



Imagine a world where security would really mean something

This world exists. It is CADES



Caisse d'Amortissement de la Dette Sociale The French State Social Debt Agency

Contents -Vol. 8 Ed. 8

COVER STORY: Global flows post-crisis Monthly Review

6-7 Briefings - OMFIF Advisers Network, OMFIF meetings

Flows

- 8 Risks from cross-border funds
 Arnór Sighvatsson
- 9 International capital movements change shape Danae Kyriakopoulou
- Managing volatile flows Atish Ghosh, Jonathan Ostry and Mahvash Qureshi
- 11 Questions over renminbi internationalisation
 Bhavin Patel
- 12 <u>Uneven impact of EU migration</u> Szilárd Benk and Péter Gábriel
- 13 <u>Decades of trade opportunities at risk</u> Ben Robinson

International monetary policy

- 14 From deflation to 'lowflation' Hervé Le Bihan and Imène Rahmouni-Rousseau
- 15 <u>Time to redraw the Phillips Curve</u> Gary Smith

US

16 Fed foggy amid Washington turmoil
Darrell Delamaide

Emerging Markets

17 Improving Chinese investment in Africa Kat Usita

Europe

- 18 Holding back the populist surge Plutarchos Sakellaris
- 19 <u>Lessons of Black Wednesday</u> David Marsh

Sustainable investment

20 Rigour to avoid greenwashing Steve Hanke

Book reviews

- 21 Soft power to further the Fatherland Robert Bischof
- 22 <u>Economic models 'not up to task'</u> George Hoguet
- 23 <u>Too much globalisation gloom</u> Gabriel Stein

OMFIF Advisory Board poll

26 Weidmann to head ECB in 2019, say majority













Official Monetary and Financial Institutions Forum

30 Crown Place, London, EC2A 4EB United Kingdom T: +44 (0)20 3008 5262

F: +44 (0)20 7965 4489

Board

John Plender (Chairman)

Jai Arya

Pooma Kimis

Edward Longhurst-Pierce

David Marsh

Mthuli Ncube

John Nugée

Peter Wilkin

Advisory Council

Meghnad Desai, Chairman

Johannes Witteveen, Honorary Chairman

Phil Middleton, Deputy Chairman

Louis de Montpellier, Deputy Chairman

Frank Scheidig, Deputy Chairman

Songzuo Xiang, Deputy Chairman

Otaviano Canuto

Aslihan Gedik

Robert Johnson

William Keegan

John Kornblum

Norman Lamont

Kingsley Moghalu

Fabrizio Saccomanni

Gary Smith Niels Thygesen

Ted Truman

red fruman

Marsha Vande Berg

Ben Shenglin, Chair, OMFIF Economists Network

Editorial Team

Danae Kyriakopoulou, Head of Research **Simon Hadley,** Senior Production Manager

Julian Frazer, Subeditor

Catherine Lockwood, Subeditor

Ben Robinson, Economist

Bhavin Patel, Junior Economist

William Coningsby-Brown, Editorial Assistant

Darrell Delamaide, US Editor

Marketing

Chris Ostrowski, Assistant Head, Business Development

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

Company Number: 7032533

ISSN: 2398-4236

OMFIF

Dialogue on world finance and economic policy

The Official Monetary and Financial Institutions Forum is an independent think tank for central banking, economic policy and public investment – a non-lobbying network for best practice in worldwide public-private sector exchanges. At its heart are Global Public Investors – central banks, sovereign funds and public pension funds – with investable assets of \$33.8tn, equivalent to 45% of world GDP.

With offices in 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.

Membership

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

Analysis

OMFIF Analysis includes research and commentary. Contributors include in-house experts, Advisers Network members, and representatives of member institutions and academic and official bodies. To submit an article for consideration contact the editorial team at editorial@omfif.org

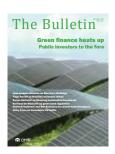
Meetings

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

OMFIF Advisers Network



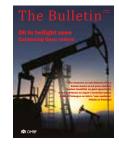
The 178-strong OMFIF advisers network, chaired by Meghnad Desai, is made up of experts from around the world representing a range of sectors: Monetary Policy; Political Economy; Capital Markets; and Industry and Investment. They support the work of OMFIF in a variety of ways, including contributions to the monthly Bulletin, regular Commentaries, seminars and other OMFIF activities. Membership changes annually owing to rotation.

















The defining characteristic of the past two years has been the rise in anti-globalisation sentiment, expressed through the UK's vote to exit the European Union, the support for Donald Trump's unilateralist agenda, and the introduction of protectionist trade measures at the fastest pace since the 2008 financial crisis. This month's Bulletin focuses on global flows – of capital, goods and people – looking at how they have developed in the post-crisis environment and analysing the political and economic challenges.

Arnór Sighvatsson, deputy governor of the Central Bank of Iceland, discusses Iceland's experience with capital flows management and presents the benefits of the special reserve requirement as a means for achieving a beneficial composition of flows. Danae Kyriakopoulou reflects on the changed nature of financial globalisation in the post-crisis period, with a greater role for foreign direct investment compared with cross-border lending. The 2008 crisis exposed the difficulty of modelling global financial markets, writes George Hoguet in his review of Richard Bookstaber's *The End of Theory*. Ben Robinson discusses the factors affecting the changed relationship between trade and GDP, forecasting a prolonged period of disappointing trade growth. However, it is easy to overstate the negative scenarios for globalisation, warns Gabriel Stein in his review of Stephen King's *Grave New World*. In the EU, Brexit and the future of trade dominate the debate. Plutarchos Sakellaris discusses the origins of modern antiestablishment attitudes in Europe, while Szilárd Benk and Péter Gábriel of Magyar Nemzeti Bank examine the impact of intra-EU migration.

On emerging markets, Atish Ghosh, Jonathan Ostry and Mahvash Qureshi present insights from an International Monetary Fund study on proactive macroeconomic management to avoid crises in the face of capital flows volatility. Such volatility and the mismanagement of flows played an important role in the Asian financial crisis of 1997-98. Many of these problems continue to trouble Asia. Gao Haihong examines the challenges for China's capital controls and exchange rate policies as it seeks to internationalise the renminbi. Bhavin Patel writes about improving financial infrastructure to facilitate the renminbi's use in cross-border payments, and Kat Usita discusses Chinese investment in Africa.

2017 marks the 10th anniversary of the European Investment Bank's first green bond issue. However, caution is needed to avoid greenwashing, warns Steve Hanke, who presents a new methodology to measure the sustainability and greenness of production processes. September 2017 commemorates, too, 25 years since 'Black Wednesday', the day Britain exited Europe's exchange rate mechanism. David Marsh presents the lessons from the episode spelled out in the OMFIF Press book Six Days in September: Black Wednesday, Brexit and the making of Europe. Central bankers today have different sets of problems. Darrell Delamaide summarises the discussions at this year's Jackson Hole meeting, while Gary Smith discusses the implications for monetary policy of the changed relationship between inflation and unemployment. Hervé Le Bihan and Imène Rahmouni-Rousseau, of the Banque de France, present insights from unconventional methods of measuring inflation expectations, concluding that the risk of a long period of 'lowflation' remains.

Early discussions have started about who will be at the helm of the European Central Bank once President Mario Draghi's term ends in 2019. Jens Weidmann, head of the Bundesbank, is the most likely successor, according to this month's OMFIF Advisers Network poll. This could entrench Germany's soft power in Europe. In his review of Paul Lever's Berlin Rules, Robert Bischof discusses the rise of Europe's 'reluctant hegemon' on the world stage.



Why China needs floating currency

Lessons of Asian crisis guiding Beijing policy

Gao Haihong, Advisory Board

The Asian financial crisis of 1997-98 proved that rapid capital account opening and fixed exchange rates were a toxic policy combination. Premature financial liberalisation in Asia invited massive capital flows, created domestic asset bubbles and inflated economies. But fixed exchange rates failed to absorb external shocks. China survived the crisis because its financial account was closed and the renminbi was strictly pegged to the dollar – a regime that served as a nominal anchor for monetary policy.



China is on its way to achieving a flexible exchange rate and a liberalised capital account. This is in line with the country's efforts to integrate into the global economy and achieve renminbi internationalisation. But now the policy-makers face the challenge of balancing a flexible exchange rate with economic and financial stability.

The renminbi exchange rate pricing mechanism, which includes a soft peg to a basket of weighted currencies and recently added counter-cyclical factors, is a mixture of market-orientation and intervention. The purpose is for the People's Bank of China to manage market expectations. But it requires two conditions: adequate foreign exchange reserves and effective controls on cross-border capital movements. The co-existence of the onshore and offshore renminbi means the central bank has to look after two markets and constantly be alert to cross-border arbitrage.

Exchange rate flexibility is not essential for currency internationalisation but it provides convertibility and openness, which is essential if the currency is to be accessible to non-residents. In the face of unwanted capital flows, capital controls should be a temporary measure in extreme circumstances. They result in resource misallocation, and there are always loopholes. For now, fine-tuned capital flow management is necessary in China. Further opening of the domestic financial market is needed to balance capital outflows. However, the effectiveness of such policy is limited because of its asymmetry.

In normal times, macroprudential measures should be in place. There are various tools that regulators can, in theory, select, such as limits on borrowing abroad, reserve requirements and measures to avoid systemic risk. China has already begun adopting tools for capital flow management. In the long term, a flexible currency can be a buffer against external shocks. As China continues to open its capital account and support the renminbi to become a key global currency, a floating renminbi will be desirable if China wants monetary policy autonomy.

Gao Haihong is Professor and Director at the Research Centre for International Finance, Chinese Academy of Social Sciences.

Weidmann: low-carbon transition 'indispensable'

Afinancial system that facilitates the transition to a low-carbon economy is indispensable', said Jens Weidmann, Deutsche Bundesbank president, opening an OMFIF symposium on green finance and the role of public investors in the development of the green market.

The meeting, 'Green bond issuance and other forms of low-carbon finance', was held at the Bundesbank's Frankfurt regional headquarters on 13 July. It was convened by the German finance ministry, Bank for International Settlements, World Bank and OMFIF.

Weidmann (pictured right) pointed out that G20 countries account for more than 80% of global carbon dioxide emissions, therefore 'collective and decisive action by the G20 membership is of the essence when it comes to mitigating global warming'.

Luiz Awazu Pereira da Silva, deputy general manager of the BIS, told delegates that the financial sectors have the opportunity to play positive roles in the green market. These include the mapping and identifying of climate change related risks; strengthening the process of labelling green finance instruments in a rigorous way; and fostering private sector investment in climate change related new technologies.

In a keynote speech Michael Meister, parliamentary state secretary at the German finance ministry, said that 'climate change may be as much a matter for financial markets as was the financial crisis'. However, more research is needed into financial risks as a study in Germany had suggested that existing models and data were not good enough.

Philippe Desfossés, ERAFP's chief executive and vice-chair of the Institutional Investors Group on Climate Change, told the seminar, 'ERAFP has a very long-term perspective. The fund is convinced that seeking to make big profits fast undermines sustainable returns,

and that it would be very unwise to believe that the crucial issue at stake, namely a shift to a sustainable economy and delayed action in this area, would not affect its assets.'

This year marks the 10th anniversary of the European Investment Bank's first green bond, and leading speakers from the EIB discussed the bank's experience as a pioneer in this field.

Joaquim Levy, former finance minister of Brazil and now managing director and chief financial officer of the World Bank Group, emphasised that the utility of green bonds lies in the strong link between their debt characteristics and the potential finance of long-term investment objectives. Directing excess savings from advanced economies towards well-planned, climate-smart infrastructure in developing economies would help increase climate resilience and generate long-term income streams from sustainable growth.

As the largest non-European supranational

issuers of green bonds, the World Bank's International Bank for Reconstruction and Development and the International Finance Corporation have been instrumental in providing investment-grade exposure to green projects in developing economies.





OMFIF adviser's successful Syrian mission



Advisory council member Aslihan Gedik has successfully worked with the Turkish and Syrian governments to grant war refugee status to animals trapped in the Syrian conflict.

Along with her partner on the ground Okan Oflaz, Gedik (pictured second left) has spent the last five months working on the logistics of bringing 13 abandoned animals in the Aleppo zoo across combat zones and into a sanctuary in Jordan.

With support from the likes of Veysel Eroğlu, Turkey's Minister of Forestry, and

Princess Alia of Jordan, she and her charity Wild@Life managed to withdraw suffering lions, bears, tigers and hyenas across multiple borders.

Despite the 1200 mile trip to the Bursa Karacabey Widlife Sanctuary in Jordan, and discovering that one of the lions was pregnant, all the animals are now on the road to full recovery.

For more information about Wild@Life's efforts to promote animal welfare, see <u>wildatlife.com/foundation</u>.

Influence of fintech on the rise

n recognition of the growing importance of financial technology, OMFIF has launched a 'focus on fintech' series featuring podcasts, meetings and commentaries.

OMFIF will seek to bring together prominent industry experts to discuss developments in cybersecurity, digital currencies, big data, regulation and financial inclusion.

In the opening two podcasts, Hiromi Yamaoka, director-general of the payments and settlement systems department at the Bank of Japan, and Mojmir Hampl (right), vice-governor of the Czech National Bank, considered the economic impact of a central bank digital currency. Yamoka also discusses the importance of common global standards to regulate private digital currencies.

Charley Cooper, managing director of the enterprise software firm R3, and Jeff Bandman, founder of Bandman Advisors and former fintech adviser at the Commodity Futures Trading Commission, took part in a discussion on the impact of decentralised ledger technology and cryptocurrencies on the global financial system. They also looked at policy and regulatory issues.



In the fourth episode, Diana Paredes, co-founder and chief executive officer of Suade Labs, examines the development of regulation technology — regtech — and assesses its potential to reduce compliance costs and improve efficiency across the financial services industry.

To listen to the podcasts, search for OMFIF on your smartphone's podcast app or via <u>iTunes</u>.

Forthcoming meetings

Bitcoin to digital central bank money

A roundtable discussion with Carl-Ludwig Thiele, member of the executive board at the Bundesbank, and Jochen Metzger, head of the payments and settlement systems department. The meeting will examine how central banks are approaching the development of digital currencies.

20 September, London

Challenges to monetary policy

City Lecture with economist Claudio Borio, head of the monetary and economic department at the Bank for International Settlements. He will focus on monetary and macroprudential policy, financial stability and the changing role of central banks. 22 September, London

Long-term growth in Spain

At the second Banco de Espana-OMFIF economists meeting in Madrid, topics include the outlook for the Spanish economy and the euro area, the optimum monetary and fiscal policy mix for growth, and reform of Europe's banking system. 3 October, Madrid

Coping with external factors

Arunma Oteh, vice president and treasurer of the World Bank, gives a keynote address at a seminar organised by OMFIF and the World Bank Treasury. The meeting examines how global headwinds impact asset and reserve managers. Speakers include Per Callesen, governor of Danmarks Nationalbank. 12 October, Washington

For details visit www.omfif.org/meetings.

Asean seeks more integration

OMFIF organised a roundtable discussion in Singapore with Mohd Munir Majid, chair of Asean Business Club, and visiting senior fellows at the foreign policy think tank LSE IDEAS.

The meeting, which marked the 20th anniversary of the Asian financial crisis, assessed the outlook for integration in the Association of Southeast Asian Nations. Attendees agreed that, though Asean's

future is inextricably linked to the rise of China, the deepening of bilateral ties with Beijing need not be at the expense of further integration.

They also discussed the impact of 3D printing, e-commerce and financial technology on the bloc. Participants suggested these developments will play a key role in the region's growth and that business dynamics will dictate Asean's future success.

Growth and investment in Ukraine



Oleksandr Danylyuk, Ukraine's minister of finance, gave a briefing in London on 6 July focusing on the volatile economic situation in his country. The participants discussed the potential of long-term growth, structural reforms and international investment.

Indonesia - policy mix and reforms



Perry Warjiyo, deputy governor of Bank Indonesia, spoke at a breakfast roundtable discussion in London on 1 August, discussing Indonesia's economic reforms. The meeting focused on the growth prospects of the Indonesian economy, economic policies and plans for reforms.

Fiscal policy for the euro area



Niels Thygesen, chair of the European Fiscal Board and a member of the Delors committee from 1988-89, gave a briefing in London on 18 July. The meeting followed the release of the EFB's first report entitled 'Assessment of the prospective fiscal stance appropriate for the euro area'.

Internationalising the renminbi



OMFIF and the International Monetary Institute of Renmin University of China, held a policy forum in Beijing on 15-16 July to discuss the Chinese economy and internationalisation of the renminbi. Among other subjects, delegates debated measures to improve China's financial stability.



Risks from cross-border funds

Iceland benefits from special reserve requirement

Arnór Sighvatsson, Central Bank of Iceland

n the years leading up to the 2008 financial crisis, carry trade-related capital inflows complicated monetary policy and contributed to the accumulation of systemic risk in many small, open and financially integrated countries.

Iceland's experience shows the challenge posed by volatile capital flows. Before the crisis, inflows amounted to about a third of Iceland's GDP, which put massive pressure on the króna once the crisis struck.

Problematic rate differentials

Many countries face similar problems. When interest rates on key international currencies are low, some economies may experience demand shocks and find themselves in a relatively strong cyclical position. They then have to keep interest rates higher. The rate differential can attract excessive and potentially volatile capital inflows. This may disrupt the transmission of monetary policy and contribute to systemic risk.

At present, interest rates on key currencies are even lower than before the financial crisis. Fund managers are searching for yield, preferably without taking too much counterparty risk. But the stock of suitable assets is relatively small. If only a fraction of the funds under portfolio managers' control are allocated to higher yielding economies, the bond and foreign exchange markets of these countries could be swamped. This would push their exchange rates up and their domestic interest rates down at a time when higher rates are needed to contain demand. This will also expose those countries to sudden capital flow reversals.

Managing growing exposure to flows

Iceland is a good example. The economy has experienced rapid export-driven growth, with GDP expanding by 7.2% in 2016. Its public and private debt ratios have fallen quickly, its credit ratings have risen and the current account is in surplus. The international investment position has turned from minus to positive territory.

Given the economy's strength, the shortterm interest rate has been significantly higher than among major trading partners, making Iceland attractive to investors.

If only a fraction of the funds under portfolio managers' control are allocated to higher yielding economies, markets in these countries could be swamped.

However, there is a problem: Iceland's bond market is tiny compared with the global demand for secure high-yield assets. Its domestic bond and foreign exchange markets are much less liquid than those in most advanced countries. Bond yields will therefore

be driven down quickly as foreign investors dive in, and the króna will rise in the interbank market of the three domestic banks.

In June 2016, fearing the impact of growing exposure to volatile capital flows, the Icelandic authorities activated a special reserve requirement on capital inflows into high-yielding domestic bonds and deposits. At the same time, the authorities held an auction of offshore krónur, facilitating a rapid move towards the removal of most remaining capital account restrictions. These had been in force since 2008. Prior to the introduction of the SRR, inflows into the domestic bond market were already severely distorting the transmission of monetary policy through the interest rate channel. This shifted policy transmission increasingly towards the more unpredictable exchange rate channel.

Tool for beneficial composition

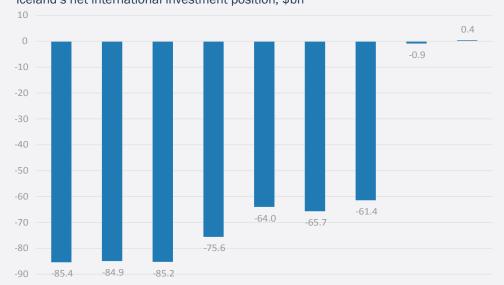
The SRR is intended to temper and affect the composition of capital flows to Iceland. Its aim is to reduce systemic risk and support other aspects of domestic economic policy, including monetary policy, thereby contributing to macroeconomic and financial stability. The activation of the SRR was partly a preventive macroprudential measure and partly aimed at mitigating the macroeconomic risk that had already surfaced. After it was introduced, normal monetary policy transmission through the interest rate channel was quickly restored.

Before the introduction of the SRR, over 70% of inflows were invested in Treasury Subsequently, investors focused on equity, including foreign direct investment. Thus the SRR achieved its objective of discouraging carry trade-related inflows that bring no long-term benefits for the Icelandic economy, increase systemic risk and carry substantial costs in terms of large reserves. At the same time, it preserved and even encouraged (by containing the overappreciation of the króna) long-term capital inflows that are likely to be beneficial, by enhancing productivity and improving the risk-sharing properties of the economy.

When the SRR is eventually scaled back, the Central Bank of Iceland intends to keep risks. Maintaining the balance is crucial.

it in its toolkit as a measure that can be activated to safeguard stability. Capital flows can have significant benefits but also pose

How inflows have benefited Iceland's net foreign capital position Iceland's net international investment position, \$bn



Source: International Monetary Fund, OMFIF analysis

Arnór Sighvatsson is Deputy Governor of the Central Bank of Iceland.



Global capital movements change shape

Foreign investment offsets lower lending

Danae Kyriakopoulou

Almost a decade after the 2008 financial crisis, the global economy is finally experiencing a period of synchronous recovery with both emerging and advanced markets expected to post robust economic growth this year and next. However, the difficult economic conditions following the crisis continue to affect the longer-term aftermath.

A notable trend in politics, economics and regulation has been the rise in antiglobalisation sentiment. The political focus has been mostly on trade and immigration; the support of protectionism and stricter control of borders were decisive factors both in the UK's June 2016 referendum to leave the European Union and in the election of Donald Trump to the US presidency. While anti-globalisation and anti-establishment parties haven't prevailed in key European elections in France and the Netherlands, their popularity is higher than before the crisis.

The effect on global capital flows has been less visible. The years building up to the crisis were a period of intense financial globalisation. Deregulation and financial innovation provided new opportunities for investors to diversify their portfolios and attempt to manage risk, and capital flows soared as banks and corporations expanded globally.

Global liquidity was further supported by a surge in savings in China and other emerging markets, notably commodity exporters. This, in turn, financed huge deficits in developed economies, while the introduction of the euro in 1999 supported a rapid increase in crossborder transactions in the currency union. These conditions have been reversing since the financial crisis, impacting the way capital flows around the world.

Global banks retreat

The most pronounced changes have been in global banking. Statistics compiled by the Bank for International Settlements show that banks' foreign claims have fallen to \$25.8tn in the first quarter of 2017, almost \$6tn down from the peak in the first quarter of 2008 - an 18% decline. A large share of that can be explained by the weak macroeconomic environment in Europe, one of the world's most financially open regions. Economic theory and evidence suggest movements in cross-border lending represent the most volatile form of capital flows and the most likely to change during crises. Foreign claims of euro area banks have almost halved to \$9.4tn from \$17.4tn in the first quarter of 2008.

The global reduction in cross-border lending can be attributed to a variety of

factors. Importantly, it reflects a desire by banks to reduce risk in the light of the painful consequences of hazardous decisions that led to large losses during the crisis. Regulation designed to tighten financial conditions, too, has encouraged such desires. Globally, this has taken the form of stricter capital and liquidity standards as part of the Basel III measures, and regular stress testing. These measures have created disincentives for banks to maintain some foreign operations.

Central bank policies have played a role as well. Research by the Bank of England shows that stricter microprudential capital requirements tend to reduce cross-border bank lending, and that some forms of unconventional monetary policy can amplify this effect. For example, both the Bank of England's funding for lending scheme and the European Central Bank's targeted longer-term refinancing operations were designed to encourage banks to focus on domestic lending.

Rebutting deglobalisation

It would be tempting to conclude from this that the world has reached 'peak finance' and that we are now in a phase of financial deglobalisation. This might not appear undesirable, given the role played by cross-border bank loans in the build-up of the unsustainable expansionary phase before the crisis.

The reality is more nuanced. A rise in other forms of capital flows has partly offset the contraction in cross-border lending. Foreign direct investment and portfolio debt and equity have continued to grow. According to analysis from the United Nations conference on trade and development, global FDI flows continued to rise in the aftermath of the 2008 upsets and have recovered to near pre-crisis levels. These higher flows have contributed to a rise in the stock of global FDI to \$27tn in

2016 from \$18tn in 2007. FDI statistics show emerging markets are now more active players in the globalisation of capital, removing the concentration of risk and exposure to volatility.

OMFIF research into countries' net international investment positions published as part of *Global Public Investor 2017* in June further shows that creditor and debtor positions have been consistently widening over the past decade and that the ratio of external liabilities to GDP has continued to grow in both advanced and emerging economies.

A rise in other forms of capital flows has partly offset the contraction in cross-border lending.

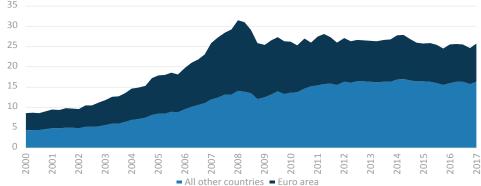
Risks remain, however. FDI is a more stable form of financial globalisation that reflects countries' and companies' long-term interests and that tends to be more difficult to reverse suddenly. Yet an increasing share of FDI income is now concentrated in low-tax, often offshore, jurisdictions. This has created a disconnect between FDI and the expected rise in productive capacity across countries, instead boosting the profits of multinational enterprises in a way that is out of proportion with the economic fundamentals of the recipient economies.

New uncertainties are emerging from the impact of technological developments on monetary policy, credit providers, and the nature of cross-border financial transactions and capital flows. These will challenge both regulators and banks to re-evaluate old models and develop new ones.

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

Cross-border lending declines after 2008 crisis

Bank total foreign claims, \$tn



Source: Bank for International Settlements, OMFIF analysis



Managing volatile flows

Emerging economies aid stability

Atish Ghosh, Jonathan Ostry and Mahvash Qureshi, IMF

The 2008 financial crisis and its aftermath saw boom and bust cycles in capital flows of unprecedented size. Traditionally, emerging economies were counselled not to impede capital flows, but to pursue exchange rate flexibility and prudent fiscal policy in the face of inflow surges. In recent years, however, there has been growing recognition that proactive management can help avoid crisis when flows recede.

To examine whether emerging economies are adopting such measures, a study by International Monetary Fund economists analyses quarterly data for 2005-13. It finds that emerging markets do react to flows, mainly through foreign exchange intervention and monetary policy. They also use macroprudential measures and capital controls. The most commonly prescribed instrument – tighter fiscal policy – is, however, the least adopted.

Capital flows and policy response

Conceptually, there is a natural mapping between the risks posed by capital flows and the tools available to policy-makers in emerging markets. Monetary and fiscal policies help address inflation and economic overheating concerns. Foreign exchange intervention can limit currency appreciation that threatens competitiveness. Macroprudential measures can be used to curb excessive credit growth and related financial-stability risks. Capital inflow controls, meanwhile, can buttress these policies by limiting inflows or by tilting flows towards less risky liabilities. Countries with controls on capital outflows can also relax these restrictions to lower net flows, reducing

overheating and currency appreciation pressures.

In practice, policy-makers do use these tools to deal with the untoward consequences of flows. Foreign exchange intervention follows the ebbs and flows of capital, with a strong correspondence between reserve accumulation and net inflows. On average, emerging markets' central banks purchase 30%-40% of the inflow. Some, for example, Brazil, India, Indonesia, Malaysia, and Peru, tend to intervene more heavily. Others, such as Mexico and South Africa, intervene less.

Policy-makers in many emerging markets have learned that they must manage capital flows.

In terms of monetary policy, inflows generally elicit higher policy rates, though the response depends on inflation, the output gap, and to some extent, currency appreciation. Rates are raised in response to higher inflation or a larger output gap — implying a countercyclical monetary policy stance — but lowered in response to real exchange rate appreciation.

When it comes to fiscal policy, however, the stance is strongly procyclical in the face of capital inflows. Government consumption expenditure typically rises as inflows surge, and falls as capital inflows decrease — presumably because emerging markets face difficulty in accessing international credit markets in bad times.

Macroprudential measures and capital controls on inflows are generally tightened as





inflows surge and relaxed when flows recede. For capital outflow controls, the reverse is true. Measures are relaxed when inflows surge – though it is only countries without fully open capital accounts, such as India and South Africa, that tend to do this.

The study shows that not only do emerging markets respond to inflows, but that their choice of policy instrument also corresponds to the nature of the risk. Foreign exchange intervention is generally used when the real effective exchange rate is appreciating. What matters more for monetary policy tightening is the output gap. Macroprudential measures are deployed in the face of rapid domestic credit growth, while inflow controls are tightened when credit growth and currency appreciation combine as a concern.

Policy-makers in many emerging markets have realised that they must manage capital flows if they are to reap the benefits of financial globalisation while minimising risks. But there are important differences in policy response even in apparently similar macroeconomic circumstances. This suggests that structural characteristics and political considerations may be shaping responses. Further research could establish whether active policy management has contributed to fewer financial crises in recent years.

Atish Ghosh is the IMF's Historian, Jonathan Ostry is Deputy Director of the IMF's Research Department and Mahvash Qureshi is Deputy Division Chief in the IMF's Research Department. This article is based on their forthcoming book Taming the Tide of Capital Flows: A Policy Guide (MIT Press), and IMF Working Paper No. 17/69. It first appeared in IMFBloa.

Emerging markets raise reserves and policy rates when financial flows increase, but loosen fiscal policy

Chart 1: Emerging market foreign reserves; % of GDP; net financial flows, % of GDP; policy rate; %



Chart 2: Emerging market government consumption expenditure, % of trend; net financial flows, % of GDP



Source: International Monetary Fund, IMF analysis Notes: Statistics are averages for the corresponding samples. Real government expenditure is the cyclical component of (seasonally adjusted) real government spending in percent of trend real government spending.

10 | FLOWS omfif.org September | ©2017



Questions over renminbi internationalisation

Beijing favours stability over capital account liberalisation

Bhavin Patel

The renminbi at the end of July regained its position as the fifth most-used payments currency by value, after falling to sixth in June. According to the latest data release from SWIFT, the international interbank telecommunications provider, the renminbi made up 2% of global payments, a slight increase against 1.98% the previous month.

The currency has risen from ninth place since 2013, reflecting a more active use of renminbi in international trade and investment as well as its slowly developing role as a reserve currency. The relative strength of the renminbi has enhanced its value share of global payments. On a real trade-weighted basis the currency rose by around 20% against a basket of 61 other currencies between the end of 2011 and July 2017. Although the renminbi is around 10% below its late-2015 peak, it remains far above the historical norm.

The fall in the value of renminbi payments in June partly reflected the lower volume of trades financed by renminbi-denominated letters of credit, a good gauge of cross-border trade activity. SWIFT estimates the value of renminbi-denominated LOCs fell by 43% against a global decline of 33% between the start of 2014 and the end of June 2017. The fall was attributed to worsening commodity prices, for which LOCs are mainly used.

Another factor behind June's figure was the fall in Chinese imports and exports over the previous year. In April 2017 the value of imports fell by 10.9% compared to April 2016. Domestic demand has remained weak despite an increase in infrastructure spending and strong credit growth this year. Likewise, Chinese exports to the US fell by 9% in April from the year before, though exports to the EU increased by 3% in the same period.

The return to fifth place for the currency in July was the result of the renminbi's relative stability against other currencies. The value of all currency payments declined by 4.3% between June-July, while that of the renminbi fell by 3.7%, increasing its relative share.

Growing role for renminbi investments

Over the last few years the total number of renminbi payments has been increasing, reflecting continued strength in cross-border transactions and growing commercial exchange to and from China. SWIFT data show that over 1,900 financial institutions made worldwide payments in renminbi in June 2017, a 16% increase from June 2015.

Moreover, the currency has a growing role in cross-border investment. This trend

has been underpinned by Beijing's policy of internationalisation and dramatic changes in technology and financial infrastructure. The introduction of China's cross-border interbank system in late 2015 has greatly improved the country's connectivity with the rest of the world.

The planned upgrade of China's cross-border interbank system, in phase two, will be crucial to boosting renminbi clearing.

The initial system uses a global identifier that allows overseas banks to identify quickly proper payment routes when processing renminbi payments. Better compatibility has reduced manual processing, thereby improving the accuracy of cross-border payments and system processing efficiency, and lowering operational costs.

The planned upgrade of the system, in phase two, will be crucial to boosting renminbi clearing. This will be achieved by raising the number of participants from key offshore financial institutions, increasing operating hours and optimising participating institutions' liquidity usage through the introduction of netting mechanisms.

Technology, supported by Chinese regulators, has further encouraged renminbi use. By the end of July 2017 regulators had issued 30 licenses to qualified digital companies to make cross-border payments. The development of financial technologies is expected to increase access for customers and businesses, boosting overall renminbi usage. The combined users of two of the largest Chinese fintech firms, WeChat and Alipay, add up to 1.3bn worldwide.

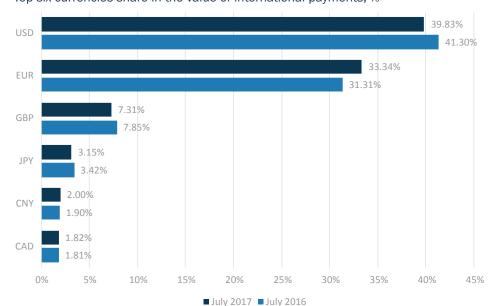
Renminbi use remains challenged

Despite the relative strength and stability of the renminbi, as well as the improvements in cross-border infrastructure over the past two years, the use of renminbi in global payments faces important challenges. Beijing's priority is to maintain stability. Despite improving rules to enhance foreign investor access to the Chinese market, they remain unwilling to open further its capital account. Capital controls are likely to foreign investors and hamper domestic companies' ability to invest abroad.

The renminbi has now developed official reserve curerency status following its admission into the International Monetary Fund's currency basket, the special drawing right. However, as the result of Beijing's pronounced caution about relaxing controls, there are considerable question marks about the pace of further internationalisation.

Bhavin Patel is Economist at OMFIF.

Renminbi regains position as fifth most active currency in global payments Top six currencies share in the value of international payments, %



Source: SWIFT, OMFIF analysis



Uneven impact of EU migration

Flow to west poses challenges for east

Szilárd Benk and Péter Gábriel, Magyar Nemzeti Bank



The flow of labour from east to west within the European Union has intensified since the accession of member states in the East. If properly managed, mobility adds value to the EU as a whole. However the effects can slow down economic convergence, so to overcome the negative impact for 'sender countries', coordinated policy action is needed.

The flow of labour between two countries is typically driven by wage differences, immigration policies (legal barriers) and factors such as cultural differences, common language and distance. After former eastern bloc countries joined the EU in 2004, all factors suggested that the flow of labour westward would increase – and indeed it did (see Chart).

There was a huge gap between the East and the West in terms of economic development and in average wage levels. Once the legal barriers to migration ceased to exist, EU citizens could move freely within member states to accept employment. No discrimination based on nationality is allowed in relation to remuneration or other conditions of employment. Furthermore, the cultural differences are moderate.

Uneven impact of migration

Substantial empirical evidence is available about the impact of migration on both the workers themselves and the sending and receiving countries. The immigrant workers benefit substantially in terms of income and welfare, and the impact on the receiver countries is likely to be positive. They face costs to integrate their new labour forces, but the workers contribute to taxes and may well mitigate labour shortages

in some industries. The higher the share of skilled immigrants the more positive the impact is on the receiver country in economic terms. However, the redistribution of income due to migration can be substantial.

The effect on the sender country is not straightforward. The 'brain drain' exerts a negative immediate impact. But in the long term, increased trade with the receiver country due to network effects and the technology transfer facilitated by return migration may mitigate its impact. Remittances may also contribute to household income.

Labour premium for growth

Overall in the EU, the flow of labour from east to west generates relatively higher benefits for receiver countries and larger losses for senders. The situation arises from the substantial share of high-skilled workers among emigrants from the East. This is amplified by technological change, which raises the value of human capital and increasingly makes a skilled labour force the key component of economic prosperity.

The gloomy demographic outlook and low fertility rate in EU countries puts a premium on labour. According to the 2017 Eurostat population projections, without a demographic turnaround the populations of most European countries, east and west, will shrink by 5-20% by 2050. Although the east-west migration will mitigate the impact of demographic change in countries to the west, it will worsen the situation in the East. The negative impact of migration on central and eastern economies is, according to some

estimates, already considerable: in some of these countries, it reduced GDP per capita by 6-10% between 1995 and 2012, mostly due to the emigration of skilled labour.

Risk of vicious circle

An important EU goal is to support the convergence of the member states' economies. But although labour migration creates or may even halt added value at the EU level, it slows or may halt real convergence. Migration increases the gap between the income level of sender and receiver countries. The income gap appears to be more persistent than previously thought. Without policy intervention, a vicious circle arises. To counterbalance the negative impact of migration on the sender countries, coordinated policy measures are required at national and EU level.

In the EU, the flow of labour from east to west generates relatively higher benefits for receiver countries and larger losses for senders.

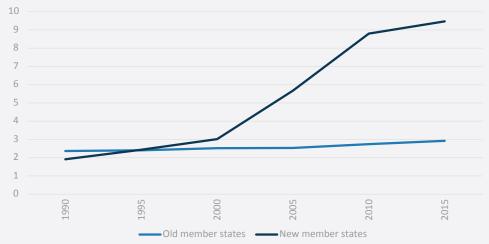
At the national level, right across the EU, policies addressing the demographic outlook will become increasingly important. Child care benefits and family tax allowances can play important roles in raising fertility rates. For sender countries, who need to retain and attract skilled labour, tax reforms, such as lowering the effective tax rates, may be effective.

The EU as a whole also needs to intervene to support the efforts of individual countries. Policies that mitigate the negative effects of emigration on sender countries are vital. Such action would help to revive the ambition of achieving convergence across EU economies.

Structural and cohesion funds are a natural place to start as labour-related factors had not yet been captured in the allocation of these funds. By increasing rather than decreasing the size of these funds the EU could redistribute the aforementioned EU-level value added of labour migration. This can induce a virtuous cycle and mitigate the adverse impact of emigration on the growth and welfare of sender countries.

Szilárd Benk is Director and Péter Gábriel is Head of Department at the Research Directorate, Magyar Nemzeti Bank, the Hungarian central bank.

Larger proportion of new member states' population migrate into the EU Individuals relocating to other European countries, % of population of sender country



Source: United Nations, author calculations

Note: 'New member states' refer to countries that joined the EU in 2004 or later



Decades of trade opportunities at risk

Policy uncertainty and structural changes threaten prospects

Ben Robinson

After years of low or negative growth, world trade volumes are recovering and expected to remain elevated throughout the third quarter of 2017, according to latest data from the World Trade Organisation.

Air freight and container port volumes, good measures of overall demand, have seen year-on-year growth of around 10% and 7%, respectively. Trade in electronic components and agricultural raw materials is expanding after a period of below-trend growth, signalling improved activity in downstream industries which use these as inputs to create more complex products.

The strength in these indicators of overall demand comes after a difficult period for world trade. Last year was the first time in 15 years – and only the second time since 1982 – that trade grew at a pace slower than world GDP, at 1.3% against global growth of 2.3%. That trade-to-GDP ratio of 0.6:1 is a marked reduction from the more than 2:1 averaged between the 1990s and mid-2000s.

While the recent increase in the WTO forecast is encouraging, policy uncertainty and structural changes in the world economy mean prospects for trade growth remain vulnerable.

Countries seeking to benefit from global trade should adapt by changing their policy focus to create a supportive domestic environment for developing their service industries and attracting foreign direct investment. This ought to include strengthening protection of intellectual property and reforming education and skills training. The international framework for services trade, too, requires unprecedented modernisation to facilitate these cross-border flows.

China restoring

The trade expansion experienced between 1991-2006 was supported primarily by the development of global value chains. These helped to integrate China, India and the formerly planned economies of Europe into the global economy. This facilitated the outsourcing of low-value processes such as assembly to low-cost centres, mostly in Asia.

These changes led to the 'fragmentation' of production, allowing countries to perform tasks which add value in cross-border production processes, rather than producing whole goods. This drastically reduced the costs of joining global trade networks, as countries no longer had to establish expensive domestic supply chains before exporting products. The result was a considerable increase in intermediate goods

trade, leading to the expansion in world trade volumes

Since the 2008 financial crisis world trade has grown at the same pace as world output. This disappointing 1:1 ratio is partly the result of cyclical factors. This includes the slow post-crisis recovery and a large fall in investment spending, which is the most trade-intensive component of import demand.

Another significant cause is the structural change resulting from China's economic development. Over the last decade, China has rapidly increased its productive capacity in everything from steel to semiconductors. Rather than simply assemble components made elsewhere, as in the past, it is drawing more of the value chain into its domestic economy and shifting production further into its interior provinces. As a result, China is exporting goods with a higher portion of

Manufacturing still accounts for around 70% of total trade, despite a declining share of global GDP. The result is a growing disconnect between GDP growth and trade expansion.

domestic value-added, impacting the amount of intermediate goods traded internationally.

As wage pressures reduce the competitiveness of its labour, China is beginning to cede its dominant position in assembly to lower-cost countries in Asia and Africa. This could lead to a similar expansion in world trade-to-GDP as that seen in the 1990s. However, several factors suggest this is unlikely to happen.

Low tradability of services

First, advancements in automated production and 3D printing are disrupting trade flows and recalibrating competitive advantages. This may lead to a 'reshoring' of production processes to developed countries.

Second, there is increasing scepticism over trade liberalisation. The US withdrawal from or renegotiation of large regional trade deals in the Asia Pacific region, Europe and North America exemplifies this issue.

Third, trade protection has swelled in the last decade, with G20 countries implementing more than 11,000 new protectionist measures since 2008.

Among the least appreciated issues constraining the trade-to-GDP ratio is the prominence of services in contributing to economic growth. These are significantly less traded than manufactured goods.

Since the 1970s services have grown to over 70% of global GDP from 53%. In developed economies, services contribute up to 85% of GDP. Manufacturing, meanwhile, has fallen as a share of global GDP to 16% from around 27%, and is still declining.

Despite these shifts, the volume of services in global trade has remained stable over the last few decades, at between 20%-25%. Manufacturing and goods trade still accounts for around 70% of total trade, despite contributing a declining share of global GDP. The result is a growing disconnect between GDP growth and trade expansion.

Unlike goods trade, services are yet to benefit from a successful and large-scale liberalisation agreement at the multilateral level. Moreover, some services are inherently non-tradable or require face-to-face interactions. Others are 'embedded' in manufactured exports and are not captured by traditional trade statistics.

Crucially, many services are delivered directly into other countries by establishing a presence through FDI, which acts as a substitute for trade in these cases. Over 60% of the global stock of FDI is in services, according to statistics from the United Nations. The value of foreign affiliate trade in services outweighs the value of cross-border service trade by more than 3:1.

Policy limiting growth

These factors suggest the global trade-to-GDP ratio is unlikely to meet its previous levels, even if global growth starts to expand at a much more rapid pace.

For emerging economies, this means joining global value chains via low-value processes may no longer be a quick route to development. For developed countries, the lesson is that trade barriers and protection for manufacturing are unlikely to solve their fundamental challenges. Managed poorly, these factors could intensify support for populist and anti-globalisation politics.

The policy focus of the leading economies suggests these issues continue to be overlooked. The cost will be measured in the lost opportunities of a prolonged period of disappointing trade growth.

Ben Robinson is Economist at OMFIF.



From deflation to 'lowflation'

Europe still needs accommodative stance

Hervé Le Bihan and Imène Rahmouni-Rousseau, Banque de France



eflationary risks in the euro area have dissipated since autumn 2016. Market indicators, nevertheless, continue to reflect medium-term inflation expectations below the Eurosystem's 2% target.

The period from 2011 to 2016 was marked by several 'deflationary warnings' in the euro area, according to market-based indicators. Since September 2016, however, the indicators have been suggesting that the risk has virtually disappeared. The cost of protection against the risk of negative inflation fell sixfold between January 2015 and May 2017. It has now reached its lowest level since the euro area debt crisis.

Moreover. swap market-based inflation expectations have risen closer to those expressed in studies such as the European Central Bank's Survey of Professional Forecasters. The perceived risk of deflation disappeared following the ECB's implementation of its asset purchase programmes. The expectation now is that inflation will be positive but persistently below target ('lowflation').

Market-based inflation measures

Measurements of inflation expectations based on the valuation of financial instruments, which reflect the market consensus on future inflation, have been developed since the beginning of the 2000s.

Initially limited to inflation-linked bonds, the range was extended to include swaps, and later options. The measurements they provide have increased in relevance as market participants' use of these instruments, to meet hedging and position-taking needs, has become more dynamic. A market indicator

often monitored by central banks is the 'fiveyear, five-year forward inflation expectation rate' derived from the swap market. This is the expected average inflation rate over the fiveyear period that begins five years from now.

Market price-derived indicators have two

If expectations deviate from the 2% inflation target, this could signal a loss of confidence in the central bank.

advantages over measurements such as the SPF. First, as they are based on instruments quoted on the markets on a daily basis, they provide frequent and responsive measurements of inflation expectations. In particular, they allow the impact of an event or a shock on inflation expectations to be measured without waiting for the forecasts to be updated. Second, they are based on real-life transactions where investors bear a financial risk that is linked to the accuracy of their expectations. They are not subject to the risk of reporting bias or a limited incentive to respond precisely, as with surveys.

However, measurements derived from the prices of market instruments are susceptible to some biases. They incorporate, in addition to the inflation expectation, a variable risk premium which compensates the purchasers for their exposure to the risk of inflation that is higher than expected. The limited liquidity of some products is another source of bias.

Inflation expectations play an important role in assessing the effectiveness of monetary policy. Where medium-term expectations persistently deviate from the 2% target, this could signal a loss of confidence in the effectiveness of the central bank.

Such a risk arose in the euro area in 2014 against a background of fragile economic recovery after the debt crisis and the fall in oil prices. The inflation rate edged down to close to zero by 2015. At the same time falling indicators of long-term inflation expectations suggested a potential deanchoring of expectations and the possibility of very low inflation, or even deflation. The cost of deflation protection on the options market reached a record 276 basis points at the beginning of 2015, before the announcement of the public sector purchase programme.

International factors

Three factors might explain why inflation expectations have recovered since mid-2016. Non-standard monetary policy measures reduced the cost of credit, reviving growth and inflation in the short term. Although the measures are unlikely to affect inflation and growth at a five-year horizon, they anchored expectations by demonstrating the commitment of the Eurosystem to its inflation target.

The price of oil is often mentioned as a factor by market participants, but the correlation between inflation expectations and the oil price remains empirically fragile.

International factors can impact on expectations. After the US presidential elections, long-term inflation expectations in the euro area recovered, influenced by those in the US. However, research by economists Matteo Ciccarelli and Juan Angel Garcia suggests that the direction of those 'spillovers' is not stable in the long term.

Whatever part those factors played in the recovery of market expectations, the battle against deflation appears to have been won in the euro area. That said, the indicators point to a slow and uncertain convergence towards the target level. This risk of prolonged 'lowflation' is one of the main reasons for maintaining an accommodative monetary policy stance in the euro area.

Hervé Le Bihan is Deputy Director, Monetary and Financial Studies Directorate, at the Banque de France. Imène Rahmouni-Rousseau is the bank's Deputy Director for Market Operations. The views expressed are those of the authors and may not necessarily correspond to those of the Banque de France.

Markets more pessimistic on inflation than professional forecasters

Five year inflation forecast, %, five-year inflation linked swap rate five years ahead,%



Source: Thomson Reuters, European Central Bank professional forecaster survey



Time to redraw the Phillips Curve

Implications for monetary policy

Gary Smith, Advisory Council

nflation continues to undershoot market forecasts and central bank targets. This is a matter of concern. The global economic recovery is one of the longest on record. Unemployment has fallen in many countries but, contrary to economists' expectations, this has not led to wage inflation.

The lack of wage inflation may impede interest rate normalisation in coming quarters, which may in turn have important implications for policy manoeuvrability when the next recession hits. 'Lower for longer' might become 'lower forever', providing further impetus for investors to seek assetclass diversification as they hunt for yield.

inverse relationship between unemployment and inflation, identified by the Phillips curve, has changed. This has surprised economic forecasters. However, much has altered since William Phillips published his seminal paper establishing the relationship in 1958.

Increased life expectancy and better health are enabling and encouraging older workers to stay in the labour market for longer. This helps them to keep occupied and to deal with the financial implications of longevity.

Delayed retirement

Older workers are motivated in part because low interest rates are leading to disappointing capital market returns, reducing their income from savings.

Many people, especially those in defined contribution schemes, have retired with lower pensions than they expected. As a result, workers delay retirement to help compensate for the impact of low interest rates. However, by doing so they tweak the lifetime savings and spending balance, and place further downward pressure on interest rates. The question arises as to whether this pressure to work for longer will ever be alleviated.

The inverse relationship between unemployment and inflation has changed, surprising forecasters.

The most aggressive wage demands typically emanate from young workers. But in the US the share of such workers in the labour market is falling, according to Deutsche Bank. Older workers are less aggressive wage negotiators because they are less likely to change jobs (and changing jobs is a common way to get a wage rise).

In many countries union membership has fallen. Andy Haldane, chief economist of the Bank of England, identified that around 6m employees in the UK are members of trade unions compared with 13m in the late 1970s. Collective wage negotiations are less common and individual agreements have become more widespread. This has helped dampen wage inflation.

This shift towards individual wage negotiations reflects changes in the labour

market, in particular the increase in self-employment and part-time working. Economists are still grappling to understand all the consequences, and the Bank of England has commissioned a review that will report on the subject later this year.

One consequence is that the growth of the gig economy, characterised by shortterm contracts and freelance work, has created uncertainty for many workers. This has further reduced the incentives for wage negotiation, putting downward pressure on wage inflation.

Marginal workers

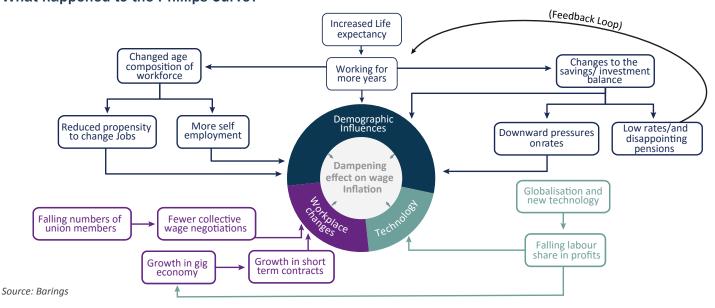
Data suggest that workers tend to prefer to be self-employed as they get older. This means that as the share of older workers in the labour market increases, the number of selfemployed workers is also likely to rise. They are a key component of the 'marginal worker' count, often viewed as critical in determining the outcome of wage negotiations.

Finally, there is the role of technology and globalisation, which may have weakened the bargaining power of workers and led to a decline in the labour share of profits.

Given that there are so many reasons for weak wage inflation that would have been unknown to Phillips in 1958, it is probably not surprising that his explanation of the tradeoff between unemployment and inflation appears to have broken down.

Gary Smith is a Member of the Strategic Relationship Management Team at Barings.

What happened to the Phillips Curve?





Fed foggy amid Washington turmoil

Monetary policy overshadowed by succession question

Darrell Delamaide, US editor

In her speech at the annual retreat of the Federal Reserve in Jackson Hole, Wyoming, Fed Chair Janet Yellen seemed determined to frustrate not only the battery of people looking for monetary policy signals, but also weaken any administration arguments for appointing her to a second term.

The impending expiration in February of her four-year term as chair overshadowed the speech. Donald Trump is not expected to reappoint Yellen.

She could have spoken on her caution about raising interest rates, which Trump would have received well. Instead, Yellen reiterated the importance of bank restrictions that the administration believes are hindering lending.

'Because of the reforms that strengthened our financial system, and with support from monetary and other policies, credit is available on good terms, and lending has advanced broadly in line with economic activity in recent years, contributing to today's strong economy,' Yellen said. 'At the same time, reforms have boosted the resilience of the financial system. Banks are safer.' Yellen made no direct comments on the direction of monetary policy.

Market pricing indicated that investors don't expect any further action on interest rates at the September meeting of the Federal Open Market Committee and are growing more sceptical that anything will happen before the end of 2017.

There is mounting concern that law-makers may not reach agreement on raising the US debt ceiling, and Fed policy-makers are worried in general about the impact of Washington's dysfunction on monetary policy.

Erratic conduct in Washington

The discussion at Jackson Hole was less about short-term monetary measures and more about the potential impact of Washington's erratic behaviour on policy.

There is mounting concern that law-makers may not reach agreement on raising the US debt ceiling. Fed Governor Jerome Powell warned that the failure of the government to

pay what it owes would be 'unprecedented' and 'a major shock to the economy'.

Such a shock is 'not something we need right now, and no one should assume the Fed has any way to protect American businesses and households from the effects,' he said in an interview from Jackson Hole.

Fed policy-makers are worried in general about the impact of Washington's dysfunction on the economy. The minutes from the July meeting of the FOMC said 'several participants noted that uncertainty about the course of federal government policy, including in the areas of fiscal policy, trade, and healthcare, was tending to weigh down firms' spending and hiring plans.'

The minutes added that 'a few participants suggested that the likelihood of near-term enactment of a fiscal stimulus programme had declined further or that the fiscal stimulus likely would be smaller than they previously expected.'

Swollen balance sheet

Markets expect details about how the Fed will wind down its balance sheet to become clearer at the September meeting. The balance sheet has swollen to more than \$4tn through Fed bond purchases for quantitative easing.

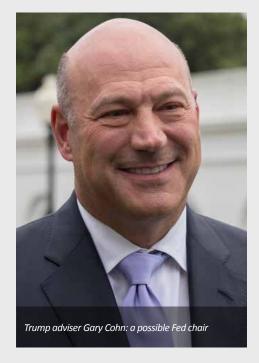
'At the next possible opportunity I think we should begin that process of letting the balance sheet run down,' Robert Kaplan, head of the Dallas Fed, said in an interview at Jackson Hole.

Kaplan is already on the record as being in favour of waiting for stronger inflation before any further rate increases. He reiterated this view in the interview: 'I'm not saying I won't be in favour of raising rates before the end of the year. I think we have the ability to be patient, and I want to see more information that suggests we're making progress toward meeting our 2% inflation objective.'

Kaplan said the 'natural' interest rate is lower than people think, so that Fed policy is less accommodative than it might appear. Other Fed officials have cited one-off effects, such as cuts in mobile phone rates, to explain the soft inflation numbers.

Esther George, chief of the Kansas City Fed and host of the Jackson Hole conference, however, affirmed her hawkish reputation. She believes there will be another interest rate hike before the end of the year.

'I'll be looking at the data in the next few weeks as we get ready for the September meeting, and see whether that still makes sense,' she said. 'Based on what I see today, I think there's still opportunity to do that.'



While acknowledging the traditional relationship between low unemployment and inflation has broken down, George said she preferred to look at the strength of the economy in general.

She favours removing at least some accommodation through starting to wind down the balance sheet. 'The estimates suggest the economy is in a good place to begin doing that,' she said.

Cohn as Fed chief

Opinions are divided on who might take over from Yellen. Gary Cohn, White House economic adviser and a long-time executive at Goldman Sachs, seemed certain to win the position until his differences with Trump over right-wing demonstrations at the University of Virginia became public.

For some observers, that will disqualify Cohn from a Trump appointment. On the other hand, it might be a convenient way to get him out of the White House.

Whether he would be suitable for the role is another question. While he would be likely to loosen restrictions on banks and advocate dovish monetary policy, the last time an investment banker became Fed chair — William Miller in a March 1978 appointment that lasted only until August 1979 — it was not a success.

Darrell Delamaide is a writer and editor based in Washington.



Improving Chinese investment in Africa

More strategic and sustainable long-term approach needed

Kat Usita

China asserts its global infrastructure spending spree is an attempt to replicate its successful domestic growth formula worldwide. Others view it as a form of imperialism: an attempt by an emerging superpower to extend its geopolitical reach by providing enormous grants to developing economies. Regardless of which viewpoint one subscribes to, well-placed infrastructure investment should contribute to economic growth.

This is especially true for transport infrastructure, which spurs business development and improves access to opportunities that might otherwise be out of reach. Despite these potential benefits, Chinese infrastructure projects face several economic and political challenges in host countries. Managing these concerns is key to the success of China's infrastructure initiatives.

Facilitating increased activity

In 2015, Ethiopia's first light railway system opened in the capital of Addis Ababa. A loan from the Export-Import Bank of China covered most of the \$475m construction cost. The railway was expected to ease much of the capital's vehicular traffic.

Two years later, train cars are packed with commuters, but many of the city's roads remain choked. While costly and inefficient, heavy traffic both on and off the tracks indicates the transport network is facilitating greater economic activity.

Still, the Ethiopian government and their Chinese partners must take steps to decongest the railway system. Its capacity should be increased by adding train coaches and fares managed to redistribute demand. Extensions to the railway should be strategically located to encourage more motorists to use public transport.

In Nigeria, the Kaduna-Abuja rail line connects those living in the north of the country to opportunities in the capital. The number of people using the line has been steadily rising since it started running last year, offering passengers a safer and

Like most China-funded projects, the \$876m contract for the Nigerian railway's construction was given to a Chinese construction company.

reasonably priced alternative to road travel. Additional coaches have been ordered to increase trip frequency and accommodate more passengers.

Like most China-funded projects, the \$876m contract for the railway's construction was given to a Chinese construction company.

Unfulfilled expectations

Elsewhere in Africa, such investments are not always warmly welcomed. Part of the Belt and Road initiative linking Chinese producers to markets in Asia and Europe is the \$3.2bn Mombasa-Nairobi railway that opened in May, connecting the port city to Kenya's capital.

Heavy traffic both on and off the tracks indicates the transport network is facilitating greater economic activity.

Though its construction was generally well-received by citizens, it triggered concerns about overpricing and disruption to parts of Nairobi's national park. Kenyan taxpayers will bear for decades the cost of the project as they repay the Chinese loan.

Such apprehension is not unsubstantiated. Tazara, a railway built in the 1970s to link Tanzania and Zambia, was China's first major infrastructure investment in Africa. It cost \$500m at the time to complete, around \$3bn today, adjusting for inflation.

Although the line has contributed to

economic growth along its corridor, especially in facilitating the export of Zambian copper, it has been inefficiently operated and poorly maintained. Tazara is now a worn-out reminder of unfulfilled expectations, and successive governments have struggled to revitalise the railway.

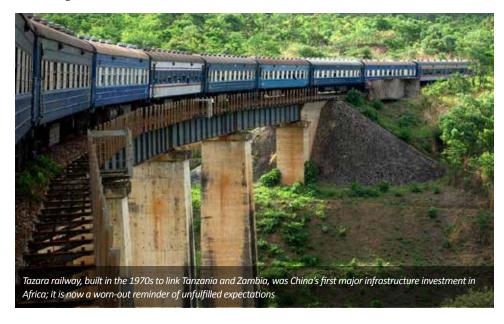
A strategic and sustainable approach

China will continue to build where it can, even if the resulting projects are met with scepticism both from outside observers and in host countries. Aside from providing access to previously under-connected locations, infrastructure investments create jobs for Chinese contractors. This often leads to considerable criticism.

Locals expect to be employed by construction companies, but they are not always hired, as firms bring in their own workers from China. When locals are given jobs, there are frequent complaints about unfair wages and unsafe working conditions. Problems arise too when staff are not trained properly to run and maintain facilities.

Impoverished governments will keep borrowing from China to build much-needed infrastructure, but should be more strategic in selecting which projects to undertake and ensure that locals benefit from jobs created by construction booms. China, for its part, should take a more sustainable approach to African infrastructure. These projects should not just be built quickly; China has to consider the long-term needs of affected local communities.

Kat Usita is Researcher at OMFIF.





Holding back the populist surge

Global economic co-operation is vital

Plutarchos Sakellaris. Athens University of Economics and Business

n many advanced economies, strong anti-establishment sentiment is causing uncertainty and instability. If the causes, which are largely economic, are not urgently addressed, global governance institutions may be unable to absorb the long-lasting shocks to society. Serious political and diplomatic engagement and action is essential.

The populist surge in advanced economies can be attributed to three economic and social dynamics that are global in scope: the decline in the income share of labour and growing income inequality; the 2008 financial crisis, which undermined trust in institutions; and extraordinary flows of economic immigrants and refugees, affecting mostly the European Union.

Causes of the populist surge

The first of these is largely the result of skill-biased technological change. This leads to capital being substituted for labour. Machines have taken the place of assembly-line workers and we are now developing robots that may displace even high-skilled workers. Technological change encourages economies of scale and creates a winner-takes-all aspect to remuneration. Globalisation has led to the offshoring of productive economic activity.

Global integration of financial markets, with inadequate macroprudential regulation, allowed cross-border capital flows to balloon before the 2008 crisis. Many economies

became vulnerable to sudden stops, when foreign-sourced capital abandoned host countries, causing great damage.

The third cause of discontent, economic migration, is a particular issue in the EU. Poverty and lack of opportunity in developing countries are exacerbated by rapid population rises that are not matched by economic growth. Linked to migration is the issue of refugees. Much of the developing world is menaced by civil wars and terrorism, forcing people to seek refuge in the EU or other developed economies.

Dealing with the causes of populism requires global, multilateral coordination. The starting point is to enable continuous, widely shared improvements in living standards. The goal is productivity growth. This can be achieved by better technology, which needs well-targeted investment in research and development. At the same time, resources have to be allocated to their most productive

Policy-makers in the EU and elsewhere need to act resolutely to remedy systemic economic failures and ultimately improve people's welfare.

use. A business environment that enables private sector activity and entrepreneurship lets this happen. Human capital is the most important asset in knowledge economies, therefore publicly provided health and education services should be prioritised. Investment in human capital enhances the ability of individuals to benefit from an economic environment that favours capital and relentless innovation.

Worldwide policy solutions required

Global problems require global solutions. Worldwide policy coordination is essential for macroprudential regulation, climate change action, the removal of obstacles to trade and investment, and exchange rate policies. To implement this, multilateral organisations are needed.

Greater promotion of effective economic development co-operation is also necessary. The best way to stop economic migration is to enable people to make a living in their homeland. Key to such a strategy is to take advantage of private finance, of which there is a surplus in developed economies. To access it, developing economies must address investors' wariness by creating institutions that safeguard property rights. Advanced economies should prioritise advice on how to build these institutions and switch from providing outright grants to using blending instruments that crowdin private investment. These instruments combine technical advice with grants, that serve as insurance to attract private capital financing for higher-risk and higher-impact projects. Infrastructure investment will be a key beneficiary, while development of entrepreneurship and small-scale businesses will also be enhanced by the provision of scarce capital.

The current anti-establishment feeling in the EU and other advanced economies has not come out of the blue. It emanates from widespread disappointment of expectations and the inability to accommodate substantial population inflows. Policy-makers need to act resolutely to remedy systemic economic failures and improve welfare. There are some grounds for optimism in Europe. This year voters in Austria, France and the Netherlands rejected the most blatant forms of populism and opened the way for beneficial reforms.

rejected the most blatant forms of populism and opened the way for beneficial reforms.

Plutarchos Sakellaris is Honorary Vice President of the European Investment Bank and Professor of Economics and Finance at the Athens University of Economics and Business.





Lessons of Black Wednesday

Episode that paved the way for Britain's EU withdrawal

David Marsh

The story of 'Black Wednesday' in September 1992, when Britain was forced to withdraw sterling from the exchange rate mechanism of the European Monetary System, has repercussions which have spread over 25 years. It marked the first tremors that led eventually to the upset of last year's referendum vote for Britain to leave the European Union. Here are 10 sets of conclusions from Six Days in September: Black Wednesday, Brexit and the making of Europe, published by OMFIF Press, explaining the sterling crisis that came to a head on 11-16 September 1992.

1. What happened with various efforts to join the ERM in the 1980s? West Germany and France led a drive to create the ERM at the centre of the European Monetary System in 1978 as a 'zone of monetary stability' in Europe. Britain rejected ERM membership on the grounds that sterling was likely to be fixed at an uncompetitive rate. Margaret Thatcher, prime minister after 1979, repeatedly displayed strong antagonism, especially as she (correctly) saw the ERM as a forerunner to economic and monetary union in Europe, which she implacably opposed.

2. Why did Britain join in October 1990?

The Treasury had run out of options to bring down inflation. An economic boom with high inflation unleashed by Nigel Lawson, Thatcher's second chancellor of the exchequer, who resigned in October 1989, prompted his successor, John Major, to consider raising interest rates beyond 15%. Major persuaded Thatcher that harnessing the power of the Deutsche Bundesbank in the ERM would allow Britain to reduce inflation and interest rates without damaging the economy.

3. What was the attitude of the Bank of England and Treasury?

Thatcher made entry conditional on a simultaneous cut in interest rates. The Bank of England and Treasury opposed this, but acquiesced as part of the strategy of persuading Thatcher to join. Robin Leigh-Pemberton, BoE governor, warned Thatcher Britain might have to reverse the rate cut. The move was never discussed in Cabinet; Major kept the decision secret from senior ministers. At the Cabinet meeting following the ERM announcement, Major covered up the Bank's warnings.

4. Was there widespread disagreement over sterling's entry rate?

Thatcher wanted sterling pegged at a relatively high exchange rate to bear down on inflation. Karl Otto Pöhl, Bundesbank president, told the Bank of England the interest rate cut should be postponed and that the proposed central rate of DM2.95 'was a little too high'. Pöhl smoothed over protests from other central banks, especially France, that Britain should have discussed entry terms with its European partners. The biggest disagreement was with Jacques Delors, European Commission president.

5. What was the role of the Bundesbank in Britain's ERM withdrawal? Norman Lamont, chancellor of the exchequer after Major took over as prime minister from Thatcher in November 1990, was irked by Bundesbank sniping against sterling. A joint BoE-Treasury mission to the Bundesbank on 14 September was told that sterling was 20% overvalued. 'Unauthorised' remarks on 15 September by Helmut

Schlesinger, Bundesbank president, about how a realignment focused solely on an Italian lira devaluation should have been wider, triggered massive sterling sales, forcing the UK's departure.

6. Why did leaving the ERM on Black Wednesday take such a long time? A 1985 Treasury paper foresaw that Britain could suspend intervention obligations at a time of crisis. But, anxious to spread political responsibility for the ignominy, Major wasted valuable time on political consultations with ministerial colleagues — contrasting with the secrecy of joining in 1990. Lamont, a sceptic on the ERM, tried to leave earlier in the day on 16 September. He observed later, 'We were bleeding to death, and all we were doing was talking.'

7. How much did the UK lose from the ERM debacle?

In the late evening of 16 September the Treasury's Nigel Wicks related how 'within a few hours, Britain's foreign exchange reserves had been transformed from a plus of more than \$20bn into a significant negative position.' On 18 September, Treasury officials were at pains to play down to Lamont the size of the fall, preferring to tell him that the reserves were 'severely depleted', rather than 'negative'. In 1993 the Treasury calculated the accounting loss from the reserves slide at £3.3bn.

8. How did Black Wednesday affect the economics of the UK and the rest of Europe?

After devaluations by other ERM currencies, and sterling's and the lira's withdrawal, the D-mark exchange rate was too high — resulting in a German recession. Outside the ERM, buoyed by a lower exchange rate, able to cut interest rates to levels consistent with British economic needs, and helped by the ERM's anti-inflationary legacy, the UK boosted economic growth to well above that on the continent and paved the way to the Bank of England's operational independence in 1997.

9. What was the political outcome?

As Stephen Wall, a close Major aide, said, 'Black Wednesday altered the course of UK policies on Europe, and was fundamentally the end of the Major government.' Britain's new trajectory of semi-detachment from the European Union culminated 24 years later in the referendum vote to leave the bloc. Major and the Treasury failed to understand how the Bundesbank's reaction to reunification would prevent extensive falls in UK interest rates, prolong the recession and hamper Britain's ability to stay in the ERM at a relatively high exchange rate.

10. What was the effect on monetary union?

Disputes with the Germans in 1992-93 strengthened French determination to forge EMU. The Bundesbank was the apparent Black Wednesday victor, but its anti-EMU resistance weakened. Europe's failure to make timely post-reunification realignments persuaded Europe's political leaders to press on with abolishing exchange rates in 1999. Germany's weakened ability to impose stringent conditions contributed to serious design flaws in EMU that became fully apparent after the 2008 financial crisis.

David Marsh is Managing Director of OMFIF.

Six Days in September: Black Wednesday, Brexit and the making of Europe will be launched on Friday 15 September. To attend the launch, see www.omfif.org/seetings. To purchase a copy, go to www.omfif.org/shop.

SIN PRINTER



Rigour to avoid greenwashing

New measure for green credentials

Steve Hanke, Advisory Board

Companies around the world are scrambling to go green. Some are so desperate that they engage in 'greenwashing', which is little more than the use of public relations campaigns to assert greenness. That said, many businesses are producing goods and employing production processes that do qualify as sustainable.

The world of green investment is growing rapidly. The FTSE4Good, a series of ethical investment stock market indices, has the largest market capitalisation of the green equity indices. At the end of June 2017, the FTSE4Good Global benchmark's net market capitalisation was \$21.8tn. That's larger than the GDP of the US – \$19.2tn.

Rigorous definition

With investors favouring green, and investment flows being earmarked as green, the question arises as to how an investment qualifies for this coveted designation. The current methods fail to meet rudimentary standards of measurement as they do not yield results that can be replicated. For the most part, methods are subjective and opaque. This is not a firm foundation for the multi-trillion dollar world of green investment. To introduce more rigour, I worked with Dr Heinz Schimmelbusch,

founder and chief executive of the Advanced Metallurgical Group, the speciality metals and minerals company where I am on the supervisory board, to develop a methodology that is simple, transparent and replicable.

Our metric is determined by starting at the origin of the supply chain. It is from there that we measure the amount of greenness resulting from production of an item that contributes to sustainability.

With investors favouring green, the question arises as to how an investment qualifies for this coveted designation.

For example, a company might produce graphite, which then helps create more efficient insulation, thus lowering energy demand. The graphite producer is therefore a supplier of a green good — the net reduction in carbon dioxide attributable to the graphite.

The supplier 'enables' the production of the green good. When it comes to the

measurement of greenness, this enabling notion leads to simplicity and transparency, as well as an objective measure of the amount of greenness associated with each supplier.

Enabling greenness ratio

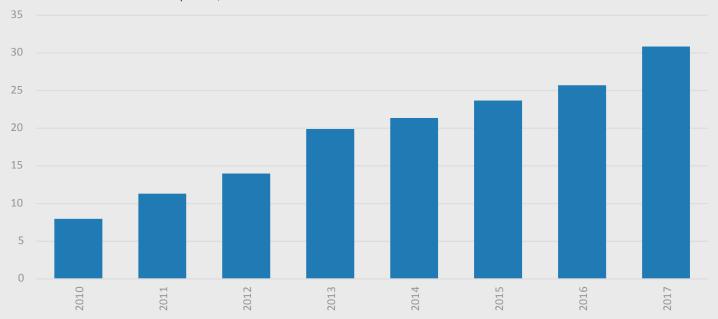
To put the concept into operation in the context of carbon dioxide emissions, a clear and replicable formulation for measuring greenness with precision can be used: the enabling greenness ratio. This is simply the net carbon dioxide reduced by a company divided by the company's total assets. This provides net carbon dioxide reduction relative to a company's size and is analogous to the traditional accounting measure — return on assets.

This year AMG will reduce an estimated 30.84 tonnes of carbon dioxide per \$1,000 of assets. The estimated net carbon dioxide reduction total grows over time, on the assumption that the raw materials supplied are still in use. A transparent assessment of green credentials is vital to underpin the growing market in sustainable investments. The enabling greenness ratio achieves this aim, and is simple and replicable.

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

AMG to reduce an estimated 30.84 tonnes of CO2 per \$1,000 of its assets in 2017

Metric tonnes of CO2 reduced per \$1,000 of AMG assets



Source: Advanced Metallurgical Group and calculations by Steve Hanke and Heinz Schimmelbusch.

Note: These data assume that all products produced since 2008 are still in use by 2017. All data from 2014-17 are estimates made by the authors.



Soft power to further the Fatherland

How reluctant Germany manages its interests

Robert Bischof, Advisory Board

In just over a decade, Germany has been transformed from the 'sick man of Europe' into a domineering and threatening force, according to some.

Given the UK's decision to leave the EU and the negotiations about the terms of Brexit, there is renewed interest in all things German, and British authors have responded. If you plan to read Paul Lever's book, *Berlin Rules: Europe and the German Way*, to enjoy a bit of good old fashioned German bashing, and to confirm your anxieties about a Europe run by Germany, you might be disappointed at times and reassured at others.

Democratic rectitude

There are a few passages that may fall into the disappointing category: 'Although Germany's dominance in Europe is in soft, rather than hard power it is no less real'; and 'Germany is, in the words of Professor William Paterson, Britain's leading academic expert on the country, a "Reluctant hegemon". Power of the kind that Germany now wields in Europe is not something that German governments have consciously sought, nor indeed is it welcome in German public opinion.'

German Chancellor Angela Merkel's policies have not made Germany loved, Lever argues, but 'she has provided the answer to Henry Kissinger's question, "Who do I call, if I want to speak to Europe?".

Lever, UK ambassador to Germany between 1997-2003, expresses British worries about Germany's role in Europe. 'Clausewitz observed in 1832 that war is the continuation of politics by other means', writes Lever, 'modern Germany has shown that politics can achieve what used to require war'. This last point, he says, is at the heart of a deep-seated mistrust of Germany. The British and many other Europeans see the country has become an icon of democratic rectitude and economic competence. But Lever wants to understand where is it going with that power.

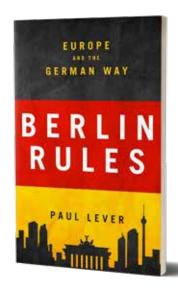
He takes the time to explain the reasons for Germany's economic and business prowess. He puts it down to three factors: the country's corporate governance system, which gives companies the ability to plan and act long-term; the much-praised apprenticeship system; and the 'Mittelstand' of successful family-owned businesses powering the country's regions. This part of the book is a must-read for UK politicians who talk about industrial strategy, worker representation on boards, an overhaul of the mergers and acquisitions code and a push on skilling up the workforce post Brexit.

Germany also manages immigration well, as it proved after the fall of the Berlin wall. Not only did it provide pensions, jobs and health insurance for 19m east Germans but it integrated a further 3m east Europeans with German ancestry.

No wonder Angela Merkel said, of the influx of refugees from the Middle East, 'Wir schaffen das' [We'll manage it]. What she got wrong was that other European nations, in particular poorer ones, had neither the infrastructure, nor the appetite or the empathy.

It is not German rhetoric about political union that matters. It is national interest and the way in which German governments are likely to interpret it.

Towards the end of the book, and after much praise for modern Germany, Lever reflects on Germany's 'power without purpose' and concludes that for Germany the European project has never been anything other than a means to further German economic interest. A very Anglo-Saxon view indeed. He argues that 'in thinking how a German-led Europe may develop, it is better to ignore what German politicians say but consider what they do. It is not German rhetoric about political union that matters. It is German national interest and the way



in which German governments are likely to interpret it.'

On the question of the Europe envisaged by Germany, he says that in 'Germany's traditional approach to how the EU should evolve, direction of travel is more important than the identification of a destination'. The word evolve is key. Incremental, well thought out steps are very reminiscent of how German Mittelstand companies improve their products. This is not suprising as grand designs aren't popular in modern Germany.

Looking to the next 20 years, Lever sees no dramatic changes in the EU, 'a cold place for the poorer nations... no resource transfer, no common credit just budgetary rigour'.

'And of the British public itself? In 20 years' time many of them will have forgotten that Britain was ever a member of the EU... [and] looking back on the referendum and the years of introspection about Europe, may wonder what all the fuss was about.'

A good read indeed — although I am not entirely sure about its conclusions. ■

Robert Bischof is Chairman of the German-British Forum and Vice-President of the German-British Chamber of Industry and Commerce.



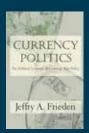
















Economic models 'not up to task'

Call for new theories to explain crises

George Hoguet, Advisory Board

Policy-makers and investors seeking to deepen their understanding of the dynamics of global capital markets and recurring financial crises would benefit from reading Richard Bookstaber's The End of Theory: Financial Crises, the Failure of Economics, and the Sweep of Human Interaction.

Bookstaber argues that neoclassical economics is not up to the task of modeling and explaining financial crises. In his view, crises should be the 'litmus test' for validating theory. He believes we need a new framework to describe the world and to model crises.

Restrictive conditions

The book reflects the author's many years on Wall Street as a risk manager. He has testified before Congress on financial stability and was an adviser to policy-makers at the US Treasury and at the Securities and Exchange Commission, where he helped design the Volcker rule and Dodd-Frank Act.

The End of Theory begins with a brief history of neoclassical economics and a critique of the axioms on which it is built. The 19th-century British economist William Stanley Jevons led the way. He argued that economics was 'purely mathematical in character'. 'We cannot have a true theory of economics without [mathematics'] aid.'

The desire for mathematical tractability in modelling economic phenomena contributed to – in the words of Gary Becker, the Nobel prize-winning economist – 'the combined assumptions of maximising behaviour, market equilibrium and stable preferences' being used 'relentlessly and unflinchingly'.

But in a crisis, Bookstaber suggests none of these assumptions hold. We need to abandon such restrictive conditions and develop more robust theory.

Bookstaber, who holds a PhD in economics from the Massachusetts Institute of Technology, discusses four phenomena that undermine current economic models. He begins with emergent phenomena, which explain how 'the actions of the system differ from the actions of the agents that comprise

the system'. An example would be where one person running triggers a stampede. What is locally stable can be globally unstable.

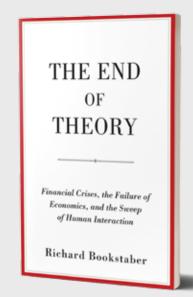
The second phenomenon is non-ergodicity. Current economic theory is ergodic. It assumes that processes stay fundamentally the same over time. But in the real world, they don't. A major financial crisis is more than a fat-tail event; it is a completely new event. The world is non-ergodic. This brings us to the third phenomenon — radical uncertainty. There are some things we cannot know. We cannot model 'unknown unknowns'.

The fourth phenomenon, computational irreducibility, rejects the notion that the economy can be reduced to rigorous mathematical models based on solid axioms.

Having eviscerated the foundations of neoclassical economics, Bookstaber develops the theory of agent based modelling (ABM). Neoclassical economics assumes a 'representative agent' with stable preferences operating under a specified probability distribution. In the ABM

Having eviscerated the foundations of neoclassical economics, Bookstaber develops an alternative way of looking at markets and financial crises.

framework, there is no representative agent and no general model; there is a complex adaptive system whose states cannot all be delineated. Multiple agents operate with individual heuristics. Their actions change the environment and each agent subsequently adjusts their behaviour. The system is reflexive. As George Soros said, this is one in which 'house prices are going up because banks are lending, and banks are lending because house prices are going up'.



Bookstaber then applies ABM to financial crises, which he defines as situations in which the demand for liquidity exceeds supply. The final chapters provide a discussion of liquidity freeze-ups, cascades and contagion.

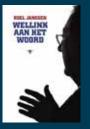
Bookstaber believes that we cannot model the financial system on the basis of traditional assumptions, because it is so complex and interconnected. Hence his adaptive framework. 'When there is a high degree of complexity, you have to figure it out as you go along.'

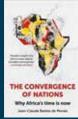
This book is an important contribution to our understanding of how markets function. The discussion of crisis liquidity dynamics is particularly valuable. Bookstaber surely is right in focusing on the incentive structure of individual market participants, complex network structures, liquidity freeze-ups and their interaction. But the theory of ABM is not fully developed – perhaps because it can't be.

The End of Theory is a sobering read, reminding us how difficult it is to understand and model global financial markets. ■

George Hoguet is a trustee of the CFA Institute Research Foundation.



















Too much globalisation gloom

Hindsights, history and the tale of western decline

Gabriel Stein, Advisory Board

Stephen King, HSBC senior economic adviser and specialist adviser to the House of Commons Treasury committee, seems to have made books on the decline of the West and globalisation his specialty.

His point of view is not new. A similar theme was forcefully — and erroneously — articulated by Oswald Spengler in his magisterial *Der Untergang des Abendlandes* (*The Decline of the West*), first published in 1918. So far the doomsayers have been wrong, though that does not mean that they always will be; the survival of a culture is as little predetermined as its decline. So King's latest book, *Grave New World: The End of Globalization, the Return of History,* deserves to be read and discussed.

Weak on history

Much of the narrative is a history of globalisation, with comments on why specific matters could become a problem — occasionally it is very interesting, sometimes very apt. But at times, the book has too many generalisations such as, 'Eventually — and, in hindsight, inevitably — post-Columbus globalisation collapsed, to be replaced by war, revolution and isolationism.' True, the first world war did lead to a halt in globalisation but why this was inevitable except in hindsight, is difficult to understand.

King is weak on history. He claims that cigarettes became a medium of exchange during the 1923-24 German hyperinflation. In actuality, that occurred during the hyperinflation after the second world war. He later refers to a rumour that Harry Dexter White, the US Bretton Woods negotiator, may have been a Soviet spy. As we know from declassified FBI documents related to the interception of Soviet communications, it was clear in 1950 that White was indeed a spy.

King outlines, correctly, that globalisation can be reversed; technology is a doubleedged sword; large migration flows may undermine the desire for domestic stability; and that there are different versions of globalisation, not just the western narrative. But he makes two other statements that are more controversial: that economic developments which reduce inequality between states but increase it within them inevitably cause hostility to globalisation; and that the international institutions that helped drive globalisation are losing their credibility.

One important point made by King is that the western narrative of globalisation triumphed because the US (or, rather,

So far the doomsayers have been wrong, though that does not mean that they always will be; the survival of a culture is as little predetermined as its decline.

western) economic model worked, and the Soviet model did not.

But we are then back to broad statements not backed up by analysis, such as, 'No matter how robust it might have seemed, 19th-century globalisation couldn't last.' This is symptomatic of the author's attempts to put the most negative interpretation possible on any trend. Occasionally, this veers into the ridiculous.

King discusses the problems of inequality and decreasing social mobility. These are serious issues. But he then refers to (unspecified) studies that say it can take 10-15 generations for an initial advantage to erode. It is highly doubtful that there are enough studies showing any families' wealth over a period of more than 300 years to allow such a conclusion to be reached.

On stronger ground

King is on stronger ground where he discusses the problems of immigration – the economic advantages versus the social

GRAVEORLD
NEW WORLD
THE STO OF GLEBALIZATION.
THE STO OF GLEBALIZATION.
THE RETURN OF MISTORY
THE RETURN OF MISTORY
THE RETURN OF MISTORY.
THE RETURN OF MISTORY

problems. But here too there is a lacuna, in that he reviews the American, British and German attitudes towards immigrants, but not the completely different French position.

He rightly points out, 'If globalisation is to succeed in a world of nation states, it either needs to retain the support of nation states or the nation states themselves need to change.' Yet he is then highly critical of the euro – precisely an attempt by nation states to support globalisation.

Gloom-mongering

The book's last chapter discusses solutions to the issues that threaten continued globalisation — and dismisses them all, thereby losing some of the raison d'être.

So, to sum up: a not entirely uninteresting book addressing a key issue facing the world but one that would have benefited from being better written and less given to gloommongering.

Gabriel Stein is an independent macroeconomic commentator.

















COUNCIL

Meghnad Desai, House of Lords; chairman, OMFIF Advisers Johannes Witteveen, honorary chairman, OMFIF Advisers

Philip Middleton, EY

Louis de Montpellier, State Street Global Advisors

Frank Scheidig, DZ BANK

Songzuo Xiang, Renmin University of China

Otaviano Canuto, World Bank Group

Aslihan Gedik, OYAK Anker Bank

Robert Johnson, Institute for New Economic Thinking

William Keegan, The Observer

John Kornblum, Noerr

Norman Lamont, House of Lords

Kingsley Moghalu, Tufts University

Fabrizio Saccomanni, LUISS University

Gary Smith, Barings

Niels Thygesen, University of Copenhagen

Ted Truman, Peterson Institute for International Economics

Marsha Vande Berg, Stanford University

Ben Shenglin, Renmin University

CAPITAL MARKETS

John Adams, China Financial Services Yaseen Anwar, Industrial & Commercial Bank of China Irena Asmundson, California Department of Finance

Georgina Baker, International Finance Corporation
Stefan Bielmeier, DZ BANK

Hans Blommestein, Vivid Economics

Mark Burgess, Jamieson Coote Bonds

Hon Cheung, State Street Global Advisors

Michael Cole-Fontayn, BNY Mellon

Thomas Finke, Barings

Christian Gärtner, DZ BANK

Trevor Greetham, Royal London Asset Management Gao Haihong, Institute of World Economics and Politics

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, BMCE Bank International

Volker Wieland, German Council of Economic Experts

Katarzyna Zajdel-Kurowska, National Bank of Poland

MONETARY POLICY

lain Begg, London School of Economics Marek Belka, formerly National Bank of Poland

Harald Benink, Tilburg University

Mario Blejer, Banco Hipotecario

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

José Manuel González-Páramo, BBVA Brigitte Granville, Queen Mary, University of London

Graham Hacche, NIESR

Akinari Horii, The Canon Institute for Global Studies Harold James, Princeton University

Hemraz Jankee, formerly Central Bank of Mauritius

Pawel Kowalewski, National Bank of Poland

Philippe Lagayette, formerly Fondation de France

Andrew Large, Hedge Fund Standards Board

Gerard Lyons, Policy Exchange

Rakesh Mohan, Yale University

Athanasios Orphanides, MIT Sloan School of Management Nagpurnanand Prabhala, University of Maryland

Edoardo 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

Makoto Utsumi, formerly Japan Finance Ministry Tarisa Watanagase, formerly Bank of Thailand

Ernst Welteke, formerly Deutsche Bundesbank

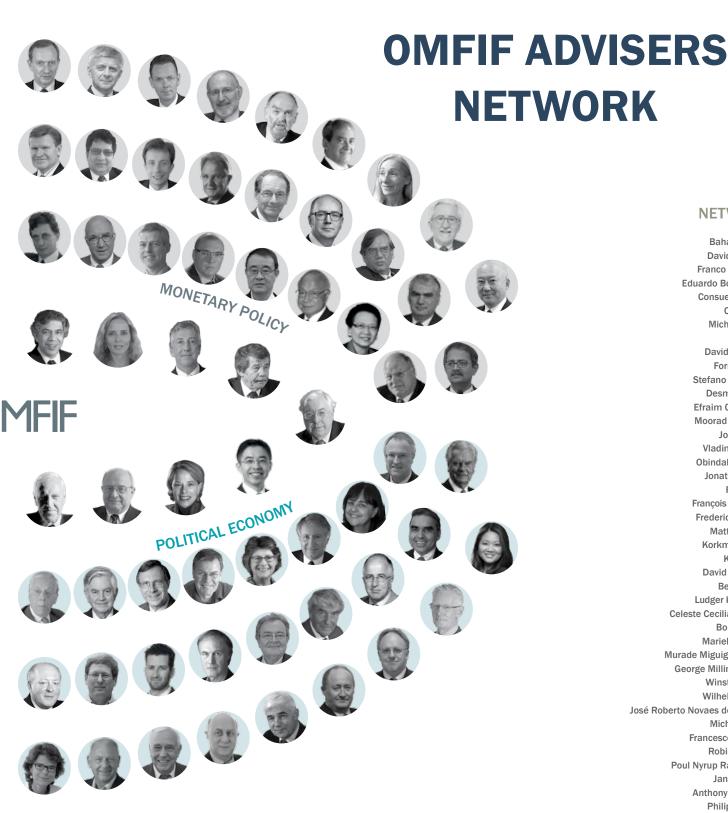
CAPITAL MARKETS INDUSTRY & INVESTMENT

INDUSTRY AND INVESTMENT

Andrew Adonis, National Infrastructure Commission
Jean-Claude Bastos de Morais, Quantum Global
Robert Bischof, German-British Forum
Albert Bressand, European Commission
Caroline Butler, Walcot Partners
Nick Butler, King's College, London
John Campbell, Campbell Lutyens
Mark Crosby, Monash University
Natalie Dempster, World Gold Council
Hans Genberg, The Seacen Centre
Steve Hanke, Johns Hopkins University
Hans-Olaf Henkel, University of Mannheim

Joel Kibazo, JK Associates
Jürgen Krönig, Die Zeit
Oscar Lewisohn, Soditic
Boyd McCleary, 39 Essex Chambers
Luiz Eduardo Melin, International Economic Synergies
Willem Middelkoop, Commodity Discovery Fund
Célestin Monga, African Development Bank
Danny Quah, Lee Kuan Yew School of Public Policy
David Smith, formerly United Nations
Takuji Tanaka, Japan Finance Ministry
Daniel Titelman, ECLAC
Pasquale Urselli, Mazars
Paul van Seters, Tilburg University

Mumtaz Khan, Middle East & Asia Capital Partners



POLITICAL ECONOMY

Antonio Armellini, former Ambassador, OSCE Frits Bolkestein, formerly European Commission Laurens Jan Brinkhorst, University of Leiden Peter Bruce, Business Day Jenny Corbett, Australia National University Reginald Dale, Atlantic Council Maria Antonieta Del Tedesco Lins, University of São Paulo Hans Eichel, former German Minister of Finance Jonathan Fenby, China Research, Trusted Sources Jeffry Frieden, Harvard University Elliot Hentov, State Street Global Advisors Roel Janssen, financial journalist Thomas Kielinger, Die Welt

Ruud Lubbers, Minister of State, Netherlands Denis MacShane, Avisa Partners Kishore Mahbubani, Lee Kuan Yew School of Public Policy David Owen, House of Lords Vicky Pryce, Centre for Economics & Business Research Brian Reading, independent economist Robert Skidelsky, House of Lords Gabriel Stein, formerly OMFIF Michael Stürmer, WELT-Gruppe Christopher Tugendhat, House of Lords John West, Asian Century Institute William White, OECD Linda Yueh, St Edmund Hall, Oxford

NETWORK

Bahar Alsharif

David Badham Franco Bassanini Eduardo Borensztein Consuelo Brooke Colin Budd Michael Burda Shiyin Cai **David Cameron Forrest Capie** Stefano Carcascio **Desmond Cecil Efraim Chalamish** Moorad Choudhry John Chown Vladimir Dlouhy **Obindah Gershon** Jonathan Grant Peter Gray François Heisbourg Frederick Hopson Matthew Hurn Korkmaz Ilkorur Karl Kaiser **David Kihangire** Ben Knapen Ludger Kühnhardt Celeste Cecilia Lo Turco Bo Lundgren Mariela Mendez Murade Miguigy Murargy George Milling-Stanley Winston Moore Wilhelm Nölling José Roberto Novaes de Almeida Michael Oliver Francesco Papadia Robin Poynder Poul Nyrup Rasmussen Janusz Reiter **Anthony Robinson** Philippe Sachs Nasser Saidi Pedro Schwartz Vilem Semerak Song Shanshan Marina Shargorodska Paola Subacchi José Alberto Tavares Moreira Jens Thomsen **David Tonge** Jorge Vasconcelos Gottfried von Bismarck

Jack Wigglesworth

Paul Wilson

Weidmann to head ECB in 2019, say majority

Nearly two thirds of advisers expect Draghi's successor to be German

This month's advisers network poll focuses on the future leadership of the European Central Bank. Members of the network were asked: 'After Mario Draghi steps down as President of the ECB in November 2019, who will replace him?' The choices were Jens Weidmann, president of the Deutsche Bundesbank, François Villeroy de Galhau, governor of the Banque de France, or someone else.

Of those polled, 61% forecast that Weidmann will take over from Draghi, while 30% believe that Villeroy de Galhau will be selected. Just 9% expect the role to go to another candidate.

Any candidate requires the endorsement of all European Union finance ministers. He or she then has a hearing at the European Parliament, which casts a non-binding vote. The post is finally confirmed by euro-area leaders, which is then held for a total of eight years. The parliament has no power to block ECB appointments.



'Weidman is the individual most likely to provide credibility to the ECB, which will probably be sorely needed against a backdrop of QE ending, Brexit, and (hopefully) a very long-lived economic cycle. However, political turmoil could easily lead to a compromise choice of ECB president.'

Colin Robertson



'A German ECB president would concentrate far too much power in German hands. But the outcome will depend on who fills the top slots as presidents of the Commission, Council and Eurogroup after May 2019.' *Denis MacShane*



'I would bet on Monsieur Villeroy de Galhau. The Germans will take a spot at Brussels-EU institutions in exchange.'

Elliot Hentov



'Why not Klaas Knot, the president of the Dutch Central Bank? He is as tough as Weidmann, but not a German and that might make him more acceptable for other countries.'

Roel Janssen



'After two presidents from large Latin countries it is hard to predict whether it is the turn of a small country or of a German who will reinstate a degree of orthodoxy after years of unorthodox measures. In the latter case, Weidman will be the natural choice.

Fabio Scacciavillani



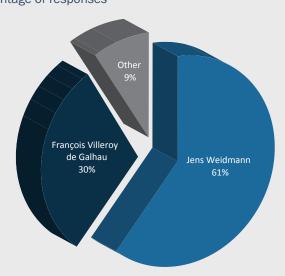
'I suspect Jens Weidmann will get it, although I think it would be nice if someone other than a Frenchman or German were chosen. But among the euro area governors, I don't see anyone that stands out.'

Hans Genberg



'Never underestimate French ingenuity in the business of horse trading.' **Akinari Horii**

Next president of ECB 'likely to be Weidmann' Percentage of responses



After Mario Draghi steps down as President of the European Central Bank in November 2019, who will replace him?



'As Germany adjusts to the challenge of working closely with a reforming France under President Macron, it will need the reassurance of having, at the helm of the ECB, somebody who instinctively understands the importance of the ECB's mission to defend the long-term value of the euro.'

Stewart Fleming



'I think it would be a wise move by the ECB to elect someone from an economy that made an impressive transformation following the 2008 financial crisis. Namely a Spanish top banker and a woman, Ana Patricia Botín.'

Robert Bischof

These statements were received as part of the September poll, conducted between 12 July-7 August, with responses from 24 advisory network members.

October's question

Who will be at the helm of the Federal Reserve after February 2018?





OMFIF at the IMF-WBG Annual Meetings 2017

October, Washington

Emerging markets morning - 12 October



COPING WITH EXTERNAL FACTORS 12 OCTOBER

OMFIF-RAMP breakfast panel

A meeting examining how global headwinds and tailwinds impact official asset and reserve managers, with a keynote from Arunma Oteh, treasurer and vice president of the World Bank. Speakers include Per Callesen, governor of Danmarks Nationalbank.



ASSESSING THE RESILIENCE OF EMERGING MARKET ECONOMIES 12 OCTOBER

OMFIF-Barings panel discussion

Speakers include Viral Acharya, deputy governor of the Reserve Bank of India, Murat Çetinkaya, governor of the Central Bank of the Republic of Turkey, and Javier Guzmán Calafell, deputy governor of the Banco de Mexico.



CO-OPERATION AND MAINTENANCE OF OPEN FINANCIAL MARKETS 12 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.



AFRICA CAPITAL MARKETS INDEX 13 OCTOBER

OMFIF-Barclays Africa Group Ltd report launch

The Africa Capital Markets Index records the openness of countries across the continent to foreign investment. The launch presents the report's key findings, followed by a panel discussion and moderated Q&A. Speakers include Jingdong Hua, vice president and treasurer of IFC.



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. Themes include the realignment of global free trade, as well as trans-Atlantic financial co-operation and regulation. Speakers include Marek Belka, former prime minister of Poland.



GERMANY, FRANCE, BRITAIN AND THE NEW EUROPE 14 OCTOBER

OMFIF-DZ BANK breakfast panel

A panel of speakers discusses the future relationships between France, Germany and the UK. Topics include the future of the euro and euro clearing, the Macron era and the UK's Brexit negotiations. Speakers include Kalin Anev Janse, secretary general of the European Stability Mechanism.

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

To register visit: omfif.org/imfmeetings



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

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

