The Bulletin

Green finance heats up
Public investors to the fore

Jean-Jacques Barbéris on Macron’s challenge
Tiago Berriel on Brazilian economic revival
Evelyn Hartwick on financing sustainable investment
Bertrand de Mazières on green bond regulation
Pawel Kowalewski and Ben Robinson on central bank divergence
Vicky Pryce on Varoufakis’ EU battle
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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 both London and more recently Singapore, OMFIF focuses on global policy and investment themes – particularly in asset management, capital markets and financial supervision/regulation – relating to central banks, sovereign funds, pension funds, regulators and treasuries. OMFIF promotes higher standards, performance-enhancing exchanges between public and private sectors and a better understanding of the world economy, in an atmosphere of mutual trust.

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Green finance heats up: public investors to the fore

At 33.9 degrees Celsius, 21 June was the hottest day in the UK since 1976, in a year that so far has been the hottest ever recorded. Earlier in June Donald Trump withdrew the US from the Paris climate agreement. Governments and the public have long debated the importance of climate change, but public and private investors too are getting the chance to invest more sustainably as the green finance market grows.

Bertrand de Mazières of the European Investment Bank (the first institution to issue a green bond) and Antony Karembu of the African Development Bank set the scene in this month’s green finance-focused edition by exploring what it means to be green and tracking the development of the green market. Robert Scharfe outlines the importance of the development of standards for green capital markets. Despite the lack of a fully developed market, our list of green-related deals of 2016-17 shows impressive expansion. This growth will not be curtailed by the US withdrawal from the Paris agreement, according to 68% of respondents to this month’s Advisers Network poll. One important area of expansion is Africa, where green bonds have the potential to transform the economy, writes Jeremy Wakeford.

Evelyn Hartwick of the International Finance Corporation draws attention to the challenges facing international finance organisations and official institutions in supporting the development of the green market. Ulrich Volz highlights the importance of climate change to central banks in the light of potential risks to financial stability. Alexander Barkawi similarly argues why monetary policy should go green. Danae Kyriakopoulou applauds Dieter Helm’s attempt to deploy economic principles in the area of conservation in her review of Natural Capital.

In our second book review this month Vicky Pryce takes a balanced view of Greece’s former finance minister Yannis Varoufakis’ fascinating but one-sided account of euro area negotiations in Adults in the Room. Theresa May seems to have learnt a lesson or two from Varoufakis’ bad experiences and is softening her stance following the start of her own negotiations with the EU in June. But her offer to guarantee EU citizens’ rights lacks substance, according to Danae Kyriakopoulou. One year on from the referendum, the UK looks weak compared with a revived EU. Jean-Jacques Barbéris outlines French President Macron’s plans to boost the economy through technology and innovation.

Franco-German co-operation is getting stronger and was even fortified by the death of former Chancellor Kohl, writes David Marsh. In his obituary, Marsh remembers Kohl as chancellor with a down-to-earth economic approach. The European Central Bank will be an important part of the future of Franco-German accord. Marsh argues that Germany’s Jens Weidmann, Bundesbank chief, should aim to become the euro area’s first finance minister and leave the role of heading the central bank to France’s François Villeroy de Galhau when Mario Draghi’s term ends in 2019. Ben Robinson discusses the difficult choices the ECB faces on the future of quantitative easing.

In the US, the succession race for Janet Yellen’s post has begun. Darrell Delamaide assesses the rumours of who might replace her, if at all. Whoever is in charge, the world’s major central banks will face a difficult task deflating their balance sheets according to the latest edition of our collaboration with Narodowy Bank Polski by Pawel Kowalewski and Ben Robinson.

Central banks elsewhere are scaling back from monetary expansion. Donald Mbaka outlines the priorities for the Central Bank of Nigeria. In a conversation with OMFIF’s Ben Robinson, Banco Central do Brasil’s Deputy Governor Tiago Berriel highlights the challenges but also opportunities from Brazil’s changed economic and political environment.
Sustainable trends in global trade, demographics and climate change present greater risks to Global Public Investors than cyclical shocks, said panellists at the OMFIF Global Public Investor 2017 launch on 14 June in London. Delegates heard that investing in green assets, infrastructure and maintaining portfolio liquidity to allow rebalancing are key to long-term success.

The fourth annual GPI report is devoted to public sector asset ownership and management across 750 official institutions around the world. With total holdings estimated at $33.8tn, Global Public Investors are a core component of world capital markets. GPI 2017 focuses on key developments in world investment and extends the coverage of asset classes from previous editions.

After a protracted period of extraordinarily loose monetary policy to support economic recovery following the financial crisis, policymakers in the world’s major central banks are considering gradually raising interest rates. This will create opportunities as well as problems for GPis, with the exit from unconventional policies expected to be unconventional in its own right.

Danae Kyriakopoulou, OMFIF’s chief economist and head of research, presented the report’s main findings. Jean-Paul Villain, director, strategy unit at the Abu Dhabi Investment Authority, delivered the keynote speech pointing to the primacy of assessing political risk in helping manage investment.

On the panel were Rick Lacaille, executive vice-president and chief investment officer at State Street Global Advisors, Mthuli Ncube, head, research lab, at Quantum Global, Joël Prohin, head of portfolio management at Caisse des Dépôts et Consignations, Ilmārs Rimšēvičs, governor of the Central Bank of Latvia and Frank Scheidig, global head, senior executive banking, at DZ BANK.

Markets were ‘ready for US rate rise’

In spite of disappointing US inflation figures, the financial markets are well set up for, and expecting, an increase in the fed funds rate,’ said John Davies, US interest rate strategist at Standard Chartered, in a telephone briefing on 14 June, held ahead of the Federal Open Market Committee announcement.

Davies, Anna Stupnytska, global economist at Fidelity, and Magdalena Polan, global economist at Legal & General, discussed the Federal Reserve’s planned unwinding of its balance sheet and the worldwide impact of US monetary policy.

When asked about any further rate hikes, the panel had mixed views, with Polan seeing the potential for a second rise later in the year, but Stupnytska predicting that this would be the last. She explained that the balance sheet reduction would be an effective tool but ‘one that would be used gradually’.

Davies elaborated on the Fed’s ‘softly-softly’ approach, previously outlined, that it had eased the market and given it the confidence to consider a more positive approach. They then moved to discuss the Bank of England and their future policies. Stupnytska explained that pre-election, the BoE seemed to be set on a steady trajectory, but sudden political uncertainty could force them to act against falling sterling.

Davies was confident the BoE would keep rates on hold, but warned, ‘More sterling weakness shows upside inflation pressures, which represents a two way risk, especially with the Brexit negotiations yet to get underway.’

US remains in a ‘regime of low growth’

In an OMFIF City Lecture James Bullard, St. Louis Fed president, said the US economy remains in a ‘regime of low growth, low inflation and low interest rates’.

He warned against further interest rate increases, saying there was ‘no need to get ahead’ of higher inflation that seems unlikely to materialise, and that balance sheet tightening ought to take precedence.

He added that the most probable outcome over the forecast horizon is that the regime persists and, hence, the current policy rate level remains appropriate.

From a global perspective, Bullard noted that the US policy rate has been rising while key policy rates abroad remain low and unchanged.

Low unemployment and low inflation co-exist not only in the US but in the UK, Germany, Japan and elsewhere.
OMFIF has launched its iTunes podcast channel with the first of its weekly podcasts, entitled ‘What does it mean to be green?’, as part of its focus on green finance.

The first recording features Bertrand de Mazieres, director general-finance of the European Investment Bank, Antony Karembu, policy and PPP specialist at the African Development Bank, and Danae Kyriakopoulou, chief economist and head of research at OMFIF.

They discuss the development of green investments and how important it is that the various financial sectors ‘focus efforts on trying to stop climate change’.

Karembu says that ‘most notable positives in the last few years are the advances in renewable energy and how competitive it is becoming’. This means sources like solar power are becoming ‘increasingly cost effective’, making green projects even more attractive to investors.

He explains that there are two main ways to invest: ‘directly in green projects, or in green bonds.’ The choices available mean governments are steadily increasing their levels of investment.

However, de Mazieres identifies the risk that involves the expansion of this form of investment, primarily ensuring that it is going towards fully green projects.

The second podcast, ‘Global Public Investors driving the green finance market’, is also available on the channel. OMFIF Economist Ben Robinson explains the development of the green finance market and the role of Global Public Investors in driving demand. Discussing green bond development he says, ‘Although demand for green assets has grown, supply has lagged behind.’ Issues like these are being addressed, but the market ‘still has a long way to expand’.

According to Joël Prohin, head of asset management at Caisse des Dépôts et Consignations, ‘Reducing risks and tackling climate change requires a shift of the whole portfolio towards compatibility with a 2 degree rise in global temperatures.’ Prohin says this represents the main issue facing the green finance market. ‘While money is readily available for green projects, the projects themselves still face hurdles in terms of regulations, harmonisation of standards and reporting practices,’ he adds.

Further discussion on international affairs, global monetary policy and other economic and political developments are available for download. To subscribe, please search for OMFIF on your smartphone’s podcast app or via iTunes.

Role of central banks post-Brexit

Rosa Lastra, chair in International Financial and Monetary Law at the Centre for Commercial Law Studies at Queen Mary University of London, joined with other academics to discuss the post-Brexit role of central banks in financial crisis management at an OMFIF-CCLS meeting on 23 June in London.

Inflation targeting in Brazil

Tiago Berriel, deputy governor for international affairs and corporate risk management at the Brazilian central bank, spoke at an OMFIF briefing on 21 June in London. The meeting focused on the relationship between central banks and finance ministries.

Turner: ‘Outlook strong for China’

Lord (Adair) Turner, chair of the Institute for New Economic Thinking, focused on the subject of Chinese debt dynamics during an OMFIF City Lecture on 5 June in Beijing. He warned that China is likely to ‘muddle through’ with a gradual tightening and significant levels of mal-investment.

Chile in an international context

Mario Marcel, governor of the Banco Central de Chile, took part in a discussion on 30 June, in London, organised by OMFIF and the London School of Economics. He examined interest rate targeting in Chile as well as the effects of tightening US monetary policy in Latin America.

Forthcoming meetings

The times of elastic money

A roundtable meeting with Mojmír Hampl, vice governor of the Czech National Bank, examining the risks and benefits facing central banks on digital currencies and decentralised ledgers, best practice and the potential for global standards.

11 July, London

Green bonds and low-carbon finance

The German ministry of finance, Bank for International Settlements and OMFIF convene a meeting on how Global Public Investors can help combat climate change. Jens Weidmann, president of the Deutsche Bundesbank, will deliver the opening remarks.

13 July, Frankfurt

International Monetary Forum

A joint meeting with the International Monetary Institute and OMFIF in Beijing focusing on the necessity of and the main approaches to enhancing the financial transaction function of renminbi, and the necessary institutional foundations such an enhancement entails.

15-16 July, Beijing

Challenges to monetary policy: What next?

City Lecture with Claudio Borio, head of the monetary and economic department at the Bank for International Settlements. The lecture focuses on monetary and macroprudential policy, financial stability and the changing role of central banks.

22 September, London

For details visit www.omfif.org/meetings.
Defining and enforcing green labels
Regulators must ensure market flexibility
Bertrand de Mazières, European Investment Bank

In 2007 the European Investment Bank pioneered the first green bond issuance and has remained an important player in the development of the green finance market.

To qualify as ‘green’, projects must make a demonstrable contribution to reducing carbon emissions or to enhancing environmental protection.

In some cases, European Union and other transnational regulations already exist regarding acceptable limits of carbon emissions for different projects. These can serve as the starting point for evaluating the ‘greenness’ of an investment, with green projects having to exceed these requirements. In other cases, the impact of new investments on making a positive contribution to fighting climate change or increasing resilience to it are evaluated according to set criteria. These might include the amount of water used, gas emissions saved or a project’s ‘carbon footprint’.

This can create challenges, because there are not universally accepted regulations and standards for these projects. However, significant work has gone into building a consensus, particularly through the Green Bond Principles. Banks, corporate issuers, multilateral development banks, regulators and governments are collaborating to improve these standards further. The EIB and the People’s Bank of China have established a joint green finance initiative aimed at developing a coherent framework shared by both the RPC and the EU.

The market must remain flexible.
Over-regulation should not stifle development.

The main way to access green investments is by investing in securities issued by specialists involved in relevant projects, such as the green bonds issued by the EIB, the African Development Bank and others. Corporate issuers seek third-party certification and other specialist services to evaluate the greenness of their securities. These bonds can then guarantee to the investor that their money is allocated to projects that fall into the climate action sector.

At this stage of the market’s development the risk of ‘greenwashing’ (misleading claims about a project’s environmental benefits) has been reduced. The market is sufficiently wide and stable to withstand isolated cases of greenwashing. Instead issuers are now at risk if they are seen to be acting unethically. This further encourages the adoption of more thorough criteria and reporting standards.

At the same time, the market must remain flexible and accommodate new participants, such as those from Asia, which may have different standards. Engagement with China has improved co-operation and accountability, and the market has accepted green assets from these countries, despite some differences. Over-regulation should not stifle development.

Bertrand de Mazières is Director-General of Finance at the European Investment Bank.

Nigeria preparing green sovereign bond
Sustainable route to African development
Antony Karembu, African Development Bank

The market for green finance has grown rapidly in recent years. After taking eight years to reach the $100bn mark for outstanding green bonds, it took just over one year to double again to $200bn. By 2035 annual issuance of green bonds could exceed $700bn per year, with a total outstanding figure of $4.7tn-$5.6tn.

New issuers are coming forward, particularly from the local government, municipal and sovereign sectors. This expands the range of currencies that green bonds are available in, as well as increasing the number of markets in which investors can access these assets. African central banks and governments are increasingly interested in issuing green bonds, offering potential for significant market expansion.

Nigeria is in the process of offering what will be the first green sovereign bond in sub-Saharan Africa. Other types of green financing have already been established in the region. Climate-aligned bonds are issued and bought in several countries, most notably South Africa. The African Development Bank is involved in projects relating to carbon capture and storage, renewable energy and sustainable agriculture, solid and water waste management. It works to improve efficiency and issues green bonds to finance these projects. The success of the first sovereign green bond will be watched closely by other governments seeking to raise funding.

Green bonds present the opportunity to meet Africa’s substantial infrastructure needs.

Green bonds present a sustainable way of helping to fulfil Africa’s substantial infrastructure and development needs. One of the reasons the global green bond market has grown so large is the recognition of the importance of a timely shift to low-carbon and climate resilient investments. Nowhere is this more relevant than in Africa. Clean and low-carbon sectors are becoming increasingly cost effective and competitive, halving the average price of solar energy in the last five years.

Africa is working to overcome the lack of agreement on green definitions, reporting standards and impact assessments. Issuers are working hard to ensure projects adhere to the International Capital Market Association’s green bond principles. This helps to enhance standardisation with international markets and strengthens investor confidence.

Development of African green finance markets could help fund the transition to a low-carbon economy while providing incentives to improve project management, funds management, transparency and reporting across Africa. Expansion of new markets and projects increases opportunities for investors to participate in green financing by widening their choice of risk, currency, asset type, location and market.

## Green energy deals 2016-17

Growing role of public investors in financing of green assets

Public investors have played a leading role in the development of the green finance market via significant allocations to green investments. Over the last 12 months they have engaged in a variety of projects, illustrated below. These add up to more than $2bn, adding to the growing stock of green assets held by public sector funds.

In addition to this positive allocation, many funds are reducing their exposure to carbon-intensive assets, raising the relative size of green investments in their portfolio. Exposure to green assets can take a variety of forms, as the illustrative deals below make clear.

<table>
<thead>
<tr>
<th>Institution</th>
<th>Nature of deal</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Norges Bank Investment Management</td>
<td>NBIM divested 10 companies reflecting the fund’s coal guidelines for observation and exclusion. It excludes companies where thermal coal is a significant part of business activities.</td>
<td>April 2017</td>
</tr>
<tr>
<td>International Finance Corporation and Amundi</td>
<td>IFC decided to invest $325m in a new green bond fund. IFC partnered with Amundi and set out plans to raise up to $2bn from international investors to create the world’s largest green bond fund focused on emerging markets.</td>
<td>April 2017</td>
</tr>
<tr>
<td>AP1</td>
<td>AP1 invested $520m in two new green funds created by Osmosis.</td>
<td>April 2017</td>
</tr>
<tr>
<td>GIC Private and Abu Dhabi Investment Authority</td>
<td>GIC and Adia invested $155m in Indian renewable energy firm Greenko Energy Holdings. GIC invested $123.9m, while Adia invested $31.1m.</td>
<td>March 2017</td>
</tr>
<tr>
<td>Pensioenfonds Zorg en Welzijn and Ircantec</td>
<td>PGGM acted on behalf of Pensioenfonds Zorg en Welzijn and purchased $370m when France launched its inaugural green bond, while Ircantec (managed by Caisse des Dépôts) subscribed for $25m.</td>
<td>January 2017</td>
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<tr>
<td>PensionDanmark</td>
<td>PensionDanmark joined a consortium of other mostly Nordic investors to invest $61.5m via mezzanine financing in the onshore wind farm Fluvanna I in Scurry County, Texas.</td>
<td>December 2016</td>
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<tr>
<td>Russian Direct Investment Fund</td>
<td>RDIF and Chinese energy company Sinomec invested $159m in Russia’s first offshore wind power plant.</td>
<td>December 2016</td>
</tr>
<tr>
<td>Fonds de Réserve pour les Retraites</td>
<td>The supervisory board of FRR decided to divest its equity and bond portfolios of companies that derive more than 20% of their revenue from thermal coal extraction.</td>
<td>December 2016</td>
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<tr>
<td>AP7</td>
<td>AP7 joined several pension funds in investing $400m in the first ever green bond issued in Swedish krona. The bond, which was worth $570m in total, was issued by Kommuninvest, the Swedish local government debt office.</td>
<td>October 2016</td>
</tr>
<tr>
<td>Ircantec</td>
<td>Ircantec launched a dedicated green bond fund structured as a Fonds commun de placement, an unincorporated open-ended fund. Green funds already represented 7% of Ircantec's holdings at $335m, compared to the market average of less than 1%.</td>
<td>October 2016</td>
</tr>
<tr>
<td>Waltham Forest Pension Fund</td>
<td>Waltham Forest Pension Fund became the first UK local government pension fund to commit to divesting all fossil fuels. In the following months, the Southwark Council Pension Fund announced it would do the same.</td>
<td>September 2016</td>
</tr>
<tr>
<td>Strathclyde Pension Fund</td>
<td>SCPF increased its investment in the Green Investment Bank’s Offshore Wind Fund LP to $105m from $65m.</td>
<td>September 2016</td>
</tr>
<tr>
<td>District of Columbia Retirement Board</td>
<td>District of Columbia aims to reduce its greenhouse gas emissions by 80% by 2050.</td>
<td>June 2016</td>
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Why monetary policy should go green
Central banks’ role for a low-carbon economy

Alexander Barkawi, Council on Economic Policies

Monetary policy is rarely a topic for discussion in debates on green finance. It should be.

The €60bn which the European Central Bank is injecting into financial markets on a monthly basis is a case in point. Its intervention is worth almost three times more than the €23bn monthly average of global clean energy investments in 2016.

A transparent review of how better to align ECB injections with the goal of funding a low-carbon economy, and whether some of its asset purchases in fact undermine that objective, is essential.

Several authorities, including the Bank of England, the European Systemic Risk Board and the Dutch central bank are examining the possible effects of climate change on financial stability and how financial regulation can mitigate these effects.

Similar questions need to be explored with regard to the monetary policy remits of central banks. Monetary operations, whether conventional or unorthodox, have several often unseen consequences. Central bankers are careful to ensure their decisions are sector neutral. Nonetheless, explicit and implicit biases abound. These range from the routine acceptance of high-carbon assets, such as car loans, in refinancing and asset purchase programmes, to the deliberate targeting of monetary measures to key parts of the economy, like real estate.

Last September, G20 leaders highlighted the need to augment green finance and expressed their support for ‘clear strategic policy signals’ to pursue this objective. Monetary policy should not be separated from this goal.

The constitutional foundations of many central banks provide a clear mandate to be part of the solution. The ECB mandate states, ‘Without prejudice to the objective of price stability [the Eurosystem] shall also support the general economic policies in the Union with a view to contributing to the achievement of the objectives of the Union,’ including ‘a high level of protection and improvement of the quality of the environment.’

Three steps will be critical to move in this direction.

Reducing high-carbon biases

First, monetary policy measures may unwittingly support high-carbon assets or discourage clean alternatives. The choice of assets that central banks buy and accept as collateral may not be sector neutral.

Identifying such biases and mitigating them where they are misaligned with the objective of a low-carbon economy are effective short-term measures.

A good place to begin may be investigating whether central banks should be buying asset-backed securities based on car loans. It would be important, too, to review whether the eligibility criteria in their collateral frameworks are based on an accurate risk assessment, including a robust analysis of carbon risks. Accounting for default risks due to stranded carbon assets in the external ratings and in-house credit assessments of central banks that underpin their collateral rules is critical in this context.

Green quantitative easing

Second, the current environment of ultra-low interest rates and significant asset purchases by central banks creates an opportunity to channel more capital towards a low-carbon economy. Policy-makers could pursue what commentators have coined ‘green quantitative easing’.

"The current environment of ultra-low interest rates and significant asset purchases by central banks creates an opportunity to pursue ‘green quantitative easing’.

This proposal may not be an option only for those central banks, like the ECB and the Bank of Japan, that are still expanding their balance sheets, but also for others, including the Bank of England and the Federal Reserve, which aim to keep the size of their balance sheets unchanged and are forced to re-invest the proceeds from maturing securities into new ones.

Increasing the share of these flows into green investments would be an important promoter for a low-carbon economy, both through the direct provision of public money and as a catalyst for private investment.

Designing a green QE programme requires a thorough assessment of the underlying market structures in funding low-carbon investments. It will demand a detailed analysis of how much money could be absorbed through low-carbon asset purchases and how such purchases could change the funding situation for green investments. Policy-makers would need, too, to decide how best to measure the success or failure of these initiatives.

Designing such a programme would also require a rigorous evaluation of what sort of institutional framework it requires, how to mitigate the risk of greenwashing (misleading claims about the environmental benefits of funding flows), and what role external rating agencies, research providers and auditors would need to play.

Balance sheets and sustainability

Finally, beyond the scope of targeted asset purchases is the need to manage central bank assets appropriately. Best practice approaches should be followed to integrate environmental, social and governance factors in investment strategies.

Institutional investors with more than $60tn in assets pledged to do this. Many of them are developing in-house capacity to account for ESG criteria in their investment processes. Others use external researchers and a broad offering of specialised indices to reflect ESG criteria in their decisions. Central banks should explore similar commitments for the $18tn on their balance sheets.

Central bankers are increasingly clear that addressing the financial risks of climate change is part of their job. Ensuring monetary policy is pointing in the same direction is the next essential step.

Alexander Barkawi is Founder and Director of the Council on Economic Policies. This is based on an article first published by the Financial Times.
There are several important reasons why central banks must consider climate change and environmental risks in their policy decisions.

The first concerns their role as guardians of financial and macroeconomic stability. Environmental threats may have direct consequences for price stability through their impact on food and energy prices.

Floods and droughts related to climate change may affect agricultural output, which in turn influences prices. Equally the need for climate change mitigation impacts patterns of energy production and thus energy prices.

These patterns can have indirect and second-round effects on core inflation. Factors affecting food and energy prices thus need to be included in central banks’ long-term inflation analysis. There may, too, be risks to financial stability from environmental damage and climate change.

Climate change risk
There are three types of financial sector risk associated with climate change. First, companies and financial institutions face ‘transitional risk’ as policies aimed at climate change mitigation will force adjustments by firms and households.

The absence of properly-functioning carbon pricing markets may justify central banks to use their power to affect credit creation and allocation.

The development of new technologies in response to climate change may render some established technologies and business practices redundant. This may prompt a reassessment of asset valuations. If the re-pricing of risk happens gradually, the threat to financial stability will be limited.

Second, economies face a ‘physical risk’ from climate change and extreme weather events. These can cause severe damage to the economy by disrupting individual businesses or entire industries.

As the Bank of England has said, ‘Fundamental changes in the environment could affect economic and financial stability and the safety and soundness of financial firms, with clear potential implications for central banks.’ Disclosure is central to addressing climate and environmental risk. The Financial Stability Board noted, ‘Inadequate information on risk exposures can lead to a mispricing of assets and/or misallocation of investment and can potentially give rise to concerns about financial stability, since markets can be vulnerable to abrupt corrections.’

Third, firms may face ‘liability risks’ if those who suffer losses related to climate change or environmental damages seek compensation from those responsible. These might include carbon extractors or emitters and environmental polluters more generally.

By providing third party liability insurance, liability risk could become a serious issue for the insurance sector. Moreover, financial firms could be held responsible for breach of fiduciary duty.

Expanding central bank mandates
Financial regulators need to address what Mark Carney, governor of the Bank of England, has called the ‘tragedy of the horizons’. The time horizon of financial stability tests typically extends to only three-five years, or a decade at most. Restricting analyses to the duration of a credit cycle is problematic when one knows actions over that period will almost certainly create instability beyond that time horizon.

Central banks may have a role to play in addressing climate and environmental risk beyond guarding financial stability. The provision of credit by banks to socially undesirable activities, such as carbon-intensive businesses, can be characterised as a credit market failure.

Environmental regulation and carbon pricing should be the preferred policy tools to disincentivise such investments. But the absence of properly functioning carbon pricing markets or effective environmental policies may justify central banks to use their power to affect credit creation and allocation.

The argument for central banks to pursue sustainability objectives beyond their core mandates is an application of the ‘theory of the second-best’.

If first-best policies for amending the misallocation of capital cannot be implemented, then governments may resort to a second-best policy and mandate the central bank to address negative environmental risks. Central banks may have a role to play, too, in supporting the development of missing market segments to promote green finance, such as a green bond market.

The case for assigning an environmental mandate to central banks and financial regulators is especially strong for developing economies. In these economies, environmental regulation is often weakly implemented or completely ignored, since weak public institutions lack clout.

Central banks control several powerful policy instruments which can foster green finance, but it is important they are not overburdened.

However, central banks and financial regulators are typically among the most sophisticated and powerful institutions. Through their supervision of the financial sector, they can exert influence over private investment decisions. Central banks’ transnational networks can help them to promote best-practice reforms in the financial sector.

Public authority collaboration
Central bank functions should depend on various factors, including the sophistication of the financial system they supervise and the existence of other institutions that may be capable of supporting green initiatives.

Central banks can use several powerful policy instruments which can foster green finance, but it is important they are not overburdened. A central issue is the division of labour among public institutions.

Other essential actors should include finance ministries, environment ministries and public banks with a developmental or environmental mandate. There is a role for financial industry bodies to provide guidance to market participants and develop standards for sustainable lending and disclosure, among other activities. Whether central banks should play a promotional role to support green investment is a political question that requires careful consideration.

Ulrich Volz is Head of the Department of Economics at SOAS University of London, Chair de Recherche Banque de France at EHESS in Paris, and Senior Research Fellow at the German Development Institute. This article draws on a report on the ‘Role of central banks in greening the financial system’ written by Volz for the UN Environment Inquiry into the Design of a Sustainable Financial System.
Unlocking climate-smart finance
Public sector must accelerate change
Evelyn Hartwick, International Finance Corporation

The World Bank Group estimates that natural disasters cost $520bn in lost consumption annually and push 26m people into poverty in poorer counties. It predicts that climate change could disproportionately affect 100m of the most vulnerable people by 2030.

Modernisation of infrastructure is vital to address these impacts and will cost $90tn over the next 15 years – primarily in developing and middle-income countries. Development institutions, with their mandates to address climate change, economic growth and the United Nations’ sustainable development goals, will play a key role in unlocking the necessary investment.

Integrated approach
The main difficulty is the lack of platforms to quickly scale up public and private finance for climate-friendly projects. The International Finance Corporation believes that increasing private investment as a result of increased debt-financed government spending should be a priority to fill the financing gap left by constrained public funds.

To achieve the required scale, investment in green portfolios must come from a combination of public and private sector capital, which means unlocking trillions of dollars held by institutional funds in cash or in low-return investments.

To attract this capital, the public sector needs to create the right environment – through appropriate policies and risk management. Primarily, it has to accelerate the systemic shift to a greener financial sector. Climate risks and opportunities should be taken into account in investment decisions to facilitate the flow of funds to greener, climate-smart investments.

All types of finance organisations – public, private, multilateral and concessional – need to work together in an integrated manner. This can be done by adapting development, concessional and commercial finance so that it matches investors’ risk appetite and expected returns for different providers of capital.

Climate risks and opportunities should be taken into account in investment decisions.

Another option is to target finance specifically to reduce risks – including through hedging mechanisms to address currency risk. Finally, the credit rating of projects could be enhanced through partial credit guarantees.

Simultaneously, official institutions should work on policy solutions – to build transmission capacity, create consistent policy and regulatory provisions between central and state levels, and help create intermediaries to increase access to finance.

Europe, Central Asia received greatest IFC financing for green projects

<table>
<thead>
<tr>
<th>Region</th>
<th>IFC green bond proceeds, $m</th>
<th>Total disbursement by region, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-Saharan Africa</td>
<td>$39m, 4%</td>
<td></td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>$90m, 9%</td>
<td></td>
</tr>
<tr>
<td>Middle East and North Africa</td>
<td>$118m, 12%</td>
<td></td>
</tr>
<tr>
<td>South Asia</td>
<td>$200m, 21%</td>
<td></td>
</tr>
<tr>
<td>East Asia and the Pacific</td>
<td>$229m, 24%</td>
<td></td>
</tr>
<tr>
<td>Europe and Central Asia</td>
<td>$284m, 30%</td>
<td></td>
</tr>
</tbody>
</table>

Source: International Finance Corporation, OMFIF analysis

IFC has so far issued almost $6bn in green bonds. In the fiscal year 2017, it issued 18 green bonds, amounting to $650m, in six currencies. IFC advises clients across emerging markets, helping them to ensure their bonds are aligned with Green Bond Principles. It then invests in these securities.

Developing guidelines
The organisation plays a leadership role in developing guidelines and procedures for the green bond market. IFC does this as a member of the Green Bond Principles executive committee and the international financial institution framework for a harmonised approach to greenhouse gas accounting.

In April the IFC signed an agreement with Amundi Asset Management to create a $2bn emerging market fund with the aim of derisking climate-smart investment. It will do this through a $125m first-loss protection agreement provided by the IFC and leveraging the IFC’s $200m seed investment into the $2bn fund. The Green Cornerstone Bond Fund will invest in green bonds issued by financial institutions in developing countries.

The IFC is one of the world’s largest financiers of climate-smart projects for developing countries. Since 2005 – when it started to track climate-smart components of its investments and advisory services – the IFC has invested around $15.3bn in long-term financing. This includes renewable power, energy efficiency, sustainable agriculture, green buildings and private sector adaptation to climate change.

Additionally, the IFC’s new Managed Co-lending Portfolio Program for Infrastructure allows large insurance companies to co-invest in infrastructure debt financing. Allianz Global Investors was the first insurer to join with a $500m commitment. The IFC-supported Sustainable Banking Network is building capacity and sharing knowledge between developing country bankers and regulators.

As a member of the World Bank Group, the IFC is working with UN Environment Programme on plans for a sustainable financial system. It is helping committed governments on upstream policy engagements, and to develop derisking tools or guarantees to incentivise private finance. All this adds up to a powerful package of measures to counter climate change.

Evelyn Hartwick is Senior Financial Officer at the International Finance Corporation.
Africa urgently requires massive development of modern energy services to meet the basic needs of its rapidly growing population and to power industrialisation and urbanisation. At the same time, the world needs Africa to leapfrog to a low-carbon energy regime to help avoid catastrophic global climate change.

This structural transformation in the energy sector will require innovative financing mechanisms to unlock Africa’s vast renewable energy potential and boost inclusive and sustainable development.

Green bonds could offer a solution. They would facilitate more productive use of Africa’s financial resources, as well as those of investors looking for enhanced returns given the low yields in developed markets. Public investors such as sovereign funds, development finance institutions and public pension funds could view green bonds as a diversification strategy that would also contribute to climate change mitigation.

Africa’s renewable strategies

Several African countries have rolled out utility-scale renewable energy projects. South Africa shows what can be achieved with robust and regulatory framework. Its renewable energy independent power producer procurement programme has attracted more than $15bn in finance from international and domestic investors, including local banks, and has procured nearly 6,400MW of renewable electricity.

Financing utility-scale renewable power for Africa

Completed green energy projects

<table>
<thead>
<tr>
<th>Country</th>
<th>Energy type</th>
<th>Project</th>
<th>Capacity (MW)</th>
<th>Completed</th>
<th>Sources of finance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cape Verde</td>
<td>Wind</td>
<td>Cabeólica</td>
<td>26</td>
<td>2012</td>
<td>Public-private partnership</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>Hydropower</td>
<td>Gilge Gibe III</td>
<td>1,870</td>
<td>2015</td>
<td>Government debt raised on international markets</td>
</tr>
<tr>
<td>Kenya</td>
<td>Geothermal</td>
<td>Olkaria III</td>
<td>139</td>
<td>2014</td>
<td>Government (revenue &amp; debt), World Bank, EIB</td>
</tr>
<tr>
<td>Kenya</td>
<td></td>
<td>Olkaria IV</td>
<td>140</td>
<td>2016</td>
<td>Government (revenue &amp; debt), World Bank, EIB</td>
</tr>
<tr>
<td>Morocco</td>
<td>Concentrated solar thermal</td>
<td>Noor 1</td>
<td>160</td>
<td>2016</td>
<td>EIB and government</td>
</tr>
<tr>
<td>South Africa</td>
<td>Concentrated solar thermal</td>
<td>KaXu Solar One</td>
<td>100</td>
<td>2015</td>
<td>Investors including IDC and Community Trust</td>
</tr>
<tr>
<td>South Africa</td>
<td>Wind</td>
<td>Sere</td>
<td>100</td>
<td>2015</td>
<td>Eskom (state-owned utility)</td>
</tr>
</tbody>
</table>

In Morocco, the Noor 1 concentrated solar power plant began operating in 2016, with a capacity of 160MW. The European Union, including the EIB, provided around 60% of the funding. When all three phases are complete, the cost of the 580MW plant is projected to be $2.45bn. The Moroccan Agency for Solar Energy raised additional finance of €106m in November 2016 through the issue of Morocco’s first green bond.

Any country with a clear green-economy strategy that targets renewable energy could raise capital through domestic and international green bond placements. Investors need bankable projects with reliable revenue streams that will ensure an adequate return on investment within acceptable risk levels. Enabling policies and regulatory frameworks are required to demonstrate governments’ commitment to renewable energy development and to provide a degree of certainty for investment planning. Furthermore, power generation projects need co-investment by public entities in transmission and distribution infrastructure to share risks.

Building a strong track record

Several other challenges must be overcome. A lack of skills, including project management experience and technical capacities, can thwart projects. But with the right mix of policies, renewable energy investments have the potential to support the growth of local manufacturing and create much-needed jobs.

Among the environmental issues are the vulnerability of hydro-electric power to droughts, and energy infrastructure generally to floods, both exacerbated by climate change. Socially, uncertain political climates hinder investment, although many countries are stabilising as their democracies mature.

Once the green energy industry establishes a strong track record in Africa, traditional bank financing will be more forthcoming, enabling private investors to play a growing role.

The case for investment in Africa’s green energy sector is clear. Renewable energy resources are available and the latent demand for energy is massive. The threat of climate change makes this an imperative not just for Africa, but for the world.

Green bonds could play an important role in channelling low-yielding funds into Africa’s burgeoning green energy sector to stimulate the continent’s sustainable development.

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Luxembourg green capital markets focus
Setting standards for sustainable bonds
Robert Scharfe, Luxembourg Stock Exchange

The lack of a fully developed market for green investments is a major obstacle to the expansion of sustainable finance initiatives. Only an environment that encompasses common standards, incentives and safeguards will encourage investors to make the best of green opportunities.

Exchanges – institutions committed to ensuring transparency, offering disclosure and comparability solutions – are in a position to support the transition to greener and more inclusive economies. They have the ability to steer the reporting behaviour of listed entities and promote disclosure of in-depth information about the issued instruments. By focusing on innovation in products, services, tools and listing and trading rules, exchanges can help support the development of sustainable finance.

Today, more than ever, exchanges play a crucial role in supporting the growth of the green bond market. They do this by bringing together green investors and issuers. In this spirit, in September 2016 the Luxembourg Stock Exchange (LuxSE) introduced the Luxembourg Green Exchange, the world’s first platform displaying only securities that raise proceeds for projects fully aligned with international green objectives.

Robust external review
LuxSE was already home to more than half the world’s listed labelled green bonds – those with proceeds earmarked for climate or environmental projects. LGX establishes the first dedicated service on an exchange that links investors’ need for more transparency with issuers’ commitment to quality of reporting. The goal is to channel more funds to the green bond market.

LGX is the first platform that lays down industry best practices for green securities, in particular the International Capital Market Association’s Green Bond Principles and the Climate Bond Initiative’s standards. To be displayed on LGX an issuer must provide at least one form of a robust external review. A second admission criterion is the commitment to reporting back to investors.

By focusing on innovation when it comes to products and services, exchanges can help support the development of sustainable finance.

These requirements are important as information about the allocation of proceeds is vital to investors.

Nine months after its launch, LGX is the world leader in green bonds listings. The 109 instruments issued by 26 entities and denominated in 18 currencies represent a combined value of €51bn.

The world’s first sovereign green bond, issued by the Republic of Poland, joined LGX in late 2016. When asked about the selection criteria, Poland’s ministry of finance explained in a written statement, ‘The implementation of the Green Exchange is proof of an open-minded approach towards the needs of financial markets.’ LGX offers issuers the opportunity to raise awareness about their green projects and promote their climate and corporate social responsibility commitments. Investors benefit from free and unrestricted access to all available information relating to a security displayed on LGX. These include the framework, external reviews, second opinions, certifications, rating reports, use of proceeds reports, impact reporting and project information. This allows for granular due diligence.

Eligibility criteria
Prior to the LGX launch, consultations took place with investors, with public and private issuers and with intermediaries such as rating agencies. The stock exchange also held discussions that gave rise to the LGX eligibility criteria, the most advanced yet in the financial market. LuxSE is a member of the UN Sustainable Stock Exchange Initiative and is implementing sustainability into its governance code.

World leaders agreed to boost sustainable development and limit climate change during the 2015 Paris Climate Change Conference. To meet these goals the financing of green projects has to move from billions to trillions of dollars annually. Such needs can be met only when projects get access to financing through capital markets. LuxSE has focused on standards and transparency. This years should see the results, acceleration in the volume of funds raised across markets, both domestically and internationally. ■

Robert Scharfe is Chief Executive Officer of the Luxembourg Stock Exchange.

Chart 1: Green bonds listing up 38% in 9 months
Bonds displayed on Luxembourg Green Exchange, €bn

Chart 2: LuxSE pioneers green bonds market
Share of listed green bonds by amount issued

Source: Luxembourg Stock Exchange
Source: Bloomberg, Luxembourg Stock Exchange
Monetary policy in Nigeria over the last decade was implemented largely in response to the aftermath of the 2008 financial crisis. This had a significant impact on the effectiveness of the banking industry to provide financial intermediation.

The Nigerian financial system was thought to be minimally exposed to external developments. This proved to be untrue. Circumstances were exacerbated by domestic weaknesses which became apparent as the impact of the crisis spread.

Banking sector near-collapse
The banking consolidation of 2004-05 created a flurry of capital market activities. Several small and mid-sized banks merged to form substantially larger institutions. New issues by the emerging deposit money banks on the Nigerian Stock Exchange attracted portfolio investment funds.

These banks advanced huge margin loans for the purchase of their shares, which became overvalued. The fallout of the financial crisis smothered advanced countries, causing a severe liquidity crunch. This led to capital flight from Nigeria as foreign investors repatriated their funds.

Portfolio investment funds engaged in significant sell-offs, and the NSE plummeted. The all-share index rose by more than 300% between end-2005 and the first quarter of 2008. By April it declined by over 60%, and by another 60% a year later.

Net outflows from the NSE reached around Ngn500bn ($1.6bn) in 2008. Increased dollar-demand put pressure on the foreign exchange market and led to the devaluation of the naira. The collapse in share prices created substantial risks for banks which had advanced huge margin loans. Margin lending had created a high level of non-performing loans. Banks were unable to meet liquidity and capital adequacy requirements.

The banking industry nearly collapsed. This severely impaired Nigeria’s most important monetary policy transmission channel.

“...The Central Bank of Nigeria instituted various development banking measures to facilitate diversification of the economy.”

Monetary unorthodoxy
The Central Bank of Nigeria intervened to avert the collapse of the banking sector. It injected substantial capital into systemically important banks – Ngn620bn in the first instance and more than Ngn1.5tn in subsequent injections. This was meant to stabilise the system while creating a basis to fix the broken transmission channel.

Banks had extended huge loans to importers of refined oil in Nigeria, and the sharp fall in crude prices led to widespread defaults. The subsequent credit crunch desiccated lending for real sector activities. Fiscal operations, too, were severely impaired by the fall in revenues caused by damped crude oil receipts.

The CBN introduced unorthodox monetary easing measures to support real sector activities and bolster growth. The Asset Management Corporation of Nigeria was created to acquire bad loans from banks. Various development banking products, such as intervention funds, were established. Monetary policy expanded into unfamiliar terrain, and price stability concerns were relegated.

Development banking
The CBN instituted various development banking measures to facilitate diversification of the economy. These provided financing for small and medium-sized enterprises as well as infrastructure. These policies included measures to enhance youth entrepreneurship and financial inclusion.

Such measures seemed at odds with central banks’ primary concern for price stability. But it was a necessary response given the peculiarities of the macroeconomic conditions in which the CBN operates.

There had to be a functioning economy upon which monetary policy could be implemented. The CBN, rather than other institutions, was in the most advantageous position to support this goal.

Although inflation surpassed the target range significantly, other outcomes were satisfactory. Various sectors of the real economy, such as agriculture, have become important growth engines. The banking industry was salvaged, avoiding potentially disastrous consequences for the country.

Unwinding and resetting
The CBN said these interventions were intended to give fiscal authorities time to implement essential reforms.

The discussion in policy circles should be for a gradual unwinding of monetary stimulus and return to the narrow remit of ensuring price stability.

This presents the challenge of transitioning through a contractionary period without unnecessarily undermining the benefits of the expansionary measures.

This will include curtailing the excess liquidity created by sectoral interventions. These partly led to significant increases in the inflation rate. Most importantly, it requires a systematic process to disentangle huge monetary intervention outlays from CBN operations and reset monetary policy to address new crises.

Donald Mbaka is Economist at the Central Bank of Nigeria. The article represents the author’s personal opinions and do not necessarily reflect the views of the Central Bank of Nigeria or its staff.

Rise and fall of the Nigerian Stock Exchange
Nigerian All-Share, index

-Source: Nigerian Stock Exchange, OMFIF analysis
Ben Robinson, economist at OMFIF, spoke with Banco Central do Brasil Deputy Governor Tiago Berriel about the country’s economic revival, its regional and global trade partners, the outlook for further structural reforms and Brazil’s involvement in the development of green finance markets. As other Latin American countries enjoy strong growth and investment following a turn towards centrist politics and market reforms, Brazil is attempting to establish the necessary conditions for long-term growth. Much depends on whether the reform agenda is set back by political challenges.

Ben Robinson: This year Brazil emerged from the most severe recession in its recent history, recording 4% annualised growth in the first quarter. What is behind this, and is it sustainable?

Tiago Berriel: Strong agricultural production was one of the key factors supporting first quarter growth. It is improbable we will have the same performance in this sector from the second quarter onwards. We expect a gradual and moderate recovery throughout 2017 to produce a positive growth figure, despite the negative carry-over effect from 2016.

Robinson: What will be the other factors contributing to growth, beyond agriculture?

Berriel: On the supply side, industrial production has stabilised and started rising, and the service sector has shown the first signs of stabilisation. On the demand side, there are signs of recovery in consumption, and net exports are strong. Government spending will be constrained and investment still needs to see a recovery. This is likely to happen later in 2017.

Robinson: Do you expect increased infrastructure investment in the US under Donald Trump to raise demand for commodity exports from Latin America, providing a boost to the region?

Berriel: Increased US demand would create a positive terms-of-trade shock which could lead to more investment in the commodities sector, but that is not priced in. There is a lot of uncertainty over these policies and how they will be implemented in the US, and over their effect on Brazil’s commodity exports. An increase in commodity demand would provide a positive shock to Brazil’s forecasts for growth and investment.

Robinson: Brazil has a high budget deficit (9.2% of GDP) and has historically struggled with high inflation, partly due to a lack of structural reforms. What challenges does this lack of this reform create for monetary policy, and does it limit the central bank’s ability to maintain stability?

Berriel: We are less worried about the current levels of nominal budget deficit than we are with the implementation of a reform agenda that will lead to a debt dynamic that is positive and stable. Inflation has already fallen to less than 4% from over 11% in the last year. We are confident this will continue into the medium and long term. This has helped the central bank by creating disinflationary dynamics, allowing monetary policy to be more effective.

Robinson: Does the continuing political instability make it more difficult to pass the government’s reform agenda for taxes, labour markets, pensions and government spending?

Berriel: There is a broad consensus on the need for reforms. There has already been agreement on capping government spending for 10 years, which means this readjustment will have to happen. There might be some delay on approval, but they will eventually go through and lead to a medium- to long-term fiscal adjustment. Approval will happen before the elections in October 2018, most probably later this year.

Robinson: In June, the Federal Reserve raised US interest rates again. Brazil’s central bank has cut rates by 75-100 basis points in each of its meetings this year and could do so further. Will this divergence lead to a reduction in foreign capital inflows? How prepared is the economy to deal with that?
Berriel: Brazil’s external accounts are very healthy. We have around $370bn in external reserves, our current account deficit is around 1% of GDP, and we have foreign direct investment inflows of around 4% of GDP. An unexpected monetary policy adjustment might impact capital outflows, but given the strength of our external accounts I don’t think that will be too significant. We have already done most of the hard work in bringing inflation down and managing expectations. We would be able to accommodate a negative external shock at this point without too much cost.

Robinson: Inflation has fallen to a decade-long low of 3.6%. Can this be sustained, or will it start climbing when energy, food prices and domestic demand increase?

Berriel: There is some effect of oil, food and other factors on inflation, but broad measures of core inflation have all been well behaved. These elements of consumer price index inflation are more responsive to monetary policy and economic activity, so the current disinflationary processes should be more permanent than movements in volatile components.

Robinson: So there is a fairly low risk of interest rates having to tighten prematurely to curb a rise in inflation?

Berriel: You will never get rid of all the cycles of monetary policy in Brazil. It’s improbable that we will never need a monetary policy cycle again, but we have good evidence that the inflationary processes have been healthy and sustainable.

Robinson: In terms of the effect of this cut in interest rates on the domestic economy, the iBovespa equity index has fallen since mid-May and is now, in June, roughly back to the same level as it was in January, despite the significant cut in interest rates. Do you expect further cuts to boost stock market performance? Or does the fall reflect underlying weaknesses?

Berriel: Bovespa’s performance is influenced by several factors, including potential growth outlooks, political stability, the ability of the government to deliver fiscal reform, and the discount rate. Monetary policy is only one component affecting Bovespa. What that pricing is probably reflecting is those other, non-monetary policy components, some of which are cyclical and will improve with time, and others which are structural and are being addressed via various reforms.

Robinson: Depreciation in late 2016 and early 2017 helped exports of agricultural goods and commodities. If the real stays below its highs of recent years, could this provide an opportunity to integrate other sectors into the global economy?

Berriel: Some sectors may benefit from a specific exchange rate level, but there are sectoral winners and losers for every exchange rate dynamic. Other things are more important for the Brazilian economy to integrate more closely. We need a state of equality domestically, in terms of being able to access markets; we need labour laws that allow flexibility; we need to boost productivity; and we need to create more competitive costs. Access to efficient financial markets is also crucial to allow Brazil to integrate and participate competitively in the world economy. The exchange rate is one issue, but not the most important one.

Robinson: With reformist governments in Argentina, Brazil and elsewhere in Latin America, what are the prospects for a revival of the Mercosur trading bloc and an increase in regional integration?

Berriel: Brazil should have an open approach to trade, and that encompasses Mercosur and other partners. Brazil is talking to other countries around the world. Success with economic integration depends on an economic and reform agenda that makes Brazil more stable and creates a more accommodating business environment.

Robinson: The Brazilian Development Bank highlighted spending gaps in solar energy, biofuel transportation and water, rail and gas infrastructure. Can green bonds and other forms of climate finance fund these projects?

Berriel: The central bank is assessing the viability of green finance in Brazil. We are trying to establish the impact different sectors of the economy have on the environment and to create ways to assess related risks. This is part of a broader plan to implement a green governance framework which will help to develop the issuance of green bonds and other forms of green finance. This is something the central bank takes very seriously.

Robinson: What are the biggest risks to Latin America?

Berriel: There are several uncertainties. Some things which are positive now could reverse and present challenges. Risk appetite in emerging assets has been high, and a reversal of this would create difficulties. Developments in the Chinese economy that affect Brazilian terms of trade would be a further risk, though there are signals the Chinese economy is strengthening. These factors are inherently uncertain. Brazil has improved its resilience to a reversal of these positive trends so, although there are downside risks, the economy is likely to be able to deal with them. In the meantime, we will continue to benefit from the favourable environment as long as it lasts.
Risks and rewards from policy exit
Rise and (slow) fall of central bank balance sheets
OMFIF and Narodowy Bank Polski analysis

The central banks of advanced economies responded to the financial crisis by expanding their balance sheets at an extraordinary pace. Nine years on, some are assessing the risks and benefits of exiting such policies and reversing this balance sheet expansion. The latest instalment in this Bulletin series, prepared jointly by OMFIF and Narodowy Bank Polski, profiles the Bank of England, Federal Reserve, Bank of Japan and European Central Bank.

Change in sentiment at the Bank of England

The 10-year anniversary of the last time the UK raised interest rates was on 5 July. In June Andy Haldane, chief economist at the Bank of England, gave a clear hint about the need to consider tightening UK monetary policy. He said the balance of risks associated with tightening ‘too early’ or ‘too late’ have swung materially towards the latter in the last 6-9 months. Markets were quick to interpret it as a change of sentiment by the Bank, especially in the light of a far more dovish speech delivered by Governor Mark Carney the same day.

Haldane’s speech halted a fall in the value of sterling and gave some impetus for a partial reversal of the pound’s losses in the first week of June. He mentioned, among various other reasons that might justify monetary tightening, changing trends in Google search terms. Google searches for the word ‘deflation’ are recording their lowest levels for several years.

At the same time, searches for ‘reflation’ are rising quickly. However, an increasing number of arguments are pointing to a possibility of lower inflation in coming months. The recent fall in oil prices to the lowest level in seven months is dragging inflation expectations downwards. These conform with the break-even inflation rate for British 10-year inflation-linked bonds falling to levels last seen in early October 2016. Such figures suggest more caution is required when assessing the likelihood of an interest rate rise in the second half of the year.

Fed discloses further balance sheet details

After raising interest rates for the fourth time in 18 months, the Federal Reserve has finally disclosed further details on its expanded balance sheet. The most eye-catching point relates to a plan to decrease reinvestment of principal payments. These will be reinvested only when they exceed gradually rising caps. With regard to principal payments derived from the Treasury securities, the cap will initially be set at $6bn per month. This will be augmented by an additional $6bn introduced at three-month intervals over 12 months until it reaches the $30bn threshold.

A similar strategy will be implemented for holdings stemming from agency debt and mortgage-backed securities. The key difference concerns the size of the initial cap and final threshold, which will be set at $4bn and $20bn, respectively. The additional payments will be set at $4bn, again at three-month intervals over 12 months.

Once the thresholds are reached, the Fed securities holding will begin to decline in a gradual and predictable manner. This should generate a fall in reserve balances. The Federal Open Market Committee is supposed to target the level, which will be below that seen in recent years, but above levels witnessed prior to the 2008 financial crisis. The new level should reflect the equilibrium point where the demand for reserve balances from banks intersects with the Fed’s ability to steer monetary policy efficiently. In the event of material deterioration in the US economic outlook, the Fed reserves the option to resume reinvesting principal payments. And if a reduced fed funds rate fails to engineer a suitably accommodative policy, the FOMC will be prepared to pursue its full range of tools including the size and composition of its balance sheet.
Bank of Japan expects moderate recovery

Tokyo is emitting conflicting messages. Rhetoric from the Bank of Japan points to the continuation of current policy, but its actions point in a different direction. Minori Uchida, head of global market research at Bank of Tokyo-Mitsubishi, was among the first to spot the new process, ‘tapering by stealth’.

An examination of monthly BoJ statistics shows a clear reduction in its pace of bond purchases. The volume of government securities held by the BoJ between May 2016-May 2017 amounted to less than ¥71tn ($10.4tn). The last time the BoJ managed to reach the ¥80tn target was in the period between August 2015-August 2016.

In the meantime Kikuo Iwata, deputy governor of the BoJ, in a recent speech placed great emphasis on the central bank’s ‘inflation-overshooting commitment’. The central bank plans to continue its monetary expansion until annual inflation in the observed consumer price index rises above 2%.

The apparent contradiction between committing to overshoot inflation via continued bond purchases and the observed under-purchase of bonds can be reconciled by Japan’s strengthening economic growth, which is creating reflationary pressures. In May the year-on-year CPI increase was around 0.4%, up from minus 0.4% at the same time last year. The BoJ feels the economy is turning from a moderate recovery trend towards moderate expansion. This could reduce the volume of bonds it needs to purchase.

ECB trims forward guidance

On 8 June the European Central Bank’s corporate sector purchase programme became one year old. At the end of the first year CSPP holdings stood at €92bn, corresponding to around 11% of the eligible CSPP bond universe. These holdings comprise 950 securities issued by around 200 groups. Around 12% were purchased at rates below 0% but above the ECB deposit rate of minus 0.4%. Since the CSPP was implemented, an average 10% of bonds bought under the ECB’s expanded asset purchase programme per month have been corporate bonds.

These bonds are primarily from the five largest euro area countries. France contributes 30%, Germany 25%, Italy 11%, Spain 10%, and the Netherlands 7%. The remaining share is split between the other euro area countries (11%) and non-euro states (6%). The consumer sector accounts for 32% of CSPP bonds, followed by utilities (22%), industrial sectors (10%), communications (12%), energy (7%) and others (17%). The credit rating of these bonds range from BBB, with a share of 52%, to A (37%) and AA (11%).

The ECB’s public sector purchase programme accounts for almost 85% of all bonds bought, on average, since March 2015. In its latest Bulletin, the ECB confirmed non-residents as the main sellers of PSPP bonds. This is borne out by analysing counterparts of the M3 aggregate.

At the latest ECB monetary policy meeting, held in Tallinn, the Bank slightly modified its forward guidance formula by removing mention of the possibility that interest rates could fall. This could imply an increased likelihood of tapering or even a reversal of the expanded asset purchase programme. Another possibility would be a partial reversal later this year of the ECB’s negative interest rates.

Market sentiment has been reflected in a fall in inflationary expectations and a flattening of the yield curve. Despite this, markets have started to believe that we may be seeing the beginning of the end of the ECB’s ultra-accommodative policy.

This analysis was led by Pawel Kowalewski, Economic Adviser in the Bureau of Monetary Policy Strategy at Narodowy Bank Polski, with contributions from Ben Robinson, Economist at OMFIF.
Doubt is creeping into the consensus at the Federal Reserve regarding an additional interest rate increase this year.

Minneapolis Fed President Neel Kashkari, who dissented on the decisions to raise the fed funds rate by 0.25 percentage points in March and June, reiterated his disagreement. ‘What’s the rush?’ he asked rhetorically at a public meeting in Michigan.

‘Why are we trying to cool down the economy when there may still be some slack in the job market and there is still some room to run on the inflation front?’ Kashkari said. ‘We’re not seeing wages climb very fast, and we’re not seeing inflation. That tells me the economy is not on the verge of overheating.’

James Bullard, president of the St. Louis Fed, repeated his reservations about further rate increases during an OMFIF City Lecture on 29 June in London. The level is appropriate, he said, given the environment of low growth and low inflation.

‘Even if the US unemployment rate declines substantially further, current estimates suggest the effects on US inflation are likely to be small,’ Bullard said.

Unnerving inflation data
John Williams, head of the San Francisco Fed, who has been hawkish on interest rates, expressed some concern about longer-term economic prospects. In a speech in Sydney he entreated fiscal authorities to contribute further to stimulating the economy.

‘Monetary policy will be severely challenged to achieve stable prices, well-anchored inflation expectations, and strong macroeconomic performance,’ Williams said, if governments fail to stimulate productivity with investments in education, job training, research and infrastructure. Lower demand and higher supply of savings have pushed down the natural rate of interest around the world, he added, and there are few signs this rate will move back up.

When rates are close to their lower bound, it is difficult for central banks to counter negative shocks with interest rates. This forces them to rely on unorthodox policies like zero or negative interest rates, forward guidance and balance sheet policies.

When rates are close to their lower bound, it is difficult for central banks to counter negative shocks with interest rates.

‘Monetary policy-makers will need to prepare for the next storm by taking appropriate actions in advance to design and commit to a more resilient monetary policy framework,’ Williams said. ‘It’s imperative to study and debate these issues now rather than wait until the next storm hits.’

Robert Kaplan, chief of the Dallas Fed, interjected with his view that low yields on US Treasury bonds dictate a cautious approach to further monetary tightening.

Kaplan said he is comfortable with where interest rates are after the June increase, though the low Treasury yields suggest markets expect sluggish growth. ‘I think there’s a point that, if the 10-year Treasury rate stays at the level it’s at, we’ve got to be very careful about how we remove accommodation,’ he said in San Francisco.

Kaplan added that, after the two rate increases this year, the Fed should wait for more evidence that weak inflation really is transitory, as Fed Chair Janet Yellen has suggested is the case.

Charles Evans, president of the Chicago Fed, expressed concerns that the recent softness in inflation may not be short-lived. Instead it could be a sign the Fed will find it difficult to reach its 2% inflation target.

‘The most recent inflation data made me a little nervous about that,’ Evans said. ‘I think it’s much more challenging from here on out.’

He suggested global forces could be the cause of the recent retreat in inflation. Evans, who like Kashkari and Kaplan is a voting member of the rate-setting Federal Open Market Committee this year, said he is in favour of waiting until the end of the year to consider a further rate increase.

End of Yellen’s tenure
Donald Trump is said to be deliberating over who may take over the Fed chairmanship when Yellen’s term expires in February.

The decision is usually made a few months in advance. Trump’s chief economic adviser, former Goldman Sachs executive Gary Cohn, is in charge of the search for the next chair. It is rumoured that Cohn himself may be a leading candidate. But there is a chance that Yellen will be reappointed for a second four-year term.

Two other candidates continue to be brought up for existing openings on the Federal Reserve Board of Governors in Washington. Randal Quarles, a Treasury official under President George W Bush, may become vice chair for bank supervision. The 2010 Dodd-Frank financial sector reforms created that post, but it was never filled. Quarles, it is presumed, would be in favour of less regulation.

Marvin Goodfriend, a conservative monetary economist, may win one of the other open seats. He is said to be sceptical of the Fed’s quantitative easing, especially the purchase of mortgage-backed securities, and to favour a rules-based approach to monetary policy.

Both men’s views conflict with policies championed by Yellen. Some see their probable nominations as an indication Yellen will not be reappointed in February.

Further unemployment rate declines will not substantially affect US

Estimated influence of unemployment on inflation

<table>
<thead>
<tr>
<th>Unemployment rate</th>
<th>Predicted core PCE inflation rate</th>
</tr>
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<tbody>
<tr>
<td>4.3%*</td>
<td>1.5%</td>
</tr>
<tr>
<td>4.0%</td>
<td>1.6%</td>
</tr>
<tr>
<td>3.5%</td>
<td>1.7%</td>
</tr>
<tr>
<td>3.0%</td>
<td>1.8%</td>
</tr>
<tr>
<td>2.5%</td>
<td>1.9%</td>
</tr>
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Source: Federal Reserve Bank of St. Louis

*Current value (May 2017 for unemployment, April 2017 for inflation)
Long-term weaknesses in Spanish and Italian banks came to the fore in June with the dismantling of two Italian banks, the rescue of a third, and the resolution of Banco Popular, Spain’s sixth largest bank. These cases raise fresh doubts about the European banking system and the measures needed to address weaknesses.

For creditors like Germany, the prospect of additional financial support for periphery country institutions, including extending the European Central Bank’s quantitative easing programme, gives rise to uncomfortable political implications.

However, in some ways the ECB has already bolstered its support for struggling countries. Despite officially reducing the size of its asset purchase programme to €60bn a month since April, down from €80bn, it has overshot this by over €2.5bn on average each month. Since the beginning of the year it has significantly increased the amount of Italian bonds purchased under QE, exceeding Italy’s ‘capital key’ allocation by more than €5.2bn (9%)

Shifts for eligible bonds
The over-purchase of Italian bonds is not a new phenomenon. A lack of eligible bonds in some European countries, including Portugal, Ireland, Slovakia and Slovenia, means some adjustment is required via increased purchases elsewhere. The scale, however, has increased rapidly. The ECB has over-purchased Italian bonds by an average of €869m per month since January, against a monthly average of €264m from the start of public sector bond purchases in March 2015 to the end of 2016 (see Chart).

This may suggest a lack of eligible bonds in larger countries, most notably Germany, where the ECB has started under-purchasing. May was the first time that the ECB bought fewer German bonds than its capital key allocation for the second consecutive month. June marks the third month in a row. Under-purchases since April total almost €1bn, against a total of just €247m for the entire period of QE up to March. Finland and the Netherlands have also seen a significant under-purchase of bonds by the ECB. Although it may be premature to conclude too much from this, should the trend continue it will raise questions over the future of QE.

Figures from the end of June show euro area inflation fell to 1.3% from 1.4% in May. This suggests monetary policy operations to boost inflation, including bond purchases, still have further to go. However, without an adjustment of the asset purchase rules, German bonds may reach their limit under the public sector purchase programme.

Prospects for adjusting QE rules
In January the ECB governing council modified the public sector purchase rules to allow the inclusion of bonds with yields below the deposit facility rate of minus 0.4%. This will primarily benefit German bonds. The weighted average maturity of German bonds has fallen to 7.14 years in June from 8.16 years in December, reflecting the shorter maturity of new bonds purchased. These bonds have yields below the ECB deposit rate.

Despite these tweaks, there are limits to how far purchases of German bonds can go, given other restrictions, including limitations on the amount of any one country’s issuance that can be bought by the ECB.

Fundamentally, adjusting the rules to allow the ECB to keep purchasing German bonds, in order to justify continued purchases of Italian, Spanish and other bonds, is unlikely to satisfy critics. Germany and others have long argued for a scaling back of QE, with a view to eventually winding it down altogether.

Yet a scaling back of QE would cause bond yields and the euro to spike, as they briefly did on 27 June after ECB President Mario Draghi seemed to suggest the Bank could soon begin tapering the bond purchase programme. Senior ECB sources intervened by saying Draghi’s comments had been misinterpreted.

The yields on Italian and Spanish government bonds had been rising steadily since the start of 2016, reaching 2.5% and 1.5% respectively in March 2017, before falling back slightly. The impact of a further rise in yield for periphery countries’ financial institutions, including those of Italy, Spain and Portugal, could be significant.

Worrying widening of Target-2 balances
These worries are contributing to the continued widening of Target-2 balances, with German claims on the ECB standing at €857bn at end-May, a record high. Italy’s liabilities have reached almost €422bn, far above their previous peak of around €290bn in 2012. Spanish liabilities are almost €376bn, their highest since end-2012. Both countries’ balances are still rising.

There are nuances surrounding Target-2 balances, including the influence of clearing houses in boosting the recorded claims of Germany, Luxembourg and the Netherlands, as well as important differences with 2012, when concerns over liquidity were paramount.

Nevertheless, rising balances raise questions about the smooth running of the financial system in case of a scaling back of expansionary ECB policies. The divergent strengths and weaknesses of euro area economies make the task of monetary policy normalisation highly complex – but the risks of interminable QE are becoming increasingly clear.

Ben Robinson is Economist at OMFIF.
May’s offer to EU citizens lacks substance
As soft power ebbs, UK economy will be the loser
Danae Kyriakopoulou

The rights of European Union nationals living in the UK has been one the most controversial issues since Britain voted to exit the bloc in June last year. The key role that concerns over immigration played in the Vote Leave victory stands in sharp contrast to businesses’ and economists’ fears over a weakening labour force.

Around 3m EU nationals live in the UK, comprising 7.3% of total UK employment. Of these around 508,000 are employed in the wholesale and retail trade sector, 382,000 in financial and business services, and around 60,000 are in the National Health Service. From a strictly economic standpoint, Theresa May’s announcement on 23 June guaranteeing EU citizens’ right to stay in the UK is a step in the right direction. However, closer examination reveals significant ambiguity.

First, to qualify for residency EU nationals who have lived in the UK for more than five years would need to have been physically present in the UK for no more than 450 days over that period. This means many of these EU nationals would be excluded even if their total time in the UK exceeds five years.

Second, the ‘citizenship route’ to staying in the UK may not be an option for some EU citizens. Austria, Estonia and the Netherlands do not generally permit dual citizenship for their nationals. This means UK residents who are nationals of these countries would have to give up their EU passports to obtain British ones, which they may not be prepared to do.

Short-sighted leadership
There are concerns as to whether the British Home Office has enough resources to process the applications of EU nationals for residency or citizenship in the proposed time frame. Funding for the Home Office fell by 24.9% between 2010-16 under the prime ministership of David Cameron.

Beyond such practical concerns, the framing of the government’s policy on these rights is important in making EU nationals welcome and willing to stay. Prime Minister Theresa May’s short-sighted definition of citizenship contrasts starkly with the values that first attracted many of these EU nationals to the UK and which has contributed to the nation’s soft power and ‘Global Britain’ identity.

Race to the bottom
Countries elsewhere are looking to fill the void left by Britain’s waning soft power. One of the strongest signals comes from Emmanuel Macron, France’s newly elected liberal president. Many of around 176,000 French citizens in the UK are hopeful his election may lead to the reversal of the structural constraints that first incentivised them to move from France to the UK, and might consider going back.

Polish, Irish, Germans largest groups of EU nationals in the UK
EU-born residents in the UK and British-born residents in the EU, thousands, 2015

Prime Minister Theresa May’s short-sighted definition of citizenship contrasts starkly with the values that first attracted many of these EU nationals to the UK.

A survey by Deloitte showed that 47% of highly skilled EU workers based in the UK are considering leaving over the next five years. The UK’s intention to attract businesses and people through tax incentives could prove to be an unsustainable race to the bottom.

Even if EU nationals choose to stay in the UK, this will not sustainably cover the future needs of the UK labour force. The British economy will be the ultimate loser.
Emmanuel Macron’s party La République en Marche (REM) won a decisive majority in the French National Assembly on 18 June. With 350 MPs for REM and its allies, the president is free to implement his reform agenda.

The economic implications are all-important. Some may see the pragmatic nature of Macron’s proposals as a euphemism for right-wing policies. The reality is more nuanced. As a force for change, Macron has ‘uberised’ the French political system, seeing off hundreds of established politicians from all parties. This demonstrates his willingness to promote progress.

Macronism is much more than pragmatism; it is a form of ‘Schumpeterism’. Instead of fearing creative destruction, Macron incites the French to spur it on and at the same time promote real equality. Such ambitions lay down profound challenges to fundamental aspects of French culture.

The four preferences
French economic policy is based on four preferences that governments of left and right have not fundamentally questioned in 30 years. These preferences are for demand-driven economic policy, for the priority role of the state, for equality and for status. The question is whether Macron will challenge these traditions and, if he does, whether he will succeed.

In terms of demand-driven economic policy, domestic demand and consumption have been responsible, on average, for 2 percentage points of annual GDP growth since 1977. By contrast, the contribution of international trade has been negative since 1977. By contrast, the contribution of international trade has been negative since 1977. Despite this, fiscal transfers have supported domestic demand. These have been partly financed by external deficits.

The previous government had started to implement policy changes. Corporate tax revenue fell by a net €20bn and household tax revenue rose by €35bn in the past five years. Macron appears to wish to strike a balance between continuing to support businesses while introducing a soft rebalancing in favour of households. His proposals to cut housing taxes and, for those on low wages, reduce social security contributions are, in effect, traditional policies.

Fundamental change
The second French preference is for the state. French economic policy is usually interventionist but not mercantilist. The public still considers it normal that the president should try to save a factory from closure. In parallel, a high level of trust in the French state led to a preference for law over flexible agreements. The country’s rigid labour laws give companies limited leeway to react to market conditions.

Macron supports fundamental changes here, favouring flexibility over regulation. His plans for labour market reform greatly enlarge the scope for flexible labour agreements at the company or sectoral level. A third pillar of the French economy and indeed society is a belief in equality. Since 1991 public spending has never been lower than 50% of GDP. Fiscal transfers and social security make France, on the surface, one of the least unequal of developed countries. Yet providing equality of opportunity has been more difficult. Just 1% of skilled workers’ children attend the ‘grandes écoles’, the elite higher education institutions that produce most political and business leaders. In contrast, 20% of the offspring of the professional classes go to these establishments.

To try to provide opportunities for all, Macron proposes far-reaching change. Through education reforms, he wishes to attack the roots of inequality by prioritising nursery and primary schooling. At present the emphasis in education is still for 80% of pupils to pass their ‘baccalauréat’, the academic qualification at the end of senior school. Since the target was introduced in 1985 it has been constantly achieved, but has done little to reduce social inequality.

Instead of fearing creative destruction, Macron incites the French to spur it on and at the same time promote real equality.

The fourth great French preference is for status rather than competition. French society and the economy remain organised through a system of deeply rooted status, guaranteed by regulation – hopefully now more a function of merit than heritage. Here, too, Macron could bring about comprehensive change. As economy minister in 2015 he oversaw reforms to enhance competition. He championed deregulation, Sunday working and freedom of competition in new sectors. In line with this, the new government intends to invest €15bn in educating workers to adapt to the new economy.

Yet there is a paradox in Macron’s practice of power. If Macronism is an agenda against what the sociologist Michel Crozier called the ‘société bloquée’ – the stalled society – his power remains essentially rooted in French tradition. When Macron launched his party, he wanted to renew the French political class by gathering supporters from the left and right, but building on the traditional institutional strength of the Fifth Republic.

Macron’s victory is a triumph for political ‘uberisation’, but it is based on existing institutions. As president, Macron has greater influence than other western leaders. We will now see how successful he is in wielding it.

Jean-Jacques Barbéris is Co-head of Institutional Clients Coverage at Amundi.
The European Central Bank is benefiting from an upsurge in optimism about the European economy generated by the waning of populist forces and the election of French President Emmanuel Macron.

But for each sign of success there is a measure of malaise. ECB credit tightening is getting closer – demonstrated by the volatile market reaction to June’s upbeat speech in Portugal from Mario Draghi, the ECB president. This will please the German Bundesbank but will bring deep problems for heavily indebted countries, led by Italy.

Even in better times, it is inescapable that the continent has fallen into a debt trap. Escaping is difficult. As Charles Goodhart of the London School of Economics and Political Science has stated, the longer low interest rates continue, the greater the over-borrowing and the worse the debt ratios become. Central banks trying to end monetary accommodation inevitably wreak damage.

Franco-German co-operation
This is a good time to reflect on the future of European institutions. There has been much talk of the ECB presidency passing to a German when Draghi steps down in just over two years.

Yet rather than aiming for the top ECB post, Jens Weidmann, Bundesbank president, should prepare for a higher prize: becoming the next German finance minister after Wolfgang Schäuble. He could influence far more decisively the reshaping of European integration from that position.

Franco-German co-operation has entered a more hopeful phase, although much depends on whether Macron can implement his growth and reform plans.

Franco-German co-operation has entered a more hopeful phase, although much depends on whether Macron can implement his growth and reform plans. In the ECB council Weidmann and François Villeroy de Galhau, governor of the Banque de France, appear to have sealed an informal ‘non-aggression pact’ not to oppose each other on monetary policy.

Numerous forces such as Donald Trump’s election, the British vote to leave the European Union and even the mid-June death of former German Chancellor Helmut Kohl fortify the Franco-German entente. As Dominique Mols, the French political strategist, has said, Europeans should raise a statue to President Trump for promoting European unity. Kohl’s death occurred at a propitious time to highlight the new spirit.

This was largely unexpected. Schäuble said shortly before last year’s UK referendum that EU governments, after a possible Leave decision, should not push for deeper European integration as voters would find this ‘crazy’.

The Germans would win maximum political benefits by allowing Villeroy de Galhau, a seasoned and sensible figure, to take over the ECB when Draghi steps down in 2019.

France at the head of the ECB
If, on the other hand, Weidmann became ECB president he would face the same obstacles that would have dogged Axel Weber, his Bundesbank predecessor, had he taken the job in 2011.

The ECB can never become the Bundesbank. As an institutional hawk, Weidmann would face the massive impediment of being structurally outvoted on key issues.

Heads of central banks run the institution best from the centre, not from the extremes. The best evidence comes from the Federal Reserve. Janet Yellen, the customarily ‘dovish’ chair, has been able to take a more comfortable centrist position, greatly aided by the emergence of James Bullard, president of the St. Louis Fed and a non-believer in higher interest rates.

The Germans would win maximum political benefits by allowing Villeroy de Galhau, a seasoned and sensible figure, to take over the ECB when Draghi steps down in 2019. That would solidify further the Franco-German concordat. Where Britain and the rest of Europe would fit in is another question.

A politicised ECB
The swing in the political climate has big implications. Weidmann and the German government – where Angela Merkel, his former boss, is likely to remain chancellor after elections in September – should continue to promote the view that he can take over Draghi’s job. That could be useful in European bargaining. But the job itself might be a relative sideshow.

France always wanted the ECB to be a more political institution. President François Mitterrand once famously said the ECB council should be mere ‘technicians’. Under Draghi, the ECB has certainly become more political. With the acquiescence of politicians, above all Merkel, it has become the main force for overcoming Europe’s sovereign debt crisis.

If the ECB has become politicised, then the natural role for Germany is to take full command of the politics. As Merkel’s finance minister, Weidmann would have far more power than at the ECB. Crucially, he could shape institutions such as an embryonic European finance ministry, debt management agency and treasury. Perhaps, in 10 years, Weidmann could be the euro area’s first finance minister.

David Marsh is Managing Director of OMFIF.
Helmut Kohl, German chancellor between 1982-98, who died on 16 June aged 87, was inextricably bound up with three great monetary transformations. More importantly, Kohl presided over a dramatic period of peaceful change in which Communist-run East Germany – a principal victim of the lack of a post-second world war peace agreement and the consequent division of Germany – was merged in 1990 with the Federal Republic.

Kohl's death following an accident in 2008, after nearly 10 years in which he had taken virtually no part in public life, occurred at an unusually symbolic time for France and Germany. His demise gave French and German leaders the chance to parade new-found entente in pathos-strewed funeral ceremonies on 1 July on both sides of the Rhine in Strasbourg and Speyer.

President Emmanuel Macron praised the longest-serving German leader since 19th century Chancellor Otto von Bismarck as ‘a privileged interlocutor, an essential ally, an indefatigable builder – and more than that, a friend’. Kohl's links to France, as a Rhinelander, were defined by ‘personal, family and historical memories’. He was a man who ‘preferred bridges to frontiers or walls’.

Macron hailed Kohl’s closeness to François Mitterrand, elected as France’s first post-war Socialist president in May 1981, 17 months before Kohl took office. ‘When France at the beginning of the 1980s chose leaders whose economic choices disturbed some of our partners, Helmut Kohl offered us his hand, setting aside the reticence of some of his political friends. When afterwards we were divided by national disputes, particularly on the subject of Europe, he maintained confidence in us. And when finally German reunification followed, he channelled all his energy to ensure that this did not weaken but rather strengthened Europe.’

German ‘miracle’
Kohl’s European spirit shone throughout his life. The first monetary adventure, which significantly shaped his life as an 18-year-old, was the 1948 establishment of the D-mark, replacing the war-shattered Reichsmark. The changeover was seen by many (including Kohl) as the mainspring of the post-war German ‘miracle’ which returned the country both economically and politically to the first echelon of internationally significant nations.

The second transformation was the introduction of the D-mark into East Germany in July 1990. Kohl decided this – without consultation with the Bundesbank, the hitherto all-powerful German central bank – in February 1990 in the helter-skelter aftermath of the fall of the Berlin wall the previous November.

The third was the replacement of the D-mark by the euro in January 1999 as the European single currency. This marked, it was hoped, a new era of integration. Implementation came after Kohl was defeated in the autumn 1998 elections, by Gerhard Schröder, a relative eurosceptic. The euro’s birth followed a decade of tortuous preparations in which Kohl and Mitterrand were the two crucial political figures. The D-mark became both a central instrument of German monetary unification and a sacrificial legacy bequeathed by the Germans to the rest of Europe. This was a vital signal that united Germany, rather than flexing its muscles, would be just as European-minded as the old western-orientated Federal Republic.

Even when he was strutting the world stage, Kohl remained a quintessential representative of the German provinces.

For all his pivotal influence on monetary affairs, Kohl had little formal interest in economics. He did not take kindly to stories of his shortcomings in economic understanding relayed by Karl Otto Pöhl, Bundesbank president during the 1980s. Even when Kohl was strutting the world stage, he remained a quintessential representative of the German provinces, a man of steadfast beliefs and homespun truths, a master in deploying raw and sometimes rough psychology in dealing with friend and foe alike.

Over the years as a Financial Times journalist, I had many dealings with him. I became aware of the forcefulness of his opinions but also of the reliability of his promises. At a midnight press conference in December 1991 in the Dutch town of Maastricht, during the summit that sealed the path to monetary union, Kohl was adamant that the UK would be a member. ‘The [British] government always does what the City wants... The City will ensure that Britain joins.’ I disagreed, and bet the chancellor six bottles of wine that I would be proved right. Kohl (on a reminder from me) kept to his word. At the chancellor’s office in Bonn in 1997, he handed over six bottles of Meerspinne Riesling and Biengarten Weiβburgunder from his local wine-growing region – and we drank a glass together.

'A man of massive certainty'
Kohl’s bias was towards action rather than words. Helmut Schlesinger, Bundesbank president between 1991-93, took over after Pöhl resigned following mounting discord with Kohl, who seldom even acknowledged Pöhl’s letters. Schlesinger once told me: ‘It was not much use writing Kohl a letter. If you wanted to communicate with him, it was necessary to see him in person. I did this on several crucial occasions.’

In an FT interview, in London, March 1990, Kohl said that recovery in East Germany would follow the path of the ‘social market economy’ pioneered in West Germany after the 1948 currency reform. The arrival of the D-mark would trigger ‘a great investment boom’ – led by consumption. ‘The Germans have a tendency towards eating, drinking, cars and travel. The car is the status symbol. When the East Germans have a lot of cars, then they will need a lot of repairing. And what does the wife say? “At last I want a decent bathroom.” And this will be a unique chance for the plumbers and handymen.’

After a decade in which Kohl, incapacitated by old age and illness, has been absent from public life, he finally leaves the arena. The chancellor of unity with a down-to-earth approach to monetary economics will be mourned by many more than the car-dealers, plumbers and handymen.

David Marsh is Managing Director of OMFIF.
In Greece, Yanis Varoufakis is remembered mainly for plunging the economy into deeper chaos at the end of his seven month tenure as finance minister between January-July 2015. By the time he left, there were runs on banks and capital controls were imposed.

While contemplating the mess their country is still in after years of austerity, Greeks continue to puzzle over Varoufakis' international 'rock star status'. In the UK he has become a regular political commentator. Varoufakis has been connected with opposition Labour leader Jeremy Corbyn and is vociferous in the media, attacking Europe for its treatment of Greece. He has written, too, on what Theresa May should expect from the rest of the European Union during negotiations on the UK's exit from the bloc.

Private support, public rebukes

When I heard Varoufakis speak at the Hay literary festival at the end of May, the packed crowd gave him a standing ovation. His book, Adults in the Room: My battle with Europe's deep establishment, is a fascinating account of the EU negotiating machine. That being said, the acerbic report does come across as (expectedly) one-sided.

The story of his interactions with EU bureaucrats, particularly the Eurogroup of finance ministers, is extraordinary. Varoufakis was patently aware of the hostility his 'peers' held towards the then rather dangerous and radical left Syriza government he represented.

The way Jeroen Dijsselbloem, chair of the Eurogroup and Dutch finance minister, and Wolfgang Schäuble, his German counterpart, treated Varoufakis will shock readers. Other countries' disregard for the anguish of 11m Greeks who saw their incomes decline by 28% over the last eight years should inspire anger.

It is readily admitted that Greece was at least partly to blame for getting into this position in the first place. But many other countries had got it wrong as well and had similar levels of unsustainable debt to deal with. Varoufakis quickly discovered the key institutions would not budge. Even if policy-makers privately admitted their policies for Greece were wrong, they had too much political capital invested to change course.

Greece crippled while banks protected

Varoufakis describes in detail the poor response of the external institutions which crippled Greece while protecting European banks. The solutions he proposed were, at least in theory, correct. He accepted the need for reform and was prepared to comply with 70% of the conditions for the new bail-out. He would not, however, accede to terms that could directly harm growth or lead to further humanitarian hardship in Greece.

Even if policy-makers privately admitted their policies for Greece were wrong, they had too much political capital invested to change course.

He argued, too, for an easing of self-defeating austerity measures. In addition, he proposed an element of debt restructuring to give Greece the chance to grow again.

Varoufakis is right that the situation in Greece was and remains unsustainable. His anger at being told privately by the International Monetary Fund and others that he was right but then rebuked by the same people publicly is palpable in this book.

But one can't help but think a more experienced politician would have realised a more collaborative approach would have suited the Greek government’s circumstances better. By the end, it became clear Varoufakis had to resign for any deal to be reached.

During his tenure Varoufakis was advised by eminent US economists Larry Summers and James Galbraith, amongst others. But in the UK the organisation most mentioned in this book is OMFIF. His appreciation of the support he received from David Marsh and his team, as well as his long-standing friendship with Norman Lamont, the former UK chancellor, are well highlighted throughout.

It was during one of OMFIF's telephone briefings after his resignation that Varoufakis revealed to astonished listeners that, in his search for alternatives to European Central Bank liquidity, he had made preparations to hack his own ministry's computers to gain access to business tax accounts to ensure a continued flow of funds.

This could get him into difficulties with law enforcement agencies in Greece. But it tells you a lot about the nature of the man: Varoufakis is undoubtedly one of the most colourful finance ministers Greece, or any country, has ever seen.

Vicky Pryce is a Board Member at the Centre for Economics and Business Research and a former joint Head of the UK Government Economic Service.
Scientists, environmentalists and, occasionally, politicians have long warned about the grave consequences of climate change. Economists, however, have been largely absent from this debate.

In *Natural Capital: Valuing the Planet*, Dieter Helm attempts to bridge this divide. His concise book has something to offer both sides. To economists it presents a compelling case of why the environment matters more than it is given credit for in economic models. To environmentalists it offers an insight into the power of economics to aid their cause and enact their ideas.

Helm’s dual role as a professor of economics at Oxford university and chair of the world’s first Natural Capital Committee (an independent body that advises the UK government on managing the country’s natural assets) grants him the authority to be critical of both camps.

‘In a sense, they are fundamentalists,’ he says of the advocates of ‘strong sustainability’, the idea that environmental sustainability is incompatible with economic development. But he criticises, too, economists who promote the view of people as simply “happiness machines”, according to which nothing matters unless its effect on human utility can be measured.

### Accounting for nature

For economists, Helm gives a cogent and data-driven argument. If the world economy continues to grow at its current rate, global consumption will be at least 16 times higher by the end of the century. Devoting an increasing level of natural resources to meet such needs will have highly negative impacts on the planet.

One response may be to limit growth or even aspire to a zero-growth society. However, demographic projections suggest the world’s population will reach around 9-10bn by the end of the century. This means, unless illiberal measures of population control such as China’s one-child policy are put in place, living standards on average would fall in a zero-growth society. For Helm, economists’ obsession with growth is not wrong, rather ‘it is the sort of unsustainable growth we have now which is the problem’.

Another response may be to implement massive redistribution to protect those that would be most harmed by a fall in average living standards. Helm rejects this as ‘not desirable and in any case not going to happen’. His dismissal might be straightforward for some but could seem arrogant to others, especially in the light of the rejuvenation of arguments about inequality on both the political left and right. *Natural Capital* would have benefited from a more serious engagement with this proposition.

### Allocating resources

Convincing economists to treat nature as a core part of the economy is only half the story. It is equally important for non-economists to appreciate the value of economics in supporting conservation efforts.

Defining nature as ‘priceless’ is oversimplistic. In a world of finite resources, conservation has a price. Enter economics, where ‘defining the optimal allocation of resources might be considered its core objective’. Government spending on conservation of endangered plants and animals means cuts to public services or higher taxes. Helm advocates focusing efforts on the conservation of renewable natural assets which are at risk of being depleted beyond a point when they can no longer be revived. The rest we don’t need to worry about – they will keep renewing themselves.

The first step in deciding how to allocate resources is proper accounting. Given the scale of the impact climate change and loss of biodiversity could have on future living standards, remarkably little attention is paid to them in mainstream economics. Textbooks treat nature as just another factor of production, alongside labour, capital and technology. Economists focus too much on GDP, which is an imperfect flow measure that ignores the stock and quality of assets.

Accounting for natural capital means economists have an interest in focusing on those assets with the highest value, which will often be the assets at risk.

### Financing conservation

One usual objection to conservation is the financing aspect. But pretending to care about growth while not caring about its sustainability is short-sighted and wrong. Various funding sources do exist.

Sovereign funds have a role to play in investing revenues from non-renewables for the benefit of future generations. Governments can raise funds by imposing pollution taxes and scrapping perverse agricultural subsidies that create pressures on the land and the sea. Regulations to enforce compensation for damage to natural capital could go some way towards solving the ‘tragedy of the commons’ by instituting property rights. Creating advisory institutions like the UK’s Natural Capital Committee is a worthwhile step to propel this agenda.

Helm’s conclusion does not leave room for slack. Saving the planet will ‘not happen in some laissez-faire spontaneous way’. We have the resources to avoid catastrophe, ‘but we do need to get on with it.’

Danae Kyriakopoulou is Chief Economist and Head of Research at OMFIF.
MONETARY POLICY

Makoto Utsumi, Olivier Rousseau, Richard Roberts, King’s College, London
Edoardo Reviglio, Nagpurnanand Prabhala, MIT Sloan School of Management
Athanasios Orphanides, Tarisa Watanagase, formerly Bank of Thailand
Miroslav Singer, Rakesh Mohan, formerly Deutsche Bundesbank

CAPITAL MARKETS

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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-Fontayn, BNY Mellon
Thomas Finke, Barings
Haihong Gao, Institute of World Economics and Politics
Christian Gärtnner, 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, SW1 Consulting
Fabio Scacciavillani, Oman Investment Fund
Lutfey Siddiqi, National University of Singapore
David Suratgar, BNY Mellon
Volker Wieland, German Council of Economic Experts
Katarzyna Zajdel-Kurowska, National Bank of Poland

MONETARY POLICY

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Marek Belka, formerly National Bank of Poland
Harald Benink, Tilburg University
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Rakesh Mohan, Yale University
Athanasios Orphanides, MIT Sloan School of Management
Nagpumnanad Prabhala, University of Maryland
Eduardo Reviglio, Cassa Depositi e Prestiti
Richard Roberts, King’s College, London
Olivier Rousseau, Fonds de réserve pour les retraites
Miroslav Singer, Generali CEE Holding
Shumpei Takemori, Keio University
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Danny Quah, Lee Kuan Yew School of Public Policy
David Smith, formerly United Nations
Takui Tanaka, Japan Finance Ministry
Daniel Titelman, ECLAC
Pasquale Urselli, Crédit Agricole CIB
Paul van Seters, Tilburg University
This month’s advisers network poll focuses on the US decision to withdraw from the Paris climate change agreement and the effect this has on reaching the goals set in 2015. Members of the network were asked, ‘Will American withdrawal from leadership on the international efforts to defeat climate change mean the world can no longer meet the goals set in Paris in December 2015?’ and ‘Which countries, or groups of countries, are best placed to assume global responsibility in this field?’

Of those polled, 68% remain confident in the G7’s ability to meet its climate objectives without US leadership. Some members argue that co-operation plays a greater role to effectively meet climate targets, while others believe there is still a need for a global leader. China should take on the new global responsibility according to 24%, as the latest figures show China contributes to around 30% of global carbon dioxide emissions, more than double that of the US. Of further responses, 16% opine that US states, without the federal government, should adopt the primary role, reinforced by the pact signed by US mayors from more than 250 cities aiming to transition to renewable energy within the next two decades.

‘It will not be much more difficult than before President Donald Trump’s decision. States, counties, cities and companies in the US will still put in significant effort. But the 2 degrees trajectory is still not in sight without a serious hardening of the measures contained in the National Voluntary Contributions. Leadership is needed to convince states that a more coercive mechanism is needed to measure emissions objectively at country level.’
Olivier Rousseau

‘The Paris agreement will hold as there is a worldwide shift away from carbon-emitting energy. The world’s money and markets are turning Paris into reality and ignoring President Trump. China seems committed to lead internationally as the carbon-cement era of Chinese capitalism has come to an end. Across Europe public opinion, and the incorporation of green politics into government thinking, is clear.’
Denis MacShane

‘Yes, the world can still meet the Paris goals. We are seeing US presidential withdrawal, not widespread US withdrawal. Many committed parties, including US states, will be more determined to show their green credentials. Responsibility will be shared globally, with the greatest impact potentially coming from previously recalcitrant emerging market states.’
Colin Robertson

‘US withdrawal from the Paris agreement makes it difficult to meet the climate objectives. Moreover, this disengagement from international affairs will damage Washington’s standing. This foreign policy blunder will definitely put more strain on relations with the rest of the world with repercussions on the diplomatic front.’
Hemraz Jankee

‘The targets in the Paris agreement are insufficient in any case, but the US shortfall should not dramatically affect the overall result. If countries focus on leadership rather than co-operation and results they will have missed the point, along with Trump.’
Edwin Truman

The statements were received as part of the June poll, conducted between 14-26 June, with responses from 22 advisory network members.

US withdrawal will not affect ability to meet goals
Percentage of responses

Will American withdrawal from leadership on international efforts to defeat climate change mean the world can no longer meet the goals set in Paris in December 2015?

China should take responsibility in meeting climate targets
Percentage of responses

Which countries, or groups of countries, are best placed to assume global responsibility in this field?

September’s question

After Mario Draghi steps down as President of the European Central Bank in November 2019, who will replace him?
• Jens Weidmann
• François Villeroy de Galhau
• Other (please state)
OMFIF at the IMF-WBG Annual Meetings 2017
October, Washington

OPPORTUNITIES AND CHALLENGES IN RESERVE MANAGEMENT
12 OCTOBER
OMFIF-RAMP breakfast panel

A meeting focused on the sharing of best practice in reserve management between central banks from emerging markets, with a keynote from Arunma Oteh, treasurer and vice president of the World Bank.

ASSESSING THE RESILIENCE OF EMERGING MARKET ECONOMIES
12 OCTOBER
OMFIF-Barings panel discussion

A panel of central bankers explores the resilience of emerging markets to challenges including the strengthening dollar, rising US interest rates and the Fed’s unwinding of its $4.5tn balance sheet, as well as significant opportunities available to them.

CO-OPERATION AND MAINTENANCE OF OPEN FINANCIAL MARKETS
13 OCTOBER
OMFIF-HSBC-Toronto Centre roundtable

A roundtable discussion on the importance of post-financial crisis co-operation and mutual trust for maintaining open financial markets. The meeting considers the challenges facing emerging markets in the supervision of financial institutions.

US-EUROPEAN RELATIONS IN THE AGE OF ‘AMERICA FIRST’
13 OCTOBER
OMFIF-American Enterprise Institute panel discussion

A panel of speakers discusses the evolving US relationship with Europe. Topics for conversation will include trade, immigration and diplomacy as well as political and economic issues, and the US withdrawal from the Paris climate accord.

GERMANY, FRANCE, BRITAIN AND THE NEW EUROPE
14 OCTOBER
OMFIF-DZ BANK breakfast panel

A panel of senior monetary and fiscal policy figures discusses the relationship between France, Germany and the UK as Europe’s post-UK role develops. Topics include the future of the euro and euro clearing, the Macron era and the UK’s Brexit negotiations.

To receive further information about any of our meetings, please contact enquiries@omfif.org, or telephone +44 (0)207 965 4497.

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