The Bulletin

February 2017
Vol. 8 Ed. 2

Macri's hopes Argentina's push for growth

World leaders in 2017: David Smith on Argentina's Macri
Abdeldjellil Bouzidi on sovereign climate bonds
Carlo Cottarelli on the global growth myth
Antonio de Lecea on globalisation
Veerathai Santiprabhob on monetary easing
FOCUS on Singapore's global role

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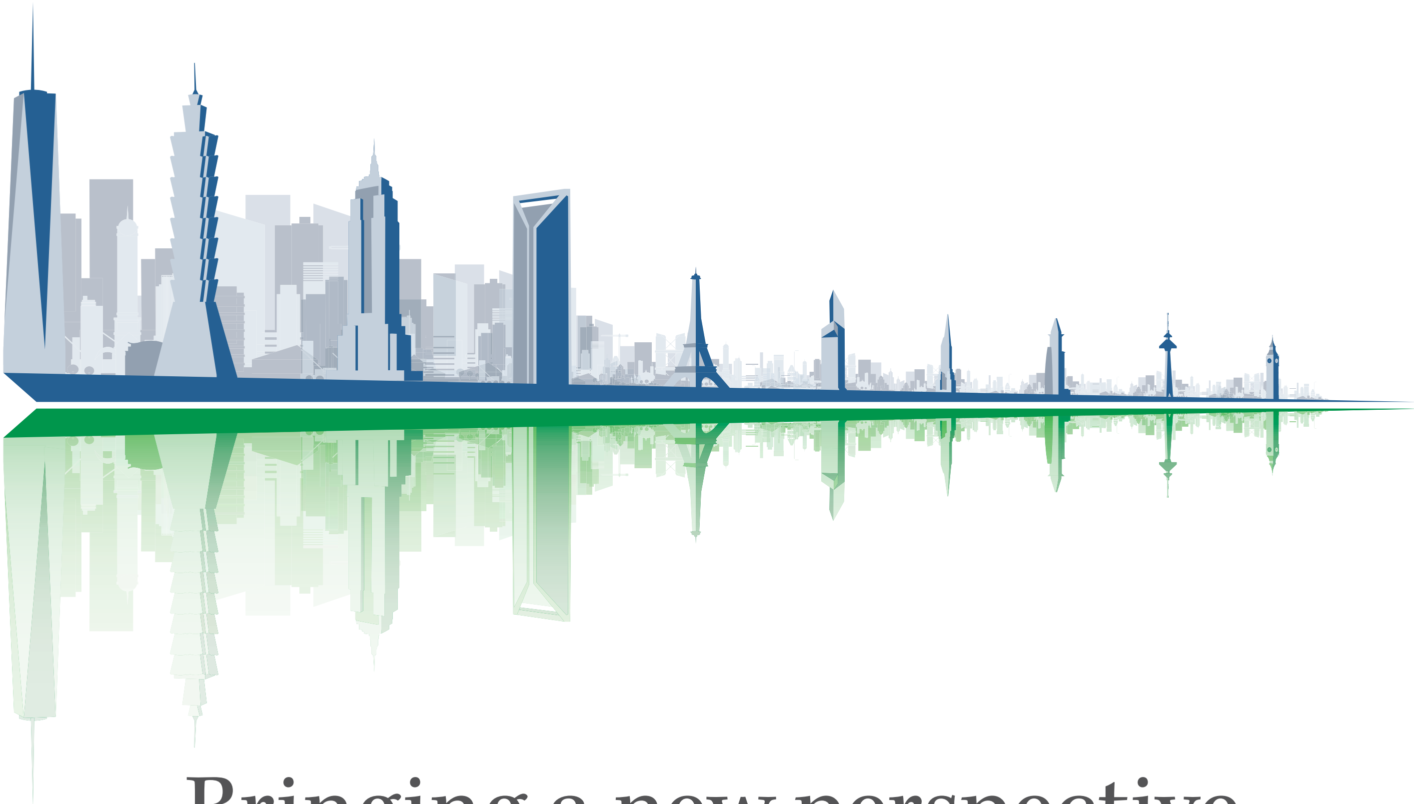

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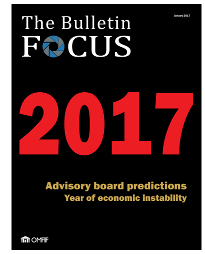

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Dialogue on world finance and economic policy

The Official Monetary and Financial Institutions Forum is an independent think tank for central banking, economic policy and public investment – a non-lobbying network for best practice in worldwide public-private sector exchanges. At its heart are Global Public Investors – central banks, sovereign funds and public pension funds – with investable assets of $30tn, equivalent to 40% of world GDP.

With offices in both London and more recently Singapore, OMFIF focuses on global policy and investment themes – particularly in asset management, capital markets and financial supervision/regulation – relating to central banks, sovereign funds, pension funds, regulators and treasuries. OMFIF promotes higher standards, performance-enhancing exchanges between public and private sectors and a better understanding of the world economy, in an atmosphere of mutual trust.

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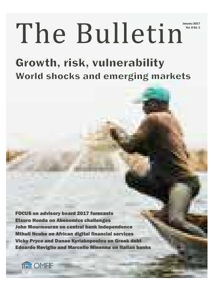
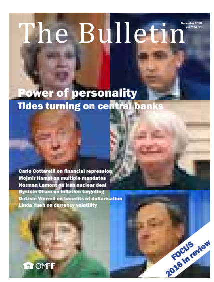
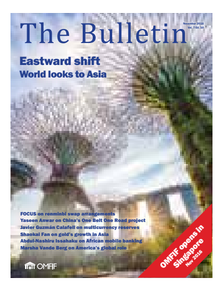
The 175-strong OMFIF Advisers, chaired by Meghnad Desai, is made up of experts from around the world representing a range of sectors: Monetary Policy; Political Economy; Capital Markets; Industry and Investment. They support the work of OMFIF in a variety of ways, including contributions to the monthly Bulletin, regular Commentaries, seminars and other OMFIF activities. Membership changes anually owing to rotation.







EDITORIAL

A continent in transition

Latin America has largely stayed out of the headlines in recent months, which have instead been dominated by the changing landscape in the US and Europe. But behind the scenes the continent is going through a dynamic transition, as illustrated by the collection of articles accompanying this month's Bulletin cover story.

David Smith writes the inaugural piece in a new OMFIF series on 'World Leaders in 2017', presenting the challenges and opportunities for Argentina's President Mauricio Macri as he wrestles with his country's economy. Reforms and the resolution of corruption scandals will be vital for Brazil, argues Winston Moore, but the economic fundamentals remain sound. Colombia is more exposed to the vagaries of the international economy, argue Ricardo Adrogue, Brigitte Posch and Michael Simpson. President Nicolás Maduro's demonetisation experiment in Venezuela has brought the economy into chaos. Steve Hanke proposes dollarisation as a potential solution.

This will become increasingly difficult to implement, however, as the dollar gathers further strength. Darrell Delamaide suggests that the Federal Reserve will tighten faster than the current dot plots suggest. Donald Trump's expansionary policies would motivate such an approach, with more investment needed to reinvigorate the country's infrastructure, argues Meghnad Desai. But, as Marsha Vande Berg reminds us, we should prepare for unintended consequences from changes in policy direction. The impact on emerging markets will be mixed, too. OMFIF's Fed vulnerability index – presented in the latest report by OMFIF Research – 'Trump: Curse or Cure?' – presents a mixed picture for emerging market exposure to dollar strengthening.

The third Focus report in our series on global financial centres profiles Singapore. In an exclusive interview, Ravi Menon from the Monetary Authority of Singapore highlights the advantages of Singapore as a gateway between Asia and the rest of the world. This is thanks to its evolving role as a hub for renminbi trading and for Chinese companies looking to finance regional expansion, write Ben Robinson and Adam Cotter.

Singapore's appeal hinges on attitudes towards globalisation in Asia and the West. Antonio de Lecea proposes a model for East-West co-operation to promote globalisation while correcting for its distributional effects. China's President Xi Jinping has emerged as the new proponent of globalisation, writes Adam Cotter. This has caused some to hail China as the new de facto world leader. However, when polled the majority of our Advisers Network said it was too soon for China to take over from the US in terms of world leadership.

Bank of Thailand Governor Veerathai Santiprabhob draws attention to the impacts on inflation from changes in the structure of trade and rising competitive pressures. Mirsolav Singer, former Governor of the Czech Central Bank, further notes the importance for central bankers to resist pressure to increase their inflation targets as the pace of price increases accelerates.

Monetary troubles are particularly acute in Europe. Andre Szasz's obituary, written by Roel Janssen, reminds us of the reservations held by one of the architects of Europe's common currency. We round off with two book reviews. William Keegan highlights the lessons from Ken Clarke's five decades in British politics in his memoir *Kind of Blue*. Rachel Pine reflects on the history of behavioural economics through the story of Daniel Kahneman and Amos Tversky in *The Undoing Project* by Michael Lewis.

Inflation: a chance for central bankers

Return to traditional arguments will suit policy-makers

Miroslav Singer, Advisory Board

The consensus that inflationary pressures are returning to the global economy grows ever stronger. If this becomes manifest, central banks may need to tighten monetary policy and end the use of unconventional tools for easing monetary policy. Politicians in many economies are unlikely to welcome this tightening. Donald Trump, for one, would not relish the associated strengthening of the dollar, as it would reduce the competitiveness of the US manufacturing sector that he promised to revive.

In the euro area, the fragile state of some members' financial sectors and unfinished euro area institution-building are likely to complicate withdrawing from unconventional policies. As the recovery gains pace, the erosion of labour market slack and the narrowing of the euro area-wide output gap will exacerbate inflationary pressures.

This is all happening in a setting where popular resentment against elites – among whom central bankers are certainly counted – is changing the political make-up of many major economies. Central banks may find themselves attractive targets for political point-scoring.

It is reasonable to expect a host of proposals to allow inflation to rise above targets, and possibly even pressure to increase the targets. The same logic that prevented central banks from lowering targets during the deflationary period, namely their reluctance to loosen mid-term expectations, should prevent central bankers from heeding such advice. Otherwise, they would act procyclically, which would negate the ultimate reason why they are independent.

Still, politicians who have been recently elected, like Trump, and others who are proving popular, such as right-wing figures Marine Le Pen in France and Geert Wilders in the Netherlands, tend toward stridency. Politicians and central bankers face increasingly candid squabbles.

In the short term, expect more orthodox argument among central banks about why it is necessary to keep inflation low. That will be a great improvement over recent times when central banks found themselves explaining why it is necessary to use unorthodox policies like quantitative easing to avoid deflationary threats.

Central banks have shown themselves over many years quite efficient in this type of dialogue. Moreover, in this environment, conventional monetary tools are more efficient. Central banks will rightly welcome a chance for a return to more traditional monetary policy. Operating the instruments for these circumstances, and taking part in the associated arguments and discussions, will suit them much better.

Miroslav Singer is Director of Institutional Affairs and Chief Economist at Generali CEE Holdings. He is former Governor of the Czech National Bank.

OMFIF Advisers and Board

OMFIF has appointed Hans Blommestein, Tom Finke and Daniel Hanna to the advisory board, and announced a restructuring of the advisory board. For the full list of members, see p.24-25.

Hans Blommestein is an associate director at Vivid Economics. He was head of bond market and public debt unit at the Organisation for Economic Co-operation and Development from 2000-16. He launched the OECD's 'Sovereign Borrowing Outlook', 'Statistical Yearbook on African Central Government Debt' and other flagship publications. He was a co-founder and co-director of the Centre for African Public Debt Management and Bond Markets and a professor of finance and economics at Twente University, Tilburg University and and SKKU Business School.

Tom Finke is chairman and CEO of global investment management firm Barings. He joined the firm in 2002 when Babson Capital Management acquired First Union Institutional Debt Management, a $3.6bn high-yield loan manager Finke co-founded in 1998. He is an active advocate for leveraged loan and securitised markets. He was a founding member of the board of directors for the Loan Syndication & Trading Association, and also for the Structured Finance Industry Group. Finke received an MBA from Duke University's Fuqua School of Business.

Daniel Hanna is the global head of public sector and development organisations for Standard Chartered Bank. He has more than 17 years of banking and research experience in emerging markets and has provided advice to governments, state owned enterprises, and companies on their economic policy, credit ratings, raising equity and debt and restructuring their business activities. Hanna was co-head of wholesale banking of Southern Africa and regional head of research for the Middle East and South Asia for Standard Chartered and a visiting Fellow for Chatham House.

Bank of England 'ready for flash moves'

Flash crashes in core financial markets will continue to surprise, said Chris Salmon, executive director for markets at the Bank of England, at an OMFIF City Lecture on 24 January in London. This is despite improvements in the ability of core financial markets to process identifiable risks, he added. He warned that modern electronic markets can facilitate a rapid and orderly reaction to significant news, but resilience might depend on preparation.

Salmon spoke of the need for central banks to understand the structure and functioning of core financial markets, which matters both for their role as guardians of financial stability, and to ensure the effectiveness of operations to implement monetary policy. He illustrated this with reference to developments in two very different markets. First he spoke of the sterling foreign exchange market, and how lessons can be learned about its functioning following two particular episodes in the past year: the period immediately following the UK-EU referendum, and the 'flash crash' that came a few months later. Salmon said, 'In both cases our understanding of these markets, informed by market intelligence, analysis and our own experience in previous operations, has been tested and improved as the Bank has responded to events.'

Salmon also discussed the sterling corporate bond market, which is small, local and thinly traded, with heterogeneous underlying assets. He explained how the Bank of England's analysis of market structure shaped the design of its corporate bond purchase scheme and how the scheme may have affected the functioning of the market.

Central banks 'must address fragility'

Central banks must address 'financial fragility' after eight years of monetary easing, said Veerathai Santiprabhob, governor of the Bank of Thailand. Santiprabhob spoke at an OMFIF City Lecture on 10 January in London that discussed regional and global macroeconomic trends, monetary policy, as well as the strengths and challenges of the Thai economy during the 'great transition'.

He said that the great transition is the present economic period in which post-2008-09 crisis mentalities are yet to abate and economic developments are still cast in terms of 'the recovery' as the world continues on its journey towards normalisation. However, this destination never arrives, as policy interest rates in major advanced economies are essentially at zero or negative and central banks continue to seek innovative ways to stimulate the economy.

Santiprabhob gave particular focus to the prevailing monetary policy paradigms that have guided central bank actions over the recent past, highlighting some of the tensions and limits of these frameworks. He warned that the norms of monetary policy need to be openly reassessed, as the economic environment is the result of a financial cycle that was unanchored. 'We need to seriously rethink the framework that allowed this to take place,' he said. 'More of the same will not do.'

He continued that Thailand and most emerging economies could cope with this year's three expected US rate rises. Santiprabhob warned that there are limits to what macroprudential tools can achieve economically and politically, and that just as monetary policy has been overburdened, macroprudential tools too risk experiencing the same problem.

For a fuller account of Veerathai Santiprabhob's speech, see p.14.

Trump plans 'irresponsibile'

The Donald Trump administration is 'repeating the mistakes of the Reagan era' by overestimating future growth warned Desmond Lachman, resident scholar at the American Enterprise Institute, in an OMFIF telephone briefing on 19 January.

Lachman described the president's tax and spending proposals as 'the height of irresponsibility' when the US economy is close to full employment. However, in the briefing on the political economy of the Trump presidency Darrell Delamaide, OMFIF US editor, pointed out that Lachman's view does not fully reflect the geographical variations of employment rates. There are many poorer areas of the US that stand to benefit significantly from Trump's plans for infrastructure spending.

The briefing, moderated by Danae Kyriakopoulou, brought in too Lord (Meghnad) Desai, OMFIF advisory council chair, and Marsha Vande Berg, distinguished career fellow at Stanford University.

Search for improbable balance

Donald Trump took over a healthy US economy, benefiting from 75 consecutive months of job gains, annualised GDP growth of 3.5% in the third quarter of 2016, low borrowing costs and bullish financial markets. Yet income inequality has increased, and growth is reliant on accommodative monetary policy and optimistic households ready to spend.

An OMFIF report on 20 January, 'Trump: Curse or Cure?', outlines the difficult search for a balanced economic policy that could mitigate the threat of additional Federal Reserve interest rate hikes derailing the recovery.

The 45th US president proposes to put 'America First' by introducing punitive import tariffs, reneging on international agreements, and threatening to brand major trade partners as currency manipulators. Domestically, Trump has pledged to lower both corporate and income taxes while increasing spending, especially on infrastructure, and deregulating financial services.

This report explores whether such initiatives will be a curse or cure for the US and world economy. Trump enters office with historically low approval ratings and a cabinet heavily criticised for its connection to the banking sector. Ultimately, the strength of global financial markets will be the barometer of Trump's success – and whether his economic policy manages to achieve an improbable balance.

To request a PDF of this report, please email editorial@omfif.org.

Forthcoming meetings

'Trump: Curse or Cure' webinar
Danae Kyriakopoulou and Ben Robinson provide a thorough investigation of Donald Trump's proposals on import tariffs, international trade agreements, and infrastructure building. This webinar is based on 'Trump: Curse or Cure?', the OMFIF report published on 20 January.
8 February

The political and economic situation of Poland and Europe
Discussion with Marek Belka, governor of the National Bank of Poland. The discussion focuses on the current economic, political and financial outlook for Europe, as well as prevailing challenges to monetary policy and financial stability.
15 February, London

Challenges to ensuring financial stability
City Lecture with Sir Jon Cunliffe, deputy governor for financial stability at the Bank of England and former UK permanent representative to the European Union.
22 February, London

Developing capital markets to support sustainable growth
The inaugural Asian Development Bank-OMFIF seminar, organised by President Nakao. The seminar will discuss best practice in emerging markets on strengthening financial stability and meeting the needs for infrastructure development.
22 March, Tokyo

Financial markets at a time of change
City Lecture with Charles Evans, president of the Federal Reserve Bank of Chicago. This lecture is part of the DZ BANK International Capital Markets Conference.
29 March, Frankfurt

For details visit www.omfif.org/meetings.

Macroprudential and monetary policy

Lord (Adair) Turner, former member of the Bank of England's Financial Policy Committee and former chairman of the UK's Financial Services Authority, spoke at an OMFIF breakfast discussion on 6 January in Tokyo. Turner outlined the main themes of his book *Between Debt and the Devil: Money, Credit, and Fixing Global Finance*, now published in Japanese. The discussion addressed the long-term sustainability of government and corporate debt in Japan, and the effective use of money financing. The event was organised in association with with the Japan Centre for Economic Research.

Public sector risk management scrutiny

Jean-Paul Villain, director of ADIA's strategy unit, addressed a joint OMFIF-Amundi seminar in London on uncertainties confronting asset and risk management for public sector investment institutions. He outlined problems caused by unusually low interest rates, higher risks and increased volatility, in a generally difficult environment for central banks and sovereign funds. The gathering, on 24 January, convened a range of economic experts and asset managers, mainly from Global Public Investors, to discuss macroeconomic, political and financial developments influencing public sector investment managers.

Macri's hopes for 'decisive stretch'

Argentine finance ministry switch spurs growth hopes

David Smith, Advisory Board

Sometimes a sacking speaks volumes. On 26 December, Argentinian President Mauricio Macri fired Alfonso Prat-Gay, a leading star as finance minister in the young government. Prat-Gay will be remembered as the suave, multilingual economist who returned Argentina to capital markets, bond issues and the International Monetary Fund during Macri's first year.

Far from burying the news, Macri's inner circle revelled in spreading the word, declaring that, 'From this point on, the president will be leading a team on the economy, a united team.' It is no secret in Buenos Aires that Prat-Gay was not the best 'team player'.

This is a critical time for Macri. The next nine months leading up to October's congressional elections will decide if he is a one-term president and potential lame duck by 2018, or whether he is the agent of lasting change not just in his own country, but Latin America as a whole. The outcome in Argentina will shape the prospects of reformers elsewhere in the region.

'The reality is that Mauricio has the presidency and the government, but he doesn't have power because the opposition still controls congress,' said one of his most senior advisers. 'He probably can't win big this year, but he must seek a working majority if he's to drag Argentina into the future.'

Facing an economic battleground

The economy is the key battleground. The 1.8% GDP contraction in Macri's first year was expected. So too was the fall of 8% in industrial production, and the rise in unemployment to just under 9%. Inflation, ending 2016 at 35%, remains an enduring problem following the lacklustre leadership of former President Cristina Fernández de Kirchner between 2007-15.

But Macri's achievements should not be undervalued. In 2016 Argentina finally settled the outstanding debts from its 2001 collapse, and the government restored honesty to its economic statistics. The peso was allowed to float freely, and thereby devalued dramatically. A tax amnesty saw Argentines repatriate almost $100bn worth of assets which had been held abroad for decades.

> ***"This is a critical time for Macri. The next nine months leading up to October's congressional elections will decide if he is a one-term president and potential lame duck by 2018, or whether he is the agent of lasting change.***

Argentina began to look in the mirror and admit a truth long denied by those in power. 'One in three Argentines lives below the poverty line,' Macri declaimed in October, releasing the first accurate numbers on the issue in decades. 'It is my responsibility, no one else's, to confront such poverty.' Few could recall a president ever taking that lead. His predecessor Cristina Kirchner once claimed Germany had more poor people than Argentina. Macri's Christmas reshuffle points to a consolidation of power. Nicolas Dujovne, chief economist at Banco Galicia for a decade, comes in as minister in charge of economic policy. Luis Caputo, another banking veteran known affectionately by his colleagues as 'the Pele of numbers', now heads the finance ministry.

Mauricio Macri, President of Argentina

A new bullish cabinet

The new team is quietly bullish about prospects, predicting 2017 growth of more than 3%, inflation under 20%, and curbing the fiscal deficit, currently 4.2% of GDP. 'You see signs of economic recovery, month by month employment is returning, and real salaries rising,' said Dujovne on his first day at work.

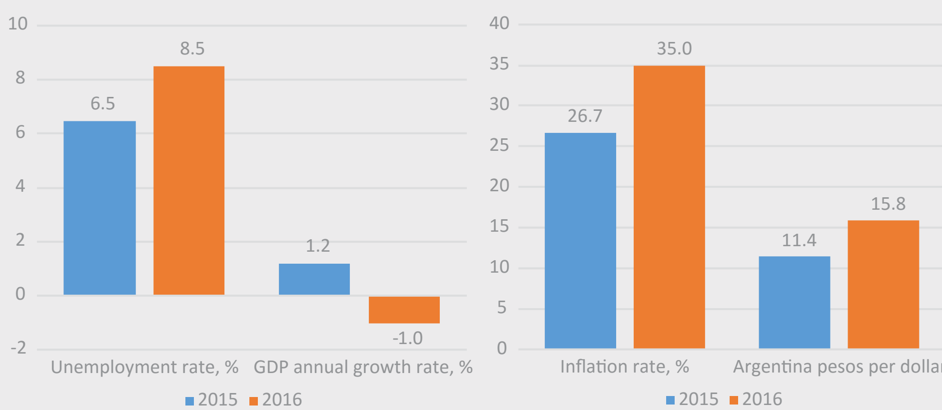
Macri must hope for nothing less than a manifest recovery in 2017. His approval ratings remain sound. Perpetual revelations of staggering corruption in the last government continue to hamper the opposition ahead of midterm elections.

'This is the decisive stretch for Argentina,' said one leading industrialist and long-time supporter of the president. 'Macri's challenge is very personal, because he genuinely believes this is the last, best chance to turn the country around – and inspire like minds in Latin America.' ■

David Smith is a former White House Correspondent, and represented the UN Secretary-General in the Americas 2004-14.

Key economic indicators worsen during 2016 under Macri

Argentina key indicators: Unemployment rate, annual growth rate, inflation rate, % and pesos per dollar



Source: IMF National Statistical Institute (INDEC), OMFIF analysis

Peace agreement bolsters Colombia

Sound policies needed to retain investment status

Ricardo Adrogué, Brigitte Posch and Michael Simpson, Barings

Colombia remains on a sound macroeconomic footing. In addition to the positive effect of December's peace agreement with the Revolutionary Armed Forces of Colombia (Farc), healthy growth and decreasing inflation since 2009 have allowed Colombia to recover more quickly than its neighbours following the global financial crisis.

While the country's current account deficit has widened, this worsening is due in large part to technical pressures and the scale of the 2014-16 oil price shock, rather than fundamental weaknesses.

Fall in oil revenue

These factors do not mean that Colombia will avoid all difficulties. The fall in oil revenue means that the government will have to implement significant fiscal adjustments through tax reform. Uncertainty around whether it will be able to pass such proposals may impact the strength of the country's corporate bond market.

That said, Bogotá's history of sound fiscal management and record in implementing challenging reforms – again in contrast to its neighbours – ought to encourage confidence. Necessary tax reforms are likely to be approved sooner rather than later. This is especially the case given impending elections in 2018, which may provide an incentive for the government to enact change. It is possible, however, that the government will be tempted to introduce fiscal stimulus in the approach to elections to curry favour with the electorate.

> *Bogotá's increasing openness to foreign trade and investment will prove very positive for business confidence.*

One can be more openly optimistic about Colombia's equity markets. Discipline on the part of businesses which are now adjusting after the fall in oil prices, rather than simply awaiting a rebound in crude prices, has allowed Colombia to outperform other emerging markets. Total returns in dollars were up 15% for the MSCI Colombia Index in 2016, compared to 9% for the MSCI Emerging Markets Index. The potential cut of the effective tax rate to 32% by 2019 from 42% would also stimulate the corporate sector.

In the event that the tax reforms are delayed, there is some risk that at least one rating agency may downgrade Colombia's credit rating. However, Barings expects Colombia to retain its investment grade status. The government is forecasting GDP growth of 2.5% in 2016 and 3% in 2017.

Tax reforms and investment rating

Tax reforms and the maintenance of its investment rating will play a pivotal role in helping the economy reach these projections. Meanwhile, Bogotá's increasing openness to foreign trade and investment will prove very positive for business confidence. Total trade has more than tripled since 2005 and foreign investment has increased fivefold, reflecting the maturating of the Colombian economy.

As far as the election of Donald Trump is concerned, some commentators expect the president to remain pragmatic in the short term. Later in his administration Trump may attempt to alter America's complex foreign trade and investment pacts.

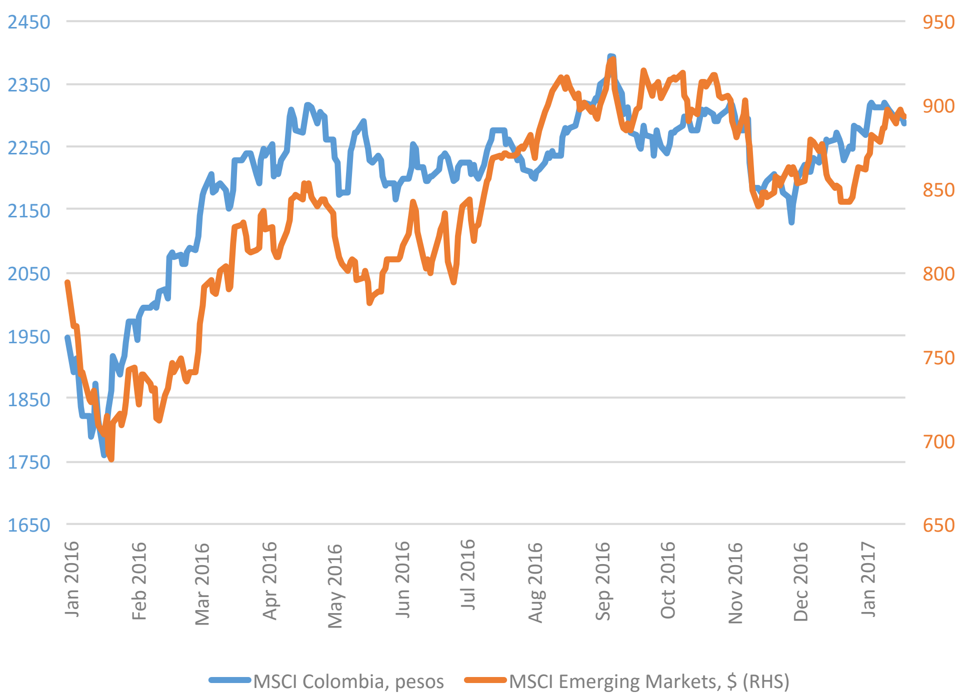
> *Markets are factoring in a strong rise in US economic activity in the light of Trump's proposed tax cuts, corporate deregulation, and increased infrastructure spending.*

However, yields on US bonds have already started to rise since his victory in November 2016. If this tightening continues, as generally expected, investment into emerging markets, such as Colombia, could slow. Conversely, markets are factoring in a strong rise in US economic activity in the light of Trump's proposed tax cuts, corporate deregulation, and increased infrastructure spending. Stronger demand from the US could support trade and investment activity with Colombia. The country's main focus, however, must be to secure internal peace and lay the foundations for substantive fiscal reform. ■

Ricardo Adrogué is Head of Emerging Markets at Barings. Brigitte Posch is Head Portfolio Manager of EM Corporate Strategies at Barings. Michael Simpson is Head of Barings' Latin American Equity Team.

Colombian equities outpace emerging market equities in 2016

MSCI Colombia, pesos and MSCI Emerging Markets, $



Source: MSCI, OMFIF analysis

Solving Caracas currency chaos

Why the dollar should take over in Venezuela

Steve Hanke, Advisory Board

Venezuela is embroiled in history's 57th hyperinflation crisis – in addition to the existing problems of economic mismanagement, corruption, and incompetence.

Since the beginning of November 2016, the bolivar has lost 42% of its value, worsening conditions for a country in which wheelbarrows have replaced wallets. In response, Venezuelan officials announced a misguided and foolhardy plan to issue higher-denomination bills to mitigate the damaging effects of hyperinflation.

If the Banco Central de Venezuela does not redenominate, then the people are stuck. But redenomination by itself is insufficient. If you go to a market in Caracas today, you either need to carry an unseemly amount of cash, or bigger bills – much bigger. President Nicolás Maduro and the central bank hope that, by printing Bs20,000 notes, they can skirt around the hyperinflation problem until it disappears of its own accord. That is a brainless undertaking.

Inflation barrier to redenomination

In the early 1990s, the former Yugoslavia tried to combat its own hyperinflation by printing larger bills, and failed horribly. That episode of heavy inflation continued throughout the decade, and the Yugoslav dinar was devalued 18 times between 1991-99. Monthly inflation of 313,000,000% transformed Yum500bn bills into small change before the ink had dried.

Redenomination achieves nothing if elevated inflation levels persist, as Zimbabwe's infamous Zwd100tn note has demonstrated. Venezuela will be no different. When inflation rises uncontrollably, reserve banks cannot physically redenominate bills quickly enough. Countries are then left with valueless notes with many zeroes and a 'wheelbarrow problem'.

> ***"A currency crunch leads to starvation and riots, and would certainly diminish Maduro's tenuous grip on power.***

Yugoslavia's inflation episode stopped only when its printing office ran out of capacity – they couldn't redenominate and print notes fast enough, so stopped. This sent the real value of notes in circulation to zero, ending the inflation episode. However, this is a painful way for hyperinflation to end. A currency crunch leads to starvation and riots, and would certainly diminish Maduro's tenuous grip on power.

Arguments for adopting the dollar

The only solutions for ending relatively painlessly Venezuela's inflation episode and the currency chaos, fanciful as they may be, are to either dump the bolivar and replace it with the dollar, or make the bolivar a clone of the dollar via an orthodox currency board.

In the latter case, the bolivar trades at a fixed rate with the dollar, is totally convertible with the dollar, and is completely backed by US reserves.

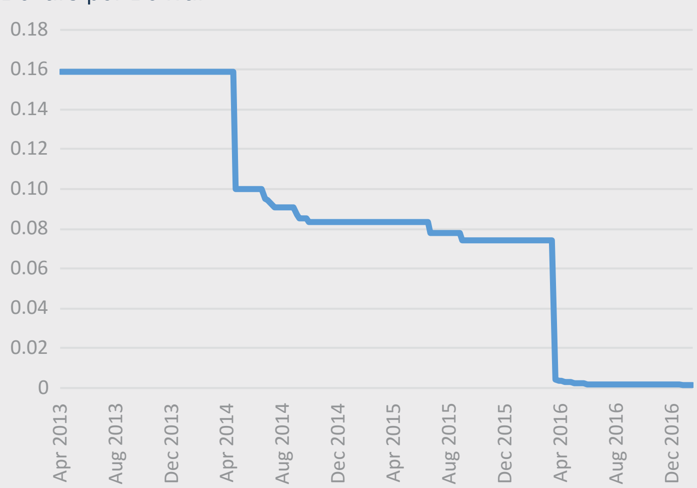
Nicolás Maduro, President of Venezuela

If a Venezuelan leader could, against all odds, announce the implementation of dollarisation or an orthodox currency board, he would become a national hero on par with revolutionary leader Simon Bolivar. International currency markets would instantly regain faith in Venezuela and restart trade. If the bolivar were either replaced or backed by the world's most trusted reserve currency, a commodity not seen in Venezuela for years would return: stability. ■

Steve Hanke is Professor of Applied Economics at The Johns Hopkins University, Baltimore.

Bolivar sees significant depreciation under Maduro

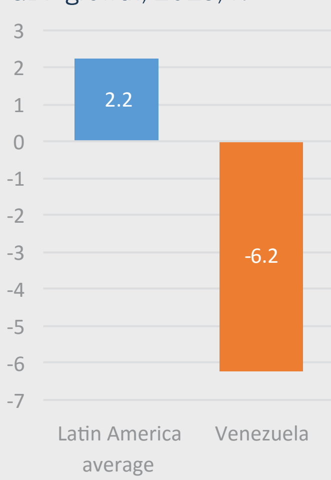
Dollars per Bolivar



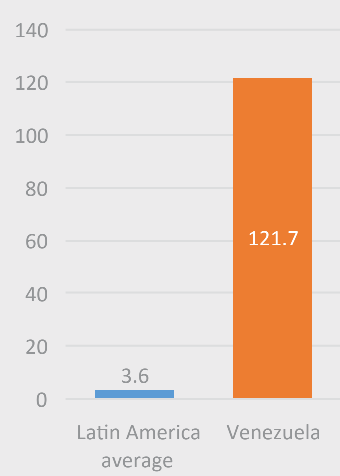
Source: WM Reuters

Negative growth and hyperinflation in Venezuela

GDP growth, 2015, %



Inflation rate, 2015, %



Source: IMF, OMFIF analysis

Brazil needs unpopular reforms

Corruption probe and fiscal deficit reduction are key

Winston Moore, Advisory Board

Brazil faces a turbulent 2017, following its two-year economic crisis exacerbated by a power struggle and corporate corruption probe. The political class, including President Michel Temer and his cabinet, is under scrutiny. Defendants have been accused of taking bribes to help contractors secure over-priced projects from the state oil company Petrobras.

Members of congress are attempting to pass legislation to shield themselves from prosecution, while simultaneously accusing the judges and prosecutors leading the Lava Jato ('Operation Car Wash') probe of abuse of authority.

The biggest fallout will come from the plea bargains submitted to Brazil's supreme court on 9 December 2016 by 77 directors and senior managers of the construction company Odebrecht. Officers of other leading Brazilian companies are expected to enter similar plea bargains. These will probably result in fresh charges levied against already-implicated politicians.

The Lava Jato probe is championed by Judge Sergio Moro. He may have a moralising effect, instilling low tolerance for corruption nationally and perhaps throughout Latin America. However, stalling of investigations by opponents could spell disaster for Brazil precisely at a time when it is starting a route to economic recovery.

Social security reform and unemployment

Temer, who took over from impeached President Dilma Rousseff in August last year, is likely to remain in office at least until elections in October 2018. He is attempting to rescind the populist policies of former President Luiz Inácio Lula da Silva, who also faces charges in the Lavo Jato probe.

Government ran a deficit as part of measures to pull the country out of recession. The deficit increased throughout 2016 to reach a record $R170.5bn ($52.5bn). This year Henrique Meirelles, the finance minister, will attempt to reduce the deficit to $42.5bn.

Brazil's social security structure is one of the most generous in the world, but it is unsustainable: the system requires reform, though the proposed changes will be resisted. At the top of Temer's list to cut the deficit is pensions reform to terminate final salary pensions and raise the retirement age to 65 (on average Brazilians work until the age of 54 before retiring). Reform of labour legislation is also on the cards.

Last year saw high unemployment, at 12m, which is expected to rise to 13.7m in the first half of 2017. This figure is then predicted to fall to 13.4m by the end of the year, in line with the anticipated economic recovery.

The economy contracted 3.8% in 2015 and 3.5% in 2016. The Banco Central do Brasil is forecasting 0.7% growth in 2017, with the finance ministry predicting a more upbeat 1% growth rate (though this figure still pales in comparison to the 7.5% recorded in 2010).

Return of deep-water exploration

Opportunities are developing in the hydrocarbons sector as the government looks to approve legislation to modify a 2010 obligation that made Petrobas the sole operator and holder of a minimum 30% stake in pre-salt oil fields.

> ***"To reduce the fiscal deficit that cost Brazil its sovereign credit rating in 2015, congress approved an austerity programme in mid-December 2016 to cap spending.***

Congress hopes that this measure will make Brazilian prospects more attractive for international investors. Brazilian pre-salt blocks, which are believed to hold a significant portion of world oil and gas reserves, are listed as a favourable investment prospect for 2017 and offer one of the lowest development break-even points globally.

Brazil is expected to hold three auctions of oil and gas areas in 2017, one of which involves blocks in the pre-salt layer. Potential investment in already discovered pre-salt blocks could top $120bn, according to the Brazilian Petroleum Institute.

The cap on production settled on by the Organisation of the Petroleum Exporting Countries at the end of 2016 helped oil prices recover and gave a boost to Petrobras and associated oil majors investing in ultradeep-water exploration and development.

Opec reports that Brazil will become the fastest growing non-member in 2017, forecasting a production increase of 250,000 barrels per day. Brazil is expecting to produce 3.4m b/d in 2017, as Petrobras will seek offers to establish seven new offshore oil production platforms as part of a $74.1bn five-year plan to increase production.

Sound economic fundamentals

There is much potential in Brazil's economy. Inflation is under control, with a 6.4% rate reported in 2016 and 4.9% forecast for 2017. Brazil reported a record $47.7bn trade surplus in 2016 with $185.2bn worth of exports and imports totalling $137.5bn. An equally robust $44bn surplus is forecast for 2017.

The Brazilian real was the best performing currency in the world in 2016, with an 18% rate of return against the dollar. This was made possible by a boost in investor confidence following the departure of Rousseff, in addition to the low base effect as the currency reversed losses made over 2015. The central bank's $370bn of foreign currency reserves covers 30 months of imports, sufficient to manage the volatility of the real.

The Ibovespa stock market index surged 39% in 2016 – its best performance since 2012 – again thanks to investor confidence in an economic upturn and the recovery of commodity prices, especially oil. In 2016, shares in Petrobras were up 122%, while shares in Vale, the world's largest iron ore producer, rose 129%.

Against this backdrop, Temer has a 14% popularity rating and lost six cabinet ministers to corruption allegations. Lava Jato will dictate the pace for change and recovery. The next six months will be critical for the Temer administration if it is to restore business and consumer confidence and put back Brazil onto a more positive trajectory. ■

Winston Moore is Managing Director of Moore Associates.

Currency flexibility and inflation targeting

Worst of trade shock may be over but risks persist

Carlos Giraldo, Fondo Latinoamericano de Reservas

Latin America faces serious near-term risks. These derive from the volatile global environment and the region's economies' inability to respond sufficiently with appropriate monetary and financial policies.

Latin American economies have suffered heavily from external disruptions, particularly the downturn in commodity prices – an important source of export revenue – and the rise of the dollar, given the high levels of dollar-denominated debt that have now become more expensive to service.

Despite these challenges and often pessimistic projections, there are promising factors for the region's economic outlook. The external shock, causing a sharp fall in foreign trade, is slowly receding. There are few economies in the region still encountering economic and financial crisis. No country has incurred a debt default. Most markets have faced this new economic scenario in a way that is broadly satisfactory, considering the magnitude of the external shock.

Recovery forecast for regional economies

Inflation remains close to target across the region, despite increases that were due in part to exchange rate depreciation. Inflation expectations are still anchored, especially in economies with central banks operating under an inflation-targeting regime. This achievement is, without doubt, a product of the move to central bank independence in the last few years.

Exchange rate flexibility has created room for more active macroeconomic management and creation of debt markets in the private sector. This has accompanied better private sector management of the exchange risk and lower exposure to balance sheet effects in comparison with previous decades.

> ***"Despite the hardening of external funding conditions, most Latin American economies have not faced trouble accessing international debt markets. Several countries have completed successful bond issues.***

Consequently, the authorities have not had to draw on foreign exchange reserves accumulated in recent years.

Most importantly, despite the hardening of external funding conditions, most economies in the region have not faced trouble accessing international debt markets, and several countries have completed successful bond issues during this period. Growth forecasts, habitually unduly optimistic, are no longer being revised downwards, and still foresee a modest recovery (see Chart).

Even the most optimistic forecasters can point to significant downside risks, and two are of particular significance.

The first is the projected cycle of Federal Reserve interest rate increases, and its effect on emerging markets. Although the Fed's base scenario shows a gradual and moderate increase in interest rates, an acceleration could have a greater impact than desired on capital flows and external financing costs for Latin America and other developing economies.

Poor external responsiveness

The second problem is Latin American countries' poor responsiveness to external developments. This is particularly marked since these economies showed relatively large ability to adjust during the 2008-09 financial crisis.

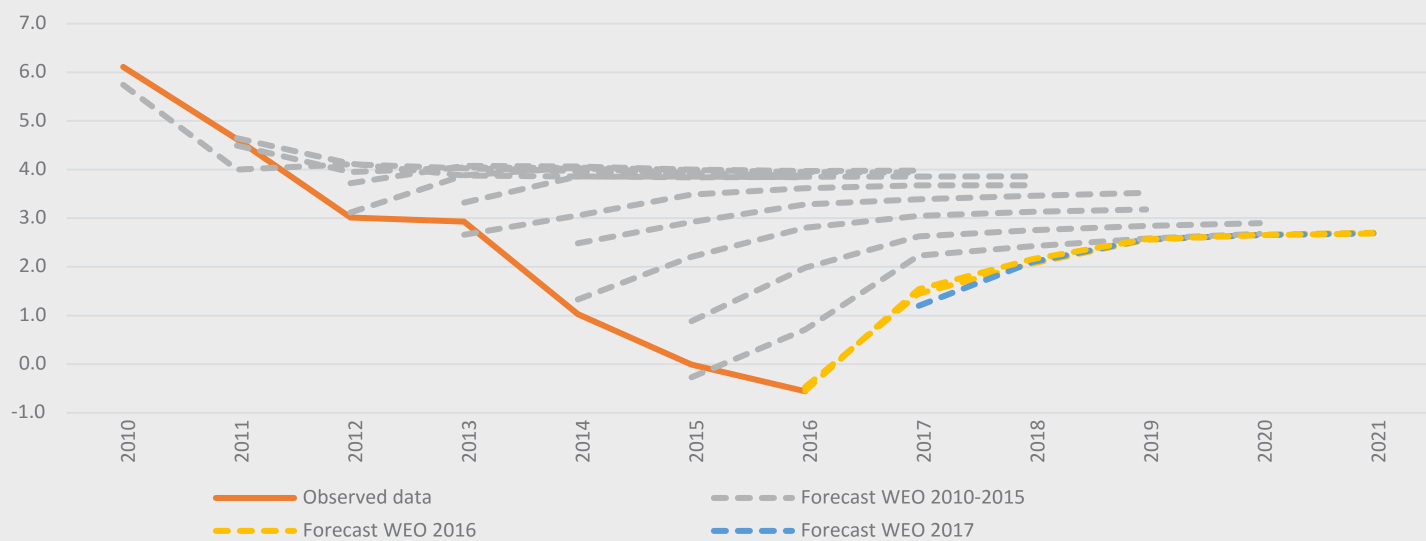
Above all Latin America has little room for fiscal expansion in most economies – a residue of previous years' countercyclical policies that creates a millstone for current administrations.

Latin America has overcome what appears to be the worst of the external trade shock, but key downside risks persist. The region's policy-makers will need great stores of wisdom and judgement to make a lasting and positive difference to growth and stability. ■

Carlos Giraldo is Director of Economic Studies and Research and Development at El Fondo Latinoamericano de Reservas.

IMF projections historically too optimistic

GDP growth, various IMF WEO publication forecasts, %



Source: International Monetary Fund World Economic Outlook. Sample of 32 countries weighted by GDP purchasing power parity

February 2017

The Bulletin FOCUS

Singapore: expanding by financial innovation

OMFIF

FOCUS: SINGAPORE

Expanding Asian markets through technological innovation

In the third Focus report on the future of global financial centres, OMFIF is profiling Singapore, a business and economic financial hub and the base for our Asia office. Singapore is expanding its premier product offering and market share in the dynamic Asia Pacific region, particularly via large investments in financial technology and its focus on the associated regulatory issues. As Ravi Menon, managing director of the Monetary Authority of Singapore, discusses in this special report, 'Fintech is fundamentally transforming the financial industry,' and financial centres must adapt to this.

"A global perspective puts Singapore in an advantageous position at a time of uncertainty in Europe and in light of the development and deepening of Asian markets.

Singapore has several distinct advantages. It is situated in the heart of the Asia Pacific region and is near to many countries with underdeveloped financial and capital markets. This allows it to act as a bridge for foreign companies and banks seeking access to Asian customers.

Around 40% of the companies listed on the Singapore stock exchange are foreign, and Singapore's developed debt markets attract corporates and financial institutions from across the region to address their funding needs. It is the primary offshore listing venue for Indian bonds and offers a large number of renminbi and Islamic finance investment options.

Given its location in the midst of key markets, Singapore focuses on serving a global customer base and providing vital liquidity to financial markets. Japanese Nikkei 225 and Indian Nifty 50 index futures are some of the most popular contracts traded on the SGX, and it is hoping to attract more activity from China, the Middle East and elsewhere via the introduction of dual-class listings.

This global perspective puts Singapore in an advantageous position at a time of uncertainty in Europe following the UK's European Union membership referendum, and in the light of the development and deepening of Asian markets. Many firms that are considering moving their operations out of London are looking not only at other centres within the EU, but also to bases like Singapore where they can access global markets and clients.

Singapore does face challenges, however. Volatile capital flows into Asia Pacific and the vulnerability of some local economies to monetary policy changes from advanced economy central banks mean local financial markets have an added degree of uncertainty. While local economies have reduced their dollar-denominated debt relative to the 1997-98 Asian financial crisis, the overall size of outstanding debt and the inflation of certain assets due to cheap dollar financing since the 2008-09 crisis mean the region is still relatively exposed to changes in the financial environment.

With the election of Donald Trump in the US, global protectionism could rise over the next few years. This could create challenges for the export-oriented economies of east and southeast Asia, and potentially impacting the amount of foreign direct investment flowing into the region.

Despite these factors there are reasons for optimism. Singapore is developing new products to serve regional customers, such as Islamic finance products and renminbi-denominated bonds and shares. It is a hub for intraregional financial projects linked to integration of the Association of South East Asian Nations. The creation of an integrated Asean insurance market is one recent proposal in this field.

The concentration of activities in Singapore and nearby fast-growing economies offers opportunities for innovation, exchange of information and best practice on new products and services, as well as a rapidly growing customer base. At a time when the financial industry is facing challenges from low growth, regulatory developments and the strains of extraordinary monetary policy actions, Singapore can offer an important model for the future of financial centres.

CONTENTS

Capital market helping regional growth

Ben Robinson

Population growth and economic development in Asia Pacific are expected to make the region the world's fastest growing economic bloc over the coming decades. Its relatively strong performance since the global financial crisis has led to a large increase in capital inflows and a substantial build-up of foreign exchange reserves.

The creation of regional development banks like the China-led Asia Infrastructure Investment Bank has provided billions of dollars for projects aimed at boosting productivity and connectivity, fostering economic integration. The Asia Pacific region is forecast to account for almost 60% of global infrastructure spending by 2025. Productively channelling these funds to achieve the region's growth potential requires the kind of sophisticated capital market and financial infrastructure that Singapore offers.

Capital market strengths

Singapore has some of the most developed debt and equity capital markets in Asia. The Singapore stock exchange offers a wide range of products and services to domestic and international companies. Turnover of securities was around $15bn in December 2016, exchange traded fund turnover was $225m, and total market capitalisation of the 757 listed companies is around $640bn. While this puts Singapore in 10th place among regional bourses, it has particular strengths in real estate, shipping, offshore marine, aviation and infrastructure assets. It is the second largest real estate investment trust market and over-the-counter interest rate derivative centre by turnover in Asia Pacific, after Japan.

According to the latest Bank for International Settlements report on foreign exchange and OTC derivatives, Singapore is the largest foreign exchange centre in Asia Pacific, with a total daily turnover of $517bn (ahead of Hong Kong and Japan with $437bn and $399bn, respectively) and the third largest globally. Turnover for OTC interest rate derivatives denominated in Singapore dollars more than doubled between April 2013 and April 2016, to $12bn. This creates a large pool of liquidity in multiple currencies available to facilitate financial transactions and intermediate financial flows in Asia Pacific and between China and the Asean region.

The depth of Singapore's financial markets allows it to play a key role in debt raising and to support the funding needs of Asian companies. It is already a key location for offshore renminbi and rupee bond issuances, with more than 80% of overseas Indian bonds listed in Singapore. With a large Renminbi Qualified Foreign Institutional Investor quota, Singapore-based investors can channel offshore renminbi into China's securities markets. Under the Renminbi Qualified Domestic Institutional Investor scheme, qualified Chinese institutional investors are able to use renminbi to invest in Singapore's capital markets. RQDII funds have, however, been subject to suspension by the Chinese authorities over concerns of capital outflows, limiting their significance to date. As China's financial system develops it is likely to provide further opportunities for Singapore. It offers deposits, insurance endowment funds and structured products in addition to renminbi bonds.

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"As China's financial system develops it is likely to provide further opportunities for Singapore. It offers deposits, insurance endowment funds and structured products in addition to renminbi bonds.

Islamic banking is a further area targeted for expansion. A recent report by EY estimates that the market size of the Islamic banking sector could more than double by 2021, from 100m customers in 2015, worth $924bn, to around 250m customers. With Malaysia, Brunei and other Islamic countries in its immediate vicinity, the city-state is seeking to expand its Islamic product offerings.

Managing regulatory challenges

Singapore's asset management sector is among the biggest in the world, with around $2tn under management. This has been led in recent years by growth in private equity and venture capital funds, hedge funds and real estate. Expansion of private markets has been encouraged by the search for yield and the growing demand for less-liquid assets that offer stronger returns than conventional public assets. This has benefited emerging market corporates, which have been able to access international investors and secure relatively cheap funding.

Singapore's extensive fund administration capabilities and its corporate and regulatory framework is being enhanced by development of a variable capital structure that will provide flexibility and low costs. This is likely to be completed by the second half of 2017, and the Monetary Authority of Singapore expects this to encourage fund domiciliation in the city. This could improve Singapore's status as a key location for matching corporates and investors in the region. The widespread mix of fixed income asset managers, global banks, international investors and important trading venues contributes to the depth of secondary markets. This is particularly important in the context of financial regulations, including the Basel III rules regarding bank capital and liquidity requirements, which have raised the cost of bank intermediation and balance sheet-intensive activities, boosting the importance of capital markets in fund raising and market-making. This effort has been supported by the Monetary Authority of Singapore standing facility, which provides repurchase agreements, foreign currency swaps or collateralised loans to eligible counterparties to support market making.

> *"The Asean market is one of the largest in the world, with a combined economy of $2.5tn and more than 650m people. To access these customers many firms have established their regional bases in Singapore.*

A gateway for investment into Asean and India

Singapore's strengths in attracting and channelling large capital flows have made it a gateway for foreign direct investment into Asean and India. This has been aided by favourable tax rates and exemptions, which allow profits derived from foreign investments which are remitted to Singapore to be taxed at the corporate rate of 17%, as well as tax free dividends and zero capital gains tax.

The Asean market is one of the largest in the world, with a combined economy of $2.5tn and more than 650m people. To access these customers many firms have established regional bases in Singapore, contributing to large FDI inflows and an FDI stock exceeding $900bn. There has been strong investment in industries that serve regional supply chains, such as logistics, shipping and financial and professional services. There is substantial FDI in manufacturing, which makes up around 20% of Singapore's GDP, the largest component ahead of business services (15.5%) and finance and insurance (12.6%).

Achieving Asia's growth potential depends on providing the products and services that the next stage of its development will require, including online cross-border payments systems, the expansion of digital banking, alternative investment platforms and trade facilitation. It depends on providing the relevant financial infrastructure to connect the estimated 876m people that do not have a bank account or do not currently use financial services.

Development of a global fintech centre

Financial technology is the key to achieving these goals, allowing firms to provide new products and tailor them to users' needs. It is helping to improve connectivity and lower costs for users, and provide 'big data' that allow firms to track market trends and emerging risks. This can help to reduce fraud, thereby lowering insurance premiums, and is vital for creating 'smart systems' that are useful for a range of products from digital health and water management systems to car insurance telematics.

MAS has led efforts to establish Singapore as a global centre for fintech development. It provides grants for fintech start-ups and encourages innovation via strong intellectual property rules. MAS helps firms achieve scalability via special financial assistance for projects that contribute to productivity, process improvement, product development and expanding market access. Its Financial Sector Technology and Innovation scheme aims to foster a 'vibrant ecosystem' for fintech innovation, encouraging financial institutions to establish innovation labs in Singapore. So far more than 20 global financial institutions have set up such centres in Singapore.

> *"Regulatory issues surrounding fintech and cybersecurity present uncertainties for financial firms and investors. This presents risks to Singapore's development.*

MAS's FSTI scheme is building the infrastructure for the new technology and associated services. Among the projects being undertaken is an interbank payments system using blockchain technology to allow real-time global payments, as well as the automation of securities issuance, trading and settlement.

These activities create challenges for existing financial institutions. Payments and lending make up 40% and 24% respectively of fintech investments in Asia Pacific. More than 60% of the revenue generated by Asian banks is derived from transaction fees, including from remittances and cross-border payments. By encroaching on their traditional business models, fintech could take a large part of banks' market share and profits. Financial firms are having to adopt and adapt to this trend. Singapore's status as a leading fintech hub puts it at the heart of this rapidly changing area.

Challenges from other fintech centres such as Paris and New York, as well as from the large incumbent banks, create significant competition for market share among the customers Singaporean firms are targeting. Regulatory issues surrounding fintech and cybersecurity present uncertainties for financial firms and investors, while the scalability of new products is relatively untested. This presents risks to Singapore's development. However, the MAS has created a regulatory 'sandbox' which allows companies to trial new technologies and expand successful product innovations while limiting the risks and costs associated with potential failures. It has set up the first Financial Services Information Sharing and Analysis Centre – the industry body for cyber intelligence – in Asia Pacific, helping it to establish the necessary frameworks for fintech development.

The symbiotic development of Asia Pacific financial markets and the creation of new financial technologies creates obstacles for existing institutions, but offers great promise for those that stay abreast of developments. Singapore's role as a proving ground for fintech solutions before they are launched in the neighbouring region puts it in a prime position to harness these developments. The overriding aim, as in much of the Singapore financial arena, is to expand services and develop new markets, underpinning the role of a leading global centre. ■

Ben Robinson is Economist at OMFIF.

Europe-Asia renminbi triumvirate

Adam Cotter

The renminbi has come a long way since the Beijing authorities moved to open the currency for trade settlement in 2009. The ensuing seven years have seen China gradually take on the challenge of liberalising the capital account in a period of slowing growth, unconventional monetary policies around the world and a fall in the renminbi against the dollar.

> ***"Singapore is at the forefront of initiatives to expand channels for cross-border flows and develop renminbi infrastructure.***

The inclusion of the renminbi in the International Monetary Fund's special drawing right is yet to generate significant trust in the currency or support the internationalisation that Beijing would wish to see. The authorities are struggling to stem the currency's decline, though Beijing is unlikely to take sudden action. International payments use of the renminbi fell 29.5% last year, according to the Society for Worldwide Interbank Financial Telecommunication. Stability remains the mantra and, though the current volatility may be unsettling, any suspensions on capital outflows are likely to be short lived. Policy-makers acknowledge that rhetoric alone will not satisfy investors. Unless fundamental reforms are carried out to improve confidence in China's financial sector, outflows could spike later this year.

Singapore is not immune to difficulties from China. However its fundamentals remain strong and it is well placed to benefit from long-term Chinese opportunities. Singapore is at the forefront of initiatives to expand channels for cross-border renminbi flows and develop the infrastructure to back greater international use of the currency. The cross-border initiatives with Chongqing, Suzhou and Tianjin, though in their infancy, will help to boost renminbi activities in Singapore.

The US has been granted the second largest renminbi-qualified foreign institutional investor scheme quota after Hong Kong, with Rmb250bn. However, with no timeframe given, and Sino-US relations likely to be strained under Donald Trump's presidency, this scheme is unlikely to be implemented for some time. Meanwhile, Singapore and London have well established reputations in Beijing, while New York remains conspicuous by its absence among the top renminbi trading centres.

Chinese institutions have been rapidly increasing their international operations and investments, and Singapore is a gateway for Chinese firms. There are around 6,500 Chinese companies in Singapore. Many of them have set up regional treasury centres to take advantage of Singapore's banking and capital markets to finance their regional expansion. The seven Chinese banks in Singapore are expanding their presence to provide funding support for the activities of Chinese and regional corporates, offering diversified renminbi products, promoting the use of the renminbi in trade and investment, treasury operations, and commodity and derivatives trading.

London's future as the largest offshore renminbi centre will remain uncertain for the duration of the UK-EU exit negotiations. In the meantime, London needs to learn lessons from Singapore's efforts in building its own effective regulatory environment and globally competitive tax regime.

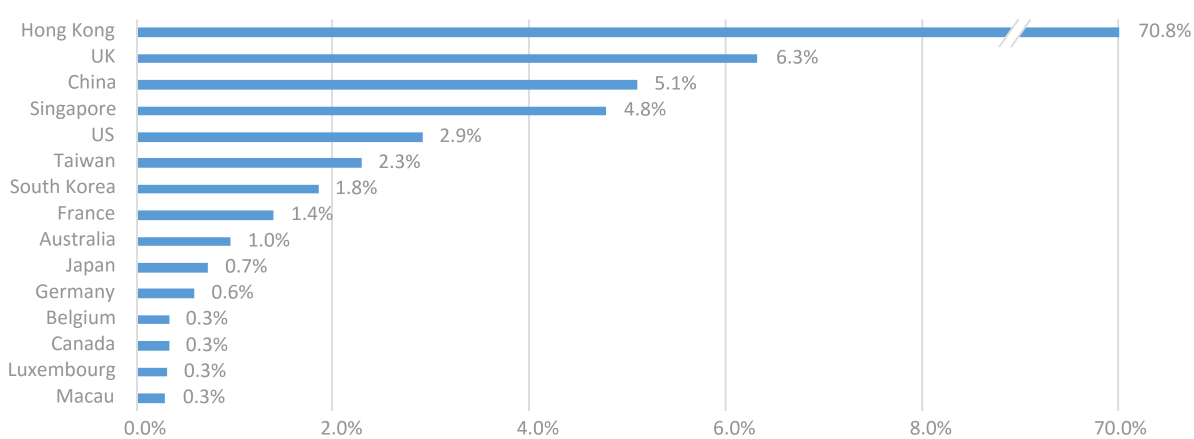
Singapore and London should consider building a Europe-Asia triumvirate with Hong Kong as the premier global renminbi centres. Switzerland, where adoption of the renminbi has also been strong, will also want to be involved in this market. The Swiss lobby has been making efforts, following the Brexit vote, to connect London, Switzerland, Singapore and Hong Kong into a so-called 'F4 alliance' to coordinate positions on global financial regulation.

Technology will continue to play a bigger role in policy-making circles, and Singapore and London are well placed to build on initiatives such as the fintech bridge to galvanise their role in redesigning the global financial infrastructure. ■

Adam Cotter is Head of Asia and Chief Representative, Singapore, at OMFIF.

Hong Kong and the UK have the largest financial payments denominated in renminbi

Top 15 renminbi economies by customer-initiated and institutional payments, November 2016



Source: Swift watch, OMFIF analysis

Centre of connectivity

Ravi Menon, Monetary Authority of Singapore

Following the launch of OMFIF's Singapore office in November, we asked Ravi Menon, managing director of the Monetary Authority of Singapore, about the state's role in Asia Pacific and the impact of international developments such as China's slowdown.

"Singapore's value proposition as a financial centre is its connectivity as a global Asia hub. It serves as a gateway between Asia and the rest of the world.

OMFIF: In London last year you said the Chinese slowdown was manageable and called on the Chinese government to accept greater market orientation, including in readiness to liquidate companies in cases of overcapacity. Nine months on, are you more or less optimistic about the Chinese outlook and the authorities' ability to handle the debt overhang?

Menon: Anxiety over China's near-term growth prospects — in particular a 'hard landing' — ebbed significantly over the course of 2016, with good reason. The authorities have carefully managed the country's growth while trying to address the structural vulnerabilities in the economy. Capacity in the over-supplied heavy industrial sectors is being gradually cut back while lending to unviable enterprises is being curbed. Private investment has started to recover alongside growing profits, and producer prices appear to have stopped declining.

Debt levels in China remain substantial. Recent measures, such as dampening property market exuberance and reducing corporate leverage, have been steps in the right direction but must be more pronounced this year. The structural reform process appears to have slowed somewhat. But there has been some progress on the fiscal and financial fronts, including implementation of value added tax. Plans have been announced to allow more foreign investment in banking, insurance and securities firms, as well as in telecommunications and education. It is important that China presses on with structural reforms which will provide the basis to lift productivity and put the country on a sustainable medium-term growth trajectory.

OMFIF: The renminbi entered the International Monetary Fund's special drawing right on 1 October. As China continues to internationalise its currency and liberalise its capital markets, what opportunities do these present to investors globally? And what role do you envisage Singapore playing in this?

Menon: China's capital markets are too large to be ignored by global investors. Its bond market is roughly the same size as the rest of the emerging markets bond universe combined, but international investors hold less than 2% of it. The recent liberalisation of China's interbank bond markets is welcome news for global investors looking for diversification and yield. Singapore is one of the largest offshore renminbi centres. The range of renminbi investment and hedging products in Singapore to serve the needs of investors with exposure to China continues to broaden. Cross-border renminbi flows between Singapore and China will continue to grow, notwithstanding the pause witnessed in 2016 as Beijing sought to limit capital outflows. The growth in other offshore renminbi centres will support the increased use of the currency in different regions.

"Post-Brexit London will retain many of its strengths as a financial centre – breadth of markets, depth of financial expertise, and connectivity with other centres. I do not expect its position to weaken significantly. And, to the extent that there is any shift of financial activities out of London, it is unlikely Singapore will be the main beneficiary.

OMFIF: What is your view of prospects for the euro area? Brexit represents a major shock for the European economy. Do you think withdrawal will harm London's status as a world financial centre? Can Singapore gain rewards?

Menon: Euro area growth will continue to be supported in the near term by accommodative monetary policy. But fading support from low energy prices and European Central Bank stimulus, uncertainty surrounding Brexit, and weak external demand will weigh in the opposite direction. The outcome of elections in France, Germany and the Netherlands could heighten political uncertainty and potentially dampen business sentiment.

While uncertainties over the terms of British withdrawal will pose challenges to the financial industry, post-Brexit London will retain many of its strengths as a financial centre – breadth of markets, depth of financial expertise, and connectivity with other centres. I do not expect its position to weaken significantly. And, to the extent that there is any shift of financial activities out of London, it is unlikely Singapore will be the main beneficiary.

Many global institutions maintain a presence in both Singapore and London to serve cross-border flows in the Asian and European markets respectively. Singapore's value proposition as a financial centre is its connectivity as a global Asia hub. It serves as a gateway between Asia and the rest of the world. Like London, Singapore benefits from political stability, free movement of capital, sound and predictable regulation, strong rule of law, and global connectivity. Singapore is strong in offshore banking, reinsurance, asset and wealth management, foreign exchange and derivatives trading, and fintech. But the scale is different: London is much bigger.

OMFIF: Singapore is a leader in fintech. A milestone was the inaugural Singapore FinTech Festival in November, which attracted 13,000 participants. How do you see future developments? What are the challenges to the industry and regulators?

Menon: Fintech is transforming the financial industry. We are seeing promising developments in areas such as digital payments and distributed ledgers. The biggest potential may be in advanced data analytics and machine learning. Financial institutions are beginning to aggregate and analyse large data sets to gain richer insights into customer behaviour and needs, detect fraud or anomalies in financial transactions, and improve surveillance of market trends and emerging risks.

We want to create a 'smart' financial centre in Singapore, where innovation is pervasive and technology is used widely. But a smart centre must also be a safe centre, which includes regulation that is conducive to innovation while fostering safety and security.

Introducing regulation prematurely might stifle innovation and derail the adoption of useful technology. So it is important that regulators keep pace with what is going on, assess risks, and evaluate whether it is necessary to regulate or leave things to evolve further. Regulation should come in only when the risk posed by new technology becomes material or crosses a threshold, and the weight of regulation must be proportionate to the risk posed.

We encourage experimentation with innovative fintech solutions. As with all experiments, there will be risks. We hope to strike a balance with our 'regulatory sandbox' for financial institutions to test solutions. This provides an environment where if an experiment fails, it fails safely and cheaply within controlled boundaries.

Strengthening cybersecurity is an important part of Singapore's fintech agenda. As digitalisation spreads and more financial services are delivered over the internet, there will be growing security and privacy concerns over cyber attacks. Users will have confidence in new technologies and innovative services only to the extent they have confidence in cybersecurity. MAS works closely with the industry to improve the resilience of the financial sector continuously. Technology risk management is an increasingly important dimension of our supervisory regime.

> ***"Strengthening cybersecurity is an important part of Singapore's fintech agenda. There will be growing security and privacy concerns over cyber attacks.***

OMFIF: Talent shortage is a perennial issue globally. How does Singapore deal with this?

Menon: Talent is indeed one of the critical issues we are addressing. Nationwide, we have a movement – SkillsFuture – to provide Singaporeans with opportunities for lifelong learning. The government provides subsidies to Singaporeans to help with course fees, as well as to corporates to encourage them to send their employees for training.

For the financial sector, MAS works closely with training providers, institutes of higher learning, and industry associations to identify skills gaps, shape the curriculum, and achieve better alignment with the industry's needs for job-ready graduates. Skills development will always be work in progress. The availability of talent is a continuous challenge, and we will need to work at ensuring that our financial sector workforce remains relevant and competitive.

OMFIF: In the next four years, we're likely to see a fiscally expansionary and economically stronger US. But it would be a US that is more inward-looking. What are the opportunities and challenges?

Menon: It is too early to comment on the economic and financial market impact of policies under the new US administration. It is critically important that the US does not reverse its long-standing commitment to international trade and investment. Global trade and growth ultimately benefit from an economically stronger and open US. A more inward-looking US will introduce great uncertainty to the global outlook, and impede investments, trade, and consumption. The outcome would almost certainly be one that is poorer for all.

OMFIF: Monetary policy worldwide has reached an inflection point. Rates in the US will continue to rise in 2017, and easing policies appear to have reached the limit in both Europe and Japan. The next move in both regions may be upwards. What impact will these changes have on Singapore and Association of Southeast Asian Nations economies more generally?

Menon: We have consistently taken the line that the gradual normalisation of monetary policy is a good thing and should be welcomed. Normalisation of rates in the US — as well as in Europe and Japan later — would be in line with stronger economic growth and waning deflation risks. Faster growth in advanced economies will provide a lift to others, including those in Asia. A rise in interest rates will restore room for manoeuvrability, stem the accumulation of debt, and reduce financial stability risks relating to inflated asset prices.

But interest rate normalisation is not without its challenges. It will weigh on the debt servicing capacities of corporates and households in Asia, which have taken on more leverage amid the accommodative interest rate environment. Faster-than-expected interest rate rises could result in a surge in currency volatility amidst strong capital outflows. For over-extended borrowers, stress points could emerge as a result of an increase in interest servicing costs and a rise in the foreign currency risks of unhedged debt. These could have implications on the asset quality of banks with Asia exposures.

That said, Asia is on a stronger footing to cope with these risks. The region has been proactive in implementing macroprudential measures to limit the build-up of financial imbalances. MAS' top-down reverse stress tests show that the Asian corporate sector would require shocks far greater than those seen in the 1997 Asian financial crisis or 2008 global crisis to come under significant stress. Our tests also show that banks in Singapore can withstand a stress scenario of steep regional currency depreciation and sharp increases in interest rates. We do not wish for these things to happen, but we must be prepared if they do. ■

GPI advert

The myth of disappointing global growth

Danger of unreasonable expectations and risky policies

Carlo Cottarelli, International Monetary Fund

The unsatisfactory pace of global growth has become a constant theme in the economic policy debate. The G20 leaders' communiqué of September 2016 warned that 'growth is still weaker than desirable'. This statement echoed the previous year's observation of growth falling 'short of our expectations'.

The last two editions of the International Monetary Fund's World Economic Outlook report were entitled 'Too slow for too long' and 'Subdued demand'. The suggestion is, in this low growth environment, that more expansionary policies would be justified.

However, there is a risk that trying to boost demand above normal growth rates would again lead to instability.

It is true that, in some areas of the world economy, growth possibilities are not fully exploited. There is nothing wrong with aiming higher. But repeated statements that the global growth rate is abnormally low are not supported by evidence. A myth may be developing that could feed unreasonable expectations and risky policies.

G20 summit 2016, Hangzhou, China.

Falling short of expectations

Recent growth figures have, indeed, as the IMF has often maintained, consistently fallen short of expectations. Since 2012, the IMF has anticipated that annual global growth would rise to 4% or more.

These forecasts have been proven wrong, and growth has remained around 3%-3.5% since 2010. However, rather than diagnosing a fundamental growth issue, it is possible that the IMF and world leaders were simply too optimistic.

One way to assess what would be a reasonable forecast for world growth is to look at the average past long-term growth rate of the global economy.

During the last five years, the global economy grew by 3.3% on average. This is marginally lower than the average growth rate over the previous four decades (3.7%).

The difference mainly reflects weaker population growth. Tellingly, per capita GDP growth in the last five years (2.4%) is almost identical to that of the previous four decades (2.5%).

The latest per capita growth rates appear low only when compared with those in 2000-07, when average per capita growth was 3.5%. However, that period was characterised by market exuberance and overly expansionary economic policies that bred the 2008-09 crisis.

Today's world is different from the 1970s and 1980s. New players have come to the fore and centrally planned economies no longer exist (China can hardly be regarded as one). One might expect a higher growth rate today compared to the past, but this is conjecture. What is instead clear is that current growth rates, at least in per capita terms, are by no means exceptionally low in aggregate terms. Though growth is lower than in the past in some parts of the world (especially in advanced economies), it is higher in others. Current global annual per capita growth of close to 2.5% is completely in line with trends over the last 50 years.

This evidence has important policy implications. Faster growth would of course be welcome, but aiming at higher growth rates must be done while preserving – and possibly strengthening – stability and resilience to shocks.

> ***"World per capita growth rates are by no means exceptionally low in aggregate terms. Current global annual per capita growth of 2.5% is completely in line with trends over the last 50 years.***

It may be neither easy nor wise to try to replicate the 2000-07 surge in growth, given that this period was characterised by policies that contributed to the 2008-09 financial crisis. This is a lesson that governments and central banks around the world need to bear in mind. ■

Carlo Cottarelli is Executive Director at the International Monetary Fund representing Italy, Portugal, Greece, Malta, Albania and San Marino.

Global economy growth rates largely stable over past 50 years

World GDP growth, %

	1970-99	*2000-07*	*2008-11*	*1970-2011*	*2012-16*
Total growth	3.6	4.5	3.1	3.7	3.3
Per capita growth	2.3	3.5	2.1	2.5	2.4

Source: International Monetary Fund World Economic Outlook

Scales tilted against relenting stimulus

Pervasive side-effects of monetary easing

Veerathai Santiprabhob, Bank of Thailand

Policy-makers are too often preoccupied with the technical management of our instruments. Most of our energy is devoted to analysing the latest economic developments and deciding on the size and timing of our actions. But a more urgent and important task is getting the paradigm right.

If one gets the paradigm right but the details wrong, the damage will generally be limited. If you move policy instruments slightly too much or a few months too soon, it won't matter very much in the long term. But if policy-makers get the paradigm wrong, the resulting harm will be severe, as the same mistakes are repeated again and again. It is therefore healthy to question prevailing paradigms.

Nine years on from the 2008-09 financial crisis, it is remarkable that policy rates in advanced economies are essentially zero or negative. Central banks are continuing to seek innovative ways to stimulate their economies. Developments are still cast in terms of 'the recovery' and the crisis mentality has yet to abate. During this period, which could aptly be called the 'great transition', we have seen remarkable things.

Weak link between demand and inflation

If someone had asked in 2007 what to expect if major central banks cut policy rates to zero for almost a decade, tripled their balance sheets, and bought up one-third of outstanding government bonds in their jurisdiction, few would have expected subdued price pressure and tepid growth to be the outcome.

The prevailing view is that inflation is low and recovery weak because the zero lower bound prevents central banks from lowering real interest rates enough to re-equilibrate the economy. That is, the actual real interest rate is too high relative to the equilibrium or natural real interest rate. This view rests on two key propositions: first, that the problem besetting economies is one of aggregate demand deficiency; and second, that low interest rates can offset this by encouraging individuals to bring future expenditure forward. But this prism, based on macroeconomic models, is too narrow given recent developments.

Globally, changes in the structure of trade, rising competitive pressures and forces such as falling oil prices have increased the influence of external factors on inflation. In individual jurisdictions, changes in labour market fundamentals mirroring changing demographics and reduced wage bargaining power have exerted a downward force on price dynamics. Meanwhile, the digital revolution has driven the prices of many services, such as telephone calls, to almost zero. These forces have contributed to a weakening of the link between inflation and measures of economic slack. Low inflation can no longer be primarily attributed to insufficient aggregate demand.

Effects of monetary accommodation

These forces also account for weaker growth. For open economies, slowing world trade has undermined exports as a growth engine. Equally, the transition to services has contributed to growth headwinds by dampening investment, given that modern services are less labour and capital intensive than manufacturing. Investment is interest-sensitive, so the transition to services may have also made the economy less responsive to monetary policy.

> ***"We need monetary policy that reacts to the financial cycle, in good times as in bad.***

The consequence is that many of the forces propelling inflation and output are structural and not easily amenable to monetary policy. These factors may limit the returns stemming from monetary ease. This would not be so much of a problem if monetary accommodation had no costs, but there are pervasive side-effects.

Persistent ultra-low interest rates and the increased presence of central banks raise concerns that policy-makers are distorting prices. Very low interest rates have driven a search for yield that has boosted asset prices globally, compressed risk premiums and supported high leverage. It is striking that global leverage, at 225% of world GDP in terms of gross debt of the non-financial sector, is higher than it was before the onset of the financial crisis.

There is a dichotomy between diminished monetary influence on inflation and output, and hypersensitivity of financial markets and asset prices to monetary policy actions. This raises a dilemma. Against structural headwinds, inflation and output fail to respond to monetary ease, and the temptation is to implement further easing. In the meantime, financial markets respond to low interest rates and the search for yield results in greater financial fragility over time. This has important long-term implications that current frameworks neglect.

The prevailing paradigm views monetary policy as a stabilisation tool for managing cyclical economic movements with no impact on the trend. But it is becoming increasingly clear that there is a direct link between the financial cycle and long-run output trajectories. Given that financial instability has long-term impacts on the economy, if monetary policy plays a role in influencing the likelihood and magnitude of a crisis, monetary policy has long-term implications.

This perspective calls for a reassessment of prevailing macroeconomic models that focus on flows and shocks but neglect stocks and states. The financial cycle is the thread that binds the challenges of today to the decisions of the past. This path dependency sharpens the trade-off between short-term inflation and output stabilisation, and financial fragility and long-term trajectories.

Based on this alternative perspective, the scales are tilted against unrelenting monetary stimulus. We need instead monetary policy that systematically reacts to the financial cycle, in good times as in bad. This differs from an approach in which policy leans against the wind only when risks to stability become evident. The alternative entails more flexibility on the delivery of inflation targets and longer horizons over which the effects of policy are judged.

Macroprudential tools not a panacea

Such a framework should be complemented by macroprudential tools. These are seen often as a useful way to offset the excesses that come of low interest rates. But macroprudential measures were originally envisaged as complements to monetary policy, rather than instruments to substitute or offset the effects of monetary or other government policies.

It is easy to believe that safeguarding stability is left to macroprudential tools while monetary policy focuses on inflation and output. But this would be like driving a car with one foot on the accelerator, trying to reach the destination as soon as possible, and the other foot on the brake making sure we don't crash. This is an especially precarious task if each foot belongs to different drivers.

The monetary policy paradigms that have got us where we are need to be openly reassessed. We have reached this juncture partly because of an unanchored financial cycle. More of the same will not do. ■

Veerathai Santiprabhob is Governor of the Bank of Thailand. This is an abridged version of his speech given at an OMFIF City Lecture in London on 10 January.

Asia's role in globalisation debate

East-West contrast on benefits of international trade

Antonio de Lecea, National University of Singapore

Discussions about globalisation in the West and in Asia often employ two different narratives about the causes of economic distortions and associated policy conclusions.

A new contrast appears to be opening up, accentuated by President Donald Trump's espousal of the view that 'protection will lead to great prosperity and strength'. Asian supporters of globalisation call for political leadership to communicate the benefits effectively, and pursue globalisation further. If the West is now reluctant, the East is prepared to take over that role.

Loss of jobs and control

One version of economic and political developments, rather prevalent in the West, blames globalisation for the loss of jobs and perceived loss of control over industry. Leave campaigners in Britain's European Union referendum argued that the EU, which could be considered the most advanced example of globalisation, had pushed integration too far. Their conclusion was that globalisation must be stalled, or at least partly unwound, to regain control.

The other school of thought, often heard in Asia, points to poor domestic policy-making and political short-termism as the chief cause of discontent. As Chinese President Xi Jinping said at the World Economic Forum meetings in Davos, 'Just blaming economic globalisation for the world's problems is inconsistent with reality, and it will not help solve the problems.'

Proponents of this view argue that technological advances have had a greater impact than globalisation on unemployment in western countries. This line of thinking highlights that western working and middle classes benefit from lower prices and a wider range of goods produced all over the world.

False promise of protectionism benefits

Both points of view have some credibility, though each misses something important. Unwinding globalisation will not make the US working class better off. American manufacturing exports supported nearly 7m jobs in 2015. Transatlantic trade and investment relations support up to 15m jobs on both sides of the Atlantic. In the face of restrictions on trade and investment, the US economy would be unlikely to lift domestic demand to offset losses in foreign activities.

> ***"Globalisation can offer benefits to all countries, as long as it is accompanied by principles that ensure all participants follow the same rules.***

That said, companies in some countries, such as China, with market capitalisation among the top 100 globally, are supported by distortive state intervention. It is hard to justify why this is the case to European businesses, which must abide by stricter regulations and competition rules. As Xi said in Davos, China has undertaken many reforms and contemplates further liberalisation.

On the other hand, globalisation sceptics have a point. Disregarding the legitimate voices expressed via the democratic process is neither fair nor politically sustainable. Western governments cannot remain blind to the examples of lower social mobility and equality of opportunity that have flowed in globalisation's wake.

G20 Hangzhou consensus

Internationalisation can offer benefits to all countries, as long as it is accompanied by principles that ensure all participants follow the same rules. The G20 leaders put forward one such model in the 'Hangzhou consensus' in September 2016, which addressed the need for inclusive, innovative growth between open markets.

The revised model involves traditional structural reforms and market opening to boost growth, an improvement in global economic governance, and sound pre-distributive and distributive policies.

The G20, now under German presidency, can encourage both West and East to give meaning to this consensus. It should build on existing ventures such as the European Commission Investment Plan for Europe and the Chinese-led Belt and Road Initiative.

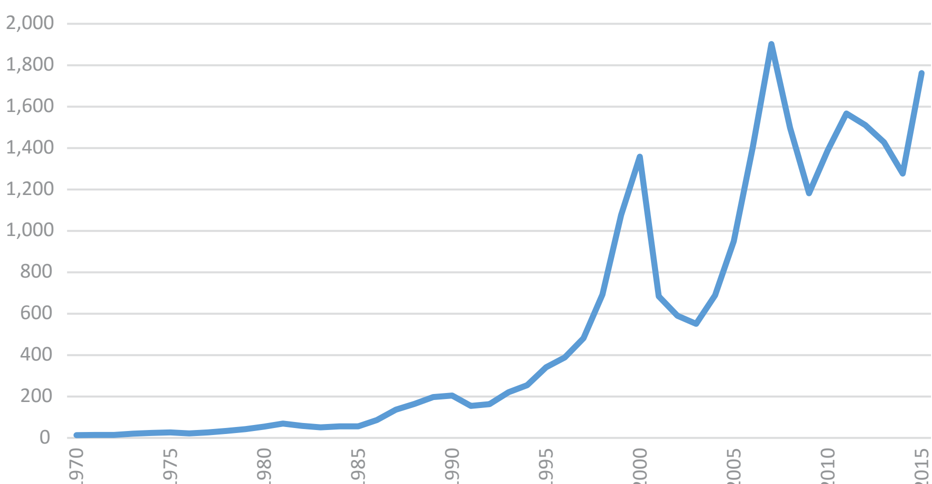
Fairer globalisation initiatives can find inspiration in the high standards of the EU-Canada trade agreement, which includes provisions on competition, state-owned enterprises, government procurement contracts and regulatory co-operation. Those wishing enforced standards can learn from EU initiatives to address distortions by some large multinational corporations. Asian countries meanwhile provide good examples of successful education and social inclusion policies.

Pursuing globalisation while correcting its unintended distortions and distributional effects provides the right framework for successful co-operation between East and West. The overriding message is that such reforms must invariably be managed by political and business leaders. But they must deliver benefits for all members of society if globalisation is to be sustainable. ■

Antonio de Lecea is European Union Visiting Fellow at the National University of Singapore's Lee Kuan Yew School of Public Policy. The views expressed here are his own.

Globalisation returns near all-time high

World total FDI flows, current prices, $bn



Source: UN Conference of Trading and Development, OMFIF analysis

Fed cautious over potential fiscal support

Monetary policy no longer needs to carry load for economy

Darrell Delamaide, US editor

With Donald Trump in office, Federal Reserve officials have concluded that it's time for the White House and Congress – both under unified Republican control – to take charge of the economy.

'We've done our job to get the economy back on a sustainable growth path,' John Williams, San Francisco Fed chief, said in a mid-January interview. 'Monetary policy in the end can't change the growth rate, the number of jobs, productivity over the long term. It's really important for us to stop thinking about monetary policy as the cure for what's happening.'

Dennis Lockhart, president of the Atlanta Fed, echoed this sentiment when he said that it is now up to Congress and the administration to offset 'demographic drags' and boost productivity growth with structural adjustments and supply-side incentives.

'During the Great Recession and the recovery phase, the Fed and monetary policy took the lead,' said Lockhart, who retires at the end of February. 'Now I think it's time for the Fed and monetary policy to shift to more of a support role.'

Contained risk of overheating

Jerome Powell, a Fed governor and former investment banker who worked in George HW Bush's administration, sounded relieved that the Fed would be getting some help from the incoming Trump team. He suggested in January that the Trump administration may be moving to a more balanced policy, with business-friendly regulation and fiscal support.

Janet Yellen weighed in on 19 January, the day before Trump's inauguration, reaffirming the Fed's intention to raise interest rates gradually. She said that it is 'unlikely' that the labour market – and with it, inflation – will become overheated, owing to the sluggish rate of improvement and the outlook for continued slow economic growth in the light of low increases in productivity and weak foreign demand.

Yellen continued, 'Allowing the economy to run markedly and persistently "hot" would be risky and unwise.' If the Fed waits too long to remove monetary accommodation, inflationary expectations would begin to ratchet upwards, she cautioned, 'driving actual inflation higher and making it harder to control'.

One argument for maintaining a gradual pace of rate increases is that the downward pressure exerted on longer-term interest rates by the assets acquired during quantitative easing will diminish as the Fed unwinds these positions.

Williams concurred at the annual forecast conference of the Bay Area Economic Institute. He emphasised the need for the Fed to reduce monetary stimulus before the economy overshoots its goals on unemployment and inflation, forcing the Fed to 'slam on the brakes'.

Lael Brainard, a Fed governor, suggested that this 'brake-slamming' might come sooner rather than later. Much depends on whether the new administration's fiscal policies aim at boosting short-term demand, rather than long-term factors like raising productivity and coaxing more people into the labour market.

"Janet Yellen weighed in on 19 January, the day before Trump's inauguration, reaffirming the Fed's intention to raise interest rates gradually.

The week before the inauguration Brainard said, 'Fiscal expansions that affect only aggregate demand, enacted when the economy is near full employment and 2% inflation, are relatively less likely to boost economic activity sustainably. They are relatively more likely to be accompanied by increases in interest rates.'

Fed ambivalence over economic impacts

Trump has promised tax breaks across the board as well as increased spending on infrastructure projects. Brainard was widely tipped as a possible Treasury secretary in a Hillary Clinton administration and created some controversy during the campaign by donating to Clinton's team, breaking from Fed tradition.

The minutes of the December Federal Open Market Committee meeting showed considerable ambivalence about the impact of the new administration's policies on the pace of rate increases.

'Many participants judged that the risk of a sizeable undershooting of the longer-run normal unemployment rate had increased somewhat. The committee might need to raise the fed funds rate more quickly than currently anticipated to limit the degree of undershooting and stem a potential build-up of inflationary pressures,' the minutes recorded. 'However, with inflation still below the committee's 2% objective, it was noted that downside risks to inflation remained and that a moderate undershooting of the longer-run normal unemployment rate could help return inflation to 2%.'

Lael Brainard, Fed governor

In addition to Lockhart's departure in February, there will be an additional replacement later this year. Jeffrey Lacker, the Richmond Fed chief, one of the longest serving FOMC members, announced he will step down in October, after 13 years at his post. The successors for both men will rotate into voting positions next year.

New voting positions go to doves

Two of the regional presidents rotating into voting positions this year are somewhat more dovish than the majority of FOMC members, who expect three rate hikes over the next 12 months.

Charles Evans, Chicago Fed president, suggested in January that the prospect of two rate hikes is 'not an unreasonable expectation'. Neel Kashkari, head of the Minneapolis Fed, is widely thought to be another of the policy-makers looking for only two rate hikes this year.

By a process of elimination, Fed watchers think that Yellen is one of the policy-makers looking for three rate hikes on the so-called 'dot plot' of expectations. The chair typically wins consensus for his or her views. ■

Darrell Delamaide is a writer and editor based in Washington.

Economic nationalism harms US too

Economy not as indestructible as Trump assumes

Meghnad Desai, Advisory Council

No incoming president could have asked to inherit a better economic legacy. The Dow Jones index has risen to new heights, unemployment is the lowest for many years and inflation is comfortably low. The cost of servicing US debt as a percentage of GDP is at one of its lowest points in the last 50 years.

However, the US economy is not as indestructible as Donald Trump may assume. It is beset by problems which are not reflected by the broad figures. The first of these is the gap in infrastructure spending, where America has not invested properly since President Dwight Eisenhower days (1953-61). There is a trillion-dollar need for renewal, which Trump has promised to address.

The second problem is stagnation in employment and wages in manufacturing. Incomes have risen in the services sector, but not in the industrial sector. Manufacturing employment began declining in the 1970s after the oil shock, but it fell only at a moderate rate. After 1990, the decline sharpened due to Chinese competition, mirroring the US trade deficit with China.

This may prove much more intractable than Trump thinks. He has taken to what Americans call the 'bully pulpit' to pressure American firms to relocate domestically from foreign countries. Trump has pulled the US out of the Trans-Pacific Partnership. He has threatened to renege on the Nafta agreement. Canada and Mexico would suffer serious economic dislocation if this happened.

> ***"Trump has taken to the 'bully pulpit' to pressure American firms to relocate domestically***

This sort of economic nationalism, which is fashionable in developing countries and parades in left wing clothes, is economically inefficient. If successful, it will put a serious cost on the rest of the US economy. Trump needs to invest in re-training the former manufacturing workers, who are now unemployed, if his protectionist policy is to have any economic benefit. There is no sign as of yet that Trump has considered this.

Before the primaries began, the prevailing theme among economists was secular stagnation. If all goes well in the crucial first weeks of his administration, Congress will accept his ambitious spending policy when he submits his budget. Then the fear of secular stagnation can be forgotten.

Congress will grant Trump what he asks for, at the very least because infrastructure spending will be spread across the country and as House of Representatives members face elections in 2018 they will want quick results. That may work for the economy, for the president and for the re-election of Republicans in the House. ■

Meghnad Desai is Emeritus Professor of Economics at The London School of Economics and Political Science.

Trump's unintended consequences

Bridging gap with hallmark Republican values

Marsha Vande Berg, Advisory Council

President Donald Trump ran as a Republican and continues to refer to himself as such. But his maverick style suggests an inclination to self-interested decision-making, rather than an embrace of hallmark Republican values like free markets and distaste for picking winners and losers.

Trump can succeed only if he finds a way to bridge his differences with conservative congressional Republicans, while at the same time binding in the constituencies which elected him. These include working class voters who are alienated by globalisation, cultural change and the impact of technology in the workplace.

In the early days following his election victory, he advanced his distinctive version of an industrial policy with few, if any, traditional Republican components. He decided that a United Technologies plant in Indiana, which manufactures air conditioners, could be a winner for him. Through the office of governor still occupied by his vice president, he used carrots and sticks to press the manufacturer into keeping jobs in Indianapolis and out of Mexico. It was a clear signal that Trump's government will engage in the protectionist game of picking winners and losers. And his message did not stop there. His late-night tweets directed at aerospace company Lockheed Martin about high costs to build fighter jets shaved 4% off its market capitalisation within minutes of the tweet. Another tweet from Trump Tower landed him unexpectedly in negotiations with Boeing over the price of a new Air Force One.

Trump is capable of being highly unconventional, but he may succeed in spurring innovation, job creation and growth. Just how well the Trump administration will succeed in supporting growth in the US economy remains to be seen. Clearly, laws of unintended consequences can go either way – and sometimes, both ways simultaneously.

In support of his intended approach to America's foreign affairs, Trump has gathered individuals around him who are rational about achieving US interests. He also has ideologues who offer advice that will be contrary and upsetting to alliances, particularly in Europe and Asia.

Trump's own approach will probably be to conduct foreign relations with detachment, unpredictability and in keeping with his already established reactive style. He will push back hard whenever he feels challenged. His style is likely to be dramatically different from that set in motion by Franklin Roosevelt, president from 1933-45, which helped define America's quintessential role at the heart of the liberal, rules-based order after the second world war.

> ***"Trump has gathered individuals around him who are rational about achieving US interests.***

Change is proceeding fast. Attempts to predict any precise outcome would be ill-advised. However, we may assume that many of the consequences, at least initially, will be unintended. Forecasting Trump's reaction to this, like much else about the president, remains an intractable task. ■

Marsha Vande Berg is a Distinguished Career Fellow at Stanford University.

The case for sovereign climate bonds

How to combat climate change with fiscal policy

Abdeldjellil Bouzidi, The Bridge Tank

Investment in a low-carbon future is a key priority for many governments across the developed and developing world, and also for central banks looking to diversify their investment portfolios. One proposal for turning this priority into action is through the creation of climate policy performance bonds – calling them 'sovereign climate bonds'.

The interest rates on these bonds would be linked to carbon dioxide reduction targets. Governments could set a rate of return on their bonds that pays investors more when the proportion of renewable energy over a year drops below a target percentage. Alternatively, the more a government reduces carbon dioxide emissions, the less interest it pays.

A vehicle for enhanced funding

Governments are well-placed to take the initiative and have the political and moral incentive to do so. Climate change threatens the lives of billions of people. If the global temperature rises by 1.5 degrees Celsius, 150m children's lives are threatened, while if it rises by four degrees this figure increases to 1.5bn. The World Bank estimates that air pollution causes one in every 10 deaths worldwide, killing four times as many people as HIV and six times as many as malaria.

November's meeting of the 'conference of the parties', the decision-making body of the United Nations Framework convention on climate change, in Marrakech, reinforced countries' commitments to keep the momentum and renew investment in a low-carbon future. Before that, the national determined contributions pledges signed by 196 nations at the Paris Agreement asked for $350bn in financing.

There is an urgent need to take action, especially as the financial challenges are increasing. But the collapse in carbon dioxide prices is weakening incentives for investment. National determined contributions are high-level blueprints, not action plans or investments. Now they need to be ordered so their impact is measurable. They could then be transformed quickly into investments, especially as low oil prices and the election of Donald Trump are threatening temperature rises exceeding the two-degrees scenario.

> *"Sovereign climate bonds could allow long-term investors to hedge their climate risk and profit from opportunities linked to low-carbon markets.*

More importantly, governments have the financial means and incentives to do so. Since 2007, public sector debt has grown by $62tn, around 9% per year. Fixed rate bonds (which includes so-called 'green bonds') are growing across the corporate sector. The government bond sector is a different story. There is a huge opportunity to re-orientate traditional government debt to help achieve carbon dioxide emission reductions. Governments could use debt to add credibility to their commitment of holding on to their policies.

Issuing a sovereign climate bond is a simple and effective way for governments to enhance their funding, provided they engage in reducing their own carbon dioxide emissions or increase renewable energy generation. Contrary to traditional 'green bonds' with a fixed coupon, there is a clear incentive for the issuer to reduce carbon dioxide by whatever means are available, especially through 'costless' measures such as adhering to reduction policies. The pay-off formula ensures that the proceeds of such bonds will be appropriately invested rather than resulting in under- or over-investment in green projects.

New investable climate asset class

Imagine if Barack Obama's outgoing administration had issued sovereign climate bonds in 2015 following the previous meeting of the Conference of the Parties. The buyers of this debt would have been institutional or renewable investors hedging their risk of policy change. President-elect Trump would probably have considered an environmental policy change more carefully, as this would have resulted in billions of additional dollars to be paid to investors.

Many investors know they are over-exposed to climate change risks and under-exposed to the opportunities. Sovereign climate bonds could allow long-term investors, such as insurance or pension funds, to hedge their climate risk and eventually profit from opportunities linked to low-carbon markets.

Bonds for a new war

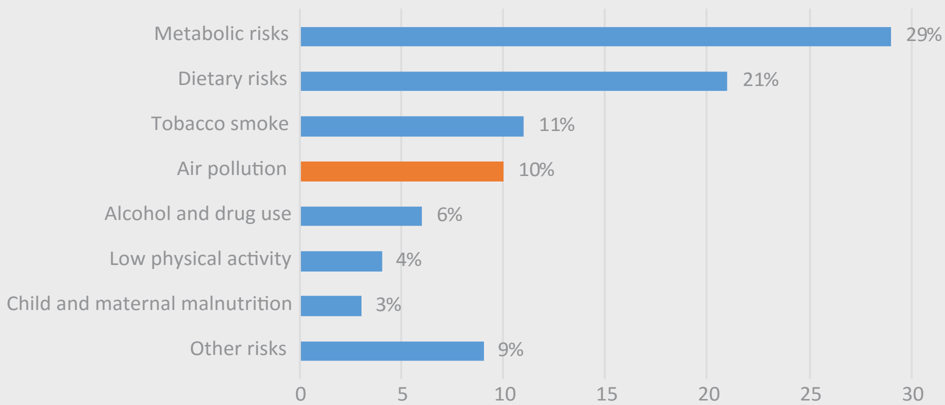
Many long-term investors, such as public pension funds or university endowments, have faced public pressure to divest from fossil fuels and invest in green products. However, they also have a duty to provide returns. Sovereign climate bonds would allow them to decarbonise their portfolios while supporting public policy and hedging against changing government policies.

On a case-by-case basis, scientists, rating agencies or other external auditors could provide additional guarantees on governments meeting, or failing to meet, their targets. The Bank of England issued the first sovereign bonds in 1694 to finance Britain's war against France. Now, more than 300 years later, we urgently need to issue a new form of sovereign bond to win the war against climate change and turn the promises of Paris into substantive action. ■

Abdeldjellil Bouzidi is a Board Member of The Bridge Tank, a Paris-based think tank focusing on emerging markets, and Founder of Emena Advisory, a Paris-based strategy and market finance consulting firm.

One in 10 deaths attributed to air pollution

Global attribution of deaths, by risk



Source: World Bank. Figures may not add up to 100 due to rounding.

China is a global contributor, not leader

Tendency to exaggerate Beijing's influence

Adam Cotter

Xi Jinping, president of China, began 2017 with a clear defence of globalisation. Speaking on 17 January at the annual meeting of the World Economic Forum in Davos, he said, 'To grow its economy, China must have the courage to swim in the vast ocean of the global market.'

The Chinese authorities are increasingly playing a part in political discourse, not least in view of the election of President Donald Trump. China is adopting a more prominent regional role in both east and southeast Asia. However, there is a tendency to exaggerate Chinese influence. Although Beijing will undoubtedly increase its contributions to international frameworks, it is a long way from leading the global policy agenda.

Chinese international agenda

China brings a measure of stability through its commitment to the international agenda in trade and investment flows. Beijing also has a role in financial regulation which it may enhance in the coming years.

The financial regulatory system is made up of a network of organisations dominated by the US and western European states. As it has done in multinational trade and investment institutions, China should recommend its highly-qualified officials for leadership positions in global financial regulatory bodies.

Trump's actions during his first 10 days in the White House reveal that his election campaign pledges were far from mere rhetoric. He has withdrawn the US from the Trans-Pacific Partnership trade deal and threatened China with punitive tariffs. Trump's administration is unashamedly unilateralist. This change in philosophy, in addition to Beijing's ability to deliver tangible economic benefits to partners, will lead to a gravitational shift towards China.

China's proposition is that it can contribute to countries' development by financing and building infrastructure. Through this network of partners, Beijing hopes to create markets for Chinese products. Such is the thinking behind the Belt and Road initiative, which accounts for $900bn in current and planned infrastructure projects in 65 states throughout Europe, the Middle East and Asia.

> ***"Though China's investments are overwhelmingly in the developing world, 2016 was a breakthrough year for Chinese investment into the US and Europe.***

Though China's investments are overwhelmingly in the developing world, 2016 was a breakthrough year for Chinese investment into the US and Europe. Investments into the US have increased by 360% since 2015, while 19% of total Chinese foreign direct investment goes to Europe. China's direct investments in southeast Asia are also growing rapidly.

Geography dictates that the Association of Southeast Asian Nations must accept a high level of connectivity with China, though these states try to avoid dependence. Deflecting the advances of economic superpowers is not new for these countries. However, it is easier to assuage political influence when those countries are on opposite sides of the globe – China is on Asean's doorstep.

Xi Jinping, president of China

Beijing has its own domestic preoccupations and China's burdensome debt-to-GDP ratio is a threat to international financial stability. This weakness has stemmed from state enterprise debt, local government borrowings, shadow banking and a hot property market.

One-off currency devaluation

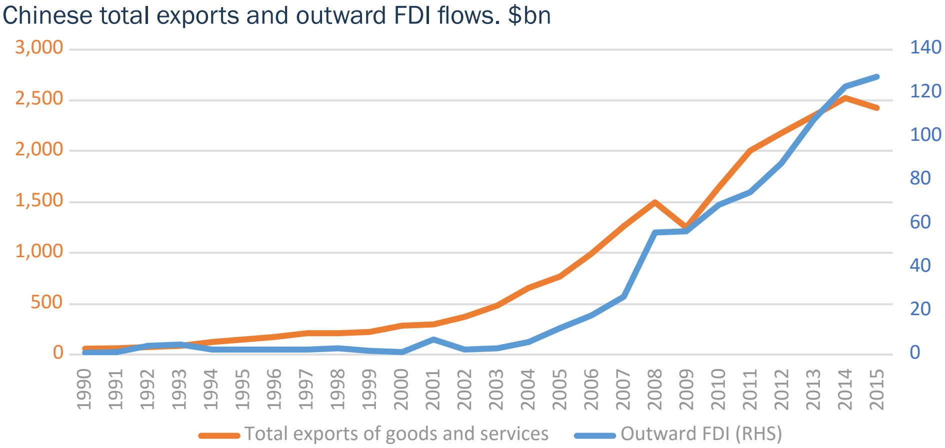
Capital outflows have come from Chinese enterprises repaying foreign currency debt in response to renminbi weakness, as well as from individuals and businesses moving cash abroad in the light of political uncertainty and confiscation risk. The government could address the decline with a substantial one-off devaluation of the currency. But such action could prove economically destabilising for China and fuel Trump's accusation that Beijing is manipulating its currency.

China must address the fundamentals that are limiting capital inflows, including indebted state-owned enterprises, a fragile banking sector, and volatile property markets. Such extensive reforms could lead to a sharp decline in growth in the short term, but to greater sustainability later.

Many members of the Politburo Standing Committee, the most powerful group in the ruling Communist Party of China, are expected to retire in 2017. Consequently, this autumn's 19th party congress provides Xi the opportunity to consolidate power and curtail corruption. Xi's future is certain to be contrasted with Trump's vicissitudes in the White House. ■

Globalisation has benefited Chinese trade and investment

Chinese total exports and outward FDI flows. $bn



Source: United Nations Conference on Trade and Development, OMFIF analysis

Adam Cotter is OMFIF's Head of Asia and Chief Representative of the Asia office in Singapore.

Lessons on a 'fair-weather currency'

Euro negotiator who worried about derailment

Roel Janssen, Advisory Board

Eyes suddenly aglow, André Szász would say, in his characteristically throaty voice, 'Just to be sure that it is correct what I have been telling you, shall I look it up?' He would turn around, open the small safe in his office in De Nederlandsche Bank, and take out one of his diaries.

In his meticulous handwriting, Szász kept notes of the many monetary meetings he had attended over the years as international director of the Dutch central bank. He would locate the passage he was seeking. Invariably, it confirmed what his ferociously precise memory had already told him.

Szász died on 2 January, aged 84. He had a front-row seat in oscillating episodes spanning the breakdown of the Bretton Woods system in 1971-73, the foundation of the European Monetary System and the move towards economic and monetary union.

Fluent in German as well as a flawless English speaker, Szász was that rarity among international central bankers: a man who could speak in their own language to leading Germans such as Karl Otto Pöhl, Helmut Schlesinger and Hans Tietmeyer. He shared the Bundesbank's near-theological leaning towards monetary stability. A convention was established that the Dutch would argue for German propositions at international meetings with less controversy and greater chances of implementation.

The sanctity of money

Szász's understanding of both the geopolitics and technicalities of central banking was deep-rooted, his life intensely private. A shy, amiable, enigmatic man, in small groups of trusted friends he could vividly relate tales of past policy-making, peppered with ironic asides about the misdeeds of politicians who dared meddle with the sanctity of money.

Szász's father was a doctor in the Austrian-Hungarian army during the first world war, who travelled to the Dutch East Indies in 1923, returning to Hungary in 1928 to find a wife. Together they went back to the Dutch Indies, where Szász was born in Jogjakarta on the island of Java in 1932. In 1933 his parents returned to Hungary, with two small children. After the 1938 Anschluss of Austria in the Third Reich, they moved again to the Dutch Indies. During the Japanese occupation, the Szász family was not forced into an internment camp, as Hungary was considered a neutral country.

In 1947, the family moved – for good – back to the Netherlands. Szász's mother died a year later, and his father sent him to a boarding school near Montreux in Switzerland. He studied economics at the University of Amsterdam, and worked at the central bank from 1960-94, latterly practically single-handedly in charge of Dutch foreign monetary policy.

In 1988, still at the central bank, he published his Ph.D. dissertation, 'Monetaire diplomatie: Nederlands internationale monetaire politiek 1958-1987'. After his retirement he wrote *De euro, politieke achtergrond van de wording van een munt*.

> ***"Szász continued to believe in the desirability of a sound European currency, but was worried about derailment.***

The English translation was published as *The Road to European Monetary Union* in 1999 and became a well-received standard text.

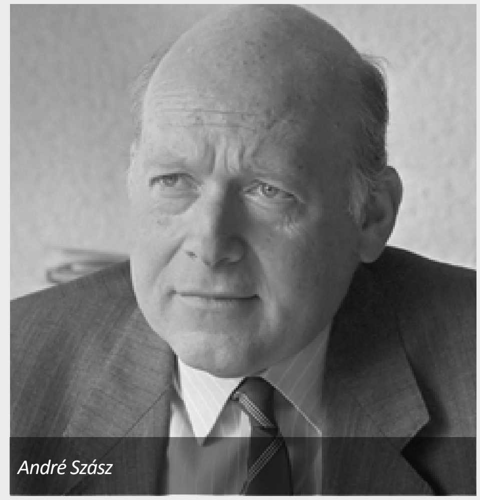
A 'once but never again' decision

After a shaky start to the European Monetary System in 1979, De Nederlandsche Bank was convinced that the Netherlands should remain fixed to the anchor currency, the D-mark. However, in 1983 Prime Minister Ruud Lubbers' government decided amid an economic crisis that the Dutch should not follow the D-mark in an exchange rate realignment.

Szász pointed to the subsequent spread between German and Dutch interest rates as an example of the pernicious effects of what he called this 'once but never again' decision. Thereafter all Dutch parties accepted that the guilder should remain irredeemably linked to the D-mark under the 'hard guilder' policy.

After 1989, with De Nederlandsche Bank President Wim Duisenberg, Szász was closely involved in negotiations on setting up the European Monetary Institute and later the European Central Bank (of which Duisenberg became the first president). In 1990, he attended a meeting of the Dutch cabinet to describe progress. 'They had no idea,' Szász recalled afterwards. 'It seemed that, for the first time, they realised how fast things were moving and what the implications of monetary union would be.'

A year later, Lubbers sealed the path to EMU at the Maastricht summit. French President François Mitterrand and Giulio Andreotti, Italian prime minister, managed to include in the draft treaty 1999 as final date for introducing the European currency. Lubbers went along with the idea, to the dismay of central bankers. Szász was convinced that timetable pressure would undermine the stringent admission criteria backed by the central bankers. He was proved right.



André Szász

Monetary union without political union

The second birth defect, according to Szász as well as many in the Dutch government, was the absence of a political union. The Bundesbank had insisted on this, much to the exasperation of politicians (including some in Germany). In the end, monetary union came about without political union or even a road-map to that goal.

The euro, Szász used to say, was a 'fair-weather currency'. When storms hit in 2010, shortcomings inevitably emerged. He continued to believe in the desirability of a sound European currency, but was worried about derailment – because the moment might arrive when Germany would have enough. 'If the Germans are no longer willing to pay the bill and a populist party surges that picks up this discontent, then it will be the end of the euro,' he predicted, well before Alternative for Germany, the anti-euro party founded in 2013, started to make headway.

On 9 January he was cremated 'in silence', as the Dutch say, without the presence of former colleagues, or current De Nederlandsche Bank representatives. The euro area still has 19 members, but the deficiencies of which Szász had tirelessly warned remained unresolved. ■

Roel Janssen has covered economic and financial affairs, fiscal policies and the euro for NRC Handelsblad, a leading Dutch daily newspaper, for more than 30 years.

Sage navigator lukewarm on monetarism

Sir Douglas Wass: Keynesian who offended Thatcherites

William Keegan, Advisory Council

Sir Douglas Wass, one of the most outstanding British civil servants of the post-war period, died on 4 January at the tender age of 93.

One of the clues to this fascinating man was a remark he made when delivering the annual BBC Reith Lectures in 1983. This followed his nine-year stint as the top civil servant at the Treasury department (1974-83) and two years as joint head of the civil service (1981-83).

In his retirement from the civil service – but not from work, as he took on a variety of banking and commercial directorships, including as chairman of the international arm of Japanese investment house Nomura – Wass was free to indulge publicly his reflections on governance.

Much to the annoyance of at least one of his successors as permanent secretary to the Treasury, Wass became a champion of freedom of information, one of his objectives being to render devious behaviour by ministers 'difficult to conceal'.

He entitled his Reith Lectures 'Government and the Governed'. For me, the revealing sentence in those lectures was: 'If incompatibility does arise, a minister should be able to remove his permanent secretary.'

> ***"Wass became a champion of freedom of information, one of his objects being to render devious behaviour by ministers 'difficult to conceal'.***

The significance of this was that, under the Margaret Thatcher government elected in 1979, Wass himself was badly treated and sidelined, but not formally removed.

Disdain for newly fashionable doctrines

Wass was, as I am, a stout-hearted Keynesian, with all the intellectual rigour of which Keynes himself would have approved. He was disdainful of the newly fashionable monetarist doctrines brought to Downing Street by Thatcher, Sir Geoffrey Howe, chancellor of the exchequer, and Nigel Lawson, their financial secretary who subsequently became chancellor in 1983.

Wass was proved right, as the 'medium term financial strategy', with its targets for controlling the money supply, proved faulty. It was old fashioned deflation and with it a rise in unemployment to over 3m by 1986, not control of the money supply, that brought inflation down.

Wass had offended the Thatcherites in 1978 in a public lecture in which, while acknowledging that the financial markets were a force to be reckoned with, he was decidedly lukewarm about monetarism.

> ***"Wass was marked down as, in a famous phrase favoured by Thatcher, 'not one of us'. His position was undermined by junior officials who subsequently rose to the top.***

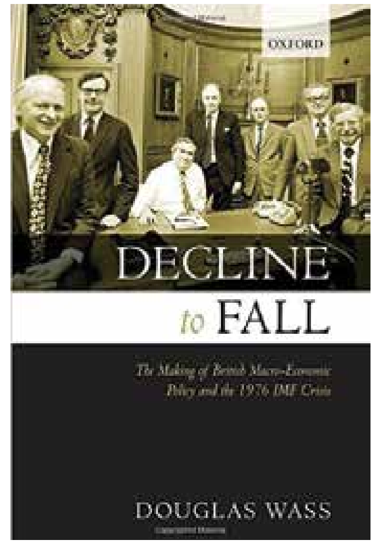
For this and subsequent trenchant advice he was marked down as, in a famous phrase favoured by Thatcher, 'not one of us'. His position was undermined by junior officials who subsequently rose to the top. Some insights into this episode were revealed by Sir Brian Unwin, who was effectively Wass's chief of staff during this period, in his own memoirs With Respect, Minister, published in December.

Approaching the IMF

Wass had previously navigated the economic difficulties of the mid-1970s, when policy-makers like himself had to deal with the onset of the oil crisis and the collapse of international confidence in the British economy. This led to the need to approach the International Monetary Fund for loans to prop up sterling in 1976.

Even Denis Healey, that especially robust chancellor, was feeling the pressure of events which nearly spun out of control and could have brought down James Callaghan's Labour government. Wass famously chided him, saying it could be worse: the Russians might be invading.

Healey was tough, but so was Wass, who never tired of telling people that in the end there was no alternative to recourse to the IMF. In a masterpiece of an account of the IMF crisis, *Decline to Fall*, Wass took issue with Healey's view that he would not have had to resort to the IMF if only the Treasury's forecasts had been more accurate. As someone who followed the crisis from first the Financial Times and later the Bank of England, I agree with the Wass judgement. The atmosphere of the time made avoiding the IMF impossible.



A reliable source of advice

Although some obituary writers have suggested that Wass was the model for Sir Humphrey Appleby in *Yes Minister*, Treasury officials who worked with him dispute this, arguing that he was much too honourable to get up to Appleby's tricks. But he was certainly the model for my own fictitious character Sir Douglas Corridor, who used to make regular appearances at holiday time in my column for The Observer. But he was not the only one. There was a time in the 1970s when no fewer than three senior Treasury officials were called Douglas.

In his later years Wass was rather amused that Treasury officials, many of whom had not been born when he retired, sought him out for advice on issues as diverse as crisis management and the withdrawal of honours.

Wass remained sage and lucid to the last, taking to regular short walks, although less able to carry out his regular swimming. Only a few weeks before Christmas he telephoned me to check on the contact number of some friends who had moved house, adding that he was looking forward to lunch in the New Year.

Alas, that last meeting did not materialise, but the fond memory of many such lunches remains. ■

William Keegan is Senior Economics Commentator for The Observer.

Tragedy, comedy, and eurosceptics

A candid view of five decades in British politics

William Keegan, Advisory Council

Ken Clarke is the best Conservative prime minister Britain never had. After a long political apprenticeship, he came into the view of the wider world when he was appointed chancellor of the exchequer under the government of John Major in 1993. He succeeded his friend Norman Lamont, who took the blame for the Black Wednesday debacle of 16 September 1992, when sterling was ignominiously ejected from the European exchange rate mechanism, precursor to the euro.

Before that, while serving as a minister in many Whitehall departments, Clarke occasionally caused controversy with his bully boy approach to public sector unions. For a long time he was not considered by Margaret Thatcher to be 'one of us', and he described himself as a Conservative 'wet' – an opponent to many of Thatcher's more hard-line policies. Yet he was more in favour of markets and privatisation than others whom Thatcher did not trust.

All these threads come together in Clarke's *Kind of Blue – A Political Memoir*, the title alluding to Clarke's party colours. This is a valuable addition to the history of the Thatcher years, from a shrewd and honest participant.

Measured self-confidence

Clarke's 1993-97 chancellorship is considered to be one of the most successful of recent decades – this self-assessment is hardly modest. 'In my more ambitious moments in later years I would claim that I had been the most successful chancellor of the exchequer since 1945,' he wrote.

It was a period of good growth, in which he succeeded in his aim of controlling public expenditure, while relying on monetary policy to regulate demand. This policy was in his hands because the Bank of England was not yet independent – Major believed that interest rate policy was fundamentally a political concern.

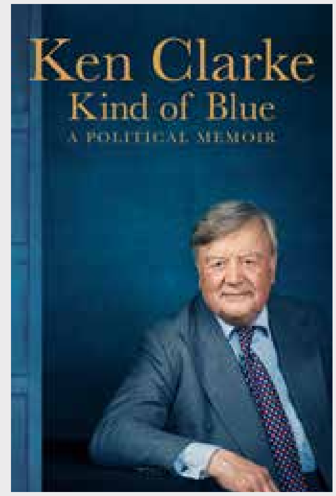
In this highly readable memoir, Clarke recalls the tragicomic events of Black Wednesday, when he was summoned by Major along with other cabinet ministers to the group struggling to know what to do. It has long been a criticism of the way the crisis was handled that the government did not admit defeat at the earliest opportunity. The cost to the reserves, courtesy of George Soros and others, was counted in billions.

In his engaging way, Clarke freely confesses that he was one of those who urged Major to stick with it. That is one of the great things about Clarke's book: while referring many times to how self-confident he has been from childhood, he owns up readily to his misjudgements. He gives various examples, such as doubting the potential of the European Airbus when he was trade minister, and being similarly sceptical about investing in the European Organisation for Nuclear Research CERN project, which was later to meet with great success in the search for the elusive physical particle, the Higgs boson.

> ***"That is one of the great things about Clarke's book: while referring many times to how self-confident he has been from childhood, he owns up readily to his misjudgements.***

A Conservative transformation on Europe

These episodes are particularly interesting in the light of Clarke's passionate pro-Europeanism – a belief which ultimately scuppered his successive attempts at the leadership of the Conservative party. In the course of Clarke's lengthy climb up the greasy political pole, the Conservative party was transformed from being predominantly pro-European to an organisation where its indefatigable eurosceptics seem to call most of the shots.



Clarke's parliamentary career encompasses the prime ministerships of Edward Heath, who took the UK into the European Economic Community in 1973, David Cameron, who bowed to pressure for a UK-EU referendum, and Theresa May.

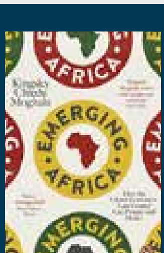
Worst political mistake

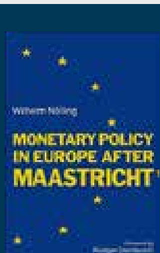
This memoir takes into account latest developments. Clarke concludes: 'David's chancer-like gamble, taken for tactical internal party-management reasons, turned out to be the worst political mistake made by any prime minister in my lifetime.'

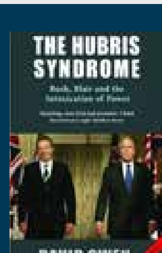
He says he has been repeatedly asked whether he can remember any madder period of political life in the UK during his career – his answer is 'no'.

Clarke reminds us that Thatcher herself was a leading advocate of the single market that her eurosceptic disciples want us to leave. Moreover, in Clarke's opinion, 'The creation of the single market was probably the biggest single boost to economic modernisation, investment, trade and jobs in the UK that the Thatcher revolution produced.' All that now is at risk. ■

William Keegan is Senior Economics Commentator for The Observer.







Unravelling stories behind human bias

The partnership behind behavioural economics

Rachel Pine

Star American author Michael Lewis' latest book, *The Undoing Project*, is timely and perfectly on message. The story of psychologists Daniel Kahneman and Amos Tversky, who studied the inherent fallibility of human decision-making, coincides with a period in history that will possibly be remembered as the era in which large swathes of voters lost their collective minds.

With plenty of behind-the-scenes moments, *The Undoing Project* is at once a historical volume, a primer on behavioural economics, and an epic 'bromance'. It combines the best features of the popular economics genre with Lewis' characteristic galloping style.

There have been few odder couples than Kahneman and Tversky, who first met in 1960s Israel. Kahneman had arrived from France in 1944, having spent time in hiding on various farms, latterly in a chicken coop with his entire family during the second world war. He was as moody and melancholic as Tversky was fizzy and charismatic.

Tversky, a decorated paratrooper in the Israeli army, enjoyed being the centre of attention. Kahneman was far more reticent, wanting nothing more than to be alone with his studies, using psychology as a means to solve problems that would be critical to the future of Israel. Included in his research were studies that led to advances in understanding how to judge which army recruits would become successful officers, members of elite squads or, perhaps, wind up in jail.

Understanding intuitive judgements

Kahneman and Tversky were each drawn to the study of psychology, then a nascent field in Israel, in order to understand how people make intuitive judgements. Their work was fuelled by a fascination with human bias, leading to discoveries that were often as shocking as they were prescient.

What they learned turned prevailing wisdom on its head. For example, statisticians are incapable of removing bias from their decisions. And a computer programme can predict the probable malignancy of a tumour with greater accuracy than a roomful of esteemed oncologists. Just about any situation that can be simply modelled will be judged more accurately by a machine than by a human.

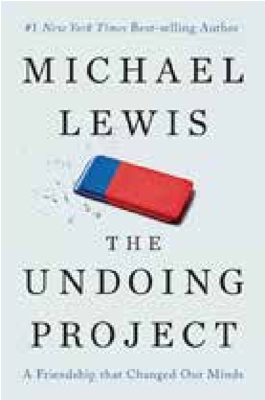
Kahneman and Tversky's first paper, 'Belief in the law of small numbers', brought to light a trap which was ensnaring even trained statisticians, psychologists and other experts – that a conclusion can be drawn from even a small sample. Disproving the idea that any sample of a given population was representative of the entire population buried numerous popular social and psychological theories. But it was the failure of scientists and mathematicians to discern this bias that drew Kahneman and Tversky's attention.

> ***"What Kahneman and Tversky learned turned prevailing wisdom on its head: statisticians are incapable of removing bias from their decisions.***

'If people do not use statistical reasoning, even when faced with a problem that could be solved with statistical reasoning, what kind of reasoning do they use?' they wondered. Among the pair's conclusions recounted in Lewis' book, the most pertinent is that no one ever makes a decision solely because of a number – they need a story.

Legacy of a lifelong partnership

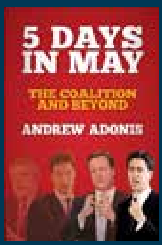
Lewis does a masterly job of telling this tale against the backdrop of Middle East politics, academia and, most of all, Kahneman and Tversky's friendship. The latter was all-encompassing and often took primary importance, even above their relationships with their spouses and children. Unlike many partnerships where individuals jealously guard their contributions, Kahneman and Tversky were truly two halves of a whole, often unable to recall which of them had contributed a specific idea to their joint work. Their collaboration continued even after their friendship faded, publishing together with minimal contact from the mid 1980s until Tversky's death in 1996.

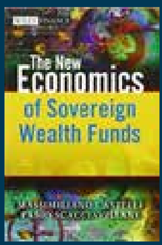


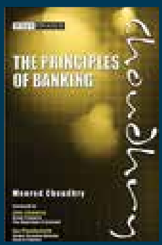
Kahneman and Tversky's work led to the development of behavioural economics, and garnered a Nobel prize for Kahneman in 2002, although it came too late for Tversky. There is almost no field that has been untouched by their research. The fields of philosophy, statistics, political science, law and medicine have all benefited from their work.

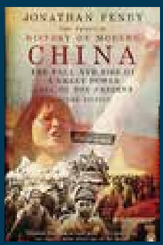
Behavioural economics gained additional momentum a few years later when Barack Obama, in his first term as US president, convened the Social and Behavioral Sciences Team, nicknamed the 'nudge unit', to apply behavioural economics theories to help improve federal programmes. This has included encouraging federal workers to save for retirement, increasing health insurance enrolment and boosting university enrolment among underprivileged students. Obama later used an executive order to institute the SBST as a permanent part of the White House. We can only guess what will become of the nudge unit under the Trump administration. ■

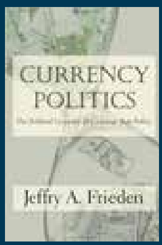
Rachel Pine is Senior Manager, North America and Caribbean & Pensions at OMFIF.

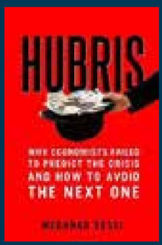












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US ahead of China in global stakes

Economic damage, but Advisory Board sees maintained leadership

This month's advisory board poll focused on America's role as the world's economic leader, considering its position in 2017 and whether China has the potential to overtake the US. Members of the OMFIF advisers network were asked, 'As a Chinese president heads to Davos for the first time ever, will 2017 be the year when the US retreats from the international stage and China takes over as de facto world leader?'

This question was posed in the light of Chinese President Xi Jinping's speech at the World Economic Forum in Davos. Many of Xi's statements were openly responding to the protectionist rhetoric of President Donald Trump, placing himself as the defender of globalisation and free trade, stating 'no one will emerge as a winner in a trade war' and there is 'no point' in blaming economic globalisation for the world problems. Xi's speech underlined China's desire to play a greater global role while the US turns inwards.

Of those polled, 41 members (representing 91%, of the advisory board) believe that the US will continue its hegemony, with only four members (9%) believing that China will take on the global leadership role as the US steps back. The consensus among members was that China remains unready for the role of global leader, as it is incapable of exerting an economic, political and cultural influence that would be universally accepted. Members emphasised that the US will take some economic damage from its switch to a domestic focus in 2017, but will remain unchallenged in its ability to influence global geopolitics.

'American ability to project power and influence globally will diminish in relative terms over the decades. The new US administration may signal a willingness to retreat or conduct policies which would accelerate US decline as the world leader. But these long-term shifts and short-term risks will not mean that China will become the instant, ready-made global leader in 2017.

'US secular weakening and possible self-inflicted retreat are enabling trends for Chinese leadership, but the Chinese are aware that 'restoring' China to first-rank status takes time. The centenary of the People's Republic in 2049 is Xi's symbolic target. Trump's policies may bring that target forward.'

Francois Heisbourg, Fondation pour la Recherche Strategique

'The US will not be retreating. It will be pursuing a more unilateral policy and will be less concerned than in the past about whether it has support from others. It will still be the most important single country in the world.

'China's role may well become more prominent as its economic weight and regional influence increase, but that does not mean that it will be exercising leadership on the world stage. In military, economic, political and cultural terms its influence worldwide will continue to be much less than that of the US.'

Christopher Tugendhat, House of Lords

'China is totally incapable of world leadership, and is much more fragile than many Europeans imagine. China is now fully focused on the 19th national congress of the Communist Party later this year. Trump will no doubt enjoy 'ego-tripping' on the world stage, and sophisticated Europeans will know how to flatter Trump's fragile ego. So the US will continue to lead, perhaps badly, but lead.'

John West, Asian Century Institute

'An appearance at Davos is irrelevant to geopolitical power. Germany's status is not diminished by Chancellor Angela Merkel's non-appearance two years in a row. But the US is in enforced retreat in the Middle East as well as Asia. Russia, as well as China, is challenging US hegemony.'

Brian Reading, independent economist

'The two countries will, hopefully in a friendly and constructive manner, compete with each other. The US would find it disadvantageous to withdraw from the international stage in such a dramatic way.'

Miroslav Singer, Generali CEE Holding

'China will not become the world de facto leader in 2017. But the isolationist stance of Trump and the prominence of China in multiple fora in the world – not just Davos – will enhance China's international position, despite the apparent move towards a more stringent political course within China itself.'

Roel Janssen, financial journalist

'Trump's strategy is not to retreat but to initiate pin-pricking policies to annoy China, and bring it to a bargaining table, helped by an alliance with Russian President Vladimir Putin.'

Meghnad Desai, House of Lords

'America will not retreat, and if China's advance is perceptible at all, it will be low key. Stages are built for actors: the US will furnish the most exuberant player, who will command a global audience.'

David Badham, World Platinum Investment Council

'There is no clear world leader in 2017. The US is likely to be weakened by the poor experience of its new leader and other members of the new administration, as well as other domestic factors. The European Union will be too incoherent internally. But the would-be leaders, China and Russia, have problems. China has a lack of useful allies with a shared vision. There are domestic economic issues in the financial sector and debts of state-owned enterprises.

'This year is more likely to be something similar to a multipolar world, each large power being more active (and leading) in its immediate neighbourhood. Wider issues may be dealt with in ad hoc partnerships.'

Vilem Semerak, Charles University

'Trump may wish to focus on domestic issues, but international questions loom large. Arguments on tariffs, relations with Russia and Taiwan, and potential marked dollar strength, hardly suggest the US will disappear from the global stage.'

Colin Robertson, SW1 Consulting

'The appearance of the China's president in Davos is not so important, but it is a signal. China will gain more attention compared to the US in 2017. The latter is with an unpredictable and erratic president. Trump, with his slogan Make America Great Again, will concentrate his efforts on domestic policies and not on geopolitics.

'But he will face opposition, when the shock of his election is over, from intellectuals, artists and academics, and from his voters when they feel betrayed. Trump cannot, will not and does not deliver what he promised during his election campaign. China is predictable and stable in its policies compared with what we will see in the US.'

Ernst Welteke, formerly Deutsche Bundesbank

'China will not take over as world leader. But I believe that gradual and crucial changes are taking place within both Chinese and new American foreign policies regarding monetary and financial international positions.'

Maria Antonieta Del Tedesco Lins, University of São Paulo

'Despite Trump, the US won't retreat from the international stage and China will not take over as de facto world leader. The US won't retreat. Despite Trump's isolationist tendencies, politicians like Mike Pompeo, James Mattis, John Kelly and Rex Tillerson, and a number of strong voices in the Senate and House of Representatives, will keep the US engaged in the world.

'China won't take over because leadership in the world is not zero-sum. Building upon its economic strength, China is a rising military and geopolitical power. But the new world order is multipolar, not unipolar as it seemed for a time after the demise of the Sovier Union.'

David R. Cameron, Yale University

'The Chinese will concentrate on their domestic economy and deeper regional ties while doing their best to calm US-China relations. At the same time, they will not accept any challenge to the One China Policy or their access to South China Sea islands via international waters. Tariffs will be another issue, as the Trump administration has the option in lieu of tariffs of ending border tax exemptions, particularly on US imports of foreign made parts.

'Xi's participation at Davos may be ill-conceived as a public relations move if it's perceived as Mao's successor casting his lot with the world's elites.'

Marsha Vande Berg, Stanford University

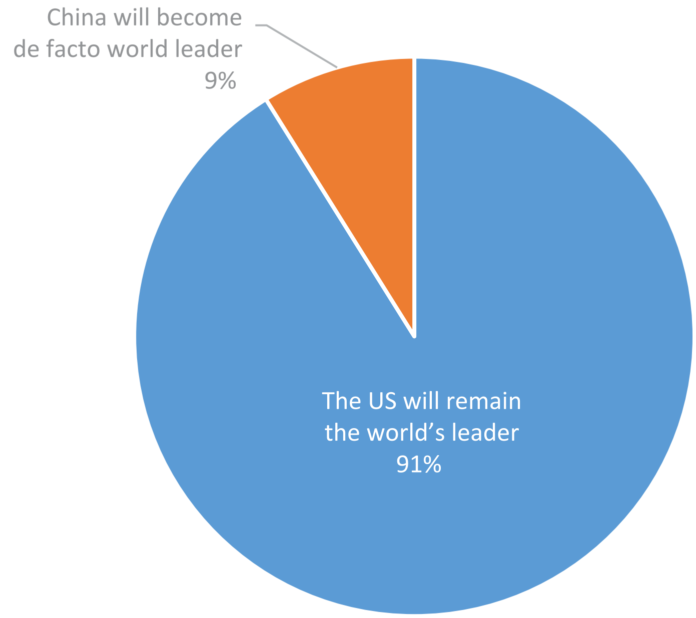
'American business interests are too deeply enmeshed in the global economy to permit such a retreat. The bigger danger is that China, sensing US ambivalence on international issues, becomes too assertive for its own good.'

Stewart Fleming, St Antony's College, University of Oxford

These statements were received as part of the January poll, conducted between 5-16 January, with responses from 45 Advisory Board members.

China will not take over as de facto world leader

Percentage of responses to the question: Will 2017 be the year when the US retreats from the international stage and China takes over as de facto world leader?



'US power and influence have been declining rapidly and will probably continue to do so for some years. But China is not, and may never be, capable of taking over as de facto world leader. One big reason is that it has no set of universal values – or least not ones that are acceptable to most other countries and peoples.'

Reginald Dale, Atlantic Council

'While the post-second world war liberal order is fraying at the edges, the US is still "the indispensable nation". China has not put forward a viable competing vison to liberalism and will be too preoccupied with domestic economic and social issues to challenge US leadership effectively in the next 15 years.'

George Hoguet, CFA Research Foundation

'The US cannot afford to take a back seat, but will have to confront global challenges. Policies of the new administration may well show a departure from the pre-election rhetoric of Trump on a number of issues, including climate change. Under any scenario, one expects that Trump will have to live up to his promise to Make America Great Again.'

Hemraz Jankee, formerly Central Bank of Mauritius

March's questions

- **With the Fed on a tightening path and with the oil price under continued pressure, is this the time for the GCC economies to question the appropriateness of their dollar pegs?**
- **What is the main obstacle to a change of exchange rate regimes in the GCC?**
- **Where will the oil price be at the end of 2017?**
- **Will the Iran deal survive Trump's presidency?**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