sheets, and easier access to credit for borrowers. Real retail sales have been rising at a decent pace (Figure 13). Auto sales have held steady for the past five years at around an annualised rate of slightly more than 17 million vehicles per month.

Business investment had weakened sharply during the global financial crisis. New orders and shipments of core capital goods (excluding aircraft) rose notably in the beginning of last year but have decreased in the second half of 2018 and stayed weak in 2019 (Figure 14). Investment in equipment, structures, software and intellectual property is necessary to raise labour productivity. Growth in labour productivity has been slow in the US and other advanced countries for many years.

Residential investment, however, has improved for the past several years, after having peaked before the financial crisis and then dropped markedly during the crisis. It took several years before the housing recovery started. House prices fell sharply—by more than 25 per cent nationally—during the crisis, but have been rising since 2013. As a result, nominal house prices have finally surpassed

US, Retail Sales, Constant Prices (CPI deflated), SA 10.0 7.5 5.0 Per cent change, y/y 2.5 0.0 -2.5 -5.0 -7.5 -10.0 -12.5 2002 2004 2006 2010 1994 1996 1998 2000 2008 2012 2014 2016 2018 2020

Figure 13: Real retail sales in the US have been rising at a respectable pace

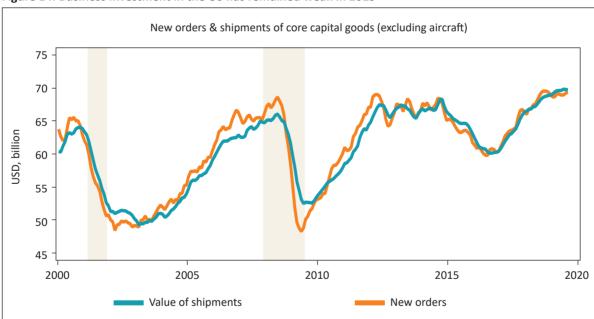


Figure 14: Business investment in the US has remained weak in 2019

Source: Macrobond.

their pre-crisis level (Figure 15), though real house prices are still below their peaks. Residential house prices have increased strongly in the past couple of years. Higher nominal interest rates and mortgage rates have not yet caused any dents in the ongoing house price appreciation. Higher house prices have been accompanied by higher rental prices. The appreciation in house prices is supported by favourable demographics, household formation and supply constraints in various markets. While residential construction has improved, construction activity is substantially below its peak prior to the global financial crisis. This imbalance in supply and demand has exerted upward pressure on house prices.

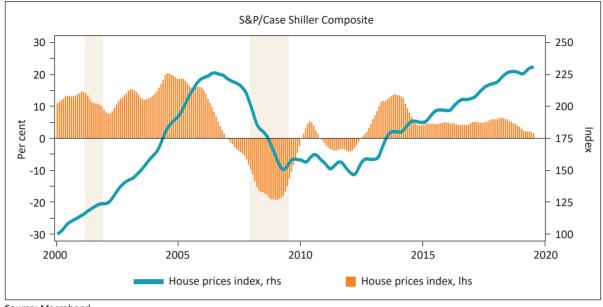


Figure 15: Residential real estate prices have surpassed their previous peak

Though equity prices declined last year, they have risen since late 2015. The phenomenon of a higher equity index despite a somewhat higher interest rate than during the global financial crisis is a bit counterintuitive since valuation models of stock prices, such as those based on Gordon's (1959) model, would imply that a higher discount rate would entail lower equity prices. However, investors' expectations of nominal GDP growth and future dividend payments from higher sales and profits usually rise during the upswing phase of the business cycle. The rise in the expected dividends per share and the expected growth rate of dividends from improved marginal efficiency of capital appears more than offset the rise in the discount rate—at least initially. Of course, financial asset prices do not keep climbing up and up. Eventually, market corrections occur when asset prices deviate considerably from macroeconomic fundamentals. Last year's volatility in equity prices was likely a manifestation of such corrections, though even further corrections might be on the horizon, particularly if global growth slows down.

The combination of higher house prices and higher equity prices since the end of the global financial crisis have enabled the household balance sheet to improve. Household net worth has risen, while household debt as a percentage of disposable income has declined. Lower interest rates, restructuring of household debt, and a gradual increase in disposable personal income have contributed to curtailing household leverage.

The trade-weighted US dollar has appreciated since the beginning of 2015 (Figure 16). Tighter monetary policy in the US, increased spreads between interest rates in the US and other major advanced countries, and lingering uncertainty about the global economy have led to the appreciation of the dollar. A strong dollar benefits US consumers because it means that imports are cheaper. However, the combination of a strong dollar, a slower pace of growth overseas, higher tariffs and trade frictions have hurt US exporters. At the same time, import demand has risen in tandem with the moderate improvement in real disposable income and economic growth in the US. This has resulted in the widening of the country's trade deficit with the rest of the world.

US dollar: Trade Weighted Exchange Index

110 - 105 - 100 -

Figure 16: Trade-weighted US dollar has appreciated since 2015

The long expansion is raising some questions about the risks of recession and whether the business cycle is reaching its peak (Isaac, 2019). The behaviour of the Treasury securities yield curve suggests that the business cycle is maturing. The slope of the Treasury yield curve, as calibrated by the difference between the yields of the 10-year Treasury note and the 2-year Treasury note, is an important indicator of financial conditions and investors' expectations about economic outlook. The slope of the Treasury yield curve has noticeably flattened from mid-2015 to mid-January 2019, as the Fed has embarked on tightening monetary policy and as long-term interest rates have declined in recent months. A negatively sloped yield curve typically precedes a recession by several months. Statistical testing has shown this to be a consistently reliable indicator of the onset of a recession in the US (Estrella and Mishkin, 1996). Of course correlation is not causation.

Median household real income has been stagnant for the past two decades. Since the global financial crisis, the bulk of gains has gone to the upper strata of society. Income inequality in the US continues to worsen (Table 3). Various measures of income dispersion—such as the Gini Index and the mean

Table 3: The evolution of income dispersion and income inequality in the US

(In 2017 CPI-U-RE adjusted dollars)

					•		<u> </u>
Sele	cted Measure	es of Househ	old Income [Dispersion, 1	970-2017		
Percentile of Income	1970	1980	1990	2000	2007	2010	2017
Median household income	49,342	50,301	54,621	59,938	59,534	54,673	61,372
Mean household income of quit	ntiles						
Lowest quintile	11,254	12,242	13,072	14,499	13,690	12,280	13,258
Second quintile	30,484	30,468	32,889	36,201	34,894	32,157	35,401
Third quintile	49,088	50,276	54,325	60,285	59,220	55,397	61,564
Fourth quintile	69,194	74,069	81,906	93,716	93,579	88,872	99,030

(Table 3 contd.)

(Table 3 contd.)

Selec	Selected Measures of Household Income Dispersion, 1970-2017						
Percentile of Income	1970	1980	1990	2000	2007	2010	2017
Highest quintile	122,497	132,065	158,951	203,081	199,073	190,668	221,846
Top 5 per cent	188,019	197,354	253,112	360,286	340,364	323,594	385,289
Share of household income of q	uintiles, per d	cent					
Lowest quintile	4.1	4.2	3.8	3.6	3.4	3.3	3.1
Second quintile	10.8	10.2	9.6	8.9	8.7	8.5	8.2
Third quintile	17.4	16.8	15.9	14.8	14.8	14.6	14.3
Fourth quintile	24.5	24.7	24.0	23.0	23.4	23.4	23.0
Highest quintile	43.3	44.1	46.6	49.8	49.7	50.3	51.5
Top 5 per cent	16.6	16.5	18.5	22.1	21.2	21.3	22.3
Summary measures inequality							
Gini index of income inequality	0.394	0.403	0.428	0.462	0.463	0.470	0.482
Mean log deviation of income	0.370	0.375	0.402	0.490	0.532	0.574	0.609

Source: Author's calcuation from US Census Bureau; Current Population Reports; and Income and Poverty in the United States, 2017.

log deviation of income—unambiguously exhibit a steady rise in income inequality. The share of household income going to the lowest three quintiles of the population has declined, whereas the share of income of the highest quintile has risen around 43 per cent in 1970 to 51 per cent in 2016, even after making appropriate adjustments for the change in household size. The recent tax cuts and other policy measures to curb transfers and reduce government expenditures are likely to further exacerbate income inequality. Household net wealth in the US is highly concentrated. Substantial evidence also exists that intergenerational mobility and the equality of opportunity have declined in the past several decades (Chetty *et al.*, 2017). These trends have fostered and fuelled right-wing populism, demand for protectionism, and anti-immigrant sentiments. Stiglitz (2018) argues that the main cause of the increase in income inequality in the US is political and that rising inequality poses a threat to democracy.

4. CURRENT CONDITIONS IN THE EUROZONE AND JAPAN

The eurozone's recovery is faltering once again. In the major eurozone economies—namely, Germany, France, Italy and Spain—the growth in industrial production has dwindled (Figure 17). The German economy—the eurozone's most important driver of economic activity—expanded at a slow pace in 2018. The unemployment rate in Germany is quite low—just 3.3 per cent (as of second quarter of 2019) as calibrated on the International Labour Organization (ILO) definition of standardised unemployment rate—but the countries at the periphery of the eurozone continue to suffer severely from high unemployment rates. The unemployment rates in the periphery have declined from their peaks attained immediately around the time of the debt crisis (Figure 18), but this decline has been incremental. The Greek economy is in a severe depression. Between 2008 and 2013, the level of economic activity in Greece shrunk by an astonishing 25 per cent. The recovery has been extremely feeble (Figure 19). In the last five years, the economy has grown by merely 5 per cent. Papadimitriou *et al.* (2018) suggest that recovery will be slow.

Currently, the central issue for the UK is Brexit. Earlier this year the British Parliament rejected the proposed Brexit deal. A hard no-deal Brexit could have severe and harmful effects on the British economy (Figure 20), which is highly dependent on the financial services sector. The city of London

Eurozone, Industrial Production, SA Smoothed 15 10 5 Per cent, y/y 0 -5 -10 -15 -20 -25 2000 2005 2010 2015 2020 Spain Italy France Germany

Figure 17: The pace of activity in the eurozone has deteriorated

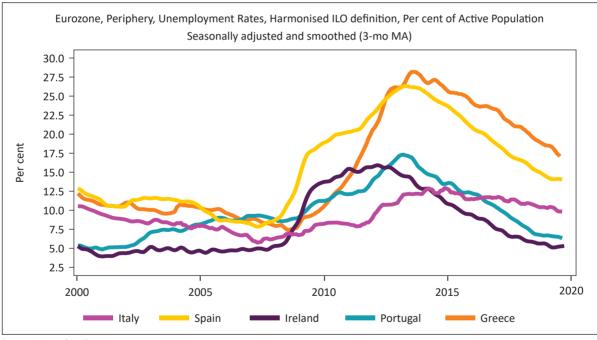


Figure 18: Unemployment rates in the eurozone's periphery is still too high, but have been declining

Source: Macrobond.

in particular is likely to suffer, as jobs and business transactions can be relocated. London is the main financial centre in Europe because of its many advantages, such as the supply of talented workers with human capital, English language, infrastructure, networks and the Anglo-Saxon legal system. However, several major European, British, US and Japanese financial institutions and multinational corporations are in the process of relocating their business to various other metro areas in the eurozone. The authorities of Amsterdam, Brussels, Dublin, Frankfurt, Madrid and Paris are trying their

Greece, Gross Domestic Product, Constant Prices, SA 65.0 62.5 60.0 57.5 EUR, billion 55.0 52.5 50.0 47.5 45.0 2000 2005 2010 2015 2020

Figure 19: Greece is still in a depression

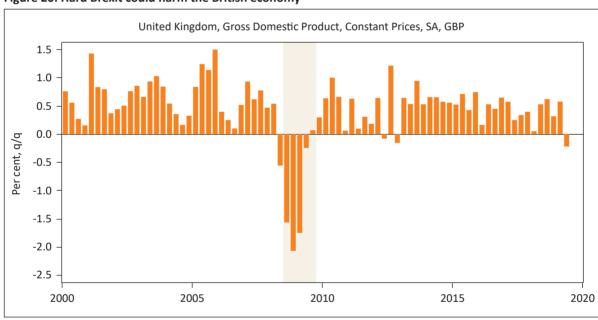


Figure 20: Hard Brexit could harm the British economy

Source: Macrobond.

best to lure financial services business away from London. Surveys of UK firms show that businesses' investment intentions (Figure 21) both in manufacturing and service sectors have declined.

In Japan, nominal GDP has once again been rising since late 2012 (Figure 22) after more than a decade of stagnation (Akram, 2014, 2016b, 2019). However, measures of core inflation are considerably below the Bank of Japan's (BOJ) inflation target (Figure 23). Indeed, the economy could slide again to deflation. The results of Abenomics⁴ have so far been mixed. Its accommodative monetary policy has

⁴Abenomics, initiated since the election of Shinzo Abe as the country's prime minister in 2012, has three components: (1) accommodative monetary policy; (2) fiscal actions; and (3) structural reforms.

BoE Agents Summary of Business Conditions 4 3 2 1 Net balance 0 -1 -2 -3 -4 2000 2005 2010 2015 2020 Investment intentions (Manufacturing) Investment intentions (Services)

Figure 21: Business investment intentions have weakened in the UK

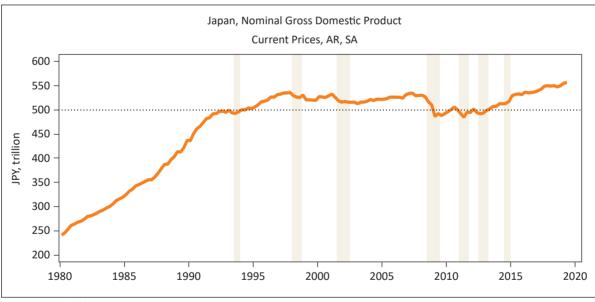


Figure 22: Nominal GDP is rising again in Japan

Source: Macrobond.

been able to keep long-term interest rates in Japan extremely low. Outright deflation had ended—at least for a while—but low inflation has been persistent.

Fiscal stimulus supported economic activity and fixed investments. However, the government's decision to increase sales taxes in April 2014 led to dampened consumption because of lower real disposable income. Initiatives on structural reforms have been rather limited, although the female labour force participation rate has risen due to both policy actions and moral suasion. Because of the expansion in the female labour force participation rate, the total labour force participation rate

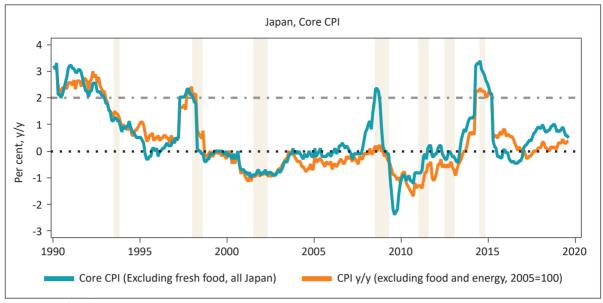


Figure 23: Core inflation in Japan is markedly below its target

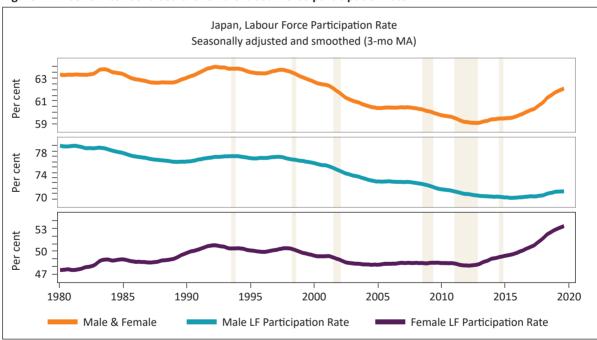


Figure 24: Abenomics has raised the female labour force participation rate

Source: Macrobond.

has risen in recent years, despite the secular decline of the male labour force participation rate (Figure 24).

The Japanese authorities have raised sales taxes in October 2019 from 8 per cent to 10 per cent (Fujikawa, 2019). While the recent sales tax hike is unlikely to be as damaging as the previous hikes in sales tax because the increase is lower than those undertaken in the recent past—and the authorities will be taking measures to counter the detrimental effects, it is unwise and counterproductive to

raise taxes in the midst of subdued inflation, deteriorating global conditions and downside risks to domestic demand (Akram, 2019).

5. MONETARY POLICY AND THE DYNAMICS OF LONG-TERM RATES IN MAJOR ADVANCED ECONOMIES

Monetary policy in the major advanced countries and regions (Figure 25) is at a critical juncture. The balance sheets of the major central banks are bloated (Figure 26).

Monetary Policy Rates in Advanced Economies 6 5 4 Per cent 2 1 0 -1 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Japan Fed Funds Canada UK ECB

Figure 25: The Federal Reserve and the European Central Bank have eased monetary policy in 2019

Source: Macrobond.

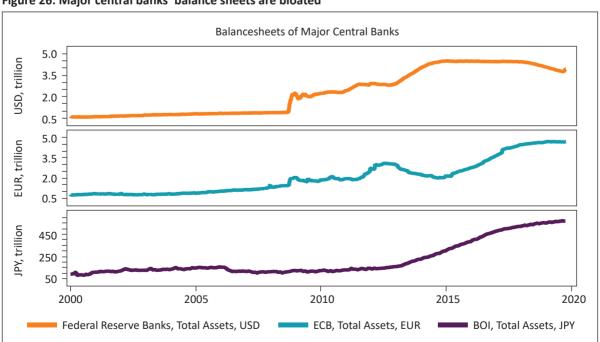


Figure 26: Major central banks' balance sheets are bloated

Source: Macrobond.

The Fed's balance sheet had started to slowly decline last year as the central bank's holding of Treasury securities and agency mortgage-backed security (MBS) matured and prepaid. Since the beginning of the year the Fed has initiated reduction in the fed funds target rate. This mid-cycle adjustments in monetary policy occurred due to several factors, including increased uncertainty regarding the global economy, particularly trade related concerns, and low reading on market-based measures of inflation expectations. The Fed has had to resume purchase of Treasury bills and increase the volume of its term and overnight repurchase agreement operations to ensure adequate supply of reserves in order to prevent spikes in various short-term interest rates.

Policymakers have made it clear that they are prepared to make necessary adjustments to the policy rates and balance sheets. Since core inflation is checked and inflationary expectations are subdued, such adjustments to support economic activity and financial stability can be justified.

The European Central Bank (ECB) in September 2019 reduced the interest rate on its deposit facility by 10 basis point to -0.50 per cent and reiterated its commitment to keep policy rates to their present or lower levels until inflation gets close to 2 per cent. It also announced that it will restart the asset purchase programme at a pace of 20 billion euro per month from November. It decided on new modalities for targeted longer-term refinancing operations and a two-tier system for reserve remuneration that will partially exempt banks' holding of reserves from the negative deposit facility rate.

The Bank of England (BOE) is likely to be cautious about hiking rates in light of the uncertainty surrounding Brexit. Meanwhile, the BOJ continues its policy of quantitative and qualitative monetary easing with yield curve control since inflation is well below target. As a result, the BOJ owns nearly 40 per cent of all outstanding Japanese government bonds (JGBs). Negative long-term interest rates pose a challenge for Japanese financial intermediaries.

Long-term interest rates rose modestly in North America from mid-2006 to mid-2008, as the Fed and the Bank of Canada (BoC) tightened monetary policy (Figure 27). However, since late 2018,

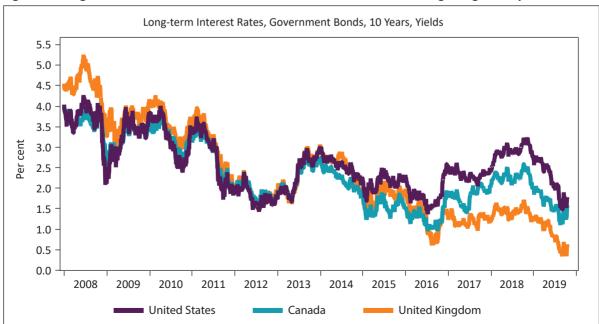


Figure 27: Long-term interest rates in US and Canada have declined since the beginning of the year

Source: Macrobond.

Government Benchmarks, Bid, 2 Years, Yield 8 7 6 5 cent 4 Per 3 2 1 0 -1 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 Germany France Spain Italy

Figure 28: Long-term interest rates are still generally negative in the eurozone, but Italian interest rates have risen

long-term interest rates in North America have eased despite tighter monetary policy as investors have become more concerned about downside risks. In the UK, interest rates on gilts have tread down. In the eurozone, long-term interest rates—particularly in the front end of the yield curve—are negative for the major economies (Figure 28). However, Italian long-term interest rates spiked in 2018 due to budgetary issues and political uncertainty. But even Italian long-term interest rates are in the negative territory. In Japan, long-term interest rates remain exceptionally low and below the BOJ's target. Indeed, since the mid-1990s, Japan's interest rate environment has witnessed a regime shift characterised by both low or negative long-term interest rates and low daily variance of those interest rates (Figure 29).

The central banks of the major advanced countries lowered their policy rates in response to the global financial crisis (Akram, 2015). A low policy rate results in a low short-term interest rate—the main driver of the long-term interest rate on government bonds—a stylised fact that Keynes (1930, 2007) recognised long ago. The low level of the short-term interest rate in conjunction with muted inflationary pressure and the tepid pace of economic activity has resulted in a low long-term interest rate on government bonds in the most major advanced countries. It has been documented that in countries with monetary sovereignty—that is, countries that can tax and issue debt in its own currency and maintain a flexible exchange rate regime—a key determinant of the long-term interest rate is the current short-term interest rate even when the budget deficit ratio or the government debt ratio is elevated (Akram, 2014, 2015; Akram and Das, 2014; Akram and Li, 2016, 2017a, 2017b, 2018).

The sharp decline in policy rates and other accommodative monetary policy measures may have been necessary in response to global financial crisis and the threat of deflation. Further accommodation in monetary policy may be required in the future if effective demand weakens. However, it should be stressed that the benefits of the low long-term interest rates on investment spending and consumer expenditures are fairly limited. Rather, fiscal stimulus and large-scale programmes for direct job creation might be more useful to counteract the weakness of effective demand.

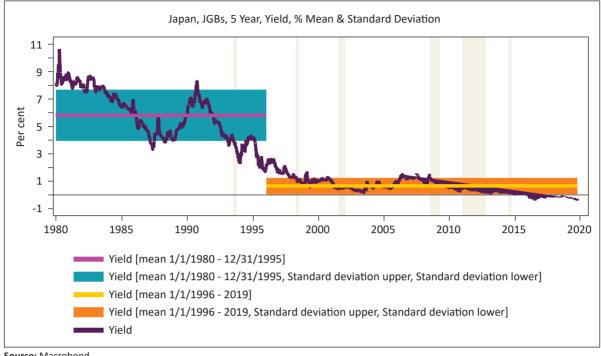


Figure 29: Negative long-term interest rates in Japan

The low long-term interest rates can hamper financial intermediation and lower the private sector's interest incomes. Samuelson (1945) notes that the banking system and financial institutions can sometimes be made better off by an increase in the interest rate and that the higher interest rate does not necessarily have an adverse effect on aggregate demand. A healthier banking system would be more likely to engage in lending and supporting fixed business investment even with a higher interest rate provided effective demand is resilient. A shift away from a regime of low long-term interest rates to a moderate long-term interest rate regime would increase the interest incomes of pensioners, savers and senior citizens.

A lower interest rate may have been necessary in the aftermath of the global financial crisis, but it was insufficient to generate strong effective demand. Public policies should support expenditure in the private sector and investment in new productive capacity, technologies and innovation. Effective demand and higher expected marginal efficiency of capital rather than the level of the longterm interest rate are more important drivers of economic activity and business fixed investment. A moderate rise in the long-term interest rate in advanced countries would indicate a return to improved conditions and a harbinger of financial stability. Hence, a modest rise in the long-term interest rates along with fiscal and structural policies to stimulate employment and economic activity might be more beneficial for aggregate demand (Kregel, 2014).

6. DIVERGENCE IN GROWTH PERFORMANCE IN EMERGING MARKETS

The pace of growth in emerging markets has slowed. Industrial production is still expanding in several emerging markets, such as China and India, despite some signs of a somewhat slower pace in recent months. Industrial production is contracting in several emerging markets, such as Brazil and Mexico (Figure 30). Overall, the patterns appear to indicate that industrial production is expanding at a moderate pace in emerging Asia, but production is quite soft in central and Eastern Europe and Latin

Industrial Production: Emerging Markets Smoothed 20 15 10 Per cent, y/y 5 0 -5 -10 -15 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 China, IP, Change Y/Y ■ India, IP, Change Y/Y Brazil, IP, Change Y/Y Russia, IP, Change Y/Y Mexico, IP, Change Y/Y

Figure 30: Divergence in emerging markets' industrial production

America (Figure 31). Business surveys, however, show that purchasing managers have a mixed view of emerging markets. (Figure 32).

The two key South American economies—Brazil and Argentina—are experiencing difficulties. Recovery in Brazil is tepid and disappointing. Brazil's economy took a dive from 2015 to 2016 (Figure 33), characterised by a biting 10 per cent decline in economic activity. The country has also faced

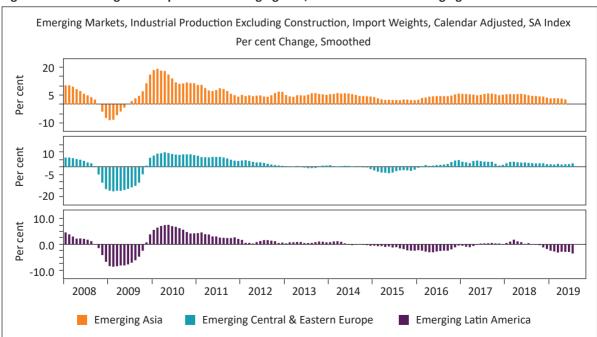


Figure 31: Industrial growth is positive in emerging Asia, but tame in other emerging markets

Source: Macrobond.

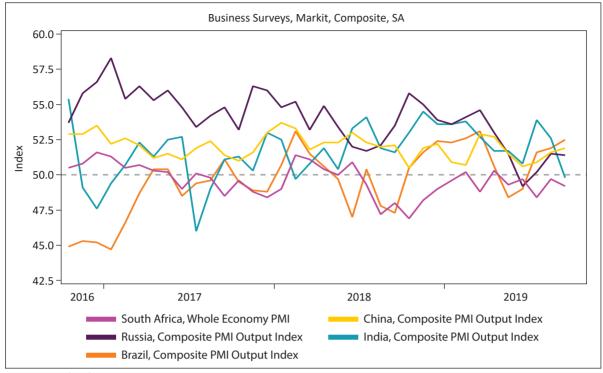


Figure 32: Business surveys show that purchasing managers' view of emerging markets is mixed

political turmoil and corruption scandals that have resulted in a major shift to the right. A former military official, Jair Bolsonaro, was elected president last year on a populistic, rightist platform. Meanwhile, the Argentina economy is also performing poorly and is in contraction with a large current account deficit (Figure 34). It also faces high real interest rates and soaring inflation.

7. CHINA AND OTHER ASIAN EMERGING ECONOMIES

Prospects for China and other Asian emerging economies remain favourable, even though the Chinese economy is growing at a slower pace than in the past decades. The pace of economic activity in India has also slowed recently.

The Chinese economy, which has been consistently strong for many years, is exhibiting clear signs of a slower pace of growth. China's growth since the inception of market reforms has been phenomenal and transformational (Naughton, 2018). Effective domestic demand in China has been driven by growth in consumption and investment (Figure 35). Contrary to widely held views, net exports have played a limited role in China's growth. This growth in consumption and investment since the global financial crisis was supported by a rapid expansion of credit (Figure 36), fiscal stimulus, public investment and private sector residential investment. But the authorities need to rein in some excesses going forward as China's incremental capital-output ratio (ICOR) is quite high (Figure 37). The high ICOR reflects China's development model that emphasises investment-led objectives. The country's development strategy supports the creation of industrial capacity, infrastructure, accumulation of capital, and building of structures, often without regard to market conditions and citizens' preferences. The high share of fixed-asset investment in national income is a function of the ongoing structural transformation and the remarkable speed of urbanisation. It is also partly a

Figure 33: Brazil's economy took a big hit during 2015–2016, while the recovery has been slow and disappointing

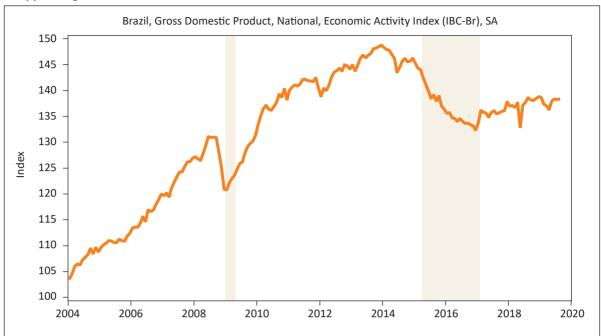
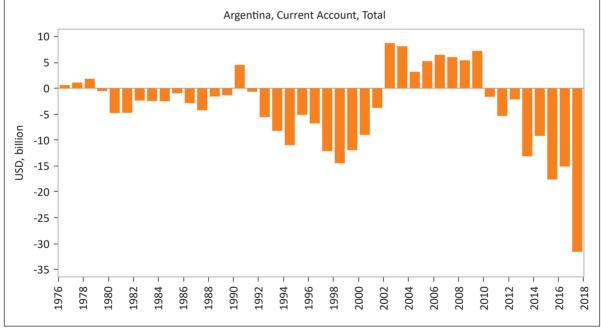


Figure 34: Argentina's current account deficit is large



Source: Macrobond.

reflection of state-directed development, local governments' emphasis on prestige projects, and the occasional misallocation of resources.

Most other Asian emerging economies, including India, have been growing quite rapidly in the past few years. However, these countries need to do much more to ensure shared prosperity, continued

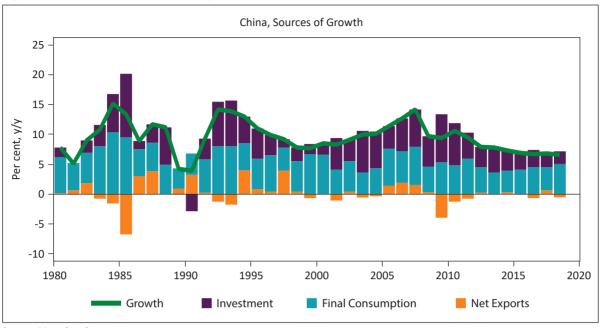


Figure 35: Growth in China is driven by domestic demand

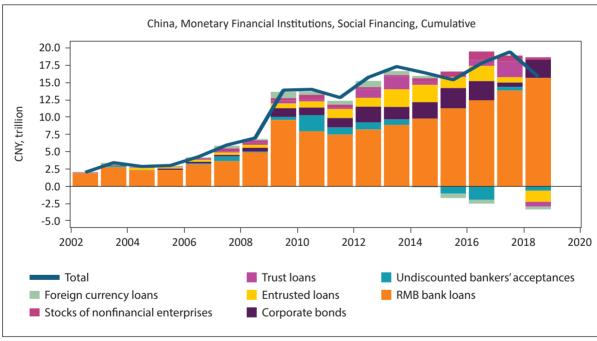


Figure 36: China is experiencing rapid expansion of credit

Source: Macrobond.

improvement in the standard of living, reduce vulnerability to global financial and economic shocks, and improve the quality of governance. India's contribution to global growth has been rising since the beginning of the century, but the pace of growth in India has declined in recent quarters.

Most Asian emerging economies' trend growth rates have risen since the beginning of the twenty-first century. Trend growth rates of real GDP in most Asian emerging economies have been fairly decent in the past decades (Table 4). It is also useful to look at trend growth rates of real GDP per

Figure 37: China's ICOR is quite high

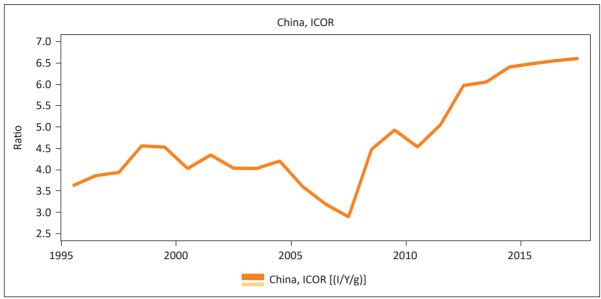


Table 4: Trend growth rates in real GDP in selected Asian emerging economies

			0	
Country	1990-1999	2000-2009	2010-2017	1990-2017
Bangladesh	4.6	6.1	5.8	5.5
China	10.2	10.5	7.2	9.4
India	5.9	6.7	6.5	6.2
Indonesia	4.2	5.3	5.1	4.4
Malaysia	6.9	5.6	5.1	5.2
Pakistan	3.2	5.3	4.7	4.1
Philippines	4.7	4.9	6.2	5.2
Thailand	4.2	4.6	2.8	3.7
Vietnam	8.3	4.8	5.7	6.4

Source: Author's calculation from Macrobond.

Table 5: Trend growth rates in real GDP per capita in selected Asian emerging economies

	•	•	0 0	
Country	1990-1999	2000-2009	2010-2017	1990-2017
Bangladesh	2.4	4.6	4.6	3.9
China	9.1	9.9	6.7	8.7
India	3.9	5.1	5.3	4.6
Indonesia	2.7	4.0	3.9	3.0
Malaysia	4.4	3.7	3.4	3.1
Pakistan	0.6	3.2	2.6	2.0
Philippines	2.4	2.9	4.5	3.2
Thailand	3.1	3.9	2.5	2.9
Vietnam	6.6	3.8	4.6	5.2

Sources: Author's calculation from Macrobond.

capita (Table 5). Growth in China has been stellar, while growth in India and Vietnam have been quite strong. Malaysia and Philippines have experienced fairly good growth though still short of their

potential growth rate. Bangladesh's trend growth is decent but still substantially below what would be required for transformational change. Economic growth in Indonesia, Pakistan and Thailand have been disappointing. Thailand has suffered from political instability and disruption. Macroeconomic adjustments, political instability, poor governance, kleptocratic leadership, military intervention in the affairs of the state, and geopolitical factors have taken a toll on Pakistan's economic performance.

Growth in India is supported by the rise and recovery in consumption and investment, supported by accommodative monetary policy and fiscal deficits. However, there are some problems of non-performing loans lurking in the banking sector. In recent months, headline inflation has been stable but core inflation has been slowing suggesting a weakening of growth momentum. Industrial production also appears to be softening.

India and several Asian emerging economies have favourable demographics which can lift growth and aggregate demand, but also this poses a key challenge. These emerging economies will need to undertake strong employment creation in the years ahead.

Most Southeast Asian economies have tried to follow Asian Tigers' (South Korea, Hong Kong, and Singapore) model of export-led growth. Southeast Asian economies have benefitted from the links in the global value chain in manufacturing and trade and investment networks with the Greater China. However, going forward the firms in these economies shall encounter stiff competition as Chinese firms rise in value addition and quality ladder. This will require increased research and development efforts to foster innovation, higher productivity and growth. Already Chinese technology firms, such as Alibaba, Baidu, and Tencent, are world class corporations.

The escalation of trade friction between the US and China will have effects on Asian emerging countries through several channels. First, given the integrated supply chain within Asian emerging economies for goods exported from China for the US, it will lead to downward pressure on firms' profit margins. Second, some production could shift from China to Southeast Asia and elsewhere. Third, it will lead to a weaker demand for capital goods and consumption goods. The overall effect of the hike in tariff is likely to dampen effective demand in Asian emerging economies.

8. DOWNSIDE RISKS, LONG-TERM CHALLENGES, POLICY RESPONSES AND UPSIDE POSSIBILITIES

This section examines downside risks and long-term challenges to the global economy. It identifies some upside risks to the outlook. It also proposes policy responses to the near-term downside risks and long-term challenges to the global economy.

8.1 Downside Risks

The global economy is expanding at a subpar pace. Risks to the outlook appear increasingly tilted to the downside. There are several identifiable downside risks for the near-term. Political gridlock in the US between the Trump administration and Congress—as manifested in the recent discussions of initiating impeachment proceedings against President Trump—could dampen growth and hurt prospects for continued expansion as the US business cycle matures. Trade friction between the US and China—and other ongoing trade disputes—may have an adverse effect on the global economy. Last year, the US announced tariffs on solar panels, washing machines, aluminium and steel. These and other tariffs are likely to rise unless a deal is reached with China and other trading partners. The eurozone's current deterioration in industrial production could be a sign of a looming recession.

Plenty of uncertainties exist about what type of Brexit will occur. A hard Brexit could entail a slowdown in economic activity. It is not inconceivable that eventually Scotland may leave the UK and join the European Union (EU).

These are some medium-term risks for the global economy. The first is in the deterioration of the relationship of the US to the rest of the world. US—China relations could be threatened by trade frictions, rivalry in the Asia-Pacific region, differences over Taiwan, and other hostilities if China chooses to exercise and project its geopolitical power. Some western planners regard China as a long-term strategic threat and even as a potential enemy rather than a partner. The US—Russia relations are troubled by western sanctions on Russia owing to its intervention in Ukraine as well as Russia's concerns about North Atlantic Treaty Organization (NATO) moving closer to its borders. The US withdrawal from the nuclear deal with Iran and the reports of the Trump administration's exploration of possible military options against Iran suggest that tensions between the US and Iran could escalate. Meanwhile, tension in the Korean peninsula have subsided, but no concrete agreements have been reached yet. And it is unclear whether—let alone, when—denuclearisation will occur. The US' relations with its Western allies are more fragile than in any time in the recent past.

The second medium-term risk is in Europe. The eurozone as a currency union is yet to have a suitable institutional structure that enables authorities to undertake countercyclical fiscal policies and ensure financial stability.

8.2 Long-term Challenges

There are some major long-term challenges for the global economy. These should be deemed as challenges rather than risks because they are likely to occur in the baseline outlook for global growth. The two key challenges are demographic transition and climate change.

The world population will continue to rise. It is estimated to increase from around 7.7 billion people in 2019 to 8.7 billion people by 2030 (Macrobond, various years). However, the share of the workingage population will decline in all major advanced countries. Indeed, Japan's total population and its working-age population are declining. Advanced countries will have to do with a smaller labour force, find ways to increase its labour force participation rate by inducing senior citizens to seek work, and rely more on immigration. Moreover, they will need to raise labour productivity to foster economic growth and support a higher and rising standard of living. Emerging market countries will also experience their own demographic changes. China's population is close to 1.4 billion in 2019 (Macrobond, various years). It is expected to remain stable for the next decade. Thereafter, it will begin to gradually decline and will be aging rapidly. Before China becomes a high-income country, it will see a large decline in its share of working-age population. The economic advantage that China currently has is partly due to its high proportion of working-age population to total population. This advantage will erode in the coming years. Brazil will also witness a rise in the share of senior citizens in the country's population in the coming years. Meanwhile, rapid population growth will occur in South Asia, including India, the Middle East and North Africa, and sub-Saharan Africa, due to their high fertility rates. Countries in these regions will continue to have a large share of working-age population in the coming decades, but this will require robust employment generation.

Climate change is a serious issue. Effective and decisive policy actions to reduce Carbon dioxide (CO₂) and other greenhouse emissions to contain the rise of average global temperature are

much needed. There is plenty of evidence of the climate change. Global temperatures have been increasing. Sea levels are rising. Oceans are warming and acidifying. Polar caps are melting. Bird migration patterns are changing. Coral reefs are bleaching. Weather patterns are more volatile. Floods, droughts and storms have become more extreme than ever before. Global warming will have major effects on the world's climate, ecology, agriculture, migration, industrial production, economic activity and international relations. It requires urgent and well thought out actions. Climate change will affect both advanced countries and emerging markets. Since the advent of the atom bomb, a thermonuclear war has been a looming risk for humanity, as noted in the famous Russell-Einstein declaration. This must be avoided.

8.3 Upside Possibilities

There is some upside risk to the outlook. First, as inflation rises, due to tighter labour markets, central banks could be forced to tighten monetary policy. Second, labour productivity could rise sharply due to the adaption of new technologies and processes, such as automation, artificial intelligence, machine learning, big data, 3–D printing, the Internet of Things, robotics and driverless vehicles, in both manufacturing and services. These could bring about many benefits to citizens.

8.4 Policy Responses to Downside Risks and Long-term Challenges

Sustainable economic and development policies that promote economic growth, new technology, and innovations without neglecting economic inequality and ecological issues would be the path to progress. The authorities in advanced countries and emerging markets will need to rely on appropriate combination of monetary, fiscal and structural policies to support employment, sustainable growth, public investment in infrastructure, and private business fixed investment. The authorities will need to create employment and equality of opportunity to ensure shared prosperity and address the rising inequality in income and wealth that has been fuelling populism and extremist political movements in many countries.

Sachs (2017) and Stiglitz (2018) provide useful policy recommendations from a progressive/liberal perspective that are appropriate for the US (and other advanced countries). Issues related to monetary policy have been discussed in Section 5. The remainder of this section discusses a few policy issues germane to Asian countries emerging, including Bangladesh. It draws partly from Quibria's (2019) insightful analysis of Bangladesh's economic performance and prospects.

First, the authorities will need to promote high growth in Asian emerging economies. This will require macroeconomic stability, industrialisation and higher factor productivity. Second, the authorities will need to take measures that directly reduce poverty and promote human development because greater access to clean water, food, sanitation, education and health can lead to the improvement of indicators of social well-being. Moreover, economic growth *alone* may not suffice to pull vast numbers of people from destitution and deprivation.

These twin objectives of economic growth and human development will require a host of policy actions. Asian emerging economies will need to undertake substantial public investment in infrastructure, such as electricity, water, transport, and support private business fixed investment in structures, equipment, and intellectual property. Countries, like Bangladesh, will need to diversify

⁵See The Russell-Einstein Manifesto. Retrieved from: http://umich.edu/~pugwash/Manifesto.html [Accessed: 17 October 2019].

their manufacturing base, improve the skills of its labour force, and attract foreign direct investment in manufacturing, infrastructure, and services. Even though there has been progress in the reduction of fertility, Asian emerging countries, such as Bangladesh, India, Indonesia, and Pakistan, shall need to stabilise the size of their population amid the rapid urbanisation that is occurring.

Progress in raising agricultural productivity and reducing the decline of available cultivable land will be essential for food security. Some Asian emerging economies, including Bangladesh, depend substantially on overseas remittances from the Middle Eastern countries and elsewhere. But there is a considerable downside risk that the flow of remittances could dwindle due to several reasons, such as lower energy and commodity prices, attempts at indigenisation of the labour force in the host countries, and restrictions on the inflow of foreign workers. Improvements in labour-saving technology, such as automation, robotics, and artificial intelligence, could reduce the absolute cost advantages of production in the Asian emerging countries. This could threaten export industries, such as ready-made garments in Bangladesh, and reduce the demand for labour in manufacturing. The authorities will need to boost domestic effective demand and raise labour productivity. Asian emerging economies are subject to global financial and economic shocks emanating from advanced economies. The authorities need to mitigate the adverse effects of climate change and natural disasters for countries like Bangladesh, Indonesia, and Philippines, that are extremely vulnerable.

Most emerging Asian countries have done fairly well in terms of real GDP growth, but better governance and visionary leadership will be essential to sustain growth and effectively cope with the economic, social, environmental and institutional challenges. The failure of democratic institutions take root in several emerging Asian countries, such as Bangladesh, Pakistan, and Thailand, could hamper economic growth and human development. It can lead to political and social instability. Lack of accountability and rampant corruption are fairly widespread in many Asian emerging countries, even in those countries which have long-functioning multiparty democratic institutions, such as India and Malaysia. Several Asian emerging economies, such as India and Pakistan, devote substantial resources for military expenditure due to their security concerns. Southeast Asian countries are devoting resources to military because of concerns about China's action in South China Sea, while China itself feels that the US regards it as a long-term threat to its position as the global hegemony. Reduction of tensions and the creation of institutions to build trust in the Asia-Pacific region would free up resources to reduce poverty and improve the quality of life in Asian emerging economies.

9. CONCLUSION

The global economy is expanding at a moderate pace, but lately, the pace has lost some momentum and the downside risks have risen. The current economic expansion in the US is the longest since World War II. The long expansion has resulted in a low unemployment rate in the US. However, economic activity in the rest of the world has slowed since the beginning of the year weakened. Long-term interest rates in the major advanced economies are low by historic standards, especially so in the eurozone and Japan. Most emerging markets in Asia have flourished and showed respectable growth rates in the past couple of years, but in recent quarters, the slower pace of growth in China is raising concerns. Economic activity in central and Eastern European and Latin American emerging markets has been disappointing.

Near-term downside risks to the global economy have surged. Trade frictions pose a threat. There are also long-term challenges, such as climate change and demographic transition, for the world economy.

Policymakers need to support economic growth in advanced and emerging markets through an appropriate mix of fiscal and monetary policy actions, and structural policies that support job creation and create economic and social opportunities—but also increase labour productivity, stabilise the evolving financial systems, and increase the standard of living. Technological advances and innovations offer great opportunities for human achievements, but the task is to realise the potential for progress. Growth should be supported with appropriate policies that foster job creation, skill formation and innovation. Policies that promote infrastructure spending, research and development, international trade, inhibit the rise of inequality in income and wealth, and create financial stability would be beneficial. Policymakers should also remain alert to downside risks and the dangers of a nuclear war and address the long-term challenges of demographic transitions and global climate change.

REFERENCES

- Aaronson, S., Cajner, T., Fallick, B., Galbis-Reig, F., Smith, C. L. and Wascher, W. (2014). *Labor Force Participation: Recent Developments and Future Prospects*. Finance and Economics Discussion Series 2014-64. Washington DC: Divisions of Research & Statistics and Monetary Affairs, Federal Reserve Board. Retrieved from: https://www.federalreserve.gov/pubs/feds/2014/201464/201464pap.pdf [Accessed: 17 October 2019].
- Akram, T. (2014). The economics of Japan's stagnation. Business Economics, 49(3), 156-175.
- Akram, T. (2015). *The Malady of Low Global Interest Rates*. Working Paper No. 852. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/wp_852.pdf [Accessed: 17 October 2019].
- Akram, T. (2016a). *A Moderate Recovery and Its Discontents*. Thrivent Financial White Paper. Minneapolis: Thrivent Financial. Retrieved from: http://bit.ly/2pnX2YI [Accessed: 17 October 2019].
- Akram, T. (2016b). *Japan's Liquidity Trap*. Working Paper No. 862. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/wp 862.pdf [Accessed: 17 October 2019].
- Akram, T. (2019). The Japanese economy: Stagnation, recovery, and challenges. *Journal of Economic Issues*, *53*(2), 403-410.
- Akram, T. and Das, A. (2014). Understanding the low yields of the long-term Japanese sovereign debt. *Journal of Economic Issues, 48*(2), 331-340.
- Akram, T. and Li, H. (2016). *The Empirics of Long-Term U.S. Interest Rates*. Working Paper No. 863. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/wp_863.pdf [Accessed: 17 October 2019].
- Akram, T. and Li, H. (2017a). What keeps long-term U.S. interest rates so low? *Economic Modelling,* 60 (January), 380-390.
- Akram, T. and Li, H. (2017b). *An Inquiry Concerning Long-Term US Interest Rates Using Monthly Data*. Working Paper No. 894. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/wp_894.pdf [Accessed: 17 October 2019].
- Akram, T. and Li, H. (2018). *The Dynamics of Japanese Government Bonds' nominal yields*. Working Paper No. 906. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/wp_906.pdf [Accessed: 17 October 17, 2019].
- Akram, T. and Swansen, R. W. (2017). *Paradoxes of the U.S. Labor Market*. Thrivent Mutual Funds White Paper. Minneapolis: Thrivent Financial. Retrieved from: http://bit.ly/2fzFtUU [Accessed: 17 October 2019].
- Chetty, R., Grusky, D., Hell, M., Hendren, N., Manduca, R. and Narang, J. (2017). The fading American dream: Trends in absolute income mobility since 1940. *Science*, *356*(6336), 398-406.

- Dantas, F. and Wray, L. R. (2017). *Full Employment: Are We there Yet?*. Public Policy Brief No. 142. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/ppb_142. pdf [Accessed: 17 October 2019].
- Estrella, A. and Mishkin, F. S. (1996). The yield curve as a predictor of U.S. Recessions. *Current Issues in Economics and Finance*, *2*(7), 1-5.
- Fujikawa, M. (2019, October 1). Japan's new tax increase tests economy's strength. *Wall Street Journal*. Retrieved from: https://www.wsj.com/articles/japans-new-tax-increase-tests-economys-strength-11569924794 [Accessed: 17 October 2019].
- Gordon, M. J. (1959). Dividends, earnings and stock prices. *Review of Economics and Statistics*, *41*(2), 99-105.
- Isaac, A. (2019, September 29). U.K. experience suggests an inverted yield curve isn't all gloom and doom. *Wall Street Journal*. Retrieved from: https://www.wsj.com/articles/u-k-experience-suggests-an-inverted-yield-curve-isnt-all-gloom-and-doom-11569762002 [Accessed: 17 October 2019].
- Keynes, J. M. (1930). A treatise on money: The applied theory of money [Volume II]. London: Macmillan.
- Keynes, J. M. (2007). *The general theory of employment, interest and money*. New York: Palgrave Macmillan.
- Kregel, J. (2014). Why Raising Rates May Speed the Recovery. Policy Note 2014/6. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/pn_14_6.pdf [Accessed: 17 October 2019].
- Macrobond. (various years). Macrobond, subscription economic data services. [Accessed: 17 October 2019].
- Naughton, B. (2018). *The Chinese economy: Adaptation and growth* (2nd edn.). Cambridge: The MIT Press.
- Papadimitriou, D. B., Nikiforos, M. and Zezza, G. (2018). *Can Greece Grow Faster?*. Strategic Analysis. New York: Levy Economics Institute. Retrieved from: http://www.levyinstitute.org/pubs/sa_gr_11_18.pdf [Accessed: 17 October 2019].
- Quibria, M. G. (2019). *Bangladesh's road to long-term economic prosperity: Risks and challenges*. Cham: Palgrave Macmillan.
- Reddy, S. (2008). The World Bank's new poverty estimates: Digging deeper into a hole. *Challenge*, 51(6), 105-112.
- Reddy, S. and Lahoti, R. (2016). \$1.90 a day: What does it say?. The New Left Review, 97(Jan/Feb), 106-127.

- Sachs, J. D. (2017). *Building the new American economy: Smart, fair and sustainable*. New York: Columbia University Press.
- Samuelson, P. A. (1945). The effect of interest rate increases on the banking system. *American Economic Review, 35*(1), 16-27.
- Stiglitz, J. E. (2018). A rigged economy and what we can do about it. *Scientific American*, *319*(5), 56-61.

Recent CPD Working Papers

Paper 129	New Minimum Wage of the RMG Sector: Addressing the Issues of Non-Compliance in Implementation
Paper 128	Financial Sector in Bangladesh: Recent Trends and Benchmarking for the Government*
Paper 127	How Prepared is the Urban Local Government in Bangladesh to Deliver SDGs?
Paper 126	Potential of Personal Income Tax in Bangladesh: An Examination of Survey Data*
Paper 125	Finance for SDGs: Addressing Governance Challenge of Aid Utilisation in Bangladesh
Paper 124	Women in Bangladesh Labour Market: Determinants of Participation, Gender Wage Gap and Returns to Schooling*
Paper 123	'Data Universe' of Bangladesh's RMG Enterprises: Key Features and Limitations
Paper 122	Livelihood Challenges of RMG Workers: Exploring Scopes within the Structure of Minimum Wages and Beyond
Paper 121	BREXIT and Bangladesh: An Exploratory Study on Likely Economic Implications
Paper 120	Fiscal Implications of Rohingya Crisis for Bangladesh
Paper 119	Exploring the State of Youth in the SDG Context: How is Bangladesh Doing?
Paper 118	Growth of Employment in the Manufacturing Sector: Impact of Trade and Trade-related Policies*
Paper 117	Towards a Social Protection Strategy for Bangladesh*
Paper 116	Alternative Approaches to Full Employment in Bangladesh: Role of the Non-farm Sector*

^{*}Available on web only









CPDBangladesh



House - 6/2 (7th & 8th floors), Block - F Kazi Nazrul Islam Road, Lalmatia Housing Estate Dhaka - 1207, Bangladesh

Telephone: (+88 02) 58152779, 9141734, 9141703, 9126402, 9133530

Fax: (+88 02) 48110414 E-mail: info@cpd.org.bd Website: www.cpd.org.bd