DECEMBER 2015 CONVERSES DECEMBER 2015

YILMAZ ARGÜDEN SAYS FOR GOVERNMENTS, BUSINESSES AND CIVIL SOCIETY TRANSPARENCY BUILDS TRUST

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Europe needs to resort to smart solutions to master the challenge presented by the influx of refugees, Alessio Brown finds

Climate change: putting a price on carbon

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2030 Agenda: our legacy to future generations?

The WFC Global Policy Action Plan presents a collection of well researched, holistic policy examples that offer a sustainable pathway, embracing a future-just perspective, bringing long-lasting solutions, writes Catherine Pearce

Climate change, conflict and the sustainable development goals

In those fragile states most in need of development progress SDG16 is central to achieving immediate and future wellbeing, Alec Crawford writes

China's ETS: a vote of confidence in carbon markets

Carbon markets have recently received a huge vote of confidence from China, Andrei Marcu writes

Why is China finding it hard to fight the markets?

Alicia García-Herrero writes that China is sitting on a pile of debt, and the only way out is to deleverage: more pain now for sustainable growth later

Boardroom briefing

In this briefing we have partnered with Atradius to pose questions and gain a better perspective of credit management and collection services, which can now be viewed as a core strategy requirement

Arlington, Texas: at the centre of it all

Arlington is quickly becoming a hub for engineering, advanced manufacturing, technology and medical science industries, the Office of Economic Development writes

30 years of success

For 30 years Kelleher International has been creating exclusive matches. In a Q&A with *World Commerce Review*, Amber Kelleher-Andrews talks about how her company finds love for top-level executives

3D printing: unleashing the magic

Martina Ferracane argues that policy makers should engage in a proactive regulatory dialogue and implement a framework to aid the development of a technology that is set to shake and reshape our reality

Africa at a fork in the road: taking off or disappointment once again?

Ernesto Zedillo illustrates some of the ambitious but necessary steps needed to unleash the tremendous potential of the African people towards the development of their nations

Africa's uncompetitive trade deals

The trade agreements that African countries enter into are in many cases undermining their development, rather than boosting it, William Gumede argues

The South African PIB: a case of the tail wagging the dog

Azwimpheleli Langalanga discusses the objectives of the PIB and how it fits into the whole FDI regulatory matrix

Intellectual property in Africa

Wayne Meiring looks at how companies can protect their intellectual property in Africa, discussing both opportunities and challenges

Online counterfeiting: the global impact

With revenue, reputation and customer safety all at risk, there has never been a more crucial time to develop and deploy a proactive and effective anti-counterfeiting strategy, says Stuart Fuller

The fall of Safe Harbour and the future of transatlantic data sharing

The basis of Safe Harbour has been questioned for some time, and in recent years it has become increasingly apparent that an updated privacy regime is necessary, Natasha Simmons writes

In Bermuda technology enhances corporate citizenship

Bermuda boasts an active corporate community which leverages its networks and which partners to help others on the Island, the Department of E-Commerce write

Building trust: the toughest leadership challenge?

Confucius said that rulers need three resources: weapons, food and trust. The ruler who cannot have all three should give up weapons first, then food but should hold on to trust at all costs. David Watkins explains

The past is not the future

Business schools – and the businesses they serve – need to discover a 'second curve' if they are to survive and prosper, Charles Handy writes

Topeka: the right combination

Topeka offers the right combination of resources and support while delivering it all with a can-do attitude, GO Topeka Economic Partnership write

Management matters

Knox House Marine & Aviation write about their aim to offer convenient, accessible and specialist services that reduce the administrative burden while maximising the benefits of ownership to owners of yachts and privately operated aircraft

Business aviation in Malta

When it comes to business aviation Malta is no longer the new kid on the block but is a serious jurisdiction well considered in the industry, Stanley Bugeja writes

The rhetoric and reality of the Trilateral and Bilateral Summits: cautious

optimism

The recent trilateral and bilateral meetings provides an insight into the region's future trade, security and political relations, Stephen Nagy finds

OBOR: will it reboot the Chinese economy?

Pravakar Sahoo discusses the centrepiece of China's foreign policy, and looks at potential future issues

A non-linear path to economic growth and prosperity

Deepanshu Mohan argues for a better incorporation of local economy features in the process of achieving economic growth as a means-to-an-end goal of securing development

TPP: implications for India

Geethanjali Nataraj and Pravakar Sahoo examine the likely implications of the TPP on India and set out a roadmap for India to prepare itself

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Governments, businesses, and civil society: transparency builds trust

Yılmaz Argüden says the elimination of unnecessary legislative, regulatory and administrative barriers represents the right and most cost-efficient economic stimulus available to governments today

After Brisbane, Helsinki, and Antalya

The need for consistent and effective regulatory regimes has never been more obvious. In 2014, in response to the G20 commitment to put emphasis on implementing structural reforms, the B20 made concrete recommendations¹ to facilitate reforms and their implementation. The Business and Industry Advisory Committee to the OECD (BIAC) furthermore released an *Economic Policy Survey*² which provided the perspectives of national business organizations as to which measures are needed, in which fields, and how they can be achieved. In fact, the vast majority of respondents called for product market reforms, including a meaningful reduction of regulatory burden.

Nonetheless, the pace of reforms for growth across both product and labour markets in OECD countries has slowed and has been largely piecemeal over the past years. According to the BIAC Survey, only 4 percent of the OECD's 2013 *Going for Growth* country-specific recommendations were fully implemented a year later, and 35 percent not implemented at all. Consequently in 2015, the Turkish presidency of the G20 put inclusiveness, investments, and implementation (3Is) as the top priorities³.

Businesses need stable, transparent, predictable, and efficient policy environments and legal frameworks, as well as consistent implementation. The elimination of unnecessary legislative, regulatory, and administrative barriers represents the right and most cost-efficient economic stimulus available to governments today. With the launch of the first OECD *Regulatory Policy Outlook* at the OECD Ministerial meeting⁴ on Public Governance, which took place in Helsinki on 28 October, the OECD is fulfilling an important mission on good regulatory practice, further promoting the full benefits of good regulatory practices. The indicators of good regulatory practices developed by the OECD constitute a fundamental basis for trust and an indispensable condition for businesses to operate and increase investment. Hence, consistent implementation of policies and regulations is critical for improving investments and growth.

Inclusiveness, integrity, and regulatory policy

An inclusive society is a society that over-rides differences of race, gender, class, generation, and geography and ensures inclusion, equality of opportunity as well as capability of all members of the society to determine an agreed set of social institutions that govern social interaction. Stakeholder engagement and creating equal opportunities in public and private institutions for all are founding stones of building inclusive societies.

A sustainable global economy is one that combines responsible behaviour, social justice and environmental care, with long term profitability. Sustainability is about seeking to improve the quality of human life while protecting the potential of future generation to do the same. For value creation processes to be sustainable, the society as a whole need to benefit from the value creation effort. This requires not only a strong culture of responsibility, but also an appropriate climate in which good governance is exercised in all institutions, including the public, private, and civil society organizations. Good governance is also a responsibility towards a sense of universal commitment and universal participation in sustainable development.

... governments need to focus on creating a regulatory environment where transparency in the public and private sectors is the norm in order to build trust and achieve inclusive and sustainable development Public policies and regulations aim to establish standards and limits to individual behaviours, but also a fair playground to motivate individuals and companies to innovate and improve their quality of life. Governments regulate economic activity to shape conduct when markets cannot function to enable efficient resource allocation, with the intention to prescribe or proscribe conduct, calibrate incentives, or to change preferences.

The imperfections are deemed to be market failures, often associated with time-inconsistent preferences, information asymmetries, non-competitive markets (monopolies), principal–agent problems, positive (when social benefits are greater than private benefits) or negative externalities (when social costs outweigh private costs), or public goods (for which insufficient investments would materialize without government intervention). However, government interventions, such as taxes, subsidies, bailouts, wage and price controls, and regulations may also lead to an inefficient allocation of resources. Government attempts to correct market failures may result in high enforcement and compliance costs. Furthermore, uneven implementation of regulations may result in unfair playing ground for competition and lack of confidence on rule of law. In short, such interventions themselves may result in regulatory failures.

Value creation requires investments for an uncertain future. The more the governments and their actions are predictable, the more would be the investments as the risk premiums would decline. Therefore, rule of law, public engagement, evidence-based public decision making, and fair implementation of regulations across players are the keys for governments to improve the business investment appetite. Given the prominent role of productivity for the success of our economies, it is important to ensure that the underlying sources of economic growth are well understood.

Therefore, policymakers should explicitly recognize that productive societies and strong economic growth are fundamental for inclusive growth. Effective implementation of structural reforms in product and labour markets is vital, and should promote equal opportunities in our economies. Furthermore, inclusive growth requires improving employment opportunities to all segments of the society, providing an environment whereby affordable products are available for all, and an enabling environment for all to have access to both public services and to be able to contribute to public decision making.

Good regulatory practices and regulatory efficiency matter

Private sector actors are largely aware of the benefits of consistent, transparent and well-balanced engagement with public institutions in decision-making processes, and actively promoting regulatory reform on the ground. Peer pressure and reviews of progress on regulatory reform and quality in OECD countries are an important instrument, but in many countries, the willingness of regulators to engage with the private sector has considerably suffered from the crisis. Discussions on specific company failures have not always been balanced with the broader picture, and in some instances the very positive role the private sector can play in the analysis of existing regulations, in the assessment of relevant measures and as a key provider of expert advice, has been disregarded. Also, policy capture is too often seen as a synonym for private sector involvement.

Stakeholder engagement is a pillar of sound, evidence-based reform and public institutions should not work in isolation. Governments, businesses, and civil society organizations should work together to re-establish trust among stakeholders. Effective consultations and well-conducted impact assessments contribute to improve the design of effective regulations. A strong involvement of relevant stakeholders should also be part of an independent evaluation of the governance cycles, in particular in the implementation phase. These are drivers for stakeholder buy-in and commitment in the implementation of regulations and contribute to the efficient monitoring of regulatory practices.

Better and fair implementation of proposed reforms would be stimulated by enhancing the **effectiveness of regulatory consultation processes** and **impact assessments** as they contribute to improve the design of new regulations, to minimize enforcement and compliance costs, and help ensure key stakeholder support their implementation. In order to increase the quality of consultations, many governments need to allow greater time for consultation. They need to explain how the information provided during consultations will be used, and to make documents for consultation more easily accessible. In particular, tools such as socio-economic development maps, public expenditure analyses, and public service satisfaction surveys provide objective input into public consultations and improve the quality of the consultation process.

Another important factor for ensuring the successful introduction of new reforms is to carry out regulatory impact assessments (RIAs), social impact assessments (SIAs), and environmental impact assessments (EIAs). Unfortunately, businesses in over a third of OECD countries seems to consider that these impact assessments are rarely or never carried out, be it partially or at all. Furthermore, experience shows that there is a tendency to utilize such studies as legitimization of political decisions once they are made, rather than as inputs into the real decision making processes.

Policymakers should also recognize that businesses operate globally, there should be **greater alignment of regulations internationally** in order to enable companies to operate more efficiently and effectively across borders. This calls for improved international regulatory co-operation. The OECD has a significant role to play in this area and the use of its instruments should be expanded, including the OECD 2012 *Recommendation of the Council on Regulatory Policy and Governance*. **Good governance is the key for inclusiveness and increasing growth**. After the OECD Governance Ministerial held in Helsinki, governments need to focus on creating a regulatory environment where transparency in the public and private sectors is the norm in order to build trust and achieve inclusive and sustainable development. Dr Yılmaz Argüden is the vice-chair of BIAC's Governance Committee, as well as the chairman of Istanbul based ARGE Consulting (B20 Governance & Sustainability Knowledge Partner) & Rothschild Türkiye, and the founder of the non-profit Argüden Governance Academy (C20 Governance Working Group member) operating under the aegis of Bogazici University Foundation

Endnotes

1. Available on the B20 Australia website (http://www.b20australia.info/Documents/B20%20Summit%20Documents/ B20%20Key%20Messages%20and%20Recommendations.pdf) & b20turkey.org/policy-papers (http://b20turkey.org/policy-papers/)

2. Available on the BIAC website (http://biac.org/wp-content/uploads/2014/07/14_05_BIAC_EPC_Survey_2014_Synthesis_Report1.pdf)

3. Available on the b20turkey.org/policy-papers (http://b20turkey.org/policy-papers/)

4. Policy Performance for Inclusive Growth: Towards a new Vision for the Public Sector

Internationalization of MSMEs crucial to inclusive growth

ABAC sees the need to support and strengthen trade and investment linkages between MSMEs and big businesses, writes Doris Magsaysay Ho he recently concluded APEC Economic Leaders Meeting was held in Manila under the chairmanship of the Philippines, and saw the attendance of leaders from 21 member economies.

Created by the APEC Economic Leaders in November 1995, ABAC comprises up to three members of the private sector from each economy. ABAC members are appointed by their respective leaders, and represent a range of business sectors, including small and medium enterprises.

As the voice of business in APEC, ABAC provides advice to leaders–recommending policy and regulatory reforms, as well as initiatives to pursue, that would best contribute to the achievement of the Bogor Goals of free and open trade and investment in the Asia-Pacific region, as set out in 1994. The ABAC members meet four times a year, each meeting runs 3-4 days long–and with this limited time, we prioritize our work to focus on specific business concerns.

Every year we submit to the APEC leaders a report which contains our key recommendations on trade and investment issues that made it to the ABAC agenda. We also provide advice to ministers whom we write to every year to share with them our thoughts on how to address challenges faced by businesses on these following areas: Finance, Trade and Investment, MSME development, Energy, Health, Transportation and Structural Reform.

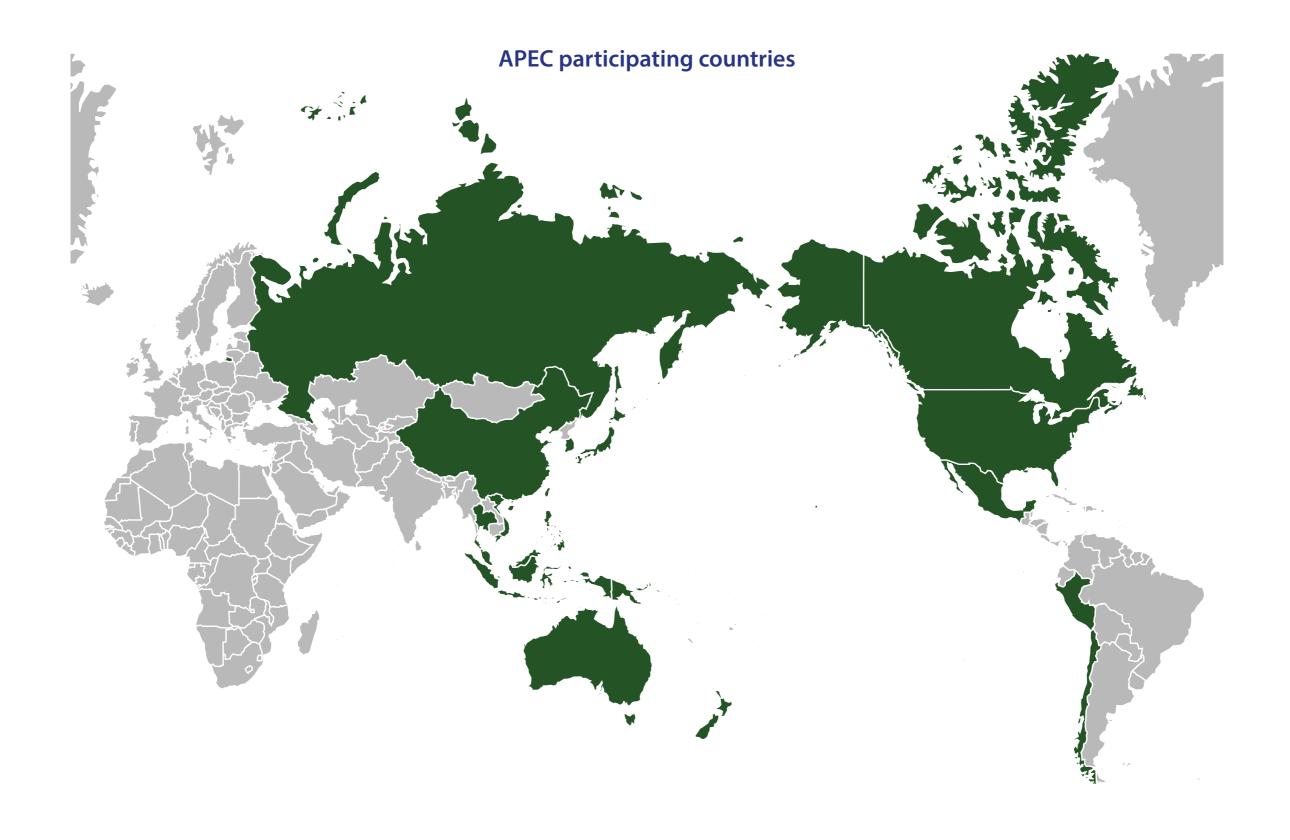
We also represent the private sector in APEC committee and working group meetings including sub-fora discussions, in order to provide additional business information and opinions to guide on their deliberations. There are also multitudes of initiatives put forward by APEC economies on various areas of cooperation, and ABAC's endorsement and/or partnership is often sought to factor in the business element in those projects. This year, ABAC went above and beyond its regular mandate of simply serving as an advisory body by pursuing action-driven initiatives, championing and funding our own projects, as a way to deepen our contribution and engagement with APEC.

ABAC's underlying key message is that business believes that free trade policies continue to be the key to unlocking the remarkable human potential in the region and improving the quality of life for the people of all 21 economies.

With 94 to 98 percent of enterprises in the region employing 50 percent of the region's workforce, MSMEs are vital to the region's economy. And we have a shared mission to build the environment to have more MSMEs participate in global trade.

In this context, the work we do at APEC and ABAC for regional economic integration and free trade should be as relevant to MSMEs as they are to big business.

> ... the advancements we have made in moving toward free trade will be meaningless if we are unable to ensure that the benefits of free and open, and the opportunities they create, are made available to MSMEs as well



ABAC's four work pillars for MSMEs are:

- Promoting the internationalization of MSMEs;
- Building innovation and value-adding activities in MSMEs;
- •
- Facilitating MSME access to regional and global finance; and
- •
- Harnessing women's participation in the economy.

ABAC sees the opportunities brought about by more inclusive business models adopted by big business on one hand, and the need to encourage MSMEs to take the initiative to offer goods and services as part of supply chains. This inclusive business model is best achieved with long term, value-driven partnership, facilitating the transfer of skills, knowledge and technology from the buyer to supplier.

Knowledge inputs and policy measures, based on careful analysis of behind-the-border, at-the-border and acrossthe-border issues that hold MSMEs back are important to address.

We encourage policy makers to develop policies that will support and strengthen trade and investment linkages between MSMEs and big businesses. We also recognize that fostering innovation towards creating new technologies and innovative business solutions is key for MSMEs to move up the value chain.

We urge policy makers to adopt a holistic view of the global value chains and international production networks in designing policies toward strengthening trade and investment linkages among MSMEs and big business. We recog-

nize that enterprises can move up the value chain and become creators of new technologies and high-impact business solutions through innovation.

The greatest opportunity for MSME internationalization is through e-commerce; however, existing international trade frameworks and regimes have been designed for traditional forms of trade and investment. These don't work anymore.

One of ABAC's key initiatives in this area is the research study on *Accelerating MSME Growth through Cross-Border e-Commerce*. The study, carried out by the USC Marshall School of Business, focused on identifying and addressing barriers and impediments to cross border e-Commerce and how these impact MSMEs.

The key findings and recommendations arising from the study are enumerated below:

MSMEs capacity and reach must be improved. The single most critical limiting factor was the lack of readiness and capability of MSMEs to engage in e-commerce. Problems of awareness, technical ability, access to talent and financing all limit the potential of MSMEs, especially in developing economies.

Getting e-payments right is crucial. For cross-border e-commerce to grow, e-payment solutions must expand beyond traditional banking solutions. Governments must allow for new, innovative e-payments solutions and avoid the vested interests of incumbents.

e-commerce marketplaces are critical enablers for MSMEs but they are *not benign* players. Marketplaces and platforms must be encouraged and supported, but care must be exercised to avoid allowing market control.

Complexity and cost of customs and trade rules destroy MSME opportunities. If major improvements 'at the border' are not made–online processes, simplified procedures, special customs clearance accommoda-tions for MSMEs–MSME participation in global trade will remain limited.

A harmonized coherent cross-border e-commerce regulatory framework is critical. The lack of comprehensiveness and compatibility of e-commerce laws and regulations across economies remains a major impediment.

Cross-border logistics for MSMEs remain an insurmountable challenge. MSMEs need innovative logistics solutions to participate competitively in global trade.

The multi-ministerial 'oversight' challenge is perhaps the single most critical impediment to meaningful policy leadership in e-commerce. Fragmented, overlapping ownership, or lack of ownership, was found to be a core problem across all APEC economies.

Building on the success of the Cross Border e-Commerce Training or CBET Workshop in China last year, ABAC is currently undertaking efforts to expand the CBET program.

The CBET Localisation Programme aims to bring professional experts to APEC economies to share their insights and experiences with MSMEs to encourage direct interaction and provide MSMEs an opportunity to build their business networks.

We have also reached out to possible partners from the World SME Forum and the B20 as we seek to create online curricula for e-commerce, with the view to expanding the reach of our capacity building efforts for MSMEs. Part

of this effort is to establish a network of MSMEs from the region, including innovation centres that can help them grow and avail of the opportunities of global value chains.

To ensure that our work continues to promote the internationalization of MSMEs, ABAC submitted the following recommendations:

- 1. Adopt simplified and harmonized domestic policies and processes that enable internet-based business and trade;
- 2. Undertake more capacity building initiatives that promote the adoption of internet-based tools and assist MSMEs to explore cross-border e-commerce;
- Promote greater sharing across APEC economies of successful training programs, especially online training courses designed to educate MSME firms on cross-border e-commerce (including ABAC's Cross Border E-Commerce Training Program (CBET); and
- 4. Establish an APEC-wide action plan focused on creating forward-looking e-commerce policy frameworks.

The digital economy plays a key role in the 'innovation revolution' that is taking place in the region.

In the 2014 APEC Accord on Innovative Development, Economic Reform and Growth, leaders acknowledged that Innovation would be the next driver of growth.

ABAC recognizes the need for economies to create an ecosystem that supports enterprise creation and innovation towards giving entrepreneurs and start-ups a chance to succeed on the new technology driven economy.

There are several crucial elements involved in encouraging the development of the new digital economy, particularly for MSMEs. Outlined here are the strategies and recommendations ABAC proposed in order to achieve this.

One is a clear strategy to integrate a digital/internet economy, as the basic infrastructure.

ABAC also calls for innovation. A digital agenda is about investing in the future and this is where innovation plays an indispensable role. Economies will need to cultivate the best and the brightest talents for innovation through a commitment to develop STEM and engineering in schools, establish research centres in universities and support inclusive innovation centres to allow young entrepreneurs to network and collaborate across the region.

Allow me to further elaborate on our work in this area.

A key component in promoting innovation among MSMEs is strengthening partnerships and networking among innovation systems-including those involving small and large businesses-as well as the public sector.

In support of this, ABAC, with the Asia Pacific Foundation of Canada, has commenced an interactive mapping initiative covering incubators and accelerators across all APEC economies. This involves the mapping of incubators in China, Philippines, Canada, and Hong Kong, China, and hopefully, Malaysia, by November 2015.

On MSME financing, ABAC called for steps to enhance MSME access to finance as this remains a significant barrier to MSME expansion.

In 2015, ABAC actively engaged the private and public sectors to consolidate best practices for increasing women's representation in the boardroom, corporate family responsibility, and integration of women-owned businesses into the global supply chain.

In APEC, the bulk of our work may seem to focus on removing barriers to trade and promoting regional economic integration towards the achievement of the Bogor goal of free and open trade and investment. However, the advancements we have made in moving toward free trade will be meaningless if we are unable to ensure that the benefits of free and open, and the opportunities they create, are made available to MSMEs as well.

ABAC looks forward to working with governments as we build on APEC's extensive work on regional integration and trade facilitation toward ensuring that these efforts remain relevant and responsive to needs of MSMEs as much as they are to big business.

ABAC believes that these recommendations are important to encouraging, facilitating and supporting the development of MSMEs, the backbone of virtually every economy in the Asia-Pacific region.

Doris Magsaysay Ho is the APEC Business Advisory Council (ABAC) 2015 Chair

SMEs in need of diversified funding options

The 2015 ICC Global Survey on Trade Finance reveals that bank funding constraints remain a major obstacle for SMEs. The answer is to increase their options says, Vincent O'Brien

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espite playing a vital role in facilitating trade – both as principal traders and as part of global supply chains – small and medium-sized enterprises (SMEs) are struggling to access funding. Indeed, ICC's latest *Global Survey on Trade Finance* – which surveyed 482 banks across 112 countries – shows that SMEs are finding it significantly more challenging to access trade finance than their large corporate counterparts.

Specifically, 53% of SMEs' trade finance funding applications are rejected – contrasting large corporates that have 79% of their applications accepted. This is particularly alarming given that SMEs account for as much as 45% of total trade transactions submitted globally, while large corporates account for 39% and multinationals 14%.

Regulatory response

One issue is the unintended consequences of the regulatory response to the 2008 crisis. According to the *Survey*, 68% of banks reported that, among sectors, SMEs are the most negatively impacted by Basel III and other regulatory initiatives. And, unlike large corporates, which can access the capital markets or use cash flow to fund major supply chain requirements, SMEs rely heavily on bank finance for both trade and growth.

For instance, in Latin America – despite SMEs representing approximately 80% of companies involved in trade in the region – they account for less than 15% of total trade financing, an imbalance being reinforced by the regulatory tightening.

SMEs: the engine of trade

Of course, this is a serious issue: around 95% of global businesses are classified as SMEs, accounting for 60% of all employment. SMEs are therefore the driving force of the global economy, bringing diversity, innovation and support for international supply chains.

What is more, SMEs dominate emerging market economies, where they are responsible for the vast majority of growth and employment opportunities. Indeed, within emerging markets SMEs are increasingly important with respect to trade – with nimble emerging market SMEs able to take advantage of the many niche opportunities that can quickly arise, perhaps in neighbouring emerging economies. Certainly, SMEs are the dynamo of south-south trade – and it is these new corridors that have been driving growth in international trade for a decade.

SMEs are therefore good news: though it is a story that will turn sour if SME funding remains constrained.

Arise the alternatives

With banks severely and increasingly impeded with respect to trade finance, it is imperative that both businesses and governments identify alternative sources of financing for SMEs. In fact, many SMEs are turning to new or alternative financiers able to support trade in areas where banks are restricted by low risk appetites, regulatory burdens or stakeholder concerns. New lenders are emerging – often started by former trade financiers that understand the low risk attributes of trade finance yet appreciate being able to operate efficiently and quickly.

> ... there is growing confidence that both old and new solutions can help bridge the divide between what SMEs need and what is currently in offe

This is just one solution, however, although – as a market driven alternative – one to be encouraged. The 2015 ICC Global Survey on Trade Finance identified two further alternative sources of financing for SMEs: Export credit agencies (ECAs) and Multilateral Development Banks (MDBs).

ECAs and MDBs

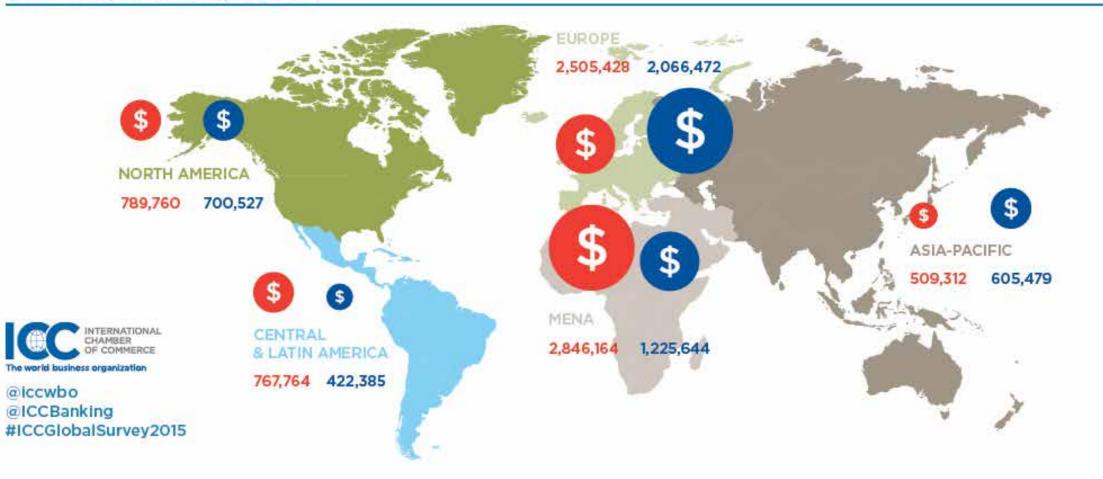
Certainly, ECAs and MDBs have been increasing their commitment to trade finance – often acting as a lifeline for emerging market trade as well as for third-tier banks trying to support SMEs. According to this year's *Survey*, banks have become more positive about the role of MDBs and ECAs in addressing trade finance shortfalls. Some 75% of respondents agreed that MDBs help narrow trade finance gaps at least to some extent. ECAs are also narrowing gaps according to 72% of respondents.

One example is the launch of the Trade Finance Facilitation Program (TFFP) – launched by the Inter-American Development Bank (IDB) in 2005 – to support Latin American and the Caribbean banks' access to international trade finance markets. So far, a total of 5,271 individual trade transactions have been supported with a total value of US\$5.03 billion.

Certainly, the innovative trade finance models of the existing MDBs trade facilitation programmes – and the creation of new development banks (also with a focus on trade) – are adding to the alternative sources of finance helping to keep supply chains open.

That said, if the gap is really to be closed it is the specialist or alternative lenders that will do it. According to the *Survey*, flexible specialist financiers are increasingly providing the financial lifeblood that drives innovation, as well as offering liquidity in areas – whether regions, industries or to SMEs – that banks are increasingly struggling to support.

AVERAGE VALUE OF LETTERS OF CREDIT SENT AND RECEIVED BY REGION (IMPORT/EXPORT) IN US\$



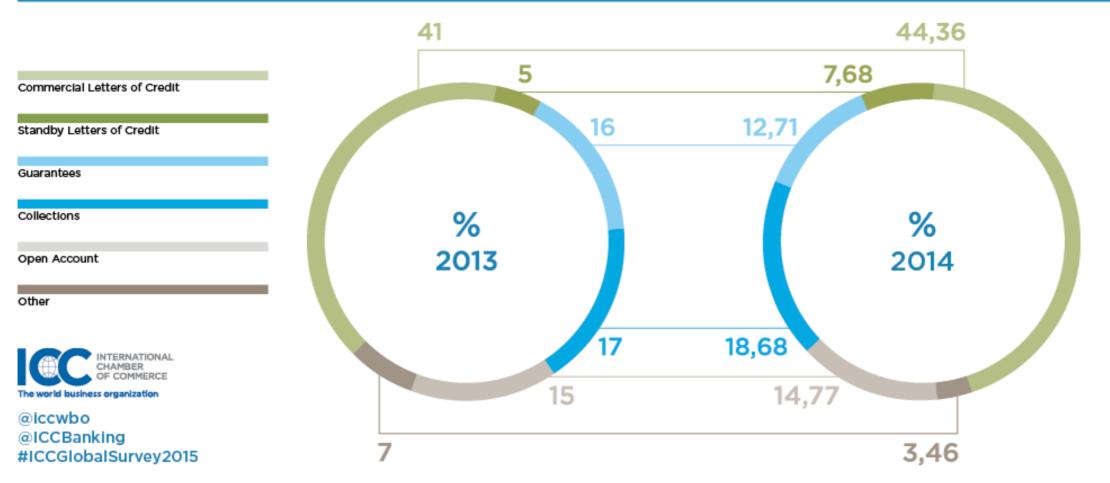
IMPEDIMENTS TO TRADE FINANCE



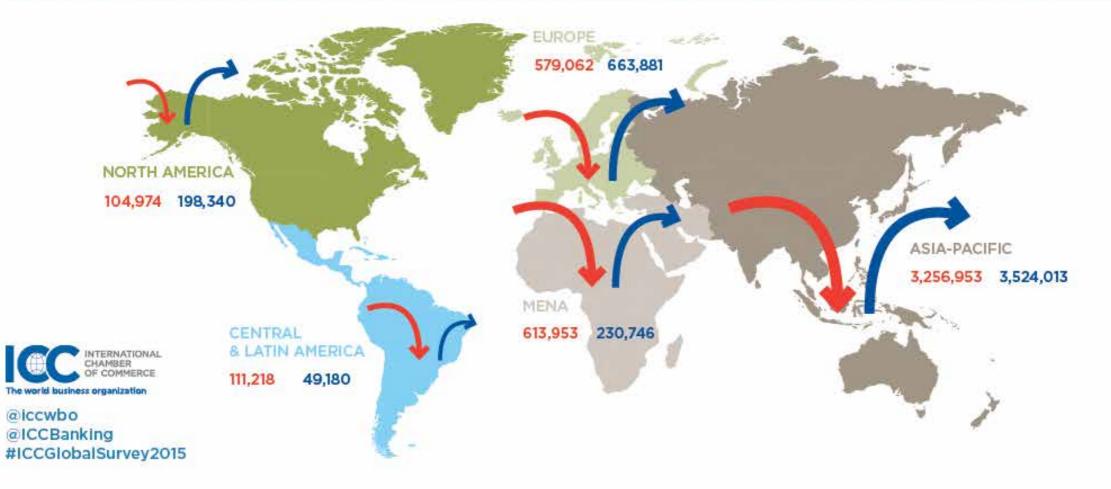
REJECTED PROPOSED TRADE FINANCE TRANSACTIONS BY CLIENT SEGMENT



EXPORT TRADE FINANCE PRODUCT MIX 2014 vs 2013



VOLUME OF LETTERS OF CREDIT SENT AND RECEIVED BY REGION (IMPORT/EXPORT)



Furthermore, specialist financiers are being recognized for their close interaction with clients and detailed local knowledge – making them strong funders of SMEs.

Local/global partnerships

Nonetheless, a key role remains for the global banks with respect to supporting SME funding. Global banks in partnership with local banks can generate a strong conduit for SMEs to access global markets.

As with the specialists, local banks are more familiar with SMEs, as well as the business environment they operate in. Yet they lack the reach and capabilities of global banks, especially in trade finance.

Conversely, global banks are developing highly-sophisticated digital platforms that help automate the delivery of their trade and transaction banking offerings – encompassing cash and working capital management, trade finance and payments processing. Yet they remain challenged with respect to catering for the growth in demand for financing, particularly for emerging market trade. The constraints are simply too great, and they are here to stay.

Of course, this suggests a marriage – or at least closer collaboration – between global and local banks. Such a partnership allows borrowers the widest choice of available financing solutions while facilitating their access to efficient and sophisticated solutions.

So, despite the SME funding gap outlined in the 2015 ICC Global Survey on Trade Finance, there is growing confidence that both old and new solutions can help bridge the divide between what SMEs need and what is currently in offer.

Vincent O'Brien is a trade finance expert and Chair of the ICC Banking Commission Market Intelligence Group

A tale of two unions

James Bartholomeusz on how Brexit could break up the United Kingdom itself s with coalition politics, the British have never traditionally been fond of referenda - yet both have been very much in vogue over the last few years. In May 2011, voters resoundingly rejected the proposal to change the country's electoral system, and last September the five million citizens of Scotland decided by a marginal 55.3% to 44.7% to remain part of the British union. Now, due to the Conservative general election victory, the country is committed to an in-out vote on its EU membership before the end of 2017.

As David Cameron's negotiations with his European counterparts begin, the last few weeks have seen the launch of several competing in and out campaigns. The public debate in the UK is embryonic (largely because no one, including the government, seems to know what is on the table for renegotiation) and predictions on the outcome are at this stage very provisional indeed. The consensus, however, is that the consequences of Brexit would be seismic - and those consequences include the strong possibility that the British state itself would splinter apart.

One of the most important trends in British politics over the last decade has been the divergence of the English and Scottish nations. Scotland was granted devolved powers in the late-1990s as part of the Blair government's programme of constitutional reform, with the aim, in the words of one Labour minister, of *"killing nationalism stone-dead"*. The effect was rather the exact opposite. In the 2007 Holyrood election, the Scottish National Party (SNP) finished in first place; in 2011, capitalising on its opposition to the austerity policies of the new coalition government in Westminster, it was able to form Scotland's first-ever majority administration.

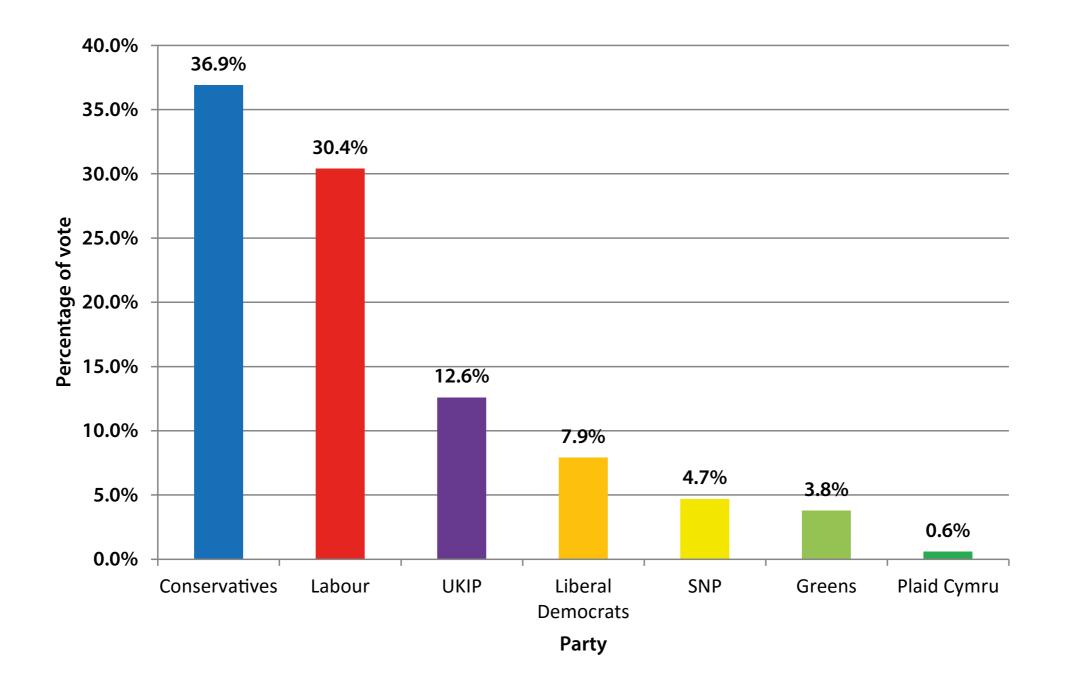
The SNP led the out campaign in the 2014 Scottish referendum, propelling support for independence from 28% five years earlier to the final 44.7%, and despite its narrow defeat party membership and popularity spiked directly after the vote. The 2015 general election cemented the SNP's monopoly over Scottish politics: it claimed all but three of the country's 59 Westminster seats, reducing the Labour Party from 41 to one in the former heartlands of unionist socialism.

The SNP exhibits the oxymoronic tendency of many contemporary separatist movements in Europe: a commitment to national independence combined with pro-EU internationalism. Like its fellow-travellers in Catalonia, the SNP wants to see Scotland as a member-state separate from the UK, free to speak with its own voice in the Council of Ministers and enjoy the direct benefits conferred on sovereign states by EU membership. It is a member of the European Free Alliance (EFA) of separatist parties, and its MEPs sit as part of the Greens/EFA group in the European Parliament. The SNP's ultimate ambition might be to throw off the yoke of Westminster, but its nationalism is anything but inward-facing. It wants an independent Scotland to play an active role on the European stage.

The concurrent trend in England, meanwhile, has been the surge in support for the United Kingdom Independence Party (UKIP). An organisation that began as a single-issue eurosceptic campaign has, over the course of the last five years, transformed into the hard-Right receptacle of English discontent with both the European Union and the British establishment. Advocating much stricter immigration controls and immediate withdrawal from the EU, UKIP achieved first place in the 2014 European elections, ahead of both main parties and the pro-European Liberal Democrats. A year later, it finished with 12.6% of the vote in the general election, a 9.5% increase on 2010.

> We can be certain, however, that when Brits go to the polls it will not only be their place in the European Union at stake - it will be the future of the British state itself

2015 UK general election results



2015 UK general election results

Party	Vote share	Seats
Conservatives	36.9%	331
Labour	30.4%	232
UKIP	12.6%	1
SNP	4.7%	56
Greens	3.8%	1
Plaid Cymru	0.6%	3

Compared to the SNP, which has become the new political establishment in Scotland, UKIP has negligible formal influence on British politics. Nevertheless, Nigel Farage's party has the Conservative government in an arm-lock over Europe. It was fear of rebellion and possible defection of his eurosceptic backbenchers that first forced Cameron into committing to an EU referendum in the Tories' 2015 election manifesto, and when the party unexpectedly finished with a parliamentary majority, the new government was obliged to launch a renegotiation of Britain's membership

with the EU institutions and other member-states. For a party holding only one of the 650 seats in the House of Commons, UKIP has been astoundingly successful in taking ownership of the Europe debate and influencing government policy.

The question of Europe, then, is a prism through which to view the present state of the United Kingdom. On the one hand, a progressive-nationalist movement is leading Scotland, rejecting the continued austerity regime imposed by Westminster. On the other, a conservative-nationalist force is taking root in England - the only nation of the UK without its own devolved administration - filling the void left by a London-based political elite that seems increasingly detached from goings-on in the rest of the country. Even without Brexit, the contradiction will have to be resolved at some point in the future. If, however, the UK votes to leave the EU in the upcoming referendum, this will mean the end of the British union.

Firstly, we can expect no slackening in support for Scottish independence before the EU referendum; as has already been proven since May, a Conservative majority in Westminster means an even more strident form of austerity politics than was seen under the coalition, which provides the SNP with increased strategic ammunition against the 'imperialism' of rule from London. Secondly, if Britain wakes up the day after the referendum to find that it has voted itself out of the EU, it is very likely that the English will have carried the result - in line with the SNP's stance, the vast majority of Scots are expected to vote to stay in. The choice facing the Scottish people, then, will be this: do we submit to the English and allow ourselves to be severed from Europe, or do we remain part of the EU by sacrificing our membership of the United Kingdom? The answer to that question is surely obvious.

A Brexit vote in the EU referendum will swiftly be followed by a second referendum on Scottish independence, with the result virtually guaranteed as a yes to Europe and a no to England. It is, of course, a point of discussion as to whether swapping the remote rule of Westminster for the remote rule of Brussels is strictly consistent with the SNP's populist rhetoric, but the party currently possesses the momentum to bracket this issue until their goal of independence has been realised, just as they have been very successful in unifying a broad church - incorporating a range of opinion from neoliberal to democratic-socialist - under the banner of independence. What matters is that a second referendum would mean an end to the 300-year-old British union, with Scotland 'subbing in' for the UK as the 28th member state of the EU.

Even if Britain leaves the European Union, it is clear that ties cannot be cut completely. The two still share a geopolitical space, and although there might be some degree of enmity on both sides, London and Brussels cannot avoid cooperating on certain issues. The acceptance of Scotland into the EU would, however, raise a number of thorny questions. Would Scotland, making up only around 8% of the total UK population, be entitled to successor status to Britain on the European level? Would it fall to Holyrood to replace Britain's contribution to the EU's Common Security and Defence Policy (CSDP)? What would become of Britain's nuclear deterrent, which is located in Faslane in Scotland, given that the SNP is opposed to nuclear weapons and that there is no place on the English coast that can host it? And with free movement of people between Scotland and the rest of Europe, would the UK be obliged to set up border controls north of Hadrian's Wall? These questions will become mere technicalities, however, if Scotland proves that is possible to prosper in Europe as a small state, formally independent but punching far above its weight as part of the EU bloc. Its biggest short-term advantage would be the windfall of capital relocation from England, with firms seeking to remain in the single market with minimal geographical, linguistic and legal upheaval. Scotland would join Ireland as an Anglophone hub with an educated workforce and high standard of living, and would presumably adopt the euro at some point down the line. (Edinburgh, after all, has its own financial sector, which could well displace the City of London as Europe's financial hub in the event of Brexit.) Moreover, Scottish success would give spur to other separatist movements across Europe, proving that the framework of the European Union can reconcile national independence with international solidarity.

And what of the rump United Kingdom? Locked out of the EU, it is clear that Britain would be ignored in the transatlantic alliance and diminished on the world stage. Nor would the question of the British union be fully resolved by the departure of Scotland. Following the Scottish example, it is not beyond the bounds of possibility that the SNP's sister party in EFA, Plaid Cyrmu, could in the future lead an independent Wales into EU membership. Concurrently, with tensions reigniting in Belfast, and Britain and Ireland on opposite sides of the EU divide, the question of Northern Ireland's status would be raised once again. Peace, stability and prosperity - the founding principles of the EU would certainly not be watchwords of a Britain outside Europe.

It will be some time before the exact contours of the referendum become clear. We can be certain, however, that when Brits go to the polls it will not only be their place in the European Union at stake - it will be the future of the British state itself.

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Why Berlin and Paris cannot give in to Cameron

Sebastian Dullien argues that British interests in protecting the integrity of the single market of 28 countries and the eurozone's wish to move forward with more integration will inevitably clash hen David Cameron presented his demands for a renegotiation of Britain's relationship with the EU to Donald Tusk, the debate in British media focused on the question of how far the prime minister had 'caved in'. The current demands to limit welfare claims from EU migrants were seen as a retreat from former Tory positions which were aimed at a much broader restriction of both in-work and out-of-work benefits for migrants.

Consequently, commentators were quick to conclude that now chances for an agreement between Britain and the EU have increased, as supposedly the other of Cameron's demands (safeguards for non-euro members; focus on competitiveness; exclusion of Britain from a goal of an 'ever closer union') were much less controversial.

Yet, this conclusion might be overly optimistic–and not only for the political reasons my colleague Almut Möller outlined recently. In fact, this conclusion fails to understand the economic logic of the interaction of the single market and the eurozone. While at first sight, protecting the single market for those who are not in the euro might sound uncontroversial, upon closer inspection, it is something that Paris and Berlin cannot agree to–at least not if they want to get over the still lingering euro crisis for good.

In 2012, in the midst of the euro-crisis, we argued in an ECFR policy brief that the euro-crisis would leave the single markets either reduced in depth or in reduced geographical scope. Our argument then was: to save the euro, more integration is necessary. Yet, this integration might be unacceptable for some of the euro-outs. Hence, either the euro would break or some euro-outs would start to reassess their costs and benefits from EU membership, eventually leaving the EU.

This point still holds true as before: while the eurozone has moved forward towards much more integration, it is not completed yet. Most economists agree that even more integration will be necessary to make the common curren-

cy work without falling back into crisis. On top of the list is the banking union. The common resolution framework and the banking union's common resolution fund have not been tested. The common resolution fund is laughingly small. Most experts say that at least a common deposit insurance is necessary. In order to make the whole framework really crisis-proof, more bank regulation will be necessary which might further crack the single market along the outside borders of the eurozone.

One example: it is conceivable that the eurozone decides that government bonds in the future should be backed by bank equity and taken into account when computing capital adequacy ratios and this is a demand which is widely discussed. After all, the euro crisis has shown that eurozone bonds are not risk-free: as none of the eurozone countries has control over their own central bank, at some point a country might be forced to default (as has happened in Greece). From a prudential regulation point of view, it is thus only logical to ask banks to hold capital to be prepared for such losses.

This argument does not hold for Britain: as the country still has its own central bank and its parliament can always require the Bank of England to print money to service the country's sterling debt, UK gilts are actually free of default

Cameron has once before underestimated the determination of his EU colleagues to reform the eurozone

risk. Hence, for Britain, it makes sense not to have gilts backed by equity capital. Of course, there then might be the risk of inflation, but in contrast to an outright default, this does not endanger bank stability.

Yet, a regulation that forces eurozone banks to back their holdings of government bonds with equity capital, but allows British banks to not do so (and hence would increase costs to eurozone banks, but not to British banks) would clearly be inacceptable to the financial sectors in the eurozone and thus also to the national governments there. So, here, only two solutions are conceivable, both not acceptable to Britain: either such a rule is introduced for the EU as a whole (which would increase costs for British banks alongside with eurozone banks) or eurozone banks need to be protected against British competition in other ways.

This is just one example how British interests in protecting the integrity of the single market of 28 countries and the eurozone's wish to move forward with more integration might clash.

Giving Britain (and other euro outs) a right to veto such regulations would mean that Berlin and Paris will not be able to move towards completing the monetary union. This should be unacceptable to any German or French government which takes the task to protect its own country seriously.

Cameron here should remember that for the eurozone governments, the stability of the eurozone is more than a politically important, yet economically marginal question of having to pay or not to pay a few billions to migrants from other EU countries through a national welfare system. For the eurozone countries, stabilising the euro zone is politically as economically an existential question, as estimates of the economic costs of a violent break-up of the currency union go into the thousands of billions of euros.

It seems that no one in Berlin (or Paris) has yet decided how much to hand to Cameron to keep Britain inside the EU. And while it is true that Merkel in principle wants the UK to remain in the eurozone, she certainly does not want to keep it at any costs. Preventing necessary reforms of the eurozone might as well be too high a cost for her.

David Cameron has once before underestimated the determination of his EU colleagues to reform the eurozone. When the eurozone pushed for the fiscal compact in late 2011 and Cameron asked for concessions for the City in exchange for agreeing to the pact (which would not have applied to Britain anyway), the other EU countries did not linger for long, but just signed the compact as a multilateral treaty outside the European treaties, leaving Britain side-lined.

He should be well advised not to make this error again. For Britain, the stakes in this gamble today are much higher than in 2011. ■

Sebastian Dullien is a senior policy fellow at ECFR

The evidence to guide Europe in the refugee crisis

Europe needs to resort to smart solutions to master the challenge presented by the influx of refugees, Alessio Brown finds

p until recently, many Europeans knew images of large refugee camps and desperate families trying to cross borders only from TV screens. The unprecedented influx of refugees into Europe, the largest since World War II, have made these scenes reality in many European neighbourhoods. Feelings of empathy and shock are increasingly joined by worries about the consequences the refugee crisis will have on society, welfare institutions and labour markets. In the EU these worries drive public opinion and political action, causing closings of Schengen borders and the resistance against a fair allocation of refugees among EU member states.

Scientific evidence proves that many of these worries are unfounded. For example, various empirical studies point to the economic opportunities of immigration and on this basis suggest ideas of how Europe could achieve a fair and effective allocation of migrants that preserves European principles and European unity. The empirical findings should be taken into account in the vein of evidence-based policy making by European policymakers in their efforts to establish a functioning integration policy.

Contrary to existing evidence reviewed by Amelie Constant (Temple University) for *IZA World of Labor* in recent weeks many European tabloids spread the preconception of the job-stealing immigrant. Giovanni Peri (University of California, Davis) and Mette Foged (University of Copenhagen) further debunk this myth in a study on how the massive influx of immigrants to Denmark during the period 1991-2008 impacted the labour market outcomes of low-skilled natives.

Contrary to popular belief, the researchers do not find an increase in the probability of unemployment for the unskilled Danish population. Instead, the findings suggest that the immigrants, who in this case were mainly refugees from Former Yugoslavia, Somalia, Afghanistan and Iraq, caused an *"occupational upgrading and specialization"* of native Danish employees. While immigrants are initially restricted to occupations and jobs consisting of manual tasks due to their language problems, natives leave these jobs by specializing in more complex occupations with a primarily interactive task content. Accordingly, the immigrating refugees had a positive effect on wages and mobility of the native low-skilled population.

Immigrants 'push up' native employees

To test such effects on a larger scale, Peri examined the effect of immigrants on the career of natives using data from eleven European countries in a co-authored study. The results point in the same direction: in countries and occupations with larger immigrant competition, natives are pushed to faster occupational upgrades and towards jobs using more sophisticated skills, requiring higher education and yielding higher wages. Natives are more likely to undertake entrepreneurial activities in response to larger immigrant competition. This implies that immigrants 'push up' natives in the labour market, and the overall effect on wages and income of natives is small but usually positive. While some natives may still be crowded out, new job opportunities are created at the same time as foreigners take jobs complementary to those of natives.

> For Europe to master this humanitarian challenge withoutsurrenderingitscorevalues, it needs to resort to smart solutions based on empirical evidence

What is the evidence on refugees? In a recent article for *IZA World of Labor*, Semih Tumen (Central Bank of the Republic of Turkey) reviews past experiences of large refugee inflows and calls for the integration of refugee workers into local labour markets to avoid negative short-run impacts.

However, actual impacts depend on the local institutional settings. Another study co-authored by Tumen analyzes the effect of the recent inflow of Syrian refugees into Southeast Turkey. While wages were unaffected, the influx did in fact increase unemployment among the Turkish residents. But a closer looks reveals that the locals who lost their jobs worked in Turkey's large informal sector. Here, the refugee inflows reduced the informal employment ratio by approximately 2.2 percent.

The authors conclude that the prevalence of informal employment in Turkey has amplified the negative impact of Syrian refugee inflows on natives' labour market outcomes. For refugees, the informal sector is the only place they can find work, as the Turkish government does not give out working permits to refugees.

Open up European labour markets to immigrants

The Turkish case shows the importance of considering granting immigrants access to local labour markets. Many of those who come to Europe for humanitarian reasons are endowed with valuable human capital that can strengthen Europe's economy. Many have good skills and professional qualifications, and – as Germany's President Joachim Gauck put it – they are *"highly mobile, flexible, multilingual, motivated and willing to take risks."* But until recently, they have been effectively barred from seeking employment. In line with what IZA experts have long demanded, Germany has now eased the restrictions on labour market access for refugees. This gives them a chance to earn their own living, to develop their professional skills further, and to achieve social integration. The next logical step is to allow qualified refugees to enter into the regular immigration process.

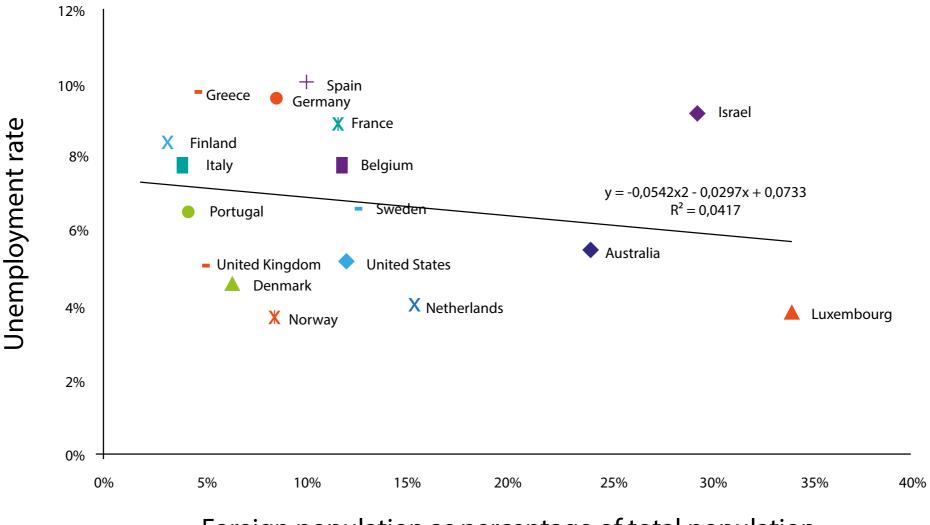


Figure 1. There is no correlation between unemployment and immigration rates for OECD countries

Foreign population as percentage of total population

Notes: Due to differences in national statistical data, Germany, Greece, Italy, Luxembourg, Portugal and the UK define foreign by nationality; the other countries define it by birthplace. French data are for 2005-2007 only. Source is OECD statistics (http://stats.oecd.org/)

Source: Constant, A, Do migrants take the jobs of native workers? IZA World of Labor 2014: 10 doi: 10.15185/izawol.10

The EU Commissioner for Migration and Home Affairs, Dimitris Avramopoulos, is well advised to further develop the EU Blue Card Directive along these lines. After all, his declared goal is to *"help Europe address skills shortages and attract the talents it needs."*

But for now, Brussels does not seem to focus on the potential economic opportunities of the refugee influx. Furthermore, a sustainable reallocation mechanism based on a quota system is still far from becoming reality. Under the current circumstances, the share of inflows borne by EU member states is more than ever heavily skewed to a small number of receiving countries. As the ongoing public discussion shows, this unequal distribution gives rise to general resentment of immigration and negative attitudes towards asylum seekers in particular.

Ever since the beginning of the refugee crisis, migration expert Klaus F Zimmermann (IZA) has repeatedly called for a transparent quota system guaranteeing a balanced distribution of asylum-seekers across EU member countries. Countries like Sweden and Germany have accepted above-average numbers of asylum applications over the past years, while France, the UK and the central and eastern European members have been rather reluctant. The definition of a 'fair share' should take into account both the population and the economic strength of each country. To handle the massive coordinative task, the European Asylum Support Office could be equipped with new competencies. In the long term, all related issues should be bundled under the responsibility of a European commissioner for refugees.

Tradable refugee quotas to better coordinate national asylum policies

How exactly refugees could be fairly allocated is shown in a recent study by Jesús Fernández-Huertas Moraga (Autonomous University of Madrid) and Hillel Rapoport (Paris School of Economics). The authors propose an EU-wide market for tradable refugee quotas to better coordinate national asylum policies. While offering asylum to refugees with valid claims is considered an international public good, it constitutes a significant financial burden on the receiving country. The authors show that a market mechanism could efficiently distribute immigrants to the country with the lowest costs (covering all the expenditures that are generated by hosting refugees: direct costs of accommodation, administrative costs, and costs for social and political distress). The study couples this system with a matching mechanism that links countries' and migrants' preferences, such as cultural and linguistic inclinations. The resulting solution could lead to a fair distribution of the burden, which would likely increase public acceptance and reduce the probability of social distress created by the increasing asylum-seeker flows.

The refugee crisis represents one of the biggest challenges for European societies, European labour markets and the unity of the EU. For Europe to master this humanitarian challenge without surrendering its core values, it needs to resort to smart solutions based on empirical evidence. This implies a fair and effective allocation of refugees among all member states and granting refugees access to European labour markets.

By doing so, Europeans would not only strengthen their own economies: Enabling refugees to build up their human capital would also give new momentum to the less developed and disadvantaged regions of the world. Although many political refugees are unlikely to consider going back home in the medium run, remittances to their countries of origin would substantially increase with their integration into European societies-thus creating a win-win-win situation for the refugees themselves, for those left behind, and for the host country.

Empirical evidence presented on the IZA World of Labor platform (http://wol.iza.org) can guide Europe in transforming the refugee crisis from challenge to opportunity. It is a free, comprehensive and reliable resource, which condenses expert knowhow on labour market policy issues for decision-makers worldwide.

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Climate change: putting a price on carbon

Kurt Van Dender, Johanna Arlinghaus, Luisa Dressler, Florens Flues and Michelle Harding write that carbon taxes and emissions trading systems will play a more prominent role in the future in cutting emissions

Introduction

Reducing the risk of very costly consequences of climate change will require strong reductions of emissions of greenhouse gases. CO_2 is the major greenhouse gas, and to a very large extent is the result of combustion of fossil fuels: emissions from the use of coal, oil and gas accounted for 69% of global anthropogenic greenhouse gas emissions in 2010 (IEA, 2014). Including CO_2 -emissions from the combustion of biofuels would push these shares even higher, by around 10%-point. Cutting CO_2 -emissions from energy use hence is a core element of climate policy.

Abating CO₂-emissions by enough to appreciably reduce the expected costs of climate change necessitates policy measures beyond the ones currently in place. For example, to limit global temperature increase to around 2 degrees Celsius in 2100, the target maintained in the UNFCCC negotiations, global CO₂-emissions will need to fall by between 40 and 70% of current emissions by 2050, and they should be close to zero by 2100.¹

Realising such deep cuts in greenhouse gas emissions requires, among other things, a transformation of the energy basis upon which modern economies rely and adopting less energy-intensive patterns of economic activity. This requires government policy, as private initiative alone cannot be expected to result in sufficient emissions abatement. This is because emission abatement is a public good: the benefits of abatement are shared by everyone but, in the absence of policy, abatement efforts are not or at least insufficiently individually profitable to ensure the level of effort required from the public point of view.

A wide array of policies can contribute to emission abatement, eg. energy efficiency regulations, support for research and development of low carbon technologies, and putting a price on carbon. Pricing carbon has particular appeal in that it incentivises emitters to cut emissions as cheaply as possible. For this reason, carbon pricing is widely seen as an indispensable part of an effective and cost-effective climate change policy package. For example, the partners of the International Tax Dialogue – the OECD, the World Bank, the IMF, CIAT (Inter-American Center of Tax Administrations), the European Commission and the Inter-American Development Bank – affirmed at their global conference in Paris in July 2105 that they *"share the view that while pricing CO₂ emissions alone may not be sufficient to address climate change, it is an essential part of the solution."*

Against this background, this article asks two questions: how do countries currently price carbon (what is the **effective carbon rate**, ECR), and how do ECRs compare to the minimum rate needed (set at \in 30 per tonne of CO₂ for this article) to provide incentives for emissions cuts in line with the 2 degrees Celsius temperature increase target? In short the answers, for 41 countries representing 80% of world energy use in 2012, are as follows:

60% of CO₂-emissions from all energy use in the 41 countries are not subject to an ECR at all, 30% are subject to a rate between zero and \in 30 per tonne of CO₂, and 10% to a rate above \in 30 per tonne. Hence, 90% of emissions are priced below the low end estimate of the climate cost of CO₂-emissions, being \in 30 per tonne, and 60% of CO₂-emissions are not priced at all.

... increased reliance on carbon pricing will allow more ambitious climate policy and better economic outcomes In road transport, 46% of CO_2 -emissions in the 41 countries face a rate of more than \in 30 per tonne of CO_2 -emissions. Outside of road transport, the ECR is zero for 70% of emissions, and 96% of emissions from energy use are subject to an ECR of less than \in 30 per tonne of CO_2 .

Price-based or market-based policies

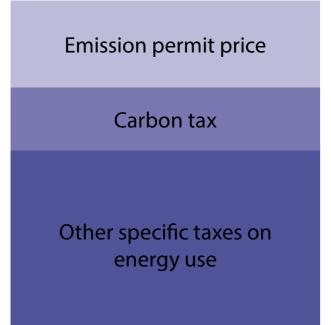
As noted in the introduction, policy instruments that 'make polluters pay' are very effective at cutting pollution at relatively low costs, because they align polluters' incentives with the social interest while giving polluters the ability to select the cheapest abatement options; see OECD (2015a). In the context of climate change, this means that the ECR should be aligned with the marginal cost of climate change (in short, the 'climate cost') of CO_2 -emissions. Estimating the climate cost of CO_2 -emissions is difficult given uncertainties over the climatic and economic processes involved, and the long term over which these processes will play out. As a consequence, available estimates cover a range of values. This paper uses €30 per tonne of CO_2 as a lower end estimate of the climate cost (Alberici et al., 2014).

Price-based or market-based policies can take the form of taxes or emissions trading systems. The ECRs in this article are the sum of prices put on CO₂-emissions from energy use through (a) emissions trading systems (permit prices), (b) carbon taxes, and (c) specific taxes on energy use; see Figure 1. Components of the ECRs can, and often do, equal zero. The base considered is all CO₂-emissions from energy use in 41 OECD and G20 countries.

Specific taxes on energy use include excise taxes levied on the consumption of energy and a range of other, quantitatively less important, taxes (value-added tax is not included since it is usually not specific to energy). Many of the specific taxes may not have been introduced to curb carbon emissions, but they do put a price on CO₂ and therefore are included in the ECRs.

Figure 1. Illustration of composition of effective carbon rate

Effective Carbon Rate $(\in \text{ per tonne of CO}_2)$



The OECD Publications *Taxing Energy Use – A Graphical Analysis* (2013) and *Taxing Energy Use – OECD and Selected Partner Economies* (2015a) provide full country-level detail on explicit carbon taxes and all other specific taxes on energy use that impose a price on carbon emissions. They cover 41 countries, including all OECD countries² and Argentina, Brazil, China, India, Indonesia, Russia and South Africa.

The OECD estimates of carbon prices resulting from emissions trading systems are new. The following emissions trading systems are included in the calculation of effective carbon rates: the Beijing Emissions Trading System (China), the California Cap-and-Trade Program (United States), the Chongqing Emissions Trading System (China), the European Union Emissions Trading System (which operates in 31 countries, of which 23 are OECD member countries), the Guang-dong Emissions Trading System (China), the Hubei Emissions Trading System (China), the Korea Emissions Trading Scheme, the New Zealand Emissions Trading Scheme, the Québec Cap-and-Trade System (Canada), the Regional Greenhouse Gas Initiative (RGGI, covering nine north-east and mid-Atlantic US states), the Saitama Prefecture Target Setting Emissions Trading System (Japan), the Shanghai Emissions Trading System (China), the Shenzhen Emissions

Trading System (China), the Swiss Emissions Trading Scheme, the Tianjin Emissions Trading System (China) and the Tokyo Cap-and-Trade Programme (Japan). The systems operate in 29 of the 41 countries and cover approximately 13% of total CO₂-emissions from energy use in the 41 countries included in the analysis.

Coverage

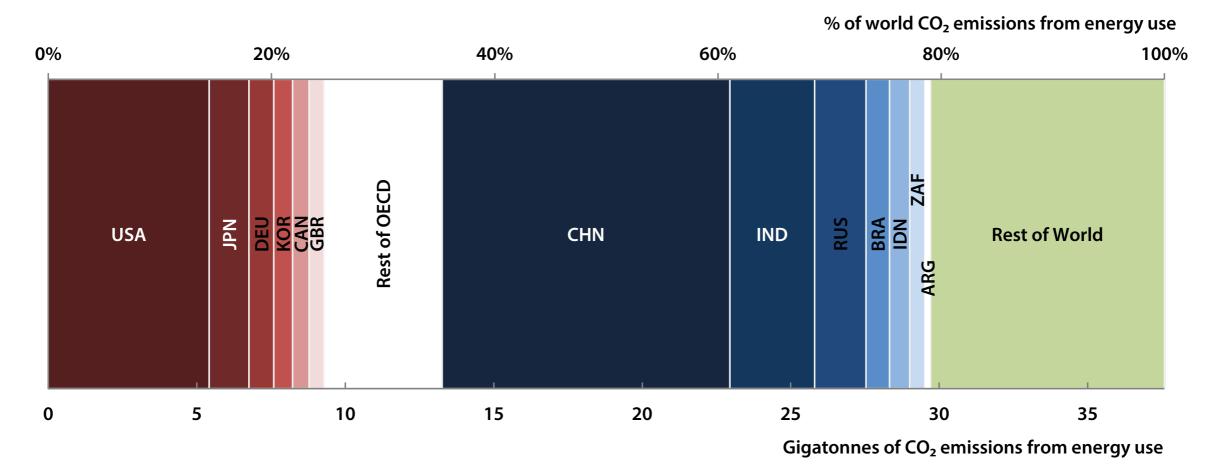
Effective carbon rates are calculated for all energy use in 41 countries, which together account for around 80% of world energy use and of global CO_2 -emissions in 2012, the most recent year for which detailed energy use data are available; see Figure 2. In 2012, the OECD share in CO_2 emissions from world energy use equals 35% and that of the SPE countries 44%. The share of the SPE countries is expected to grow rapidly, along with their share in world output: on the basis of current membership, the OECD's share in global output may be expected to decline from 62% in 2013 to 43% in 2050 (Johanssen et al., 2013).

Effective carbon rates in 2012 - an overview

Effective carbon rates, averaged at the economy-wide level (on a weighted basis by the quantity of emissions subject to each individual carbon rate), differ strongly between countries, ranging from approximately EUR 105 per tonne of CO₂ to just over zero when biomass emissions are included in the CO₂ emissions base (the maximum is \in 127 when biomass emissions are not included). In 14 of the 41 countries (12 countries excluding biomass emissions), the economy-wide average ECR is less than \in 30, a low-end estimate of the climate cost of one tonne of CO₂ emissions.

In all countries, the ECR consists predominantly of specific taxes on energy use other than carbon taxes. In some countries, explicit carbon taxes are a significant component of the ECR, notably in countries with above average ECRs. The prices of emission trading permits, again weighted over the entire base, only lead to a small increase in total ECRs. Continued extension of coverage of emissions by specific carbon pricing mechanisms and raising the rates has the potential to significantly increase the weight of these specific mechanisms in the ECRs, as well as increasing the level of the ECRs.

Figure 2. Global CO₂ emissions from energy use (2012)



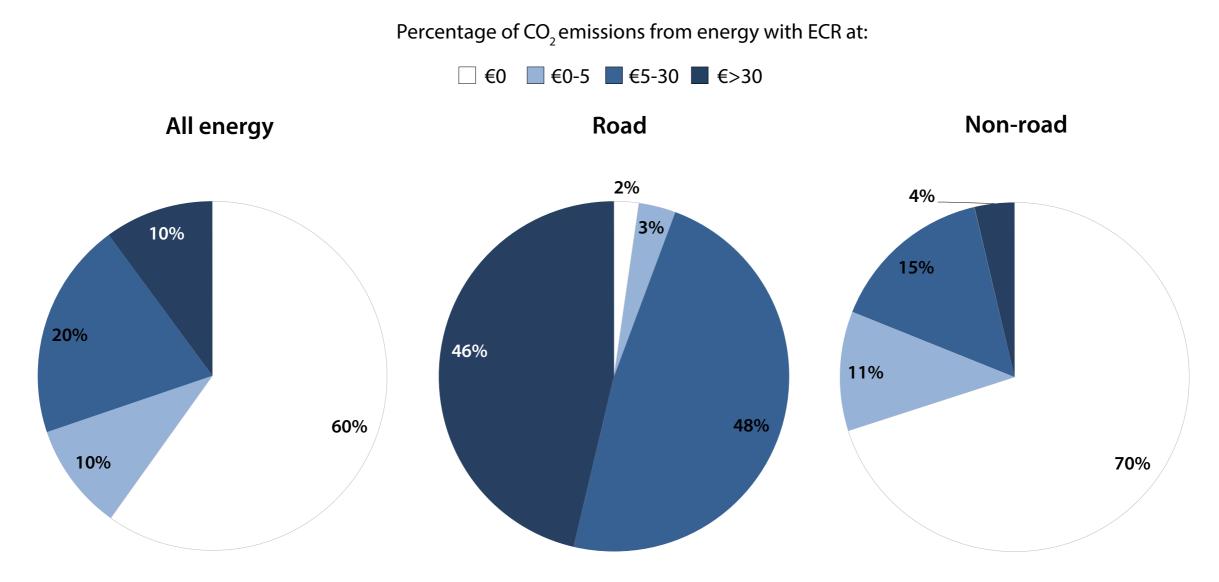
Source: OECD calculations based on IEA Energy Balances

Economy-wide effective carbon rates hide considerable differences in rates across sectors. The average ECR in transport is much higher than in other sectors. The ECR on non-transport emissions is low on average – less than \in 30 in 37 countries (36 countries when biomass emissions are excluded), and less than \in 5 in 14 countries (13 countries when biomass emissions are not included). This is because specific taxes on energy use are higher in transport than in other sectors. Carbon taxes and emission permit prices have the potential to bring more balance to ECRs across sectors, and can help increase transport rates where necessary. This would better align carbon prices with climate costs and would improve their cost-effectiveness, but would also require considerably higher carbon taxes or permit prices than currently applied in most countries.

Figure 3 shows the shares of CO_2 -emissions from energy use in the 41 countries that are subject to specific ECR intervals. The left panel applies to all emissions in these countries, the middle panel to road transport emissions, and the right panel to all emissions except road transport CO_2 -emissions from energy use. Considering all energy use (left panel), 60% of CO_2 -emissions from energy use in the 41 countries are not subject to an ECR at all, 10% are subject to a rate between zero and \in 5 per tonne of CO_2 , 20% to a rate between \in 5 and \in 30 per tonne of CO_2 , and 10% to rate above \in 30. Hence, 90% of emissions are priced below the low end estimate of the climate cost of carbon of \in 30, and 70% of emissions are priced at a rate of less than \in 5, implying there is hardly any policy-driven price incentive to reduce emissions.

The middle and right panels of Figure 3 show large differences in ECRs between transport and non-transport emissions. In road transport (middle panel), only 2% of emissions in the 41 countries face a zero ECR, and 3% of emissions face a rate larger than zero but less than \leq 5 per tonne of CO₂-emissions; 48% of emissions are subject to a rate of between \leq 5 and \leq 30, and 46% of emissions face a rate of more than \leq 30 per tonne of CO₂-emissions. These relatively high rates may not have been introduced to mitigate CO₂, but still provide an incentive to reduce the tax burden by cutting CO₂-emissions.

Figure 3. Share of CO_2 -emissions from energy use subject to ECRs of zero, zero to $\in 5$, $\in 5$ to $\in 30$, and more than $\in 30$, for all emissions (left), road transport emissions (middle), and all emissions except road transport emissions (right), 2012 –biomass emissions included.



Source: OECD calculations based on data from Taxing Energy Use 2015: OECD and Selected Partner Economies (OECD, 2015a) and on emission trading systems.

Excluding emissions from road transport (right panel of Figure 3), for 70% of emissions, the ECR is zero, for 11% of emissions it is above zero but below €5, for 15% of emissions it is between €5 and €30, and for 4% of emissions it is at least €30.

While the treatment of CO₂-emissions from combustion of biomass can have a large impact for some countries, the differences are less pronounced at the level of aggregation considered in this note. The share of zero rates is 4%-point lower in the case where biomass emissions are excluded than in the case where they are included (as in Figure 3) for non-road emissions and for total emissions, but it remains high at 66% and 56% respectively.

Concluding remarks

Making polluters pay for CO₂-emissions from their energy use can be achieved through taxes on energy use (both carbon and other specific taxes on energy use) and through emissions trading systems. The total price on CO₂ resulting from the combination of these mechanisms is presented in this paper as the effective carbon rate. The OECD has estimated the ECR for 41 countries, including all OECD countries and Argentina, Brazil, China, India, Indonesia, Russia and South Africa.

The evidence on ECRs leaves no doubt that carbon pricing policies are not being utilised to their full potential. Where stringent alternative policies are in place, this means that CO_2 -emissions abatement policies are likely to be more costly than necessary. Where alternative policies are lacking or weak, it means that current policies do not reflect the climate cost of CO_2 -emissions. In either case, increased reliance on carbon pricing will allow more ambitious climate policy and better economic outcomes. Increases in ECRs are needed to reach climate goals, and will often engender domestic co-benefits, eg. by reducing air pollution or raising valuable public revenue. At present, excise taxes are the main drivers of ECRs. Carbon taxes and emissions trading systems currently contribute only modestly to effective carbon rates, because of their limited sector and geographical coverage and their comparatively low rates. If coverage continues to expand and rates increase, carbon taxes and emissions trading systems will play a more prominent role in ECRs in the future.

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This article draws heavily from the OECD brochure "Effective Carbon Rates in the OECD and Selected Partner Economies", OECD, Paris, 2015.

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1. http://www.carbonbrief.org/two-degrees-will-we-avoid-dangerous-climate-change

2. These are Australia, Austria, Belgium, Canada, Chile, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, Netherlands, New Zealand, Norway, Poland, Portugal, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States

2030 Agenda: our legacy to future generations?

The WFC Global Policy Action Plan presents a collection of well researched, holistic policy examples that offer a sustainable pathway, embracing a future-just perspective, bringing long-lasting solutions, writes Catherine Pearce

uring the painstaking three year process to agree the Sustainable Development Goals, 'leave no one behind' became the assumed headline, adopted by many to help communicate and pledge an underlying commitment to a complex agenda. The poor, the marginalised, people in vulnerable situations and living on the edge of society come to mind. They are typically voiceless and forgotten. Yet, what of future generations? They are also without a voice, and for whom full enjoyment of their human rights looks increasingly uncertain.

"We act as we do because we can get away with it: future generations do not vote, they have no political or financial power; they cannot challenge our decisions. But the results of the present profligacy are rapidly closing the options for future generations."¹

Claims of the transformational nature of the 2030 Agenda need to be supported by a new mindset which challenges current patterns where short-term interests often override the well-being of future generations. It is after all, the decisions made today that will affect them. Changes are needed to address the challenges posed by climate change, environmental destruction, extreme poverty and the widening gap between rich and poor, all of which pose enormous risks, not only to present generations, but to future generations too.

Ending poverty–a key part of the 2030 Agenda, is as much about future generations as present day. People cannot think and act long-term if their daily life is an existential struggle. Today, the impacts of climate change are most heavily felt by the poorest, threatening people's basic rights such as the right to food, water and shelter on a daily basis. As a result, much of the world's population is prevented from developing sustainably in a way that doesn't compromise future generations.

The 17 goals and 169 supporting targets agreed at the UN 70th session reflect our global response to a complex set of interlinked and connected challenges. Some would say the agenda is contradictory and incompatible in places. Future generations are recognised early on in the 35 page document:

"We are determined to protect the planet from degradation, including through sustainable consumption and production, sustainably managing its natural resources and taking urgent action on climate change, so that it can support the needs of the present and future generations."²

The good intention presents nothing new. Since 1946, the international community has marked in numerous international treaties and conventions the need to recognise the interests of future generations. Over 20 national constitutions enshrine the needs of future generations. Yet, the warnings of the *Brundtland Report* are as urgent today as they were in 1987. Additional, innovative and far reaching measures that get beyond the rhetoric will be needed if we are to truly deliver our commitments to future generations.

> Our Global Policy Action Plan presents a collection of well researched, holistic policy examples that offer a sustainable pathway, embracing a futurejust perspective, bringing long lasting solutions

The future starts now

It is with a keen sense of purpose and urgency that many are looking to how to implement the *2030 Sustainable Development Agenda*. The good news is that policy solutions already exist, so we do not have to start from zero. The World Future Council has identified a range of existing proven policies. Our Global Policy Action Plan³ presents a collection of well researched, holistic policy examples that offer a sustainable pathway, embracing a future-just perspective, bringing long lasting solutions. We can learn from these pioneering policies and replicate and build on their success stories.

It is important to remember that the 2030 Agenda is a universal agenda, applying to all–a marked change from the Millennium Development Goals. Action is as much about domestic policies as it is about external policies or foreign aid budgets. A recent report by the Bertelsmann Foundation, *Sustainable Development Goals: Are the rich countries ready?*⁴ highlights that very many industrialised countries are nowhere near achieving these goals. The greatest deficits lie in far from sustainable production and consumption behaviour. In addition, in many cases their economic systems also exacerbate the trend toward social inequality. When looking to leadership on the global goals, many rich countries have a great deal to do.

Follow up and review

Reviewing progress will be a central aspect to the 2030 Agenda, in order to be able to measure with any accuracy if we are on track and to help build incentives for improvement. While the commitments are not legally binding, countries will be expected to report on the progress that they are making against the goals at the national, regional and global level.

Tools and architecture at the UN level will provide a key role: UN agencies and institutions will need to help support governments in their efforts, and provide the mechanisms for effective review processes. Much of this is still open

to question. The 2030 Agenda calls to prepare a report, to include "a proposal on the organizational arrangements for State-led reviews", and to "clarify institutional responsibilities."⁵

Many are concerned that the High Level Political Forum, the new UN body and home to help governments implement the Sustainable Development Goals is not equipped to manage this complex process. As many have already noted, the 2030 Agenda transcends the silo approach and initiates a new interconnected way of identifying and implementing solutions. Current UN structures and systems seem out of step, and slow to reflect this broadening perspective. Unless we seek to improve them, we risk not only not meeting the goals, but also passing on a world with drastically diminished opportunities to the generations to come.

A High Commissioner for Future Generations

The World Future Council is calling for a High Commissioner for Future Generations, working at the UN, to help bring a long-term, coherent perspective to how the international community respond to these challenges of today. Many governments and civil society have supported this call. The UN Secretary-General in his 2013 report, *Intergenerational Solidarity and the Needs of Future Generations*,⁶ also recommended to establish a High Commissioner for Future Generations. The report recognises key priorities of the role, including; offering support and advice where requested; undertaking research; fostering expertise on policy practices and interacting with member states, UN entities, and others.

In addition, as part of the broader institutional framework and policy approach, we can see that the High Commissioner would bring added value in working alongside existing UN agencies to help ensure sound delivery of the global goals and effective, applied understanding of how we look to the long-term. An authorised person acting as an institutional voice can advocate for future generations at the UN level. This representative would highlight the long-term implications of proposed action and present recommendations and remedies. Appointed by member states, the Commissioner would have the power of advocacy only. We are not suggesting a role that would interfere with the national sovereignty of member states or challenge decisions with the power of veto. Rather, this role is focused on problem solving, in order to help facilitate informed decision-making, and place issues in a broader inter-temporal context.

The 2030 Agenda demands the vision and leadership to begin connecting dots and addressing systemic challenges. A representative for future generations can help institutional arrangements to build that vision. By placing future generations at the heart of advocacy and investigative procedures, it reinforces the interconnections between thematic areas, bringing greater coherence to our global efforts. Policy coherence is increasingly being seen as an important prerequisite for balanced, inclusive and sustainable solutions.

Decisions affecting future generations should be made in a transparent way. This requires making underlying assumptions clear. While transparency by itself does not guarantee appropriate transfers to the future, it should increase awareness that a choice about transfers is being made. A dedicated representative can help to bring this transparency, and in so doing, can contribute a key element of legitimacy and efficiency to how these decisions are made.

A small staff size, dynamic and multi-disciplinary in nature would not be a bureaucratic exercise, the office would be low on administration, high on visibility.

Reflecting innovative action elsewhere

Existing Commissioners or Guardians for Future Generations at regional and national levels have shown to help introduce a long-term perspective into policy making, linking citizens with governments, working as a catalyst for sustainable development implementation and acting as principal advocate for common interests of present and future generations.

Earlier this year, Wales introduced exciting landmark legislation, the Well-being of Future Generations (Wales) Act. Not least to bring a long-term perspective to policy making, and ensure a 'One Wales, One Planet' outlook, the legislation is introduced to help implement the Sustainable Development Goals. The legislation also establishes a Commissioner for Future Generations, whose role is to act as a guardian for the interests of future generations in Wales, and to support the public bodies listed in the Act to work towards achieving the well-being goals. Their annual report to the Welsh Assembly will help to mark progress and outline the improvements needed in order to better safeguard the ability of future generations to meet their needs.

Given that the Welsh Assembly has had a duty to promote sustainable development for the past 15 years, it is notable that the Welsh Government decided that it needed to introduce a law in order to ensure delivery. With its legally-binding goals, its universal approach to sustainable development, and its review processes, this really is a radical and innovative piece of legislation. It shines a light upon other governments – that they may well need additional measures, policies and legislation to deliver the goals at home.

Wales is one of the first countries to take a concerted effort in introducing the Sustainable Development Goals into its domestic policy agenda. It is up to all of us to steer a path onto an equitable and fair framework for a resilient world. Our failure to act now will threaten our past achievements, our civilisation and our future hopes.

Catherine Pearce is Director of Future Justice and Co-ordinator of the Global Policy Action Plan at the World Future Council

Endnotes

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Climate change, conflict and the sustainable development goals

In those fragile states most in need of development progress SDG16 is central to achieving immediate and future wellbeing, Alec Crawford writes eace and stability, it has long been recognized, are prerequisites for sustainable development. A quick look at the most recent *Human Development Report* by the United Nations Development Programme shows that those countries furthest from achieving sustainable human development are typically those most affected by violence and fragility: countries like the Democratic Republic of Congo, the Central African Republic, South Sudan, and Somalia. Without peace and stability, progress on education, health and other determinants of wellbeing in these countries will be difficult, if not impossible.

In September 2015 world leaders gathered in New York City at the United Nations General Assembly. The primary objective of this year's meeting was no less than to chart a course for global development for the next 15 years. After three years of consultation and development, the assembled Member States voted to adopt the Sustainable Development Goals (SDGs): 17 commitments to sustainable development that seek to build on the Millennium Development Goals and achieve global sustainable development by the year 2030. The SDGs cover a range of development challenges, from poverty and inequality to climate change and environmental degradation.

In those fragile states most in need of development progress, it is SDG 16—the promotion of peaceful and inclusive societies for sustainable development—that is most central to achieving immediate and future wellbeing. In these countries, achieving peace and stability is a necessary first step toward the achievement of the other SDGs.

Climate change will complicate the achievement of SDG 16 in fragile states. It is increasingly well accepted that climate change can be a contributor—at times subtle, at times significant—to the causal network that generates conflict and threatens human security. This is particularly true for fragile states, many of which are found in regions where the worst climate impacts are anticipated, such as the Horn of Africa, the Sahel, and the Middle East (see Table, noting that climate vulnerability data is not available for Somalia or South Sudan).

Table: State fragility and climate vulnerability, 2015

Top 10 most fragile states	Top 10 most climate vulnerable states
South Sudan	Eritrea
Somalia	Sudan
Central African Republic	Chad
Sudan	Congo (DR)
Congo (DR)	Central African Republic
Chad	Burundi
Yemen	Haiti
Syria	Yemen
Afghanistan	Guinea-Bissau
Guinea	Solomon Islands

Source: The Fund For Peace Fragile States Index 2015; Notre Dame Global Adaptation Index (ND-GAIN)

The vulnerability of fragile states to climate impacts is rooted in a number of factors, including the limited capacities of their governments and institutions; in the reliance of their populations and economies on climate-sensitive sectors such as agriculture and pastoralism; in their histories of conflict; and in their high rates of poverty and inequality. In such contexts, the additional stress of climate change may strain the capacity of households, communities and governments to cope with and respond to impacts.

Climate change is not expected to directly result in violence. Rather, there is growing consensus that climate change will instead act as a 'threat multiplier,' exacerbating existing challenges and sources of tension such as weak governance, poverty, historical grievances and ethnic differences. With climate change making many fragile parts of the world hotter, drier and less predictable, it could contribute to the root causes of conflict by: undermining livelihoods; increasing competition for scarce natural resources; displacing large numbers of people; and overwhelming state institutions by placing addition stress on social, economic and natural systems.

Ensuring that progress can be made in fragile states on SDG 16 therefore links to action on SDG 13—taking urgent action to combat climate change and its impacts. Concerted international action is needed to mitigate greenhouse gas emissions. But significant effort will be required to strengthen the adaptive capacity and resilience of fragile countries, and their populations, to manage the impacts of climate change.

Designing policies, programs and projects that support the resilience and adaptive capacity of individuals, communities and governments in fragile states... is an important part of ensuring sustainable development for those most in need Thankfully, international stability, adaptive capacity and climate resilience are achieved through many similar investments. All will require the support of the international community. These include strengthening statutory and customary governance and institutions; clarifying resource rights, particularly around water and land; and integrating climate risks into sectoral policies and responses, including water, health, agriculture, infrastructure and disaster management. More support is required for research into new seed varieties, crop types, livestock breeds, and growing techniques; for improved water management; and for building early warning systems that ensure support arrives when and where it is needed. Regional cooperation around resources like water should be supported and enhanced.

Specific investments should be made to improve the data on climate change and its impacts in fragile states, so that policies are based on sound numbers. At a basic level, it is often difficult to access and interpret such data in fragile contexts: in Haiti and South Sudan—combined—there are fewer functioning weather stations (8) than in the (smallest) Canadian province of Prince Edward Island (9). At the same time, capacities must be strengthened to deal with the complexities of climate change vulnerability and risk is low, particularly in fragile states. This includes government staff and peacebuilding practitioners; they often do not have the skills or knowledge required to use or understand climate data and translate it into appropriate responses.

When working in fragile states, peacebuilding interventions should be climate-resilient, so that they take into account the implications of near- and long-term climate risk as a contributing factor in driving conflict. This could mean integrating drought and flood risks into decisions on refugee camp placement, or including climate risks in reintegration programs for ex-combatants. Climate change responses must also be designed and implemented in a conflict-sensitive way, to ensure that, at a minimum, the interventions do not increase the risk of conflict and—preferably—they instead enhance peacebuilding opportunities. This would mean, for example, ensuring that the benefits of adaptation programs are equitably distributed across all the relevant stakeholders. Investments in building resilience are investments in peacebuilding and conflict prevention. Designing policies, programs and projects that support the resilience and adaptive capacity of individuals, communities and governments in fragile states, and in so doing reduce the risk of climate-related conflicts, is an important part of ensuring sustainable development for those most in need.

Alec Crawford is an Associate at the International Institute for Sustainable Development (IISD)

China's ETS: a vote of confidence in carbon markets

Carbon markets have recently received a huge vote of confidence from China, Andrei Marcu writes

he recent announcement by President Xi Jinping that China will start a national emissions trading scheme in 2017 can be seen as a genuine game changer. It has given a boost to carbon markets and cap-and-trade as the preferred way forward for those economies that have the capacity, the depth and the breadth for a liquid carbon market.

In addition, Mr Xi's announcement, made during his official state visit to the US in September, has the potential to alter the tone and substance of the discussions on competitiveness and carbon leakage. This is one of the top issues in the EU and the major component of the July 2015 legislative package published by the European Commission to operationalise the 2030 framework for climate and energy and the October 2014 EU Council Conclusions.

But what does it mean? According to the World Bank report *State and Trends of Carbon Market*, about 23% of the world's GHG emissions are now under some type of carbon-pricing regime. China's announcement signals that the world's second-largest economy and the largest emitter has decided to put a price on GHG emissions through a cap-and-trade system.

This represents a significant vote of confidence in carbon markets as an approach towards curbing carbon emissions, which no amount of spin can undermine. Without a doubt, this will make carbon markets more appealing to China's major trading partners, as it creates a clear, and politically feasible path to a global carbon price in the future, and a more level playing field.

Objective observers will see that the EU has now been joined in its pioneering EU ETS by the world's largest emitter of greenhouse gases. In addition, the Republic of Korea has also recently started a cap-and-trade system, joining other jurisdictions, including the Regional Greenhouse Gas Initiative (covering the power sector in nine northeaster states of the US) and the California-Quebec link, soon to be joined by Ontario, the industrial heartland of Canada.

At a recent press conference Japan's Environment Minister Yoshio Mochizuki said: "Emissions trading is a cost-effective measure that will certainly lead to emissions reductions. ... We would like to consider the measure while looking at the impact on industry and employment." This statement may indicate that Japan, which has long been reluctant to adopt a cap-and-trade system, may be re-examining its options.

Although a US federal cap-and-trade seems not to be in the cards any time soon, remarks by New York Governor Andrew Cuomo in a speech at Columbia University on October 9th, suggests that there is some movement in this direction in the United States. Speaking alongside former US Vice President Al Gore, Cuomo said that combining the Regional Greenhouse Gas Initiative with the market used by California and the two Canadian provinces would accelerate efforts to reduce air pollution blamed for global warming. He also expressed the hope of involving other states and provinces with the goal of creating *"a broader North American market to collectively reduce emissions"*.

The writing has been on the wall for some time, but especially since the UN Secretary General's Climate Summit last year in New York, when 73 countries and over 1,000 companies expressed support for putting a price on carbon. While there are always exceptions, most major economies and global companies have signed up, in part out of a recognition of the inevitability of carbon pricing.

... most major economies and global companies have signed up, in part out of a recognition of the inevitability of carbon pricing Discussions of the various options available for carbon pricing have been going on for some time, and while choices depend on parameters referred to above, as well as political preferences, cap-and-trade provides the environmental certainty that is so much needed.

In the final analysis, this is not about raising revenues, as badly needed as they may be by the public purse, but about environmental delivery. Other approaches may be portrayed as simpler, but politically they seem difficult. While taxes can be passed through, there is no hiding from the transparency and delivery of absolute emissions caps that carbon markets bring.

Action on climate change in many jurisdictions has been held back by the argument that carbon pricing in an asymmetrical global climate change regime may put certain economies and sectors at a competitive disadvantage and expose them to the risk of carbon leakage. It is no accident that the Clean Development Mechanism has been re-baptised by some as the 'China Development Mechanism', and opposed on the ground that it is providing subsidies to Chinese competitors.

All US bills to address climate change have been criticised in the US for putting the US at a disadvantage with respect to Chinese competitors. With a cap-and-trade system in place in China in 2017, that argument is unlikely to hold much water in a rational discussion.

Inevitably, the focus will have to shift from national approaches to finding international cooperative approaches in order to address the issue of competition and carbon leakage.

Finally the Paris Agreement, which is still under negotiation, will attempt to provide a framework for creating an international carbon market. This will, in time, lead to one global carbon price, which is the ultimate aim of those

who advocate market-driven change, rational economic asset allocation, flexibility and a move towards a more level playing field.

This will be achieved by unifying different emerging domestic carbon markets, through different routes, which may include linking, networking, clubs, as well as any other approaches that may emerge in time.

A global carbon tax may be tempting, and it may be simple, but it is not on the agenda at this time for the obvious reason that, especially before the Paris COP, it is politically explosive. One may also argue that it may neither be desirable nor needed. In time, a global carbon price will emerge bottom-up from the many domestic emissions-trading systems and prices that are currently operating, or being developed.

Cap-and-trade is still a young regulatory market, with many jurisdictions continuing to experiment and learn from each other. To the question *"Is cap-and-trade a sound approach?"* the Chinese have answered with a resounding YES.

To the question *"Is the EU ETS as effective as we would want it to be right now?"* the answer may be NO. However, such an answer does not recognise the complexity of the issues faced, is incomplete and may, inadvertently, give the impression that the approach itself is flawed. Instead, it should include the qualifying remark 'but changes have been introduced that will address the issues'.

Finally, carbon markets will not provide a panacea for curbing greenhouse gas emissions. No one is disputing that they need to be accompanied by other policies. But that does not detract from the huge vote of confidence that carbon markets have recently received from China.

Andrei Marcu is a Senior Fellow and Head of the Carbon Market Forum at the Centre for European Policy Studies (CEPS)

Why is China finding it hard to fight the

markets

Alicia García-Herrero writes that China is sitting on a pile of debt, and the only way out is to deleverage: more pain now for sustainable growth later HF

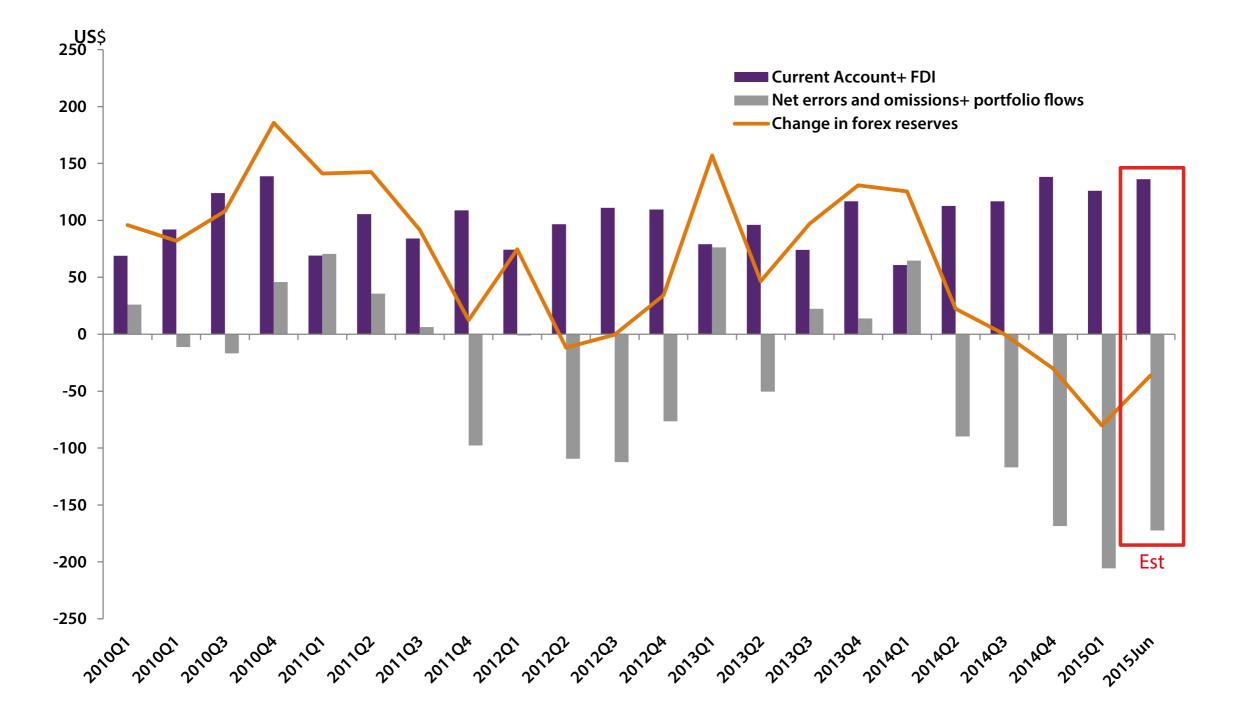
hina's market drama started in June this year with the collapse of the Shanghai stock exchange, followed by frantic interventions by the Chinese authorities. As if the estimated \$200 billion already spent on propping up stock prices were not enough, China found itself in another battle with the market, defending the RMB against depreciation pressures after the PBoC devalued the RMB by nearly 2% on August 11. The cost of the foreign exchange intervention to keep the RMB stable is estimated at \$200 billion.

This adds to existing pressures on China's international reserves, which though still extensive, have been reduced by as much as \$345 billion in the last year, notwithstanding China's still large current account surplus and still positive net inflows of foreign direct investment (Figure 1). The fall in reserves is not so much due to foreign investors fleeing from China but, rather, capital flight from Chinese residents. Another –more positive reason – for the fall in reserves is that Chinese banks and corporations, which had borrowed large amounts from abroad in the expectation of an ever appreciating RMB, finally started to redeem part of their USD funding while increasing it onshore. While this is certainly good news in light of the recent RMB depreciation, the question remains as to how much USD debt Chinese banks and corporations still hold and, more generally, how leveraged they really are a time when the markets may become much less complacent, at least internationally.

Public and corporate sector over-borrowing can be traced back to the huge stimulus package and lax monetary policies which Chinese economic authorities introduced during the global financial crisis in 2008-2009. A RMB 4 trillion investment plan focusing on infrastructure was deployed, but the real cost spiralled. The government also subsidized the development of several important industries and lowered mortgage rates to boost housing demand. At the same time, the PBoC substantially loosened monetary policy with interest rate cuts, reductions in reserve requirements and even very aggressive credit targets for banks.

According to the authorities' initial plan, the funds needed for the stimulus package would come from three sources: central government, local governments, and banks, with costs shared relatively equally. However in practice, giv-

Figure 1. China's balance of payments



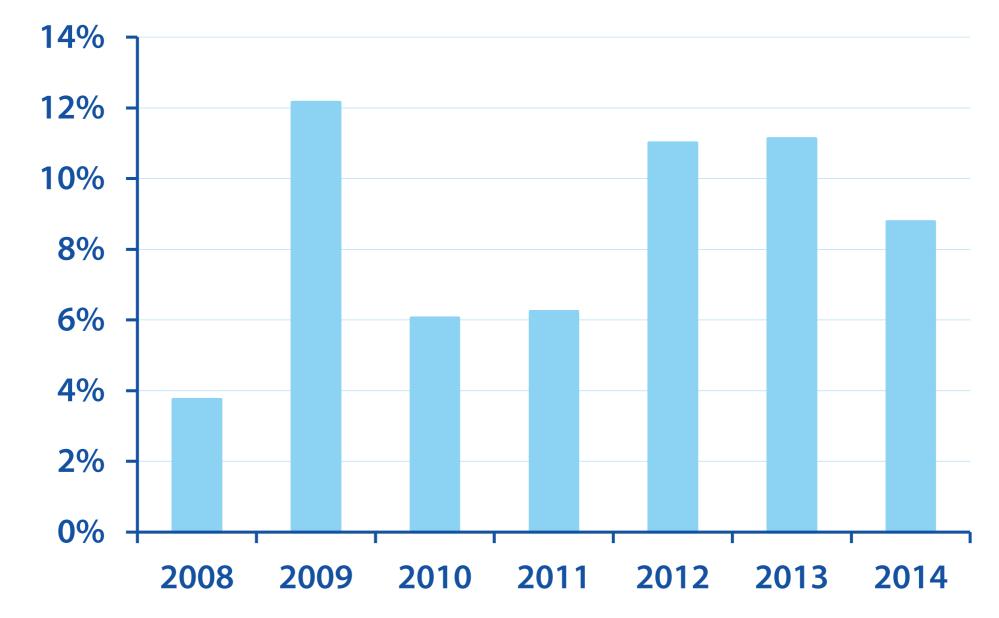


Figure 2. China's augmented fiscal deficit as % of GDP

Augmented fiscal deficit as % of GDP

en their limited fiscal capacity, local governments had to turn to banks to meet their borrowing needs. Banks could not decline loan requests from central or local government because of government ownership and control over most banks. In the meantime, government subsidies for specific industries boosted credit demand as firms in these sectors sought to take advantage of policy support and expand their production capacity. Mini-stimulus packages have since become the new norm of China's economic policy. When growth started to slow in 2012, the authorities responded by rolling out more infrastructure projects to revive the economy, which has blotted China's consolidated deficits every year since 2008. Although no official statistics exist on this, our best estimate is 8-10% fiscal deficits with the corresponding increase in public debt every year (Figure 2).

All in all, China's public debt today is above 53% of GDP, according to the National Audit. This may look small by international standards, especially in the developed world, but the rate of debt growth is unmatched elsewhere, and is even higher than Japan with its recurrently large fiscal deficits (Figure 3).

On the corporate side, cheap money at home made it very – if not too – easy for companies to borrow. In fact, corporate debt has doubled as a percentage of GDP in the last 14 years. Beyond the stock of debt, its service is becoming an issue for corporations as the Chinese economy decelerates and their revenues are on the wane. Taking a very simple measure of stress in debt service, the ratio of EBITDA to interest expense has been below 1 for about one

... it seems clear that China can no longer use the old recipes to stimulate its economy

third of Chinese domestically-listed corporates, implying that their operating cash flow was insufficient to service their interest payments. This is especially the case for private ones (Figure 4).

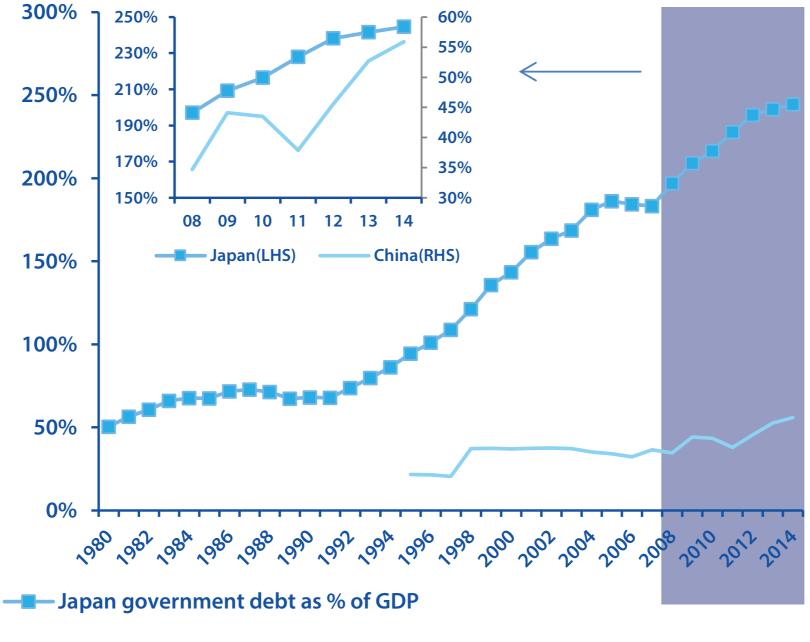
Given that banks' balance sheets have not been able to accommodate the borrowing from both the public and the private sector, a significant share of the corporate sector, especially smaller corporations, has increasingly used the shadow banking sector to meet their financing needs and circumvent tightening regulations on bank loans (Figure 5). This hardly regulated part of the financial sector now constitutes nearly 30% of GDP, with a good amount of inherent risk.

By the same token, the FED quantitative easing coupled with a cheap dollar and the expectation of continuous RMB appreciation made it even easier to borrow from overseas and, to a large extent, from international banks. In fact, the exposure of Chinese banks and corporates to dollar debt has ballooned in the recent years, only correcting very recently in anticipation of FED hikes and the recent RMB depreciation, as previously mentioned (Figure 6).

Finally, even households have not been totally spared from the leveraging mania. This can be explained by the fact that they have been confronted with an ever more expensive housing market and, more recently, the possibility to hedge massively to invest in the stock market. All in all, China's total debt was 284% of GDP a year ago and, given the still large fiscal deficits and the leverage-fed stock market bubble – it seems likely that it may have reached 300% of GDP today.

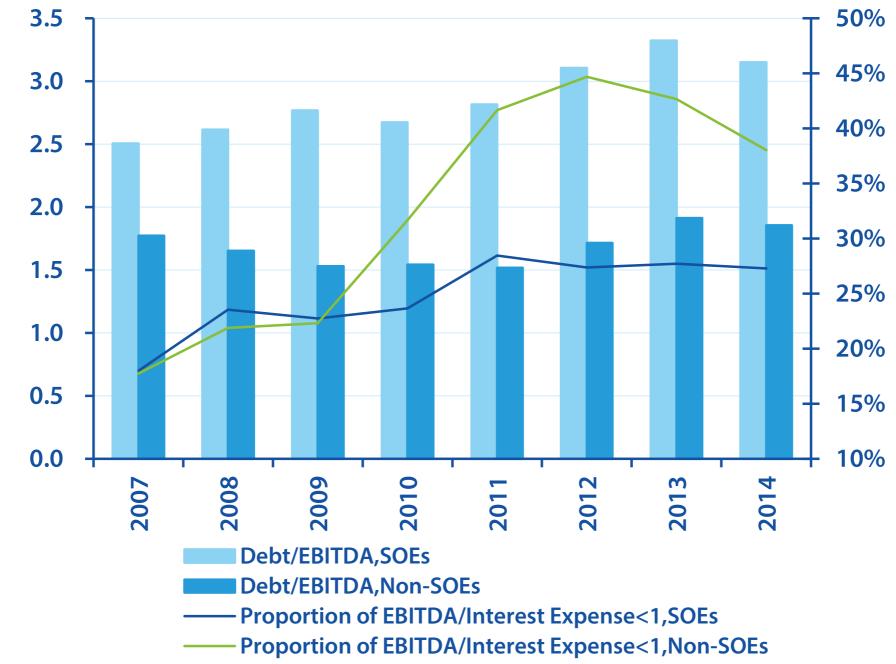
Notwithstanding its massive size compared with other emerging economies, the fact that most of it is domestic has been the key argument for the Chinese government and many economists to downplay the risks. There are, however, at least two main reasons why we should worry about China's debt. First of all, even domestic debt has to be paid if you want to avoid huge distributional effects. In particular, local government debt will need to be cleaned up at some point, which will worsen banks' asset quality unless the current loan for debt swap program is extended





—— China government debt as % of GDP (including both central and local government debt)

Figure 4. Corporate debt stress ratios



Source: Wind, CEIC and BBVA Research

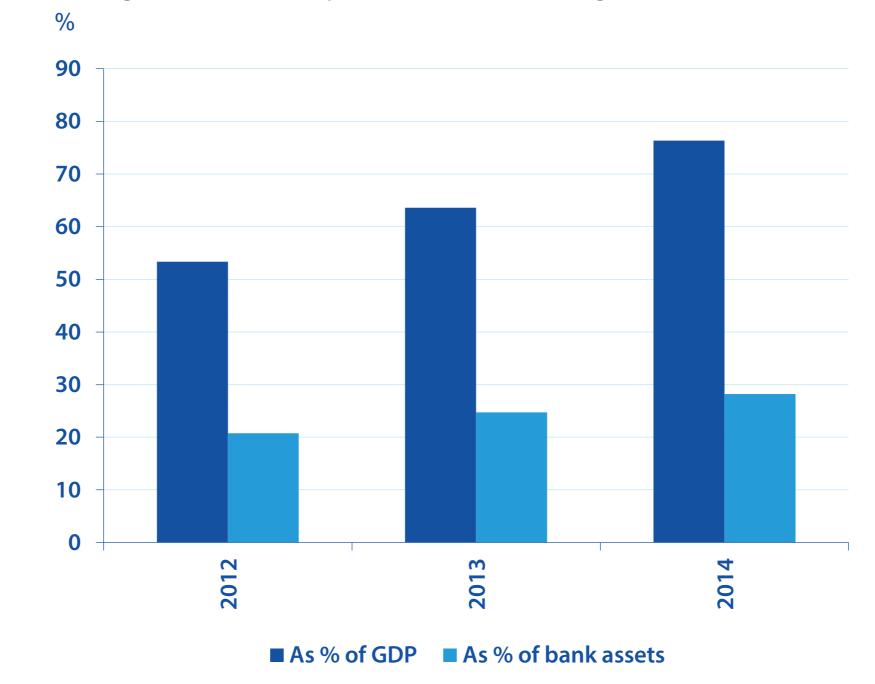
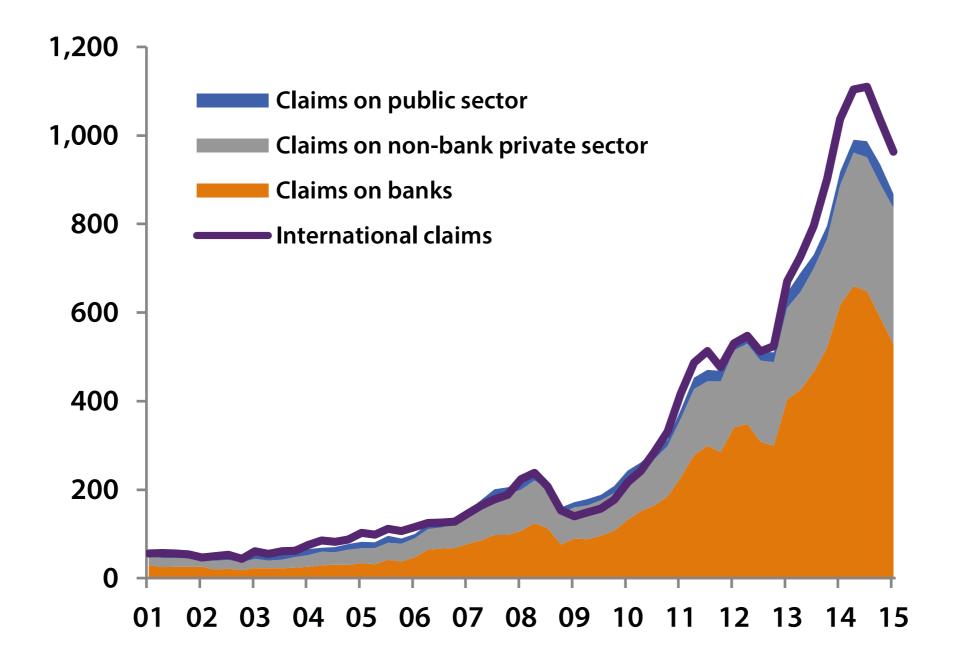


Figure 5. Shadow banking has become an important source of financing

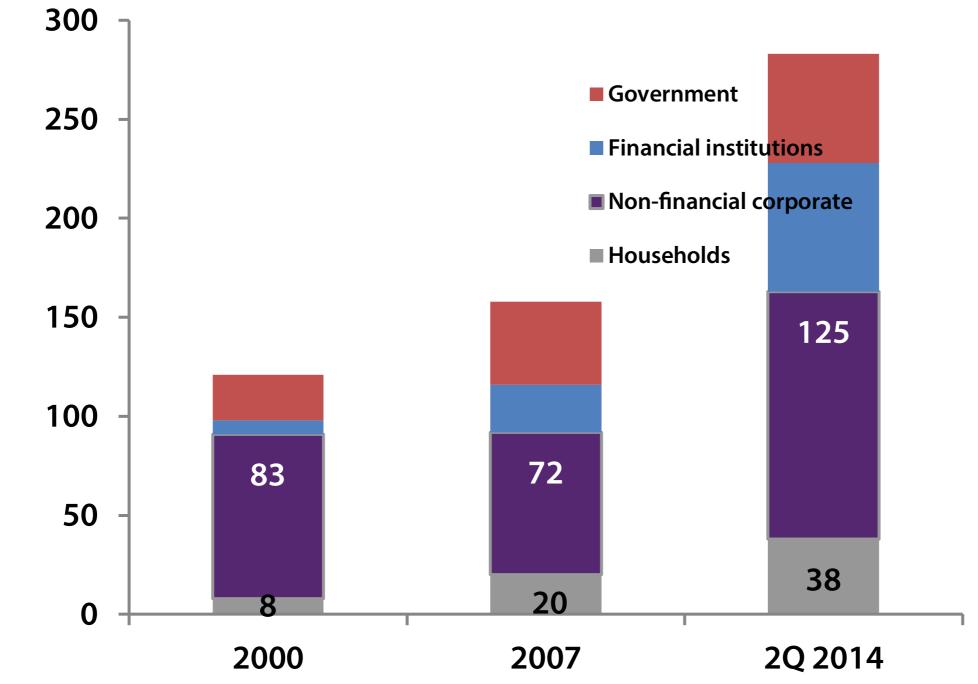
Source: CEIC and BBVA Research

Figure 6. Breakdown of China's international claims (billion USD)



Source: BIS and Natixis





Source: Datastream, PBoC and Natixis

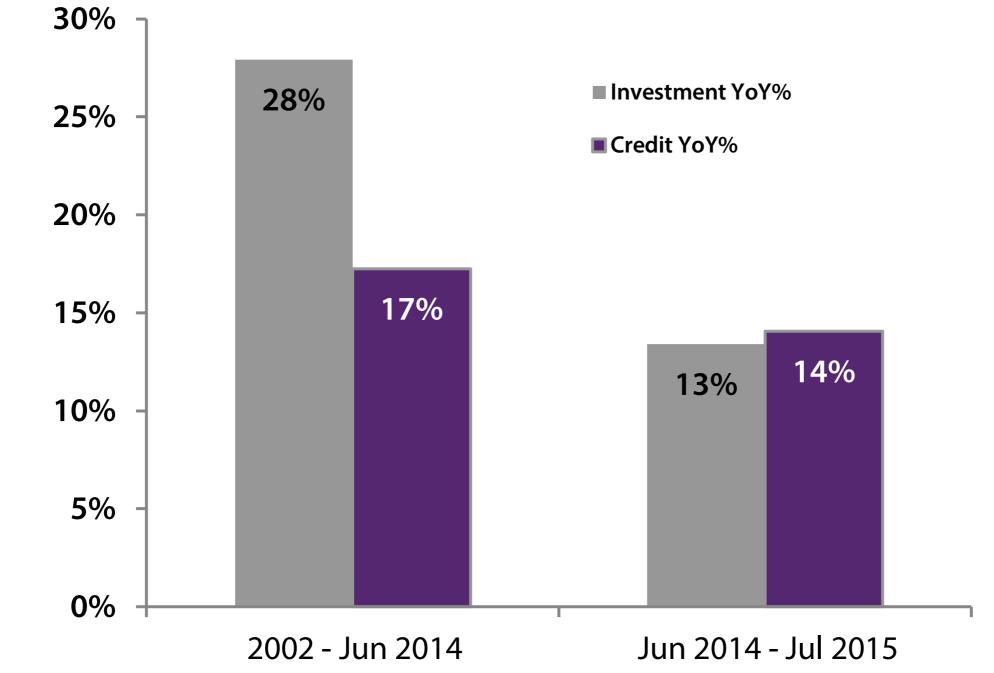


Figure 8. Credit growth overtakes investment growth in 2014

Source: Datastream, PBoC and Natixis

massively, which then pass the burden on the central government. Second, and more importantly, excessively high debt is known to slow growth. The underlying reason is that every unit of new credit has a harder time in finding a productive project to invest in as those which were more productive have already been funded. In fact, as Figure 8 shows, in the past the Chinese economy needed much less credit for a single unit of investment than it needs now.

On this basis, it seems clear that China can no longer use the old recipes to stimulate its economy. This would only induce additional leveraging and China needs just the opposite. Deleveraging will be painful in the short term, as investment will have to come down even more than it has already. But then wasn't rebalancing towards a consumption-based model what China really wanted and needed? I would advise the Chinese authorities to forget about more fiscal and monetary stimulus, and push towards deleveraging: better more pain now for more sustainable growth later.

Alicia García-Herrero is a Senior Fellow at Bruegel





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Boardroom briefing

In this briefing we have partnered with Atradius to pose questions and gain a better perspective of credit management and collection services, which can now be viewed as a core strategy requirement redit management and collection services can now be viewed as a core strategy requirement and not as previously a secondary business function. If this is recognised as applying not just to corporate entities but also to the SME sector then it is clear that businesses need to be briefed at boardroom level to formulate a clear path forward. In this briefing we have partnered with Atradius to pose questions and gain a better perspective.

Political concerns are critical to business confidence when planning to trade globally. Stability and confidence are key to winning vital overseas trade. Can you please explain the balance between political and commercial risks in formulating solutions for clients?

Both political and commercial risks play a role in determining the credit quality of a business. Take for instance Greece this year. The political and subsequent economic issues that the country itself is struggling with went so far as to make it almost impossible for some companies to pay for goods and services. While commercially companies may be stable and profitable, political and economic issues made selling on credit a less viable option. While this may be an extreme case, the political system, infrastructure, regulatory environment, stability of the government, the financial strength of a country, likelihood of natural disasters and many other factors can influence whether payment from a buyer in that country could be hindered by factors not directly related to the business itself.

The commercial risks however are far more focused on the companies themselves. The competitive environment, financing, payment history, management and industry trends, amongst others all play a role in assessing the likelihood of a buyer to pay their invoices.

Traditional suppliers of banking and finance are much more cautious in their lending profiles. With this in mind, lenders examine client funding requests much more forensically. This can result in denial of funds or a much higher rate. Obviously better credit management and collection improves and

Global businesses often have unique needs depending on their global footprint. Their businesses will operate out of multiple countries but maintaining different credit management contracts can lead to gaps in or inconsistent coverage of their receivables risks

smooths out cash flow issues. How, in practice, does this protect shareholder value and access to future capital?

Since 2008 many lending institutions have been substantially more cautious than in years leading into the financial crisis. This is making it difficult for suppliers who are not only having more difficulty getting bank financing, but who are also dealing with customers using trade credit to finance their operations.

Credit insurance can help provide the security some banks need to help get financing. Credit insurance provides the bank with assurance that, if the customer of the borrower does not pay, the insurance will pay reducing the chance that the borrower will default on its loan. It also helps the insured company smooth its cash flow since the insured supplier has a regular predictable premium expense and if there is a payment default the insurance can provide a clear reimbursement schedule if the debt is not paid. Payment defaults are no longer a big question mark on the suppliers' books but schedulable and manageable expenses.

Clearly as one enters new markets different profiles and expectations of potential customers appear. This understanding can be critical and impact on both sales and profitability. What are the differences between emerging markets and more traditional territories?

Emerging markets do often represent the potential to attract new untapped buyers with whom a business can grow. However they also bring risk. Less mature markets often haven't yet implemented the level of sophistication in their legal and regulatory infrastructures to support the type of security western companies are accustomed to when transacting trade. As a result, accessing current and relevant information about a buyer to make smart trade decisions, particularly when it comes to selling on credit terms, can be difficult. Not being able to access this infor-

mation or misinterpreting what you have been able to get a hold of, can result in a real and significant risk of loss. As can changes in the political situation that can quickly turn a safe buyer into a risky one.

Collecting outstanding debts can be another cloudy area as it may be easier for companies to hide behind laws the seller was not aware of or disappear completely. It is not unheard of for a company entering into a contract with the wrong party within a company's organisational structure and finding out after delivery of the products or service that they can't collect the receivable. While developed markets can pose similar risks, the regulatory and financial reporting laws often provide a clearer path to success.

In today's markets there is potential for information overload and the vital clear data can be lost in the mix. Clients need to have advice on seeing through this fog of data and accessing the material which is key to their sales. What on-going research and analysis is done to develop products and services?

It's true that today we have access to more information than we have ever had before. However, all that information is of no use if it is not the right information, we need to make smart decisions. Even if it's the right information it's not terribly helpful if it's buried in a sea of other input. While we want to try and simplify the flow, we also want to make sure that customers receive all the available information they need to make smart business decisions. This is especially important when the message is that a buyer represents an uninsurable risk.

Finding the right information and interpreting it is where credit insurers and collections agencies play a vital role. Atradius for instance has access to information on over 200 million companies around the world. We are able to tap these resources to automatically provide our customers with decisions on credit limit requests in most situations. But it is not just the access to this information, it is our experience in analysing the various pieces of information about the market, the sector, the buyer and, very importantly, the payment behaviour of the buyer not just with the customer, but with other suppliers as well to determine the risk that they will not be able to pay their invoices. We have actuarial teams dedicated to studying this type of information and building models that predict the likelihood of default of our customers' buyers.

Fortunately Atradius also has a close and positive working relationship with its customers and business partners. We listen to them, and we are therefore well aware of what they need and desire. As such we develop and improve our products and services to help them meet their needs and improve their credit management. A very good example of this is the 2015 introduction of Atradius Insights, an online business intelligence platform that we built together with our customers. This tool not only improves the performance of our clients in their portfolio and credit management, but also shows business opportunities and identifies risks. Additionally, we have regular contact with dedicated local customer panels that support and advise us in our product development.

Each sector has areas of importance that need due consideration specific to their industry and goals. Expertise in these areas is needed to understand local conditions and concerns. Can you provide examples from different sectors and explain the varied approaches and requirements?

Our approach to assessing credit risks from sector to sector is quite similar. We employ a top-down approach starting with macro-economic factors and then looking at the micro-economic factors or factors that specifically impact the industry and the company.

Certain factors, for instance commodity prices, can have a completely opposite impact on two businesses for which they are important. For instance oil or metal prices. When they decline, suppliers suffer, but the buyers or users of

the commodity, companies like construction companies or plastics companies, benefit from the price reduction. Even this is not a steadfast rule as buyers who have already ordered or are sitting on stock at a higher price may find themselves in a margin squeeze if they are forced to sell at lower costs while they are working through higher cost raw materials.

If you look at the construction industry you might be looking at financing, whether the contractor owns the land, percentage of the project that has already been sold, what covenants have been agreed by the bank and whether there is sufficient room under the covenants for flexibility. With pharmaceuticals there will be more focus on things like patents, market potential of the product and again funding. Right now with the dramatic shifts in exchange rates, currency movements are an important consideration for any company for which foreign sales are important.

The bottom line is that our underwriters have a lot of sector experience, industry and specific buyer knowledge and sophisticated models available to them that help them assess the risks associated with payment default for a company. With this we are able to provide Atradius customers with a great deal of value.

In terms of efficiency, it is of great benefit to plan for separate markets on a group basis. Where this is possible, companies will obviously wish to consider this approach as an option. There are of course concerns and potential pitfalls which need careful thought. Can a unified policy be issued as a single tool for a global player?

Global businesses often have unique needs depending on their global footprint. Their businesses will operate out of multiple countries but maintaining different credit management contracts can lead to gaps in or inconsistent coverage of their receivables risks. Sure you can have separate arrangements with different units within one inter-

national insurance agency, but this can sometimes lead to inconsistent performance of your insurers and less than optimal communication across your risk platform. We believe it is better to have the option of working locally with people who have intimate knowledge of the local market and the relevant risks, but with an umbrella policy that provides consistency in contract terms, transparency and complete sharing of information between all account teams across the world, plus local representation and contacts in the markets that the customer is located. In this way everyone working on the account has the same information and can seamlessly support the customer with the most up-to-date information.

Arlington, Texas: at the centre of it/all

Arlington is quickly becoming a hub for engineering, advanced manufacturing, technology and medical science industries, the Office of Economic Development writes "At the centre of the largest metropolitan area in the state ranked best for business, home to three professional sports teams, the largest business park in North Texas, and one of the fastest-growing research institutions in the United States, there's a lot happening in Arlington, Texas."

Mayor Jeff W Williams, City of Arlington

rlington is geographically located at the epicentre of a thriving North Texas region, one of the top economic engines in the United States. Its strong economy, competitive business environment and skilled, diverse workforce make it a prime location for global investment.

Arlington's assets have put it on the world stage. Built on a legacy of bold choices and can-do spirit, Arlington is home to state of the art facilities such as General Motors Assembly Plant, the University of Texas at Arlington, the Texas Rangers' Globe Life Park, Six Flags Over Texas, and the Dallas Cowboys' \$1.2 billion AT&T Stadium-the most technologically advanced stadium in the world-which holds the record for the largest attendance at an indoor concert in North America.

Arlington welcomes over 8 million visitors each year and truly has something for everyone. "Arlington's Entertainment District keeps the adrenaline of the community running and creates positive impacts on the local economy," said Bruce Payne, Arlington's Economic Development Manager. From thrill-seeking visits to the amusement park to major league ballgames and word-class events, Arlington is sure to continue its reign as the 'Entertainment Capital of Texas.'

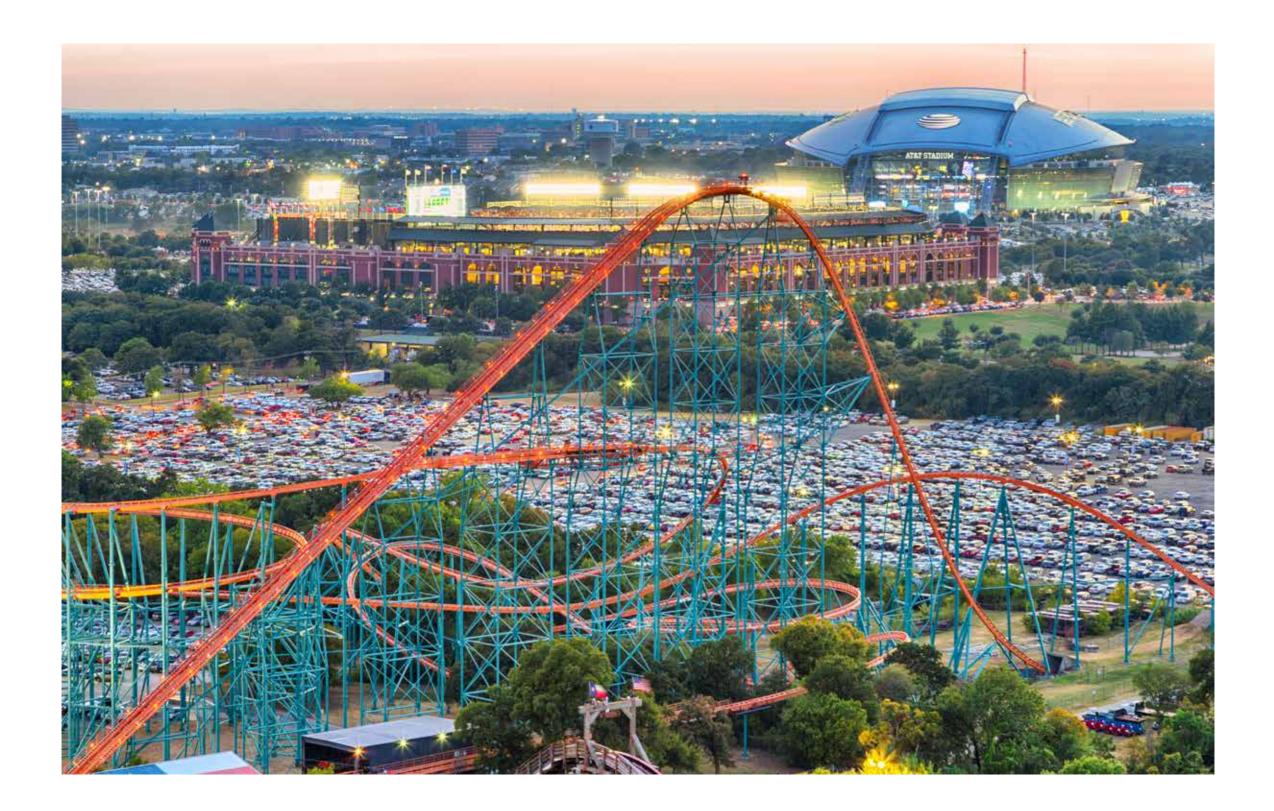
Arlington: globally connected

Arlington's enviable assets don't stop at entertainment; it is perfectly situated and known for its unparalleled access to the entire Dallas-Fort Worth Metroplex. Arlington is only 8 miles away from Dallas-Fort Worth International Airport (DFW International), the 4th busiest airport in the world. DFW International provides direct flights to over 200 destinations, including 60 international destinations. Unlike many major airports, DFW International supports 24-hour-a-day/seven-day-a-week operations. Arlington's direct proximity to the airport is an extraordinary advantage for business attraction. DFW International is four hours or less by air from every major North American market, providing Arlington highly valuable connectivity to domestic and international markets.

In addition to being a gateway to DFW International, Arlington is home to the region's corporate airport of choice. Designated as a reliever airport to DFW International, the Arlington Municipal Airport supports a full range of general aviation—corporate, cargo, charter and recreational aircraft operations.

Arlington is positioned along Union Pacific Railroad's main transcontinental route, intersected by two major interstates, and within close proximity to multiple major air cargo facilities. Logistically, it is an obvious choice for business investment. Located directly to the east of Southern California ports and due north of major Gulf ports, Arlington is well-positioned to support movement of products and services to high-growth markets in Asia as well as Europe.

We want to help you make your business case to invest in Arlington



Arlington: quality education and skilled workforce

From the centre of a metropolitan area boasting 12 major universities and a regional workforce of over 3.8 million, Arlington businesses can draw talent from 360 degrees. But, with that said, there's no real reason to look beyond the city's borders.

Quality education is a top priority in Arlington, a place where a student can excel from kindergarten to a PhD without ever leaving the city. The University of Texas at Arlington (UTA), the second largest institution in the University's system, has over 37,000 students representing over 120 countries. UTA is a growing research powerhouse that provides businesses with a steady supply of talent. The institution's research activities and engineering strengths are assets for the continued development of the region's aerospace, advanced manufacturing, and technology industries.

Arlington partners with Workforce Solutions for Tarrant County to offer workforce improvement services to job seekers and businesses of all sizes. The award-winning programs and services offered connect businesses with qualified job seekers through workforce development activities including, customized, skills-based training; recruitment, pre-screening, and placement services; and other special programs. Workforce Solutions serves over 38,000 employers and a civilian labour force of over 980,000 annually.

Arlington means business

Arlington was recently branded as 'The American Dream City' and for many that means great opportunity. Arlington is quickly becoming a hub for engineering, advanced manufacturing, technology and medical science industries. Texas Health Resources, one of the largest health care systems in Texas, L-3 Communications, a leader in the aircraft simulation and training industry, and Progressive, a global player in the aerospace industry, represent just a few of the key investments being made in Arlington.



Located in Arlington for over six decades, the General Motors Assembly Plant is the only facility in the world that builds GM's award-winning, full-size SUVs. Through the efforts of the City Council and the Office of Economic Development, a true partnership has developed over the years. GM continues to believe in Arlington, and recently announced a \$1.4 billion investment in Arlington Assembly-the largest single facility investment in the United States this year.

"The City of Arlington is dedicated to attracting, retaining and expanding businesses like GM that are committed to bringing quality employment and capital investment to Arlington," Payne said.

Arlington: where dreams get done

The city takes prides in its business community and is strategically positioned to ensure that businesses from across the globe have the space, resources and assistance needed to help them realize their dreams in Arlington. The City is equipped with the necessary tools to respond to global opportunities, offering a tailored approach to meet each need. *"We want to help you make your business case to invest in Arlington,"* Payne said.

In Arlington, the possibilities are endless. It's a place where convenience and comfort can coexist, side by side. A place at the centre of it all, where living is affordable, talent is plentiful, and education is top-notch. A place where aspiration, collaboration and hard work get dreams done.

Office of Economic Development, City of Arlington

30 years of success



World Commerce Review spoke with Amber Kelleher-Andrews talks about how her company finds love for top-level executives For 30 years Kelleher International has been creating exclusive matches. In a Q&A with *World Commerce Review*, Amber Kelleher-Andrews talks about how her company finds love for top-level executives

What can a potential client expect in the initial discussions?

Expectations are different for everyone. Most expectations are set during the initial introduction period with Kelleher over the phone or Skype. A large percentage of our potential clients come from current client referrals. When a happy member refers someone, this new individual comes in with a wealth of knowledge about Kelleher and is excited to begin the process. That said, others see us in the airline magazines, articles like the *New York Times* or *Forbes Magazine*, and on various news outlets such as the BBC, ITV or American television. When an individual such as this only knows us from press coverage, we slow down the process, and start by learning more about who they are and why they have reached out to our search-firm in particular.

This initial phone call is what we call our 'discovery'. This discovery process is very important for both parties. We discuss Kelleher International's 30 year history in business, because we are the most experience matchmaking firm out there, and this obviously helps when making a financial commitment. We talk about our high success rate but are very realistic about the process not working for everyone. Each member's experience is a very personal one and is therefore different from the next.

Most importantly, we talk about the individual, where they are in their life, their goals, aspirations, career and relationship status. Essentially, we are looking for a 'match' for our organization when we interview a potential client. The more positive they are in life, the more they will attract like-minded individuals and the more matchable they become. We aspire to hold the largest membership of passionate, eligible attractive singles on the globe. In doing so, it has made our job much easier when searching for compatibility, love and true partnership from within our membership database.

What are the common questions asked?

Everyone is interested in *"how we do what we do"*. They ask about the process. *"How do we find each match?" "Do we meet them in person"* and *"how do we screen"*. Often the question comes up around *"what makes us the most success-ful matchmaking firm in the industry?"* I truly believe that our secret sauce is in our clientele and we start from there. We have focused for three decades on building this vibrant calibre of eligible single men and women. Our members are passionate, successful, interesting, worldly, emotional stable and ready for a life partner.

If you are single, you learn quickly that timing is everything, and as matchmakers, we specialize in timing. It is the sweet spot that carries a lot of weight when it comes to finding love. We meet everyone in person, screen and vet each candidate. On-line services get brought up often with questions around comparison. People share with us all the time the frustrations around random dating and dating apps and how they are filled with non-committal, semi-depressed people who are just looking to 'hook-up'.

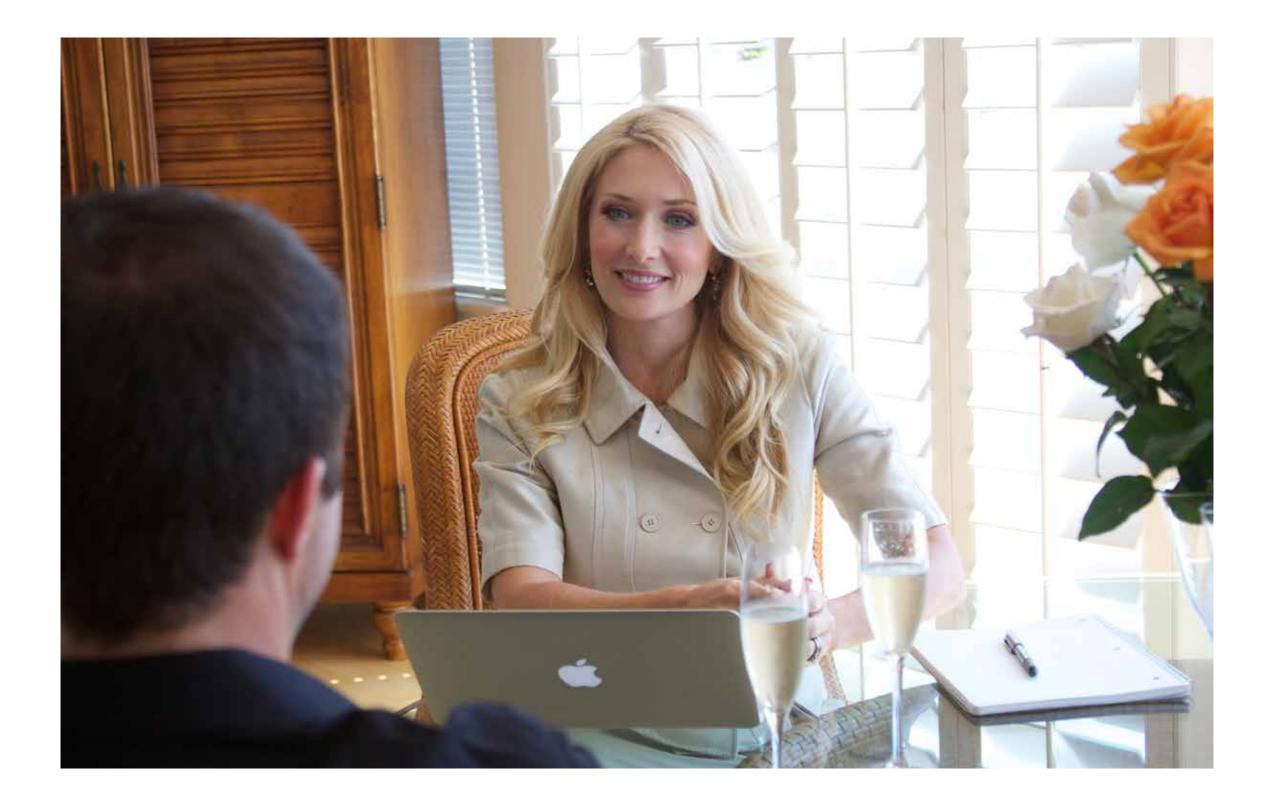
We aspire to hold the largest membership of passionate, eligible attractive singles on the globe. In doing so, it has made our job much easier when searching for compatibility, love and true partnership from within our membership database I love these questions during the discovery period because we work in such a different world than this with our members, that I always find it hard to imagine that people out there still subject themselves to such useless plat-forms as poorly-designed dating apps to find emotionally stable partners.

As the process proceeds what can a client expect to happen?

Following our in-person meeting, we tailor the membership based on the client's needs. To do this, we discuss membership options and various matchmaking teams. Since we are a global company, we begin with which locations to search from within and design his/her matchmaking teams accordingly. It starts with how wide a net each member wants to cast, city by city, which directly corresponded with how many matchmakers will be searching on his/her behalf.

For example, if you wish to be matched in both London and New York, you will have two matchmakers assigned; one international and one domestic. They will be familiar with the local databases in his/her cities of choice. If one prefers a local search in one city, or maybe a global search, they meet their matches accordingly.

Once the actual matchmaking begins, we discuss in detail the profile and criteria of each introduction. There are no blind dates here, which busy people really appreciate. Education, age, location, family values, religion, politics and even sibling order are part of this conversation. Our job is to bring each person to life by creating a compelling profile that accurately describes them. Next they meet their match! Our introductions are never coffee dates, we screen everyone so members don't have to.



They can expect a real match with an attractive, accomplished, compatible individual. Most share a lovely dinner together, which gives them time to get to know one another. After the introduction takes place, we look forward to discussing the date the following day. This 'feedback' is essential to the Kelleher process. It is from the feedback that we learn about personality traits, preferences and chemistry. The more we learn about our clients the better our matches become.

The rewards come when our clients send us an engagement announcement or invitations to their wedding. We also love to add photos of new born babies to our family dashboard at our headquarters. It's a very special relationship when you are acknowledged for bringing others such bliss and happiness.

A client is successful in his field but shy-how do you handle this?

It's interesting that you mention 'shy' because in my experience I find that some people can be very dynamic in their work and yet they can be shy or reluctant to be equally confident dating-especially if they are attracted to the individual at first sight. Kelleher guides everyone in their own unique journey, and since we don't put dates together randomly, much work goes into the process of selecting a compatible counterpart.

Very successful people in all aspects of their lives often have the hardest time finding a lifetime mate. Most rely on their friends, who are already involved or married, and their circle of singles keeps getting smaller and smaller. Some start to wonder if they may be too picky. We have been successful in finding relationships for these picky clients because of our huge database and their never-ending supply of eligible, single men and women to choose from. Again it is our secret sauce; memberships go to clients who are interesting and interested, educated, fit, successful, selective, and yes, dating, but too busy to find their elusive mate on their own. If they happen to be shy at first, it usually doesn't last long.

Typically how long does the process last?

Our memberships range from one to two years. In most cases we are successful in identifying their perfect match in this time frame. We do allow for our clients to place their membership on hold at their leisure, so this can extend the membership term as well.

We encourage successful matches to get to know each another better. To do this they have the option to go 'on hold' and have fun pursuing the relationship without losing any contractual time. It's nice for clients to know that we understand that they are not in a rush but rather appreciate the various relationships that develop through our unique introduction process. It's a tremendous learning opportunity for growth in oneself, even if the match isn't the one they marry in the end.

In fact, we have had several business partnerships come from introductions, huge foundations have been created, and a wonderful community of passionate change-makers that continue to stay in touch. In many respects, our introductions are making impactful investments together and getting into social and humanitarian causes globally, all stemming from their extraordinary connections.

How does the Kelleher approach differ from the herd?

Kelleher invented the concept of commercial matchmaking back in the early 80's. Thirty years ago video-based dating services were just starting to get noticed, but matchmakers did not exist... unless you go back to the Yenta's of your Jewish neighbourhoods. When my mother, Jill Kelleher, founded Kelleher International she was essentially ahead of her time.

Since we are known for being the first, we have been fortunate enough to be considered trail-blazers of our industry. I like that and it keeps me on my toes, always redefining how we can improve on what we do.

Matchmaking has become quite popular over the last 10 years and we have had fun watching the changes within this industry and learning from our growth as well. As my mom says, "We have come a long way, baby!"

I think that our members like that. Even though we had had huge opportunities to grow faster, we chose not to become a franchise. Creating a safe, confidential company where clients can appreciate the personalized touch and discretion always came first, and still does. We have grown but at the same time remain in many ways the original boutique mother/daughter matchmaking company that began in San Francisco 30 years ago this winter.

Kelleher International is now one big family. Our associates and representatives and clients are so much fun to work with. I love our team of matchmakers. I love that they are so dedicated to the process of relationships and happiness. Because of them and our success, we have grown across the United States and into Europe and we are awarded *Best Global Matchmaker* year after year.

Kelleher's success is apparent-what do you put this down for?

When two people put their membership on hold, we wait with sheer anticipation for the outcome. Not everyone wants to get married, especially if they have been married before and their children are grown. But they are all looking for love and want a rewarding, sensual partnership with their equal.

Many come to us to prevent themselves from making the same relationship mistakes over and over again. I had one male client just tell me recently that he was joining Kelleher *"to protect him from himself"*! I had to laugh, yet it probably rings true for so many. Not everyone is good at picking for themselves.

Success for us is different in each person we bring on board. It's their version of success that we find success. If the match doesn't end with wedding bells or riding off into the sunset, we begin again. This to me is one of the high-lights of having a strong matchmaker on your side.

Our team is ready with a new introduction for you! On your own, a break-up can be a difficult time... feeling alone and having to go back to your friends, or bars, churches or wherever you can, to meet someone single again and start all over. But our matchmakers already know you and know your criteria and preferences and are literally standing by.

We love and believe in what we do. My mother, Jill says, "Someone once told me that every time a marriage happens, whomever put the happy couple together gets a pair of 'Angel Wings'". She likes that.

What stories can you tell us about that would interest our clients?

This just happened last week. I was searching for a client who lives on the East Coast and I came across a profile in our database of a very interesting gentleman who appeared to be an excellent match for her, but he lives across the pond. He had sent in information about himself but hadn't yet joined.

As I read more about him, I knew my instincts were right and that we should move forward with this introduction, but I was concerned that she would not be open to the distance. It was a stretch to suggest someone outside of the country but it screamed the perfect pair.

I contacted him first to see if he would be available and interested in meeting our beautiful East Coast client. He responded positively and was interested in her profile. Turned out he was actually an American from the East Coast as well. In fact, he was moving back to the East Coast within six months. He explained that while his current home is in London, he travelled back and forth on business and would be delighted to meet her during his next trip. They decided to meet with her over the Thanksgiving holiday.

Last week, following Thanksgiving, we received the wonderful news that they completely hit it off. In fact, they spent the entire weekend seeing each other and already plan to spend the Christmas holidays together. When I spoke to our client, she sounded like a giddy school girl. He said he *"couldn't believe we could do this and out of no-where"*. He was grateful we considered him and as successful and attractive as he is, he said that he hasn't meet a women of this calibre in years. She was just the type of woman he was looking for.

It's hard to keep up with all the fun stories like this. Perhaps one day we will assign a job in-house to do just that... keep track! My mom and I have always wanted to start a newsletter called 'What's The Buzz' and keep everyone posted on all the love that goes around and around. Who knows, if I get enough time someday, I'd love to write a book on all this wonderful insight into relationships and actually what makes people tick. Until then, it's just what we do!

"Aviation Malta - Open for Business"

The Malta Business Aviation Association (MBAA) aims to promote excellence and professionalism amongst our Members to enable them to deliver best-in-class safety and operational efficiency, whilst representing their interests at all levels in Malta and consequently Europe. The MBAA will strive to ensure recognition of business aviation as a vital part of the aviation infrastructure and the Maltese economy.



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3D printing: unleashing the magic

Martina Ferracane argues that policy makers should engage in a proactive regulatory dialogue and implement a framework to aid the development of a technology that is set to shake and reshape our reality

"Every once in a while a revolutionary product comes along that changes everything"

Steve Jobs

Not quite science fiction

The 'replicator' was a futuristic gadget proposed in the '60s in the Star Trek series. The machine could rearrange subatomic particles to form any object, from food to spare parts to repair the ship. The show plot took place around the 2260's, but 3D printing has made the replicator a reality already today. This technique enables the creation of threedimensional objects starting from a digital model. The 3D design is sliced digitally and successive ultra-thin layers of material (which can be as diverse as metal or ceramic) are deposited one on top of the other until the three-dimensional object is created.

This process of 'additive' manufacturing is a diametric contrast to the traditional manufacturing processes, which are fundamentally subtracting material and typically produce waste while casting, moulding, forming, machining and joining a part. Given the nature of additive manufacturing, there are barely any economies of scale, making it particularly well positioned for customisation of products to fit the specific characteristics or preferences of an individual.

As the range of materials suitable for printing expands and the technology keeps advancing, 3D printing is positioning itself as a *"viable alternative to conventional manufacturing processes in an increasing number of applications"* - as reported recently by McKinsey. Several products are already being manufactured and customised through 3D printing, while the prototyping of food, drugs and even human organs is moving at a staggering pace.

The magic of 3D printing

3D printing allows to bring the customers in direct contact with the companies, taking manufacturing into a whole new era of customisation. Beyond expressing a preference between a set of predetermined options (colours, sizes or add-ons), the customisation of the vast majority of the products manufactured today has normally been out of scene. In fact, a tweak in most of the products manufactured with standard manufacturing would imply a big readjustment in the manufacturing facilities. However, additive manufacturing allows the companies to accommodate a specific size or configuration request by simply modifying the digital file of the product. As a result, 'mass customisation' becomes commercially viable.

The possibilities in this area are numberless. They go from online customisation of basic products such as lamps or shoes to printing of human organs using the patient's stem cells, through personalisation of drugs based on the genetic data of the individual or the creation of smooth food for people with impaired mastication.

Policy makers should engage in a proactive regulatory dialogue and implement a framework under which 3D printing can achieve the status of a legitimate form of production

The rapid uptake of 3D printing in the shoe market makes a clear case for the potential to create new value through customisation. Several shoe companies, including Nike, Feetz, and United Nude, are now using 3D printing technology to give customers shoes that are custom made for them. The process starts by creating an accurate 3D model of the person's feet through the use of 3D scanning technique. Today, this can be done economically through mobile apps-thereby also offering the possibility for the customer to became an integral part of the manufacturing process by providing his/her own data. This information is then combined with details about the customer's height, weight, and activities they engage in. After inputting all the data, the customers receive a personalised pair of shoes tailored exactly for them.

The same transformation is set to happen for other products, such as jewellery, dresses, car dashboards, parts for jet engines, replacement parts for synthesisers, electronic parts, or drugs. Other interesting examples of functional customisation can already be found in the medical sector, where, for instance, the Belgian company Materialise is printing customised prosthesis.

Beyond allowing for mass customisation, the flexibility of additive manufacturing makes it possible to create objects of great intricacy in their internal structure, which would not be feasible to manufacture with standards techniques. In this way, limitless opportunities are opening up for new designs which add strength to the object, while reducing the amount of material needed to produce a functional product (savings can be as high as 90% of material). General Electric, for instance, is printing jet engine brackets that weigh 84 percent less than their predecessors and nozzles which are five times more durable and two thirds lighter than before, allowing for savings in fuel costs estimated to be up to \$1.6 million per airplane per year.

Another example presenting the revolutionising potential of this technology to create complex structures - and perhaps the greatest application of 3D printing - is bio-printing. It consists in the layer by layer deposition of cells

into a 3D gel to create functional three-dimensional tissue and organ constructs. When it comes to transplants, waiting lists are often deadly long. Not only is there an insufficient number of organ donations, but the transplant recipient's immune system is most likely to reject the organ-and therefore careful attention has to be dedicate to finding a donor whose immune system might fit the recipient. By printing the organ, however, most of the problems associated with donations can be bypassed. The time it takes for the entire process of printing an organ is relatively short compared to the time spent waiting for the right donor. Moreover, the use of the patient's own stem cells as a basis for the print eliminates the risk of rejection.

A 3D bioprinter deposits multiple types of kidney cells—cultivated from cells taken by a biopsy—while simultaneously building a scaffold out of biodegradable material. The finished product is then incubated. The scaffold, once transplanted into a patient, would slowly biodegrade as the functional tissue grows.

Researchers are currently looking mainly into 3D printing of specific living parts, such as kidneys, ears, blood vessels, skin and bones. However, the research is likely to spread to other areas shortly. Today, every 30 seconds a patient who could have been saved with tissue replacement dies instead. By cutting organ donors waiting lists to zero, 3D printing would produce an incredible value for the society.

This overview shows how diverse the applications of 3D printing for direct product manufacturing can be. McKinsey estimates that 3D printing of final products can cover up to 50% of products in relevant categories by 2025, with up to 80% value increase per product when the consumers decide to use themselves a 3D printer. Beyond final product manufacturing, this technology is also facilitating the production process through tool and mould manufacturing and promoting product innovation through rapid prototyping.

Setting the priorities right

Both technical and regulatory barriers are slowing down the diffusion of 3D printing today. Technical limitations comprise mainly slow build speed, limited object size, limited details or resolution, and high costs for materials and printers. However, rapid progress is being made in all these areas. The Department of Energy's Oak Ridge National Laboratory and machine tool manufacturer CINCINNATI® Incorporated recently announced a partnership for creating a 3D printer with 200 to 500 times the speed, and 10 times the size, of most current printers. Carbon3D has also recently pulled in \$100 million in new funding to bring to the market a 3D printer which allows to print functional parts at 100 times the speed of existing printers. Moreover, several patents for technologies such as laser sintering will expire soon, thereby spurring additional competition among manufacturers of 3D printers. This will, in turn, drive new players also in the market for printing materials, providing a downward push to the prices.

The major challenges for widespread adoption of this technology are rather stemming from the strong legal uncertainty surrounding these technologies. For 3D printing to achieve its full potential and to prevent the creation of a fragmented market, a series of interventions should move up in the policy makers' agenda.

Intellectual property rights (IPR) issues are those most likely to arise in the short term. The border between what entails a violation of IPR and what instead falls under the fair use definition is not clear today. It appears unquestionable that if an object owned by the user breaks, its owner can make use of 3D scanning and 3D printing to repair it. On the other hand, if the file used to 3D print the spare part is downloaded from the web, it can be considered as owned by the company that makes the part and it therefore might entail an IPR violation. It would also be hard to define who is liable in case of a copyright infringement. It could be the person who downloads the file, the platform which shares it or the company which performs the print. The situation gets more complex if the user buys online a file which was uploaded unlawfully, believing that the provider of the file was actually the rightful one.

Shedding light on these issues is paramount for the commercialisation of 3D printed objects and will become more of an issue as the activity moves from the hobbyist community to mass production. In the lack of policy guidance, several 3D printing manufacturers are dealing with the issue today by refusing to print objects which clearly entail an IPR violation and are asking the users to agree to a contractual clause which relieves them from any responsibility. In addition, striking the right balance will be complicated by the fact that the digital files downloaded from the web are often tweaked to such an extent that they become new objects, and therefore simply uploading the file does not entail that the object will be printed in the same format in which it is uploaded. Given the international nature of platforms for sharing files for 3D printing, it will be required a global response to these issues, and the current IPR regime is certainly not optimally suited for such an approach.

Another challenge requiring policy attention relates to the imposition of tariffs and other duties. Leveraging on the argument that downloadable files (music, film, games) can be made into a physical object (burnt on a cd/dvd), the WTO tends to treat these files as goods (and therefore governed by GATT) rather than software (which would be governed by GATS). This argument is hardly applicable to 3D printing files. In fact, contrary to the case of a digital song, the file cannot be directly 'consumed'. Only if the file will actually be printed and the print will be functional, there is a case for imposing a control in terms of tariffs and tax collection. Moreover, the same argument presented above complicates the situation. Are duties on a digital file defendable if that file can actually be easily tweaked and turned into a different object?

Conformity standards and testing (including legal liability) of 3D printed objects also urge a regulatory discussion. First of all, additive manufacturing makes necessary to rethink the general rules on the certification process of 3D printed products. As each product is slightly different from the other, it is hard to implement the same rules applied to the current standardised manufacturing system. The diffusion of mass customisation in the medical sector represents a clear example in this regard. Today, thousands of 3D printed invasive and/or implementable medical devices are being implanted. These devices include artificial limbs, cranial implants and other prostheses and implants manufactured by means of additive manufacturing technology. However, 3D printed medical devices are not explicitly regulated today and the situation does not change under the recent European Commission proposal for the Directive on medical devices. As a result, all 3D printed medical devices would likely fall under the category of custom-made devices. If this were the case, the regulatory burden on this new technology would remain low, as manufacturers would only be asked to ensure that their devices are safe and perform as intended. The lack of clear and safe framework to regulate 3D printed medical devices would delay their adoption and hamper the possibility to build trust in this technology.

On the other hand, the standard certification process for devices classified as medium or high risk does not fit with the nature of 3D printed devices. In fact, in the case of printed devices, the quality of the finished products relies heavily on pre-manufacturing steps of the patient-specific medical imaging and the design of the device. Appropriate quality requirements should therefore encompass, other than the printing process itself, also the evaluation of the imaging and the digital design phase. Regulating input materials and machinery will not be enough to ensure the safety of the final product and might actually create counterproductive burdens.

In addition to certification issues, there is the problem of legal liability. Today, most of the products are subject to strict production standards and testing, with manufacturers held liable in case of accidents arising from product malfunctioning or inappropriate break. However, if a product is downloaded from the web and then 3D printed at home or in a print shop, it is not clear who would be liable in case of accidents. It could be the designer, the website which shared the file, the supplier of printing material, the manufacturer of the 3D printer or the person who performs the printing. Finally, there are other key health issues which should also be addressed. For instance, they com-

prise the necessity to control the safety of certain materials (especially when they are used to create objects that will get in contact with food) and the emission of ultra-fine particles during the printing process.

All these issues are being overlooked today by European policy makers. A proactive regulatory discussion will allow to rethink the nature of digital products and the concepts of IPR, taxation, product certification and legal liability in the digital age, while ensuring a global action in support of innovation. In case of inaction, our current regulatory framework would work de facto as a barrier to innovation.

3D printing is a technology that has "the potential to revolutionize the way we make almost everything"

Barack Obama

Disrupt or be disrupted

From a wider economic and societal perspective, 3D printing fits within a wave of technological innovations that recently hit the market and which are set to shake and reshape our reality. While 3D printing alone will not disrupt our entire economy, we are likely to see a radical transformation of entire sectors in response to widespread adoption of this technology. In some cases, this will result from the close interaction of 3D printing with other technologies. For instance, in the pharmaceutical industry, 3D printing and advancements in genomics are supporting the rise of personalised medicine.

For what concerns the manufacturing sector, a hybrid solution between additive and traditional manufacturing, is the most probable outcome. In some cases, the different techniques will co-exist, with 3D printing supporting certain phases of the production process, such as prototyping, production of moulds and tooling, direct manufacturing of spare parts, as well as on-the-spot 3D printing of broken machinery parts. In other cases, the adoption of 3D printing might disrupt the entire value chain of a company. This is the case for all those products whose customisation is made commercially viable by the use of 3D printing. As the traditional steps of the manufacturing process are replaced by direct manufacturing of the product, the concept of global value chain becomes obsolete. Therefore, as the manufacturing process becomes leaner and the companies start looking for a new and more specialised workforce, they might find more convenient to re-shore their production-thereby also facilitating a closer engagement with their customers.

Finally, plummeting costs for setting up the production system for additive manufacture will enable more and smaller companies to cost-effectively manufacture products on demand and in small batches, supporting the rise of urban start-ups engaged in manufacturing.

Summing up and on why we should look beyond GDP

Even if the direct cost of producing a product with 3D printing might be higher, the restructuring of the production process and the adoption of new business models allow for the total cost of production to be lower. By switching to additive manufacturing, the companies can achieve savings by limiting the waste of material, reshoring the production and thereby decimating transportation costs, and reducing inventory and facility costs.

At the same time, more value for consumers is created with personalised and customised products, while limitless opportunities are opening up for manufacturing of products with intricate internal structures. With the technology developing at a staggering pace, additive manufacturing is becoming commercially viable for a wide range of products.

Policy makers should engage in a proactive regulatory dialogue and implement a framework under which 3D printing can achieve the status of a legitimate form of production. Striking the right balance between ensuring the safety of this technology and avoid stifling the innovation will not be an easy task. However, a cross-border proactive collaboration to ensure a global regulatory framework would be a much welcome first step and would prevent the rise of a fragmented market resulting from the adoption of national solutions to issues which are intrinsically global. Clear regulation would enhance confidence in this technology and create the conditions for it to spread safely.

Digital fabrication has the potential to transform radically the functioning of certain sectors, spur innovation and produce great value for consumers. The manufacturing sector is likely to experience a re-configuration of the (global) value chain model into a new lean model in which a digital file is directly manufactured into a functional object.

This change will require a smaller but more qualified workforce, therefore creating the conditions for reshoring of manufacturing and the rise of urban start-ups. Being close to the customers, in fact, allows the companies to respond better to their preferences, while decimating transportation costs. In turn, the nature of global trade flows will also be impacted, as fewer intermediate and finished goods will be traded.

These developments alone will not change how our economy works today. However, together with the rise of the sharing economy, the open-source movement, the open data applications and other innovations, 3D printing at

home (also referred to as 'home fabrication') feeds into a wider economic and societal transformation which is challenging our model of market exchange.

These innovations are allowing consumers all around the world to benefit from an easy access to nearly free services and products, while more value is also created by customising the service or product to the individual preferences. Our conventional metric for measuring economic performance and wealth today - the Gross Domestic Product (GDP) indicator - fails to reflect the value resulting from these new applications. Most of these activities take place outside the marketplace or promote access to a product rather than ownership, resulting therefore in GDP shrinking rather than accounting for the new value being created. This argument feeds the wider discussion around how to measure wealth in the digital age. Digitisation and digitalisation are creating huge gains for people in all parts of the world, most of which is not accounted in GDP. While this metric was never considered perfect, with the digital age it might actually become misleading. Is it finally time to move beyond it?

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Africa at a fork in the road: taking off or off of the taking off or disappointment once again?

Ernesto Zedillo illustrates some of the ambitious but necessary steps needed to unleash the tremendous potential of the African people towards the development of their nations ot long ago, some called Africa's growth performance the worst economic disaster of the 20th century. Indeed, by any measure, African countries' economic record since around the time of the 1973 oil shock was dismal. The secular malaise of Africa's economy started to abate around the mid-1990s, becoming a new trend of growth revival by the early years of the present century.

By some indicators, the consequences of this shift are quite impressive. Since 2000, Africa's annual GDP per capita growth has averaged almost 2.5%, with sub-Saharan Africa averaging an even higher 3% and extreme poverty rates fell to 48.5% in 2010. Economic growth has fuelled meaningful progress in tackling a number of the continent's other key social challenges. Since 2000, under-five and maternal mortality rates have dropped, life expectancy has improved, near universal primary school enrolment has been achieved, and literacy rates have risen faster than in the past.

So what triggered and further fuelled the shift in Africa's performance? And—more importantly—is it sustainable or, alternatively, what is needed for Africa's development to take off?

Reasons for Africa's growth revival

The answer to the first question is clear – improved macroeconomic management, pro-private sector growth policies, population growth and urbanisation, opening up to foreign trade and investment, booming markets for natural resources, strengthened governance and rule of law, and a drastic reduction in conflict and political instability.

Some give special weight to political or geopolitical factors such as the end of the Cold War in explaining Africa's awakening. At that time, Africa's authoritarian regimes, feeling the pressure of liberalisation in Eastern Europe, started to ease their grip. More open and competitive political participation led to the emergence of more competent leaders and better policies that boosted macroeconomic management and took into account marginalised groups. Another cause was the rise of a new civil society applying pressure for better governance.

Two important features of Africa's structural transformation and growth are more orderly rural-to-urban migration and improved agricultural productivity. Because of these trends, Africa's ongoing transformation is more socially and economically inclusive than in the past.

External factors certainly played a favourable role in Africa's good economic performance, the most important being the spike in commodity prices that also led to rises in foreign direct investment. Rising commodity prices were bound to relax growth constraints on resource-rich African countries, attracting international investment. The commodity boom that benefitted many African economies cannot be explained without Chinese demand, spurred by that country's own economic boom.

How sustainable is the upturn in performance?

As reduced demand and lower commodity prices are followed, in all likelihood, by slower African growth, then most African nations will have only two options – either sink back into mediocre economic performance or embark upon more profound reforms to create other engines of economic growth.

To make African growth inclusive, the playing field must be levelled and this requires a system that provides justice and security for all Africans Even with the rapid growth of the last 15 years, vast numbers remain unemployed in Africa. This will only get worse as growth slows considering millions of young people will enter the labour market each year. The continent also still confronts extremely high poverty rates. Sub-Saharan Africa is the only region where the number of poor people continues to rise despite GDP growth, and where inequality is still rising.

Persisting structural weaknesses will restrict capacity to grow and some of those weaknesses have become more acute over the recent period of fast growth. The clearest, and most worrisome structural weakness is the dualistic nature of most African economies with informal sectors outside the fiscal system.

In low-income African countries, the informal sector generates half of national output, 80% of total employment, and 90% of new jobs. This is a problem for countries' economic growth potential, productivity, quality of employment, income distribution, and fiscal revenues.

Those in the informal sector are either self-employed or working in business units with very few people. When marginalisation from the legal system is combined with small size, the results are lack of legal identity, little or no capital, isolation from formal sources of credit and technology, and very limited markets, all resulting in very low productivity. In addition, there is evidence that, until 2005 at least, labour in African countries shifted from high- to low-productivity activities.

When job creation is mostly in the informal sector, the impact on GDP growth is much lower than it could be. It also means lower incomes and if these workers make up the majority of the labour force, this becomes a driver for wors-ening income inequality.

The fiscal implications are significant because the formal sector shoulders a disproportionate tax burden. It is not uncommon for Africa's large formal enterprises to provide more than 95% of tax revenue, while the informal sector contributes less than 3%. Increasing taxes and fees on a dwindling formal sector lead some firms to either close or become informal, creating a vicious cycle.

Since formal enterprises are the only source of fiscal revenues in many African countries, they carry a burden that makes them uncompetitive internationally with relatively high wages and unit labour costs despite Africa's low per capita income. After controlling for firm characteristics and country effects, African firms pay a wage premium of 50%.

In many African countries, trade policy exacerbates the problem. Large disparities in import tariffs and other trade restrictions give rise to massive smuggling, which relies on informal businesses and crowds out formal ones.

Other factors that may explain the duality include overvalued exchange rates raising the cost of wages, poor infrastructure causing high transport prices and an insufficient supply of electricity, barriers to competition that discourage the creation of new formal businesses, and insufficient and inefficient investment in human capital.

Governance

Africa has other structural weaknesses, but the one posing the greatest challenge may be the political one. Despite amazing strides towards democracy achieved across the continent since the 1990s, it is still somewhat fragile in many African countries. Powerful forces are at play that seek to reverse the political reforms that led to improved government policies and the recent economic boom. In many countries where term limits were adopted 20 or 25 years ago, those limits have been removed, or at least there is pressure to extend limits or abolish them completely, and political and civil liberties have weakened.

Overemphasis on the power of the ballot, without mechanisms to effectively distribute power to the people, is at the root of Africa's recent political volatility. The value of multiparty democracy declines if it encourages corruption, inequality, and societal fragmentation without delivering clean and accountable governments. This concern about the fragility of Africa's polity and governance should be taken seriously. Also pertinent are analyses showing improved democracy reduces the probability of growth reversals and cushions economies from reversals during economic instability.

Preserving and strengthening governance continues to be crucial for Africa, particularly regarding corruption. Any discussion of African development must include corruption, which continues to impede the rule of law, good governance, and state building. Any democratic reversal that reduces political alternation makes the pursuit of development more difficult.

Another aspect of governance that is crucial for the development of more than a few African countries is natural resource governance. Most resource-rich countries have substantial deficits in governance that result in poor resource management, causing not only their deviation from development purposes but also making the poor to be excluded from the benefits of that wealth. On present trends, the proportion of poor people living in resource-rich countries will increase to 50% by 2030 from 20% in 1990. Corruption is at the root of this trend, but corruption is itself the symptom of a broader institutional weakness and governance failure. This must be tackled and a good place to do so is in natural resource management.

It is worrying that a significant proportion of natural resources are misused in Africa, but this can be an opportunity for Africa's future development as revenues from natural resources properly managed could reach \$400 billion a year, by some estimates eight times development aid receipts. Better governance and management of those resources can lead to new economic activities, including downstream industries, resulting in higher GDP growth and generating better quality jobs on top of the fiscal revenues.

Agriculture

Africa is also home to 60% of the world's uncultivated arable land, so agriculture has a huge potential role in sustaining Africa's good overall performance of the last 15 years. Agriculture is also crucial considering around 70% of the poor are still rural.

Most African countries need to raise agricultural productivity significantly to achieve widely distributed economic gains. It will not be enough to increase yields per hectare, but rather, a multiplicity of other policy interventions are needed, including lowering transport costs, expanding credit in rural areas, and making reliable energy available to agricultural producers.

The goal must be to have sustainable and substantial productivity gains to have high economic growth rates, become more economically inclusive, create jobs for youth, and reduce poverty. The right strategy must focus on smallholder farmers, key geographies, staple crops and livestock, the adoption of key technologies and practices, and developing comprehensive regional food systems.

The entire agri-food system is important, not just supply of production. A holistic approach requires actions comprising natural resources, social networks, and diversity in genetic resources and farming techniques in addition to effective governance.

There are pitfalls in following rigidly general prescriptions when pursuing higher yields and productivity in the African agricultural sector. Successful interventions must take into account heterogeneity on the ground and should be

tested before being widely applied. Large-scale programmes introduced from above and purely state-led are likely to fail.

Participating in global supply chains

While agriculture is crucial to keep African economies moving forward, a dynamic manufacturing sector is also a must.

Workers leaving the rural sector traditionally have moved into the informal sector, not the formal manufacturing sector. There are estimates that Africa's working age population will increase by 70% over the next 15 years – there-fore, it is crucial to advocate active policies to foster African industrialisation. While Latin America's import-substitution model and Asia's export-oriented one may no longer be options for Africa, this is not an insurmountable obstacle given the changes that have taken place in global production, trade, and division of labour.

It is important to note the view best articulated by Richard Baldwin (2013) on the development implications of an essential feature of contemporary globalisation – the economic feasibility of unbundling complex production processes. As computing and telecommunication capabilities became cheaper, production dispersion in internation-alised supply chains has become cost effective and, in many cases, the only way to be competitive.

By assimilating off-shored links of the supply chain, developing countries can industrialise more rapidly without waiting to build the deep industrial base formerly required. Nations can industrialise by joining a supply chain rather than building an entire industry, which gives Africa a real opportunity to industrialise despite being a latecomer. The new industrial model, by virtue of decomposing production into a multitude of tasks, offers Africa the potential also to develop a formal service economy linked to modern manufacturing.

For this opportunity to materialise, much more must first be done to improve Africa's human capital. Despite the sizable resources spent on health and education, results are disappointing. There is a valid concern of whether human capital deficiencies are a chief obstacle for further development.

There is also the challenge of insufficient infrastructure. It is hard to see how African economies can move up the value chain without better infrastructure. African exporters pay some of the highest transport prices in the world. However, this will not be fixed just by building new infrastructure, but will require dismantling entry and other competition barriers and regulations. For African firms to have a serious chance, governments must also lower trade barriers and strive for African economic integration.

Conclusion

There are reasons to be both optimistic and troubled about Africa's development prospects.

African economies have come a long way and although nobody dismisses the role of favourable external conditions, much credit is also due to domestic conditions and decisions of Africans themselves.

However, recent setbacks illustrate how uncertain the African take-off still is. Now with headwinds from a more difficult external environment, like declining commodity prices and slower growth in key trading partners, most countries will need to reinforce or even redesign a number of their strategies and policies to foster employment and productivity while reducing their economic duality. The challenge is not just to restore the basic macroeconomic fundamentals, but also to embark on a structural transformation that goes well beyond the efforts applied over the last 20 years.

The most significant transformation needed consists of strengthening, and in some cases building, practically from scratch, the institutions required for lasting development. On this, foreign aid could be used actively to promote such institution building. Among all the necessary institutional reforms, the most urgent and important are those pertaining to the rule of law. To make African growth inclusive, the playing field must be levelled and this requires a system that provides justice and security for all Africans. This ambitious but necessary step would lead to more accountable and responsible governments and would help further unleash Africa's immense development potential.

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Africa's uncompetitive trade deals

The trade agreements that African countries enter into are in many cases undermining their development, rather than boosting it, William Gumede argues any trade agreements African countries enter into whether with former colonial powers and industrialised countries, and new emerging powers such as China, are in many cases undermining their development, rather than boosting it.

The European Union's Economic Partnership Agreements (EPAs) with former African, Caribbean and Pacific colonies which replaces trade arrangements between the ACP states which operated for three decades prior, is a case in point.

Last year, Günter Nooke German Chancellor Angela Merkel's Africa Commissioner rightly warned the EPA is doing the opposite of Europe's stated development policy for Africa. Speaking to German public broadcaster ARD on 4 November 2014, Nooke said the EPAs with Africa are in danger of cancelling development efforts by European countries. *"Economic negotiations should not destroy what has been built up on the other side in the Development Ministry"*, Nooke told ARD.

The EU's economic partnership agreements (EPAs) threaten African economies for a number of key reasons. It threatens African farmers and infant industries, as EPAs promote EU products and services entering African markets without any quotas or duties.

The EU's EPAs demand products from the EU to Africa to get the same level of government support in African recipient countries as locally produced products. The EU's EPAs expect African countries to abolish the requirement for local content in locally manufactured and processed goods. Yet it is crucial for African countries to build up local industries.

EPAs undermine African attempts to build local manufacturing capacities – as often heavily subsidized European products flood African economies.

The EPAs undermine individual African countries' ability to develop their own independent policies. One of the key reasons for the development failure in many African countries since they became independent has been their lack of freedom to come up with economic policies appropriate to their own circumstances - a handicap not restricting richer nations. Yet, only if African countries have the space to decide what policies to pursue can they, *"turn their economic gains into real productive capacity"* as stated by Supachai Panitchpakdi, UN's Conference on Trade and Development (UNCTAD) Secretary-General².

The EPA's also undermine Africa's attempts to pool their individual country markets, trading more with each other and to create a continent-wide free trade area from Cape to Cairo. This approach is integral to Africa's future prosperity.

EPAs undermine Africa's capacity to piggy-back off the rise of new emerging powers such as Brazil, India, China and Turkey who have rapidly become new investors and new markets for African products. As part of the EPAs African countries must declare the EU as 'most favoured nation' whose products should not be subjected to higher levies than those of developing countries.

Unless African countries come up with more competitive trade agreements with both industrial and new emerging-market partners, the continent is unlikely to break out of the cycle of underdevelopment In addition, African countries must extend all the benefits of any future trade agreements that an African country may enter into with other countries. This is not surprisingly seen by African countries as a way to prevent African countries from striking more competitive deals with new emerging economies such as India, Brazil and China.

In implementing EPAs, the EU has divided Africa into its own regions, completely undermining current African efforts at integration. But the EU also punishes all countries in a region, if one defaults on any part of the EPAs. For example, in the case of Southern Africa, the EU's EPA proposals to the Southern African Development Community (SADC), is that if an individual countries default on any part of the EPA in this region, the EU has the power to act against all SADC countries. Yet SADC is expected to reach a consensus if there is a trade dispute with the EU.

Those African countries which refused to sign up to EPAs terms and conditions were threatened to have their access to EU markets totally withdrawn. Namibia initially refused to sign-up, but was forced to back down as the EU threatened to bar market access to Namibian beef, grapes and fresh fish annually worth €30 million.

Swaziland was forced to sign up because the EU threatened to close its markets to the mountain kingdom's sugar and citrus – the country had nowhere else to go. Kenya was holding out for some time, but the EU punished the country by imposing import tariffs on some of the country's key exports effective 1 October 2014. Following the widespread job losses and factory closures, Kenya buckled and signed the EPA agreement.

African countries have little recourse for trade, economic and political disputes with the EU, specifically regarding disputes over EPAs. As former United Nations Secretary General Koffi Annan's Africa Progress Panel have noted: African countries are marginalized in the WTO's Dispute Settlement Mechanism³.

The United States African Growth Opportunities Act (AGOA) sets political and economic conditions for select African countries to export their products to the US. Under AGOA, the US signs trade arrangements with individual African countries, with often onerous conditions, rather than with regional blocs, which undermines African regional integration and the formation of regional supply chains. Former US Secretary of State Hillary Clinton has acknowledged that 'regional integration has gotten too little attention within the AGOA framework'⁴.

In 2010, the value of African products traded under AGOA reached \$44 billion. Close to 91 percent of the goods traded under AGOA was oil. Only 5 percent of African products exported to the US under AGOA were non-oil or non-apparel. Yet, Africans desperately need to move their products from raw materials to higher process and manufacturing ones, which create jobs and earn more income.

Import tariffs for raw materials from Africa such as oil are typically low in industrial countries like the US and the EU, but they increase dramatically with each state of processing. US and industrial countries' subsidies to their farmers often outweigh the supposedly beneficial access given to African countries that sign trade agreements with them - this is the case in both the US's AGOA and in the EU's EPAs.

Remaining colonial-era trade agreements are also restrictive. France still has punishing trade agreements with the bulk of its former African colonies dating from colonial times. These include that France has first right of refusal or acceptance on minerals discovered after independence in some of its former African colonies; and French companies had to be considered first when African governments award large contracts⁵.

Such obligations heavily undermine the long-term development of former French colonies. Mamadou Koulibaly, the Speaker of the Ivory Coast Parliament, in his book, *The Servitude of the Colonial Pact*, heavily criticised this post-independence arrangement which effectively keeps former French African colonies in bondage to the former colonial power.

At African independence, France insisted its former colonies remain in a currency union with it, by using the CFA franc (Communauté Financière de l'Afrique zone), which was created in 1945. However, to use the CFA franc, 14 former French African colonies had to agree to use the French Treasury to manage the system, with former colonies having to deposit 65% of their foreign currency reserves with the French Treasury, to 'stabilise' the monetary zone⁶. This has now dropped to 50% of their reserves.

Former French colonies include Senegal, Cameroon, Ivory Coast, Mali and Chad. France determines the exchange rate. According to the 2012 annual report of the Bank of France, reserves sat at US\$20 billion at the time⁷. Members of the CFA zone 'borrow' from France at commercial rates if they wanted to access their foreign currency reserves⁸. In practice, this meant that former French African countries, although supposedly independent, have restricted control over setting their domestic monetary policy – and therefore broader economic and development policy.

Alarmingly, African countries have also more recently struck very unfavourable deals with many new emerging powers such as China, India and Brazil. Most of the Chinese infrastructure investments in Africa usually are 'tied' to bringing Chinese labour, machinery and firms and foreign aid is linked to securing Chinese investment opportunities for Chinese companies, or political support from African governments for China global diplomacy positions.

Zimbabwean leader Robert Mugabe in August 2014 went to Beijing to ask for US\$10 billion financial bailout for the country's ailing economy. China gave Zimbabwe US\$2 billion loan, to build a power station, coal mine and dam, using future Zimbabwean mining tax revenue as security. For these Zimbabwe had to sign a commitment to use revenue from Zimbabwean state-owned companies to get loans from China's state-owned banks.

In 2013, the Gabon government took the Chinese investor, Addax Petroleum, owned by state-owned Sinopec, to the International Chamber of Commerce's arbitration court, after the Gabon government disputed small print in the

original contract between the Gabon government and Addax Petroleum, which blocked the Gabon government from selling an oilfield licence to a third party.

In 2014, South Africa signed a deal with Russia worth US\$50 billion, whereby Russia's Rosatom State Atomic Energy Corporation would provide up to eight nuclear reactors to South Africa by 2023. The reactors will be based on Russian technology. In the deal, Russia is likely to finance the deal, through a model of playing both the role as nuclear vendor and financier. In such an arrangement the Russian government provides a loan to SA – to build the reactors, which is repaid from the electricity tariff over 15 to 20 years.

Although African countries sign individual trade deals with many emerging markets, their products often still face restrictive tariffs. In fact, high tariffs barriers – whether regulations, health standards and licensing systems which are discriminately applied to African products, remain stubborn obstacles for African countries when they export to emerging markets such as China, India and Brazil.

Often, these emerging markets specifically put up barriers to high value added African products so crucial in Africa's industrialization. Business Unity South Africa (Busa) President Futhi Mtoba has pointed out how high trade tariffs barriers set up by India undermines South African business there⁹. These include lack of transparency in India's trade tariff schedule, and stringent licensing regulations and packaging rules.

New emerging powers such as China and India send labour intensive manufacture, and high-value added products, which creates jobs in their own countries - to Africa. This means they undermine Africa's ability to establish a manufacturing base – so crucial for jobs and economic growth. Already, many local African manufacturing companies, for example in Ghana, Kenya and Ethiopia, have to close down because of cheap Chinese and Indian competition¹⁰.

African countries need to review all their existing trade agreements and cancel or change the terms of restrictive ones. Unless African countries come up more competitive trade agreements with both industrial and new emerging-market partners, the continent is unlikely to break out of the cycle of underdevelopment.

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KAANSE RE The South African PIB: a case of the tail Wagging the dog South AFRICAN RESERVE BANK AC

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Azwimpheleli Langalanga discusses the objectives of the PIB and how it fits into the whole FDI regulatory matrix

hen South Africa reviewed its bilateral investment treaty (BIT) network it was to be expected that the current BITs, insofar as they belonged to a different generation, were going to be cancelled. What was not expected by the international community was that they will be replaced with a domestic statute called Protection of Investment Bill (PIB), ushering in a new era in which foreign investments will be subjected to a purely domestic regime.

In spite of an outcry from business and diplomats, the bill was finally presented to Parliament by the Trade and Investment Minister Rob Davies, and it is now officially waiting for the President to sign it before it becomes law.

Perhaps the most concerning issue that stands out from this Bill is that it deviates from the international investment law principles. The objective according to government is to align the PIB with the Constitution. Further, the state avers that this is being done because the Bilateral Investment Treaties were 'unconstitutional'. As a result, in South Africa`s view the PIB therefore cannot be used to codify what South Africa deems to be unconstitutional principles. The main components of the PIB which deserve attention are the exclusion of the fair and equitable treatment, the national treatment (screening) provision, and public interest. Maybe most importantly is the reliance that the PIB makes on the Constitution. This should naturally then shift attention to the efficacy of the Constitution to protect foreign investors from both a purely legal and political perspective.

The preamble of the PIB states that one of the main objectives of the statute is to create a link between Foreign Direct Investment (FDI) and industrial policy. The FDI therefore has to promote South Africa's industrial policy objectives. These objectives include job creation, economic growth, sustainable development and the well-being of South African people. In addition, the PIB provides that the government should be able to regulate in the public interest. Public interest is quite expansive in this regard. Emphasis is also placed on the need to pursue black economic empowerment.

The PIB in order to entrench constitutional principles makes specific references to sections in the constitution dealing with expropriation, just administrative action and international law. The South African Constitution generally provides for a standard of compensation that is lower than that found in bilateral investment treaties. It is disingenuous of the PIB to purport to offer protection through the Constitution.

In addition, the PIB replaces the international investment principle of fair and equitable treatment with a standard that obtains within the South African Constitution. This is the fair administrative action. What is also intriguing is the cross reference to the section in the constitution which deals with international law including customary international law. Standards of treatment such as fair and equitable treatment are part of customary international law. Section 7 of the PIB provides a 'screening' framework, albeit, lacking a constitutional framework. The PIB also has done away with the investor state dispute settlement system which it replaces with state to state arbitration. According

... the South African government has indicated that it is open to negotiation of investor state contracts with individual investors. This would be feasible with large firms and might not be viable for smaller and medium enterprises to the Department of Trade and Industry (DTI), foreign investors who are aggrieved have to 'lobby their governments' to initiate state to state arbitration. The DTI is well aware that a South African statute cannot bind a foreign government. This provision is therefore of no practical force and consequence.

Exhaustion of local remedies is also a component of the PIB. This means that investors have to subject themselves to the totality of the South African judicial process. South African courts suffer from a huge backlog in terms of cases. Foreign investors therefore run the risk of being disadvantaged by having to go through the local court systems. It is also important for foreign investors to anticipate how South African courts might interpret and apply the PIB. The potential attitude of South African courts to an issue such as expropriation can therefore be discerned from *Minister of Mines and Energy v Agri South Africa* which dealt with expropriation.

Expropriation/deprivation: AgriSA case

The South African Constitutional Court is one of the most respected and progressive courts in the world. Its judgments are often cited in US, Canadian, UK and other esteemed jurisdictions. However, the court reasoning in the (farmers lobby group) *AgriSA* case left a lot to be desired. South Africa follows a precedent system which implies that a decision of a superior court is binding on lower courts in similar facts.

Through *AgriSA* a group of commercial farmers and landowners challenged the government's decision to convert mineral ownership in the country from the old order to new order rights. The government policy in the Mineral and Petroleum Resources Development Act (MPRDA) was that landowners can no longer claim ownership of minerals found in his land by virtue of him exercising real rights on that land. Instead, under the MPRDA, minerals were to be held in trust by government on behalf of the people of South Africa. This conversion was challenged on the basis that the regulatory measures resulted in expropriation or what in international investment law would be referred to as constructive taking, regulatory taking, deprivation, measures tantamount to expropriation etc.

The challenge was mounted from the Pretoria High Court until it reached the Constitutional Court as a constitutional matter. The Constitutional Court was seized with having to determine whether the Government's regulation to convert mineral rights from the so called old order to the new order, amounted to expropriation and/or deprivation. Section 25 of the South African Constitution provides that no one may be deprived of property except through a law of general application, and further states that expropriation will be conducted within the law with below market value compensation. The Constitution does not define the terms of expropriation and deprivation. Such interpretation is left to the courts.

The Constitutional Court in a majority judgment arrived at an erroneous interpretation of deprivation. According to the Court, for deprivation to occur, to the extent that it triggers compensation, they should be state benefit. This decision has a policy effect that extinguishes the existence of regulatory takings in South Africa. Any situation in which the government regulates to the loss of foreign investors is not expropriation or deprivation as long as the state is not directly benefiting. This is one simple example that shows that South African courts are not yet ready to deal with complex international investment regulatory cases.

If *AgriSA* had gone to international arbitration, the outcome would have been totally different. International investment law does not make a distinction between expropriation and deprivation. The reasoning in this case was replicated word for word in the earlier version of the PIB. That section has however now been transferred to the Expropriation Bill, another contentious instrument which falls under the mandate of the Department of Public Works.

PIB within a regional matrix

South Africa is a key member of the Southern African Development Community. Questions have been raised on how the PIB fits into the whole SADC FDI regulatory matrix. This is because within the SADC, there is an instrument

that replicates a BIT prototype. This is Annex 11 of the Finance and Investment Protocol. The FIP has an ISDS system and all the standards of treatment including the fair and equitable treatment provision.

In order to bring the PIB to alignment with the FIP, South Africa has successfully lobbied other countries in the SADC to revise the FIP and make it consistent with the regional Model BIT. Such a revision will automatically result in the PIB being consistent with the regional instruments. Judging from statements from DTI officials, the process to revise the SADC Finance and Investment Protocol are at an advanced stage and the new version would be done by June next year.

South Africa has also indicated that the Tri-Partite Free Trade Area and the Continental Free Trade Area will both have an investment chapter. The SADC Model BIT has lowered standards of protection. One of the main features of the SADC Model BIT is its inclusion of the fair administrative action. This replaces the fair and equitable treatment. The SADC Model BIT has in many ways influenced the South African PIB.

South Africa Model BIT

After concluding the review of its BIT framework, South Africa indicated that it will negotiate BITs when there are 'political and economic' imperatives to do so. Further, South Africa indicated that it will draft a Model BIT to use in those future negotiations. The Model BIT process has apparently been put to a hold to allow the PIB and the FIP to be reviewed. However, DTI has indicated that the South African Model BIT will be informed to a great deal by the PIB. Investor State Dispute Settlement will not be part of the Model BIT.

What is encouraging though is that the Model BIT will be subjected to a public commentary process. Foreign investors can have a chance to input and maybe influence the process. Within South Africa itself, the need for BITs is becoming more apparent as the country's investors abroad are subjected to questionable decisions. The MTN fine

of US\$5.2 billion is an example of a case in which international arbitration would have been quite useful. In addition to BITs and the PIB, the South African government has indicated that it is open to negotiation of investor state contracts with individual investors. This would be feasible with large firms and might not be viable for smaller and medium enterprises.

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Intellectual property in Africa

Wayne Meiring looks at how companies can protect their intellectual property in Africa, discussing both opportunities and challenges In this article, we look at how companies can protect their intellectual property (IP) in Africa, discussing both opportunities and challenges. But first a few words about the continent and its economy.

Africa

Africa is the world's second largest continent and it has a population in excess of one billion. In many of the continent's 54 independent states colonialism has left its mark. There are, for example, English-speaking countries such as Nigeria, South Africa and Kenya, French-speaking countries such as Cameroon, Ivory Coast and Mali, and Portuguese-speaking countries such as Angola and Mozambique. In the north, Arabic is the main language.

Africa's economy

The term 'Africa rising' is often heard. It refers to the fact that Africa is the fastest growing economic region in the world, housing nine of the world's 15 fastest growing economies. The size of the African economy has more than trebled since the year 2000, and the IMF's growth forecast for Africa is 4.5%.

Although commodities are extremely important, consumer spending is also a significant driver of economic growth. There has, for example, been a dramatic increase in the size of the middle class in countries like Nigeria, South Africa, Egypt, Ghana, Angola and Kenya, and there is a huge demand for consumer goods in these countries. Foreign direct investment into Africa is also on the up, with the continent receiving some US\$128 billion in investment in 2014.

With a population of some 170 million, Nigeria is Africa's most populous country. It is also Africa's largest economy, with a GDP in excess of US\$510 billion. Africa's second biggest economy is South Africa, and its GDP is in the order of US\$370 billion.

IP Protection in Africa

General

Although IP protection in Africa has not always been easy, there have been significant improvements to the continent's IP statutes and systems of late. For example, IP laws have recently been modernised in a number of countries including Burundi, Djibouti, Ethiopia, Gambia, Ghana, Kenya, Libya, Mauritius, Rwanda, Seychelles, Uganda and Zanzibar. There have also been significant improvements on the technology front, with the IP registries of Nigeria and ARIPO now being able to offer online services. These are very positive developments.

International treaties

Companies wishing to invest in Africa will be encouraged to hear that most African countries have signed up to the major international IP agreements that industrialised countries belong to, such as the agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS), the World Intellectual Property Organisation (WIPO), the Paris Union and the Berne Convention. These agreements basically ensure that there is equal treatment for IP throughout the world.

There is a strong need to increase the infrastructure across Africa, especially regarding enforcement

Many African countries belong to the Patent Co-operation Treaty (PCT), with the result that inventions can be protected in Africa by way of PCT filings. A number of African countries also belong to the Hague System regarding the international registration of designs. The international IP treaty that has been most in the news, however, is the Madrid Protocol regarding the international registration of trade marks.

Madrid Protocol

The international trade mark registration system is one that allows a company that is based in a member country to file an application to register its trade mark in its home country, and then file a further application for a single international registration, designating as many of those member countries that it wants to cover. The company then has trade mark protection in all the countries of interest through one international registration.

The following African countries and regions belong to the international trade mark registration system:

Algeria, Botswana, Egypt, Gambia, Ghana, Kenya, Lesotho, Liberia, Madagascar, Morocco, Mozambique, Namibia, OAPI, Rwanda, Sao Tome & Principe, Sierra Leone, Sudan, Swaziland, Tunisia, Zambia and Zimbabwe.

Although the international trade mark registration system works well in much of the world, in Africa there have been problems. The first problem is that there are concerns that international registrations may not be valid and enforceable in a number of the so-called 'British law countries' in Africa. A British law country is one where the state needs to pass legislation that incorporates an international treaty into the national law before the treaty becomes effective. A number of British law countries that have signed up to the Madrid Protocol have failed to pass such enabling legislation, and there are therefore doubts as to the validity and enforceability of international trade mark registrations in these countries. The countries of concern are Lesotho, Liberia, Namibia, Sierra Leone, Zambia and Zimbabwe. A second problem flows from the fact the system requires each country that is designated in an application to advise the international office within a period of 18 months if protection in that country is being refused–protection may be refused, for example, on the basis of a clash with an earlier registration. If no notice is given within the 18-month term, the registration is automatically valid in that country.

Unfortunately, a number of the African countries that belong to the Madrid Protocol, such as Ghana, do not examine applications within 18 months, which means that international registrations become valid in these countries by default. Although this might sound like an attractive proposition, it can in fact be dangerous–someone who is adversely affected by an international registration in such a country might apply to cancel the international registration in that country on the basis that it was wrongly registered.

The third problem with international trade mark registrations in Africa revolves around the fact that the OAPI regional IP union has recently joined the Madrid Protocol, and there are doubts about whether this was done lawfully.

Regional protection

Africa has two regional registration systems. The first of these is known by the French name Organisation Africaine de la Propriété Intellectuelle, or by its acronym OAPI.

OAPI

This system applies in much of French-speaking Africa and it covers patents, registered designs and trademarks. It is a single-registration system, which means that a single filing covers all the OAPI member countries-the OAPI member countries in fact do not even have national IP systems. The countries that belong to the system are:

Benin, Burkina-Faso, Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea, Gabon, Guinea, Guinea-Bissau, Ivory Coast, Mali, Mauritania, Niger, Senegal, Togo and the Union of the Comoros.

The OAPI system is well established and effective. There is, however, a problem that flows from the fact that in 2015 OAPI became a regional member of the international trade mark registration system (Madrid Protocol). What this means is that a company that is based in a country that belongs to the Madrid Protocol can now get trade mark protection in the OAPI countries by simply designating OAPI as part of an application for an international registration. In other words, the company no longer needs to file a separate OAPI application.

Many believe that OAPI's accession to the Madrid Protocol was invalid. That is because it was done by way of a resolution of the body's Administrative Council. What was required, was an amendment to the document that founded the OAPI union, the Bangui Agreement, as well as a ratification of that amendment by every member country. It is felt that OAPI designations of international registrations will therefore not be valid or enforceable. It is likely that the issue will eventually end up in a court of law.

Until such time as there is more clarity on this issue we feel that there are serious risks attached to covering OAPI through an international registration.

ARIPO

The second regional registration system is called the African Regional Intellectual Property Organisation (ARIPO). This system applies in much of English-speaking Africa. The member countries are:

Botswana, Gambia, Ghana, Kenya, Lesotho, Liberia, Malawi, Mozambique, Namibia, Rwanda, Sao Tome e Principe, Sierra Leone, Sudan, Swaziland, Uganda, United Republic of Tanzania, Uganda, Zambia and Zimbabwe.

This registration system came about through various treaties and it covers patents, designs and trademarks. It is different from OAPI, in that it isn't a single filing system, but rather a designation system. In other words, applications are filed at a central office in Harare, Zimbabwe, and the applicant designates those member countries that it wants covered. Each individual IP office has an opportunity to refuse protection in their country within a period of 12 months. Each member country also offers the option of national registrations.

ARIPO works well for patents. There are, however, serious problems with trademarks. One reason relates to the issue that we discussed earlier about British-law countries, in this case ARIPO member countries that have not incorporated the ARIPO treaty relating to trade marks into their national laws. As a result there are doubts about the validity and enforceability of ARIPO trade mark registrations in Liberia, Malawi, Namibia, Swaziland, Tanzania and Uganda. Our view is that the ARIPO registration system is best avoided for trademarks.

National protection

With the exception of the OAPI member countries, the countries of Africa do have national registration systems. Many of these are perfectly normal, but some are anything but. Here are a few examples:

- The Libyan Trade Mark Office closed in July 2014 but it has since re-opened and is run by a militia group. Trade mark applications can be filed, but there is no guarantee that they will be considered valid if the political situation changes. The Patents Office, on the other hand, is run by Government officials.
- There is no formal IP law in South Sudan, but the Code of Civil Procedure Act provides for the Sudan Trademarks Act to be applied in the absence of a substantive law, and for a while the Business Registry within the Ministry of Justice was accepting and processing trade mark applications under its provisions. However, fil-

ings have now been suspended, and are unlikely to be resumed until the substantive law is in place. A Trademark Bill has been drafted since 2013 but it is not known when it will be enacted.

• Somalia has been in a state of civil war for many years. As a result there is simply no IP law in this country.

Some unusual aspects of IP in Africa

As much as Africa follows many of the IP norms and trends of the developed world, there are some interesting variations:

- European co-operation: an interesting development has been Morocco's recent decision to sign an agreement with the European Patent Office (EPO), allowing for the validation of European patents in Morocco. A European patent validated in Morocco has the same legal effect in Morocco as a Moroccan patent, and it is subject to Moroccan patent law. Tunisia has signed a similar agreement with the EPO, but this is not yet in effect.
- Traditional knowledge: the protection of traditional knowledge is a big issue in Africa, and we have seen it introduced in different ways. In Gambia the authorities have introduced protection of traditional knowledge by way of specific legislation. In South Africa, on the other hand, protection of traditional knowledge has been introduced by way of amendments to the existing IP laws.
- IP philosophy: there is a strong perception in much of Africa that IP benefits industrialised nations far more than it does African nations. We see this particularly in the context of pharmaceuticals, where there is a strong feeling that African consumers are exploited by multi-national companies. The South African authorities have announced that they will take steps to put a stop to the 'ever-greening' of pharmaceutical patents, in other words the practice of extending the life of pharmaceutical patents through the patenting of amendments to the original formulation. It has also been announced that patent examination will be introduced in South Africa.

Conclusion

There is a growing interest in Africa. The evident proliferation of new laws is a positive development. There is, though, a strong need to increase the infrastructure across Africa, especially regarding enforcement.

Wayne Meiring is Managing Director of Spoor & Fisher Jersey

Online counterfeiting: the global impact

With revenue, reputation and customer safety all at risk, there has never been a more crucial time to develop and deploy a proactive and effective anticounterfeiting strategy, says Stuart Fuller

security

Ounterfeiters have been quick to exploit the high-growth potential of the online world. The internet has allowed criminals to refine approaches, increase reach, and target the lucrative world of e-commerce via rogue websites. By setting up fake websites that closely mimic those of genuine brands, or selling high volumes of counterfeit products via auction sites, criminals can target the B2B and B2C markets with ease.

2014 saw a 15% increase in the sale of counterfeit goods online¹, with Chinese online marketplace Alibaba recently confirming that it took down 114 million suspicious listings over a period of 12 months², highlighting the scale of the issue. Indeed, counterfeiting has grown in scope, scale and complexity in the past three decades. With retailers currently losing between \$300m and \$400m annually to copycats and counterfeiters³, the figures show no sign of slowing down.

With counterfeits offering huge potential profits and a low risk of being caught, it is no surprise that the industry is booming. In fact, counterfeit goods are as profitable for criminal gangs as illegal drugs⁴, bringing returns of up to 900%⁵. The growing global marketplace means that criminals have access to both cheap labour and raw materials, and a vast numbers of consumers with low overheads via online marketplaces and social media. This makes counterfeiting a very lucrative business for experienced fraudsters, who take advantage of the popularity of online shopping, as well as consumers' desire to be seen with branded products and the latest merchandise.

Securing sectors

With almost every sector operating in some way through the internet, no business or website is safe from the risks. The worst affected areas include retail, pharmaceutical, financial services, entertainment, technology and luxury brands. In the financial services market fraudsters are increasingly counterfeiting the look and feel of banking and insurance brands, setting up fake websites and phishing emails to trick users into compromising their information. 31.5% of all phishing attacks in 2013 targeted financial institutions, and 22.2% of all attacks involved fake bank websites⁶. While the internet is proving extremely lucrative for the sector, fraudsters are clearly having a severe impact on on-line operations, affecting both customer trust and brand reputation.

The technology industry's complex supply chains and reliance on manufacturing in the Far East make it extremely vulnerable to counterfeiters and grey-market profiteers. Counterfeit technology does not just endanger revenues and reputations, it also endangers customers – with instances ranging from exploding laptop batteries to substandard, fake aircraft parts on the rise. Today, counterfeit products and components are a particular challenge for the telecoms industry, given surging global demand.

Impact for businesses

NetNames' research shows that 34% of business managers in the retail industry are extremely concerned about keeping their brand and trademarks protected in the evolving web landscape⁷, and their fears are not unfounded. Counterfeiting presents a myriad of financial dangers for brands – directly affecting sales volumes, prices, costs,

...anti-counterfeiting capabilities are increasing, with strategies becoming more accessible and effective

investment and the brand equity of firms. Indeed, multinational brand owners lose approximately 10% of their topline revenue to counterfeiters⁸.

In addition to the huge financial loss, hard earned reputation for value and quality can be quickly lost due to counterfeiters and ruined forever. Counterfeiting can rapidly erode brand perception in the marketplace if consumers are disappointed with an unwittingly purchased counterfeit product. According to our research 78% of consumers would shun a brand if they found themselves on a bogus website pertaining to that brand, even though the company itself was not negligent. Meanwhile, the online world also means that bad news travels everywhere, fast – with consumers sharing their experiences via social media or peer reviews in real time.

Cost for consumers

Aside from receiving unsatisfactory goods, or buying products online that never arrive, consumers may be exposed to an even more dangerous side of fakes. Counterfeit pharmaceuticals, edible products and household substances can pose stark health and safety concerns, with many shoppers at risk of harm - and even death - from tainted goods, including harmful ingredients or chemicals. In 2013's OPSON III operation, 34 countries seized more than 1,200 tons of fake or substandard food, and nearly 430,000 litres of counterfeit drinks⁹. In addition, a recent raid in the UK saw thousands of fake make-up products taken out of circulation, many containing harmful substances or exposure to vermin.

Fighting fraudsters

The almost limitless borders of the internet make regulation extremely hard to enforce, and there is only so much that the government, police and online marketplaces can do to minimise the presence of counterfeit goods online. In light of this, brands must take responsibility in protecting consumers from counterfeits, or risk losing loyal cus-

tomers who are dissatisfied with substandard or even dangerous products. The good news is that there are a number of ways in which retailers can protect themselves and their customers from fraudsters.

Firstly, brands should consider appointing a dedicated brand protection manager to raise awareness of the challenge of counterfeiting both internally and externally, and also to liaise with law enforcement agencies on the problem. Retailers must then take centralised control over domain names to rapidly respond to cybersquatters, typosquatters, and rogue e-tailers.

The arrival of many new gTLDs (generic top-level domains) brings opportunities for brands to safeguard their customers' intellectual property online. Businesses should take advantage of this by developing a proactive gTLD strategy, which will engage consumers and ensure that legitimate brand channels are easy to find. In addition, by adopting a dotBRAND domain name, companies will be able to manage their space on the internet by effectively controlling their own domain name registry and making it easier for customers to find them. This ring-fencing of their online entity will ensure that their brand's reputation, customers, trademarks and, ultimately, revenues are protected.

A key factor in combatting counterfeits is proactively educating customers on the reality of fake products, as well as any known counterfeit operations they may be exposed to. In many instances, consumers are still largely unaware of the risks posed by counterfeit goods-from the financial losses due to malware and fraud, through to physical injury and even death. Despite the fact that health risks would turn the majority of consumers away from counterfeit purchases, sizeable numbers continue to buy high-risk items – including medications, alcohol and cosmetics. This highlights the need for a new narrative to be established, where retailers ensure shoppers are aware of the threats and how to avoid them. Many companies even set up dedicated web pages to help consumers determine whether a product they have bought is a fake and report where they purchased it, using the power of brand advocacy to turn detective.

Where necessary, companies can always bring in external experts with the experience and advanced technologies to monitor for threats and rapidly enforce against infringements across all online channels, as well as giving advice on domain name strategies. In order to address the problem on a larger scale, retailers can join forces with other brands and industry bodies to pool resources, influence and intelligence. New anti-counterfeiting technologies, including product identification and tracking, can be shared as part of a multi-layered approach.

A call to action

Fraudsters are becoming increasingly powerful, but at the same time, anti-counterfeiting capabilities are increasing, with strategies becoming more accessible and effective.

With revenue, reputation and customer safety all at risk, there has never been a more crucial time to develop and deploy a proactive and effective anti-counterfeiting strategy. In the fast-changing digital and consumer environments, it is more important than ever for businesses to manage their online presence carefully, allowing brands to be present, protected and prosperous on the internet.

Stuart Fuller, Director of Commercial Operations at NetNames, a leading online brand protection company

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The fall of Safe Harbour and the future of transatlantic data sharing

The basis of Safe Harbour has been questioned for some time, and in recent years it has become increasingly apparent that an updated privacy regime is necessary, Natasha Simmons writes

Introduction

On 6 October 2015, the Court of Justice of the European Union (CJEU) delivered its landmark judgment on Safe Harbour in the case of *Maximilian Schrems v Data Protection Commissioner* [Case C-362/14]. The CJEU ruled that Commission Decision 2000/520/EC concerning transfers of personal data to US companies, and establishing the 'adequacy' of the Safe Harbour certification system, is in fact invalid. The decision reflects what many in Europe consider, that present laws are outdated, and the law must adapt to catch up with the pervasiveness of technology in the digital age.

"Legal rules that were written at the dawn of the personal computer are no longer adequate for an era with ubiquitous mobile devices connected to the cloud."¹

Background

In the aftermath of Edward Snowden's revelations about US intelligence agencies' extensive access to personal data, Austrian privacy campaigner, Max Schrems, made a complaint to the Irish Data Protection Authority (DPA), challenging Facebook's reliance on Safe Harbour for personal data transfers from the EU to the US. Schrems claimed that the Safe Harbour program did not ensure an adequate level of protection for EU personal data being transferred to the US. Schrems also requested that the Irish DPA examine the validity of Safe Harbour, and, if required, that the Irish DPA suspend Facebook's transfers of personal data to the US.

The Safe Harbour framework

Under the Data Protection Directive (95/46/EC), the transfer of personal data to a third country, in principle, may only take place if the third country ensures an adequate level of protection of the personal data. The Commission may make a finding that a third country provides an adequate level of protection due to its domestic law or international commitments. Commission Decision 2000/520/EC on Safe Harbour was an example of this. Prior to the ruling

of the CJEU in the *Schrems* case, organisations signed up to self-certification under the Safe Harbour framework could legally receive personal data being transferred from Europe.

The framework included a set of privacy principles and frequently asked questions. In order to be certified under Safe Harbour, organisations had to ensure that their privacy practices met the requirements of the Safe Harbour Privacy Principles. They also had to file a self-certification form with the Department of Commerce, and, in addition, publish a Safe Harbour privacy policy setting out how the company ensured compliance with the principles.

The decision

In its judgment, the CJEU considered the roles of the European Commission, and the national supervisory authorities, as well as the fundamental rights enshrined in European law. The CJEU held that the existence of a Commission decision finding that a third country ensures an adequate level of protection of personal data transferred cannot

It appears that we are about to witness the construction of a new framework, and we must be prepared for the wave of change approaching

remove, or reduce, the powers available to the national supervisory authorities under the Charter of Fundamental Rights of the European Union and the data protection directive (95/46/EC). The Court emphasised the right, guaranteed by the Charter, to the protection of personal data and the role with which the national supervisory authorities are entrusted thereunder. The Court stated that no provision of the directive prevents oversight by the national supervisory authorities of transfers of personal data to third countries which have been the subject of a Commission decision.

The Court noted that the national supervisory authorities must be able to examine, with complete independence, whether the transfer of a person's data to a third country complies with the requirements laid down by the directive. Nevertheless, the Court pointed out that it alone has jurisdiction to declare that an EU act, such as a Commission decision, is invalid. An individual or national supervisory authority must be able to bring proceedings before the national courts so that they may refer the case to the Court of Justice.

The CJEU then investigated whether the Safe Harbour decision is invalid. In this respect, the Court stated that the Commission was required to find that the United States in fact ensures, by reason of its domestic law or its international commitments, a level of protection of fundamental rights essentially equivalent to that guaranteed within the EU under the directive, read in the light of the Charter. The Court noted that the Commission did not make such a finding, but merely examined the Safe Harbour program. For those reasons, the Court declared the Safe Harbour Decision invalid.

The result of the ruling is that the Irish supervisory authority is required to examine Schrems' complaint and, following its investigation, is to decide whether, with regard to the directive, transfer of the data of Facebook's European subscribers to the US should be suspended on the ground that that country does not afford an adequate level of protection of personal data.

Response from regulators

The Article 29 Working Party (WP), comprised of EU national data protection authorities, met shortly after the *Schrems* ruling with the aim of adopting a harmonised approach to the decision, and avoiding a varied response throughout member states. The WP released a statement thereafter, on 16 October 2015, which addressed the case and its wider implications. The WP commented that the matter of massive and indiscriminate surveillance was a key element of the CJEU's reasoning.

The WP also granted a three month grace period, indicating that the EU and the US will have until the end of January 2016 to find a political, technical, or legal solution to this matter. The EU Commission issued guidance, on 6 November 2015, with the objective of ensuring a consistent response from national regulators and offer legal certainty for businesses. The Commission indicated that it remains committed to the goal of a renewed and sound framework for transatlantic personal data transfers. The Commission also advised that companies may use a number of alternative tools for carrying out their international data transfers to third countries that are not deemed to grant an adequate level of protection. Further responses are anticipated at EU and national level over the coming months, and progress should be closely monitored.

With regard to the future of data transfers across the pond, it should be noted that the EU and the US have been negotiating a new Safe Harbour framework since 2013. Whilst significant progress has been made in terms of a successor program, national security derogations are still an obstacle, and there is no concrete timeframe as yet. Therefore, it is not clear when exactly a new framework will be agreed. As a result, businesses relying on a Safe Harbour 2.0 being finalised should be aware that this is not a fail-safe solution, and they risk losing consumer trust and possible enforcement action if a successor is not agreed by the end of the grace period in January 2016.

Next steps

In light of the WP's statement, it is clear that businesses should begin evaluating the range of available alternatives in order to devise a plan of action. Notwithstanding this, companies should remain calm and avoid making rash decisions until they have carefully assessed their priorities and the alternatives available to them. It is important for organisations to be pro-active in order to demonstrate to the regulators that any necessary remediation steps have been taken to address the implications of the decision. Businesses, therefore, are advised to take steps in the aftermath of the *Schrems* ruling in order to determine whether they must take any compliance action.

Such an assessment should include the mapping of EU-US data flows where Safe Harbour is currently the model of transfer used, as well as identifying key elements including types of data and the purpose of transfers. Companies should focus on key data flows depending on their business operations and needs. Businesses should also consider alternative data transfer methods and select the best option for their particular organisation. In addition, organisations should assess whether any local requirements must be fulfilled, for example, regulatory filing or authorisation. It would also be useful to record the assessment and compliance steps taken, and businesses should keep up-to-date with any developments regarding Safe Harbour.

Alternative data transfer options for businesses

Whilst the CJEU ruling has a huge impact on EU-US data transfers, it should be remembered that Safe Harbour is not the only mechanism for such data transfers, and that alternatives exist. US companies that rely on the Safe Harbour framework to transfer personal data to the US will now have to consider other methods of transfer in order to comply with EU law. The ruling will affect both US processors and controllers. In addition, EU companies currently using a US Safe Harbour certified service provider will also have to consider their response to the *Schrems* decision. Alternative options available for data transfers from the EU to the US include EU model clauses, Binding Corporate Rules and EU data centres, among others.

In relation to the use of EU model controller-to-processor clauses, these may be used in order to comply with standards throughout all EU member states, and help to address any customer concerns regarding appropriate data protection compliance. The model clauses, however, do entail specific obligations, and may involve some administrative burden for the company. In terms of companies managing intra-group personal data transfers, one option which they may wish to pursue is that of Binding Corporate Rules (BCRs).

BCRs, however, may not always be the most suitable option as they are most appropriate in the case of intra-group transfers and for larger organisations. BCRs would be most relevant for organisations wishing to establish a global privacy compliance framework, and may not be a viable option for smaller businesses due to the time and cost constraints involved. Businesses should take the time to consider the best solution for them in light of the advantages and disadvantages of the various transfer options.

Wider considerations

The *Schrems* ruling raises broader considerations concerning the right to privacy, and the future of transatlantic personal data transfers in the tech age. It is difficult to envisage how privacy rights can last if their strength varies depending on when and where user data is transferred to- the fundamental right of privacy should not be impinged by overseas data transfers. This logic is present in the *Schrems* ruling, and other recent CJEU case law.² There has been an increasing move within Europe towards reinforcing the right to privacy, which is reinforced by the draft General Data Protection Regulation (GDPR) currently making its way through the legislative process, as well as the Digital Single Market agenda.

There is a delicate and intricate balance which must be struck between protecting the fundamental human right of privacy, allowing the internet to have global reach and supporting advancing technology, whilst developing the law so that it may try to address the challenges presented by the digital world.

Conclusion

Privacy advocates who wish to see a stronger transatlantic data protection regime will likely welcome the *Schrems* judgment as a step in the right direction. Critics of the ruling, however, may argue that it could have a detrimental effect on smaller European businesses, who may struggle to trade with US businesses, particularly in terms of the cloud computing market.³

It is yet to be seen what the exact outcome of this ruling will be in terms of future data exchanges between the EU and US. What is clear is that this is an issue at the forefront of the privacy arena, and one to be closely watched. It influences a number of wider issues, such as internet balkanisation and the relationship between the US and Europe concerning privacy rights in the face of emerging technology. The basis of Safe Harbour has been questioned for some time, and in recent years it has become increasingly apparent that an updated privacy regime is necessary. It appears that we are about to witness the construction of a new framework, and we must be prepared for the wave of change approaching.

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Endnotes

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In Bermuda technology enhances corporate citizenship

Bermuda boasts an active corporate community which leverages its networks and which partners to help others on the Island, the Department of E-Commerce write ermuda boasts an active corporate community which leverages its networks and which partners to help others on the Island, especially the third sector.

The Island's very active third sector not only includes voluntary and charitable organizations as well as community groups, it also includes companies and individuals who contribute-donors and volunteers. As such, the over 400 registered charities benefit from the support of the companies that contribute over \$33 million annually in addition to the individuals that give almost \$50 million per annum, and the volunteers that donate over 2.7 million hours a year.

For a country the size of a dot in the ocean, the third sector benefits from an incomparable opportunity to affect change in Bermuda in the areas of research, education, and development¹.

Local and international companies in Bermuda are every active, providing different kinds of support on a systematic basis to charities, schools, hospitals and other organisations. They understand the value of incorporating a deliberate, focused approach to practicing good corporate citizenship and have it well integrated within their management system and strategic plans.

It is well-recognised that Science, Technology, Engineering, Arts and Maths (STEAM) are essential tools with which students in the twenty-first century need to be equipped. Full familiarity with these topics launches them towards professional success in a variety of careers and allows them to grow into informed citizens in an increasingly complex society.

Whether it's STEAM or simply STEM, many companies in Bermuda are providing opportunities for Bermuda's students to work with technology in ways that they may not be able to on an average school day. Taken together, these initiatives not only demystify these highly technical disciplines and the pursuit of knowledge in advanced technologies, but also help students to develop skills that would come in handy regardless of their career choices.

Developing project management, critical thinking, teamwork, and communication skills benefit these students in their educational and career development at many levels and regardless of the professions they choose to pursue.

Below are just a few examples of how corporate citizenship is enhancing technology education and literacy on the Island.

Energy and infrastructure solutions

Ascendant Group, Bermuda's largest provider of energy and infrastructure solutions, is the parent company of Bermuda Electric Light Company Limited (BELCO) which is the sole provider of electricity Island-wide.

> ... the third sector benefits from an incomparable opportunity to affect change in Bermuda in the areas of research, education, and development

Every summer, Ascendant runs its highly-praised STEM Summer Camp for students, aged 12 to 14 years. During a week of hands-on experiential learning, students are asked to be curious and ready to use their problem-solving, critical thinking and research skills in order to solve problems with technology. Led by STEM education professionals, they develop challenging robotics projects and take field trips, amassing STEM knowledge and gaining in confidence and competence.

Ascendant also encourages young Bermudians to explore their interest in the Island's energy infrastructure. It offers students summer employment opportunities as well as mentoring, apprenticeships, education and training. It also awards scholarship monies to undergraduate and graduate students in engineering, environmental sciences and business studies.

Ocean Sciences

Taking STEM to the next level, the Bermuda Institute of Ocean Sciences (BIOS) gives wide-ranging exposure and education to children of all ages through different programmes. Through Ocean Academy, aspiring young scientists are provided with the opportunity to experience ocean sciences first-hand from courses to internships, one-off lectures and workshops to well-established curricula.

In addition to formal instruction, BIOS also infuses the fun of competition into learning. On a yearly basis, MARINE (Mid Atlantic Robotics IN Education) organises a competition around Remotely Operated Vehicle (ROV). *"Students design their own ROVs and deploy them in underwater missions, such as documenting a local shipwreck, measuring lionfish populations, or recording temperature data during hurricane season"*. In 2016, Bermuda will become a regional

partner of the Marine Advanced Technology centre (MATE). With the aid of a lead sponsor, this new partnership will allow Bermuda students access to international competitions beginning in 2017.

This programme is not purely theoretical: hundreds of ROVs are in use worldwide by marine industries, underwater archaeologists, and scientific research programs. As students learn to build and test ROVs in the classroom, they acquire skills and experiences that prepare them for those industries–should they wish to join them.

Sailing, design, and the marine industry

The America's Cup has teamed up with some of the biggest names in the marine industry to launch the America's Cup Endeavour Programme. The programme provides a pathway to success for youth ages 9 through 12 across all backgrounds as they experience an interactive STEAM curriculum, gather water safety knowledge, and develop life skills through learning to sail on 4 different types of boats: Optimist, RS Feva, Hobie Cat and O'Pen BIC.

The America's Cup Endeavour Programme leverages the cutting-edge design and innovative technology at the heart of the America's Cup to engage students with hands-on learning activities and foster their interest in pursuing STEAM career pathways in the future.

The America's Cup Endeavour STEAM curriculum includes interactive learning modules for students to learn about measuring wind and wind power, sail area and perimeter, buoyancy, sailing angles, marine debris, and health and nutrition.

Through their participation in the America's Cup Endeavour Programme, students have an incredible opportunity to visit the ORACLE TEAM USA base in Bermuda where they learn about the advanced science and technology that drives competition for the America's Cup.

Students also benefit from interaction with the team's Head Physiotherapist and Team Nutritionist, and the Physical Performance Manager in order to better understand the importance of healthy eating and an active lifestyle amongst athletes.

Bermuda Department of E-Commerce

Building trust: the toughest leadership challenge?

Confucius said that rulers need three resources: weapons, food and trust. The ruler who cannot have all three should give up weapons first, then food but should hold on to trust at all costs. David Watkins explains rust has become one of the most pervasive and perhaps for that reason least noticed aspects of social and business life. We need it in order to live at all. Think about how we conduct our daily lives – would you go to a dentist or doctor with a suspicious reputation?

Trust is like a bank account. You can make deposits and withdrawals. The higher the trust account, the more likely that the company (or person) will attract more business. We trust in the things that we have confidence in.

Therefore, leaders must deal and trade in trust. They should have an understanding of how trust is built, sustained and if necessary recovered. As Warren Bennis stated in his book *On Becoming a Leader*, one of the basic ingredients of leadership is integrity. Integrity is the basis of trust. Integrity, however, cannot be acquired – it must be earned.

Project Globe, a study conceived by Robert House of the Wharton School of Business in the US, set out to measure the most universally acceptable great leadership characteristics. After more than a decade of work and careful study of 112 considered characteristics, 'honesty and integrity' stood out as being the most universally 'desirable' of those leadership characteristics.

Nevertheless, we appear to be beginning to witness a crisis of trust in leadership. Too many scandals, too many examples of misused power and too many broken organisations are leaving us with a predisposed assumption that leaders cannot be trusted.

Take Bernie Madoff, for example. He ran what appeared to be a successful finance and investment firm and as a non-executive chairman of Nasdaq at the time presumably generated a perception of great integrity. One who could be trusted with an individual's life savings.

43%

In terms of the credibility of people, academics and other experts are the top of the trust list (67%); CEOs are at the bottom (43%). And this gap is wider than in 2009 But hiding behind the mask was a leader who, according to Denny Chin, his federal trial judge, committed crimes of "extraordinary evil". Madoff, having effectively run the largest Ponzi scheme of all time and swindling some \$65 billion, was sentenced to 150 years in prison. Madoff has dealt his last card as, on paper at least, he will get to taste freedom sometime in 2139.

According to the Edelman Trust Barometer of 2014, trust in company leadership has plateaued. In terms of the credibility of people, for example, academics and other experts are the top of the trust list (67%); CEOs are at the bottom (43%). And this gap is wider than in 2009. This surely means that the time is ripe for business leaders to have the courage to act aggressively through transparent engagement in their activities.

Trust is the emotional glue that binds followers and leaders together. The accumulation of trust is a measure of the legitimacy of leadership. It cannot be mandated or purchased; it must be earned Company results are driven by actions and actions are driven by attitudes, perceptions, behaviours and beliefs about what is right or wrong.

In the book Leaders: The Strategies for Taking Charge, co-written by Bennis and Burt Nanus, it is claimed that "Trust is the emotional glue that binds followers and leaders together. The accumulation of trust is a measure of the legitimacy of leadership. It cannot be mandated or purchased; it must be earned".

If this is true, then our leaders must recognise and understand within their leadership process how others around them feel. And this understanding must come from within – the head and the heart. Great leaders are able to face up to the reality that they need to manage stakeholder expectations and the dual commitments of relationships

112

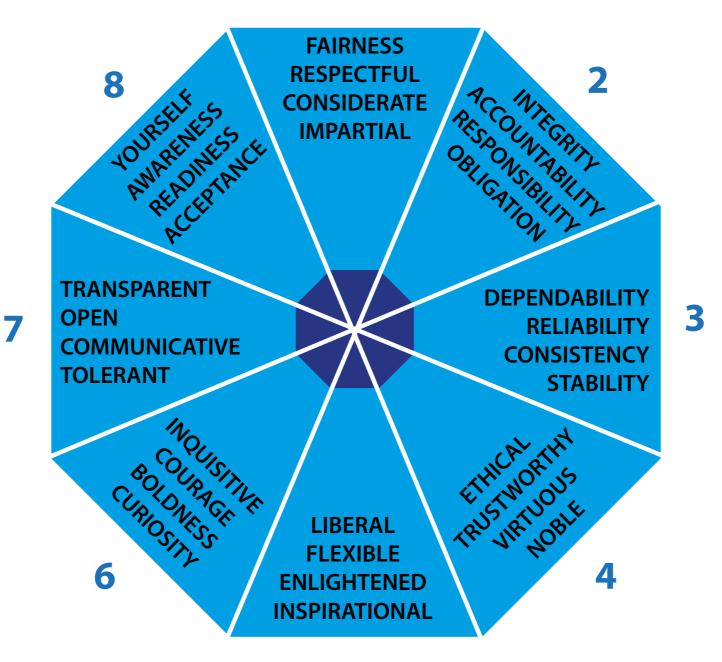
After more than a decade of careful study of 112 considered characteristics, "honesty and integrity" stood out as being the most universally "desirable" leadership characteristics and results; not put one over the other. Maximising profit in the short-run may hurt trust-building with other stakeholders in the long-run.

Perhaps, therefore, we should consider that establishing trust is much more about behaviour rather than processes. Good leaders are followed chiefly because people trust and respect them rather than the pure technical skills they may have.

If leaders can get this right, they typically produce consistently high performance almost any way you can measure it – gross sales, profits, talent retention, company reputation and customer satisfaction.

But where to start? One approach is my pragmatic model the 'Eight axioms of honest leadership'. (see diagram below)

Eight axioms of honest leadership



The model collates the traits and behaviours that I believe represent trust and honesty. These behaviours are grouped together into eight axioms. These further combine into the easy-to-remember acronym, FIDELITY.

The axioms are not a list of tasks to plan and do. They are behaviours to consider and master. Leaders work at embedding these behaviours into observable actions in order that all or some can become habits. A leader should aim to achieve 'habitual honesty'.

Anchoring the axioms

Actions that ranked highest in the Edelman survey included clear and transparent communication, telling the truth (regardless of how unpopular or complex it is) and regular engagement with employees.

But building trust is not just a matter of being truthful. Rather, it requires a concerted effort to change personal behaviour and, in doing this, careful consideration of the observable actions. Here are some ideas:

ANCHOR 1 Look in the mirror

The best place to start is with yourself. If you are honest with yourself you will be seen as honest by others. Self-awareness and control help demonstrate integrity and moral intelligence. Self-honesty starts with the recognition of your main responsibilities – to yourself, to your followers, to your organisation and to other stakeholders.

This also means accepting what you discover. If you suffer from self-delusion that everything is not your fault – for example, you lay the blame on difficult customers, an unreasonable boss or soft market conditions – then you mislead yourself and your team, and you will make faulty decisions.

ANCHOR 2 Increase your focus

To build trust you need to focus on it. But when you focus on something it tends to increase. For example, if you focus on the fact that your car is old and needs expensive repairs, you get a bit depressed.

Then when you think about this and focus on it, what happens? You start to think of other things that you had forgotten about and you need to repair – the crack in the bathtub, the kids' broken bikes and so on. Focus increases the thing you are focusing on.

With this in mind, try to focus on the things you need to do to instigate the axioms. Think about just one thing.

For example, if you are the type who tends to work behind a closed door, think for a few minutes about the message that your closed door provides to your team. Does it demonstrate that you are ready to guide others and act

> Honesty and building trust is a never-ending job; you have to maintain your focus to do these things and continually question yourself and monitor your actions

as an inspirational leader? Probably not – how could it when you put up a barrier between yourself and your followers? Focus on keeping it open.

ANCHOR 3

Communicate with inspiration

Of course you know it is critical to communicate. I do not mean a town hall meeting and assuming everyone is on board – the success of any communication lies within the receivers' heads; they determine if they understood and accept your message.

Some simple rules:

Do not lie or hide the truth

Eventually lies will catch you. Tell it like it is. If it is bad news, say so. But tell people what you are doing to make it better. If it is good news, say so and thank people. Be humble. Integrity starts in your communication.

Be personal

Do not be afraid of sharing experiences and telling stories. If you stay at arm's length then you can expect others to hold back and stay reserved. This will not promote a transparent and trusting culture and is not inspirational. Open up.

Avoid vagueness

Specificity is better than ambiguity. Learn to communicate with clarity. Simple and concise is better than complicated and confusing.

Focus on giving

The best communicators are adept at transferring ideas, aligning expectations, inspiring actions and spreading their vision. Communication is not for you – it is for your followers.

Listen first

Great leaders know when to dial it up, dial it down and dial it off (mostly you should focus on down and off). This is not about all-round dialogue.

Be empathetic

Ensure that your communication is candid, empathetic and caring and not full of an inflated ego.

Be aware of your gaps

Be aware of what you are not saying or doing.

ANCHOR 4

Look around, benchmark the best

If you see a great idea there is no reason to be ashamed to borrow it and adapt it to your needs. As the great investor and philanthropist Warren Buffet said: *"It's better to hang out with people better than you. Pick out associates whose behaviour is better than yours and you'll drift in that direction"*. Look out for your benchmarks wisely and follow them.

ANCHOR 5

Show you care

This is vital as you have to execute with people not processes. This means you must show the people that you care about them and build a baseline trust. And people will determine the success or failure of your efforts.

Finally, honesty and building trust is a never-ending job; you have to maintain your focus to do these things and continually question yourself and monitor your actions. What are you waiting for?

ABOUT THE AUTHOR

David B Watkins is a consultant, coach, author, facilitator and leadership shaper with over 20 years business and leadership experience across the world. He recently published his first leadership book Where's my dog? The Search for Honest Leadership available in Amazon stores worldwide. David.B.Watkins@gmail.com

The past is not the future

Business schools – and the businesses they serve – need to discover a 'second curve' if they are to survive and prosper, Charles Handy writes hen I last spoke to the EFMD conference in 1974 my talk reflected my own personal dilemma. I was at the time the Director of the MBA Programme at the London Business School (although it was then technically still called an MSc because London University did not recognise the MBA as a graduate degree).

I found myself presiding over a programme that I could not fully believe in but was unable to change.

I had soon realised that there are limits to how much you can teach about the practice of management in a classroom. I, along with all my colleagues, had gone through American business schools and had adopted their classroom-based models as the prototypes for ours.

For some reason we did not look to our own examples of other professional schools – architecture, law, medicine or accounting – all of which combined classroom instruction with a form of tutored apprenticeship. It became clear to me then that the MBA more accurately stood for Master of Business Analysis.

There is nothing wrong in that so far as it goes. The problem was that it did not go far enough. We were, in effect, training consultants not managers. And as future consultants, the best of our students were rapidly picked up by consulting firms and investment banks. That was not, I felt, what we were there for.

We also followed the American model along with the Ford and Carnegie Reports and anchored our school in the University of London. I had naively though that this would allow me to import occasional teachers from their faculties, such as those of philosophy, law and political theory as well as history and science, because I believed that business analysis needed to be enriched by other disciplines to provide a more rounded preparation for a management role.

I soon discovered, however, that the traditional faculties of the university regarded us as a cuckoo in their nest and wanted nothing to do with us. Nor did my own colleagues welcome the thoughts of any such intrusions. What we did import, alas, was the university ethos, one that valued published research more than teaching ability for career promotion. The result was a school that was effectively a collection of subject silos and colleagues who were pushed to teach subjects rather than students.

One of the problems was that almost all of my colleagues were pure academics. They had never had to put their knowledge to work in businesses or any other organisation.

But knowing *What* does not automatically guarantee knowing *How*, let alone knowing *Why*.

In desperation I found myself running workshops in communication skills and listening exercises. But these were inadequate sops in what I saw as a wrongly focused system. I worried that we were turning loose clever but unskilled graduates into a world that desperately needed effective leaders and managers.

> Concentrating on manager development rather than management education – a subtle but crucial change of words – means moving away from the university and towards the work organisation

The development of our future managers was effectively delegated to myself as programme director. It was in recognition of this that I was promoted to Professor of Management Development, one of only two such titles in Britain, or in Europe, at the time.

It was probably in recognition of my rarity value that I was asked to be one of the early Trustees of the newly formed EFMD, which, indeed, became my sanctuary and haven in those years. It would be interesting to know how many Professors of Management Development there are in this hall today. Few, if any, I suspect. That, I fear, is a symptom of one of our problems – the main purpose of our existence is not recognised academically or culturally.

Even the research that became the focus of attention of most of my colleagues was not the ground-breaking stuff of the physical sciences but rather a recording and interpretation of what was happening in the real laboratories of management, the businesses themselves. Again, useful but not future shaping.

In general, we followed our customers, those same businesses, serving their wishes and using the best of them as our models. We seldom wanted to challenge them, content to feed them with new entrants groomed to their ways.

It was a strategy that made us a successful business but not, I felt, a transformative educational institution. I remember well the day when a journalist rang me to en-

x10

Costs are soaring, in research as well as teaching, with the average two-year programme costing \$120,000, ten times the cost of one online

15 years

Richard Lyons estimates that half of US business schools will be out of business in less than 10 years. Clayton Christensen reckons that half of the American universities will be bankrupt in 15 years quire what LBS thought of a new government initiative aimed at business. I heard myself saying *"The school does not think...."* before stopping myself and suggesting she talk to a particular member of the faculty.

Then I reflected, should not the school have a view on current events? All that brainpower going to waste because we were a collection of individuals not a group with a view. In my more cynical moments I reflected that I was more truthfully the curator of an elite pond where the businesses came to fish for talent and the students came to be hooked.

As long as my recruitment process captured the right sort

of fish everyone was happy, irrespective of what we taught them or what they learned. Anecdotally, past students would tell me that they had enjoyed a tough and stimulating educational experience, one that had made them more

self-confident and had led onto a good job, but that they had so far found little use of anything particular that they had learned.

Indeed the surveys, then as now, indicated that only 10% of our learning came from books or study. No wonder, perhaps, that I was disconsolate.

That was more than 40 years ago. Since those pioneering days when business schools were hardly known outside the US they have multiplied around the world.

There are now thought to be over 10,000 business schools overall with nearly 5,000 in India alone. The MBA is a global brand, with many young people seeing it as the necessary entry ticket to good jobs and big salaries.

Clearly my misgivings did not worry anyone else. It is a great success story. But success can lead to wilful blindness and the belief that all will continue as it has in the past. Are they right or are they unwittingly on the road to Davy's Bar?

'Davy's Bar' alludes to something that happened to me some years ago and has subsequently led to my own 'Theory of Everything'.

One day I was driving through the Wicklow Mountains behind Dublin when I found myself uncertain about the right road to take. I saw a man by the roadside so I asked him if I was on the right road to Avoca.

"You are indeed," he said, "and it's easy, just go on up the hill for two or three kilometres, then down for a while until you cross a small bridge and see Davy's Bar on the other side. You can't miss it, it is bright red. Have you got that?"

The second curve has to start before the first curve peaks because otherwise there are no resources or energy to cover the early investment that will start the second curve

"Yes. I think so," I said.

"Well, half a kilometre before you get there turn right up the hill."

It sounded so clear that I drove off before I realised what he had said. I got to the bar, turned round and found the right road but as I drove on I thought that in life we cannot do that, miss the road and turn back.

Too many businesses that I knew have ended up in Davy's Bar having missed the turn to the future and can only reminisce about the good times and how they missed their opportunity to change direction.

I went on to formulate my experience as a general principle, the 'Law of the Sigmoid Curve', the curve of everything human or made by humans, businesses, governments even empires and, of course, our own lives.

Any and everything will start with an investment of some sort, be it money, ideas or education. More goes out than comes in for a time. Then the line picks up and grows and grows until, eventually, it peaks and thereafter starts to decline. The eventual decline is inevitable; all we can do is determine how long the line might be and at what place we are on it.

That is a depressing prospect for the human race but there is an escape from the inevitable. We can start a second and even a third curve:

The trouble is that the second curve has to start before the first curve peaks because otherwise there are no resources or energy to cover the early investment that will start the second curve. Obvious that may be, but it is hugely difficult in practice because the need to start second curve thinking comes just when everything is going well, when all the implicit messages urge one to continue the status quo. Where are the business schools on that first curve now? Some believe that they are nowhere near the peak of the curve. LBS has recently raised £100 million to buy and refit the nearby City Hall with a suite of new lecture theatres, confident that life will go on as before only more so.

On the other side of the ocean Richard Lyons of Berkeley's Hass School estimates that one-half of US business schools will be out of business in less than 10 years. Clayton Christensen of Harvard reckons that half of the American universities will be bankrupt in 15 years. Part-time participants and GMAT applications are both declining.

Meanwhile, costs are soaring, in research as well as teaching, with the average two-year programme costing \$120,000, ten times the cost of one online.

Roger Martin, former dean of the Rotman School of Management at the University of Toronto in Canada, has calculated that the total cost of one published article is now \$400,000 and something like \$1.7 million for one that is actually used by managers.

Are business schools becoming just too expensive to survive as they are today? It is my sense, from perusing the excellent publications by Howard Thomas and others on the Future of Management Education for the EFMD, that most of the business schools of the world are at or maybe even beyond the peak in the curve. 10%

Indeed the surveys, then as now, indicated that only 10% of our learning came from books or study.

It seems beyond doubt that the schools are going to be hit by a disruptive innovation from the new online courses. In my terms, the intruders will steal a march on the incumbents and get to the second curve ahead of them. Change so often comes by the bypass, unnoticed until it is right there, already ahead of you.

The paradox is that just when business schools may be beginning to hit the buffers they will actually be needed more than ever. Businesses are getting ever more complex, too big to be human scale and too self-absorbed to be seen as legitimate to wider society.

These businesses also need to find a second curve, one that defines a new purpose, new structures and new values and therefore requires a new sort of leadership. The opportunity is there for the business schools to match their second curves to those of the corporation, but are they up to the challenge?

They probably have five to 10 years to find that new curve while current programmes keep them going – that is the point of the overlap in the curves, it gives time for experiment. PepsiCo, I understand, does this routinely, with two groups in each division, one promoting the current strategy, the other seeking to disrupt it before others do.

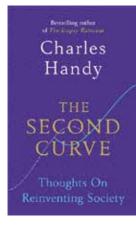
So what should be the elements of that second curve? You are, of course, better placed than me to answer that. But as a concerned outsider I might be allowed to express a view. I have a rule of thumb that if a computer or the internet can do what you do, then let them do it and move onto things that they cannot do. In this case this means leaving a lot of the *What* syllabus to online courses and concentrating on the *How* and the *Why*.

Essentially that means concentrating on manager development rather than management education – a subtle but crucial change of words. It means moving away from the university and towards the work organisation.

Different faculty will often be needed, often drawn from outside, and different faculty reward systems will be needed. Maybe the business schools should become leadership academies to recognise the change in emphasis.

Second, in place of research that records/interprets current practice, the new academies should turn themselves into think tanks, exploring the future – of business, of capitalism, of organisation structures and the role of regulation and so on.

These are big asks, which require big changes but my fear is that, left to continue as they are, the schools will become shadows of their former selves, slimmed down, with shorter, cheaper courses, poorer faculty and shabby buildings, relics abandoned in the sands of time.



This article is an edited transcript of an address by Professor Charles Handy to the EFMD Annual Conference, June 2015, in Brussels.

Above

In The Seond Curve, Handy builds on a life's work to glimpse into the future and what challenges and opportunities lie ahead. Provocative and thoughtful as ever, he sets out the questions we all need to ask ourselves – and points us in the direction of some of the answers.

The Second Curve, is published by Penguin Random House and available in print and e version from Amazon.co.uk

Topeka offers the right combination of resources and support while delivering it all with a can-do attitude, GO Topeka Economic Partnership write

peka: the right

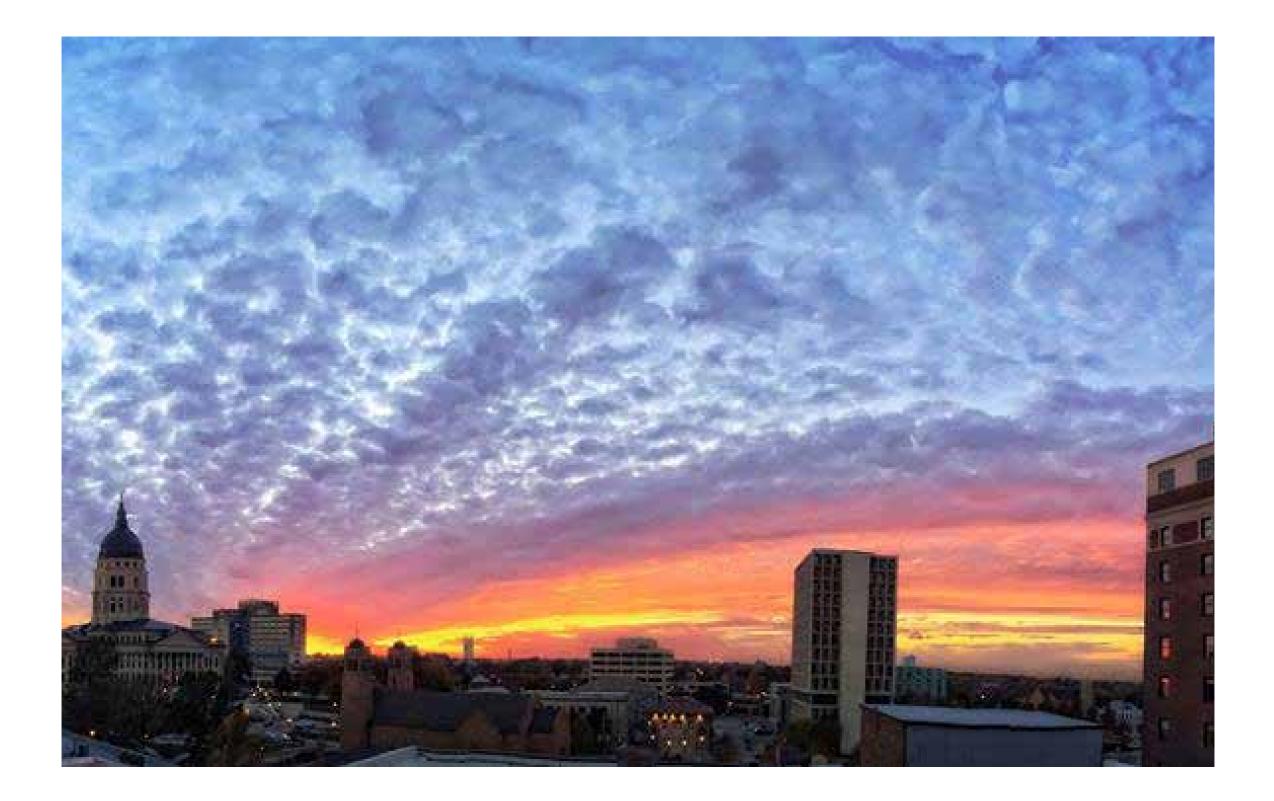
combination

ansas's business-friendly policies, low living expenses, and hard-working population make it an ideal location for companies that are looking to expand or relocate their business. But which destination in this great state offers the right combination of resources and support while delivering it all with a can-do attitude? For many companies, including Mars Chocolate North America and Home Depot, the destination of choice is Topeka.

Topeka, located in Shawnee County, Kansas, offers a wide range of resources and services to existing and relocating or expanding companies. Whether it's access to a highly education workforce, quality infrastructure, or a low cost of doing business, our community offers unique advantages, including:

- Over 700 available acres fully equipped for your business, including two commerce parks with prime locations near rail and highway transportation and direct access to two runways.
- Foreign Trade Zones that are 'user friendly' site-specific and allocated on an individual company basis.
- Aggressive local incentives, based on the quality of jobs, and state incentives, including income tax credits.
- A tax program that exempts all machinery and equipment from personal property taxes.
- A ten-year property tax exemption on real property for qualified companies.
- Infrastructure that allows for goods shipped by truck to reach 25 percent of the US in one day and 90 percent by two.
- A knowledgeable workforce with over 25% of the population having a bachelor's degree or graduate degree.

These advantages, coupled with a knowledgeable staff and a friendly community, have led these companies to choose Topeka as their newest home: Target Distribution Center, Home Depot Distribution Center and Mars Chocolate North America. We also continue to be home to other large companies, including Frito-Lay, The Goodyear Tire



& Rubber Company, Big Heart Pet Brands, Hill's Pet Nutrition and many others. Having these corporate citizens as a part of the Topeka and Shawnee County community has helped provide a stable quality of life throughout the Topeka and Shawnee County area.

Once a company has decided to call Topeka and Shawnee County home, we work with local officials to make sure companies transition smoothly into our community; but we don't stop there. We help established businesses continue to grow by offering incentives for expansion and dedicated staff with expertise in helping existing companies.

In the past year, many of Topeka's existing companies took advantage of both the healthy economy in Topeka and resources and incentives offered by GO Topeka to grow their business. Big Heart Pet Brands, Federal Home Loan Bank and Mars Chocolate North America have all expanded their facilities and added more jobs to the community in 2015.

Whether it's access to a highly educated workforce, quality infrastructure, or a low cost of doing business, Topeka offers unique advantages



Why are all of these companies thriving in Topeka? Because here, business expenses are low, meaning your company gets more bang for its buck! Here's how:

- Our cost of doing business is 15 percent lower than the national average.
- Our cost of living consistently ranks 8 percent to 10 percent lower than the national average.
- State and local taxes are 11 percent lower than the national average.
- Energy costs are 18 percent lower than the national average.

In addition to the low cost of doing business, Topeka prides itself on its highly-educated, well trained, quality workforce. We work continually to ensure that our people are ready to work for your business. A new food manufacturing training class teaches the hard and soft skills necessary to succeed in the food manufacturing world. The Washburn Institute of Technology, located in Topeka, offers programs in technology, construction, transportation, and more. The Advanced Systems Technology program turns out students with the technical knowledge and skills to trouble-shoot, repair and maintain industrial machinery and equipment to keep production lines and distribution systems running. Four universities within a 60-mile radius provide a combined enrolment of 63,000 and over 13,500 graduates each year. And to top it all off, the State of Kansas offers tax incentives to help with continuing education and workforce training.

So if your company is looking at expanding, relocating, or growing, come take a look at Topeka. We have the right combination of resources to make your relocation or expansion quick and painless. And, more importantly, we deliver it all to you with a great attitude and support from beginning to end!

GO Topeka Economic Partnership



Management matters

nox House Marine & Aviation, part of Knox House Trust Limited - an Isle of Man based corporate and trust services provider has announced their continued expansion by appointing James Porter and Tarryn Boland-Porter to their Marine & Aviation division. James Porter has been appointed as Senior Manager and is responsible for the management, development and day-to-day operation of Knox House Trust Limited's Marine and Aviation division. Tarryn Boland-Porter has been appointed as Assistant Manager and is responsible for managing the aircraft and super yacht portfolios within Knox House Trust Limited's Marine and Aviation division.

Knox House Marine & Aviation offers owners of yachts and privately operated aircraft a comprehensive range of ownership, management and administration services that are bespoke to their requirements and delivered through a single point of contact. Drawing upon a team of marine specialists, aviation experts and corporate service and trust practitioners, our considerable resource provides superior personal service with the convenience of instant access to highly technical support and advice. **Our aim is simple: to offer convenient, accessible and specialist services that reduce the administrative burden while maximising the benefits of ownership.**

Yachts

Knox House Marine & Aviation understand owners' requirements and expectations and as such, aim to remove the administrative burden from yacht owners by delivering full management and administration services. Our services

Knox House Marine & Aviation is a "one stop shop" for all yacht and aircraft ownership, management and administration services can cover all aspects of yacht management and administration, which can be tailored according to the level of assistance required by owners. With the many advantages of yacht ownership, comes the responsibilities of managing the yacht's operations and the associated book keeping and accounting duties. KHMA works closely with owners and captains to analyse the operation of each yacht to customise a financial plan best suited for meeting their requirements.

Knox House Marine & Aviation's comprehensive yacht management and administration services include budget preparation, payroll, invoicing, European VAT registrations, ISM & ISPS technical services and much more. Should crew payroll service be required, KHMA can provide full crew employment and payroll services to assist owners

KHMAs summary of services include:

- Yacht and aircraft tax efficient ownership structures
- EU yacht and aircraft importation
- Yacht and aircraft registration
- Management & Payroll
- Technical services
- Surveying
- Insurance
- Finance
- Trusts
- Companies
- Foundations
- Family Office

and to ensure they comply with crew employment legislation, EU national insurance/social security and contribution requirements. With an extensive global network of reputable, well established, and trusted suppliers and agents, we can provide assistance for anything your yacht may need regardless of where it is operating.

Aircraft

Knox House Marine & Aviation's aircraft services extend from aircraft ownership solutions, to registration, importation, ongoing management and administration, insurance and finance. We establish an understanding of our client's requirements from the initial enquiry stages and build a suitable solution around this. Mirrored with the advantages of yacht ownership, comes the responsibility of managing the aircraft's day to day administration and operations. Through our partner network, KHMA can offer a dedicated aircraft operation service where flight planning, airfield slots, ground handling and land permits will be overseen. We will also ensure that the mandatory day to day administration, payments, book keeping and accounting duties are managed. Knox House Marine & Aviation is a 'one stop shop' for all yacht and aircraft ownership, management and administration services and we are always delighted to be of assistance.

Should you wish to discuss any of the services provided by Knox House Marine & Aviation, please contact us at enquiries@khmarineaviation.com, on +44 (0) 1624 631 710 or visit our website at www.khtlimited.com

Hermes Executive Aviation - Private aircraft operations

Hermes Executive Aviation

We exceed your expectations

Our word is our bond

We are an exclusive private aviation management company offering a bespoke, discreet service fully tailored to our clients' requirements and expectations. Underpinned by customary values and eagle-eye attention to detail, nothing is too much trouble when it comes to providing the best possible service. Our team ensures that every detail of our clients' flight and aircraft management is handled with grace and efficiency ensuring that only the finest will carry our clients to their destination in safety, on time and in the comfort and style they deserve.

We are the complete service, seamlessly integrated into our client's own operations and needs; discreet, professional and unassuming; we put the pleasure back into their privilege. Our name may be new, but out team have decades of experience in the aviation industry. We are absolutely dedicated to providing the finest aircraft management service in the world to the client.

www.hermesexecutiveaviation.aero

Business aviation in Malta

When it comes to business aviation Malta is no longer the new kid on the block but is a serious jurisdiction well considered in the industry, Stanley Bugeja writes alta is anything but another offshore jurisdiction. The reason is fairly simple; as an EU country Malta cannot be an offshore jurisdiction. Malta is a member of EASA and operating an aircraft with the Maltese flag and with a Maltese commercial certificate gives one the peace of mind that the aircraft is being operated to the highest of aviation standards. This is not only important because in aviation safety is paramount but as any seasoned aircraft sales broker would tell you, the value of the aircraft goes hand in hand with how well the aircraft maintenance and its records have been kept. A signatory of the Cape Town convention operating on a Maltese flag and with a Maltese Air Ops Certificate (AOC) is ensuring that your valued asset is on one of the most reputable aviation registers worldwide.

Malta has a long aviation history, perhaps amongst the oldest in Europe. 2015 has been of particular significance because the island celebrated 100 years since the first flight to the island. On 13 February 1915, a British Shorts 135 aircraft was airlifted from HMS Ark Royal and gently lowered in to the waters of Grand Harbour, Valletta, to undertake the first-ever flight in Malta. This fateful flight marked the beginning of the first 100 years of aviation in Malta.

A bilingual island in the centre of the Mediterranean, Malta is well placed and equipped for international trade. Speaking recently to a Spanish CEO of one of the many AOC's on the island, he stated, *"Malta has a functional bureaucracy, if I cross all the t's and dot the I's I will reach my objectives with the help of the authorities."*, he continued *"You feel that everyone is trying to help you to succeed in your business, which is such a breath of fresh air"*. Another accountable manager of a South African organisation which is currently migrating all its operations to Malta, said, *"Malta, Open for business is what caught our eyes, experiencing how things really work here confirms your motto"*.

Malta Open for Business is the motto of Aviation Malta which is a co-operation between Malta Enterprise, a government investment support agency, and the Malta Business Aviation Association, a private enterprise consisting of private organisations in the aviation industry in Malta. In mainland Europe business aviation falls into one of two categories, and the unluckier ones actually get the worst of both worlds; that is, business aviation is either a nuisance and hence given the cold shoulder, drowned in a mountain of bureaucracy, or else taxed heavily, both directly and indirectly, as it is labelled as an exuberance. This is where Malta comes across as really a business aviation friendly jurisdiction.

Authority fees in Malta for both registering an aircraft and operating commercially with a Maltese licence are amongst the cheapest in Europe. All legislation is in English and all application forms are in English. Operating an aircraft with a Maltese licence requires one to have a Maltese company with a principal place of business in Malta, but here again the process is fairly straight forward and in most cases one can have a company set up in one working week.

The advantages of operating on an Air Ops commercial licence are, amongst others, freedom of movement in the EU, VAT exemption of both acquisition and operation of the aircraft as well as the possibility to reduce one's cost by

When it comes to business aviation Malta is no longer the new kid on the block but is a serious jurisdiction well considered in the industry legally chartering out to third parties. All of this with a low tax structure of effectively 5%. Already a number of management companies have set shop in Malta with a number of very well-known brands in the industry now operating exclusively from Malta.

The above and more positive experiences by various entities have meant that the Maltese jurisdiction has now more than 100 business jets operating on approximately 25 EASA Air OPS AOC operating worldwide, and these numbers continue to grow on a daily basis. When it comes to business aviation Malta is no longer the new kid on the block but is a serious jurisdiction well considered in the industry, whether it is aircraft owners, financiers, manufacturers, aircraft managers or operators.

The Maltese Civil Aviation authority boasts itself as one of the most approachable authorities in Europe, available 24/7. One of the major challenges for the authority has been to absorb the well the growth in the industry and this has been done extremely well through aggressive employment and investing in new facilities.

In the past 15 years Malta has seen huge development and investment in the aviation industry from both the private and public sector. A state-of-the-art airport which is barely 10 years old. A myriad of maintenance facilities which can service aircraft types from manufacturers such as Airbus, Boeing, and Bombardier. The government is building three brand new hangars and there is space for more.

In spite of this growth an area which has seen significant growth in the past years has been the aviation training sector. From initial pilot and technician training to mechanic type rating, cabin crew attestation as well as flight dispatchers and aviation English courses. As the number of operators on the island, continue to increase, so is the need for human resources and again the public private co-operation is ensuring that the local needs are being met both with regards to initial training as well as recurrent training. The high standard of this training is now attracting cus-

tomers from across the European and Asian continents. The latest of which is a multinational consortium which is said to even include aircraft simulators.

There are a number of challenges ahead, as the jurisdiction continues to grow so will the requirement for additional human resources both in the private and public sectors. However Malta is a fairly stable, secure cosmopolitan society which in past few years has ranked very high on list of desirable locations for expats. Being an island has its challenges, primarily amongst these is connectivity and the aviation sector plays a principal role in this challenge. Both the public and private sectors are aware of the significance of the success of the jurisdiction so every effort will continue to be placed to ensure its continued success.

Recently the government has launched a project which again will be a joint effort between the public and private sectors as well as EU funding to launch the National Aerospace Centre. The objectives the National Aerospace centre will be to bridge the gap between the training and educational institutes and the requirements of the industry. Furthermore it will be investing heavily in research and development for the enhancement and growth of the jurisdiction.

The Malta Business Aviation Association is confident that Malta will be able to emulate in aviation its success in shipping, where it has the largest shipping registry in Europe. The demand is there, the business aviation aircraft is a tool which supports the growth of the business and as such also the growth of the Maltese and European economy. We will continue to support the local authorities in ensuring that our legal framework is conducive to the business requirements, the existing local companies in continuing to prosper and the foreign parties wishing to either do business with existing local businesses or setting up shop in Malta.

Stanley Bugeja is President of the Malta Business Aviation Association (MBAA)

The rhetoric and reality of the Trilateral and Bilateral Summits: cautious optimism

The recent trilateral and bilateral meetings provides an insight into the region's future trade, security and political relations, Stephen Nagy finds he recent trilateral and bilateral meetings in Seoul between PM Li Keqiang, President Park Geun-kyu and PM Shinzō Abe was the first time in three years that the top political leaders of East Asia's most important countries gathered to discuss shared interests within the region. The focus of their discussions tells us much about each country's priorities, public diplomacy and the challenges ahead in terms of forging a constructive and mutually beneficial relationship. Understanding these three areas provides insight into the region's future trade, security and political relations.

In the process of engaging in an analysis on each country's priorities, their interests in public diplomacy and the challenges at both the trilateral level and bilateral level, I will explore the following questions: what a common agenda suggestions about regional political relations? How do bilateral and trilateral relations differ between each grouping? Are bilateral relational challenges the same in the case of Japan-China and Japan-Korea? Is there political space for more amicable relations? How will an improvement, worsening or status quo effect trade in the region?

I argue that the functionalist approach to cooperation explicitly voiced at the recent trilateral and bilateral summits strongly suggests that China, South Korea and Japan remain far apart on core issues that continue to divide them. Moreover, shifts in dynamics between Japan-South Korea, South Korea-China and China-South Korea indicate that an incremental rapprochement between Japan and South Korea is taking place while China-Japan rapprochement continues to struggle to find traction.

Trilateral Summit: economic, environmental and natural disaster cooperation

November 1st' meeting between PM Li, President Park and PM Abe were important optics in the global public diplomacy contest that has been occurring between these three countries. Striving to appear as a responsible and forward-looking country globally, China has been waging a public diplomacy war with Japan in which on the one hand it aims to portray China as a responsible global player that engages in dialogue and diplomacy. On the other hand, it aims to paint Japan as an unrepentant, revisionist nation bent on remilitarization and overturning the status quo.

Similarly, Japan's public diplomacy since at least 2010, but in particular under PM Abe, has highlighted its commitment to international laws, norms and the international community in many diplomatic pronouncements linking trade, security and international norms advocacy in Southeast Asia. Public diplomacy initiatives have shifted from been reactive to Chinese successes to proactive in attempting to portray positive Japanese imagines at the regional and global level.

For example, the 'The Bounty of the Open Seas: Five New Principles for Japanese Diplomacy' stresses Japan's support and interest in deepening relations with countries with shared values such as democracy, freedom of press, respect for human rights.¹ Without overtly saying so, this 'values diplomacy' juxtaposes Japan with China in an effort to elevate and consolidate Japan's position as a status quo power that abides by international law.

... an incremental rapprochement between Japan and South Korea is taking place while China-Japan rapprochement continues to struggle to find traction South Korea under President Park has not been a passive player in this public diplomacy competition. She has openly chided Japan and the Japanese PM for its revisionist in tendencies and stance on comfort women. Public diplomacy has extended the historical argument between Japan and South Korea to North America with individual states erecting comfort women monuments to put pressure on the Japanese government.²

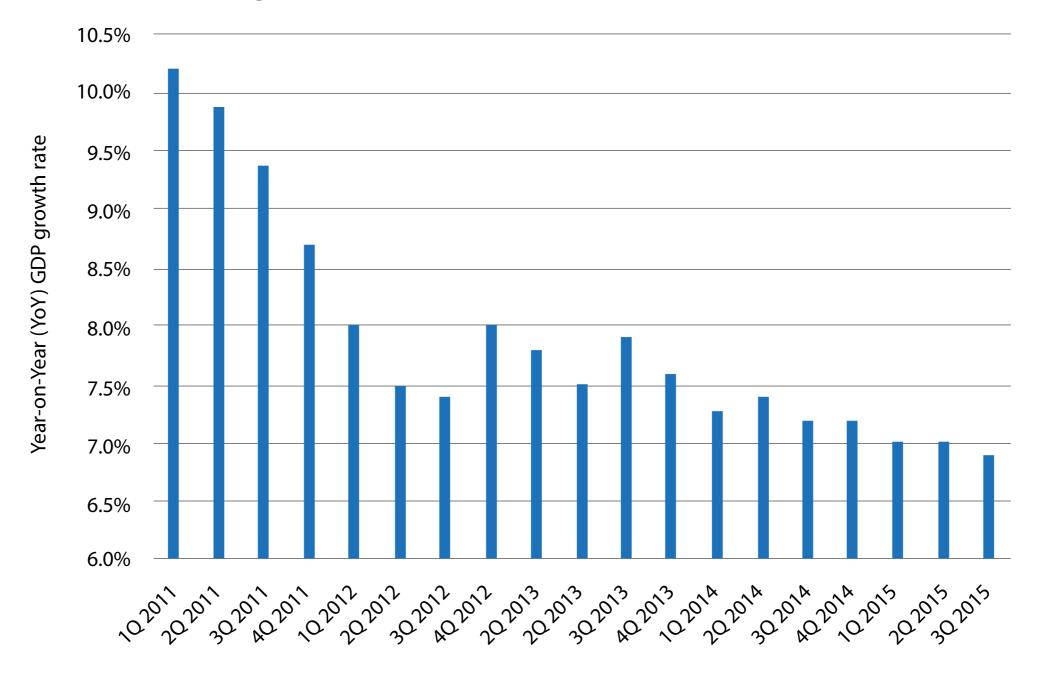
With this public diplomacy contest on full view, each leader wanted to convey the optics that they are statesman and stateswomen that want to create forward oriented messages. As domestic audiences weigh heavily in each leader's mind, they took a functional approach to cooperation by agreement to continue to work towards a trilateral free trade agreement and to agree to deepen environmental and disaster cooperation.

Although important, especially considering the enormity of the environmental challenges in China as well as the region's numerous natural disasters, this functionalist approach indicates at the trilateral level, these countries are still finding it difficult to deal with traditional security issues such as territorial disputes but also issues of history, Japan's imperial legacy and leadership, joint or otherwise within the region.

The focus on a trilateral free trade agreement should also be seen for what it is. Owing to a slowing Chinese economy, Japan and in particular South Korea must find creative ways to maintain sustainable economic growth.

Both countries are ageing quickly, have a smaller and smaller young population entering the workforce and as a result, a dwindling number of domestic consumers. A FTA with China would open up a vast market for South Korean and Japanese products. For South Korea, it would cement China's status as South Korea's number one trading partner wedding South Korea's economic future to the success, failure or stagnation of the Chinese economy.

Figure 1. China's GDP is slowing



Source: National Bureau of Statistics, China

On the Chinese side, a FTA would be another way to stimulate a slowing economy but also to further bring Japan and South Korea into the Chinese economic orbit. Closer and deeper economic relations with East Asia's largest economy would be a boon to Chinese foreign policy it would make it more difficult for both Japan and South Korea to shift too far away from Beijing's political agenda for fear of economic pressure. With a past track record of applying punitive economic and other sanctions when political relations sour or are counter to Beijing³, the trilateral FTA may be another pipe dream for countries within the region as it risks creating an economic client state relationship with China.

Notwithstanding the challenges, economic, environmental and disaster cooperation between China, South Korea and Japan do represent win-win scenarios and messaging that they can take back to their domestic audiences to demonstrate that they are making progress with their counterparts without sacrificing their core issues. This is especially true with their track record of cooperation at the state-to-state; local government and grassroots level.⁴

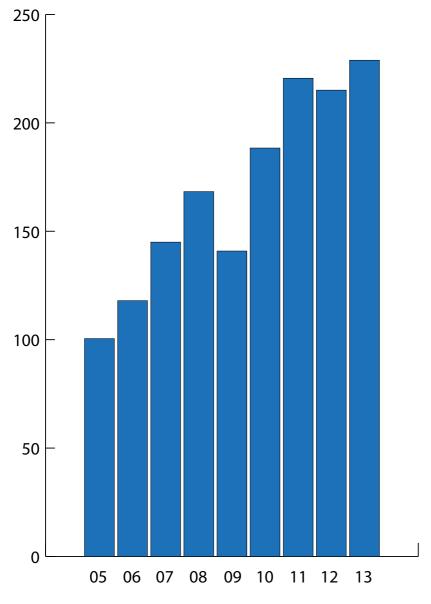
Bilateral tangos part I: incremental progress in South Korean-Japan relations

Whereas the trilateral meetings used past functional cooperation as a model for reengaging with each other, the bilateral meetings came away with very different take homes messages. The Japan-Korea bilateral meeting led to incremental progress due to back door pressure from the US as well as recognition in the domestic South Korean context that Park's hostile stance towards Japan has been unproductive⁵, sacrificing overall relations for a focus on the comfort women issue.

This incremental progress between Japan and South Korea has taken place in the backdrop of efforts by PM Abe to move towards the South Korean position on comfort women. The first overt gesture was a PM Abe speech in the US in which he made reference to the human trafficking of women in East Asia⁶. Although not a direct reference to comfort women, the term human trafficking is a much stronger wording compared to previous PM statements.

Figure 2. South Korea-China trade

\$ billion



Source: Korea International Trade Association

The second overt gesture was the tasking of a committee to examine Japan's imperial part to present⁷. The lengthy report highlighted that many women were violated during Japan's imperial past and that Japan has made progress.

The third over gesture came at PM Abe's August 14th speech on the 70th anniversary of WW2 in which he spoke of the indignity of women behind the battlefields⁸.

Collectively, these movements towards President Park's position have contributed to an incremental improvement in relations and a shift of South Korea-Japan relations towards a non-comfort women based core. This repositioning of Japan-South Korean relations on a comprehensive, win-win rather than zero-sum axis means that Japan and South Korea will incrementally increase their bilateral cooperation in areas of mutual interest.

The first area of cooperation will likely be support by Japan for South Korea's inclusion as a member of the TPP. South Korea's participation would further increase the number of middle class consumers from developed countries that would be export destinations for products made by Vietnam and other member states in South East Asia. At the same time, joining the agreement would allow South Korea businesses to enjoy the IPR and service sector protection that is the hallmark of the TPP and access to Southeast Asia's burgeoning manufacturing network where South Korean products can be made and exported to TPP member states.

South Korea's inclusion would no doubt add to the momentum to also include both Thailand the Philippines, deepening and broadening the scope and breadth of the TPP. Their inclusion, which has already received verbal support from the Japanese government⁹, would expand Southeast Asia's role as an alternative production hub to China's existing expansive hub.

Bilateral tangos part II: status quo and the ASEAN rupture

Whereas the Japan-South Korean dynamics could be characterized by incremental and steady progress, China-Japan dynamics are better characterized by maintaining the status quo or a 'new normal' in which relations remain tense, calcified in mutual distrust but functional in non-core related issues¹⁰.

Leaders committed to dialogue and to future meetings while at the same time not addressing any of the core differences that exist between the two. This was intentional as both leaders were playing to domestic audiences which are highly distrustful of governments in either country.¹¹

Japan under PM Abe is understood in China as in the process of a new grand strategy of national revival akin to Japan's Meiji restoration in which she transformed from an isolated, closed country to a regional powerhouse that colonialized the Korean Peninsula and then engaged in a destructive war of expansionism in China and Southeast Asia. In contrast, China under the leadership of the Chinese Communist Party (CCP) is understood in Japan as inherently anti-Japanese, corrupt and engaged in assertive military expansionism in both the East and South a China Seas. Concerns over Chinese regional hegemony loom heavily in Japan both at the level of citizens and policy makers.

This divide has led to both countries competing with each other in the region and globally through public diplomacy, overseas development aid (ODA), foreign direct investment (FDI) and competing trade agreements such as the TPP, RCEP and the Trilateral FTA touched upon at the Trilateral Summit. Mistrust has also lead to strategic missteps such as Japan not joining the AIIB and not being more proactively and cooperatively engaged in the One Belt One Road Chinese initiative. Both Chinese initiatives provided Japan an opportunity to not compete but cooperate with China, exercises that would have been useful in deescalating the mutual mistrust that exists.

Japan's successful conclusion of the China-excluding TPP along with 11 other countries sends the strong single that the traditional approach to China by Japan of separating politics and economics has been abandoned or at least deprioritized for a geo-economic strategy that preferences trade and economic relations with like-minded states.

This shift has important implications for East Asian regional integration. First, the model of an ASEAN-centred integration based on ASEAN plus 6 or plus 10 is unlikely to come to realization. In the short term, both models may be ASEAN-centred but in the mid to long term, China's economic growth would cause regional economies to gravitate towards the enormous pull of China's economy. Second, agreements such as the TPP will have the effect of splintering ASEAN into those states with strong client state relations with China (Laos and Cambodia) and those states with mutual economic interests connected by the TPP cohesive (Vietnam, Singapore, Malaysia, Brunei and most likely the Philippines and perhaps Thailand). The ASEAN-way of consensus-based decision making will continue to fracture owing to economic forces and political influence from outside ASEAN.

Going forward

The November 2015 trilateral and bilateral meetings in Seoul were heralded as a turning point towards rapprochement between China, Japan and South Korea. A closer analysis provides us with different conclusions that are rooted in the different dynamics and sources of conflict between participating states.

Japan-South Korea frictions are firmly rooted in Japan's continued reticence to forthrightly acknowledge the comfort women issue and its colonial legacy on the Korean peninsula. Incremental steps forward over the past six months have created a positive momentum for an improvement in relations that will have downstream economic benefits associated with South Korea's likely inclusion into the TPP.

Whereas prudent-optimism characterizes improvements in South Korean-Japan relations following the Trilateral and Bilateral Summits, cautious pessimism is an analysis of both the rhetoric and implemented policies by both China and Japan is the take home message from the Summits. Instead of history being the core dividing factor between China and Japan, mutual distrust, security concerns and history (both contemporary and long-standing differences) will continue to contribute to frosty but functional relations.

Competition rather than cooperation will continue to be the hallmark of Japan-China relations which will shift regional integration away from an ASEAN-centred RCEP, ASEAN plus 6 or 10 model to transpacific integration attenuating China's economic hegemony in the region.

ABOUT THE AUTHOR

Dr Stephen R Nagy has been an Associate Professor in the Department of Politics and International Studies at the International Christian University since September 2014. Previously he was an Assistant Professor at the Department of Japanese Studies from December 2009 to January 2014. He obtained his PhD from Waseda University, Japan in International Relations in December 2008. His research interests include international relations of Northeast Asia, Sino-Japanese relations, Asian regional integration and regionalism in Asia. His recent funded research projects are "Sino-Japanese Relations in the Wake of the 2012 Territorial Disputes: Investigating changes in Japanese Business' trade and investment strategy in China". Currently he is conducting a research project on the entitled "Perceptions and drivers of Chinese view on Japanese and US Foreign Policy in the Region".

With extensive experience in China, Japan and Northeast Asia, Dr Nagy provides macro-level geopolitical analysis on trends in the region to businesses, governments and the media. He has published widely in peer-reviewed international journals such as China Perspectives, East Asia, the Journal of Asian Politics and History and the International Studies Review on topics related to trade, nationalism and China-Japan relations. He has also published in think tank and commercial outlets such as the China Economic Quarterly on trade and political risk. In addition to writing in media and policy forms outlets in Japanese and English such as Diamond OnLine, South China Morning Post, the East Asian Forum and Policyforum-net on issues facing the region. Nagy is a frequent political/economic and security commentator on Japan-China-Korea.

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OBOR: will it reboot the Chinese economy?



Pravakar Sahoo discusses the centrepiece of China's foreign policy, and looks at potential future issues

Introduction

The Chinese President Xi Jingping mooted the idea of the New Silk Road and 21st Century Maritime Silk Road initiatives in 2013. Later, in November 2014, the One Belt, One Road (OBOR) concept was officially unveiled at the Asia Pacific Economic Cooperation (APEC) meet with the establishment of a \$40 billion silk fund. The OBOR project has two parts. One Belt will be a land based economic corridor slated to run from Xian in Shaanxi province, China, traversing through Central Asia and Europe before terminating at Venice in Italy. The belt involves significant investments to develop road and rail infrastructure along this corridor along with other ancillary facilities like high speed fibre optic cables for better communication and energy pipelines.

The One Road, on the other hand, refers to the 21st Century Maritime Silk Road-a sea based route, originating from Quanzhou in Fijian province China, passing through the Strait of Malacca in order to reach Nairobi (Kenya), before merging with the land based route at Venice. Investments are likely to be undertaken in development of ports in the participant countries along with initiatives to simplify procedures of transporting goods across the borders.

The regions to be covered under the two initiatives comprise about 40 to 60 countries consisting of about 65% of the world's population generating 30% of the world's GDP. It is believed that the OBOR is likely to be completed in time for the 100th anniversary of the establishment of the People's Republic in China, in 2049.

A beginning has been made with the operationalization of the \$40 billion Silk Road Fund in February 2015. This Fund is being backed by the China Investment Corporation (China's sovereign wealth fund), China Development Bank, the Export-Import Bank of China and the State Administration of Foreign Exchange. It is expected to fund infrastructure and industrial corridor projects in participant countries. The Karot Hydropower project in Pakistan is the first recipient of this Fund. Other institutions likely to invest in OBOR projects include the AIIB and the BRICS New Development Bank. Chinese average growth, which has remained at nearly 10% per annum over the last three decades, started showing signs of slowdown since early 2014. Rising labour costs, declining global demand for exports leading to excess capacity in factories, weakening of stock markets and rising income inequality within the country are some signs of overheating of the Chinese economy. Initiatives of the scale of the One Belt, One Road Project will therefore be of great significance for China and the rest of the world, not only economically but also geopolitically.

OBOR: economic implications for China

Creating demand for heavy industries in China: the four major objectives of the OBOR are development of road and rail infrastructure; high speed fibre optic cables and energy pipelines; development of ports in the participant countries and establishment of trade logistics and institutions. Further, the OBOR initiative seeks to achieve policy coordination between participant nations through inter-governmental cooperation, macro policy correspondence and special communication mechanisms.

A prime focus of the OBOR initiative is to improve physical connectivity via massive infrastructure investment that will raise demand in certain industries and development of trade between China and participant countries. The OBOR initiative intends simplification of trade related procedures and customs cooperation, reducing barriers to

What is most important for the Chinese economy today is boosting aggregate demand for its industries and that is possible through OBOR

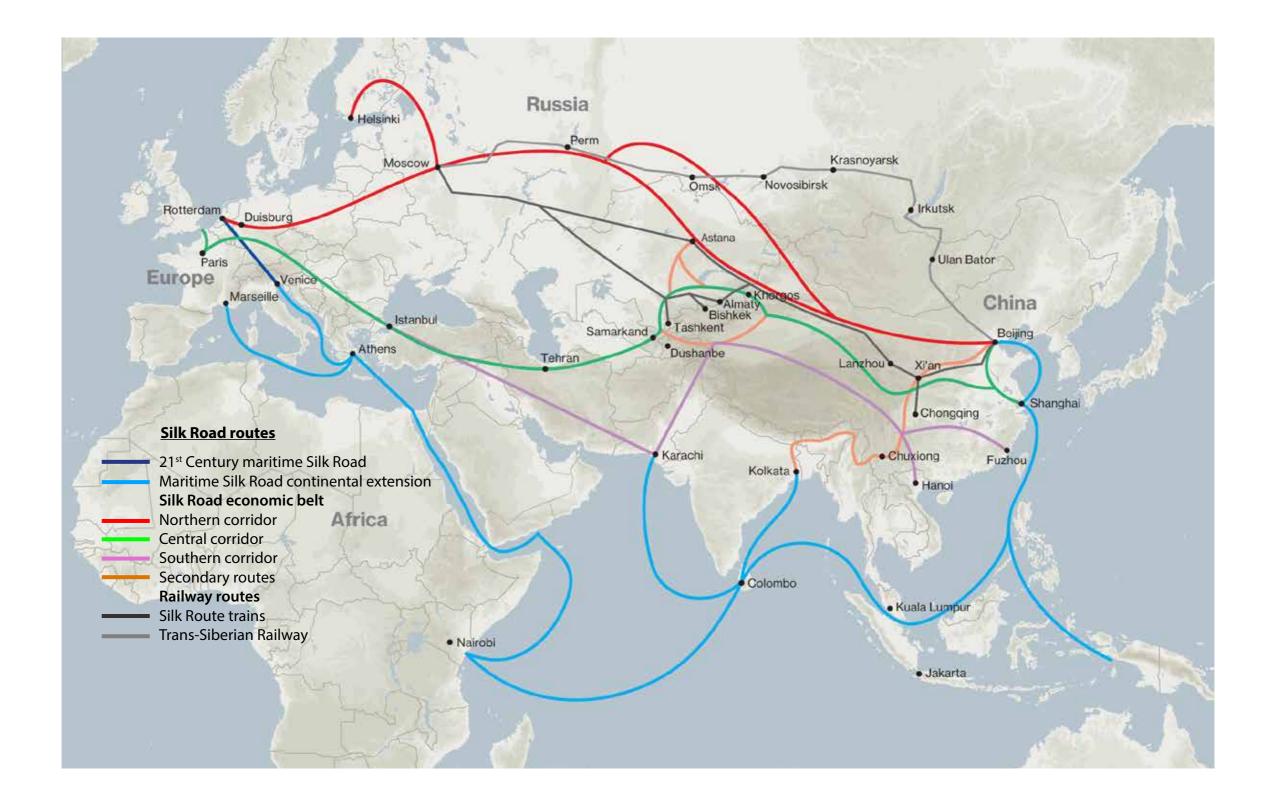
trade and investments within participant countries. Given that most of the countries covered under the OBOR project are developing countries that need quality infrastructure, large investment will be made in infrastructure which in turn would raise demand for products such as steel and cement. Some of the industries like construction machinery, petrochemical and materials, high speed railways and wagons, telecommunication equipment and pipelines will see increased demand as well.

As most of the OBOR infrastructure projects would be funded by China and institutions supported by China, such demand orders will go to Chinese companies that have thus far been saddled with unutilized capacity due lack of demand. China is the largest steel and cement producer in the world, but most of the factories run with excess capacities in the last couple of years owing to weak global demand.

In fact, what China needs from now onwards is giving a boost to aggregate demand to sustain even 7% growth rate. Higher demand in these heavy industries will lead to higher production which in turn is likely to generate millions of jobs across entire value chains. The OBOR initiative will re-boot China's factories not only in using installed capacity but also expanding in future thereby contributing to exports, jobs and forex.

China in recent years has developed great expertise in building infrastructure projects abroad. In fact many Chinese companies are actively involved in many road and high speed rail construction projects in Asia, Africa, Europe and South America. Implementation of the OBOR initiative will throw open opportunities to such companies.

Another sector where China is likely to gain significantly is renewable energy, especially solar energy. With green energy gaining currency among countries across the globe, China would seek to leverage its newly acquired technical knowhow and available natural resources to make the best use of the opportunity afforded by the OBOR initiative. China is home to about 90% of the world's rare earth deposits-the most critical raw material for solar panels. As



Chinese companies expand internationally, particularly in participating countries, demand for various financial and non-financial services will rise, providing thousands of jobs to the tertiary skilled workforce of China.

Exports for infrastructure projects from Chinese companies to participant nations will mostly be financed by Chinese institutions (like the New Silk Road Fund, China Development Bank and China Exim-Bank) or Chinese dominated financial institutions (like the AIIB and the BRICS New Development Bank), along with private entities like Maritime Silk Road Fund Management Center. China is likely to use its \$4 trillion forex muscle power to finance such institutions.

If these institutions operate on market principles, China is likely to derive additional benefits by investing its forex reserves in such projects. At present the rate of return on capital is every low in China, therefore it's an opportunity for China to use its capital in productive way and also help the internationalization of the renminbi. By advancing renminbi denominated loans or credit lines for projects importing Chinese goods, China would be able to broaden the international usage of its currency.

Regional integration for trade and investment: with regional connectivity as the main focus, the OBOR project is likely to further the integration of South and South East Asia with Central and West Asia and Europe. Other than the OBOR initiative, China has been involved in negotiations with quite a few countries for regional connectivity, such as the high speed rail link from Beijing to Moscow via Kazakhstan; road corridors under the nomenclature of Bangladesh-China-India-Myanmar corridor; and road connectivity with Thailand. Once completed these corridors will complement the OBOR corridor, effectively linking South East Asia directly with Western Europe through OBOR, thereby facilitating not only trade, commerce and investments but also cultural exchanges with the focus on people-to-people contact and tourism.

The OBOR initiative will help Chinese firms to get more market access, especially in Western Europe where they have not been so successful. Over time Chinese companies are looking to move forward in the global value chain by transiting from low-end, low-quality manufacturing to high-end, high-quality manufacturing. Such companies therefore are in need of markets that will have viable demand for their products. China is attempting to provide an opening for such companies, especially in countries of Europe and Central Asia, by making them partners through OBOR instead of confronting their restrictive trade and investment policies.

OBOR will further China's interest in Central Asia. China is already a major trading partner of Central Asian countries, especially in the energy sector. Several Central Asian countries like Turkmenistan, Uzbekistan and Kazakhstan, along with Russia, are well connected with China through various hydrocarbon pipelines. China has provided about \$3 billion to Turkmenistan, \$10 billion to Kazakhstan, and has promised about \$25 billion to Russia as either loans or as advance payment for future oil supplies. On the back of such investments China has been able to squeeze out concessions for not only Chinese hydrocarbon entities, but also preferential treatment for trade and investment.

Chinese energy firms (for example CNPC and CNOOC) have begun encroaching the markets of existing domestic firms of central Asian countries. For example, Gazprom of Russia has been losing its market share in the lucrative Central Asian hydrocarbon pipelines business to the pipeline arm of CNPC. With the implementation of the OBOR corridor it is expected that Chinese firms will follow the footsteps of their hydrocarbon siblings.

In return for investments made for building infrastructure like road, railways, airports and ports, along with communication infrastructure like cross country fibre optic trunk lines and mobile towers in participant countries, Chinese firms will bargain exclusive fiscal concessions along preferential treatment, not only vis-à-vis other countries but also against domestic firms. Such concessions will reduce China's cost of doing business in such countries, thereby boosting the competitiveness of Chinese products. Spin-offs from such a boost is expected to be felt globally. As infrastructure within the Belt and the Road develops, industrial corridors are likely to be established along the same. Construction of industrial corridors is likely to have a domino effect in the entire Belt and Road. With quality infrastructure in place, transaction costs in such industrial corridors will be minimized, leading to higher production, employment and profits. Therefore all participant nations would seek to attract capital to invest in such corridors even though it is likely that China will fund such investments initially.

Opportunity for balanced growth across provinces in China: China's industrial development in the last four decades has been mostly concentrated in eastern coastal regions. Today, the coastal eastern and south eastern provinces of China enjoy superior transportation systems, possess the bulk of the country's natural resources and have better industrial infrastructure. The world class key cities of Beijing and Shanghai are located in this region.

OBOR projects cover about 16 provinces while the Silk Road economic belt includes provinces like Ningxia, Chongqing, Szechuan, Guangxi, Yunnan and large parts of Inner Mongolia, the 21st Century Maritime Silk Road includes provinces like Jiangsu, Zhejiang, Fujian, Guangdong, Hainan, Shandong etc. Some of these provinces are relatively less prosperous compared to eastern provinces. Further, the recently launched infrastructure projects in western China and regions bordering Mongolia will be absorbed into the OBOR scheme. Therefore, the implementation of the OBOR economic belt will help the interior and western China to undergo significant development in terms of infrastructure and industrialization. The focus of such development is likely to go into the building of roadways, high speed railways, airports and ports, thereby improving the connectivity of such provinces with rest of China.

OBOR: implications for strategic and foreign policy issues

It is well known that China aspires to be known as a major world power rather than to be known merely as a regional power. India, Vietnam and Japan feel threatened both politically and economically by China due to her aggressive posturing on bilateral, regional and global issues. Her meteoric economic rise has made western powers, in particular the United States, nervous about maintaining the hegemony enjoyed by them in global affairs.

The differences in socio-economic ideologies between the two countries have brought them to loggerheads at many international fora. In recent years, the USA has endeavoured to develop or improve its relationships with countries of the Asia Pacific, especially with China's neighbours like India, Vietnam, Japan, Philippines etc, with dual objectives of containment and engagement with China. The US also concluded the Trans-Pacific Partnership negotiations which includes Japan, Australia, Canada, Mexico, Vietnam, Malaysia but not China.

Along with the formal objectives of OBOR, there exists some implied objectives which seek to benefit China and its industry. As has been noticed with other global multilateral initiatives and institutions like the Marshall Plan of the 50s, the Asian Development Bank (ADB), International Monetary Fund (IMF) etc, the principal funding country gets a significant political voice in the recipient or participant countries' domestic and international policies. For many observers, in the East and the West, the OBOR initiative of China appears to be a tool to further the country's political and economic interests both in Asia and in the rest of the world.

For example, China has long-standing disputes with many of its neighbours like India and Vietnam. By increasing economic influence through OBOR initiatives, China would aim to settle such disputes in her favour. Economically, China appears to have dual objectives to promote such lineage between countries and continents. The Chinese economy has slowed down over the last couple of years leading to excess capacity in Chinese factories. By promoting investments in the course of implementation of OBOR projects, it is expected that new opportunities and markets would be created for Chinese firms which would have a multiplier impact on production of goods and services domestically, thereby creating more jobs and higher incomes for the Chinese populace.

Given her huge foreign exchange reserves, totalling about \$4 trillion, China is in need of avenues to invest so as to earn a reasonable return on the same. Also, with most of the projects (in initial phases at least) to be financed by Chinese financial institutions like China Investment Corporation, China Development Bank etc, and China-dominated institutions like the Asia Infrastructure Investment Bank and BRICS New Development Bank, it is being commented by many observers that China is attempting faster internationalization of her currency, the renminbi. Thus it quite apparent that China has a grand vision in promoting OBOR; a vision which seeks greater roles for China (both political and economic) in the international community.

There has been a mixed response by the international community with regard to the OBOR project. While most of China's neighbours, especially the ones in Central Asia like Mongolia and Kazakhstan, are quite upbeat about the prospects and the benefits of such an initiative as it would lead to significant Chinese investment in infrastructure, along with modern technologies for extraction and utilization of their domestic natural resources.

Similar views are held by countries along the 21st Century Maritime Silk Road. Countries like Sri Lanka, Myanmar and Maldives have openly supported the Chinese twin initiatives by offering several concessions to Chinese companies. However, the countries with which China has long standing disputes like India, Vietnam etc, along with western developed countries like USA and Australia view the OBOR initiative with suspicion.

It is in this backdrop that China seeks to expand her influence not only in Asia but across Africa and Europe, with the One Belt, One Road as the weapon. Finance is likely to be the primary instrument of this policy. Infrastructure construction is an expensive affair with large capital requirements and long gestation periods. China through her various agencies and institutions will provide much of the financing required at least in the initial stages. Most of the recipient countries are either developing countries or under developed nations.

Also many of such countries, especially those in Central Asia and the Middle East are or would be in the process of rebuilding their economies post-civil wars. Financing at such a critical juncture is likely to give China a big say in the direction of not only their economic but also foreign policies. Experience with Bretton Woods institutions like IMF and World Bank corroborates this argument. In countries like Myanmar, Maldives and Pakistan, existing policies are being tweaked to suit Chinese interest post receipt of aid or investment.

China also expects to improve her relations with the European Union. The latter's economy is going through a very bad phase with low consumer demand and high unemployment. It is reported that the EU intends to invest €315 billion on infrastructure across the group over the next 10 years, to be financed by and large by the private sector. The OBOR project gives China an opportunity to build and upgrade the infrastructure without over-straining the relationship with euro group. Investments in the projects will generate employment, stimulating domestic demand in the region. Chinese companies on the other hand gain market access in the European Union, something that China has found rather hard to get.

Traditionally an ally of the US, the EU of late has been increasing her engagement with China much to the agony of the US. The recent decision by several major EU countries like France, Germany, Italy and the UK to join the AIIB, in spite of stiff American opposition, points towards the recognition of China by EU as a credible economic power. The OBOR initiative is further likely to deepen the mutual trust between the EU and China. Such mutual trust will give rise to greater cooperation among the two economic powers in both economic and strategic matters.

Conclusion

Overall, China's OBOR initiative is grand and if implemented successfully over time, it would certainly reboot Chinese economy which has been slowing down in recent years. What is most important for the Chinese economy today is boosting aggregate demand for its industries and that is possible through OBOR which will create opportunities for trade and investment for Chinese firms.

Though OBOR is a grand idea, things are easier said than done. Although domestically China will be able to achieve its objectives of the OBOR initiative, execution of cross national projects will be full of potholes. Countries along the Belt include some of the most underdeveloped and volatile regions of the world like Pakistan, Iran, Iraq, Syria etc. Pursuing infrastructure projects with some countries will not only involve significant financial and political challenges but also involve serious security implications.

In sum, the OBOR initiative is a centrepiece of China's foreign policy and domestic economic strategies. It is aimed at rejuvenating two ancient trade routes and further opening up markets within and beyond the region In order to make the OBOR successful, China is keen to offer more economic and financial assistance to regional countries and beyond through connectivity programmes, technical exchanges and the building of infrastructure.

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A non-linear path to economic growth and prosperity

Deepanshu Mohan argues for a better incorporation of local economy features in the process of achieving economic growth as a means-to-an-end goal of securing development ivers of ink has been spilled in studying the role of the state as an active economic actor in promoting growth and development in developing economies. States in peripheral countries across Asia, Latin America and Africa have most importantly showcased this by being engaged in varying patterns of state intervention. For growth to be inclusive and sustainable in nature, it is widely accepted that states do need to play an active role in promoting rapid industrial transformation while supplementing equity in terms of the distribution of economic resources and the income generated.

The role of policies here is thus critical in establishing the state to effectively manage the market forces to fruition. Yet, in many cases, we observe states (particularly in developing economies) to be largely ineffective in promoting economic development at a sustainable rate. Case in point could include cross country narratives from Sub-Saharan Africa (Zimbabwe, South Sudan, Angola, Benin etc.), Asia (Bangladesh, Afghanistan, Bhutan, Myanmar, Cambodia etc.). One of the main reasons for this stems from a lacuna in understanding the concept and nature of economic growth that is vital for each of these late developing economies.

The nature of an endogenized/indigenous growth process for any economy warrants to be distant from the uniformly defined neo-liberal frameworks on growth accounting. I discuss these frameworks here under the economics of growth while pressing on the need for an expanded relationship, using a taxonomy of geography, institutions, integration processes along with the role of the state. Through the knowledge of these factors albeit established through non-linear relationships, I argue, for a better incorporation of local political economy features in the process of achieving economic growth as a means-to-an-end goal of securing development.

What the state is?

Quite often in informal discussions and academic discourses there seems to be no practical distinction made between what constitutes/defines the 'state' and the 'government'. Where a government can be removed through revolutions, coups etc. the state with its rights and obligations remains. In an anatomy of the state, Murray Rothbard defines state through the eyes of some scholars as "an institution of social service; the apotheosis of society; an amiable, though often inefficient, organization for achieving social ends"; but almost all other scholars regard it as "a necessary means for achieving the goals of mankind, a means to be ranged against the 'private sector' and often winning in this competition of resources".

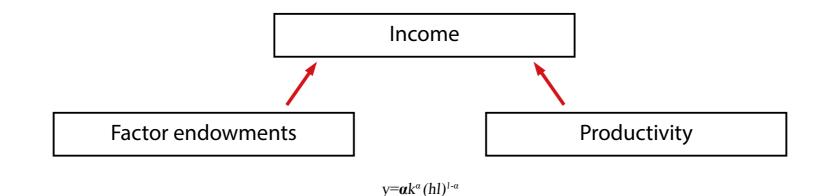
Contrary to Rothbard's views, the role of the state today, particularly in the case of a late developing/industrializing economy, remains critical in promoting the participation of the private sector in sharing the resources while also promoting economic competition for them to achieve maximum returns. To be defining the state only as an *"orga-nization of the political means and as the systematization of the predatory process over a given territory"* would circumscribe its role by excluding the benefits of good, efficient economic policies. In expanding the economics of growth, it is thus, pertinent to involve the 'visible hand' ie. state as an active stakeholder.

The economics of growth

To shape our thinking about the economics of growth, it helps to distinguish between the 'proximate' and 'deep' determinants of growth. The figure below highlights the traditional way in which economists across the globe study growth through elements in determining a higher income which is considered as a sign of increasing economic prosperity. The total produced output in the form of goods and services (as computed by the Gross Domestic Product-GDP) for an economy is shown here as a function of the resource endowments (labour, physical capital, human capital) and the productivity with which these endowments are deployed.

In the equation given below, *α* as a constant represents the technical and allocative efficiency level for an economy. This efficiency level reflects the optimum use of the resource endowments across varied economic activities. According to Rodrik, the growth of per capital output further can be expressed in terms of three proximate determinants: 1) physical capital deepening 2) human capital accumulation and 3) productivity growth. Advancing Rodrik's

Figure 1: How economists think of income determination for measuring economic growth (Dani Rodrik)

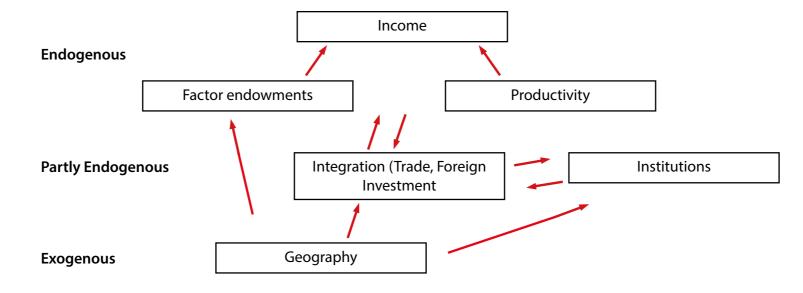


Per capita growth= physical capital deepening + human capital accumulation + productivity growth

analysis on defining proximate determinants of growth with deeper determinants, he uses a threefold taxonomy that significantly add to the final value of economic growth in an endogenous¹ or exogenous² way.

As per the threefold taxonomy defined here (figure 2), "Geography relates to the advantages and disadvantages posed by a country's physical location (latitude, proximity to navigable waters, climate, and so on). Integration relates to the market size, and the benefits (as well as costs) of participation in international trade in goods, services, capital, and possibly labour and Institutions refer to the quality of formal and informal socio-political arrangements ranging from the legal system to broader political institutions that play an important role in promoting or hindering economic performance³".

Figure 2: Growth Economics in one page with a Threefold Taxonomy (Source: In Search of Prosperity)



What is missing here though is the mention of the state itself in shaping the path to higher growth through effective policies which in turn will best allow the resource/factor endowments (land, labour, capital etc.) to be most effectively used in generating income and producing the maximum production output; Policies, at the same time would also allow the state to equitably distribute the gains from production, trade and foreign investment (received inwards) to the society.

Studying interrelationships

The arrows indicated in Figure 2 reflect the basic framework with feedback effects, both from the growth back to the 'causal' factors and among the 'causal' factors. The central question in growth economics literature are which of

these arrows matter the most for economies and why? Rather, today, it is pertinent to expand this how these arrows can work best through the effective intervention of the state? For example, institutions in countries like China⁴ (since 1980s) and India (since 1990s) have been shaped by the state's ability to understand the changing needs of local politico-economic requirements better which allowed for these rising economies to work on building their own set of institutions.

For economies that are rich in terms of their natural resource endowments (say oil in the Middle East and diamonds in the case of African economies like Botswana), the state needs to acknowledge the primacy of geography in affecting higher income determination through trade and investment. While economies like Australia, Mauritius on the other hand offer us narratives on how, in spite of the absence of a rich geography, both these economies

Consistency is a minimum requirement of good planning and the skill in it is to identify correctly the constraints that will bind the course of growth while judging the maximum feasible rate of growth that the country concerned can achieve through effective state intervention and good quality institutions have grown and developed. Australia⁵ is the only OECD economy that contains large areas of tropical land and where much of land is desert, arid with low and highly variable rainfall.

What states need?

Consistency is a minimum requirement of good planning and the skill in it is to identify correctly the constraints that will bind the course of growth while judging the maximum feasible rate of growth that the country concerned can achieve. For the state to sustainably guarantee this, sensitivity to local politico-economic conditions and economic facts remains the key. The nature of the solution lies in the nature of the problem itself when it comes to streamlining processes in working towards higher, inclusive economic growth as a precursor to economic development in an economy.

Policies and intervention that: strengthen the role of public institutions, socially invests in accruing human capital accumulation (education, healthcare, skill development and developing alternate employment opportunities), gauging societal expectations for a better standard of living and well-being are steps of priority in being sensitive to the local politico-economic conditions.

Economic facts, on the other hand, depend on economic statistics and on the effective functioning of dynamic models that bridge the gap between planning and implementation. Thus the need for transparent, accountable and verifiable economic data remains the key in designing economic policies (for trade, industry, investment, social security etc.) ie. for effective state intervention. Economically primitive planning models, in the absence of hard-core numbers on the growth, cannot be made operational and would only allow incumbents at the state level to work in maximizing their own interests.

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Endnotes

1. Endogenous Growth: "Endogenous growth is long-run economic growth at a rate determined by forces that are internal to the economic system, particularly those forces governing the opportunities and incentives to create technological knowledge. For example, the equilibrium price of a good in a supply and demand model is endogenous because it is set by a producer in response to consumer demand"

http://www.econ.brown.edu/fac/Peter_Howitt/publication/endogenous.pdf

2. Exogenous Growth: "The belief that economic growth arises due to influences outside the economy or company of interest. Exogenous growth assumes that economic prosperity is primarily determined by external rather than internal factors. According to this belief, given a fixed amount of labor and static technology, economic growth will cease at some point, as ongoing production reaches a state of equilibrium based on internal demand factors".

http://www.investopedia.com/terms/e/exogenous-growth.asp

3. Dani Rodrik, What do we learn from Cross Country Narratives?, In Search of Prosperity (2003) - pp 6; http://press.princeton.edu/chapters/s7518.pdf

4. The case of Township Village Enterprises (TVEs) highlighted in Y. Quan's paper on How Reform Worked in China? is highlighted as a classic case of institutional innovation for the Chinese case.

5. Refer to the paper on the Australian growth experience by Ian W McLean and Alan M Taylor here: http://core.ac.uk/download/pdf/9313113.pdf

TPP: implications for India

Geethanjali Nataraj and Pravakar Sahoo examine the likely implications of the TPP on India and set out a roadmap for India to prepare itself he United States along with 11 member countries signed the historic Trans Pacific Partnership (TPP) agreement on 5th October 2015 at Atlanta, USA. TPP not only includes developed and developing countries connecting west with east but covers areas like competition policy, regulatory symmetry, labour standards, environment issues along with trade in services, technical barriers to trade and intellectual property rights.

The key outcome of TPP is expected to be high and dynamic-evolvement of standards for trade and investment which are most likely to seriously affect India's trade and investment. In the above backdrop, the paper explains what are the likely implications of TPP on India and sets out a roadmap for India to prepare itself.

Introduction

Given the slow and tedious negotiations on crucial issues at the World Trade Organisation (WTO), mega Free Trade Agreements (FTAs) have begun to change and set the rules to create a 21st century template for international trade investment. One such mega FTA just concluded is the TPP which is set re-write the principles of trade and investment and expected to affect India to a considerable extent. For an emerging country like India with high aspirations, staying out of the TPP, regardless of the latter's fairness and manner of implementation will be a geo-economic self-goal. It's for time for India to prepare itself to tackle tariff, non-tariff and market access issues that will arise out of TPP and protect India's trade ambitions, particularly India's exports which have been contracting for last ten months.

The TPP, once implemented in full force, is expected to change the global trade architecture resulting in such high standards in markets covering 1/3rd of world trade and 2/5th of world GDP that India, being a non-TPP trading partner, will find it difficult to access unless its domestic capacity and standards improve. Hence, the implications of the TPP for India and other emerging economies which are not a part of this mega FTA would be a need to develop a strategy to deal with the expected adverse impact. The nature of global trade has changed from mere exchange of goods to complex transnational supply chains and value chains over last couple of decades. A product today is made across geographies, where raw materials and intermediate goods are sourced from across borders. As India is gradually getting integrated to Global Value Chains (GVCs), it has to raise and maintain the standards to remain a part of Global Supply Chains (GSCs). The most difficult for India would be raise its standards to the TPP level to remain a part of GSCs with TPP counties and indirectly with countries with whom TPP members have FTAs. The standards, mostly US standards that are high and developed by the private sector and multi-national firms, relating to production like environment, labour along with product specific standards will result in Indian exports facing more non-tariff barriers. Further, the rules of origin in TPP will favour member countries to be part of GVC than India. The conformity of standards to enter a TPP member country market would be difficult for India to meet.

Because supply chains are linked with low-cost labour in developing countries, labour and environmental standards too have come to form part of economic agreements these days. This is in addition to rules governing IP, cross-border investment, etc. are together identified as '21st century trade' in common parlance. These complex elements of

It is only major structural changes in the Indian economy... that will determine whether India manages to battle it out in a world of complex supply chain-led international trade and investment modern day trade will be increasingly dealt with by mega-FTAs like the TPP, which has already been signed and the Regional Compressive Economic Partnership (RCEP) which is also on the anvil.

Moreover, the TPP is different as it covers areas such as competition policy, regulatory symmetry and standards for labour and employment along with other major features such as trade in services, technical barriers to trade and intellectual property rights. As TPP includes other developing countries, it is expected that the trade disciplines and standards will be implemented in these countries other than non-TPP members affecting India's trade once TPP gets implemented. The potential impact of TPP on India will be on three fronts mainly; (a) trade diversion, (b) drop in FDI and (c) geopolitical exclusion.

In the above backdrop, this paper attempts to detail the nature and key elements of the Trans-Pacific Partnership agreement and its implications on India by suggesting a few policy measures that India would need to undertake to deal effectively with the adverse impact of this major mega FTA.

Evolution, key elements and scope of the TPP

The TPP has its origin to a much smaller group called the Trans-Pacific Strategic Economic Partnership (P4) among four small countries Brunei, Chile, New Zealand and Singapore, which came into force in 2006. It is only in October 2008 that the USA took the initiative in joining the group. Finally, the concluded TPP is a comprehensive US-led FTA covering all the modern day elements of trade includes Australia, Brunei, Canada, Chile, Japan, Malaysia, Mexico, New Zealand, Peru, Singapore, and Vietnam.

What is different with the TPP is that it goes beyond trade and involves near-complete harmonization of regulations and trade disciplines among member countries. Moreover, the TPP covers many behind the border measures aimed at disciplining the state owned enterprises (SOE's), observing competition rules, ensuring regulatory coherence, fa-

cilitating supply chains, setting out labour standards, environment standards and securing more protection for IPRs including patents and copyrights¹.

The TPP is geographically inclusive and extends to ASEAN and NAFTA countries. Other Asian countries such as South Korea and Thailand have indicated their intention to join the group in the foreseeable future and China too is considering joining the TPP, though it remains to be seen how China will meet the standards for doing so. Given other Asian countries preparing grounds to join the group, the TPP is actually staring India in its backyard. Japan's entry into the TPP is significant as Japan has traditionally been extremely protective of its farm and non-farm sectors, which it will now have to open up. In such a scenario, it would be difficult for India to avoid being marginalized in the trade rule-making process, if it continues to stay out of the TPP. Key elements of the TPP are:

- Comprehensive market access. The TPP reduces and eliminates tariff and non-tariff barriers across goods and services trade and investment, so as to create new opportunities and benefits for business, workers, and consumers.
- Regional approach to commitments. The TPP facilitates the development of production and supply chains, seamless trade, enhancing efficiency and facilitating cross-border integration. Goals include creating and supporting jobs, raising living standards, enhancing conservation efforts and opening domestic markets.
- Addressing new trade challenges. The TPP promotes innovation, productivity, and competitiveness by addressing new issues, including the development of the digital economy, and disciplining state-owned enterprises in the global economy.
- Inclusive trade. The TPP includes commitments to help small- and medium-sized businesses to understand the agreement, take advantage of its opportunities, and bring their unique challenges to the attention of the TPP governments. It also includes specific commitments on development and trade capacity building to ensure that all parties are able to meet the commitments in the agreement and take full advantages.

• Platform for regional integration. The TPP is intended as a platform for regional economic integration and designed to include additional economies across the Asia-Pacific region.

The scope of the TPP is vast². TPP itself covers about 40% of global GDP and nearly a third of world trade. In their assessment of the economic impact of TPP, Petri and Plummer (2012) find that the enforcement of the TPP could yield annual income gains of \$295 billion, including \$78 billion in the US alone. It is expected to unleash potential gains of as much as around \$1.9 trillion in the Asia Pacific through free trade.

One third of US gains are likely to come through investment provisions of the TPP. This is not surprising as capital flows to and from the US will inevitably rise, in view of US-led investment regulation harmonization within the aegis of TPP. The study further finds that Vietnam is expected to gain 14% under the TPP as it would become a hub of low-end manufactured goods like textiles and garments. Likewise, American service export is going to lead the export growth figures in that country.

Japan will experience a 2% hike in its GDP and an increase in trade volume to the tune of \$340 billion. Todo³ considers the possibility that these figures are exaggerated, but nonetheless concludes that the TPP will substantially add to Japan's GDP, and any addition is welcome given Japan's economy grew at less than 1% in the past two decades. In short, the benefits of the TPP in terms of trade and investment growth – as well as overall economic growth – have been established by the literature on the subject, however limited due to its topical nature⁴.

Trade disciplines and standards of TPP

TPP seeks to institutionalize certain labour standards. Participating countries have agreed to enforceable labour rights and higher labour standards that will eventually give way to high-standard framework for labour rights⁵ and help reduce trade barriers. In the TPP, negotiated environmental standards are of the highest order that include pro-

visions on enforcement of environmental laws, including the multilateral environmental agreements. This has implications for the TPP countries as well as for the non-TPP countries like India as TPP countries are also major trading partners of India.

Not all TPP countries have acceded to the different existing multilateral environmental agreements (MEAs), but ratifying the TPP will compel them to eventually accede to them. Besides, the TPP dispute settlement mechanism will appoint a panel to decide if a party has failed to implement its environmental expectations under an MEA. This raises concerns as the MEAs themselves lack such dispute settlement systems today. There is a clear attempt here to link trade and environment which has been thwarted by the developing countries at WTO so far⁶.

The strongest concern is the aggressive stance of the US on protection of IPRs, which will allow IP to be monopolized by a few corporations. It bases its view on encouraging innovation. This would however lead to inaccessibility of affordable medicines, particularly for developing countries like India. Not only would it make it difficult for generic drug makers, it will also restrict free flow of information and knowledge. The TRIPS Agreement already seeks to actively protect intellectual property rights, the dominant players in this area being the technologically advanced countries like the US. India is part of the TRIPS Agreement.

Further, the TPP seeks to strengthen the Rules of Origin, with specific origin rules on sensitive sectors like farm products and textiles, so that only the TPP countries get the benefit of market access. Overall, it is an all-encompassing comprehensive economic deal that has been signed between the member countries. This is also reflected in the joint statement released by the trade ministers of the 12 member countries. The joint statement says that in addition to *"liberalizing trade and investment between us, the agreement addresses the challenges our stakeholders face in the 21st century, while taking into account the diversity of our levels of development."* The joint statement also said that

the deal would also promote economic growth, support higher paying jobs, enhance innovation, productivity and competitiveness raise living standards and reduce poverty among the member countries of the TPP.

Implications on India

All these provisions of TPP, particularly trade disciplines and harmonisation of standards at higher level may spell trouble for India: in essence, the impact on India will be in the form of trade diversion leading to falling exports, industries suffering and rising unemployment.

Trade: Though India is relatively less integrated into the global economy compared to its counterpart China, which has five times greater share in world trade, India with a share of 2.1% cannot do with further trade diversion. In fact the slowdown of exports for last ten months has worried Indian policy makers to achieve the targeted growth of 8 percent. One reason why China has the clout that it has today is because it has for decades integrated into the global economy actively leading exports and FDI inflows tables.

Today 80 percent of international trade is constituted by global supply chains (UNCTAD, 2013). The TPP is going to further intensify this trend as it will seamlessly link production facilities across borders. If India is to integrate more to these production networks through global value and supply chains, joining the TPP will help. Otherwise India needs to prepare itself to meet the tariff and non-tariff standards of TPP. Anyway, Indian exports are most likely to be hit as the TPP provides special concessions to its partners. For example, Indian textile exports, of which the US itself corners 30%, will come under pressure as competitors in the form of Vietnam and others will be in a position to usurp India's market share on the back of benefits granted under the TPP. A third of India's exports are directed towards TPP/TTIP countries. Therefore joining TPP would help India's exports, particularly Indo-US trade. By choosing to be absent from the TPP, which accounts for almost a third of world trade and 40% of global GDP, India risks off-putting implications for itself. According to a Center on Global Trade and Investment study, India's nominal GDP

is likely to be trimmed by more than 1% as a result of TPP. The ensuing negative effects on the economy by way of revenue and job losses are going to be large⁷.

The clause of incorporating sustainability standards, which will keep evolving, in areas such as child labour, human rights & working conditions, animal health, testing requirement, quality management, IPRs, etc. will make India's exports vulnerable to TPP countries. Indian producers need to take a serious note of it to improve their standards as some of the countries aspiring to be member of TPP like China has already started in a big way. China has initiated some big steps in recent years in areas of improving IPR, carbon emission in certain SEZs by 90%, improving working conditions of the labour including hike in wages etc.

The TPP will not only affect India's exports due to trade diversion but also India's imports. If TPP member countries don't find it profitable to export to India as a consequence of both low tariff and non-tariff barriers in TPP member countries, India's essential imports, which are crucial for exports and growth, will get costlier, affecting competitive-ness. Apart from the trade diversion, there could re-routing of exports from non-TPP member to TPP member as many TPP members countries are having FTAs with countries that are India's competitors in many sectors.

There are already studies⁸ finding that India's trade, particularly exports of textiles & wearing apparels, agricultural products, processed food, heavy manufacturing would get affected if TPP is implemented. Textiles and clothing, which is one of the top labour-intensive manufacturing exports, will certainly get affected because of trade diversion towards a TPP member country like Vietnam. However, impact analysis of these studies underestimate the magnitude as non-tariff measures, which will facilitate trade among TPP members countries and services trade are not taken into account fully. According to a Center on Global Trade and Investment study, India's nominal GDP is likely to be trimmed by more than 1% as a result of TPP. The ensuing negative effects on the economy by way of revenue and job losses are going to be large⁹.

Foreign direct investment: FDI inflows into India started to pick up from mid 2000s and India is today one of the largest recipients of FDI in the developing world, and the largest in South Asia. With the exclusion of India from the TPP the relative attractiveness of India as a destination will go down as TPP member states will have an investment pact amongst themselves which incentivizes foreign investment. TPP also involves regulatory harmonization, meaning that MNCs under the aegis of the TPP do not have to face regulatory hostilities in host countries or grapple with different laws wherever it operates. Even as India's legislations are not particularly aligned with global standards, companies have earlier faced issues like retrospective tax legislations. In this context, a TPP sans India isn't good news for the latter. Given its emphasis on manufacturing for employment creation and infrastructure building, India will hardly be in a position to forego potential FDI inflows.

As most of the production today happens across borders, multinationals would not prefer India as part of the production process as they would find it difficult to access market in TPP countries. Though India is the most favoured destination for FDI in 2015, its absence in TPP and inability to achieve the trade and investment disciplines to reach the high standards of TPP would keep away foreign investors to make India as their production base or a part of their production process.

Trade and investment coverage of TPP along with TTIP it is about half of global share. With supply chains, this coverage will be very much larger. A few experts have said that Indian firms are capable of meeting the standards and even desire to produce modern and knowledge-intensive manufactures; however it might actually require a platform such as TPP for it to fulfil its agenda of effectively meeting the required standards¹⁰.

Geopolitics: The TPP is a well-crafted geo-economic exercise as much as it is a trade and investment pact. It has succeeded in excluding China from the game and stunting its rapid rise by narrowing the very channel that it treaded to rise in stature–commerce. However today's mega-FTAs are intended to outcompete each other and TPP is a good

example. The EU-US TTIP on the other hand has less geopolitical connotations, but will nonetheless serve a blow to China. While studies show that the US would gain marginally with the implementation of the TPP, the US has clearly gained a geopolitical victory here. This is understandable as it might want to stamp its authority on the global economic governance mechanism after it lost some credibility after the 2008 financial crisis and newer groupings like BRICS started to garner much attention.

India has to deftly navigate the TPP waters by making sure it does not isolate itself by staying out of the TPP picture for too long. At the same time, actively committing to the TPP will be hard. An incremental process, where India initially joins the discussions and then figures out how well it is placed to enter the TPP as a member, is desirable. India in fact can bring in much needed flexibility in the TPP and also boost its ties with US through TPP.

However, as of now there is no clear consensus in the Indian Government on whether enhanced market access through the TPP will be worth the gains as it would involve huge costs to a few select still protected Indian industries. Undoubtedly, India would need to prepare itself for higher standards than it has ever committed to in the past. But the gains to India if it joins the TPP also cannot be overlooked. According to a study carried out by Bergsten¹¹, India would gain as much as \$500 billion in exports by joining the TPP. But until India prepares itself to join the TPP, India simultaneously could open the India-USA FTA negotiations. An FTA with US could help to a considerable extent to nullify the adverse impact of the TPP and also prepare itself better to join the TPP with the help of US support. The overall impact of the TPP on India could be limited if India signs the FTAs with EU, Australia, Canada and the US.

Conclusion and way forward

The multi-polar world requires trade policy and domestic policy to go hand-in-hand to prepare India for its larger role as an emerging market economy. India has been a founding member of the GATT, which was replaced by the

WTO in 1995. Consistent reforms, particularly trade and industrial reforms, helped India to integrate with the world economy. For example, merchandise trade to GDP has increased from 13.88% in 1991 to 42% in 2013.

But while multilateralism survived in Bali last year, the bitter reality of the ambitious mega trade deals like the TPP and the TTIP is creating a snowball effect on global trade, leaving developing countries like India with little or no leverage to bargain, and cannot be ignored. What is also noteworthy is that over past few years India has criticized the WTO in areas pertaining to IPR, trade related investment measures, general agreement on trade and services and non-tariff barriers. Moreover, India requires a consensus based multilateral regime under the WTO framework which will work for its betterment.

Unfortunately, because of the presence of 159 WTO members, agreement on a proposal is hard to achieve. The recent tumult over getting the TFA passed is a case in point. It is, therefore, essential to look into the international trade policy regulations and conditions which led to the emergence of mega-regional negotiations such as the TPP, TTIP and RCEP, with the objective of determining the conditions for market access in large parts of international trade and trade policies in the not too distant future.

In terms of market access TPP will adversely affect India because of the conditions that will emerge from it. India lacks standards and capacities due to which it will lose its market access for exports to the markets of countries negotiating mega-FTAs. Also, India requires developing an inclusive system of conformity assessment, failing which it will get more difficult for India to access global markets on a wide level. This will require India to negotiate under the RCEP as it is seen by a few of Indian exporting firms as the key to achieving the evolving standards of the TPP.

In terms of tariff reductions and service liberalization, the TPP has the potential to go beyond WTO; however there is a possibility that the advantage of the liberalization will accrue to handful of trading partners. Moreover it will not address the issues of anti-dumping/countervailing duties or subsidies at all.

Inclusion of standards-one which is generic, related to environment and labour, and the other which is product specific-is going to make trade negotiation all the more complex, and countries that are outside the negotiations, especially India, need to be prepared. Similarly the TTIP will focus on mandatory standards prevailing in the EU and the US which are generally private standards whose content requirement keeps increasing with time and competition measures. This agreement will largely benefit the member countries, while the countries outside will be highly affected. Even at a broader level, because standards incorporated in the mega-FTAs discussed here will potentially become international benchmarks in years to come, India stands to gain little if it stays out of the picture.

However, the credibility of WTO can't be ignored as compared to TPP as its rules are less complex and WTO addresses the issues of anti-dumping and subsidies, which are vital for India. Besides, the WTO with its transparent and merit-based dispute settlement system, has been the most distinguished example of successful multilateral cooperation since its inception – a view India has fiercely advocated.

The way forward for India to remain relevant in the global trading system might well be membership of mega FTAs such as the RCEP, TPP and TTIP. However, rushing into FTAs without a level playing field for domestic businesses wouldn't be of much help to India. A desirable strategy would be to have a good mix of bilateralism and multilateralism by targeting trade pacts which are comprehensive, particularly with members of TPP, TIPP and RCEP.

India has a few legitimate concerns that need to be addressed. For instance, India along with other developing countries will find it difficult to give in on environmental standards on account of the stage of economic development that it is in. Likewise, on the IPR front, India will have a hard time conceding to IPR protection regime of the kind that the US wants as it has a huge generic drug manufacturing industry. Other concerns are in the domains of sweeping tariff cuts that are expected under the TPP, something that India cannot afford to participate in as it has legitimate domestic concerns to address. Labour standards of the developed West are also hard to meet.

However, these are issues that should be thrashed out and negotiated as staying out of these mega FTAs does not help either in economic terms or foreign policy terms. Even if one finds policy interventions to partly surmount the economic setbacks, the geopolitics of it is hard to miss.

Finally-and this is important-it is only major structural changes in the Indian economy, from infrastructural overhauls to legislative fixes, institutional reforms (including curbing corruption) to human resource development that will determine whether India manages to battle it out in a world of complex supply chain-led international trade and investment. Mega-FTAs are mere enablers, which India should partake of according to its needs at a given time.

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Endnotes

1. Seshadri, VS, (2014), "Trans-Pacific Partnership: What It Portends", Economic & Political Weekly, vol xIIX no 33. Pp 27-31 2. The TPP includes 30 chapters covering trade and trade-related issues, beginning with trade in goods and continuing through customs and trade facilitation; sanitary and phytosanitary measures; technical barriers to trade; trade remedies; investment; services; electronic commerce; government procurement; intellectual property; labour; environment; 'horizontal' chapters meant to ensure that TPP fulfils its potential for development, competitiveness, and inclusiveness; dispute settlement, exceptions, and institutional provisions. Further, it also includes issues related to the internet and digital economy, the participation of state owned enterprises in international trade and investment, the ability of small businesses to take advantage of trade agreements and other topics.

3. Todo, Y (2013). Estimating the effect of the TPP on Japan's growth. VoxEU.org, Centre for Economic Policy Research.

4. Williams, BR, (2013), "Trans-Pacific Partnership (TPP) Countries: Comparative Trade and Economic Analysis", Congressional Research Service, Cornell University.

5. The calls for commitment on protection of labour rights have grown louder after the tragic Bangladeshi clothing factory collapse in 2013, which killed 1,129 people.

6. Similar attempts are being made at the WTO in the Doha Development Agenda, where the developmental agenda is being burdened with non-development issues. Such attempts so far have been thwarted by the developing countries.

7. Why free trade agreements are ever more vital for India', B Chatterjee & V Ravindran, Business Standard, 22 March, 2014

8. Ganesh-Kumar, A and Chatterjee, T (2014), "Mega External Preferential Trade Agreements and their Impacts on the Indian Economy", Discussion paper, Cuts International, Jaipur.

9. The ensuing negative effects on the economy by way of revenue and job losses are going to be large

10. Singh, HV (2014), "Trans-Pacific Partnership Agreement: It's Impact on India and Other Developing Nations", Background Paper for CII-IISD Conference in Delhi, 12 August, 2014.

11. Bergsten, C Fred. (2015), "India's rise: a strategy for trade-led growth." Peterson Institute for International Economic, PIIE Briefing 15-4.