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The Bulletin

Official monetary and financial institutions ▪ Asset management ▪ Global money and credit

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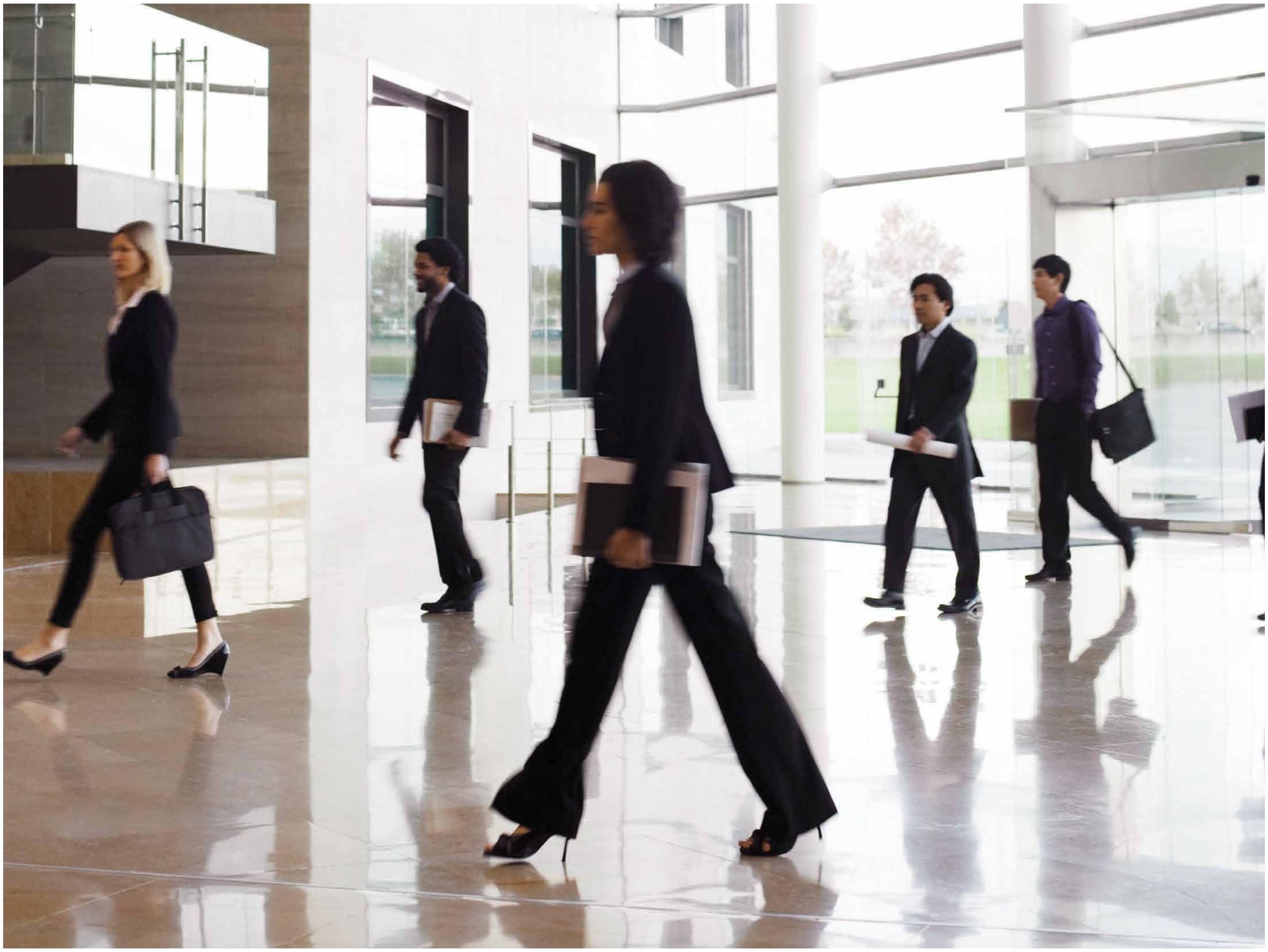

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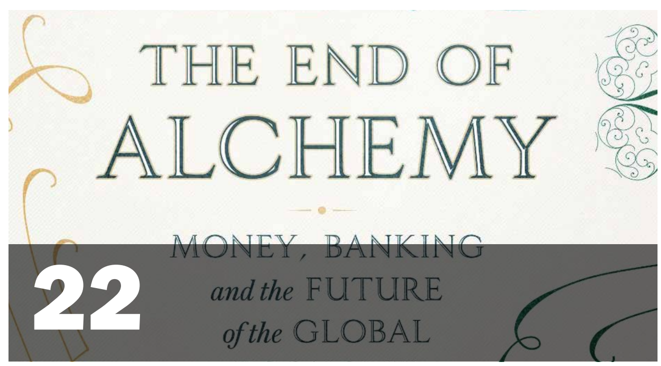

OMFIF OFFICIAL MONETARY AND FINANCIAL INSTITUTIONS FORUM

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

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EDITORIAL

Reselected Lagarde and women's role in central banking

Christine Lagarde, reselected as managing director of the International Monetary Fund for a second term from July, will be presiding over the spring meetings of the IMF and World Bank in Washington in mid-April with the world economy in a precarious, if not perilous, state.

OMFIF has participated in a debate over whether it would be opportune to adopt a candidate from Asia and/or emerging market economies to break the long hold of the Europeans over the post. But in the end, for several reasons (not least because Lagarde had played a deft hand over various efforts to integrate China into the world economy), she received fulsome support and was returned unopposed.

The gestation period for a non-European at the helm advances by five years. In the meantime we wish her and the Fund well in helping navigate the world's economic and financial shoals. We use the opportunity of Lagarde's reconfirmation to examine the role of women in central banking, where there has been no notable improvement, and even some slippage, compared with the findings of our last survey a year ago.

As the monthly review for March shows, OMFIF has dedicated many meetings in the past few weeks to the phenomenon of negative interest rates. The Federal Reserve remains in positive territory – although Darrell Delamaide explains how arguments between hawks and doves are again heating up. The European Central Bank lived up to expectations on 10 March by increasing its monthly purchases of government (and now corporate) bonds and cutting negative rates further, although with the firm intention (not for the first time) of finally reaching the floor. José Manuel González-Páramo, a former ECB board member, now at the Spanish bank BBVA, says monetary policy is running out of steam. Barnabás Virág describes how the Central Bank of Hungary has adopted targeted monetary measures to act directly on the real economy.

Ezechiel Copic from the World Gold Council says gold has prospered from negative rates as central banks around the world step up purchases. Ben Robinson examines latest IMF data on reserve asset diversification – an area where gold again appears to be playing an increasing role. Paul Tucker, former deputy governor of the Bank of England, expounds his thoughts on geopolitics and the role of the dollar, a further element in OMFIF's coverage of an emerging multicurrency reserve system. Michael Kalavratinos investigates Latin American sovereign wealth funds as the region grapples with the (for many countries somewhat unusual) task of managing excess reserves.

The debate over a possible UK departure from the European Union is occupying an increasing amount of financial market attention – just one more facet of concerns about the political heath of Europe. The results of March's Advisory Board poll reflect this – more than 80% of respondents maintain that the UK would be safer, more secure and more prosperous inside the EU, while 49% state that Brexit would promote disintegration in the rest of the EU.

Christian Noyer, former governor of the Banque de France, bluntly warns that London's preeminent role in euro trading would not survive Britain's EU departure. Edoardo Reviglio from the Cassa Depositi e Prestiti highlights another major risk – climate change – and says the move towards 'decarbonising' financial assets will send out worldwide ripples.

One of the greatest risks, of a new financial crisis, has certainly not been dispelled. But it could be, according to a book by Mervyn King, former governor of the Bank of England, extolling the virtues of intensified holdings of collateral by commercial banks. William Keegan, in his review of King's 'ambitious work', throws in his own habitual jibe about the dangers of neglecting the impact of austerity programmes.

Briefings

Forbes explores UK current account risks

Bank of England Monetary Policy Committee Member Kristin Forbes explored the risks stemming from the UK's current account deficit at an OMFIF roundtable in London on 21 March.

With the deficit standing at 5.1% of GDP and global and domestic risks increasing, Forbes said it was right to ask whether the UK was once again overly vulnerable because of its reliance on foreign financing. But, she argued, there are 'compelling reasons why today's current account deficit may not be alarming' – and why UK circumstances are fundamentally different to those in 1956, when the Suez crisis highlighted foreign investors' ability to deal a 'blow' to economies reliant on foreign financing.

Noyer outlines Brexit threat to euro trading role

Christian Noyer, former Banque de France governor, told an OMFIF-German British Forum dinner on 3 March that the UK outside the EU would sacrifice its premier position in euro trading. After a British exit, euro authorities 'could no longer tolerate' London's currency role.

Regarding the consequences of Britain's 23 June referendum, he said that he could not see any circumstance in which the UK could benefit from the single market without observing its regulations. 'Nor do I see the possibility of associating the UK in designing these regulations if it is no longer in the EU,' he added.

For a full account of Christian Noyer's speech, see p.15

ECB's inflation target 'needs to be more flexible'

Otmar Issing, former member of the European Central Bank executive board, spelled out the ECB's interlocking dilemmas over monetary policy at a briefing in London on 2 March ahead of the landmark policy meeting on 10 March.

The ECB was seen as rapidly running out of manoeuvring room. Yet further cuts in negative interest rates and a possible increase in monthly bond purchases were both seen as strong possibilities – action that eventually transpired on 10 March, along with a further extension of the ECB's long-term lending to commercial banks to encourage further credit growth and lower margins. Issing made no secret of his distaste for undue monetary easing and his belief that deflationary fears were overdone. He argued that he ECB's inflation target might need to be treated far more flexibly in the light of the oil price fall.

Euro's confused state and the UK referendum

Clockwise from top left: Antonio Armellini; David Marsh, Lord (Nigel) Lawson; Lord (David) Owen

The confused state of the single currency, amid a general air of crisis in Europe, has big implications for the British referendum on the European Union on 23 June. This was the topic of discussion at the launch at the Reform Club in London on 22 March of the updated edition of *Europe's Deadlock – How the euro crisis could be solved and why it still won't happen*, by David Marsh, OMFIF managing director.

The book's suggestions for resolving the crisis – including establishing a European treasury and finance ministry and making European governments rather than national central banks the owners of the European Central Bank – are highly unlikely to be realised, as Marsh admits.

Antonio Armellini, a former Italian ambassador to India, argued that the EU is a 'political project' and that the euro is a 'tool' for achieving this. He warned of the dangers for the rest of Europe if the UK left, suggesting it 'could be the end of Europe' and encourage rising nationalism.

Lord (Nigel) Lawson, a former UK chancellor of the exchequer and one of the leaders of the 'leave' campaign, criticised this approach to integration. He highlighted the historical experience of unification in the US, Germany and Italy, in which 'political union came before monetary union'. He suggested that the only two possible solutions to the 'euro disaster' were to abandon the single currency altogether or accept 'full-blooded political union'.

All the speakers, including Lord (Meghnad) Desai, chairman of the OMFIF advisory board, and Lord (David) Owen, former UK foreign secretary, outlined alternatives to the status quo.

These included Armellini's idea of a system of 'two Europes', in which a federal 'core' based around countries committed to the euro pursued closer integration while creating an 'outer' grouping based around an enhanced free trade zone.

Central banks as pawnbrokers

Central banks must switch from being 'lenders of last resort' to becoming 'pawnbrokers for all seasons' to curb banks' excesses and stabilise the financial system, according to Lord (Mervyn) King, the former Bank of England governor.

Presenting his new book *The End of Alchemy* to an OMFIF meeting in London on 15 March, King said the financial crisis showed how central bank regulation had to be overlhauled. Central banks needed to be able to step in to support banks in difficulty, provided they lodged adequate collateral in the form of high-quality government securities in a system akin to the ancient trade of pawnbroking, under which loans are advanced to anyone who pledges collateral sufficient to cover the loan.

Only by ensuring that liquidity insurance is paid in advance will the incentive for bank runs be eliminated, King said. This means that private financial intermediaries should bear the cost of the risks they brought to the system.

For a review of The End of Alchemy, see p.22

Germany: UK must stay in EU

Germany would prefer the UK to remain in the European Union so the two countries can help forge a joint European future, Wolfgang Schäuble, the German finance minister, said at a joint OMFIF-German British Forum conference in London on 3 March.

Speaking about the in-out referendum on 23 June, Schäuble said he did not wish to prejudge the outcome of the British vote, but Germany had become accustomed to working with Britain on a range of economic and political issues and he hoped this would continue. He understood the British desire for more deregulation in services in the EU economy and this needed to be on the agenda.

International meetings

The fintech policy landscape
Susan Lund, partner at McKinsey Global Institute, discusses the retrenchment of traditional financial institutions.
7 April, London

Pre-IMF Spring Meetings roundtable
OMFIF and State Street Global Advisors host discussions on the challenges facing public investors in 2016 and beyond.
12-13 April, London

The future of wholesale funding markets
A breakfast meeting to discuss BNY Mellon's report on the future of bank funding and market operations.
14 April, Washington

What have we learned from the euro crisis?
Conversation between Paul Volcker, former Federal Reserve chairman, and Athanasios Orphanides, professor of the practice of global economics and management at Massachusetts Institute of Technology.
18 April, Washington

Prospects for the American economy
Robert Steven Kaplan, newly-appointed president of the Federal Reserve Bank of Dallas, a former Goldman Sachs vice chairman, discusses the US monetary and growth outlook.
29 April, London

Negative rates and Japanese economy

The opportunities and limitations of Japan's unconventional monetary policies were outlined on 1 March in London by Akinari Horii, former assistant governor of the Bank of Japan and OMFIF advisory board member. Horii believes the bank's new move into negative interest rate territory could damage the monetary transmission mechanism. He described the measures to offset negative effects on consumers and banking profitability through a 'tiering' system.

Merkel 'cannot go on forever'

Michael Stürmer, the veteran German political commentator and OMFIF advisory board member, discussed Chancellor Angela Merkel's setbacks in the 13 March regional elections in a telephone briefing on 14 March. Merkel could draw some comfort from the weakness of the Social Democratic party, her partner in the Berlin coalition and main opponent for her Christian Democrats in the 2017 general election. Yet she 'could not go on for ever,' Stürmer said.

GPIs seeking investments for growth

GLOBAL PUBLIC INVESTOR 2016

The objectives and portfolio choices for Global Public Investors were discussed on 22 March in London. Participants were optimistic on the outlook for economic growth, however concerns were raised that much of this growth was in places where GPIs cannot access it. Though the situation is improving in China, in India there is still room for improvement. Many delegates expressed dissatisfaction with the lack of structure in many markets for investors to take long-term risks.

König sees increased financial stability

Elke König, chair of the Single Resolution Board, told an OMFIF City Lecture on 3 March that a bank should be able to fail without dragging whole countries' economies with it – just like any other business. She said that the SRB will reinforce financial stability by addressing and overcoming resolution obstacles. Financial institutions will be more robust, more resistant and the regulatory landscape more efficient – a sign that measures taken over the last few years have helped increase financial stability.

Slow progress for women in central banking

Figures unchanged: 15 female chiefs in 191 institutions

The influence of female central bankers over international monetary policy has increased during the last year but progress has been slow, according to the OMFIF Index of Female Central Bankers. The index reached 2.19 (out of a maximum of 10) at the end of 2015, up from 2.07 the year before and 0.90 in 2013. The index calculates the positions held by women, as governors and as members of policy-making boards, weighted by their nation's GDP and G20 positions.

The large increase in the index between 2013 and 2014 reflected Janet Yellen's ascension as chair of the Federal Reserve in early 2014 which, given the size of the US economy, had a significant impact. Without this, the 2014 index would have fallen by 0.03, to 0.87. The 0.12 increase in 2015 therefore appears to represent the rather modest underlying trend.

The number of female central bank governors in 2015 remained unchanged at 15 out of 191 institutions. The increase in the index mainly reflects the relative increase of the GDP of the Bahamas, Malaysia, the Maldives and Israel (all with female governors), moving their countries up the rankings by four, two, one and one places, respectively. G20 countries maintain a strong representation of women in senior but sub-gubernatorial central banking positions, but after progress in 2014 there were no new additions in 2015. Hu Xiaolian, deputy governor of the People's Bank of China, left to join the Export-Import Bank of China in February 2015, reducing the weighting of the board component.

So far in 2016 Wendy Craigg, governor of the Central Bank of the Bahamas, has stepped down while Zeti Akhtar Aziz, governor of Bank Negara Malaysia, is due to retire on 30 April. Nazneen Sultana, deputy governor of Bangladesh Bank, lost her job in March as a result of a 'cyber heist' at the central bank. After Yellen and Elvira Nabiullina, governor of the Central Bank of the Russian Federation, Zeti's position up to now has provided the biggest individual weighting to the index, due to Malaysia's relatively large GDP. As a result of these changes, the index by the end of this month will have fallen 0.14, to 2.05, so 2016 may turn out to represent a year of setbacks for female prowess in central banking.

There have been a few new female appointments this year, including Sharon Donnery, deputy governor of the Central Bank of Ireland (in March), and Kateryna Rozhkova, acting deputy governor, National Bank of Ukraine (since January). However, both these countries are outside the G20, so their appointments have no bearing on the OMFIF index. ■

The Index is calculated using two components. The first weighs the GDP of countries with a female central bank chief against the world total. The second component computes the percentage of women in G20 central bank board positions. Each component is weighted equally at 50%. This index uses revised figures for 2013 and 2014, which have been updated since publication in January 2015.

Female central bankers have remained in decision-making positions in several industrialised countries

Lael Brainard, Board Member
US Federal Reserve (from June 2014)
Previously Treasury under secretary for international affairs.

Claudia Buch, Deputy President
Deutsche Bundesbank (from May 2014)
Previously president, Halle Institute for Economic Research (2013-14).

Esther George, President
Federal Reserve Bank of Kansas City (from October 2011)
Previously executive vice president of supervision and risk management (2009-11).

Sabine Lautenschläger, Board Member
European Central Bank (from April 2014)
Previously deputy president, Deutsche Bundesbank (2011-14).

Anne Le Lorier, First Deputy Governor
Banque de France (from November 2011)
Previously at EDF group (2002-11) including responsibility for corporate finance and treasury management.

Andrea Maechler, Board Member
Swiss National Bank (from July 2015)
Currently deputy division chief, IMF monetary and capital markets department.

Anna Trzecińska, Vice President
National Bank of Poland (from November 2014). Previously deputy president of the Bank Guarantee Fund (2009-14)

Loretta Mester, President
Federal Reserve Bank of Cleveland (from June 2014)
Previously executive vice president and director of research at Federal Reserve Bank of Philadelphia.

Marta Evelyn Rivera, Vice President
Central Reserve Bank of El Salvador (from June 2014)
Previously president of the bank (2013-14).

Nemat Shafik, Deputy Governor
Bank of England (from August 2014)
Previously IMF deputy managing director (2011-14).

Sayuri Shirai, Member of Policy Board
Bank of Japan (from April 2011)
Previously associate professor (1998-2006), then professor at Keio University (2006-11).

Nazneen Sultana, Deputy Governor
Bangladesh Bank (January 2012-March 2016)
Previously executive director. Joined bank 1980.

Carolyn Wilkins, Senior Deputy Governor
Bank of Canada (from May 2014)
Previously adviser to governor, secretary to governing council.

Ksenia Yudaeva, First Deputy Governor
Central Bank of the Russian Federation (from 2013)
Previously chief of experts directorate, presidential administration.

In 15 countries, led by the US, female governors still at the helm – but mainly in less developed nations

Janet Yellen, Chair, Federal Reserve (from Feb 2014)
Previously Federal Reserve vice chair (2008-14), president, Federal Reserve Bank of San Francisco (2004-10). She was chair of the White House Council of Economic Advisers under President Bill Clinton, and Professor Emeritus at the University of California, Berkeley, Haas School of Business.

Caroline Abel
Central Bank of Seychelles (from March 2012)
Previously first female deputy governor (2010-12).

Azeema Adam
Maldives Monetary Authority (from April 2014)
Previously assistant governor and chief economist, monetary policy and statistics. Joined bank 1991.

Maiava Atalina Emma Ainuu-Enari
Central Bank of Samoa (from August 2011)
Previously manager, financial markets department. Joined bank 1991.

Zeti Akhtar Aziz
Bank Negara Malaysia (May 2000-Apr 2016)
Previously acting governor (from 1998), senior positions including reserve management. Joined 1985.

Maria do Carmo Silveira
Central Bank of Sao Tome e Principe (from Mar 2011)
Previously prime minister (2005-06), governor (1999-2005).

Wendy Craigg
Central Bank of The Bahamas (Jun 2005-31 Dec 2015)
Previously deputy governor and board member (1997-2005).

Karnit Flug
Bank of Israel (from November 2013)
Previously deputy governor (from 2011). First joined bank 1988, rejoined 1997.

Chrystalla Georghadji
Central Bank of Cyprus (from April 2014)
Member of ECB governing council. Previously Cyprus auditor general (1998-2014).

Valeriia Gontareva
National Bank of Ukraine (from June 2014)
Previously chairman, Investment Capital Ukraine (2007-14).

Rets'elisitsoe Adelaide Matlanyane
Central Bank of Lesotho (from January 2012)
Previously second deputy governor (2006-07), first deputy governor (2007-12).

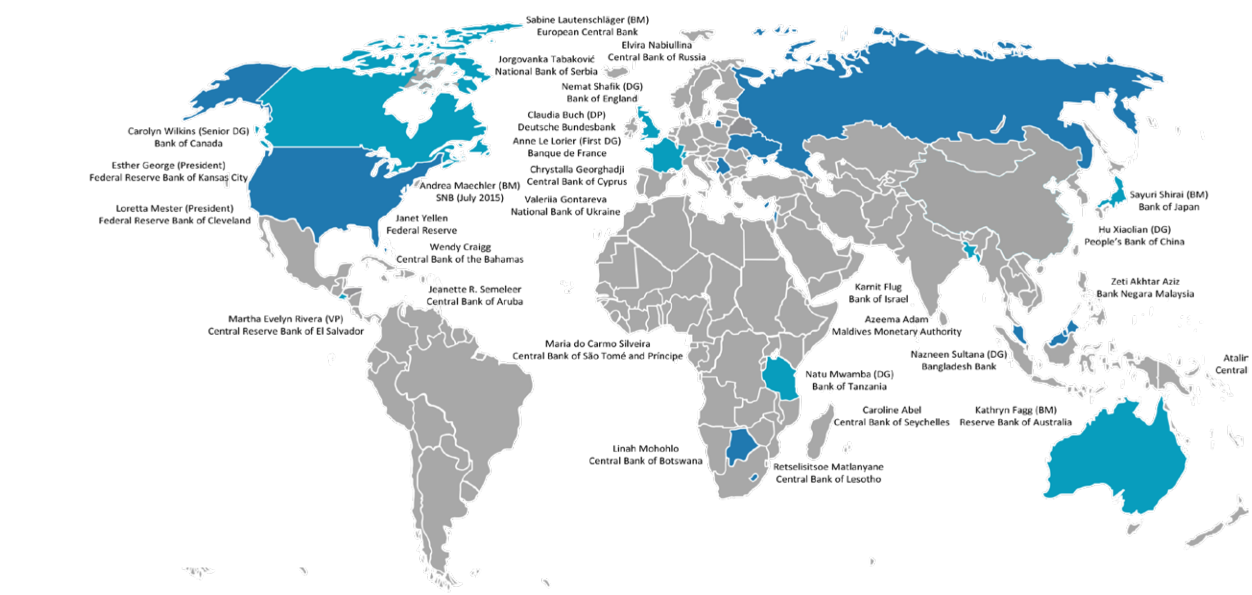
Linah Kelebogile Mohohlo
Bank of Botswana (from October 1999)
At bank for over 30 years. Previously at International Monetary Fund.

Elvira Nabiullina
Central Bank of the Russian Federation (from June 2013)
Previously minister of economic development (from 2008), aide to President Putin (2012-13).

Jeanette Semeleer
Central Bank of Aruba (from September 2008)
Previously executive director (2000-2008) after working in research department. Joined bank 1990.

Jorgovanka Tabaković
National Bank of Serbia (from August 2012)
Previously minister of economic and ownership transformation (1998-2000).

Female central bankers spread out across the world



A means of strengthening the workforce

Increasing female participation improves bottom line

Christine Lagarde, International Monetary Fund

The more women in senior managerial positions and on corporate boards, the more profitable firms are. One more woman in senior management or on a corporate board is associated with an 8-13 basis points higher return on assets.

The results of a 2016 International Monetary Fund staff study of 2m firms in 34 countries in Europe are clear: increasing female participation improves the bottom line. It is difficult to extrapolate the findings of this study directly to central banks but, in general, the same basic conclusions are likely to hold true: bringing more women into the field of central banks can only be beneficial to the overall performance of the institutions concerned.

The whole economy benefits

Bringing more women into the labour force benefits a country's economy in two important ways. First, more women working will expand labour supply. If women choose to participate in the labour market as much as men do, Europe's workforce could increase by 6%. If they also choose to work as many hours as men, the effective labour supply could grow by as much as 15%.

Second, the prevalence of full-time female employment is a strong predictor of the share of senior corporate positions held by women. More women in senior managerial positions and in corporate boardrooms, the IMF staff study confirms, is associated with stronger firm financial performance. This would help support corporate investment and productivity, further mitigating the slowdown in potential growth in Europe.

The positive relationship between more women high on the corporate ladder and firms' profitability is more pronounced, the study finds, in sectors where women form a larger share of the labour force. This highlights the importance of bridging gender gaps between senior executives and the general workforce. This positive association is more evident in knowledge-intensive services and high-tech manufacturing sectors – where diversity, including gender diversity, can help meet high demand for creativity and innovative capacity.

> ***"More women in senior managerial positions and in corporate boardrooms is associated with stronger firm financial performance.***

More working women

There is scope to bring more women into the labour force. In almost all European countries, women are significantly less active in the labour market than men. Even those women who are employed often work less than full-time. Although women today make up almost half the European labour force aged 25-54, their representation on the top rungs of the corporate ladder is significantly below that of men.

In regions like Europe, where populations are aging, the working-age population is being squeezed, and productivity growth is declining, there is more incentive than ever to improve opportunities for women to work full-time and climb in the employment stakes.

Over the past three decades, millions of women in Europe have joined the labour force. Countries such as Spain and Ireland have seen the share of women who work outside the household double since the 1980s – from under 40% to more than 80% in the case of Spain. In several Nordic and eastern European countries, women today are almost as likely to work for pay as men are.

At the same time, legal requirements for gender diversity in corporate boardrooms have helped boost women's representation in top decision-making positions – women now hold almost a quarter of senior management or board positions in the corporate sector.

Policies matter

Women's personal preferences and attitudes toward working are important determinants of their decision to join the labour force. This is especially true in Europe, where women today face no legal restrictions to employment, are just as educated as men, and have fewer children – and social norms have changed.

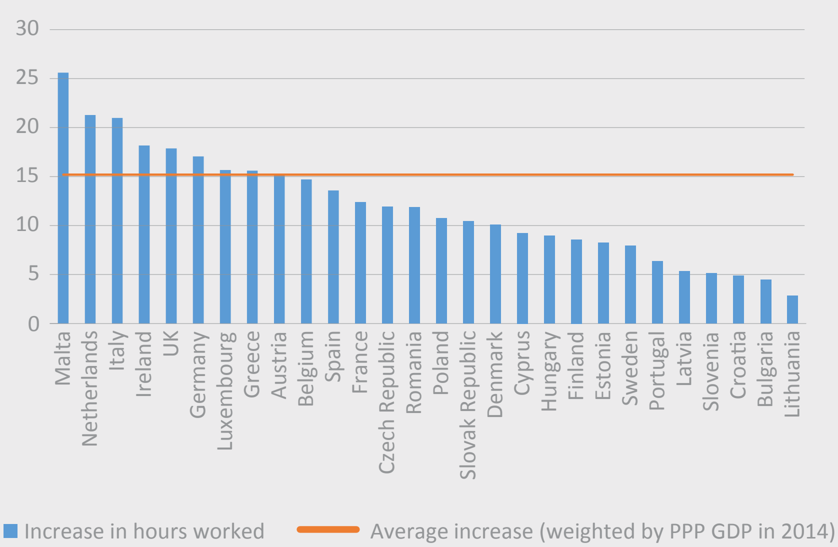
The study finds that policies also have an important influence on women's employment decisions, even after accounting for individual characteristics, choices, and preferences about working. Removing tax disincentives for the second earner in a family, providing sufficient childcare services, and allowing parental leave can broaden the opportunity for women to work as much as they want.

Women have made big advances in employment status in Europe, but this is only a staging process in a long journey. The potential benefits can be large. We must not miss this opportunity. More women in the labour force, and in more senior positions is good news for women, for their companies, and for their countries' economies. ■

Christine Lagarde is Managing Director of the International Monetary Fund. This is an edited version of Christine Lagarde's blog, found at http://bit.ly/1TplBQ1. The IMF staff study can be found at www.imf.org/external/pubs/ft/dp/2016/eur1601.pdf

Eliminating the gender gap would increase the labour supply

Gains from eliminating the gender gap in participation and in hours (%)



Sources: Eurostat and IMF staff calculations.

Hawks and doves divided on expectations

Pace of monetary tightening slows amid concerns

Darrell Delamaide, US editor

Hawks and doves at the US Federal Reserve have found a new battleground: inflation expectations.

Inflation finally shows signs of increasing – the core personal consumption expenditures measure preferred by Fed policy-makers moved up to 1.7% in January from 1.4% the previous month. However the newest concern expressed by doves slowing the gradual tightening of monetary policy is that inflation expectations remain low and may even become 'unanchored'.

For the moment at least, the doves have the upper hand – which is to say, the ear of Chair Janet Yellen. Cautioning that 'economic conditions will evolve in a manner that will warrant only gradual increases in the federal funds rate,' the Federal Open Market Committee left the key federal funds rate unchanged at its meeting on 16 March. Other data indicated that panel members now expect only two rate hikes this year, instead of the four indicated in December.

The consensus statement from the March meeting noted the increase in inflation, but added that it was still below the Fed's 2% target. 'Market-based measures of inflation compensation remain low,' the statement said. 'Survey-based measures of longer-term inflation expectations are little changed, on balance, in recent months.'

Though the nod to inflation expectations is part of the Fed's formulaic statement each month, Yellen explained in the press conference following the meeting that uncertainty about expectations is tempering the Fed's view of how gains in employment are impacting inflation.

The Phillips curve – which posits that inflation will increase as unemployment declines – while no doubt still valid, has been quite flat, Yellen noted. She said that the impact of incremental declines in unemployment on inflation should not be 'overstated'.

'The Phillips curve theory suggests that inflation expectations are also an important driver of actual wage and price-setting decisions and inflation behaviour', Yellen said in response to a question. 'I believe there's also solid empirical evidence for that.'

Unfortunately, the measures for inflation expectations, whether surveys or market indicators such as risk premia, are imperfect and don't give a clear picture.

Not everyone on the FOMC agrees with this assessment, as Yellen acknowledged when she said, 'This model continues to at least influence my own thinking. It certainly is a factor that I, and at least some of my colleagues, are incorporating in these projections.'

One of those who shares this view and who has emerged as the chief dove in this debate is Fed Governor Lael Brainard, a former Treasury official.

'Inflation has persistently underperformed relative to our target', Brainard cautioned at a Washington bankers conference in early March. 'Moreover, measures of inflation compensation and some survey-based measures of inflation expectations suggest that inflation expectations may have edged lower. Given the currently weak relationship between economic slack and inflation and the persistent, depressing effects of energy price declines and exchange rate increases, we should be cautious in assessing that a tightening labour market will soon move inflation back to 2%.'

"The newest concern expressed by doves slowing the gradual tightening of monetary policy is that inflation expectations remain low and may even become 'unanchored'.

Another official calling for caution on tightening is William Dudley, head of the New York Fed and a permanent voting member on the FOMC. 'This continued period of low headline inflation is a concern, in part because it could lead to significantly lower inflation expectations,' he said in China at the end of February. 'If this drop in inflation expectations were to occur, it would in turn tend to depress future inflation.'

Surveys of household expectations have declined over the past year to historic lows, he noted. 'To date, these declines have not been sufficiently large for me to conclude that inflation expectations have become unanchored,' he said. 'However, these developments merit close scrutiny.'

But the hawks are becoming restive with all this scrutiny of cloudy expectation measures.

'I think we need to get on with it,' Philadelphia Fed chief Patrick Harker told bond traders at a New York conference. 'There is a strong case that we need to continue to raise rates.'

Atlanta Fed Chief Dennis Lockhart suggested the economy was strong enough for a rate hike sooner rather than later. 'There is sufficient momentum evidenced by the economic data to justify a further step at one of the coming meetings, possibly as early as the meeting scheduled for end of April,' he told a business group in Savannah, Georgia.

Fed Governor Lael Brainard

Showing that the lines between hawk and dove are becoming blurred, San Francisco Fed chief John Williams continued to align himself with those favouring another rate increase right away.

'Assuming everything else is basically the same and the data flow continues the way I hope and expect, then April or June would definitely be potential times to have an increase in interest rates,' he said in an interview with Deutsche Börse's Market News International.

Meanwhile, St. Louis Fed chief James Bullard, who has expressed concern in the past about the low level of inflation, now sees a risk the Fed will overshoot on inflation if it doesn't raise rates further.

'I think we are going to end up overshooting on inflation,' he said in a Bloomberg interview. 'You get another strong jobs report, it looks like labour markets are improving, you could probably make a case for moving in April.'

Bullard criticised aspects of the Fed's communication policy. Despite official protestations that every FOMC meeting is 'live' and could produce changes in monetary policy, markets tend to expect they will come only at those meetings followed by a press conference, so that context for the decision could be provided.

'You should have press conferences at every meeting,' he said in the interview. 'I've long been an advocate of this.' ■

Darrell Delamaide is a writer and editor based in Washington.

Reserve gains for gold and dollar

China, Saudi Arabia lead emerging economies' declines

Ben Robinson, OMFIF Economist

The $263bn net fall in global foreign exchange reserves in the final quarter of 2015 reduces the reserve total to $10.92tn at end-2015, down from a peak of almost $12tn in mid-2014. These headline figures, reported in the International Monetary Fund's currency composition of foreign exchange reserves database, mask important underlying trends.

The IMF stopped breaking down its Cofer reserves data into 'advanced' and 'developing' economies at the end of the first quarter of 2015, reporting instead the aggregate only. Examination of the details behind the numbers produces a more nuanced picture than the decline in overall foreign reserves suggests.

'Unallocated' reserves – the vast majority of which are held by emerging economies – fell by $469bn, making these countries responsible for the bulk of the latest decline. This is supported by country-level data which show that China's and Saudi Arabia's foreign currency reserves fell $195bn and $31bn respectively in the fourth quarter of 2015.

Some advanced economies' reserves also fell (including those of the US and Japan), while a few developing countries' foreign exchange holding increased, although in some cases this was achieved by selling other reserve assets including gold and special drawing rights.

There has been a decline in developing countries' foreign reserves for every quarter since the end of June 2014, just before the oil price collapsed. The $8.06tn of reserves recorded in that quarter has marked the high point of their two decades-long accumulation of reserve currencies.

Financing large deficits

This has consequences for the advanced economies, particularly the US. The accumulation of their currencies by fast-growing emerging economies allowed the industrialised world to borrow cheaply, helping to finance large deficits and to keep their debt repayments sustainable.

If reserves are now on a protracted downward trajectory, financial markets may become more constrained, rich-world borrowing may become more expensive, and asset prices could deflate.

This would have repercussions on developing countries, as loose financial conditions in the West have been one of the main sources of emerging market capital inflows over the past decade.

Reserve managers in some emerging markets such as China see some benefits in declining reserves, as this gives them greater leeway to make active asset allocations based on their underlying assessment of currencies and financial markets.

Some of China's declines are also the result of central bank reserves being used to finance projects including the 'One Belt One Road' land and sea trade route between China and Europe.

Amid the overall sell-off, some reserve currencies have performed better than others. The amount of reserves allocated in dollars increased by $131.5bn, offsetting some of the large unallocated sell-offs and helping to maintain the US currency's share, at over 64%. This is an increase of almost 3 percentage points since mid-2009. The euro's share, by contrast, has fallen by more than 8 percentage points over the same period, from 28% to 19.9%.

As the European Central Bank has shifted progressively to negative interest rates, many countries have reduced the share of euros in their reserves and in some cases sold them entirely.

Some of the increase in the dollar's share is due to the effects of appreciation against other currencies at the end of last year. Most countries see the dollar as the ultimate reserve currency and safe asset in times of crisis. Yet, as a multicurrency reserve system gradually emerges and the global influence of the dollar declines compared with its peak 20 years ago, currencies' roles within the system are likely to undergo considerable fluctuations.

Build up of gold reserves

One important development in reserve assets has been the build-up of gold holdings by developing countries. While total currency reserves fell in the last three months of 2015, central banks made net purchases of 167 tonnes over the same period, an almost 25% increase on the year before. China accounted for around 32% of this increase.

The falling oil price contributed to a high Chinese trade surplus of almost $600bn last year. China is putting more of these earnings into gold rather than dollars. This appears to signal that the Chinese government is backing the renminbi in gold to increase its stability and credibility as a reserve currency, ahead of the renminbi's inclusion in the SDR from October this year.

The increase in gold purchases might reflect the rising value of the dollar in the last three months of 2015, which makes central banks with excess dollars more prepared to convert them into the yellow metal, as well as the fall in the gold price leading up to the Fed's December decision to raise interest rates.

This dollar strength could endure, due to a combination of continued underperformance of other currencies and a further tightening of monetary conditions in the US.

> ***"There has been a decline in developing countries' foreign reserves in every quarter since the end of June 2014. The $8.06tn of reserves recorded in that quarter has marked the high point of their two decades-long accumulation of reserve currencies.***

This would make the build-up of dollar reserves increasingly expensive and could spur a reallocation into other currencies. Risks associated with other reserve currencies, however – in particular the euro and the yen, now that both have moved further into negative interest rate territory – might limit this reserve currency reallocation.

The shares of Swiss francs, Canadian and Australian dollars, yen and sterling have increased but remain relatively small, at 0.3%, 1.9%, 1.9%, 4.1% and 4.9%, respectively. The share of 'other currencies' has declined from 3.2% in the third quarter to 3%. The inclusion of the renminbi later this year will cause a significant rebalancing of the overall allocation of reserves

Reserve accumulation in the next few years is unlikely to match that seen up to mid-2014. However, if currency flows into emerging economies pick up again, reserve managers will have a broader range of assets from which to choose, as the multicurrency reserve system continues its advance. ■

Gold's positive role in a negative world

Central banks turn to bullion to diversify reserves

Ezechiel Copic, World Gold Council

Monetary policy has entered a new and unprecedented phase. Central banks in Denmark, the euro area, Japan, Sweden, and Switzerland have all implemented negative interest rate policies since mid-2014.

Distinct from real interest rates, nominal interest rates are now negative, meaning commercial banks are being charged a small (but noteworthy) rate for deposits they hold with central banks in these countries.

Although these policies were largely devised to counteract deflationary pressures and, in some cases, currency appreciation, negative nominal interest rates could also have a significant impact on central bank reserve managers. Ultimately, this may help boost their demand for gold, the price of which has risen by almost 15% since the start of the year.

Four main factors arising from negative rates should support further central bank investment in gold. The first, and perhaps most obvious, is that negative (or even just very low) interest rates reduce the opportunity cost of holding gold. The 10-year sovereign debt yield curves in Japan and Switzerland are negative, while those in France and Germany are negative beyond five years. Even interest rates in the US and the UK are extremely low across the curve, with debt up to two years yielding less than 1% (Chart 1).

The second factor supporting gold investment is that negative nominal interest rates significantly reduce the pool of assets in which central banks are likely to invest. Reserve managers are typically buy-and-hold investors with limited risk tolerance. As such, they usually invest in safe, liquid assets including advanced country sovereign debt and monetary gold.

The prevalence of negative interest rates, however, has led to around 30% of this debt trading with a negative yield (equal to more than $8tn), while almost 40% is trading between 0% and 1%. Unless reserve managers are willing to commit to a loss-making investment strategy – not something that goes down well with taxpayers – they will need to consider increasing their holdings of gold (Chart 2).

> ***"Increased turbulence in financial markets highlights the need for portfolio diversification – a quality at which gold excels.***

The third factor relates to foreign currencies and potential intervention risks. Some negative interest rate policies were designed and implemented to counter currency appreciation pressures, especially vis-à-vis the dollar. However, since the start of the year, the currencies of all the five advanced countries that have implemented negative rates have appreciated against the dollar, by between 4% and 7%. The longer this situation persists, the greater the likelihood that some may pursue intervention measures. Conversely, no central bank is waiting to intervene in gold, so bullion effectively becomes a less risky asset.

The final factor supporting increased gold investment comes amid growing uncertainty about the effectiveness of negative nominal interest rates.

As investors continue to digest the Bank of Japan's unexpected decision to enter the negative interest rate fray in late January, there is a 'growing perception in financial markets that central banks might be running out of effective policy options', according to the Bank for International Settlements' Quarterly Review, which was released on 6 March.

Claudio Borio, head of the monetary and economic department at the BIS, noted that confidence in central banks was 'faltering'. Increased turbulence in financial markets highlights the need for portfolio diversification – a quality at which gold excels.

According to data from the World Gold Council's latest Gold Demand Trends report, central banks bought more than 336 tonnes of gold in the second half of 2015 – the largest semi-annual total on record.

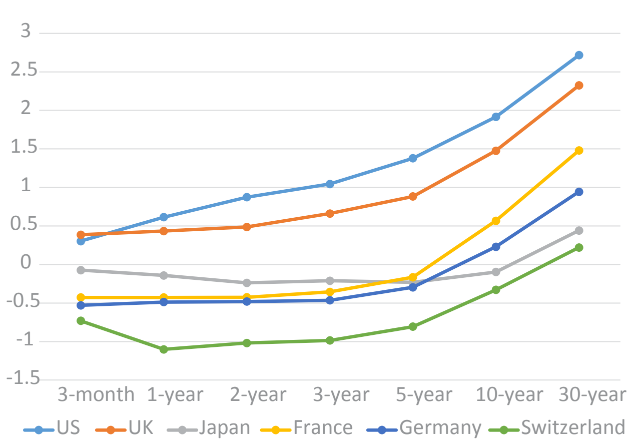
The acceleration of such purchases, across a diverse range of countries, highlights that diversification of foreign reserves remains a top priority for central banks.

As reserve managers continue to grapple with the challenges of negative nominal interest rates, 2016 and beyond are likely to see new record amounts of gold purchases by central banks. ■

Ezechiel Copic is Director, Central Banks & Public Policy at the World Gold Council.

Chart 1. Low, or negative, sovereign debt yield curve

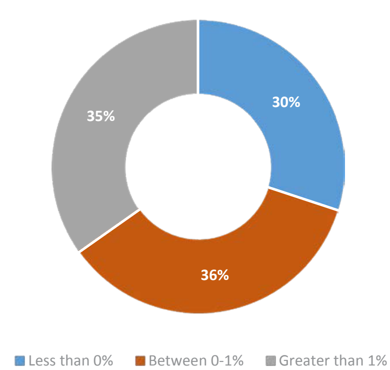
Sovereign debt yield curve, 3 months to 30 years



Source: Bloomberg

Chart 2. Sovereign debt trading at low rates

Advanced economy sovereign debt outstanding



Note: Sovereign debt from Australia, Canada, Denmark, Euro area (investment grade), Japan, Sweden, Switzerland, the United Kingdom and the United States. The total may not equal 100% due to rounding.

Source: Bloomberg

Geopolitics and the monetary system

Jostling for power: the US, China and the others

Paul Tucker, Systemic Risk Council

The international monetary and financial system is being transformed in the wake of the 2007-09 crisis and, separately, by the emergence of a new geopolitics. This was probably the last global financial crisis where the subsequent reform agenda was framed largely via deep transatlantic relationships.

Many of the rising economies already have a seat at the table, via the G20. Next time round, they will be active, perhaps leading, participants.

And next time, we might, for the first time in well over a century, live in a world with parallel reserve currencies – and with the major banks and other globally active intermediaries domiciled across the whole world rather than, as now, largely in the US, the UK, Switzerland, France and Germany.

New reserve currencies might emerge alongside the dollar, seen in the infrastructure to support renminbi transactions and trading outside China, and in the currency's addition to the Special Drawing Right. It would be surprising if China did not entertain such thoughts or plans.

Much is made of the world reserve-currency issuer's 'exorbitant privilege', in terms of geopolitical returns and reduced funding costs. To that standard list should be added its value as an economic shock absorber and, therefore, domestic political insurance policy.

By enjoying reduced funding costs as the world rushed to buy treasuries, the dollar's pivotal status helped America weather its biggest domestic economic and financial crisis for nearly 80 years. This effect must have been noticed in the capitals of the rising economic powers.

The dynamics of geopolitics

The future international monetary system, and the possibility of a multipolar reserve currency world, will be determined by, and influence, the dynamics of geopolitics.

There are four broad possibilities. The first scenario is for a dollar system under a modified Washington consensus. Continued dollar centrality is most likely if the US economy performs well, and if the US exercises its power prudently.

Performing well includes continuing to be the world's engine of technical innovations that drive productivity improvements. It includes avoiding boom and bust, especially another US-led global crisis. It also requires long-run fiscal and external sustainability, so that the US can sustain the costs of a Pax Americana in international defence and security.

Second, in a tense world, we could see rival reserve currencies and overlapping zones of influence. The public good of a single numeraire and common medium of exchange for international economic activity would begin to unravel.

The US and China might vie for economic and political influence. Asian currency politics would become ever more entangled with the territorial politics of the South China Sea and with the development politics of Africa and Latin America. The main currency issuers would reward allies with currency swap lines, and would seek to tie others by encouraging wide use of their currency. It would be a world of fierce competition for placements and patronage within the main global institutions.

> ***"Unless monetary policy-makers can convince politicians that, with floating exchange rates, monetary easing is not a form of currency war, such controls could become attractive to big economies too.***

Third, and more benignly, a more balanced multipolar system could emerge in which a number of other countries, as well the two economic superpowers, are successful enough to sit at the top table. These might include India, conceivably Indonesia, Mexico and Brazil.

Four scenarios for monetary system

- Dollar system under a modified Washington consensus
- Rival reserve currencies and overlapping zones of influence
- Balanced multipolar system
- Economic and financial protectionism

There would be a question about European representation. Germany is unlikely to be big enough on its own for top table membership, so Europe as a whole would have to be a success, requiring profound reforms in its monetary union.

As with the first scenario, the international monetary rules would require adjustment. Leadership of international institutions would either rotate amongst the top table powers or move to the second level of countries that were big but not amongst the biggest.

The fourth scenario would be a dangerous and impoverished world of retreat to economic and financial protectionism, even autarky. The great powers, few or many, would struggle for strategic and military supremacy as the economic and civilising benefits of international trade eroded.

No one would design or plan for this world, but we could slip into it. History will remember favourably the anti-protectionist sentiments of the G20 summits held in 2008 and 2009. But it takes work to hold that position.

Creeping capital controls

Some of that is technical. Solutions to the problem of 'too big to fail' financial institutions will need to be truly embedded and executed. Unless macroprudential measures can insulate relatively small open economies from violent capital flows, capital controls will creep back in.

Unless monetary policy-makers can convince politicians that, with floating exchange rates, monetary easing is not a form of currency war, such controls could become attractive to big economies too. Of those four scenarios, the first and the third are more attractive. Whatever happens, geopolitics and the monetary system will be intertwined.

Decades pass during which international monetary affairs and foreign policy proceed in largely parallel universes, when the international balance of power and the institutional structures behind it are broadly settled. Over the next quarter or half century, that is unlikely to be the case. ■

Sir Paul Tucker is Chair of the Systemic Risk Council, Fellow at the Mossavar-Rahmani Center for Business and Government at Harvard Kennedy School, Harvard University, and a former Deputy Governor of the Bank of England. This text is taken from the 2016 Tacitus lecture 'A New International Monetary System In A New World Order'. For more details about the lecture see www.world-traders.org/tacitusPastLectures.php

Brexit threat to London's euro role

Benefits of EU membership by top three economies

Christian Noyer, former Governor, Banque de France

Christian Noyer, former governor of the Banque de France, speaking at the OMFIF-German British Forum dinner

As Winston Churchill said in his 1946 'United States of Europe' speech, the revival of Europe, and the subsequent development of the European Union, could proceed only as a joint effort of Germany and France. If they disagreed, no progress was possible; if they agreed, many things were within reach.

The UK, joining the then European Community in 1973, has been key in several instances. One was the EU's eastern enlargement after the fall of the Iron Curtain. In Germany, and even more in France, public opinion and politicians, while supportive in principle, appeared more cautious. This was due to the associated cost and risk of weakening a culture developed over several decades, and protected through very cautious enlargements in terms of the number of countries involved in each step.

A second instance involved the establishment of the European single market in the 1980s and 1990s. The Common Market, as the Community was called, was functioning well for the exchange of goods, but it was less effective for the provision of services, of which financial services was of major interest to the City of London.

In the single market, the free provision of services (directly from one country to the other) is made possible, in fair competition, because of common regulations – banking, insurance, financial services and financial market regulations. The UK was key in defining these principles and pushing in favour of the agreement.

EU and EMU duality

EU membership by Europe's three major economies has been a factor for overall progress. One major issue lies in the creation of a two-tier system, with Britain outside economic and monetary union. The very low probability of the UK joining the euro transforms a legal exception into a permanent shift, which raises problems.

The UK fears that the EMU majority could 'dictate' EU rules. This fear can be addressed; I do not see for the time being any risk that euro members could act as an EU voting bloc. But Britain cannot enjoy a permanent exemption to any rule that is an essential component of the single market. This would destroy its rationale and effectiveness.

For France and Germany, the duality of the geographical areas of the EU and EMU is a complication. In making necessary EMU decisions, the Eurogroup of finance ministers does not have the legal authority of the Council of Ministers. For democratic accountability, there is no EMU parliament. The European Central Bank president holds hearings before a parliament of the whole EU, not just that of EMU.

Refining the institutional setup is probably inevitable, for matters which are specifically and only relevant for EMU members. The same could be said of the banking union, although in principle it could be a larger area than that of EMU.

> ***"If Britain left the EU, the euro area authorities could no longer tolerate such a high proportion of financial activities involving their currency taking place abroad.***

Regarding the consequences of Britain's 23 June referendum, I cannot see any circumstance in which the UK could benefit from the single market without observing its regulations. Nor do I see the possibility of associating the UK in designing these regulations if it is no longer in the EU.

London and euro trading

I would like to focus on London's position in euro trading. It is already very difficult for euro members to accept that our currency is largely traded outside the currency area, beyond the control of the ECB and of euro area institutions such as market regulators. When tensions occur and risks materialise, the interests of a foreign financial centre might take priority over those of the currency area itself.

That can be acceptable only if, and as long as, the UK is a member of the EU, and accepts the involvement of, and co-operation with, the European regulatory agencies. If Britain left the EU, the euro area authorities could no longer tolerate such a high proportion of financial activities involving their currency taking place abroad.

Looking at the future more positively, building the EU has been a beneficial undertaking for the three major economies, and for the entire continent. It is an original concept: neither a federation nor a simple free-trade agreement, allowing nations with a large degree of sovereignty to develop specific co-operation.

The EU has considerably changed over the years, in size and in substance. The EU is not a frozen concept. It is not true that we should simply either accept its faults, or reject it as a whole. If there are problems, most likely damaging all our countries, let us fix them. ■

Christian Noyer was Governor of the Banque de France between 2003 and 2015, Chairman of the Bank for International Settlements between 2010 and 2015, and Vice-President of the European Central Bank between 1998 and 2002. This article is an abridged version of a speech at the OMFIF-German British Forum conference dinner in London on 3 March.

Challenges facing monetary transmission

Supply side measures needed to strengthen economy

José Manuel González-Páramo, Advisory Board

Ever since the global financial crisis of 2007-08, the task of sustaining economic growth and preserving financial stability has fallen on the shoulders of central banks. In fact, they have consolidated their traditional monetary role as guarantors of price stability, while also actively preventing the financial system's collapse by providing liquidity to the banking system.

The toolkit in the hands of central banks has proved much richer than could have been expected before the crisis. Among the instruments widely used by major central banks, both during and after the crisis, it is worth underscoring two – sizable expansion of their balance sheets, and negative interest rates.

Expansion of balance sheets

The nature of the expansion of central banks' balance sheets has varied. At the start of the crisis, the US Federal Reserve, the Bank of England and the Bank of Japan embarked on large-scale asset purchases aimed at sustaining asset prices to avoid a banking solvency crisis.

By contrast, in the euro area, where the retail banking sector plays a larger role as credit provider to the real economy, the European Central Bank initially expanded its balance sheet by offering long-term refinancing operations of up to three years. Such 'emergency' measures were aimed at avoiding a banking liquidity crisis.

More recently, in view of mounting concerns over deflationary risks, the ECB launched a monthly programme of outright purchases, including public bonds and private assets (asset-backed securities, covered bonds and, since 10 March, investment-grade corporate bonds).

The launch of a new series of targeted longer-term refinancing operations is aimed at stimulating credit while reducing uncertainty over banks' funding needs.

The introduction of negative rates

Some central banks – including the ECB and those of Switzerland, Sweden, Denmark and Japan – have complemented expansionary monetary policies with another innovative measure: rate cuts that have left reference rates in negative territory.

In some cases, negative rates were aimed at reducing currency appreciation pressures. In others, the objective was to maintain a functioning money market in which commercial banks lend to each other

> ***"The low interest rate environment can be expected to impact negatively on banks' profits and capital, and may counteract some of the desired effects of monetary policy.***

as a means of protecting the monetary transmission mechanism.

Some argue against negative rates in view of their undesirable side effects. In a very extreme case, if interest rates were to go deep into negative territory, there is a risk that depositors could switch to cash, which pays no interest but does not charge any either.

The experience of other countries offers very limited evidence for the effective lower bound for the ECB´s deposit rate. I do not think that precedents are easily transposed to the euro area, given the existence of different jurisdictions where 'ease of cash transactions' can vary from one to the other. We are not quite at the floor yet. Retail deposit rates have remained insulated from deposit rate cuts once the zero bound has been crossed.

But cutting rates deeper into negative territory could seriously weaken the transmission of monetary policy. As banks are reluctant to pass on the cost to depositors and eager to shield shrinking profits, they may be forced to re-price some credit segments, negatively affecting the credit.

The low interest rate environment can be expected to impact negatively on banks' profits and capital, and may counteract some of the desired effects of monetary policy.

Impact on exchange rates

Last but not least, I should mention the 'unintended' global spillover effect of negative rates, namely the impact on exchange rates (both on level and volatility) – a growing source of concern against a background of high uncertainty.

The ECB´s 10 March announcement that the bank's governing council would opt for further unconventional measures (balance sheet expansion) over additional rate cuts has shed light on how central banks acknowledge the side-effects of negative interest rates. In fact, the ECB did not introduce a tiered deposit rate (one of the possible measures), in a signal that further rate cuts are unlikely.

Central banks have been working flat out since the onset of the crisis. Arguably, the marginal effect of each additional measure is declining and some monetary policy actions could prove counterproductive.

Financial markets are increasingly questioning whether monetary policy is close to reaching the limits of its effectiveness in developed economies, and whether central banks are out of effective ammunition. Against this background, the debate about 'helicopter money' comes to the fore. Its implementation would face legal hurdles in some jurisdictions, namely in the euro area, where the EU treaty bans direct funding to governments.

Against this backdrop, while current economic conditions require a very accommodative monetary policy stance, monetary policy alone is not sufficient to restore sustainable growth. Other policy domains should contribute to strengthening the economic recovery, particularly from the supply side. ■

José Manuel González-Páramo is a Member of the Executive Board of Grupo BBVA and former ECB Executive Board Member.

ECB monetary policy decision – 10 March 2016

- Interest rate on main refinancing operations cut to zero
- Interest rate on marginal lending facility cut to 0.25%
- Interest rate on deposit facility cut to -0.40%
- Monthly purchases under asset purchase programme expanded to €80bn
- Investment grade euro-denominated bonds issued by non-bank corporations eligible for regular purchases
- Four targeted longer-term refinancing operations (TLTRO II), with a maturity of four years, launched from June 2016

When conventional tools need a boost

Why Hungary has adopted targeted monetary measures

Barnabás Virág, Magyar Nemzeti Bank

Central banks in an inflation-targeting regime can meet their inflation objectives on a long-term basis only through steady economic expansion. Consequently, policy instruments that generate only one-off price shocks without contributing to steady economic growth do not facilitate sustainable price stability.

This realisation has contributed to the extension of central banks' mandate in recent years. Inflation targeting has become more flexible and central banks have placed greater emphasis on attaining sustainable growth and financial stability.

Experience suggests that, in addition to their general tools, central banks expanded the use of targeted instruments to help attain their broadened objectives in a low interest rate environment. The advantage of targeted tools is that they avoid fragmented monetary channels and the resulting frictions, allowing the central bank to achieve its desired stimulus without impediment.

An active central bank role

In line with these circumstances, the Magyar Nemzeti Bank has adopted a more active central bank role. The Bank's actions take into account the low inflationary environment, the risks of high indebtedness and the vulnerability of the banking system owing to the large volume of Swiss franc-denominated mortgage loans and the slow recovery.

In terms of conventional instruments, the MNB has sought to manage deflationary risks and support economic recovery by a substantial easing cycle, reducing its policy rate to 1.2% from 7% in the period between August 2012 and March 2016. In addition, it applied a number of targeted, unconventional tools to meet the challenges it faced.

The MNB's measures included providing cheap collateralised refinancing to banks to back lending to the small and medium-sized business sector, under the so-called Funding for Growth Scheme, reversing the declining trend in corporate lending.

The conversion of Swiss franc-denominated mortgage loans has improved the economy's shock-absorbing capacity and strengthened the damaged monetary policy transmission mechanism. Interest rate cuts and a programme to improve the economy's self-financing capacity have lowered Hungary's external vulnerability, reducing gross external debt and long-term government securities yields.

Looking ahead, the asset management company established by the MNB based on its macroprudential mandate will improve the efficiency of the credit channel through a reduction in banks' portfolio of non-performing real estate loans. These measures provide an effective, long-term stimulus to the real economy, supporting the sustainable achievement of the inflation target.

Developing capital markets, in general, provide an important way for central banks to allow companies to access alternative funding. Risk premia can be lowered using central banking measures to reduce the economy's vulnerability and improve the traditional transmission mechanism.

Crisis management

In contrast with Hungarian practice, along with lower interest rates, central banks have turned to quantitative easing through large purchases of government and other bonds. These crisis management instruments have side-effects, raising stability risks.

Showing how these instruments have reached the limit of their value, yield curves have typically flattened out as risk premia diminished. The potential impact of further QE appears to be negligible.

In addition, several developed country central banks have introduced negative interest rates, raising questions both in terms of efficiency and bank profitability. Monetary transmission channels have remained fragmented, and bank lending remains subdued.

As a result of the international effect of QE by large central banks, bond issuance has boomed in emerging markets, starting to become dominant in a number of emerging economies. However, as a result of the issuance of corporate bonds in large volumes, rollover and renewal risks may take a heavy toll on stability.

> *"Central banks have turned to quantitative easing through large purchases of government and other bonds. These crisis management instruments have side-effects, raising stability risks.*

Furthermore, currency debt increased considerably in several countries due to favourable interest rate spreads, which itself raises the risk of debt repercussions in future years if exchange rates move adversely.

Taking into account the fact that the most relevant internationally applied conventional instruments have been exhausted by now, central banks need to be more innovative in dealing with future deflationary shocks.

A proper, well-chosen mix of targeted and conventional measures can be more efficient to deal with the challenges posed by the new, low interest rate environment. ■

Barnabás Virág is Executive Director of Magyar Nemzeti Bank (the Central Bank of Hungary).

Latin American funds remain healthy

Challenges to maturing sovereign wealth development

Michael Kalavritinos, BNY Mellon

Since the financial crises of the 1980s and 1990s, central bank reserves in Latin America (Chart 1) have grown significantly, exceeding $700bn, and sovereign wealth funds have evolved in some countries. However, the macro picture is now different. The region will hardly grow in 2016, held back by the end of the commodity super-cycle, slowing growth in China, and the prospect of further interest rate rises in the US.

Latin American central bankers face challenges in trying to mitigate the rate of currency depreciation (through selling reserves) and inflation targeting (by raising interest rates) while political will is tested to ensure public finances remain controlled and structural reforms persevere. Central banks generally have sufficient reserve coverage to support trade, financial flows, exchange rates and banking systems.

Despite declines in reserves and sovereign wealth funds over the past two years, these have grown considerably over a longer period and remain healthy, providing more than sufficient coverage of short-term external debt (Chart 2). A large proportion has been allocated to investment-grade dollar and G7 (Canada, France, Germany, Italy, Japan, the UK and the US) sovereign securities.

As such, the focus has been on short-term rather than long-term liquidity (stabilisation rather than savings), with some exceptions (Chile, Colombia, and Trinidad and Tobago – all commodity exporters). Savings and stabilisation funds have also taken root in recent years, for example in Mexico, Panama and Peru. Some countries, notably Brazil and Peru, have tapped them to finance public spending gaps.

As Latin American sovereign wealth and stabilisation funds mature, they face knowledge, political, regulatory and operational challenges. Although many sovereigns participate in multilateral programmes and seminars, many of these institutions accept that they still face a steep learning curve, specifically in respect of sovereign wealth management. As a senior executive of a South American sovereign wealth fund notes, 'We are used to managing deficits not surpluses.'

Today, many finance ministries, under whose jurisdiction sovereign funds fall, defer to central bank colleagues to manage and service them. However, their experience consists of managing and servicing historically conservative dollar-based portfolios, rather than asset classes further along the risk continuum.

Central banks often pursue conservative strategies to mitigate political, legal, reputational, and headline risks, particularly during times of economic stress. Some, like those of Argentina and Paraguay, display concern with legal claims and the security of their assets in major financial centres by placing their reserves with the Bank for International Settlements.

As many contracts are under New York law, some sovereigns waive immunity under the US Foreign Sovereign Immunity Act. This affords sovereigns certain conditional safeguards but specifies that protections for commercial activities under international law are not applicable.

Technical experience

As sovereign funds diversify away from investment-grade sovereign debt, certain financial institutions, such as global custodians, can provide operational, technological, product, and regulatory expertise. Central bank reserve departments are generally selective in respect of recommending new asset classes or business initiatives to their boards. This is to ensure not only that there is a proper business justification (risk/reward), but that they have appropriate operational infrastructure to support them.

This includes access to real-time position information and pricing, valuations, and performance and risk analytics. It is key they understand if their assets are segregated in the local market; what occurs in the case of insolvency of the sub-custodian; and whether the assets are identifiable in the market.

Partnerships with global financial institutions that are experienced in the sovereign segment and its issues can provide the technical expertise and experience required to support decision-makers as they seek to create safety nets for future generations. However long-standing observers of the region recognise this will be a slow, incremental process.

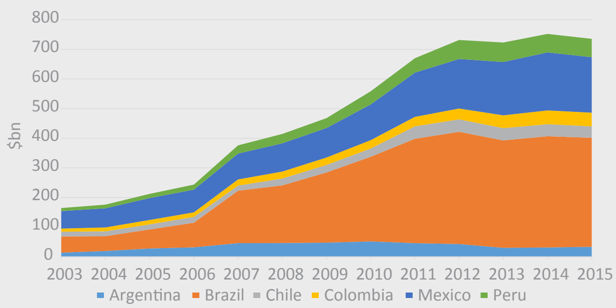
Short-term considerations will take precedence over longer-term ones where reserves and sovereign wealth can play an important role in monetary and fiscal policy. Countries such as Mexico, Chile, Colombia and Peru should be commended for using some of those assets to defend their currencies, supporting fiscal shortfalls while behaving fiscally responsibly.

In classic counter-cyclical style, Chile did this in 2009, tapping $9.2bn to support its economy. Unlike other less responsible countries, such as Venezuela, countries like Chile understand the importance of not losing sight of their long-term aspiration to accumulate and diversify rainy day funds. ■

Michael Kalavritinos is Deputy Head, Global Client Management, Latin America at BNY Mellon. The views expressed herein are those of the author only and may not reflect the views of BNY Mellon. This does not constitute business or legal advice, or any other business or legal advice, and it should not be relied upon as such.

Chart 1: Rapid increase in central bank reserves

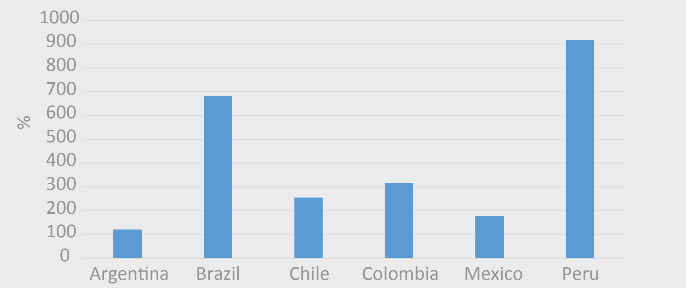
Bank reserve increase, selected countries, 2003-15



Sources: IMF, Central Bank of Brazil

Chart 2: Latin America's improved financial stability

Ratio of foreign exchange to external short-term debt, 2016



Source: Economist Intelligence Unit

Decarbonising financial assets

China played important role in Paris agreement

Edoardo Reviglio, Advisory Board

The agreement reached at December's climate conference in Paris represents a milestone towards stabilising concentrations of greenhouse gas emissions in the atmosphere. Until the last moment many feared a deal would not be reached. The positive outcome was due to the leadership of the world's two largest economies: China and the US.

China's role was particularly important. China is responsible for a large proportion of global greenhouse gas emissions and depends on the Middle East for almost 50% of its oil and gas imports. Pollution levels in the country are unsustainable. And if China wants to become a global leader in the next few decades, it has to 'turn green'.

Since the start of the 2007-08 financial crisis, which caused postponement of limits on carbon dioxide emissions, financial markets have largely neglected (soft) actions by policy-makers to cut greenhouse gas emissions. However, the Paris agreement, and China's role during the negotiations, demonstrate that the world as a whole maintains a strong commitment to that goal.

This raises questions for investors regarding the long-term convenience of holding investments with a high carbon footprint. An important gradual process of 'decarbonisation' appears to be underway in the global financial sector as asset owners increasingly consider climate change-related risks.

'Perhaps the most significant effect of the Paris agreement in the next few years,' wrote The Economist, 'will be the signal it sends to investors: the united governments of the world say that the age of fossil fuels has started drawing to a close.'

There is broad consensus that markets have yet to price in forthcoming taxes on polluting companies. Regulation, fiscal policies and pricing mechanisms (carbon-pricing) are relevant risks to which all investors are exposed. Investors need to act in a timely manner by divesting from polluting companies, decarbonising their portfolios and proactively investing in the transition to a low-carbon economy.

Commitment to transition

The Portfolio Decarbonisation Coalition, the Montreal Carbon Pledge and the Carbon Disclosure Project underline the financial sector's commitment to an energetic transition.

The Portfolio Decarbonisation Coalition is an initiative signed by 25 large investors that will channel investment flows towards carbon-efficient companies, projects and technologies. The initiative aims to 'decarbonise' $600bn of assets under management and supports the Montreal Carbon Pledge. Investors commit to measure and publicly disclose the carbon footprint of their investment portfolios. Disclosing this is particularly important because it demonstrates investors' financial risk.

> *An important gradual process of 'decarbonisation' appears to be underway in the global financial sector as asset owners are increasingly considering climate change-related risks.*

More than 120 investors with over $10tn of assets under management have subscribed to the Montreal Carbon Pledge, which allows investors (asset owners and investment managers) to formalise their commitment to the Portfolio Decarbonisation Coalition's goals.

The Carbon Disclosure Project aims to increase capital flows to low carbon companies, projects and technologies. It works with 822 institutional investors holding $95tn in assets to help them reveal the environmental risk in their investment portfolios, and holds the largest global collection of self-reported climate change, water and forest-risk data.

Profitable investment strategy

To hedge climate risks, investors can either divest from polluting companies in their portfolio, invest in low carbon indices, or invest in green bonds and green companies.

There are two main types of low carbon indices: 'pure-play' indices, including stakes in green companies; and 'decarbonised' indices (or 'green beta indices'), constructed by excluding the largest greenhouse gas emitters from a benchmark index.

A paper by Mats Andersson, Patrick Bolton and Frédéric Samama* shows how investing in a properly-constructed 'decarbonised' index allows long-term passive investors to hedge climate risk without sacrificing financial returns. The largest greenhouse gas emitters are excluded from a benchmark index until a final index with a 50% lower carbon footprint is obtained.

Investment in such an index is what the authors call a 'free option on carbon'. Contrary to their 'pure-play' counterparts, 'decarbonised' indices offer protection against the timing risk of climate change mitigation policies. Investors following this yardstick can achieve the same return as the benchmark index until climate change mitigation policies are introduced – at which point decarbonised indices outperform the benchmark.

The paper suggests a relatively risk-free investment strategy. The authors provide empirical evidence, showing that a properly-constructed decarbonised index regularly outperformed the benchmark between 2010 and 2015 – even without concrete policies limiting greenhouse gas emissions.

When the global financial industry takes the lead, this is likely to have a crucial impact across a still wider sphere. This may be good news for the planet. But decarbonisation does not solely depend on the behaviour of financial markets. ■

Edoardo Reviglio is Chief Economist at CDP Group, Rome.
**Hedging Climate Risk (2016): papers.ssrn.com/sol3/papers.cfm?abstract_id=2499628*

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An underlying imbalance

Confusing symptoms and causes

William Keegan, Advisory Board

Mervyn King's ambitious work, *The End of Alchemy: Money, Banking and the Future of the Global Economy* is the product of much post-crisis reflection by the man who was the UK's central bank governor at the onset of the storm.

A distinguished academic economist, King joined the Bank of England in 1991, serving first as the Bank's chief economist, then deputy governor, and finally governor from 2003 to 2013. He was at the coalface in 1992 – the year of Black Wednesday, when the Conservative government was forced to withdraw sterling from the European exchange rate mechanism – and during the subsequent recovery.

King makes his distrust of fixed exchange rate mechanisms abundantly clear – though he seems to have forgotten that the post-war Bretton Woods arrangement, establishing the rules governing financial and commercial relations between the US, Canada, western Europe, Australia and Japan, was for 'a fixed but adjustable exchange rate system.'

He was more than a bystander as the pound floated downwards, with a beneficent impact on output and employment, once it had escaped the straitjacket of the ERM in 1992. At the Bank he actively promoted inflation targets as an integral part of reconstructing British economic policy.

The importance of expectations

In a key chapter entitled 'Heroes and villains: the role of central banks', King emphasises the importance of expectations when it comes to monetary policy. 'Businesses and households base their decisions on expectations of the future, and so the way we expect monetary policy to be conducted in the future affects economic outcomes today.'

Well, not all their decisions – many are based on the needs of the moment. Nor do many people pay too much attention to what the central bank is up to. However, as King points out, 'an entire industry of central bank watchers has grown up, working in the shadows and inhabiting a world of double-talk, coded language and private vocabulary'. According to King, one of the aims of central banks, 'has been to put this industry out of business and to move to a world of simple, clear language'.

To judge from the financial pages, central banks have yet to put the watchers out of business. But as one who followed King's gubernatorial progress closely, I can affirm that he always did his best to communicate clearly. And, apart from a few rather technical diversions, he has lived up to his own high standards in this book, which is aimed at the general reader as well as the famous names recommending it, including former US Federal Reserve chair Alan Greenspan.

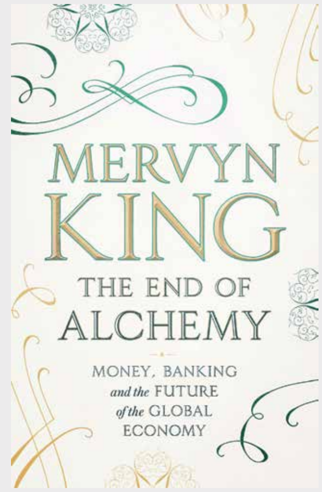
Ah, Greenspan! Two of this work's preoccupations are, first, the way that, with a few distinguished exceptions, Greenspan, the so-called 'maestro', and others, including the author, got it wrong. Second, 'the fact that the recovery is far weaker than expected, even with the monetary stimulus put in place, suggests that something is amiss'. We need, King argues, to tackle the 'underlying disequilibrium'.

Long-term imbalances

This book enables him to explain his long-term concerns about 'imbalances', both within the UK and in the world at large. He coined the acronym Nice to describe a 'non-inflationary, consistently expansionary' decade but, equally consistently, warned that it could not last. In the UK there was an imbalance between the growth of domestic demand and the chronically growing trade deficit.

Internationally, King, in common with Ben Bernanke, the then US Federal Reserve chair, was concerned about the imbalance of excess savings in Asia and excessive borrowing in the West. The financial crisis eventually grew out of the relentless search for 'yield', which led not only to all those fancy derivatives but to plain over-risky lending by banks.

While recognising that governments and central banks have gone some way towards



making the financial system safer, King argues that they have not progressed nearly far enough. He unveils a detailed 20-year plan under which banks would gradually be required to do much more to underpin both their liquidity and solvency.

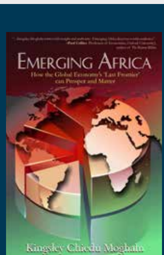
He links economic disequilibrium and financial alchemy by asserting that to blame the crisis on the financial sector is 'to confuse symptoms and causes'. 'Undoubtedly, the fragile nature of our banking system made the crisis acute and fast moving. But across the world there was a massive macroeconomic disequilibrium, both within and between most major economies.'

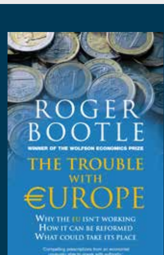
It is an interesting thesis, accompanied by an exhaustive analysis of the various schools of economic thought. 'To restore faith in capitalism will require bold action – to raise productivity, rebalance our economies, and reform our system of money and banking.'

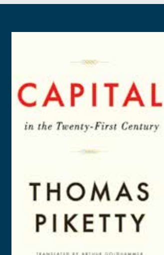
King writes at a time when some of the most distinguished economists of our time are scratching their heads and opining about 'new normals', 'secular stagnation', slowing technical progress' and goodness knows what barriers to economic growth.

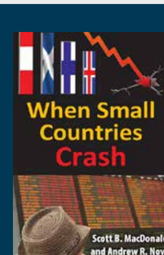
However, to this reader at least, he underestimates the impact on the animal spirits of businessmen, and therefore on productive investment, of the introduction of 'austerity' policies so soon after the successful Keynesian stimulus of 2009. ■

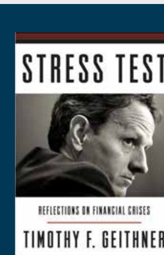
William Keegan is Senior Economics Commentator at The Observer.

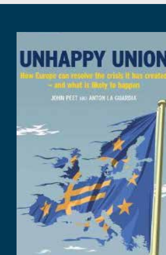












Britain 'better off' if it votes to stay

OMFIF Advisory Board highlights risk of EU disintegration

Britain goes to the polls on 23 June to vote on the UK's continued membership of the EU. David Cameron, the British prime minister, announced the referendum on 20 February following negotiations with EU leaders in Brussels. Already the cause of deep divisions within Cameron's Conservative party, stretching back to the tenure of former Conservative Prime Minister Margaret Thatcher, the campaign was ignited by the announcement by Boris Johnson, the mayor of London, that he would campaign in favour of 'Brexit'.

OMFIF's series of Commentary pieces on the referendum, which runs until the day of the vote, reflects the complex and multifaceted nature of the debate within the UK, and how it is being viewed by the rest of the world. For an overview of the OMFIF 'Brexit' commentaries see www.omfif.org/analysis/uk-eu-referendum/

We put two questions to members of the Advisory Board: 1) Do you believe Britain would be safer, more secure and prosperous inside or outside the EU? 2) With regard to the rest of the EU, would a British exit promote disintegration or integration?

An overwhelming majority of respondents – 82% – said that Britain would be safer, more secure and more prosperous inside the EU. Just 13% said it would be better off outside. But opinion was more divided on the second question: 49% of participants said a British exit would promote disintegration, 22% thought it would encourage integration, while 29% said Brexit would produce neither outcome. ■

'You cannot go back to the time when Britain was great, rather than middling. Outside Europe Britain would be a politically and diplomatically smaller country, less secure, less prosperous, less influential.'
Stuart Mackintosh, Group of Thirty

'Brexit would have a disruptive effect on weaker members of the EU but would encourage, over time, closer integration inside a hard core composed of euro members (though not necessarily all the current members). This will, in fact, happen anyway, even if Britain remains in the EU. We will get an inner circle of more integrated members and an outer circle of less engaged countries – with Britain in the outer circle (or outside the outer circle if it leaves the EU).'
Reginald Dale, Center for Strategic and International Studies' Europe Program

'The rest of the EU is disintegrating anyway and the process will likely continue regardless of whether the UK stays in or not. Brexit could serve as a wake-up call however. If so, the odds that the rest of the EU will change course away from its current path of certain collapse will improve as a result of Brexit.'
Athanasios Orphanides, Massachusetts Institute of Technology, former Governor, Central Bank of Cyprus

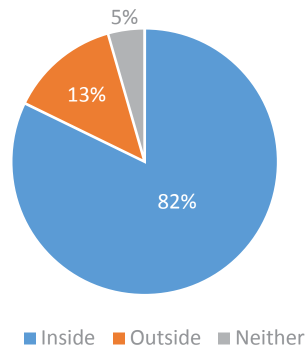
'Brexit is unlikely to promote integration. The French and some other member states would try to use it as a means of drawing the residual 27 closer together. But others could be tempted to follow Britain's suit, or at least to use the opportunity to argue for more substantial reform of the institutions.'
Boyd McCleary, Bushmills Associates, former UK High Commissioner to Malaysia

'The EU's problems – the Brexit threat, immigration, the unresolved euro debacle and Russian aggression – all entail ever greater disunion. Brexit can be a catalyst for disintegration or reform. I suspect Brexit would speed the EU's disintegration in its present form.'
Brian Reading, former Economic Adviser to Prime Minister Edward Heath

These additional statements were received as part of the March poll, conducted 7-15 March, with responses from 45 Advisory Board members.

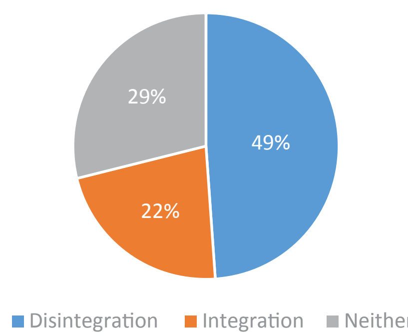
More security and prosperity seen inside EU

Only 13% of respondents say UK would be better off outside



Only 22% predict departure would trigger integration

Nearly half of respondents say exit would unravel EU



April question

Who do you think will be the next US president?
a) Hillary Clinton b) Donald Trump c) Bernie Sanders d) Ted Cruz

Which candidate, as president, would be most likely to promote sustainable US economic growth in the next two to three years?
a) Hillary Clinton b) Donald Trump c) Bernie Sanders d) Ted Cruz

Which candidate, as president, would be most likely to bring about raprochement between the US and Russia in foreign affairs and security in the next 2-3 years?
a) Hillary Clinton b) Donald Trump c) Bernie Sanders d) Ted Cruz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