

The Bulletin

OMFIF

February 2018
Vol.9 Ed.2

- Desmond Lachman on financial sector risk
- Vicky Pryce on euro area banks

- In conversation with Robert Stheeman
- Jun Saito on inequality in Japan

- Philippe Desfossés on pension funds' sustainable investments
- Dariush Yazdani on sovereign funds' investments in alternatives

SEEKING STABILITY

Risks from market bubbles





Adaptability.

It's the new look of partnership.

At Barings, we are evolving to meet the needs of our clients. With a global footprint and expertise across a broad range of public and private asset classes, we provide customized, innovative strategies and modern capital solutions.

Learn more about how Barings is changing the definition of financial leadership.

BARINGS

[BARINGS.COM/ABOUT-US](https://www.baring.com/ABOUT-US)

The Bulletin

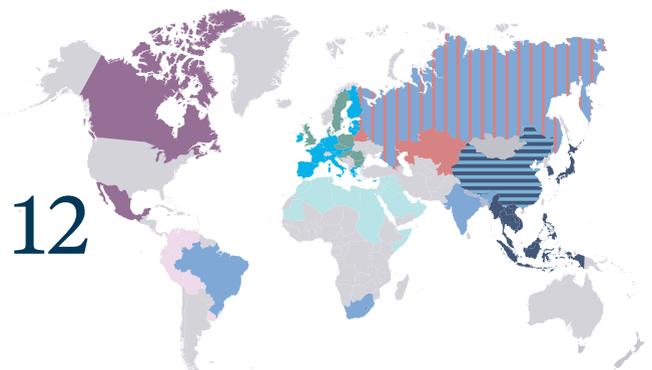
February 2018. Vol.9 Ed.2

8



6

- 4 **ABOUT OMFIF**
- 5 **LEADER**
- 6 **REVIEW / AGENDA**
- Cover: Financial stability**
- 8 **MARKET EXCESSES HERALD CRISIS**
Desmond Lachman
- 10 **THREAT TO US INTEREST RATES**
Marsha Vande Berg
- 11 **EMERGING MARKET GAINS SET TO FRAY**
Gary Kleiman



12

- 12 **GAPS IN GLOBAL FINANCIAL SAFETY NET**
Danae Kyriakopoulou
- 14 **SECURING THE EURO AREA'S FUTURE**
Kalin Anev Janse
- 15 **ECB'S EASY MONEY BOOSTS BUBBLE RISK**
Vicky Pryce



Cover illustration:
Nick Lowndes



16

- In conversation**
- 16 **ROBERT STHEEMAN**
with David Marsh

Worldview

- 20 **FED PERSONNEL CAROUSEL IN FULL SWING**
Darrell Delamaide
- 21 **CONTAINING JAPANESE INEQUALITY**
Jun Saito
- 22 **OPPORTUNITIES BEYOND MANUFACTURING**
Otaviano Canuto
- 23 **SERVICES ARE DRIVING DOWN INFLATION**
Ben Robinson
- 24 **GOLD'S SOVEREIGN FUND APPEAL**
Dariush Yazdani
- 26 **INVESTING PENSIONS FOR SUSTAINABLE GROWTH**
Philippe Desfossés
- 27 **PENSION FUNDS DIVEST FROM FOSSIL FUELS**
Kat Usita
- 28 **CRYPTOCURRENCY CRUSH**
Oliver Thew
- 29 **BLOCKCHAIN BEYOND THE HYPE**
Bhavin Patel



27

30



Inquiry

- 30 **CHART OF THE MONTH: SWITZERLAND BANK LOANS TO GDP**
- 30 **THE NUMBERS: DIGITAL DIGITS**
- 31 **BOOK REVIEW: A TIRESOME THOUGHT EXPERIMENT**
Julian Frazer
- 34 **OMFIF ADVISERS NETWORK POLL**
Bitcoin market crash 'inevitable'

Black Wednesday, Brexit
and the making of Europe...

SIX DAYS IN SEPTEMBER

'GRIPPING PORTRAYAL'

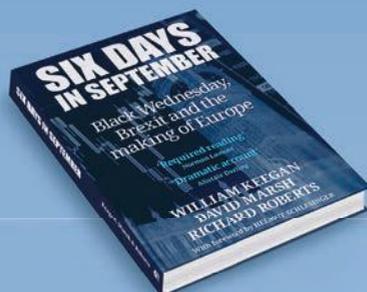
Kenneth Clarke

'REQUIRED READING'

Norman Lamont

'DRAMATIC ACCOUNT'

Alistair Darling



The 2017 Amazon bestseller by
William Keegan, David Marsh
and Richard Roberts

With a foreword by
Helmut Schlesinger

Available to
buy now at:
omfif.org/shop



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 \$33.8tn, equivalent to 45% of world GDP.

With offices in London and 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.



Membership

Membership offers insight through two complementary channels – Analysis and Meetings – where members play a prominent role in shaping the agenda. For more information about OMFIF membership, advertising or subscriptions contact membership@omfif.org



Analysis

OMFIF Analysis includes commentaries, charts, reports, summaries of meetings and The Bulletin. Contributors include in-house experts, advisers network members and representatives of member institutions and academic and official bodies. To submit an article for consideration contact the editorial team at analysis@omfif.org



Meetings

OMFIF Meetings take place within central banks and other official institutions and are held under OMFIF Rules. A full list of past and forthcoming meetings is available on www.omfif.org/meetings. For more information contact meetings@omfif.org



OMFIF Advisers Network

The 178-strong OMFIF advisers network, chaired by Meghnad Desai, is made up of experts from around the world representing a range of sectors: monetary policy; political economy; capital markets; and 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 annually owing to rotation.



Official Monetary and Financial Institutions Forum
30 Crown Place, London, EC2A 4EB
United Kingdom
T: +44 (0)20 3008 5262 F: +44 (0)20 7965 4489
www.omfif.org @OMFIF

BOARD

David Marsh, *Chairman*
Jai Arya
Pooma Kimis
Edward Longhurst-Pierce
Phil Middleton
Mthuli Ncube
John Nugée
John Plender
Lauren Roberts
Peter Wilkin

ADVISORY COUNCIL

Meghnad Desai, *Chairman*
Johannes Witteveen, *Honorary Chairman*
Louis de Montpellier, *Deputy Chairman*
Frank Scheidig, *Deputy Chairman*
Songzuo Xiang, *Deputy Chairman*
Hani Kablawi, *Deputy Chairman*
Gary Smith, *Deputy Chairman*
Otaviano Canuto, *Aslihan Gedik*,
Robert Johnson, *William Keegan*,
John Kornblum, *Norman Lamont*,
Kingsley Moghalu, *Fabrizio Saccomanni*,
Niels Thygesen, *Ted Truman*,
Marsha Vande Berg, *Ben Shenglin*, *Chair*,
OMFIF Economists Network

EDITORIAL TEAM

Danae Kyriakopoulou, *Head of Research*
Simon Hadley, *Production Manager*
Julian Frazer, *Subeditor*
Jeanelle Wolhuter, *Subeditor*
Ben Robinson, *Senior Economist*
Bhavin Patel, *Economist*
Kat Usita, *Economist*
William Coningsby-Brown, *Editorial Assistant*
Darrell Delamaide, *US Editor*

MARKETING

Chris Ostrowski, *Head, Business Development*
Sarah Butler, *Deputy Head of Development*
James Fitzgerald, *Senior Marketing Executive*

Strictly no photocopying is permitted. It is illegal to reproduce, store in a central retrieval system or transmit, electronically or otherwise, any of the content of this publication without the prior consent of the publisher. While every care is taken to provide accurate information, the publisher cannot accept liability for any errors or omissions. No responsibility will be accepted for any loss occurred by any individual due to acting or not acting as a result of any content in this publication. On any specific matter reference should be made to an appropriate adviser.

Company Number: 7032533. ISSN: 2398-4236

Seeking stability

Markets have entered 2018 facing contrasting realities between a strengthening real economy and a build-up of financial risk. Consensus forecasts see improving growth for most economic regions. Global markets including the FTSE 100 and MSCI World Index ended 2017 on record highs. But growth has largely been credit-fuelled, suggesting it may have been generated by unstable financial systems. Global debt has reached levels never seen before, at three times the size of the global economy.

Economic history suggests this divergence is unlikely to continue. The question is when and how it will stop, and what direction it will take. Will stronger growth help reduce financial risks, or will asset market bubbles burst, damaging the real economy? This is the question we have tried to answer in this month's Bulletin.

2018 could be a pivotal year as central banks intensify scaling back monetary support. Whether financial markets will prove resilient to these shifts was a chief concern among asset and reserve managers at OMFIF's seminar on 'The Great Normalisation', held in London at the end of January. If risks do materialise, there may be no effective global financial safety net to protect countries that get into trouble.

Some markets are already seeing a correction. As anticipated by our Advisers Network, the price of bitcoin has dropped substantially since the start of the year. However, there is still a lot to expect from the underlying blockchain technology, as OMFIF's digital experts explain – even CryptoKitties and Dogecoin.

This month marks the start of our annual analysis of asset allocation trends as part of our Global Public Investor publication, to be released in May. We investigate some of these in The Bulletin, such as the shift of pension funds away from fossil fuels and the need for regulation to support a further move towards sustainable assets. Global public investors must not forget warnings that environmental risk could be the ultimate threat to financial stability for this generation.

Danae Kyriakopoulou
Chief Economist and Head of Research



»23 January, London



Above: Hans-Olaf Henkel at OMFIF's offices in London.
Inset: Henkel and Caroline Butler, OMFIF Adviser, at the London discussion.

Doubts on German-French alliance

PRODUCTIVITY and competitiveness in Germany are slipping under a gradual process of European Union 'harmonisation and centralisation' aimed at shoring up the euro and bridging the economic gap with France and other members of the single currency.

That was the message from Hans-Olaf Henkel, former president of the Federation of German Industries, in a series of OMFIF meetings discussing his campaign to keep Britain in the EU. Henkel said the euro was holding back German companies' efficiency, since they were profiting unduly from

export orders during the world economic upswing.

Henkel, a member of the European parliament, had been a controversial backer of the far-right Alternative for Germany (AfD), now in the Bundestag and on track to become the formal German opposition under plans to reforge a grand coalition between Chancellor Angela Merkel's conservatives and the Social Democratic Party. Henkel quit the AfD with some of the party's other MEPs in protest about its rightward shift. He now sits in the European parliament for an alliance of liberals and conservative reformers.

»30 January, London

Asset and Risk Management



OMFIF convened a group of economic experts and asset managers for a one-day seminar to summarise economic and financial developments and discuss the outlook for public sector investment management in Europe. Attendees discussed the impact of unconventional monetary policies and the pressure on central banks' balance sheets.

»13 December, Accra

Practical tool for financial markets



GHANA'S external position has improved thanks to macroeconomic reforms, according to speakers at the launch of OMFIF's research for the Barclays Africa Group Financial Markets Index. Financing costs are strongly related to countries' index score, making this an important practical guide for African economies.

»22 January, London

A view from the European parliament

OMFIF held a discussion with Kay Swinburne (right), MEP, European Conservatives and Reformists, on the UK's exit from the European Union. Topics included assessment of the Brexit negotiations and the role of the European parliament in the withdrawal process.



»17 January, London

UK and German debt management

BRITAIN and Germany can draw similar lessons, from the macroeconomic and financial viewpoints, from two decades of running debt management offices. That was the message from an OMFIF discussion between Robert Stheeman and Tammo Diemer, heads of the UK and German debt management offices.



FORTHCOMING MEETINGS

»Wednesday 7 March, London

Gender Balance Index launch

OMFIF launches the **Gender Balance Index 2018**, a measure of the presence of men and women among senior staff of central banks, pension funds and sovereign funds. Includes a panel discussion on the role of women in central banking.

»Tuesday 13 March, Frankfurt

Economy, growth and investment

In the eighth **Economists Meeting** in Frankfurt, OMFIF convenes experts to examine macroeconomic and political developments in Europe, the implications of monetary policy for the banking sector, and the impact of the Basel III and Mifid II accords.

»Thursday 15 March, London

New challenges for financial regulation

Robert Ophèle, chair of the Autorité des marchés financiers, France's stock market regulator, gives an OMFIF City Lecture. He focuses on financial innovation, managing Brexit's effects on European markets, and how best to regulate cryptocurrencies.

»Tuesday 20 March, Prague

The future of money: risks and returns

OMFIF and the **Czech National Bank** organise a joint seminar to analyse the impact of fintech. This includes private cryptocurrencies, central bank digital currencies and distributed ledger technology, as well as the relevant benefits and risks.

[For details visit omfif.org/meetings](http://omfif.org/meetings)

SEEKING STABILITY

Central banks and policy-makers are struggling to contain volatility and asset price bubbles as they unwind years of unorthodox monetary policies



Illustrations by Nick Lowndes

Market excesses herald crisis

Complacency and mispriced credit bring Minsky moment closer



Desmond Lachman
American Enterprise Institute

Many years of highly unorthodox monetary policies by the world's major central banks would have shocked the late Hyman Minsky, the renowned US credit cycle scholar. These policies have led to excesses in global asset prices and the gross mispricing of credit risk. He would have reminded us that extended periods of financial market complacency are generally followed by painful crises.

Seldom before has the global credit market displayed such complacency. Minsky might have noted that government bond yields have plummeted to record lows and global equity valuations have reached lofty levels experienced only three times in the last 100 years.

In their desperate search for yield, investors have lent to risky borrowers at interest rates that do not nearly compensate them for default risk. This has been especially the case in advanced economies' high yield markets and the emerging market corporate debt sector, where borrowing has increased by \$3tn over the last six years.

The overwhelming portion of US and European bank loans today are made without the normal protective covenants. Despite its high public debt level and the country's dysfunctional banking system, the Italian government can still borrow long term at around 2% – a rate not dissimilar to the US government's.

Striking indications of credit mispricing are to be found in emerging economies. A country such as Argentina can readily place a 100-year bond in the market, when it has

defaulted no fewer than five times in the past 100 years.

The recent bond placements of highly dubious credit risks such as Iraq and Mongolia have been oversubscribed several times.

Minsky would have been disappointed by the seeming complacency of central bank heads at a time when they should have long since reined in financial market risk. US Federal Reserve Chair Janet Yellen's recent reassurance that she did not expect to see another financial market crisis in her lifetime is difficult to believe.

Minsky would have chastised the Fed for having excessive faith in bank regulatory reforms put in place after the Lehman bankruptcy in 2008. This is not simply because the Trump administration is dismantling these reforms. Most credit in the US is intermediated through the so-called shadow banking system, which includes hedge funds, asset managers and private equity companies. This part of the system is largely free of government regulation. How quickly we forget the lessons of Long-Term Capital Management. In 1998, a group of banks under the supervision of the Fed had to bail out the highly leveraged hedge fund to prevent the collapse of the financial system.

No one can know when the next Minsky moment, a sudden collapse in asset prices after an extended period of growth, might occur. However, financial market excesses leave little doubt that the conditions for such an event are forming.

With the major central banks now shifting from ultra-unorthodox monetary policies towards gradual normalisation, it would be unwise to discount the likelihood of a Minsky moment in the next year or two. ●

Desmond Lachman is a Resident Fellow at the American Enterprise Institute.



Threat to US interest rates

Trump tax law sets targets for workforce restructuring



Marsha Vande Berg
Advisory Council

Consensus is growing that the passage of President Donald Trump's tax bill in December will change corporate behaviour and benefit customers, employees and shareholders. The question is whether such benefits can boost US labour productivity and position the economy for more than a lone stimulus injection.

The fundamental expectation of the Tax Cuts and Jobs Act is that companies will redirect their collective savings, owing to the dramatic reduction in corporate rates, towards rebuilding workforce capacity and increasing real wages.

The gap between US corporate profits and wages as a share of GDP is wide – 51% to 43%.

‘Strengthening global economic conditions augment the benefits that corporates will enjoy from the rate decrease.’

Narrowing that gap will be critical to the tax law's success. This can happen only if the cuts are a genuine boon to the US economy and help mitigate the estimated \$1tn rise in the deficit. Deciding how to increase capacity at a time of almost full employment will be critical for the Trump administration.

Some companies are

responding positively to the dramatic reduction in the statutory corporate tax rate to 21% from 39%. Walmart, the world's largest retailer, announced it will increase its starting wage to \$11 per hour and distribute a bonus to employees, in addition to expanding parental leave benefits. Apple said it will repatriate more than \$200bn in overseas profits, paying a one-off tax of \$38bn, and will hire another 20,000 US workers and invest \$30bn in US facilities.

Short-term pain

Fourth-quarter accounting adjustments necessitated by the tax law have obscured its expansive impact on financial services, at least temporarily. Such issues underscore how complex the law's implementation will be. Many questions remain unresolved. The

law was adopted in record time and without the requisite vetting though bipartisan committee debate. It passed Congress without a single Democratic vote, and Trump signed the bill into law just two days later.

When it came to guidance from the administration, legislators received a paltry one-page analysis from US Treasury

Secretary Steven Mnuchin. The report included estimates of the impact of the \$1tn increase in the deficit. Half of the attempt to offset this must come from new corporate tax revenues, Mnuchin said. The remainder should come from temporary tax bracket changes for some citizens, deregulation, infrastructure development and reductions in benefits, almost all of which require bipartisan backing.

Long-term gain

JPMorgan Chase chief Jamie Dimon called the law a ‘big, significant positive [for the banking sector], and much of it will fall to our bottom line in 2018 and beyond’.

Citigroup and Goldman Sachs executives agreed that hits to their respective balance sheets in the fourth quarter of last year would give way to substantial long-term gains.

Strengthening global economic conditions augment the benefits that corporates will enjoy from the rate decrease. For commercial banks, the probability of higher interest rates in 2018 may likewise boost loan growth. Investment banks can count on the tax cut and deregulation to boost incomes as optimism spreads to merger and acquisition targets.

Rush of rate rises

The cheerfulness among US corporates is palpable as Trump begins his second year in office.

\$1tn

Increase in US deficit due to Trump tax plan

The president claims credit for unleashing ‘animal spirits’ that will propel growth. But such promises of success are meaningless.

William Dudley, the retiring New York Federal Reserve president, painted a different picture about the tax cuts’ longer-term implications.

In January he warned that while a short-term lift is probable, the increase in government borrowing as a result of business’s enthusiasm could lead to faster-than-expected interest rate increases in 2018.

A Federal Reserve dominated by Trump appointees will be in the difficult position of deciding whether to increase rates at a faster pace in a year that features gruelling midterm elections.

For the tax cuts to produce a stronger and inclusive economy, policy-makers and corporates must take a variety of measures. They include the need for workforce restructuring and retraining in the light of disruptive technological advancement, population aging and Trump’s hardline immigration policies. ●

Marsha Vande Berg is a Stanford University 2016-17 Distinguished Career Fellow.

Emerging market gains set to fray

2017 rally did not distinguish between leaders and laggards



Gary Kleiman
Kleiman International

In 2017, the performance of emerging market bonds and stocks exceeded the most optimistic early-year expectations. Fears of global monetary and trade squeezes proved overdone, paving the way for rallies across the asset class. The 35% rise in the MSCI index led double-digit benchmark increases across the asset class. Almost all countries were part of this trend in a pattern last seen a decade ago before the financial crisis.

Last year's combined investment fund flows of \$200bn mirrored the previous peak. Exchange traded funds, which have since mushroomed, accounted for 10% and 25% of debt and equity allocations respectively. Better than expected corporate earnings and average 5% GDP growth approached the level of boom periods.

However, the rally did not distinguish between asset classes and leaders and laggards within them, and overlooked

geopolitical and banking system problems. Financial stability may be a prominent theme after years of post-crisis relief. Private sector leverage is causing concern and the public sector has limited capacity to mount rescues, due to steeper fiscal deficits.

Asia outstripped Latin America and Europe. MSCI's inclusion of Chinese A-shares and buoyant company profits drove the global tech cycle and neutralised concerns over stresses in China's banking system, corporate debt overhang and capital outflows. Authorities have announced crackdowns on state-enterprise leverage, deposit withdrawals by bank card holders and entrusted loans, where an agent bank organises loans between borrowers and lenders, in the shadow banking system. They have signalled further action, as financial stability is a priority of the ruling Communist party.

Foreign exposure to bonds

In contrast with 2008, economic and credit spillovers from China's potential crises would now hit emerging market bonds as well. Foreign investors' corporate and sovereign exposure rank near the top globally in surveys by the Emerging Markets Traders Association. South Korea, Malaysia and Thailand are grappling with high household and business debt. South Korea's central bank stood out last year by hiking interest rates and imposing credit card curbs to shrink the country's personal leverage, which

was 150% of GDP, the highest in the Organisation for Economic Co-operation and Development.

In Europe, Russia lagged behind with a barely positive MSCI result despite low valuations. It may face more western sanctions for election interference, as the US Treasury is considering a ban on buying government bonds. Turkey's 35% rise was due to

banks continue to deal with large corporate borrower restructurings. Argentina's economic policy turnaround and capital market re-entry under President Macri resulted in record borrowing and a near 75% MSCI frontier index bounce in 2017. This was offset by Venezuela's implosion under a harsher socialist regime bringing

'In contrast with 2008, economic and credit spillovers from potential crises would now slam emerging market bonds as well.'

official loan stimulus overheating the economy after the 2016 attempted coup.

Foreign investors trimmed local bond positions in Hungary and Poland in reaction to populist administrations courting EU condemnation, and fears that domestic institutional investors lack back-up capacity after private pension fund shutdowns.

Latin America has a packed 2018 election calendar. In presidential contests in Brazil, Colombia and Mexico the main parties are offering scant commodity diversification and productivity-raising platforms amid scandals and criminal investigations. Brazilian

hyperinflation, debt default and a humanitarian catastrophe.

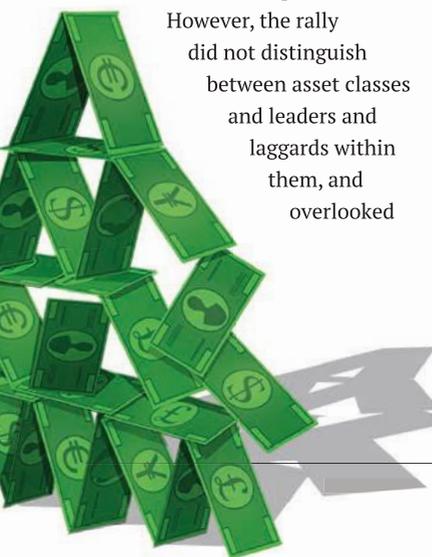
Political jitters

Frontier market stumbles in the Middle East and Africa left the composite gauge 10% below MSCI's main roster. The boycott of Qatar by its neighbours has hurt Gulf states. Political jitters in South Africa and Zimbabwe affected bank liquidity and profitability.

It should serve as a warning to the asset class that the Institute for International Finance's lending conditions survey returned a neutral result. Stock returns will probably continue to catch up with bonds over the long term, but there will be wide variation depending on individual countries' political and economic circumstances. ●

Gary Kleiman is Co-Founder and Senior Partner at Kleiman International.

150%
Household debt as share of GDP in South Korea



Gaps in global financial safety net

How to augment large but fragmented reserves



Danae Kyriakopoulou
OMFIF

The risk of financial instability may have risen over the past decades as globalisation has intensified. This is in spite of a string of international measures to improve financial regulation and tighten surveillance over countries that follow unbalanced policies. Some elements of a ‘global financial safety net’ intended to protect countries against crises are in place, but large gaps remain.

Following a sharp drop after

the 2008 financial crisis, global capital flows have begun to recover. Their composition has also changed. As analysed in the September Bulletin, the post-crisis regulatory wave has succeeded in curbing cross-border bank lending. However, this has been partly offset by increasing levels of direct investments. Banks’ total foreign claims stood at \$25.8tn in 2017, \$4.6tn down from their pre-crisis peak.

Globally integrated capital markets offer important rewards to individual economies, enabling them to expand investment opportunities and diversify risk internationally,

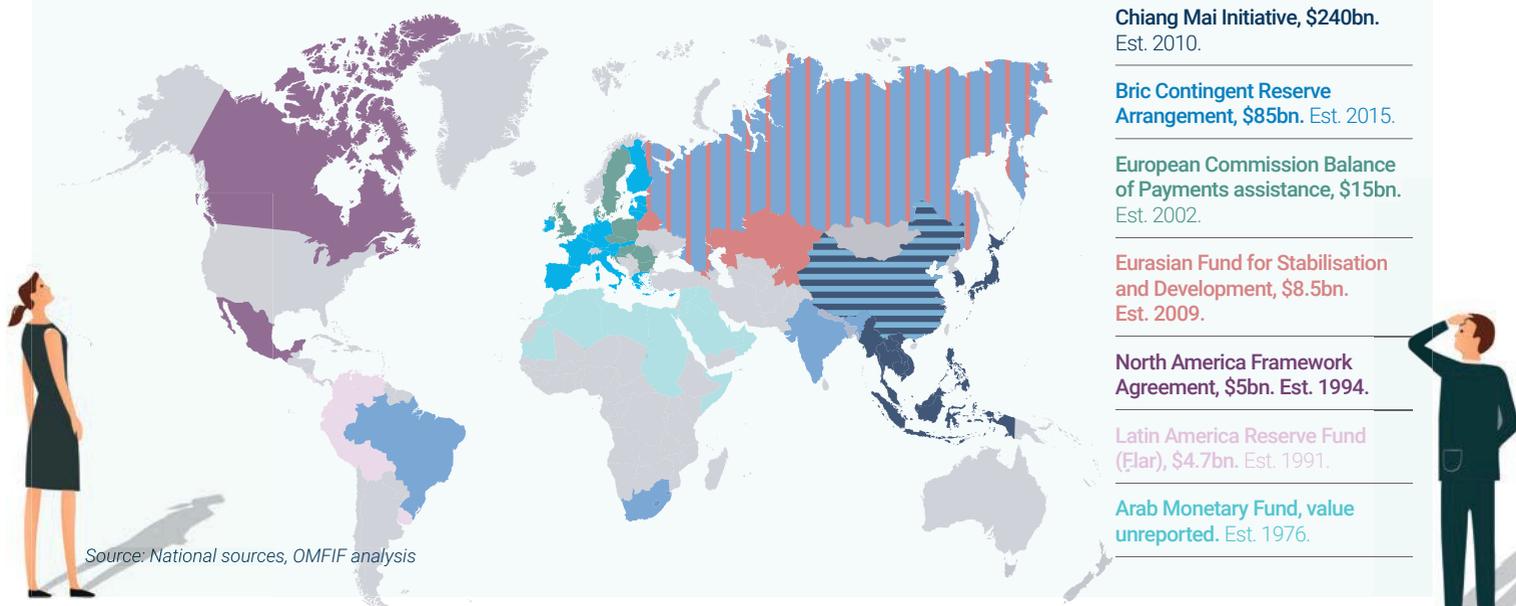
and to borrow to smooth consumption in the face of shocks. The potential gains resulting from such international risk sharing and efficient resource utilisation can be large. But capital flows can also be volatile and unpredictable, and abrupt reversals can have damaging effects on the real economy. As developed countries’ central banks navigate a period of normalising monetary policy, the global economy is entering a juncture where these risks may intensify, particularly in emerging markets.

This backdrop highlights the importance of an effective

global financial safety net, defined as the collective value of countries’ sources of insurance and financing. These include individual countries’ reserves as well as external public financing at the regional and global level, such as central bank bilateral swap arrangements, regional financial arrangements such as regional reserve pooling, and the International Monetary Fund. These measures are intended to provide countries with insurance against crises, financing when shocks hit and incentives for sound macroeconomic policies. As shown in Figures 1&2, the elements of a potential safety net grew strongly following the

Figure 1: Largest regional safety nets are European and Asian

Map of regional financial arrangements



65%

Share of global foreign reserves jointly held by Asia and the Middle East

financial crisis, as individual countries amassed more foreign reserves and BSAs and RFAs were introduced.

Expanding the net

But even this may not be enough. Reserves (including gold) of individual countries' central banks and sovereign funds make up the vast majority of the total, at around \$20tn. Out of these, around \$12tn are foreign exchange reserves held at central banks (see Figure 2). This presents several problems. Global reserves may be large, but they are also fragmented. Asia, led by China, and the Middle East, led by the oil-exporting Gulf economies, jointly hold 65% of global foreign reserves, according to the 2017 edition of OMFIF's *Global Public Investor* report. This uneven distribution will rarely match the global distribution of risks.

Moreover, size is not always a guarantee of resilience. In times of crisis, individual countries' reserves can be depleted very quickly. Russia's reserves declined by almost 30% in just nine months in 2014-15. Reserve pooling and RFAs such as Asia's Chiang Mai Initiative and the European Stability Mechanism in the euro area can go some way to address this, but remain vulnerable to regional shocks and domestic disturbances

with regional impact. These may create situations when individual countries want to access the regional pool at the same time. The choice of currency for regional reserve pools can also be problematic: Unless reserves are denominated in a currency that is issued by one of the central banks in the region, they run the risk of being depleted quickly in a crisis. But the alternative would only be feasible for regions with currencies that enjoy reserve status. RFAs are also politically difficult to implement. Better mechanisms to contain potential disorderly spillovers are urgently needed if they are to become effective tools.

These constraints elevate the importance of global resources held at the IMF. Quota resources at the Fund doubled as part of the 14th General Review of Quotas reform package implemented in 2016, and now stand at sdr475bn (\$675bn). The Fund's lending toolkit offers multiple instruments of crisis prevention through which its members can receive financial assistance, such as the Flexible Credit Line and the Precautionary and Liquidity Line. But the stigma associated with requesting precautionary financing has constrained the extent to which the facilities have been used. In response, IMF staff proposed a new facility, the 'short-term liquidity swap' for 'members with strong fundamentals and policies', 'to provide liquidity support for potential balance of payments needs of a short-term, frequent and moderate nature'. The proposals were rejected

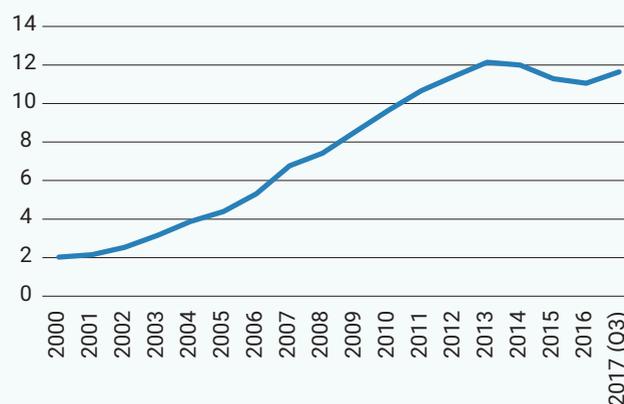
by the Board in December 2017, who cited worries over 'the importance to maintain incentives for strong policies, minimising moral hazard, safeguarding Fund resources and avoiding overlap and proliferation of instruments'.

These important concerns need to be addressed, and

indeed the Fund insists that the proposals are not completely off the table, but rather on the shelf for now. But the alternative of a global financial safety net which never took off the ground could be even more problematic. ● **Danae Kyriakopoulou is Chief Economist and Head of Research at OMFIF.**

Figure 2: Reserves have risen six-fold since new millennium

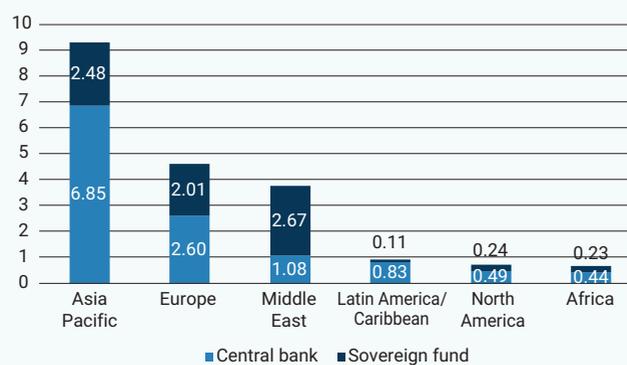
Foreign reserves excluding gold, \$tn, global total



Source: International Monetary Fund, OMFIF analysis

Figure 3: Asian sovereign fund and central bank assets largest in the world

Reserves by region and type of institution, \$tn



Source: OMFIF Global Public Investor 2017

Securing the euro area's future

Fostering financial integration in Europe



Kalin Anev Janse
European Stability
Mechanism

In talks with investors about the future of the euro area, the most common topics of conversation include the need for greater market integration, a more competitive financial sector and deeper economic collaboration. Fortunately for them, Europe's political agenda is already heading in that direction. There are five ideas that may help secure Europe's future.

First, Europe must complete banking union. Much work has already been completed, including the establishment of the Single Supervisory Mechanism and the Single Resolution Fund to wind down banks. The SRF is slowly filling its coffers, but should be supported by a backstop to make it more credible in the eyes of the markets. The European Stability Mechanism is considered as a probable candidate to play this role.

The second element that political leaders must add to banking union is a common deposit insurance scheme. If all Europe's banks would guarantee deposits together, it would reduce the risk of bank runs in any country. Legacy problems in certain countries need to be rectified but, in general, cross-border European banks

are positive about the move to complete banking union.

Third, Europe needs to harmonise its financial markets, so it becomes easier to invest across borders. This is a wide-ranging project referred to as capital markets union. Corporate, tax and bankruptcy laws vary massively between European countries. Making it easier to decipher other countries' laws would increase cross-border investment and benefit Europe's venture capital and private equity markets.

Building new models

The fourth factor relates to Europe's fiscal tools and the possibility of establishing a 'rainy day fund'. Presently, poorer European countries can already receive support from the European Union budget, which is around 1% of the size of the EU economy. For recipients, European countries, the transfers can be large, worth up to 4% of their GDP.

There is a further set of measures to meet a severe euro area downturn. In that case, countries can spend more taxpayer money. Normally there is a cap on budget deficits of 3% of GDP. But during the euro debt crisis, countries agreed to exceed the limit. This helped stimulate the economy at a crucial time.

But if a single country is hit by a crisis, and its neighbours are not, there is no fiscal leeway. It would be beneficial to

have a facility to address such asymmetric shocks. The ESM can address problems in individual countries, but only when it is too late and when they have already lost access to markets. A new facility could be developed to avert such problems and hopefully to prevent the ESM from having to act.

Different models are being discussed. One strict condition is that countries always need to repay funds they receive. There will be no permanent transfers between countries, and there will be no jointly-issued debt.

Some people are worried that these changes will mean 'a lot more Europe' and a weakening of national sovereignty. That is not the case. Europe does not need a full fiscal union, with additional transfers between countries, nor a full political union.

The fifth idea on the future of the region concerns the establishment of a European Monetary Fund. The role of the International Monetary Fund in Europe has diminished. When

the European debt crisis started, the euro area had neither the expertise nor funds to assist. But over time, the ESM's financial capacity and expertise have grown and the role of the IMF has become less prominent. There appears to be a consensus that in any future European crisis, the IMF will probably not be involved in the region's programmes.

These are not vague concepts; they are concrete steps that are firmly part of the political agenda. They all aim to make markets stronger, to support the recovery of the financial sector, to make monetary union more robust and the economy more resilient. ●

Kalin Anev Janse is Secretary General of the European Stability Mechanism.

'These ideas for securing Europe's future are concrete steps, firmly part of the political agenda.'



ECB's easy money boosts bubble risk

QE stabilised European banks, but hurt profitability



Vicky Pryce
Advisory
Board

The European economy is powering ahead despite months of political uncertainty in Germany and Spain. Growth in world trade, with developed and emerging nations all experiencing synchronised expansion, has helped. But getting to the point where Europe can take advantage of better trading conditions owes a lot to the European Central Bank, particularly the huge injection of funds and general easy monetary stance pursued since June 2014.

As Mario Draghi, the president of the ECB, keeps reminding us, the euro area has enjoyed GDP growth of between 0.4% and 0.8% each quarter since mid-2014 despite tight or at best neutral fiscal policies.

In many ways June 2014 was a turning point. The ECB launched a negative rate on bank deposits, which persists. The introduction of quantitative easing on a massive scale in 2015, which is also continuing, although at a reduced rate, made a big difference. The same is true for extra purchases of covered

bonds and corporate bonds, though they are dwarfed by the government bond purchases under the scheme.

The overall monetary easing policy included a series of two-year targeted long-term refinancing operations, which were used to increase bank lending to the non-financial private sector, excluding

mortgages. Four-year TLTROs issued in 2016 still have a long way to go, so policy remains accommodating for the moment.

Such unconventional monetary policy inevitably caused distortions as the ECB moved into uncharted waters. But the ECB can claim, with some justification, that the overall

effect has been positive. The banking sector stabilised in a more or less orderly fashion and, despite tighter regulatory and capital requirements, has done relatively well in stress tests.

At the same time, bond yields across countries moved closer together. Greece, which is hoping to exit its third bail-out soon, has seen its benchmark 10-year bond yield spread over German government bonds reduced to around three percentage points from more than five percentage points in late 2013.

Worries persist. This huge injection of funds and record low interest rates may have created the perfect conditions for an asset bubble. 'Zombie' companies may have been kept going artificially, storing up trouble for the banks and the economy. The preservation of these companies could be leading to misallocation of capital. And if and when

the ECB starts reversing the QE process, as the US Federal Reserve is doing, it is unclear what the impact will be.

On the positive side

On the positive side, QE has reduced the risk to banks by delinking them as far as possible from sovereign risk. However, low interest rates have affected European banks' profitability in comparison with their US counterparts.

Despite a recent improvement, roughly €865bn of lending across the euro area is still classified as non-performing, much of this the legacy of the financial crisis.

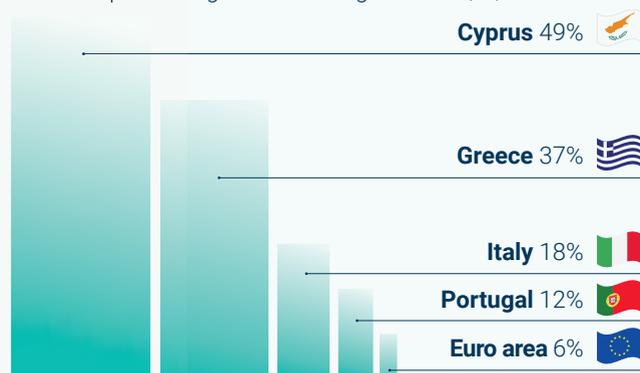
Although that represents only about 6% of all lending for the euro area, the difference between countries is stark. The figure in Greece and Cyprus is much higher, 37% and 49% respectively. While Italian banks' non-performing loan ratio is now below its peak of 18%, its size is a concern for the future.

The ECB's proposed rules to encourage banks to deal more aggressively with their NPLs over the next two years have caused much anxiety and have met strong resistance. Not only from Greece, where banks have been forced to sell bad loans at huge discounts, but also from the likes of Italy and France, which have urged a slower path of reform. ● **Vicky Pryce is a Board Member at the Centre for Economics and Business Research.**

'Unconventional monetary policy inevitably caused distortions. Zombie companies may have been kept going artificially, storing up trouble for the banks and the economy.'

The euro area's bad loans

Bank non-performing loans to total gross loans, %, 2016



Source: World Bank, OMFIF analysis

Sterling status ‘a good thing’

Robert Stheeman, who since 2003 has led the UK’s Debt Management Office, an executive agency of the UK Treasury set up in 1998, tells OMFIF Chairman **David Marsh** about changes in sovereign debt management, the impact of Brexit, and the benefits of sterling’s reserve currency status.

David Marsh: As head of the DMO, you have seen great change in the external environment. There was the 2008 financial crisis and a big increase in UK international debt issuance because of the country’s parlous economic position at the time. Do debt managers now have to be more concerned with relationship management with big international investors, including sovereign funds and central banks?

Robert Stheeman: Yes. When the UK DMO opened our borrowing quantity was much less than it is now. I used to go abroad to seek potential investors only once every two years. Now we have to be more proactive. The market, too, has fundamentally changed. It’s not just bigger, it’s also much deeper. That liquidity has enabled the UK DMO – and would enable any other debt manager – to access markets and raise funds on a scale which 15 years ago would not have been imaginable.

Marsh: Sterling is still one of the world’s major reserve currencies. Is that a good thing?

Stheeman: I think it is probably a good thing from a debt management perspective as it adds to the diversification of the investor base. I don’t think it’s a deliberate UK target to say sterling needs to have reserve currency status. But having it is undoubtedly beneficial. Sterling is the fourth or fifth largest reserve currency. That is a good position to be in. Being the largest reserve currency, on the other hand, would bring all sorts of complexities from a debt management perspective.

Marsh: Countries in the euro area are linked together by monetary union, but they don’t have a debt union and they don’t have a single government. Does that give Britain advantages over individual euro area issuers?

Stheeman: I think it does, on a couple of levels. The first is the

sense that the UK is sovereign in its currency. This sovereignty works to our advantage in a way that it probably would not for one or two smaller euro area countries. The idea that decisions on debt management policy and debt management issuance would have to take in what other jurisdictions are doing would hugely complicate proceedings.

Marsh: There are a couple of questions I need to ask about Britain’s exit from the European Union. The last time sterling suffered a serious fall was after the Brexit referendum in June 2016. What did your peers say to you the day after we decided to leave?

Stheeman: I don’t think any of them spoke to me the day after the referendum, which was probably a good thing! Britain’s floating exchange rate was an important safety valve and helped mitigate potential pressures from the international investor community and on the UK bond

market. A floating exchange rate allows the market to express itself, in a way that would be much harder if investor attention focused on bond markets with a limited amount in other areas. I feel that it has been a huge boon having a floating exchange rate.

Marsh: What do you think the government needs to do to make sure during the Brexit process that the UK keeps faith with the considerable number of foreign investors who have put money into gilts?

Stheeman: This is all about credibility. The nature of sovereign debt is that it needs to be credible to be a serious proposition for an investor. Debt management and the price of sovereign debt are a manifestation of credibility and faith in government credit. Governments must make sure that they uphold that standing. ●



To listen to this conversation in full, visit omfif.org/podcasts

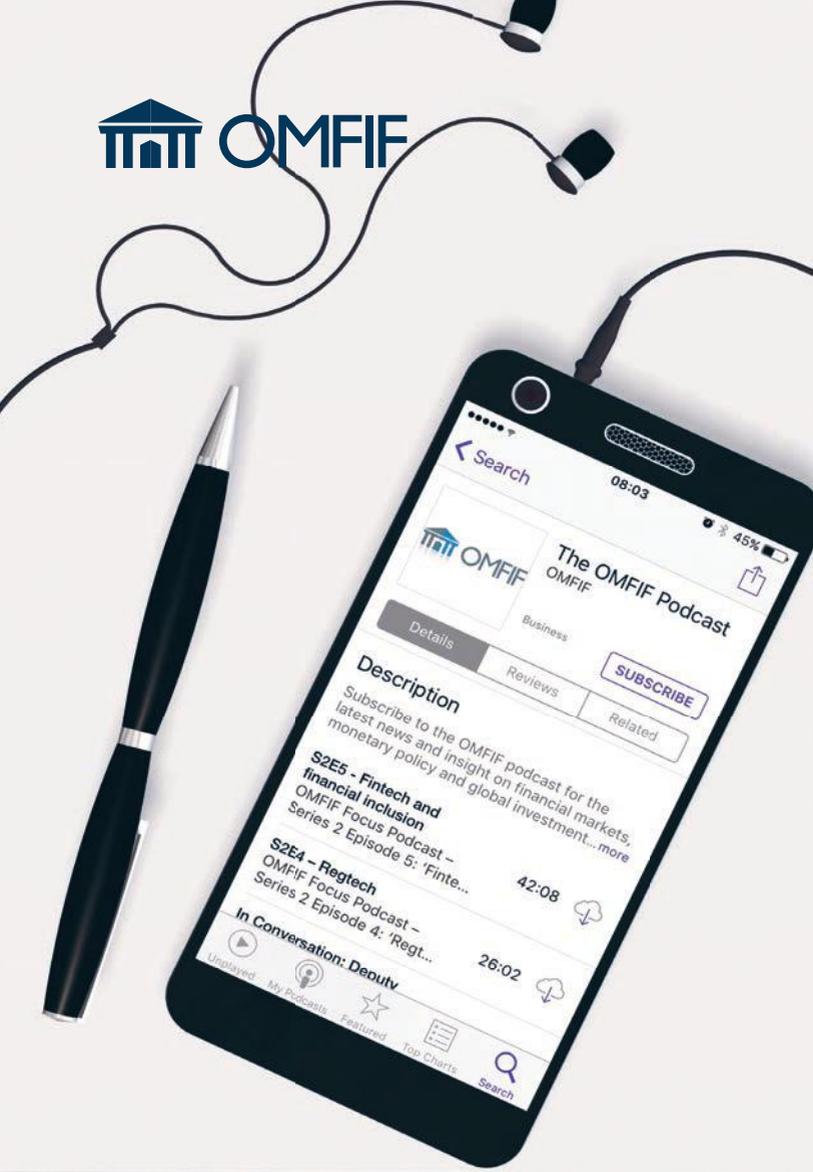
A middle-aged man with thinning hair, wearing a dark grey suit, a light blue shirt, and a red patterned tie, stands on a wooden staircase. He is looking down and to his left, with his right hand resting on the wooden handrail. The background shows the architectural details of the staircase, including wooden arches and a white pillar.

‘It’s all about credibility. The nature of sovereign debt is that it needs to be credible to be a serious proposition for an investor.’

Profile

Education: Having left Stowe school, Steeman pursued a banking career in Germany.

Career: In 1982 Steeman qualified as a banker at Hamburg chamber of commerce and subsequently held various positions in German financial institutions. From 1991-2002 he worked in debt capital markets at Deutsche Bank. Since 2003 he has been chief executive of the UK Debt Management Office. He was awarded a knighthood in December 2015.



The OMFIF Podcast

Subscribe to the OMFIF podcast for the latest news and insight on financial markets, monetary policy and global investment themes.

Published weekly, the podcast features input from a range of academic experts, policy-makers and investment professionals.

Podcasts available include:



Combating terrorist and criminal financing

Rob Wainwright, executive director of Europol, joins Anton Varga to discuss

the methods terrorists and criminals use to transfer and launder illicit funds. They cover the impact of these crimes on the financial sector and wider economy, the problems surrounding globalisation and technology, and how global authorities are seeking to prevent criminal financing.



Global order: Beyond China and the US

Danny Quah, professor of economics and acting dean of the Lee Kuan Yew School

of Public Policy at the National University of Singapore, joins Adam Cotter to discuss the shifting world economy. They cover emerging economies, a new era for China, challenges for traditional political systems, equality of opportunity and the positive impact of technological disruption.

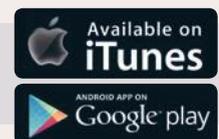


Focus on Green finance

A series of podcasts that analyse developments in green finance. Speakers

include Bertrand de Mazières, director general of finance at the European Investment Bank, George Papaconstantinou, former Greek finance minister, and Joël Prohin, head of asset management at Caisse des Dépôts. Topics of discussion feature the regulation, infrastructure and development of the green finance market.

Download now from iTunes or omfif.podbean.com



Worldview

This month's expert analysis

21 Kat Usita on public pensions divesting from fossil fuels



24

Dariush Yazdani on gold's appeal

26

Philippe Desfossés on pension funds helping economies grow



20 Darrell Delamaide on Fed vice-chair speculation



29

Bhavin Patel on the potential of blockchain



27 Jun Saito on containing Japanese inequality



22

Otaviano Canuto on manufacturing

Fed personnel carousel in full swing

Pressure to increase diversity in powerful New York post



Darrell Delamaide
US Editor

Despite the recent US government shutdown and the Federal Reserve remaining in limbo, the economy continues to surge ahead, powered by tax reform, deregulation and improved business and consumer confidence.

Jerome Powell had to be renominated as the next Fed chair, since his nomination did not come up for a vote in the Senate before its session ended in 2017. Then he had to be reapproved by the banking committee, but his confirmation by the full Senate quickly followed before Fed chair Janet Yellen's term expired at the beginning of February.

Good foil

Speculation over a new vice-chair continues. John Williams, the San Francisco Fed chief, is the latest contender. A long-time aide to Yellen when she headed the regional bank, Williams is an economist and therefore a good foil for Powell, whose background is in law.

Williams has turned hawkish of late and in January described the three rate increases on the agenda for 2018 as a 'good starting point'. He said growth should be faster this year than originally forecast but there are no signs of wage-driven

inflation. 'It could be a little bit quicker pace of increases,' he said, 'but I don't see any kind of game-changing shift in strategy.'

In a separate newspaper interview, he said the chances were greater that faster growth would prompt four rate increases rather than pulling back to two. He is relatively sanguine about the possibility

for a new normal after a decade of crisis management. Boston Fed chief Eric Rosengren has suggested the Fed should adopt a more flexible inflation target.

With unemployment still declining, he worries that a surge in inflation would prompt the Fed to slam on the brakes to keep to its 2% inflation target, risking a recession.

Trump's third nomination

is considerable pressure to keep the search for the second-most important policy-maker on the Federal Open Market Committee broad and transparent.

Unlike the board of governors, whose members are nominated by the president and confirmed by the Senate, the presidents of the regional banks are chosen by the board of each bank, subject to approval by the governors in Washington. The three banking members of the regional boards don't get to vote on the president, leaving it to the three industry representatives and the three 'public' representatives to make the choice.

Increase diversity

The powerful New York post — the president is vice-chair of the FOMC — has always been filled by a white male, and the Fed has been under pressure to increase diversity.

Raphael Bostic, who became head of the Atlanta Fed in June, is the first ever African-American to head one of the regional banks. One of the rumoured candidates for the New York job, former Pimco chief executive Mohamed El-Erian, was born in New York to an Egyptian father and French mother, and grew up partly in Egypt and Europe. Minneapolis Fed chief Neel Kashkari was born in the US to immigrant parents from India. ●

Darrell Delamaide is a writer and editor based in Washington.

FED DEBATE CONTINUES

<p>'Sanguine'</p> <p>John Williams, San Francisco Fed chief</p> 	<p>'Worried'</p> <p>Eric Rosengren, Boston Fed chief</p> 
<p>'Leans hawkish, sounded dovish'</p> <p>Patrick Harker, Philadelphia Fed chief</p> 	<p>'Ready to go'</p> <p>Marvin Goodfriend, economics professor at Carnegie Mellon</p> 

that deficits resulting from tax reform could become a drag on growth. As a voting member this year, Williams will have his say whether he gets the vice-chair nomination or not.

Philadelphia Fed chief Patrick Harker, who leans hawkish, sounded dovish when he suggested that just two interest rate hikes might be more appropriate in 2018 if inflation continues to be soft.

Fed policy-makers are looking

to the Fed board is Marvin Goodfriend, an economics professor at Carnegie Mellon University. The former research director at the Richmond Fed, who is a well-known monetary policy scholar, has pledged to increase transparency and accountability at the Fed.

The New York Fed is searching for a successor to William Dudley, who will step down as president in mid-2018, before his term expires in 2019. There

Containing Japanese inequality

Policy-makers must enhance globalisation while preserving social stability



Jun Saito
Japan Center
for Economic
Research

Policy-makers often cite Japan as an example of how countries can effectively contain the threat of widening inequality. According to traditional indicators such as the Gini coefficient and data on the income share of the top percentile of earners, Japan outperforms the US and major European economies.

However, the situation is more serious if one examines Japan's relative poverty rate. Among members of the Organisation for Economic Co-operation and Development, Japan's relative poverty rate is high, close to the US and much higher than the UK, and is continuing to rise. There are several reasons for this.

The first is Japan's aging population. The relative poverty rate is higher among elderly people, who, in the light of Japan's demographics and low fertility rate, make up a larger share of population than in other countries. The number of Japanese aged 65 or older has almost quadrupled over the last 40 years. The fertility rate has recovered

40%

Share of irregular workers
in Japan

somewhat but is still below 1.5 births per woman, far below the replacement rate of 2.1. This contributes to the increase in the country-wide relative poverty rate.

Second is the increase in the number of irregular workers, those who work part-time or under agency, and fixed-term contracts, over the last 30-40 years. They are paid less and enjoy fewer benefits than those in regular, full-time employment. The government has said it wants to narrow the wage gap between irregular and regular workers as part of Prime Minister Shinzo Abe's labour reform programme. Regardless, since the share of irregular workers among all employees is increasing, reaching almost 40% in 2017, the relative poverty rate should again increase.

The third is poverty in single parent households, which are becoming increasingly common owing to Japan's rising divorce rate. This is especially the case for single mother households, which tend to rely on a disproportionate amount of irregular work.

Limited globalisation

These observations imply that inequality is becoming an increasingly serious issue in Japan. However, market watchers should take note of the major difference in the country's composition of inequality when compared with other nations.

In Japan, inequality among prime-age workers — those between 24-54 years old — has

'Japan has not had to grapple with disruptive technological advances and the negative consequences of globalisation to the same degree as other countries.'



not increased. There are two possible answers that may explain this variation between Japan and other developed countries, all of which have had to contend with the impact of technological disruption and globalisation.

One is that Japanese labour market polices have successfully restrained the rise in inequality. However, public expenditure on such policies is low compared to other countries. Indeed, Japan belongs to the group of nations, alongside the US, which spends the least on such measures.

This leaves the other answer: Japan has not had to grapple with disruptive technological advances and the negative consequences of globalisation to the same degree as other countries. Low growth in Japanese labour productivity, as well as import protection in the agricultural sector, limited inward foreign direct investment, and restricted immigration seem to confirm this idea.

Stability v. growth

Widening inequality is a serious threat to society and should be avoided as much as possible.

However, if the cost of containing widening inequality is to give up growth opportunities, this creates different problems for countries. So far Japan has opted to sacrifice some elements of technological change and globalisation, consequently sacrificing growth, to preserve social stability.

But the Japanese economy needs to strengthen. If growth prospects are to improve, the country must orientate its policies towards enhancing technology and globalisation. These measures would inevitably involve pressures that could widen inequality, and should therefore be complemented by mitigating policies, including expanded education and retraining programmes.

The alternatives are that Japan will continue to suffer from low growth, or that increased exposure to globalisation and technological disruption will lead to heightened social instability. Neither situation is attractive for the world's fourth largest economy. ●

Jun Saito is Senior Research Fellow at the Japan Center for Economic Research.

Opportunities beyond manufacturing

Scope of stand-alone and embedded services



Otaviano Canuto
Advisory Council

Since the second half of the last century, manufacturing has been a vehicle for job creation, productivity increases and growth in emerging economies. First in Latin America, followed by Asia and eastern Europe, rising manufacturing levels transferred labour from low-productivity occupations to activities using more technology. This was facilitated by the transferability of manufacturing technologies relative to other parts of the economy. But two issues cast doubt over the possibility of replicating or deepening this process.

First, manufacturing is highly sensitive to minor changes in overall competitiveness factors, including labour costs, real exchange rates, the business environment and infrastructure. Second, technological changes that reduce labour costs are threatening to unwind some of the motivation for transferring

manufacturing to emerging economies.

For latecomers, using manufacturing exports as a platform for high growth is likely to become more difficult. At the least one may say that the requisite standards of infrastructure, business environment, local availability of skilled workers and other competitiveness factors are rising.

Unskilled labour

Market watchers are increasingly asking whether services can eventually surpass manufacturing in terms of job creation in developing countries. They wonder if further innovations can lead to higher transferability of technologies and tradability of services, and examine whether local manufacturing centres will remain a precondition for production of services.

These issues are addressed by Mary Hallward-Driemeier and Gaurav Nayyar, senior economic adviser and economist at the World Bank respectively, in their book *Trouble in the Making?*:

The Future of Manufacturing-Led Development.

Hallward-Driemeier and Nayyar call attention to how technological advances have made some services, including finance and telecommunications, increasingly tradable. This may help raise productivity in developing economies. They highlight, too, the potential benefits of reaping economies of scale in services that are highly affected by technology, especially since only low marginal costs are incurred by adding units to production. However, these services are unlikely to be a strong source of jobs for unskilled labour.

Low-end services that provide unskilled employment are less likely to create opportunities for productivity gains. With some exceptions – Hallward-Driemeier and Nayyar mention construction and tourism – the services sector has less scope than the manufacturing-led development of recent decades to yield both high productivity gains and job creation for unskilled labour.

There is much still to be learned about the connection between manufacturing and services. Alongside increases in demand for stand-alone services that are very sensitive to changes in consumers' income, policy-makers must determine the prospects for the demand for services accompanying the transformation of manufacturing. They will have to deduce the extent to which

local manufacturing centres benefit from demand for these manufacturing-related services.

'Servicification'

In their assessment of the rising 'servicification' of manufacturing, Hallward-Driemeier and Nayyar conclude, 'While a range of "stand-alone" services and some embedded services can provide growth opportunities without a manufacturing core, the increasing servicification of manufacturing underscores the growing interdependence between the two sectors. Given this deepening interdependence, policies that improve productivity across different parts of the value chain will result in the whole being greater than the sum of its parts. The agenda therefore should be to prepare countries to use synergies across sectors to participate in the entire value chain of a product while also exploiting stand-alone opportunities beyond manufacturing.'

It is becoming more difficult to boost employment of unskilled workers while at the same time obtaining substantial increases in productivity. There is no alternative but to raise standards domestically if a developing country wants to make best use of services and manufacturing as engines for meaningful growth. ● **Otaviano Canuto is an Executive Director of the World Bank. The opinions expressed in this article are his own.**

'The services sector has less scope than the manufacturing-led development of recent decades to yield both high productivity gains and job creation for unskilled labour.'



Services are driving down inflation

Central bank policy must adapt to new reality



Ben Robinson
OMFIF

Central banks are struggling to account for the persistence of low inflation despite trillions of dollars of monetary stimulus and tighter labour markets. Their explanations centre on the disinflationary effect of globalised product, capital and labour markets on shifting the Phillips curve, the inverse relationship between unemployment and inflation. It is widely acknowledged that tighter labour markets in a given country no longer result in the expected rise in inflation, because global rather than domestic slack has become a fundamental determinant of prices.

Monetary policy-makers see ever-larger stimulus, for the sake of adding a few extra basis points to inflation, as not worth the financial risk. Structural changes in the global economy add urgency to this reassessment.

Over the last few decades the services sector has risen

steadily both as a share of global GDP and employment. Many of these sectors are increasingly knowledge and technology-driven. This has had a dramatic impact on economic organisation, productivity, costs and product quality, which may have lowered the inflationary pressures of economic growth and low unemployment. Difficulties in measurement mean these issues are often overlooked, but their influence on monetary policy transmission could be substantial.

Challenges of measurement

The internet has made many functions that were previously paid for, such as communication, entertainment, information and news, effectively free. This means a large amount of economic activity no longer appears in GDP figures.

With output becoming more difficult to measure accurately, productivity gains may be under-reported. In late January the UK Office for National Statistics revised its estimates for productivity and sectoral growth upwards after acknowledging that

advances in digital technologies and communications services had not been captured by official figures. Inflation, meanwhile, was lower than reported, reflecting the adjusted value of the services produced.

These difficulties represent a significant break from the past, where producing more of a given good or service required greater demand for physical inputs, pushing up aggregate demand. This ensured a strong link between economic slack and inflation, and allowed central banks to manage price levels via traditional monetary policy tools.

The digital economy is more dependent on intangibles that have a less direct influence on aggregate demand. Many services are produced and distributed using software rather than requiring physical inputs, supply networks and bricks-and-mortar outlets. This is making the marginal cost of new production essentially zero.

The extent to which this has affected the link between potential output, inflation and monetary policy is still unclear, but the break with past

experience is striking.

Data-driven services have also allowed dramatic improvements in quality, although these are often hard to quantify. As a result, it can be misleading to compare the price of items over time, creating difficulties for the year-on-year nature of inflation measures. An iPhone may be much more expensive than an outmoded mobile phone, but it offers much greater functionality. Improvements in technology and communications have similarly transformed even low-tech sectors such as food delivery and transportation, further hindering comparison.

Central bank models depend on historical data to guide their forecasts. The rapid growth of the digital economy and technology-enabled services is creating a new reality to which policy-makers must adapt. Updated models using assumptions based on services output, quality, prices and productivity gains are needed. The lack of hard data here suggests one reason why inflation has consistently undershot forecasts and why monetary policy has been so slow to achieve its target.

Policy-makers are trying to understand the true impact of the evolving digital and service-based economy on inflation dynamics. Until they succeed, the risk of inappropriate or potentially harmful choices could grow. ●

Ben Robinson is Senior Economist at OMFIF.



‘The extent to which the digital economy has affected the link between potential output, inflation and monetary policy is still unclear, but the break with past experience is striking.’

Gold's sovereign fund appeal

Diversification and liquidity guide allocation strategy



Dariush Yazdani
Pricewaterhouse
Coopers

High levels of assets under management and sophisticated strategies have increased the importance of sovereign funds as institutional investors. Their presence in world markets has become more pronounced. The introduction of various funds in recent years has cemented their global influence. As the number and diversity of sovereign funds expand, more are shifting into alternative assets.

In the past, these funds' main asset allocation was to equities and fixed income instruments. However, a low interest rate

environment over the past decade has led sovereign funds to search for higher yields and, in the process, turn towards alternatives.

The inclusion of alternatives in a portfolio can improve its risk-reward profile significantly. Gold, for example, has a negative correlation with equities and performs well during stock market downturns. Principal preservation, introducing a source of returns that has reduced market risk, is attained while the value of investments is protected from possible decreases in the purchasing power of the currency the asset class is expressed in.

But the inclusion of certain alternatives in a portfolio can also introduce risks such as illiquidity, complexity and cyclicalities, where

the asset's value fluctuates widely according to business cycles or seasonal demand.

Nevertheless, the heterogeneous aspects of alternatives allow sovereign funds to select appropriate asset classes to suit their specific objectives. Alternative asset classes possess different correlations of returns

In terms of performance, different alternative assets deliver strong returns on a five-, 10- and 20-year perspective (see chart), despite uncertain market conditions. On both a 10- and 20-year basis, gold and private equity outperform. Hedge funds and commodities consistently underperform when compared

'The inclusion of a wide variety of asset classes in a sovereign fund's portfolio provides strong diversification benefits, especially if it is combined with more traditional asset classes.'

compared with traditional asset classes. The inclusion of a wide variety of asset classes in a sovereign fund's portfolio thus provides strong diversification benefits, especially if it is combined with more traditional asset classes such as bonds or equities.

Liquidity benefits

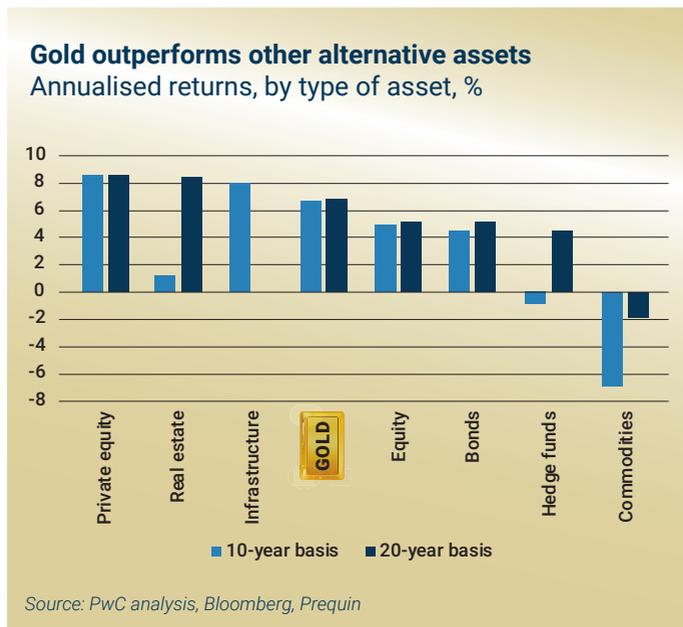
Only gold can rival traditional investments with regards to liquidity. Measured against traditional investments, the lack of liquidity of most alternative asset classes is a significant drawback. Inclusion in a portfolio will cause diversification, but it will also create illiquidity problems.

This means alternatives require long-term investment horizons and are prone to further illiquidity in times of crisis, as was the case in the subprime mortgage crisis.

with traditional and other alternative asset classes.

Sovereign funds' general goal of safeguarding the prosperity of their home country by accumulating and increasing wealth fits well with alternatives offering diversification, a hedge against inflation and improving portfolio performance. While alternatives are not immune to risks such as illiquidity, complexity and cyclicalities, their ability to provide downside protection and diversification will entice investors.

Sovereign funds should continue to consider alternatives as a new source of income. But to reap the rewards, these investors must find the right allocation strategy, monitor their portfolios well and reallocate their capital to reflect economic developments. ● **Dariush Yazdani is Partner at PricewaterhouseCoopers Luxembourg.**





Global Public Investor 2018

**MAY
2018**



- Asset allocation
- Global Flows
- Digital Economy

The fifth annual *Global Public Investor* is devoted to public sector asset ownership and management across a full range of official institutions around the world.

GPI 2018 focuses on key developments on the world investment scene and extends further the coverage of asset classes from previous editions. **The Top 750 Ranking** encompasses the world's largest central banks, sovereign funds and public pension funds based on assets under management. Articles by GPIs make it a practical guide to the global asset management community.

For more information and to view the synopsis, visit omfif.org

Investing pensions for sustainable growth

Greater allocation to equities and infrastructure needed



**Philippe
Desfossés**
ERAFP

Big pension funds bear a special responsibility because they manage sizeable assets for the long term. Better alignment is needed between the financing of the economy and these large investors.

While banks finance long-term projects with shorter-term funds, the nature of their activity changes when they can distribute credit virtually without limit.

Contrary to banks, pension funds and other very long-term investors are encouraged, even obliged, to make the transformation the other way around. But, unlike banks, pension funds do not create money; their contributions are a form of saving. However, regulations lead most funds to invest in far shorter-term assets.

There are two explanations.

First, regulators tend to consider (mistakenly) that market-price volatility of assets is a good indicator of risk. This is true for those that manage very short-term commitments (proprietary trading by a bank, for instance) but irrelevant for funds whose investment horizons span decades.

Second, benchmarked management prompts managers to avoid any risk of deviating from the consensus. Many investors therefore adopt investment strategies that are limited to replicating indices, or even purchasing indexed products such as exchange traded funds. These products are inexpensive, which naturally pleases administrators, and more attention is paid to reducing management expenses than to whether these investments will deliver the desired performance over the long term.

Recent proposals regarding how pension funds can contribute to the financing of

the economy are aimed at regaining control over the creation of money.

For young contributors to pension funds, the consequences of the investment choices made by their funds today will have a direct impact on their pensions but also, by correlation, on the world in which they will live.

In pay-as-you-go systems, contributions by members are redistributed immediately. Funded pension schemes have to invest sustainably. Achieving long-term economic growth without harming the prospects of future generations benefits long-term investors.

Productive capital

If a pension fund's aim is to ensure the transfer of a deferred income from generation to generation, then it should be helped to invest in the economy's productive capital. Pension funds must be allowed to increase their investments in equities, infrastructure, unlisted securities and anything that contributes directly to growing the economy.

The fall in bond yields (most of which now generate lower returns than the rates at which bonds remunerate their liabilities) has resulted in a strong appreciation of bond portfolios. However, these capital gains cannot be built upon due to restrictive investment rules. Given that many pension funds currently post solid liquidity, and in some

70%

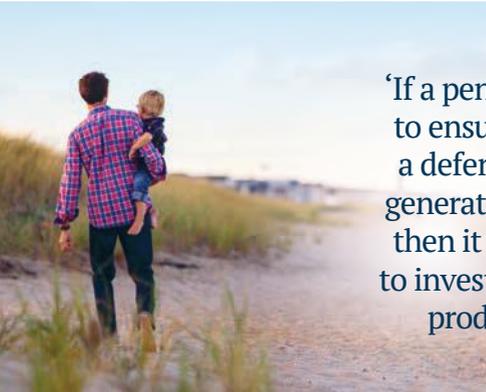
Expected equity allocation of Norges Bank Investment Management assets

cases very positive cash flows, these resources could be used more efficiently.

Norges Bank Investment Management in Norway is increasing its equities exposure from 62.5% to 70%, and Japan's Government Pension Investment Fund has raised its equity allocation to 50% of assets. In the unlikely case that negative market trends should result in a fund failing to cover 100% of its obligations, it would be preferable to give it access to refinancing by the central bank rather than obliging it to sell assets at the risk of accelerating the fall in their prices.

Pension funds manage the transfer of savings over time and their liabilities are therefore very long-lived. The mobilisation of these long-term resources should be encouraged to ensure financing that is less reliant on debt and money creation. This requires in-depth re-assessment of regulatory frameworks applicable to pension funds as well as a re-examination of the role of the banks. ●

Philippe Desfossés is Chief Executive Officer of ERAFP, the French public sector pension fund.



'If a pension fund's aim is to ensure the transfer of a deferred income from generation to generation, then it should be helped to invest in the economy's productive capital.'

Pension funds divest from fossil fuels

US and Europe lead the way, while UK disappoints



Kat Usita
OMFIF

Public pension funds are tasked with safeguarding the financial future of their members, which requires making the best possible investment choices. There is a glaring irony when those choices may endanger the lives they are intended to support, such as when such funds finance fossil fuel production. Policy-makers and fund managers must acknowledge this discrepancy and address how pension funds and other public investment institutions are contributing to global warming.

New York City is taking responsibility. Over the next five years, the city's five public pension funds will divest the \$5bn they hold in fossil fuel investments as its officials sue the five biggest oil companies: BP, Chevron, ConocoPhillips, Exxon and Shell.

While New York City's divestment is the largest of any US city to date, it is not the first public body to make such a move. In 2015 the state of California ordered its two largest public pension funds to divest the \$200m they held in fossil fuel companies. The following year, the city of Washington's retirement board disposed of \$6.5m of such assets. These actions are significant for the oil industry, and contrast

sharply with President Donald Trump's refusal to acknowledge climate change as a legitimate policy concern.

The European Union has been more consistent. In late 2017 the European parliament passed a resolution calling on all public and private investment institutions to divest from fossil fuels. Earlier in the year, the Irish parliament approved a bill requiring its sovereign fund to sell off all fossil fuel assets.

Once this is implemented, Ireland will be the first country in the world to achieve full divestiture of public money from fossil fuel. Norway's sovereign fund has also divested a significant amount of fossil fuel assets after legislators ordered it to remove investments from companies that generate more than 30% of their revenue from coal.

Financial pressures

Progress has been more disappointing in the UK, in spite of its legislated commitment to reduce greenhouse emissions by 80% from 1990 levels by 2050. Several large public pension funds, including the £17.2bn Greater Manchester fund, still have assets allocated to fossil fuel companies.

Local public pension funds have £16.1bn invested in fossil fuels, comprising 5.5% of total assets. A comprehensive shift away from these investments would require policy guidance to clarify that doing so would not betray public pension funds' fiduciary duty to

'With the growing availability of green financial instruments, funds should not be hard-pressed to find alternative investment opportunities that support sustainability goals.'



find the best financial returns for members.

Critics are quick to highlight the financial burden of divestment, especially when fossil fuel investments make up a significant share of a fund's portfolio. There could be consequences to a fund's ability to finance current pension incomes, for instance. This is why divestiture must be executed strategically, as the examples in Norway and the US show.

Beyond divesting, funds need to become more proactive in selecting climate-conscious investments. With the growing availability of green financial instruments, there are alternative investment opportunities that support sustainability goals. Over \$100bn worth of green bonds

were issued in 2017, 125 times the number a decade ago. While this is still a relatively small amount, green finance is growing quickly and will become an increasingly important component of funds' portfolios.

Public investment funds are different from other investing institutions as they have a social function. Pressure to find the best investment returns have compromised this role.

If pension funds are genuinely committed to protecting their members' future livelihoods, they need to assess carefully the broader implications of investment decisions and rectify actions that counter their ultimate objective. ●

Kat Usita is Economist at OMFIF.

Cryptocurrency crush

Retail investors crowding into risky asset alarms regulators



Oliver Thew
OMFIF

Last month's World Economic Forum meeting in Davos featured an entire session dedicated to the crypto-asset bubble. The total market capitalisation increased 3,429% to \$600bn over the course of 2017. Millions of ordinary people around the world began investing, with an estimated \$5bn in trading volume per day across 1,100 currencies and tokens. From established cryptocurrencies such as bitcoin and ether to cryptokitties – a blockchain-based game that allows players to buy and trade virtual cats (see p.30) – the market rallied.

The rise of cryptocurrency trading has been accompanied by warnings from regulators concerned that the new market poses a threat to financial stability. In November 2017, Randal Quarles, vice-chairman for supervision at the US Federal Reserve, claimed that bitcoin could pose serious financial stability issues as it is adopted more widely.

Some regulators began clamping down. In Israel, the securities agency barred companies trading in bitcoin from operating on the country's stock exchange because it believes the public is unprotected. Bank Indonesia outlawed all payments and transactions in

cryptocurrencies, claiming they can affect financial stability and cause harm to society. The People's Bank of China closed local exchanges, implemented a blanket ban on initial coin offerings and put pressure on bitcoin miners to try and shut them down.

But Mark Carney, governor of the Bank of England, and Janet Yellen, chair of the Fed, have stated that cryptocurrencies and the rally do not pose a significant risk to financial stability. Other regulators, including the Banco Central do Brasil, have reiterated that there is no immediate risk to

'When the South Korean government announced it would make cryptocurrency trading illegal, it triggered a sell-off that caused individuals to lose up to 40% of their portfolios.'

the financial system. Regulation is needed for the market to grow, but it also seems as though the cryptocurrency rally is a speculative bubble.

No systemic risk

Although total market capitalisation has increased over the past year, it still represents a tiny segment of global markets - equivalent to less than 2% of any major asset class. The cryptocurrency market has few links to the wider economy and is not systemically interconnected. It is not being held, traded or financed by the banking sector, which means

there is no significant exposure to core financial institutions. The bursting of a cryptocurrency bubble should not have systemic or macroeconomic implications.

However, the threat to individuals' personal finances is real. Last year's boom was largely driven by speculation and herd mentality, rather than any intrinsic value or established investment strategies. Easily accessible exchanges and products, such as contracts for difference, allowed lower- and middle-income consumers to invest large amounts in cryptocurrencies. As last month's

crash showed, individuals with little investment experience can be exposed to wild fluctuations in value and can lose significant amounts of money.

Furthermore, cryptocurrency exchanges, trading platforms and wallets are frequently hacked. A large hack, similar to the Mt. Gox attack in 2014, could cause investors to lose most, if not all, of their cryptocurrencies. While some investors have been refunded after a hack, the general absence of depositor's insurance to absorb losses for these investments makes them risky.

A heavy-handed approach to protect consumers can have the

3,429%

Rate of increase of total market capitalisation for cryptocurrencies over 2017

opposite effect. The South Korean government recently announced it would make cryptocurrency trading illegal. This prompted a public backlash in the world's biggest cryptocurrency market and triggered a big sell-off, which caused individuals to lose up to 40% of their portfolios. When Chinese regulators banned cryptocurrency trading in 2017, bitcoin lost 32% of its value.

Educational approach

More progressive regulators have taken an educational approach. They inform consumers about the relevant risks, including the fact that cryptocurrencies are not regulated financial instruments, but stop short of banning related activities. The UK's Financial Conduct Authority, the BoE, the Monetary Authority of Singapore, the US Securities and Exchange Commission and Financial Stability Oversight Council have taken this approach.

As Jens Weidmann, president of the Bundesbank, said, 'Just because investors can lose money isn't a good reason to get involved.' ●

Oliver Thew is Business Development Manager at OMFIF.

Blockchain beyond the hype

Technology reduces counterparty risk and aids regulation



Bhavin Patel
OMFIF

If you believe the hype, blockchain is a revolutionary technology that will transform the way financial services operate. However, the ‘year of the blockchain’ is yet to materialise.

In the context of finance, blockchain can be defined as a digital platform that uses cryptography and a distributed messaging protocol to create a link between two or more parties to transfer asset ownership. The transaction is registered across a network of computers, in a distributed ledger.

The promise of blockchain cannot be ignored. In capital markets, the technology has the potential to settle currency, equity and fixed income trades almost instantaneously, creating an opportunity for banks to eliminate intermediaries.

Institutions are not switching their business models

immediately, as interoperability is a problem. Blockchain attempts to transfer value from one party to another and reconcile the changes to their respective accounts quickly and securely. This requires all parties to be on the same blockchain system and access the same data. Given the number of competing systems, this is impractical. Additionally, as a system grows, the speed of transactions suffers.

Scalability problems

Blockchain payments are not fast enough to support large-scale operations. For instance, the Bitcoin blockchain is unable to process transactions at the speed required by banks. At most it can handle seven transactions per second. In comparison, Visa averages 2,000 and can scale up to 56,000 transactions per second if required.

As chains grow they become unwieldy. Private ledgers tailored to overcome this lag are in development, but these ledgers will not interact with each

other. Groups such as R3, which has 41 banks as members, are seeking to overcome this issue by developing a standardised, interoperable platform.

When blockchain works

A blockchain is needed in a multiparty agreement where no one trusts each other and there is an opportunity for deception.

The decentralised nature of blockchain means there is one time record of a transaction and the data are replicated through nodes. Nodes are important members of the network that validate transactions. Participants in the system cannot lose or destroy transactional data without incurring very high costs.

The adoption of blockchain has been transformational for certain industries, especially for companies in parts of the world that lack the infrastructure to transfer large-value contracts, or where centralised solutions are unreliable and open to corruption.

In the diamond industry for instance, a distributed ledger can be used to track the history of ownership back to the mine. The blockchain generates a tracking key, which is etched into the diamond.

Blockchain technology can drive solutions even without implementation. The first step towards implementation involves a company agreeing on data and processing models. Human

factors are usually responsible for causing problematic noise in data, which is one of the problems the distributed ledger aims to solve. Harmonising data standards can solve most problems, without the need for the company to implement a blockchain.

Blockchain operates continuously, while traditional transaction processing has a two-day settlement period. Legislators and regulators have not caught up with the need for real-time regulation.

If a regulatory body became a node in the blockchain system, it could see all the information in a market, making regulation more effective.

Monitoring the stability of the banking sector could be easier if the Financial Stability Board used blockchain. If a blockchain recorded every instance of a bank failing to make a payment or transfer assets, the regulator would have the power to act quickly to stop the bank from trading, or inject emergency liquidity if required.

Blockchain could become the backbone of capital markets infrastructure, reducing counterparty risk and settlement times, and increasing regulatory transparency. The system will only ever be as good as the information built into it – which is why much more work lies ahead. ●

Bhavin Patel is Economist at OMFIF.



The (digital) numbers

\$114,000

The amount that some digital 'CryptoKitties' are worth on the ethereum blockchain market. CryptoKitties are generated in a game where players can purchase, sell and breed digital cats.



It has proved to be hugely popular, with a reported 180,000 players signed up and a total expenditure of \$20m in ether, ethereum's cryptocurrency.



\$2bn

The market capitalism which Dogecoin reached in early January 2018. The 2013-era cryptocurrency was designed as a parody of more prominent digital currencies like bitcoin and is associated with the Shiba Inu breed of dog. Dogecoin has re-emerged as a result of general cryptocurrency popularity, resulting in investors purchasing low-priced assets.

¥46bn



The amount which Coincheck, a Japanese cryptocurrency exchange, must refund to customers after hackers stole funds in January. Coincheck said it would reimburse 260,000 people who lost their holdings in the NEM cryptocurrency.

\$8m



The value of rapper 50 Cent's forgotten 700 bitcoins. In 2014 he offered fans the chance to pay for his new album in the cryptocurrency — transactions he had forgotten about until the recent boom reminded him of his digital foresight.

The chart

Each month we take a look at a chart from the world's central banks. This month, Switzerland.



The ratio of bank loans to GDP in Switzerland has risen sharply post-crisis, indicating potential risks to financial stability.



Swiss bank loans growing faster than the economy
Ratio of bank loans to nominal GDP



Source: Swiss National Bank, OMFIF analysis

A tiresome thought experiment

Julian Frazer

THIS reviewer has never read a book like *Four Futures: Life After Capitalism* before – mostly, one should hope, because most sensible editors will tell authors who produce a work like this to return to their office and try again.

The author, Peter Frase, in this slim volume ventures to sketch a quartet of postcapitalist visions based on the ‘twin anxieties’ of resource scarcity, due to climate change, and robotised automation.

The formulas for each are simple. A scarcity of resources combined with social equality will lead to socialism. Communism will arise where there is social equality and an abundance of resources. These are Frase’s utopias. On the other side, hierarchical society and abundance will engender rentism. The most dystopian system, combining hierarchy with scarcity, is exterminism, in which the rich and powerful eradicate the poor.

Early in the text Frase writes: ‘Why the reader might ask, is it even necessary to write another book about automation and the postwork future?’ By the end

of *Four Futures*, readers will be asking why it was necessary for this book to be written, when so many better ones are available.

Problems begin with the introduction, which takes up more than one-fifth of this six-chapter book. The preamble could have easily been cut by 10 pages without diluting the argument. This would allow readers to meet Frase’s ‘four futures’ with vigour, rather than exasperation.

Things are not helped by the nauseating number of allusions to *Star Trek* and other parts of popular culture. While it may be television’s favourite space adventure series, *Star Trek* is not, contrary to Frase’s leftist

‘Four Futures reads too much like an over-embellished university dissertation and too little like a meaningful political critique.’

impressions, well known for its ‘communistic quality’.

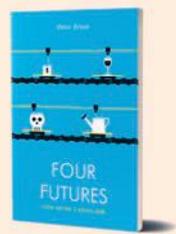
Likewise *The Hunger Games* has found ‘enormous success’ not because it is a work, as Frase believes, of dystopian criticism, but because of its simpler appeals. As with other works of ‘young adult’ (or, less delicately, ‘old child’) fiction, its success is based on pandering to teenagers’ rebellious compulsions. A

gainful piece of political writing, which is what one assumes Frase was aiming for with *Four Futures*, ought to avoid such stock and facile references.

His chapter on rentism is the strongest because its foundations are the closest to what is on view in the modern economy. It is, after all, much easier to criticise something which exists than it is to elucidate nuanced political ideals. Fragments on the future of intellectual property rights, in the light of potentially epoch-shaping technologies such as 3D printing, offer some worthwhile ideas and are deserving of further research. These passages are proficient, but not strong enough to redeem the whole book.

Though just 150 pages long, *Four Futures* is a tiresome attempt at social theorising, a failed thought experiment. It reads too much like an over-embellished university dissertation and too little like a meaningful political critique.

Frase spends too much time referencing other people’s writing, which undermines the worthiness of his occasional original thinking. His reading list includes Kurt Vonnegut’s *Player Piano*, *The Second Machine Age* by Erik Brynjolfsson and Andrew McAfee, and Charles Stross’s *Accelerando*, to name a few. This reviewer recommends you turn to those books instead. ● **Julian Frazer is Subeditor at OMFIF.**



¥4.4tn

The total income generated from Japan’s intellectual property, with revenue up 74% in the last five years to ¥4.4tn (around \$40bn) at the end of 2017. The development and protection of intellectual property is part of Japanese Prime Minister Shinzo Abe’s long-term growth strategy.

COUNCIL



Meghnad Desai
House of Lords; chairman, OMFIF Advisers



Hani Kablawi
Chairman EMEA and CEO Global Asset Servicing BNY



Louis de Montpellier
State Street Global Advisors



Frank Scheidig
DZ BANK



Johannes Witteveen
honorary chairman, OMFIF Advisers



Songzuo Xiang
Renmin University of China



Otaviano Canuto
World Bank Group



Aslihan Gedik
OYAK Anker Bank



Robert Johnson
Institute for New Economic Thinking



Norman Lamont
House of Lords



Kingsley Moghalu
Tufts University



Fabrizio Saccomanni
LUISS University



Gary Smith
Barings



William Keegan
The Observer



Niels Thygesen
University of Copenhagen



Ted Truman
Peterson Institute for International Economics



Marsha Vande Berg
Stanford University



Ben Shenglin
Renmin University



John Kornblum
Noerr

NETWORK

Bahar Alsharif
David Badham
Franco Bassanini
Eduardo Borensztein
Consuelo Brooke
Colin Budd
Michael Burda
Shiyin Cai
David Cameron
Forrest Capie
Stefano Carcasco
Desmond Cecil
Efraim Chalamish
Moamad Choudhry
John Chown
Vladimir Dlouhy
Obindah Gershon
Jonathan Grant
Peter Gray

François Heisbourg
Frederick Hopson
Matthew Hurn
Korkmaz Ilkorur
Karl Kaiser
David Kihangire
Ben Knapen
Ludger Kühnhardt
Celeste Cecilia Lo Turco
Bo Lundgren
Mariela Mendez
Murade Miguigy Murargy
George Milling-Stanley
Winston Moore
Wilhelm Nölling
José Roberto Novaes de Almeida
Michael Oliver
Francesco Papadia

Robin Poynder
Poul Nyrup Rasmussen
Janusz Reiter
Anthony Robinson
Philippe Sachs
Nasser Saidi
Pedro Schwartz
Vilem Semerak
Song Shanshan
Marina Shargorodska
Paola Subacchi
José Alberto Tavares Moreira
Jens Thomsen
David Tonge
Jorge Vasconcelos
Gottfried von Bismarck
Jack Wigglesworth
Paul Wilson

CAPITAL MARKETS



John Adams
China Financial Services



Yaseen Anwar
Industrial & Commercial Bank of China



Irena Asmundson
California Department of Finance



Georgina Baker
International Finance Corporation



Stefan Bielmeier
DZ BANK



Hans Blommestein
Vivid Economics



Mark Burgess
Jamieson Coote Bonds



Hon Cheung
State Street Global Advisors



Michael Cole-Pontayn
Association for Financial Markets in Europe



Thomas Finke
Barings



Gao Haihong
Institute of World Economics and Politics



Christian Gärtner
DZ BANK



Trevor Greetham
Royal London Asset Management



Daniel Hanna
Standard Chartered Bank



George Hoguet
CFA Research Foundation



Soh Kian Tiong
DBS Bank



Stuart Mackintosh
Group of Thirty



Paul Newton
London & Oxford Capital Markets



Saker Nusseibeh
Hermes Fund Managers



Jukka Pihlman
Standard Chartered Bank



Colin Robertson
SWI Consulting



Fabio Scacciavillani
Oman Investment Fund



Lutfey Siddiqi
National University of Singapore



David Suratgar
BMCE Bank International



Volker Wieland
German Council of Economic Experts



Katarzyna Zajdel-Kurowska
Narodowy Bank Polski

MONETARY POLICY



Iain Begg
London School of Economics



Marek Belka
former prime minister of Poland



Harald Benink
Tilburg University



Mario Blejer
Banco Hipotecario



Stewart Fleming
St Antony's College, University of Oxford



José Manuel González-Páramo
BBVA



Brigitte Granville
Queen Mary, University of London



Graham Hacche
NIER



Akinari Hori
The Canon Institute for Global Studies



Harold James
Princeton University



Hemraz Jankee
formerly Central Bank of Mauritius



Pawel Kowalewski
Narodowy Bank Polski



Philippe Lagayette
formerly Banque de France



Andrew Large
Hedge Fund
Standards Board



Gerard Lyons
Bank of China
(UK)



Rakesh Mohan
Yale University



Athanasios Orphanides
MIT Sloan School
of Management



Nagpurnanand Prabhala
University of
Maryland



Edoardo Reviglio
Cassa Depositi e
Prestiti



Olivier Rousseau
Fonds de réserve
pour les retraites



Miroslav Singer
Generali CEE
Holding



Shumpei Takemori
Keio University



Makoto Utsumi
formerly Japan
Finance Ministry



Tarisa Watanagase
formerly Bank of
Thailand



Ernst Welteke
formerly
Deutsche
Bundesbank

INDUSTRY & INVESTMENT



Andrew Adonis
House of Lords



Jean-Claude Bastos de Morais
Quantum Global



Robert Bischof
German-British
Forum



Albert Bressand
European
Commission



Caroline Butler
Walcot Partners



Nick Butler
King's College
London



John Campbell
Campbell Lutyens



Mark Crosby
Monash
University



Natalie Dempster
World Gold
Council



Hans Genberg
The Seacore
Centre



Steve Hanke
The Johns
Hopkins
University



Hans-Olaf Henkel
University of
Mannheim



Muntaz Khan
Middle East &
Asia Capital
Partners



Joel Kibazo
JK Associates



Jürgen Krönig
Die Zeit



Oscar Lewison
Soditic



Boyd McCleary
39 Essex
Chambers



Luiz Eduardo Melin
International
Economic
Synergies



Willem Middelkoop
Commodity
Discovery Fund



Célestin Monga
African
Development
Bank



Danny Quah
Lee Kuan Yew
School of Public
Policy



David Smith
formerly United
Nations



Takuji Tanaka
Japan Finance
Ministry



Daniel Titelman
ECLAC



Pasquale Urselli
Mazars



Paul van Seters
Tilburg University

POLITICAL ECONOMY



Antonio Armellini
former
ambassador,
OSCE



Frits Bolkestein
formerly European
Commission



Laurens Jan Brinkhorst
University of
Leiden



Peter Bruce
Business Day



Jenny Corbett
Australia National
University



Reginald Dale
Atlantic Council



Maria Antonieta Del Tedesco Lins
University of São
Paulo



Hans Eichel
former German
minister of
finance



Jonathan Fenby
TS Lombard



Jeffrey Frieden
Harvard University



Elliot Hentov
State Street
Global Advisors



Roel Janssen
NRC Handelsblad



Thomas Kielinger
Die Welt



Ruud Lubbers
former prime
minister of the
Netherlands



Denis MacShane
Avisa Partners



Kishore Mahbubani
formerly Lee Kuan
Yew School of
Public Policy



David Owen
House of Lords



Vicky Pryce
Centre for
Economics
& Business
Research



Brian Reading
independent
economist



Robert Skidelsky
House of Lords



Gabriel Stein
Stein Brothers
(UK)



Michael Stürmer
WELT-Gruppe



Christopher Tugendhat
House of Lords



John West
Asian Century
Institute



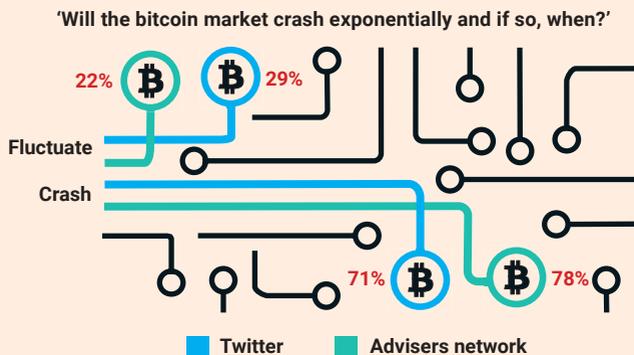
William White
OECD



Linda Yueh
St Edmund Hall,
University of
Oxford

Bitcoin market crash ‘inevitable’

OMFIF networks fail to back the controversial currency



The poll for this month focuses on the future of bitcoin. Participants were asked: ‘Will the bitcoin market crash exponentially and if so, when?’

Of those who responded to the advisers network poll, 78% agree there will be an exponential crash compared to 22% who say that prices would fluctuate. However, within the timeframe of the poll a major drop in bitcoin price occurred. Subsequent answers took this on board, with many suggesting the crash had already begun.

The question was also opened up to OMFIF’s Twitter network for the first time and respondents came to a similar conclusion, 71% to 29%, that the market would fail, though this poll closed before bitcoin’s significant decline in value.

The following statements were received as part of the January poll, conducted between 10-22 January, with responses from 18 advisory network members and 38 Twitter users.

‘The bitcoin crash is already underway as it does not have real values justifying its existence, due to the currency being just a — absolutely brilliant — product of imagination, along with the measures being taken in several jurisdictions forbidding its use.’

José Tavares Moreira, formerly Banco de Portugal

‘No it will not fall exponentially, at least not this year. With apologies to Keynes “The price of bitcoin can stay irrational longer than you can stay solvent.”

Paul Newton, London & Oxford Capital Markets

‘The bitcoin market is a classic case of a bubble and will therefore crash soon.’

Hans Blommestein, Vivid Economics

‘I really think a crash is inevitable as bitcoin’s value is not based on anything fundamental.’

Jukka Pihlman, Standard Chartered

‘We are already witnessing a burst in the bitcoin bubble in 2018. There is need of official recognition of this cryptocurrency phenomenon in order to have more market stability and confidence from investors.’

Hemraz Jankee, formerly Bank of Mauritius

‘The market should crash within the next two years. It is a shame the monetary, regulatory and political sectors let these speculative assets freely undermine the overall market economy.’

Korkmaz Ilkorur, Credit Europe

March’s question:

What are your expectations for the European Central Bank president and vice-president candidates when Mario Draghi and Vitor Constâncio step down?

- a. Both women
- b. A man and a woman
- c. Both men



Africa awaits

Asset and risk management forum

OMFIF, the South African Reserve Bank and the World Bank Treasury's Reserves Advisory and Management Program (RAMP), convene public sector asset managers, as well as select private market participants, over two days.

The Forum focuses on governance, macroeconomic and financial developments, as well as the challenges and opportunities for public sector investment managers. The aim is to discuss best practices and offer an avenue for an interactive dialogue.

Venue: South Africa Reserve Bank, Pretoria **Date:** 14-15 June 2018

For more information or to register your interest, please visit omfif.org/meetings



LOCAL GLOBAL

Our initiative to help your business think German:
Consultancy on-site. Expertise worldwide.

As one of the market leaders in Germany, DZ BANK stands for stability and reliability. We are represented in major financial and commercial centres, and together with our 1,000 cooperative banks (Volksbanken Raiffeisenbanken) we offer comprehensive financial services and combine regional proximity with global financial market expertise.