The Bulletin

OMFIF

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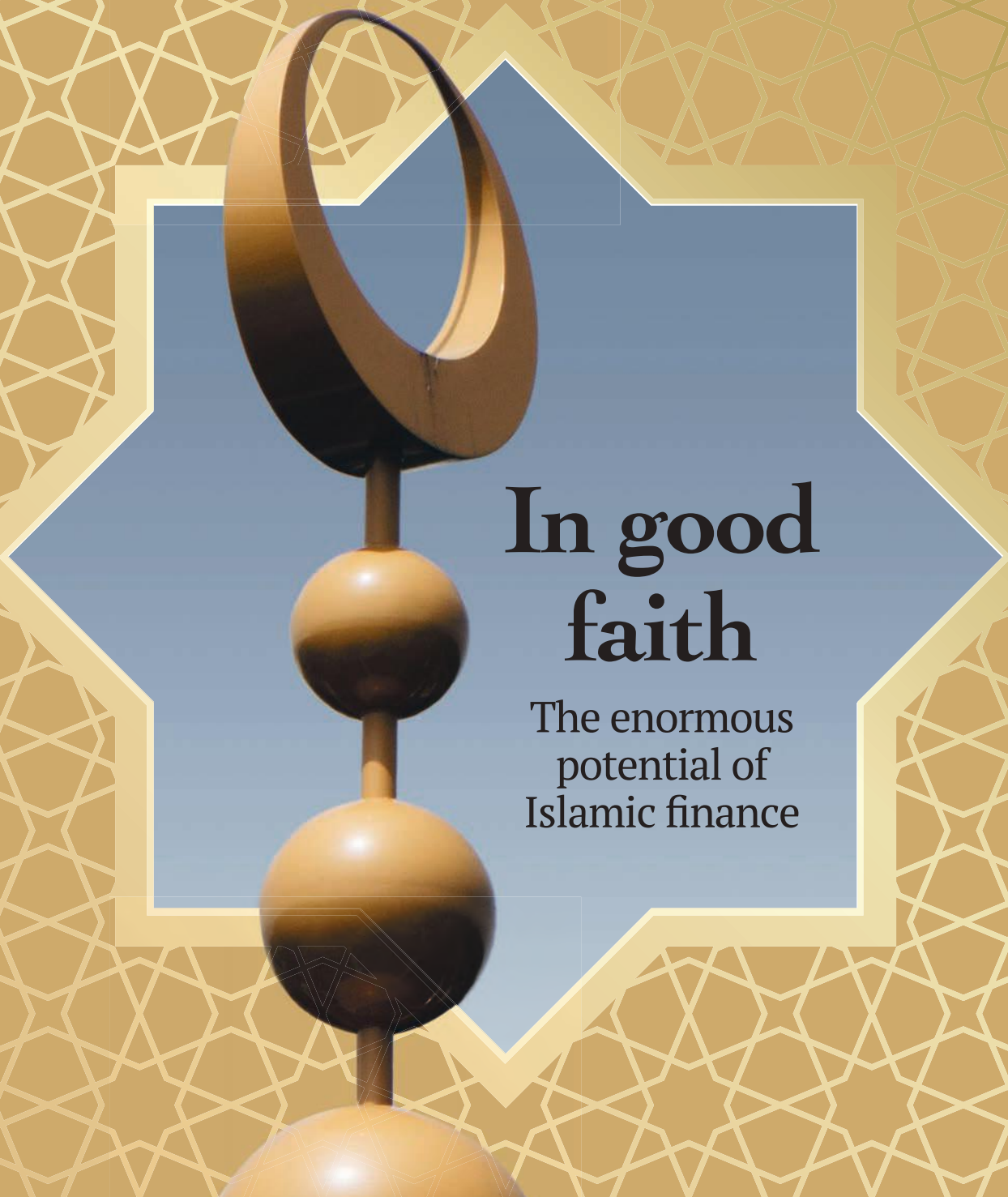

In good faith

The enormous potential of Islamic finance

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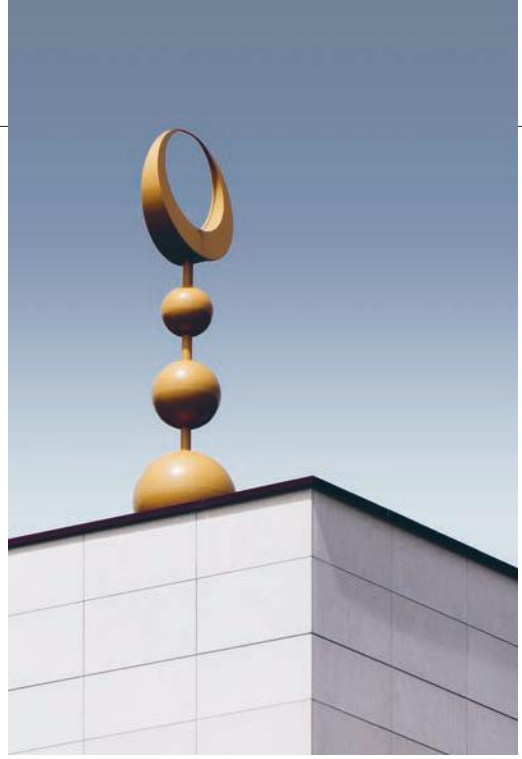

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Dialogue on world finance and economic policy

THE Official Monetary and Financial Institutions Forum is an independent think tank for central banking, economic policy and public investment – a non-lobbying network for best practice in worldwide public-private sector exchanges. At its heart are Global Public Investors – central banks, sovereign funds and public pension funds – with investable assets of $36tn, equivalent to 45% of world GDP.

With offices in London and Singapore, OMFIF focuses on global policy and investment themes – particularly in asset management, capital markets and financial supervision/regulation – relating to central banks, sovereign funds, pension funds, regulators and treasuries. OMFIF promotes higher standards, performance-enhancing public-private sector exchanges 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

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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 173-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.

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Islamic finance scales up

Thanks to the concentration of wealth in oil-rich economies and the development of harmonised regulatory standards, the Islamic finance market is more popular than ever. Defined as a way of conducting finance while respecting sharia law, Islamic finance originally focused on the retail market; it has since grown to attract mainstream investors. The industry boasts assets worth more than $2tn, and is expected to exceed $3tn by 2020.

This month's Bulletin looks at this small but fast-growing and dynamic market, documenting its present state and development trajectory. Our contributors examine the links between Islamic finance and other investment trends such as green finance, through the development of green sukuk products, and the digitalisation of finance through Islamic fintech.

The UK is a hub for innovation in Islamic fintech, while Muslim-majority countries in Asia have been at the forefront of the development of Islamic finance products. Malaysia launched the world's first green sukuk in 2017, and in February this year Indonesia issued the first sovereign green sukuk, a five-year $1.25bn bond whose proceeds are allocated to climate- or environment-related projects and designed to comply with Islamic law.

These developments reflect a growing focus on innovation and sustainability in investment practices. This was a key theme at this year's International Monetary Fund-World Bank Group annual meetings in Bali, where OMFIF launched two new reports: on the development of capital markets in Africa, and on the application of blockchain technologies to central banks' interbank payments systems. Adjusting investment shifts in the demographic and societal profiles of the global economy will drive the development of new specialist finance markets.

Danae Kyriakopoulou
Chief Economist and Head of Research

»11 October, Bali

Africa 'must deepen national savings'

AFRICAN countries must deepen markets for national savings as a prerequisite for sustainable growth, Dondo Mogajane, director general of the South African Treasury, said in Bali, launching the second annual Absa Africa Financial Markets Index, this year in an interactive digital version.

*Visit **omfif.org/analysis/reports** to download the full report*

»2 October, New York

Central banks face 'hot breath' over QE

POLITICAL constraints on the Fed and ECB to combat a future recession will be much greater than after the 2008 crisis. That was a conclusion of an OMFIF seminar discussing 10 years of quantitative easing. With central banks feeling the 'hot breath' of politicians, leeway for technocratic solutions is constrained.

»19 September, London

Assessing the UK's economic outlook

SPEAKING at an OMFIF meeting in London, Silvana Tenreyro, member of the Bank of England's Monetary Policy Committee, discussed inflation, the productivity puzzle, and the outlook for the UK economy in the light of an assumed-orderly Brexit and geopolitical developments between the US and China.

»8 October, Singapore

Consequences of US growth

JAMES Bullard, president of the Federal Reserve Bank of St. Louis, spoke at an OMFIF Foundation City Lecture. He remarked that the US growth surprise has allowed the FOMC to normalise its policy rate, but that faster productivity growth will be needed.

»11 September, Singapore

Achieving inclusive growth in Asia

OMFIF and the International Finance Corporation organised a seminar to discuss ideas and best practice on inclusive and innovative growth. Topics of discussion included demography, globalisation, digitalisation, and the process of channeling infrastructure investment to Asia. Speakers included Jingdong Hua, vice-president and treasurer of the IFC.

»9 October, Bangkok

Countries 'share risks and rewards'

EMERGING market countries and advanced economies face similar challenges and potential rewards from a complex pattern of risk and opportunity in the world economy. That was a theme of a symposium organised by the Bank of Thailand and OMFIF.

»25 September, London

Where next for the euro?

OMFIF organised a lunch discussion with Peter Praet, member of the executive board of the European Central Bank. Topics included the outlook for the European economy, implications of unwinding unconventional monetary policy, and the challenges in maintaining price stability and financial stability.

»3 October, London

Conventional approaches

'AFTER many years, we finally are close to achieving our dual mandate objectives and are finally returning to a more conventional policy approach,' said Charles Evans, president of the Chicago Federal Reserve, at an OMFIF City Lecture on the US economic outlook and Fed policy.

»11 October, Bali

OMFIF-IBM report launch

OMFIF organised a roundtable to mark the launch of an IBM-OMFIF report on central bank digital currencies. Discussion focused on the findings of the report and the broader questions surrounding the application of digital currencies and blockchain technology to the global payments system.

Much admired commentator

REGINALD 'Reggie' Dale, OMFIF advisers network member, who died on 18 September, was a much-admired commentator on European politics and economics with a matchless catalogue of contacts in Brussels.

FORTHCOMING MEETINGS

»Wednesday 7 November, London

The efficacy of macroprudential policies

A roundtable with **Donald Kohn**, member of the Financial Policy Committee at the Bank of England and vice-chairman of the Federal Reserve (2006-10). Topics of discussion include macroprudential policies and the transformation of the world economy for central banks.

»Monday 12 November, London

Leadership in the UK and Brexit scenario planning

A roundtable with **Lord (Norman) Lamont**, chancellor of the exchequer (1990-93) and **Lord (Christopher) Tugendhat**, vice president of the European Commission (1981-85), on the UK's negotiation process and the economic and political impact of the different Brexit scenarios.

»Monday 10 December, London

Balancing the roles of the European Central Bank

A lunch discussion with **Ignazio Angeloni**, member of the supervisory board of the European Central Bank. The meeting focuses on how the ECB balances its roles of monitoring the euro area's banking sector while stimulating banks to lend more.

»Thursday 31 January, London

Outlook for reserve asset management for 2019

A seminar on the outlook for public sector investment management in Europe for 2019, along with economic and financial developments in 2018. It brings together a group of economic experts and asset managers from a public sector background.

For details visit omfif.org/meetings

In good faith

Enormous potential of Islamic finance

Sector must offer an alternative proposition to conventional institutions

Faizal Karbani
Simply Ethical

When it comes to business, trade and finance, the dominant paradigm is a secularist one in which religion has little or no role to play. Islamic finance challenges this model.

Islam does not subscribe to a secularist view of life; there is no separation of 'church' and 'state' as such. When it comes to business and finance, Islam lays down clear principles that believers are expected to follow. Failing to follow these guidelines would, from a believer's perspective, contravene divine law and guidance.

Today the Muslim population is around 1.8bn, or one-quarter of all people. By 2060 it is expected to grow to more than 3bn, an increase of 70%, against an average expected growth of 32% across the world. This means that in 2060 more than 30% of people will be Muslim. It is unsurprising that Islamic finance is building material scale and attracting interest from governments and the private sector across the world.

Having said that, the global market for Islamic finance accounts for just 1% of the world's financial assets. The reason for this is that the power that has shaped the international financial system has come from and been dominated by non-Muslim economies. Although they make up a large portion of the global population, many Muslims live in some of the most economically deprived countries in the world, especially in Asia and Africa.

Overcoming perceptions

In the last 40-50 years, Islamic finance has started to emerge in the global financial landscape. A growing and more affluent part of the Muslim population is asserting its sensitivities in everything from healthcare and fashion to banking and finance.

The Islamic finance industry is often perceived as complicated, perhaps partly because of the use of Arabic terminology. A brief framework, which I outline below, ought hopefully to highlight how simple it can be.

Islam is pro-business and pro-trade. It recognises and embraces the need for people to earn a livelihood and encourages honest and lawful industry. There is a maxim in Islamic law that applies to business and trade: Everything is permissible unless expressly prohibited by God. Sharia law clarifies those prohibitions. Sharia-compliant transactions are free from contractual uncertainty and ambiguity in the key commercial terms and subject matter of the underlying deal. The intention here is to prevent disputes arising between two contracting parties.

Examples of prohibited activity would be the sale of alcohol, pork or the provision of gambling. Such activities are prohibited because they are seen to be, on balance, damaging to people and society. Moreover, transactions are interest free. This is probably the biggest single difference between Islamic finance and conventional finance. Islamic finance purports the role of money to be a store of value and a medium of exchange; it is not to be used as a commodity and traded to earn interest.

Proponents of Islamic finance would argue that the interest-based fractional reserve banking system has had several harmful consequences. These include greater wealth inequality, as lenders who loan money on interest will naturally favour those who have the most collateral, namely the rich. The interest-based system also encourages debt. This places a burden on the indebted and can lead to failure of businesses, loss of assets and further recessionary pressure in the event of economic downturns. Moreover, giving commercial banks the right to create money and lend on interest incentivises them to increase the money supply. If the money circulating in the economy increases at a faster rate than the real production of goods and services, the result is inflation.

The Islamic finance industry has enormous growth potential, but this depends on it being true to its underlying principles and presenting an alternative value proposition. So far the industry, in trying to establish itself in existing financial frameworks, has produced many products and services that mimic the economic effects of conventional financial transactions. To gain wider acceptance from Muslims the industry must demonstrate that its offerings are in line with the spirit and letter of Islamic law. For non-Muslims there is no religious imperative to adopt these products; the only way they will be attracted is if Islamic finance offers something different to conventional products. Perhaps non-Muslims will be attracted by the industry's ethics, or by its more equity- rather than debt-based approach.

If the Islamic finance sector can build this distinctive value proposition, there is little doubt it can enjoy substantial, sustainable growth. In time, it can grow to occupy a credible and long-term place in the global financial system as a valuable alternative to the conventional, interest-based financial system. ●

Faizal Karbani is the Founder and Chief Executive of Simply Ethical.

Green sukuk becoming mainstream

Supportive regulation critical to adoption of sharia-compliant bonds

Kat Usita
OMFIF

When Tadau Energy first issued green sukuk in 2017 to finance a 50 megawatt solar project in Malaysia, the $59m offering was immediately oversubscribed. Uptake of the world's first sovereign green Islamic bond was similarly high, when Indonesia raised $1.25bn earlier this year. Though not unusual for green bonds, the intense demand for these early issuances of green sukuk make clear that there is much room for the asset class's expansion.

The global green bond market is estimated to be worth around $400bn. The key to accelerating its growth is widening the products available and aligning them with investors' environmental, social and governance mandates.

As with green bonds, sukuk can be classified as green based on the underlying asset and investment strategy. By definition, sukuk can only finance sharia-compliant activities, a broad category that includes climate resilient and sustainable projects. The strictness in classifying sukuk requires transparency and clarity in identifying what the instrument finances. Because of this, green sukuk may prove especially attractive to investors who are wary of greenwashing.

Sustainable capital

Malaysia was the first country to formally support green sukuk issuance, establishing the Sustainable and Responsible Investment Sukuk framework in 2014. Home to the world's largest base of sukuk, Malaysia is also increasingly looking towards renewable energy. The government is 'greening' its energy mix, with a target of generating 20% of electricity from renewable sources by 2030. This requires significant investment in infrastructure for solar, wind and hydro power generation and storage. The green sukuk market is critically important in financing this kind of infrastructure on such a large scale.

For issuers of green sukuk, the product is the natural intersection of three bases of investor demand: sustainable investments, infrastructure development and sharia compliance. Emerging markets have high demand for the first two, and pursuing the third enables Muslim investors to participate. Various estimates say that the Islamic finance market will exceed $3tn by the end of 2018. Its rapid expansion in recent years coincides with the boom in green finance, as well as the increasing attention paid to global infrastructure needs, which are projected to reach more than $94tn between now and 2040.

Green sukuk should grow into a more mainstream investment choice over the coming years. Initial offerings have been oversubscribed, though this mostly reflects the shortage of green bonds generally rather than an inherent interest in their Islamic counterpart. The challenge for issuers is improving awareness around sukuk more broadly, allowing investors to become more used to Islamic finance products, and then tapping those who have clear ESG objectives that green sukuk can match.

Strict requirements

Because green sukuk are a relatively novel product, market growth is largely dependent on the regulatory environment. Majority-Muslim countries have good reason to establish frameworks that support green sukuk market growth, particularly those nations with a clear need for sustainable infrastructure, such as Malaysia. Incentives for climate-friendly activities boost demand for green securities, and tax deductions encourage issuers to consider green sukuk for fundraising.

Implementing higher and stricter disclosure requirements can mitigate concerns over greenwashing. It can also minimise the cost of due diligence, especially for interested investors still unfamiliar with sukuk. When Indonesia, one of the world's largest emitters of greenhouse gases, became the first country to issue sovereign green sukuk, there were concerns that some projects to be funded by the bond might carry risks of deforestation. However, a close reading of the issuance documents shows there are safeguards to ensure these projects do not adversely affect forest areas and reserves. The level of detailed information provided can make an issuance more attractive.

The demands of climate change, population growth and urbanisation create financing gaps that innovative financial products must fill as soon as possible. Establishing supportive regulatory frameworks and boosting green activities will help green sukuk grow out of their niche corner and into the wider green finance market. ●

Kat Usita is Economist at OMFIF.

$1.25bn

Amount raised by Indonesia with world's first sovereign green Islamic bond

Overcoming Islamic finance inefficiency

Sharia-compliant banking draws parallels with ESG investing

Otaviano Canuto
OMFIF

Islamic finance refers to a way of conducting finance that respects sharia law, including banning interest-based transactions and ensuring risk sharing between parties. Sharia-compliant contracts are intended to rule out features that would make them akin to gambling or 'making money from money', while engagements in businesses considered immoral or ethically problematic are forbidden.

These principles mean many 'conventional' products must be amended to fit into the Islamic finance framework. There are no pure debt securities in Islamic finance, with interest replaced by the rate of actual return on contracts of exchange or risk sharing. Sharia-compliant bank deposits are collected on a profit- and loss-sharing basis instead of fixed predetermined liabilities. All financial contracts must be backed by assets, transactions or activities in the real economy.

Islamic finance instruments can be matched to some conventional products as long as interest and speculation are absent. Take for example leasing a house with a property transfer at the end rather than lending for an acquisition with fixed interests. Another instance would involve joint ventures in which partners bring in capital and management with corresponding proportional shares of profits. This includes arrangements in which the financier provides 100% of the capital for the creation and operation of a business, keeping its ownership, while the customer provides management and labour. Profits are shared according to a pre-established ratio and, if the business fails, the financier incurs all of the losses unless it is demonstrated it was the customer's fault.

There is also the possibility of 'cost plus selling' structures. Instead of taking a loan to purchase something, a client can convene with a financier, with the latter buying an item and selling it to the former at a higher price on instalment, with a provision that the selling price cannot be raised once the contract is signed. In the event of default or late payments, options include third-party guarantees, collateral guarantees on the customer's belongings, or a penalty fee to be paid to an Islamic charity.

Principle value

Islamic finance assets have been forecast to reach more than $2.4tn in 2018, with Islamic banks and sharia-compliant sukuk bonds comprising $2tn and $400bn respectively.

Islamic finance corresponds to almost 1% of global financial assets, but the sector's estimated annual growth rate is between 10%-15%. While just 10 Muslim-majority countries hold 95% of global sharia-compliant assets, these have expanded to other territories.

Nevertheless, the sector faces significant challenges. Many aspects of Islamic finance suffer from emulation and re-engineering of conventional instruments, which result in inefficiencies and higher transaction costs. Sukuk lack standardisation and risks are more difficult to assess than with conventional bonds. In addition, Basel III core capital requirements place Islamic financial institutions at a disadvantag, owing to the different way in which capital is structured in Islamic banks.

The World Bank Group has provided support to overcoming such obstacles, both by issuing and supporting independent issuances, including the provision of a sharia-compliant investment guarantees for infrastructure projects. The world's first 'green sukuk' for renewable energy and other environmental sustainability projects was launched last year in Malaysia with the support of the World Bank's Malaysia Knowledge Hub.

However, perhaps the toughest issue is tied directly to one of Islamic finance's most positive features: financial stability. Islamic finance circumvents destabilising debt-deflation dynamics, avoids contracts containing murky risk definitions and imbeds a commitment to back all financial contracts by assets and activities in the real economy. Although this, on the face of things, is a good thing, it means derivative instruments such as options and futures are difficult to obtain. If one considers that a prudentially well-managed, mature financial system brings economic advantages that outweigh its potential instability, Islamic finance then implies an inevitable opportunity cost.

A parallel can be made with investments that reflect environmental, social and governance principles. In those cases, performance below non-ESG portfolios is compensated, from the standpoint of investors' preferences, by ensuring adherence to certain principles as a value in itself.

Examples of non-financial compensation can also be found in non-Muslim faiths – the STOXX index in Europe for example only selects companies classified as respectful of Christian values. Sharia compliance may well be deemed as a benefit greater than any economic opportunity cost for those who favour its use. ●

Otaviano Canuto is a Member of the OMFIF Advisory Council and a former Vice-President and former Executive Director of the World Bank.

Too big to ignore

Islamic finance sector left unscathed by 2008 financial crisis

Julia Demidova
OMFIF

Investors looking to diversify their portfolios are increasingly turning to sharia-compliant products. Globalisation and awareness of sharia-compliant initiatives have prompted investors to start adopting the ethical principles of Islamic finance. Demand for Islamic bonds – known as 'sukuk' – is rising, and extends beyond Islamic financial institutions. Non-Muslim governments are keen to tap into the Islamic finance industry, as are conventional fund managers.

But demand for sharia-compliant products outstrips supply. Last month, Abu Dhabi Islamic Bank raised Aed1bn through a rights issue that was five times oversubscribed. This reflects the significant growth within the Islamic finance industry and an increasing appetite for Islamic bonds. Unlike their conventional counterparts, sukuk and sharia-compliant products are stable and impartial. Islamic institutions are generally more cautious. The Qatar International Islamic Bank, for example, delayed its issuance of $500m sukuk on the international market. This was due to high rates and an expected increase in US Federal Reserve rates in 2019, which meant higher funding costs.

In Islamic finance, investors are required to share profits and risks, and interest rates are banned. As a result, Islamic financial institutions were hardly affected by the 2008 financial crisis. There were, however, some defaults on sukuk at the time, mostly concerning periodic rental payments – similar to a mortgage in conventional economies – but these are generally rare. Since 2008, Islamic financial institutions' legal and governing structure have improved, for example with the introduction of special purpose entities.

The differences between sukuk and bonds extend beyond structure. Interest rates on bonds are fixed, regardless of losses or gains. Meanwhile, sukuk are a legal contract between the issuer and the buyer. Bonds are a proof of debt, whereas sukuk are a proof of ownership. There are also practical differences, such as how sukuk and bond issuers raise capital, and how investors are rewarded. Islamic scholars agree that money is just a means of exchange and not the asset. The capital committed by stakeholders can bring returns, which are derived from the efficient and ethical use of capital. Moreover, bonds mature at pre-agreed value, while sukuk mature at market value.

Fastest growing industry

The growth of Islamic finance makes it too big to ignore. Before the 2008 financial crisis, it was the fastest-growing part of the financial industry. In 2009, it grew by 26.1%.

The industry's growth has since slowed, due to political instability across the Middle East and low oil prices. Nevertheless, at the end of last year it was worth more than $2.4tn, and that figure is expected to rise to $3.5tn by 2021.

Despite this significant growth, the profitability of Islamic banks has plummeted. This is because investment portfolios are too concentrated on specific sectors such as commodity, energy and consumer sector financing. Still, assets have grown twice as much as traditional investments.

The Islamic finance model is based on profit and loss sharing, so it is not impacted by any disruption of financial markets. Conventional institutions, meanwhile, take advantage of market volatility. There is a high correlation between assets and liabilities; any losses on an investment would be reflected on the balance sheet through a decrease in liabilities. This is a better risk management strategy, and shows that Islamic institutions have a more systematic approach than their conventional peers. During the 2008 financial crisis, Islamic banks helped stabilise the global economy and were not affected by the collapse of Lehman Brothers.

The financial crisis highlighted the need for change, particularly regarding the Islamic finance sector's supervisory and legal infrastructure. The latter should align with global financial regulatory reforms and framework to enhance its resilience to future financial shocks. Regulation must be addressed jointly between conventional financial markets and Islamic financial markets to ensure sustainable and efficient growth in the rapidly changing Islamic industry. The financial crisis also led to tighter supervision of liquidity risk management in both Islamic and conventional financial institutions.

$3.5tn
Total amount Islamic finance is expected to grow to by 2021

The Islamic finance sector's popularity is unlikely to wane any time soon. In October, Singapore launched a sharia-compliant index for funds based in the country. As the Muslim population grows and the world gains a better understanding and awareness of ethical sharia principles, demand for Islamic financial products can only expand. ●

Julia Demidova is Commercial Partnership Manager at OMFIF.

Islamic fintech unencumbered by status quo

UK entrepreneurs highlight potential scope of Islamic finance industry

Abdul Haseeb Basit
Elipses

The focus in both conventional and Islamic finance since the 2008 financial crisis has been ensuring more stringent regulatory conditions are being met. These are designed to prevent the sorts of systemic shocks experienced a decade ago. This has generally resulted in banks holding more capital to protect customers, which in many instances has reduced their ability to lend to and service clients. The sector is yet to see a fundamental retooling to become more ethical, sustainable and inclusive, and seems destined to follow the damaging boom-bust cycle.

A cohort of entrepreneurs in the Islamic financial technology sector is trying to inspire change. This new breed feels strongly about finance's ethical imperative, especially after the events of 2008, is unencumbered by financial legacy and not limited to the status quo of conventional finance models.

Islamic fintech companies, like conventional fintech firms, have focused on innovation in three main areas: low regulatory friction, unserved customer needs, and technology-led products that compete on price.

Pioneers have emerged. Yielders is an investment platform that enables customers to invest in property assets from as little as £100. It was the first Islamic fintech business authorised by the UK Financial Conduct Authority.

In the US, Wahed Invest became the first sharia-compliant robo-advisory platform authorised by the Securities and Exchange Commission. It allows customers to start saving and investing in companies that pass their sharia-screening framework, meaning they are in permissible industries and are not too heavily leveraged. The business recently expanded into the UK.

Sustainable and ethical investment is not limited to existing asset classes. UpEffect, a UK-based crowdfunding platform for small and medium-sized enterprises, has focused on supporting ethical companies largely overlooked by traditional investors and platforms.

In addition to these novel ventures, Islamic fintech firms are beginning to compete more directly with existing financial service providers. Two such businesses are Primary Finance and InsureHalal. Primary Finance has created a home purchase plan that offers an alternative to interest-bearing mortgages, based on a co-ownership model between financier and homeowner. InsureHalal has developed sharia-compliant home insurance, and will soon expand to other insurance products.

United Arab Emirates-based NOW Money focuses on the large population of migrant workers in Gulf Co-operation Council countries, whose earnings often fall below the income thresholds that banks will service. NOW Money works with employers to allow them to pay their workers directly into an e-wallet and provides them with a debit card, a mobile money app and remittance services that are cheaper than those offered by the incumbents.

As Islamic fintech enters capital markets, UK-based platforms like IslamicMarkets.com are providing financial intelligence for the Islamic economy. They have entered into agreements to work with several institutions in the GCC and Southeast Asia. More innovation in this space is coming. The market would benefit from a truly digital Islamic challenger bank, and demand for Islamic SME lending remains unserved.

UK a hub for innovation

Existing Islamic banks have gone through a period of consolidation over the past few years. The emphasis today at Islamic finance conferences is firmly on fintech. Most often, the discussion stays within the bounds of reprising models developed by mirroring conventional finance, rather than rethinking finance frameworks to focus on consumer choice, ethics, sustainability and inclusion.

A few organisations, such as the Responsible Finance and Investment Foundation, are bringing together the Islamic and ethical sectors by benchmarking and building frameworks to embed these values within the global economic system. They are drawing especially on the expertise of fintech businesses.

Groups like the UK Islamic FinTech Panel aims to bring together actors in this space, including start-ups, banks, investors, government departments and practitioners, to address problems that require collaboration and collective design thinking. The first initiative to come out of the panel is the iE5 Accelerator, a virtual community of entrepreneurs with a physical co-working and acceleration space in development.

The UK is home to the second highest number of Islamic fintech firms in the world, after Malaysia. The development of the sector in the UK has been helped by proactive government support, primarily through policy and regulatory advances that have afforded equal opportunities to Islamic finance.

This, coupled with a coming together of a large pool of fintech and Islamic finance talent, positions the UK as an ideal place for Islamic fintech development to continue. The question remains as to whether the traditional financial sector is willing and able to adapt into a more ethical, sustainable and inclusive version of itself. ●

Abdul Haseeb Basit is Co-Founder and Principal of Elipses.

Managing volatile capital flows

Már Guðmundsson, governor of the Central Bank of Iceland, and **Danae Kyriakopoulou**, OMFIF's chief economist and head of research, discuss Iceland's capital flow management policies, the extent of banking sector reform and the significance of central bank independence.

Danae Kyriakopoulou: You are starting your 10th year as governor of the central bank, having taken the helm shortly after the beginning of a major financial crisis that hit Iceland in 2008 and demonstrated the challenges posed by volatile capital flows on a small open economy. What did you learn from that experience and how have the capital flow management tools introduced since then worked to manage the impact of growing exposure to international financial markets?

Már Guðmundsson: The main lesson we learned is that it is very risky to try to construct an international financial sector in such a small country as Iceland that has its own currency. We also learned that large and volatile capital flows must not be ignored, and that policy-makers should not think that exchange rate flexibility, inflation targeting and interest rates are the only tools of monetary policy and that microeconomic regulation or supervision are sufficient. We have added macroprudential instruments to deal with foreign currency risks in domestic balance sheets. We have imposed both a liquidity coverage ratio and net stable funding ratio in foreign currencies on our banks. Parliament has also granted the central bank power to restrict foreign currency borrowing by households, municipalities or corporations that do not have foreign currency earnings or assets. This hasn't been used yet as such borrowing has so far been almost non-existent.

We have introduced a specific capital flow management tool, which is a reserve requirement on capital inflows into the bond market and high-yielding deposits. Sometimes you need such tools to deal with big surges in capital inflows or situations where the monetary policy channels are not working. It has worked well, though most of the time we would prefer not to use such measures. But if we have to use them, we will.

DK: The banking sector was at the heart of the Icelandic crisis. There is a debate among economists and regulators on whether global efforts around financial sector reform have gone far enough. Do you think we have fundamentally changed the safety of banks?

MG: Basel III was a step in the right direction, although I would have preferred a higher leverage ratio. A minimum leverage ratio of 3% is rather low, but this was what was possible to compromise on at the time. I think international banks would be willing to have a higher leverage ratio if the complexity of regulation was reduced. We need to be open to the possibility that more is needed in the regulatory field. The low leverage ratio might hit us in the future, but there is significantly more capital and liquidity in the banking system globally. I don't think a banking crisis is imminent, at least not on a global scale.

DK: Central banks across advanced economies have come under attack over their expanded remits, with some people arguing that certain functions currently performed by central banks should be brought back to the jurisdiction of elected policy-makers. Should the prospect of reduced power be a worry or come as a relief for central bankers?

MG: This issue varies significantly from country to country. Central bankers need to acknowledge the difficult position they are in, and more generally that politicians globally have not stepped in to the degree that they needed to in terms of crisis management and fiscal policy. Central banks, as the saying goes, 'were the only game in town'. I don't think that's something central banks should relish, but you have to deal with the situation as it is.

The other complication is that there is a limit, especially in small countries like mine, on how many institutions you can have and how many separate groups overseeing financial stability you can create. That is why, for instance, in my country, the pendulum is still swinging in the other direction. When capital controls were introduced in 2008, the central bank was tasked with managing those, which was a huge and difficult task.

In Iceland, a domestic group of experts has proposed giving even more power to the central bank by moving microprudential regulation and supervision under the roof of the central bank as well. Recently the government decided to set up a work stream in order to bring this about. There are obvious positives and benefits to this. In Iceland, there are only three major banks, so the micro immediately becomes macro, and vice versa. At the same time, this might complicate the functioning of the central bank and there is a reputational risk. If the central bank takes over microeconomic supervision, then we need to think about some internal separations in order to mitigate reputational risk.

In general, I don't think we have found the optimal solution. Politicians must be more involved in some instances, and I think >>

‘Politicians globally have not stepped in to the degree that they needed to in terms of crisis management and fiscal policy.’

the system we set up in 2014, with the establishment of a Financial Stability Council with the finance minister chairing, was a step forward. But I don't think that's the end of the story.

DK: The low cost of energy in Iceland has attracted the energy-intensive cryptocurrency community. Does the central bank itself see a motivation to research the application of distributed ledger technology to its wholesale interbank payments systems? Has it considered issuing a digital currency?

MG: We follow developments in this field and what other central banks are doing very closely. We recently published a report on the pros and cons of introducing a digital central bank currency. We are not proposing anything yet, and are not even saying that we think this should be done. We are saying this needs to be discussed, because any introduction of a CBDC will probably necessitate legislative changes.

A central bank digital currency is likely to be based on a centralised ledger, not a distributed one. But then, distributed ledgers may be useful for other kinds of transactions, but the technology is not yet fully developed. It is improving and we will have to wait and see.

Profile

Education: Studied economics and mathematics at the University of Gothenburg before receiving his bachelor's degree from the University of Essex and an MPhil in economics from the University of Cambridge.

Career: Guðmundsson became an economist with the Central Bank of Iceland in 1980, and served as economic adviser to Iceland's finance minister between 1988-91. He returned to the central bank for 13 years, latterly serving as chief economist. For five years he was member of senior management of the Bank for International Settlements, before becoming governor of Iceland's central bank in 2009.

Worldview

This month's expert analysis

From physical to digital

Cybersecurity investment is tantamount to impact investment

Eva-Maria Dimitriadis
C5 Accelerate

The Global Impact Investing Network defines impact investment as investment 'made into companies with the intention to generate social and environmental impact alongside a financial return'. This is nothing new. In 2017, Investment Association figures showed that inflows into ethical funds exceeded £1bn for the first time. The rapid growth in signatories to the United Nations' principles for responsible investment highlights the increasing recognition of the challenges facing corporates and investors. However, these investments have focused on the physical world and issues like climate change. The need to protect our environment is clear; the massive growth of our digital lives means the same care must be paid to cybersecurity – the new frontier for ethical investment.

Cybersecurity's social and environmental impact is digital rather than tangible, but is every bit as important as protecting our oceans and forests and combating poverty. People's lives are increasingly connected, and many day-to-day activities are carried out online. Just 11 years ago, only around 1% of the world had internet access. Today, more than 55% of the population – around 4.2bn people – use the internet. This number is rising daily. The internet has transformed the world and more data have been created and stored over the last decade than in the previous 5,000 years. Data are being created so fast, measurement units cannot keep up. Gigabytes are insufficient and we are now measuring in zettabytes – or 1tn gigabytes at a time.

'Just 11 years ago, only around 1% of the world had internet access. Today, more than 55% of the population – around 4.2bn people – use the internet.'

The digital world is providing opportunities that are increasingly accessible, thanks to advances like cloud computing. However, there is a proportionately large risk. Where big data gathers, so does criminal opportunity. In the industry we say there are two types of companies: those that know they have been hacked and those that don't. Stories about data breaches are commonplace. Viruses like Nopetya and Wannacry have devastated systems; major corporations have lost countless customer records to hackers or internal mishaps.

Booming business

Protecting the digital world is a booming business. Companies devoted to areas such as data protection and identity management have no trouble finding investors. The challenge is for that investment to be properly understood. It is not a niche area of technology. It is impact investment in the proper sense of the term and should be given its legitimate place in ethical investment frameworks.

Private equity and venture capital can play a major role in protecting the digital world. Many online entrepreneurs benefit from the cloud's affordability and accessibility. Companies such as Amazon Web Services are removing traditional barriers to entry such as infrastructure costs related to information technology, and entrepreneurs are surrounding themselves with teams dedicated to ensuring users' safety online with innovative products and solutions. The money and nurturing that allows these companies to grow is mostly being provided by venture capital and private equity firms that are looking to make a difference.

The internet is the first and only truly global commons. It has created arguably the greatest global good and continues to provide opportunities for everyone, from businesses of all sizes to consumers, governments and individuals. The digital world must receive the same attention and investment into protecting it as the physical world. Environmental, social and governance investment must evolve beyond the physical and into the digital. ●

Eva-Maria Dimitriadis is Chief Operating Officer of C5 Accelerate.

Private credit emerging in Africa

Asset class offers safer means to access growth markets across continent

Ryan Martin
Altica Partners

Private credit is a strategic, mainstream asset class in international portfolios. Its appeal centres around a constellation of desirable characteristics, including a yield premium, downside capital protection and lower duration sensitivity than competing credit sub-asset classes. Diversification into private credit can help optimise portfolio efficiency.

There is significant global interest from sovereign funds, pension funds, insurers and family offices. Most investment is directed towards developed markets in the US and Europe.

There are indisputable signs of maturity in developed markets. A 'wall of money' effect, high earnings before interest, taxes, depreciation, and amortisation multiples and intense competition seem to have compressed returns and diminished the appeal of private credit. Returns on vintages immediately after the European debt crisis offered 13%-15% on an unlevered basis for senior debt. Industry observers note expected returns have compressed towards 7%-8%. In the US, net internal rates of return are closer to 6%-7%, with cash yields of 4% or less.

Industry-wide available capital is at a record $251bn, of which 95% is concentrated in the US and Europe. Research by Private Debt Investor indicates that 69% of loans in Europe and 75% in the US are 'covenant-lite'. Moody's has called these 'distressingly weak'.

Private debt in Africa

The opportunity for private debt in Africa is substantial. At its core is a shortage of adequate finance to mid-market corporate and financial institutions. The credit gap for small and medium-sized enterprises in sub-Saharan Africa is $140bn, says the International Finance Corporation.

This opportunity is augmented by structurally superior growth and investment prospects. SSA has been the fastest-growing region after developing Asia since 2000. A demographic dividend, growing labour force and rapid urbanisation underpin burgeoning demand. By 2034, Africa will have a larger workforce than China or India.

African leaders are focused on developing market-orientated policy. This year has witnessed the establishment of the Single African Air Transport Market and the Continental Free Trade Area, creating a market of more than 1.2bn people and GDP of $2.5tn. The World Bank's Ease of Doing Business index illustrates this shift. Countries like Rwanda (which ranks 42nd), Morocco (70), Kenya (81), Botswana (82) have comparable or markedly better scores than more familiar emerging markets like India (101), Brazil (126) and China (78). The direction of reform in Africa stands in stark contrast to protectionist tendencies in developed markets.

SMEs' ability in SSA to generate private sector growth and jobs is constrained. Local financial institutions and corporations find dollar funding a challenge because of high costs and lack of flexibility of local borrowing.

Private equity alone cannot fund Africa's economic diversification. Leaving aside recent performance challenges, in many cases ceding control is unattractive or premature. Limited exit opportunities deter investors from making allocations to Africa-focused funds.

Private credit is a more attractive route to accessing growth opportunities. It is a safer asset class offering downside protection through seniority and a contractual return component. The emergence of private credit funds testifies that investors are recognising this opportunity and committing significant capital.

Investors should prioritise sectors that governments deem strategically important to diversification, as well as businesses that benefit from urbanising populations with higher spending power.

Consumer spending in Africa is projected to reach $2.1tn by 2025, up from $1.4tn in 2015. Business-to-business spending is expected to reach $3.5tn by 2025, an increase of around 50% from 2015. The World Investment Report 2018, published by the United Nations Conference on Trade and Development, forecasts African foreign direct investment inflows to rise by 20% to $50bn this year.

Investing for impact

Global investors increasingly expect managers to engage with stakeholders on environmental, social and governance issues throughout the lifecycle of investments. Aligning these with the UN's 2030 sustainable development agenda and the IFC's 10 environmental and social standards is integral.

Delivering sustainable transformation for African companies with respect to corporate governance and skills-transfer enables local companies to adopt international standards. This will benefit employment, productivity and growth.

Private credit offers investors the safest means to access growth markets, as well as the prospect of higher risk-adjusted returns in less efficient and less competitive environments. It also enables investors to diversify their private debt exposures and take advantage of different economic cycles and risk that is arguably more attractively priced. Undoubtedly, the private credit opportunity in Africa will become a crucial channel for accelerating economic development and closing the credit gap. ●

Ryan Martin is Head of Sovereign and Macro Strategy at Altica Partners.

Follow the money

Technology is transforming the fight against money laundering

James Cannings
Università Bocconi

In June this year, the European Union adopted its fifth Anti-Money Laundering Directive. Responding to the growing popularity of digital currencies, virtual currency exchange platforms must now perform 'know your customer' checks and monitor transactions. Likewise in Asia, South Korea's financial services commission now requires users of virtual currency exchanges to hold real-name bank accounts. These are steps in the right direction. Detecting money laundering is essential to fighting other financial crimes, such as terrorist financing and the evasion of taxes and sanctions.

Advances in artificial intelligence and machine learning could allow financial institutions to reduce costs and better detect money laundering. The issue is the large number of transactions passing through financial institutions every day: it is impossible to monitor them all using traditional methods. Regulators must balance flagging suspicious transactions and ensuring legitimate payments can flow freely. New technology can be used to reduce the number of false positives while identifying suspicious transactions. The Monetary Authority of Singapore is using past data to train machines to identify suspicious transactions that can be prioritised and investigated by humans. In the private sector, HSBC has partnered with UK start-up Quantexa to use AI to flag suspicious activity.

Fewer excuses

Advances in AI technology give fewer excuses for non-compliance. Regulators have an opportunity to step back while banks take preventative measures against money laundering. This would be a welcome change, given the unmanageable task authorities face. Money laundering takes up around 2%-5% of global GDP every year, according to the United Nations office on drugs and crime, and Europol estimates that only around 1% of EU criminal proceeds are confiscated. De Nederlandsche Bank listed 'taking a hard stance on financial and economic crime' as one of three focus areas in its 2018-22 supervisory strategy. The central bank believes financial institutions have a responsibility to be at the forefront of financial crime prevention. DNB is willing to take tough measures, holding commercial banks responsible for enabling financial crime and referring them to the public prosecution service when necessary. DNB has made it clear: ignorance of money laundering is not an excuse.

> 'The seemingly daily advances in AI technology give fewer excuses for non-compliance.'

This should incentivise financial institutions to take safeguarding measures. Money laundering prevention is a costly business. Financial crime compliance costs UK banks around £5bn every year, according to the British Bankers' Association. There are also fines for banks who fail to spot money laundering; earlier this year, ING was fined $900m. The adoption of new technology in this area can be cost effective for financial institutions. This puts them on the same page as regulators, with cost-saving technology alleviating stress on regulators' overstretched resources.

Banks also face severe reputational risk. ING's chief financial officer resigned in September. ABLV, Latvia's third-largest lender, was liquidated after the US Treasury accused it of facilitating money laundering. A scandal at Danske Bank has seen its share price fall 30% since March; a reported €200bn passed through non-resident bank accounts in its Estonian subsidiary between 2007-15. After internal investigations uncovered that a large number of its Estonian non-residential bank accounts were suspicious, Danske Bank's chief executive officer resigned. These cases highlight the potential financial stability risk that arises from money laundering. It can destabilise commercial banks and undermine trust in the financial system.

> **2%-5%**
> Amount of global GDP lost to money laundering every year

Regulators need the co-operation of financial institutions for preventative measures to be effective. Policy-makers must ensure the right conditions are in place for banks to do this, by encouraging the development of new anti-money laundering technologies, like the UK Financial Conduct Authority's regulatory sandbox. This closer relationship between regulators, technology companies and banks will only strengthen the fight against money laundering. ●

James Cannings is a postgraduate student at Università Bocconi and former Programmes Assistant at OMFIF.

Asia returns to ESM bond market

Investors trust Europe to resolve its problems and create growth

Kalin Anev Janse
European Stability Mechanism

Volatility returned with a vengeance to fixed income markets in the middle of this year, propelled by political events such as the election of a right-wing Italian government and the threat of a global trade war. As often happens, many people commented that this could have serious implications for the cohesion of European monetary union.

We at the European Stability Mechanism believe such opinions are unfounded. In 2010, many wrongly predicted the euro area would break up. Today, EMU is much stronger than before Europe's sovereign debt crisis, economically as well as in its institutional architecture.

There is evidence that investors have not lost interest in the euro area. In two ESM deals before the summer, Asian investors returned to Europe's books in high numbers: 13% and 17%, well above the full-year average of 4% in 2017 and 9% in 2016.

Asian investors have always been loyal supporters of bonds issued by the ESM and its predecessor, the European Financial Stability Facility. At the start of the debt crisis, almost 40% of ESM/EFSF bonds in the primary market went to Asian investors. Over the years, that number gradually fell. Investors say the reasons for this are manifold, but are largely to do with low yields in Europe. At the same time, Asian investors have been net sellers of ESM bonds in the secondary market since 2015.

Marked intelligence

These two trends caused the total volume of ESM bonds held by Asian investors to decline steadily since 2013. This year, however, the outflows are at their slowest pace since 2015. The data show there has been a clear inflection point since a trough in 2017.

If the primary-market interest illustrated by recent deals endures, net outflows may well end soon. The decision by the European Central Bank to end its quantitative easing programme by the end of 2018 is likely to accelerate this trend.

The data underpin what we at the ESM hear when meeting Asian investors: that they trust the ability of the euro area to fix its problems, and the capacity of the European economy to create higher standards of living and more jobs.

The reason these trends can be spotted so accurately is that the ESM has, since its founding in 2012, put great effort into monitoring trading of its bonds. We know of course who buys ESM bonds upon issuance. But we also ask all banks in our market group to report every deal in the secondary market. This has yielded a database of more than 200,000 trades.

Armed with these data, the ESM can draw conclusions such as the one above to better understand investor preferences and supports its euro area stability mandate.

The ESM helped preserve the integrity of the euro during EMU's worst crisis. In that time, it has also developed into a centre of excellent market intelligence. ●

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

'At the start of the debt crisis, almost 40% percent of our ESM/EFSF bonds in the primary market went to Asian investors.'

Trillion dollar savings

Artificial intelligence is set to take over financial services – at a cost

Lex Sokolin
Autonomous Research

Autonomous Research recently completed a deep dive analysis into the development and application of artificial intelligence in financial services, and came to a $1tn conclusion. That is the size of industry cost eligible to be automated or augmented over the next 10 years, as technology implementations shift from proofs of concept to production.

The AI movement is here because much of the needed AI 'corpus' has been built over the last decades. Artificial intelligence requires hardware with massive computing power and data sets with millions of rows across various types of human activity. These assets have emerged from the development of the web. There are 7.5bn people and 20bn smart computing devices, powered by a $100bn cloud storage market. Venture capital has flown into 'machine learning' companies at a rate of $5bn-$10bn per year, attracting human and financial capital.

The AI discussed today is not science fiction, but a mathematical approach to building self-improving regressions called 'machine learning'. A subset of this discipline involves 'neural networks', a type of data crunching method that is best powered by an Nvidia graphics card. We are unlikely to see killer robots, but rather good robot statisticians solving problems across large data sets. Evidence suggests neural networks make fewer errors in such tasks than their human counterparts. Contrary to popular belief, AI can also be used in a creative capacity to explore ideas quickly or to do emotional tasks.

The potential of artificial intelligence is a challenge for the traditional economy and a capitalist society. Most AI research is publicly available through academic archives and much of the code is open source, with the popularity of machine learning courses at top universities skyrocketing, along with associated compensation levels. This open source nature implies that the core research cannot be owned. However, large tech and attention companies have been building powerful out-of-the-box implementations of AI, channelled through sticky 'software as a service' platforms, which are hard to replicate. They own the cloud, on which AI sits. The likely result is AI reinforces monopolistic behaviour, automates low-value human judgment tasks, and accrues shareholder returns.

In financial services, AI and machine learning have an impact across the organisation. In the front office, the most promising applications focus on integrating financial data and account actions with software agents that can hold conversations with clients and support staff. In the middle office, as regulations become more complex and processes trend towards real-time, artificially intelligent oversight, risk-management and 'know your customer' systems can become very valuable. In product manufacturing, AI analyses credit risk using new types of data. For instance, it determines insurance underwriting risk and assess claims damage using machine vision on customer-submitted images.

Several routes for AI

In the US alone, 2.5m financial services employees are exposed to the impact of these technologies. Financial firms see potential cost savings of $490bn in customer-facing roles, $350bn in the middle office and $2bn in product manufacturing. While those are large numbers, it is possible that instead of cost cutting, the technology will lead to productivity improvements. This would imply that staff is retained and up-skilled to focus on high-end, creative or emotional tasks. But some initial indications point in the opposite direction. A micro-credit lender with an AI underwriting model, for example, shared that over the last year they fired many of their human underwriters once the model was trained. They then hired junior staff to clean the data and senior staff to audit the algorithm. The net result is a hollowing out of the middle, which is a natural outcome of power law distribution from technology.

20bn

Number of smart computing devices in the world

The future of AI in financial services can take several routes. One potential path is that tech companies like Amazon and Google continue to add skills to their smart home assistants, with Amazon Alexa sporting over 20,000 skills already, outcompeting finance companies in the process. Another potential path is the example of China, where tech and finance merge to build full psychographic profiles of customers across social, personal and financial data. The last road is towards decentralised autonomous organisations that are built by the crypto community to shift power back to the individual, with skills made from open source component parts. In each of these cases, we should be careful to understand and regulate the ethical considerations of giving so much of ourselves blindly to software. ●

Lex Sokolin is Global Director Fintech Strategy and Partner at Autonomous Research.

Directing capital towards sustainable goals

Green bonds in Asia show power of financial institutions at their best

Kenneth Cheong
BNY Mellon

Official institutions and financial markets, especially in the Asia Pacific region, can play a major role in propelling green development and combating climate change around the globe. Unlike other parts of the world where environmental, social and governance goals are often realised through direct corporate debt, banks tend to be at the forefront of ESG change in Asia Pacific.

This institutional trend is a way for financial markets to foster sustainability. Banks use green bonds not only to promote their ESG criteria, but to encourage corporate green and social activities in their markets through lending and microfinance.

The green bond market in Asia Pacific is a case in point. Green bonds lend institutional backing to the United Nations' sustainable development goals for water, infrastructure, sustainable urban development, and climate and biodiversity. They help direct capital towards projects that support the SDGs, and introduce a key lens focused on ESG impact and returns among investors within and into Asia.

They also address a capital supply gap in Asia by providing direct capital that can broaden banks' investor base in bond markets. In turn, they allow banks to extend loans in support of green projects and companies. At the same time, it is gratifying to see a broader issuer base as corporates increasingly make forays into direct green bond issuance.

Technology investment

Multiple factors are spurring green bond expansion, both as a financial opportunity and an ethical commitment. According to BNY Mellon research, on the 'Race for Assets', more than half of investors expected allocations to alternative assets to increase in 2018.

> 'The need for technology investment increases as investors enter asset classes with which they are less familiar, as is the case with green bonds in Asia Pacific. Funds require systems that provide high-quality, up-to-date information to ensure investors can make effective decisions.'

Such demand raises the stakes for asset supply across many alternative asset classes, from hedge funds and private equity to infrastructure and debt. The latter two help explain the more than 50% rise in green bonds that BNY Mellon and others are observing. It is not hard to make the connection between these findings and the increasing popularity of ESG investing.

This demand, however, requires two things. First, the market needs assets in which to invest. Second, the investors flowing into these asset classes, including green bonds, require greater transparency and lower fees from alternative-investment managers. This opens an opportunity to address challenges in providing information on a timely basis to infrastructure investors while offering core trustee and agent services.

Key trends include improved data capture, analytics and secure cloud-based systems, all of which can simplify reporting procedures. This increases efficiency and removes the need for heavy investment in back-office personnel.

The need for technology investment increases as investors enter asset classes with which they are less familiar, as is the case with green bonds in Asia Pacific. Funds require systems that provide high-quality, up-to-date information to ensure investors can make effective decisions about investment and redemption. Managers will probably need to develop new structures and strategies to meet these demands. Trustees, too, need to bring new knowledge, creativity, and flexibility to navigate novel and complex structures.

> **50%**
> The rise in issuance of green bonds observed in 2018

In addition to helping local and regional banks raise capital for lending, the trends highlighted above should help connect the right capital pools with investor demand. These principles can, and should, be applied not only to institutions and investors in Asia, but to all green bond supporters throughout the world. ●

Kenneth Cheong is Managing Director of Corporate Trust, Asia Pacific, at the BNY Mellon. **The information contained here reflects the personal views of the author and may not reflect the views of BNY Mellon. It is for general information purposes only and is not intended to provide legal, tax, accounting, investment, financial or other professional advice on any matter. This does not constitute a recommendation by BNY Mellon of any kind.**

A regulatory approach to fintech

Guarding against emerging risks without stifling innovation

Christine Lagarde
International Monetary Fund

In 1876, when Alexander Graham Bell was awarded a patent for the telephone, the only way to communicate rapidly over long distances was by telegraph. The dominant company in that market dismissed Bell's invention as a useless toy and rejected an opportunity to buy his patent. The rest, as they say, is history.

This anecdote illustrates the unpredictable nature of technological innovation. Today, some enthusiasts say crypto-assets may represent the beginning of a similar breakthrough. Others condemn crypto-assets as little more than a fad or a fraud. We should not dismiss them so lightly.

Crypto-assets are just one example of how new technologies are being used to deliver financial services. Advances in artificial intelligence promise to extract more value from ever more abundant and ubiquitous data. Its applications in financial services include enhancing fraud protection and regulatory compliance, potentially expanding access to services and deepening financial inclusion.

Financial technology offers considerable promise, but it also poses risks. Consider distributed ledger technology, which underpins crypto-assets. It can enable faster and cheaper transactions, store records securely and execute so-called smart contracts automatically. But the technology has also been used for illicit purposes.

Regulators face a difficult task. On the one hand, they must protect consumers and investors against fraud and combat tax evasion, money laundering and the financing of terrorism. They must also protect the integrity and stability of the financial system. On the other, they must beware of stifling innovation that benefits the public. By engaging with market participants at the centre of financial innovation, regulators can stay abreast of the benefits of new technologies and identify risks. Developing a forward-looking regulatory framework calls for creativity, flexibility, and new expertise.

Crisis lessons

The experience of the 2008 financial crisis and its aftermath yielded three important lessons. First, trust is the foundation of the financial system, but it is fragile and can be shaken easily.

Second, risk accumulates in unexpected places. In the years before the crisis, financial instruments emerged that were poorly understood by investors, such as collateralised debt obligations. It is unclear whether a decentralised financial system will be more stable or less. There is a chance that emerging risks will go undetected as the role of traditional intermediaries diminishes.

Third, in a globalised world, financial shocks quickly reverberate across borders. Responding to a crisis requires concerted action. And a global financial system may transmit shocks more quickly.

Global action

So far, national authorities have reacted with varying degrees of regulatory stringency. If this uncoordinated response continues, activity will simply migrate towards more lightly regulated jurisdictions in a race to the bottom. Because crypto-assets know no borders, a global approach is vital.

Such an approach is taking shape. The Financial Action Task Force has given guidance to its members on addressing money-laundering and terrorist-financing risks associated with crypto-assets. The Financial Stability Board, which coordinates financial regulation for the G20 economies, is studying ways to monitor crypto-assets.

The G20 agrees with the FSB's assessment that crypto-assets do not pose a threat to stability, though they could pose a threat in the future. The G20 asked the FSB and other standard-setting bodies to continue their work on crypto-assets and report on progress.

The International Monetary Fund can serve as a forum for the exchange of ideas and forging consensus. It is the job of the Fund to monitor the economies of its 189 members. That gives the IMF a unique global perspective.

We must understand innovative technologies, learn from them, and perhaps even adopt some of them to improve regulation, supervision and surveillance. In some cases, it will be enough to apply existing regulations. In others, new approaches may be required as risks emerge and as distinctions between entities and activities break down. One thing seems certain: we should not put off action until the answers become clear. Instead, we must begin to consider the regulatory framework of the future.

We must do so in a manner attuned to the rapid pace of change, and with the awareness that unexpected new opportunities and risks may emerge. One approach, undertaken in Hong Kong, Abu Dhabi and elsewhere, is to establish regulatory sandboxes where new financial technologies can be tested in a closely supervised environment.

Above all, we must keep an open mind about crypto-assets and fintech, not only because of the risks they pose, but also because of their potential to improve our lives. When in doubt, think of Bell and his telephone. ●

Christine Lagarde is Managing Director of the International Monetary Fund. This is an edited version of an article that first appeared in Finance & Development magazine.

Managing expectations

Institutions turning their back on growth forecasts

Didier Borowski
Amundi

Recent financial turmoil has renewed concerns over an impending crisis. Given the importance of the Federal Reserve's monetary policy for global financial markets, investors are questioning the strength of the US economy. The issue is whether the Fed can go much further in its monetary normalisation (which would tend to increase both long-term interest rates and appreciate the dollar) or if now is the time to predict the 'end of cycle' within the next 12-24 months. In the latter case, there would be no increase in interest rates next year and the equity market would soon stop climbing.

Growth forecasts are therefore crucial, not only to correctly anticipate corporate profits (the heart of stock market dynamics) but also to predict inflation and unemployment, essential ingredients of monetary policy. Yet the Fed has often acknowledged that its own economic forecasts are no better than those of consensus forecasts. The Fed's expectations regarding the federal funds rate are no more accurate than those of investors.

If the Fed, with all the means at its disposal, cannot predict correctly the turning points of the business cycle, it is unclear how an isolated economist could. This is why some institutions have given up forecasting growth and are holding back consensus expectations. However, consensus forecasts are not necessarily better recession indicators.

But forecasts are not idle. As a cycle matures, the variance of forecasts increases. Long cycles generally come with a rise in imbalances (debts, trade or fiscal deficits). They are also weakened by inflationary pressures. Forecasts thus naturally begin to diverge, which could signal a turning point. There is usually high variance during periods of crisis or financial turbulence. There is low variance during periods of expansion, particularly at the beginning of a cycle. Under these conditions, a gradual increase in variance should indicate a turning point.

Emerging dissensus

To confirm this hypothesis, my team and I used consensus data to build a monthly synthetic indicator of expected variance over the next 12 months. We failed, but this can ultimately be explained by a mimetic bias that is well-known among economists.

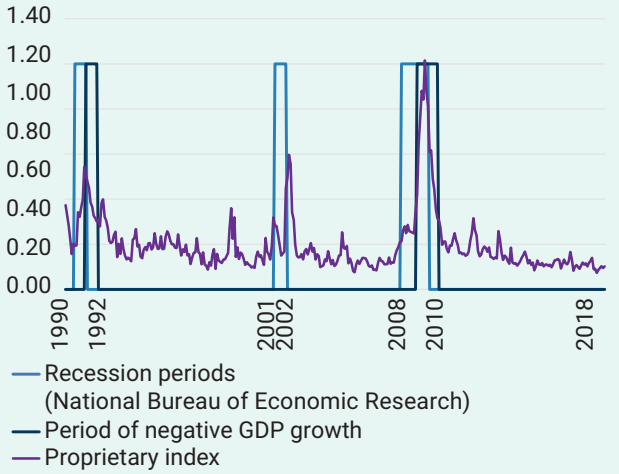
Therefore, it may be better to look at another metric. As the cycle matures, it is probable that at least one economist will stray from the consensus view. In this case, the variance will not move much, but the difference between the highest and lowest forecasts will rise significantly. This hypothesis has proven to be fruitful: by constructing a monthly synthetic indicator based on this difference, we obtained a better leading indicator of the cycle (see chart).

It is striking that our two metrics (variance and gap between the highest and the lowest forecast) remain very low by historical standards. The situation differs from the late 1990s (before the IT bubble burst) and the period just preceding the 2008 financial crisis. The current cycle – which is on the verge of becoming the longest expansion in US history – appears like it will last forever.

A dissensus is likely to emerge once 2020 growth forecasts are taken into account. In the meantime, investors may fall into the illusion of an endless cycle. The deeper this belief is anchored, the higher the risk of 'boom bust' – repeated economic expansion and contraction. By overestimating growth and corporate profits, investors are led to buy overpriced equities. They will not notice their mistake until it is too late. The Fed, if it falls in the same trap, could overreact and precipitate the end of the cycle by excessively tightening its monetary policy. If this happens, the conditions of a 'boom bust' will be met. It simply remains to be seen if the boom is over. ●

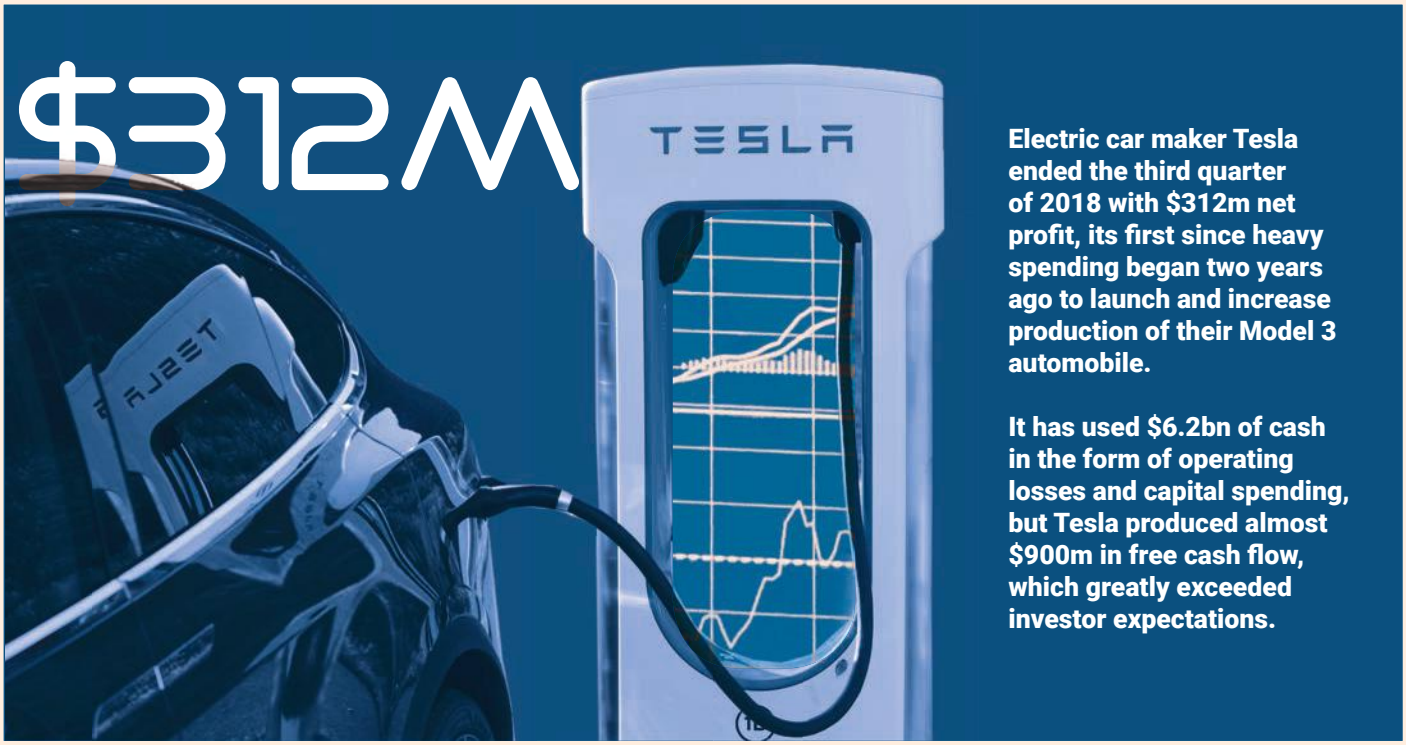
Didier Borowski is Head of Macroeconomic Research at Amundi.

Forecast dispersion as an indicator of economic cycle
Proprietary index, extracted from consensus data*



Source: NBER, Datastream, Consensus Forecasts, Amundi research
**Highest-lowest forecast at the 12-month horizon*

The number



Electric car maker Tesla ended the third quarter of 2018 with $312m net profit, its first since heavy spending began two years ago to launch and increase production of their Model 3 automobile.

It has used $6.2bn of cash in the form of operating losses and capital spending, but Tesla produced almost $900m in free cash flow, which greatly exceeded investor expectations.

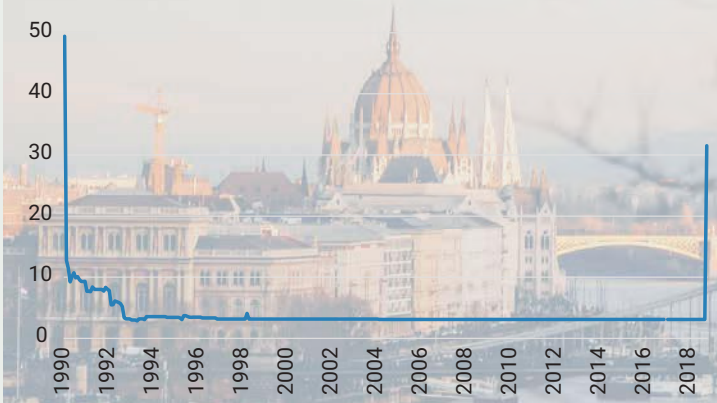
The chart

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

The bank purchased 28.4 tonnes of gold in the first two weeks of October, increasing its total gold holdings 10-fold to 31.5 tonnes. This is the first time in more than 25 years that the central bank has changed its gold reserves. Governor György Matolcsy explained that the move is intended to improve the security and stability of Hungary's wealth and that there are no investment concerns behind the holding of gold reserves.

The size of the country's gold holdings is approaching levels last seen during Hungary's 'golden train' period, when it received 30 tonnes of gold bars and coins at the end of the second world war. However, Hungary remains a relatively small gold holder, ranking outside the top 50 globally, according to the World Gold Council. In contrast, Russia has been purchasing almost 20 tonnes each month in 2018.

Hungary increases gold reserves tenfold
Central Bank of Hungary's gold holdings, tonnes



Source: International Monetary Fund, Central Bank of Hungary, OMFIF analysis

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Advisers network poll

Shelving of Aramco IPO is 'calculated'

Network suggests Saudi social reform is delayed rather than scrapped

This month's poll focuses on the developments surrounding Saudi Arabia's mooted initial public offering of Saudi Aramco. Participants were asked: '**Saudi Arabia has shelved the proposed initial public offering of state-owned oil company Saudi Aramco. Is this a sign of the kingdom's waning commitment to its ambitious Vision 2030 reform programme?**' Respondents from the advisory board believed that Saudi Arabia halting the IPO was not indicative of a lack of commitment to its reform programme. Instead, most agreed it was strategic, as officially reported by the kingdom itself. Confidence in the outlook for oil prices was suggested as a factor for this. Social media narrowly agreed with the advisers, adding to the consensus that Saudi Arabia will press on with its reform plan. Most participants responded to this poll before the news about the killing of Jamal Khashoggi came to light, which understandably has overtaken the discourse around Saudi Arabia and precipitated foreign investment outflows from the kingdom.

This is indeed a reality check and proof of Saudi Arabia's waning commitment to the Vision 2030 project.

Hans Blommestein, Vivid Economics

No, it may have been just a shrewd judgment as to market conditions. But now with the Khashoggi scandal, both the offer and the reform are in jeopardy.

Meghnad Desai, London School of Economics

The shelving of the IPO has come as a shock to potential investors. While officially this is being played down as a postponement, waiting for more optimum conditions, it does appear more like a waning of the kingdom's commitment to its ambitious Vision 2030 programme.

Hemraz Jankee, formerly Bank of Mauritius

It is a reflection of more positive expectations on oil price.

Miroslav Singer, Generali CEE Holding

This decision may be a sign Saudi Arabia is now more confident about the short and medium term outlook for the oil price.

Tavares Moreira, formerly Banco de Portugal

The fulfilment of Saudi Arabia's long-term vision requires many shorter term adjustments although if the adjustments are too great then they may lose the ability to orchestrate.

Colin Robertson, SW1 Consulting

December's question:

Which parts of the world would most benefit from improved regional trade agreements?