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WHY IS ILLIBERALISM ON THE RISE? DANIEL DĂIANU SHARES HIS THOUGHTS Tax reforms are accelerating in many countries, Pascal Saint-Amans writes

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Why is illiberalism on the rise?

Daniel Dăianu considers the limits to markets, liberalism and democracy, and finds that the political elites need to change their thinking for liberalism to continue to be a force for good

How far can trade policy go in promoting European values?

The EU can and should use trade agreements to promote European values but not at the expense of its economic interests, argues Luisa Santos

The EU's pivot to Asia

Fraser Cameron considers the unforeseen consequences of global uncertainty, and how the EU has seized the opportunity in deepening EU-Asia relations

Tax reforms accelerating with push to lower corporate tax rates

Tax Policy Reforms 2018 describes the latest tax reforms. Pascal Saint-Amans says there is a crucial need to continue addressing equity issues and environmental challenges

The missing profits of nations

Between 1985 and 2018 the global average statutory corporate tax rate fell by more than half. Thomas Tørsløv, Ludvig Wier and Gabriel Zucman argue that profit shifting is a key driver of this decline

Trump's economic gamble with trade wars and tax cuts

John Rapley assesses Donald Trump's tax and trade policies, and argues that he could win big or lose everything

The Chequers proposals are damaging: there are better alternatives

Patrick Minford considers the Chequers proposals, and finds that the initial proposals are damaging to the UKs national interests and suggests a better route for the UK

Free trade between the EU and US: a match made in heaven

The EU and US have recently expressed a desire to aim for zero tariffs and non-tariff measures between them. Hylke Vandenbussche, William Connell and Wouter Simons estimate the gains from such a deal

The impact of Brexit on the property industry

UK property has continued to remain a popular investment. Paresh Raja considers the current trends and examines what the future might hold

Why corporates virtue-signal: conscience or cover-up?

Robert Oulds examines the origins of corporate virtue signalling, and argues that brands need to change their approach to connect with customers

From the great moderation to the great recession and beyond

Don Kohn considers what we can learn from the last global financial crisis. He says that complacency in good times can ultimately store up problems for the global economy and financial system

A financial union for the euro area

How much should the economic and monetary union be deepened? Poul Thomsen shares his thoughts

The euro area: current status and challenges ahead

Monetary policy has played the key role in the recovery, but cannot remain the only game in town, says Luis de Guindos. He adds that we now need action in other policy areas – notably fiscal policy and structural reforms

People on the move: migration and mobility in the European Union

Migration is one of the most divisive policy topics in today's Europe. Uuriintuya Batsaikhan, Zsolt Darvas and Inês Goncalves Raposo assess the immigration challenge facing the EU

The pursuit of inclusive growth in Africa

The economic priority for Africa is development. Tao Zhang outlines how the International Monetary Fund will continue to support the continent with policy advice, capacity building, and financial support

Bermuda: leading the way in fintech

In early 2018 Bermuda launched a fintech initiative to become a global technology hub. Caroline Caton reviews how legislation is achieving this goal

Economic policy for artificial intelligence

Policy will shape how AI affects society. Ajay Agrawal, Joshua Gans and Avi Goldfard consider policies that will influence diffusion and policies that will address the consequences of AI

European 'techlash' or milestone in antitrust enforcement?

Cristina Caffarra, Oliver Latham, Matthew Bennett, Federico Etro, Pierre Régibeau and Robert Stillman argue that the European Commission's decision on Google Android has economic merit and falls within established legal precedent

Google at 20: how a search engine became a literal extension of our mind

Google's products have become integrated into our everyday lives. Benjamin Curtis argues that there are some deeply troubling issues we urgently need to address

The economics of the Google Android case

Alexandre de Cornière and Greg Taylor argue that the case offers a great example of the need to consider the implications of the market's two-sidedness

The Digital Freedom Pass: emancipation from digital slavery

Dennis Snower argues for reform in the form of a Digital Freedom Pass. The person can then choose which identification to share, with whom, and when, allowing emancipation from our current digital slavery

Be more trusted

World Commerce Review interviews Gerhard Oosthuizen about the exciting future for payment enablement technologies

Central bank digital currency: why it matters and why not

The potential benefits and risks of digital central bank money for use by the general public have been widely debated. Dirk Niepelt looks at the consequences of substituting outside for inside money

Data quality - the lifeline of successful AI adoption

Al requires large amounts of data to drive the decision-making processes. Jan Hanika finds that a successful deployment of Al also requires a suitable information infrastructure

Patents, intellectual property rights and their social utility

Deepanshu Mohan examines the structure of intellectual property, patent inflation and what can be done to cultivate innovation

What should the EU do about the Turkish currency crisis?

The Turkish lira has been under significant pressure in recent weeks. Grégory Claeys and Guntram Wolff discuss the EU's exposure to possible crisis in Turkey and how the EU should react

Why universal basic income costs far less than you think

In light of the huge benefits available from a UBI, it's a waste of time to argue over wildly inflated cost estimates. Elizaveta Fouksman says the numbers are out there – we can pay for a basic income

Bulgaria and the ERMII

Alexander Lehmann examines the criteria for Bulgaria's entry into the ERMII and the banking union, and the precedent it sets

The great fiscal lever: an Italian economic obsession

Alessio Terzi argues that the efficiency of Italian investment is currently low. Specific measures can be taken to improve this situation and only once this is done should the public investment lever be used forcefully

Beyond Nord Stream 2: a look at Russia's Turk Stream project

Simone Tagliapietra considers Russia's Turk Stream project and analyses the strategic impacts on Europe

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Ed Bolen looks forward to NBAA-BACE, which brings together key aviation contacts from around the world to a single meeting place to get critical work accomplished



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Why is illiberalism on the rise?

Daniel Dăianu considers the limits to markets, liberalism and democracy, and finds that the political elites need to change their thinking for liberalism to continue to be a force for good he distinction made between 'liberal' and 'illiberal' democracy is both conceptually and operationally meaningful, but can still sow seeds of confusion. This is because democracy has liberalism in its genes; liberalism in a deep sense embodies spiritual and civic commitment to a host of *de facto* and *de jure* values.

These values and the related political regime mean, basically, power in the hands of citizens (the people) and decision-making made via institutionalised checks and balances – what John Kenneth Galbraith and others referred to as *countervailing power*, which prevents absolute power from being ceaselessly accumulated.

Democracy implies an effective separation of powers; it also implies respect towards fellow citizens, tolerance, and ethical conduct in social and political life. Within this interpretation of democracy, liberalism is a fundamental, organic foundation of democratic parties' *Weltanschauung*; this foundation is present from the right to the left of the democratic spectrum, in the philosophy and conduct of political parties. In democratic Europe, for instance, Christian democracy and social democracy belong to an enlarged political 'family' that relies on *deep liberalism* at its core.

The extent to which liberalism in Europe overlaps with what one meets in the US, is subject to debate. For there are significant differences in terms of the relationship between the public and the private spheres, the size and content of state intervention in the economy, regulatory systems, etc. Admittedly, conservative political philosophy contains a liberal component when it assimilates the rules of political competition and a democratic political regime.

But there is evidence of mounting illiberal temptations in the industrialized world, in democratic societies. Are these temptations linked with temporary phenomena, in the 'extraordinary times' we are living through, or do they have deeper roots? An answer to this question begs an examination of trends in society and economy, of the emergence of new (unconventional) threats, and, not least, of failed public policies.

The argument that 'liberal democracy' is on the wane is wrong to the extent that policies can be corrected, that citizens and elites alike do not lose trust in democratic values. It may also be true that, although democracy has a 'liberal core', it can also be driven by 'illiberal' components, and that the magnitude of the latter can vary. But for democracy to survive, its liberal core must be preserved.

For world peace it is vital that the democratic order not be dismantled; it is vital to prevent major conflicts, trade wars, and the destruction of the multilateral system that was created in the aftermath of World War II

Democracy and economy

Liberalism and democracy have an economic foundation that inevitably leads to the issue of property rights. Freedom cannot exist without a free economy, without people (economic agents) having the freedom to make choices about consumption and production.

A system of property rights lies behind decisions which mirror individual and organisational preferences (at enterprise level) in the allocation of resources, in production. Clearly defined property rights, transparency and the institutional/legal capacity for enforcing them are called for in free economies. But civilized capitalism demands a public sector as well, for the provision of public goods that enable people to live as dignified citizens.

Totalitarian 'experiences' teach us about the relationship between society and property rights. The command (communist) system excludes economic freedom in resource allocation and production; this system operates according to the logic of a single enterprise, as a fully centralised, command system¹. National-socialism/fascism demonstrates that private property can underlie a totalitarian regime, provided private property rights do not 'work' for the separation of powers or discourage/prevent an abusive concentration of power, but are instead subservient to abusive power².

Modern capitalism implies cohabitation between the public sector and the private sector, ideological/political choices, and management of what economists refer to as 'externalities' and market myopia³; these mould the proportion between the two spheres.

The public sector, via its own policies and productive and financial assets, is asked to provide public goods that are essential for society; and it is asked to implement policies that enhance the very functioning of the private sector, to preserve the 'social cement' in society, and to mitigate economic disparities (inequalities among people).

Income distribution plays a paramount part in the metabolism of capitalism and requires an effective answer as far as public policies are concerned – in the sense that markets should not be left to decide everything, whatever the consequences may be⁴. The impact of new technologies and automation (not least in creating the possibility for massive structural unemployment) should be considered in formulating public policies.

Democracy relies on a 'culture of freedom', which, as history shows, cannot take root within a short time span, nor 'imported', or imitated, as one chooses; roots are important. The United Kingdom is the most relevant example of the limits put on absolute power, a process that started more than eight hundred years ago⁵ and which evolved over centuries toward an advanced democracy.

After gaining independence, the United States set off with a constitution that mirrors the way in which the Founding Fathers understood the importance of the separation of powers⁶, even though equal civil rights for women and African-Americans were only granted much later. These examples are not meant to suggest that people living elsewhere should take a similarly lengthy approach in obtaining democracy.

Yet, it is a fact that time cannot be compressed at will in terms of institution-building; the 'Arab Spring' is a telling case in this respect. Democracy advanced at different speeds on the old continent, with institutional frailty being visible especially in central and eastern European countries. Illiberal propensities in the countries that shrugged off communism after 1989 can also be associated with their pre-communist and communist track record in terms of economic development and political regimes.

Markets, liberalism, and democracy – where limits show up

Free markets⁷ are the driving force behind entrepreneurship and a vibrant economy. The thinking of Adam Smith, John Stuart Mill and, later, the 'Austrian School' were validated by history in this regard.

Development is inextricably linked with free markets, and the progress of less advanced economies provides many lessons in this respect. The collapse of communism was brought about, primarily, by innate flaws in the command system, as Ludwig von Mises and Friedrich August von Hayek had, among others, had anticipated⁸.

Over the past few decades, China's economic miracle is perhaps the most convincing proof of the extraordinary energy that economic freedom provides in unleashing entrepreneurship, in pushing an economy ahead with the government (state) still the key player in steering the economy and allocating resources, and in building competitive advantage (via industrial policies).

The 'return to Europe' of former communist countries in central and eastern Europe involved radical institutional transformation and entailed economic progress – some less spectacular aspects of the transition notwithstanding. That there is a resurrection of national economic interests in this region of the European Union is an evolution that deserves an analysis on its own; part of it is linked to fear of the 'middle income trap'.

But markets do not bring the best results automatically. Market failures require government intervention. This has brought about, over time, the development of public sectors, the setting up of public and private institutions that insure against risks (pension systems, health-care systems, etc), and mechanisms for the regulation and supervision of financial markets, including antitrust law (against collusion/oligopolistic agreements, rent-seeking). Bismarck's Prussia saw the first ever social insurance arrangement within a capitalist system.

The very functioning of the democratic state has required public policies meant to ensure basic public goods, among which defence and security, education and health (areas that should not be left in the care of the private sector alone), a judicial system based on the rule of law ('no one is above the law'), etc. History shows that where

social cohesion is badly damaged, negative consequences arise and 'social capital' and 'social cement' get diluted, whereby cracks emerge in the democratic process that may give rise to social and political conflict.

Whenever inequality crosses the frontier of what people/citizens perceive as tolerable, when the sense of 'social justice' and fairness is blatantly disregarded, it is democracy that bears the brunt. The remedy can be found in the formulation and implementation of corrective public policies; failing to do so makes matters worse.

Social fragmentation and growing perceptions of individual and collective insecurity can augment political demands for protection via government intervention. The backlash against globalization, a spreading propensity to turn inwards and the rise of protectionism⁹ are associated with the fallout from a simplistic vision of globalisation, one which disregards (and underestimates) the number of losers from global competition.

The higher the number of losers (whose ranks have been growing in advanced economies over the last couple of decades), the more vigorous is the political demand for protection, and the stronger is populism in terms of rhetoric and political action. In other words, globalization, as an embodiment of liberalization/economic openness, unless it is wisely and pragmatically managed, leads to fierce counter-reactions.

It is often said that people do not grasp the benefits of globalization. The problem with this assertion is that while benefits may frequently prevail over costs at the aggregate level, at local/community level costs may be massive, and social dislocations hard to bear¹⁰.

And where communities are rife with losers, their interests can easily be articulated in a quest for protection. Brexit, and the last presidential election in the US (the impact of fake news and media manipulation notwithstanding), epitomize an undeniable reality, one which can be seen in other EU member states as well.

It is no wonder that international institutions, like the World Bank, the International Monetary Fund, the OECD, the EBRD, etc. pay increasing attention to the effects of globalization, and a thinning of the social fabric and social fragmentation that can end in full-blown political disarray. Major central banks (the Federal Reserve, the Bank of England, the ECB, etc.) devote increasing attention to income distribution, a research topic one could hardly have imagined them focusing on not so long ago.

Things get more complicated in countries where political leaders justify public policies that entail high social costs by repeating constantly that 'there is no other way', or 'that this is what international markets demand'. This type of argument is likely, in the end, to damage the institutional and political legitimacy of policymakers; and it can fuel social and economic pressure (on the part of local business groups) in favour of protectionism.

A reinterpretation of globalisation is, therefore, needed; one that takes into account the relationship between the wide diversity of citizens' social and economic circumstances. In other words, a narrowly-understood economic liberalism, ie. market fundamentalism, can pave the way for the erosion of the social foundation of democracy, ie. the erosion of the middle class. Under such conditions, political extremism and exacerbated populism emerge. Market fundamentalism works against liberalism, against democracy, in its deepest meaning¹¹.

Just as one can talk about 'illiberal democracy', one can identify 'undemocratic liberalism' (Yascha Mounk)¹². This happens when people feel that they no longer have a grip on their lives, when they lose trust in their leaders, and when they ascribe decisions to the power of money (ie. government capture by interest groups which are seen as illegitimate).

More on what fuels illiberal propensities nowadays

Economic insecurity and its 'illiberal' fallouts can be related to a dramatic change in the balance of power in the

global economy, especially towards the new economic powerhouses (China in particular, but also India, etc). Robert Kaplan alludes to this with a metaphor: 'The Return of the Marco Polo World'¹³.

Trade disputes can mushroom in such an environment. Social fragmentation and anxiety, which mirror economic insecurity, can be fostered by new technologies (eg. 'big data', the power of some companies – the Facebook scandal is a harbinger in this regard) and strengthen the case for government intervention, not only via regulatory steps.

New technologies can even enhance the resort to illiberal methods in societal management. Fear of the unknown (of all sorts), of insecurity in general, has to be factored in. People need to feel comfortable in a habitat where they have lived for a long time, and this sentiment cannot be divorced from habits and customs, from a sense of belonging to communities that share identities¹⁴. But things can turn highly complex (even ugly) when authoritarianism is associated with identity, ethnic, religious aspects. Here, the democratic process may easily go astray.

There is also a disconnect between economic developments and social and political dynamics, which are defined by fury at, and protests against, the elites, especially the political establishment¹⁵. The role of fake news, disputing the 'truth' (scientific and of any other sort) need to be mentioned in this context. Likewise, the rejection of 'experts', who are blamed for failed public policies (eg, the light-touch regulation paradigm when it comes to financial markets) should not be overlooked.

When people are looking for responses to overall insecurity, a sort of demonstration effect in both economic and politic regimes can be at work. There are still world political/institutional structures which feature a single ruling party.

These are not necessarily closed systems. China has opened up its economy for almost four decades by introducing market-based reforms; the latter have proved remarkably successful in modernising the country, even though the political system has remained that of a single party. There is also a sort of a fascination with the 'economic model' of Singapore, although it is a very small (city) state. And hands-on economic policies practised in emerging Asian countries have explanatory power as well.

In addition, in times of economic and security strain, or when facing major ecological challenges, the appeal of an authoritarian setup may tempt some people. But it is one thing to use authoritarian means within a democratic (liberal) framework, and another to alter the democratic nature of a system (society), to give up its liberal core; there is a red line which should not be crossed.

Even in China, political pluralism should not be ruled out completely, although authoritarian traces will probably remain for a long time; such evolution will become more likely once citizens vie for more voice (to use Alfred Hirschman's concept) in the running of their country.

The European Union and the question of legitimacy and democratic accountability

The European project aimed to reconstruct economies after World War II and put aside the great rivalries between European powers – principally Germany, on the one hand, and France and the UK, on the other.

It was a success story, despite the bumpy road towards building a new Europe – from six founding states in 1957 to 28 member states by 2013 (but before Brexit).

But the EU is a vast, very intricate institutional construction. The union's economic gains hid for quite a while the incompleteness of its design (to take just one example, the lack of a significant budget, as stipulated by the 1977

MacDougall Report, of 2-2.5 percent of GDP at the beginning and 5-7 percent of GDP upon the establishment of monetary union).

The financial crisis that broke out in 2008 underscored the shortcomings of its decision-making procedures and a stark fact: European institutions suffer from a 'democratic deficit', as many pundits and officials have put it. Financial assistance programmes for beleaguered eurozone countries (grappling with liquidity and solvency crises) have been implemented via *sui generis* methods and mechanisms.

The latter, albeit largely understandable due to the enormous pressure of events and the need to manage acute crises, have fuelled popular discontent and increased the amount of distrust in the functioning of national and European institutions.

The current EU commissioner for economic affairs, Pierre Moscovici, and other high-ranking European officials (including Germany's former finance minister Wolfgang Schäuble) were quite candid in noting that the decision-making framework in the euro area needs to be reformed as part of the push to streamline public institutions and policies, in order to give them more legitimacy.

In light of the need to reform eurozone institutions and policies a key question arises: can financial integration overcome economic fragmentation without fiscal arrangements, ie. risk-sharing schemes? Fiscal integration implies more than institutional cooperation; it requires institutional integration and a eurozone budget, which leads implacably to the fundamental political question of the eurozone – integration.

But political integration in the euro area is a fantasy under the present circumstances. Besides, there is a fundamental contradiction in European integration, which is epitomized by Dani Rodrik's trilemma: integration

(globalisation via the 'single market') can hardly cohabit with autonomous economic policy and with democratic accountability¹⁶ at the national level¹⁷; something must give in in this triumvirate.

This trilemma may simplify reality, and trade-offs and compromises may be worked out. However, it poses a formidable challenge to the eurozone unless integration is backed by policies and mechanisms that can iron out excessive heterogeneity and competitiveness gaps between member states – policies and tools which would prevent growing tensions that erode the social fabric and give rise to extremist reactions, populism, euroscepticism, etc.

Again, the incompleteness of the eurozone is to be singled out, for this is not a genuine monetary union, as it lacks proper fiscal arrangements (as one finds in the US, in Germany as a federal state, etc).

Why is the fiscal challenge critical to the eurozone? Deeper integration (a single budget, among others) would bring, as mentioned above, the political issue to the fore. Wealthier/creditor countries fear a 'transfer union' (fiscal transfers), however much sense the latter makes in a monetary union that would not be merely a single currency area. Yet, beyond narrowly-defined economic interests¹⁸, there are constitutional impediments posed by fiscal arrangements that involve fiscal transfers.

Here lies the greatest difficulty in reforming the eurozone. To believe that the Banking Union (when it is completed with the setting up of a single deposit insurance scheme and a more solid common resolution fund) can make up for fiscal arrangements is, arguably, an unrealistic approach. For the eurozone to be viable, both public and private risk-sharing schemes are needed.

Disquieting prospects

Liberalism at its most fundamental identifies itself with democracy. Yet, when globalism, as a vision, leads to unrestrained liberalization by disregarding market failures and losing sight of those who lose in economic competition, democracy is jeopardised. This happens because the social fabric is worn thin, the middle class (its social basis) withers, confidence in the ruling elites fades away, and, ultimately, a crisis of democratic governance is brought about. Simultaneously, authoritarian propensities and endeavours crop up¹⁹.

It may also be the case that we are going through the downward phase of a long-term economic cycle (Kondratiev, Schumpeter²⁰); this phase can explain the 'inward looking syndrome' one sees in several industrialized societies, and the Great Recession (the global financial crisis) admittedly belongs to the downward phase of a secular cycle. The new industrial (technological) revolution and the emergence of new global economic powerhouses play an important part in these dynamics.

For world peace it is vital that the democratic order not be dismantled; it is vital to prevent major conflicts, trade wars, and the destruction of the multilateral system that was created in the aftermath of World War II (starting with the Bretton Woods system). This does not mean that major stakeholders in the global order cannot proceed to reform the multilateral order and inter-country relationships.

In the European Union (and the eurozone) reforms are needed to increase the legitimacy of – ie. the democratic nature of – its institutions. In order to avoid worst-case scenarios, pragmatic public policies need to reconcile the requirements of a free economy with what political and social inclusion mean in a democracy. The liberal order of the world, as established after the victory over Nazi Germany and its allies, is being severely tested and its current prospects are worrisome²¹.

But the liberal idea still has the upper hand in the industrialized world and many people stand behind it. However, if its power to shape people's minds and conduct is to continue, an enlightened version of liberalism needs to be practised and political elites need to show more respect for their fellow citizens.

To the dismay of many, this fragility of democracy (ie. of liberal values) is now all too apparent. This is all the more reason to learn the lessons of ancient and recent history, to be candid and honest about mistaken policies, and to be bold in trying to amend them. Democracy, with its liberal genes, is the best political regime mankind has come up with.

Remembering Winston Churchill's words is as timely as ever.

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Endnotes

1. As can be read in the Communist Manifesto (Karl Marx, Friedrich Engels, 1848), The State and Revolution (VI Lenin, 1917).

2. Hitler's seizure of power was backed by business circles eyeing expansion at home and abroad. Those business circles presumably feared the growing power of the socialist movement in Germany, not least because of the Great Depression.
 3. For instance, internalising the effects of climate change, it manages the relationship between the present and the future generations (which is a weakness of the general equilibrium models).

4. As libertarians would say. There is an almost inherent dynamic of asset concentration, which can negatively affect the system's homeostasis and, ultimately, the democratic nature of a regime. Middle class erosion is to be viewed in this context. Thomas Piketty's and Emmanuel Saez's works are to be interpreted from this perspective.

5. See Magna Carta Libertatum (1215), which sought to confine the monarch's power.

6. Bearing in mind, of course, the absolute power of royal/princely regimes in Europe.

7. Markets exist even in command (communist) systems, yet they operate underground in the main. Ironically, they help the system work by 'greasing the wheels' of the machinery.

8. Their dispute with Enrico Barone, Oskar Lange, Abba Lerner, Fred. M Taylor and others on The Economic Calculation is famous. It is noteworthy that Joseph Schumpeter proved ambivalent in judging the systems' dynamics (see his 'Capitalism, Socialism and Democracy', New York, Harper and Brothers, 1942). This work introduces the term 'creative destruction'. But Schumpeter's death in 1950 prevented him from getting more knowledge on the Stalinist command systems at work, and he meant he did not witness the decay and collapse of communism.

9. See Daniel Dăianu "The New Protectionism", World Commerce Review, Spring, 2017.

10. See also David Autor, Trade and labor markets: Lessons from China's rise (MIT, February 2016).

11. See also Daniel Dăianu 'Markets and society: When high finance corrodes economy and undermines democracy',

Eurozine, 21 July 2011; and Emerging Europe and the Great Recession (Cambridge Scholars Publishing, 2018).

12. Yascha Mounk, The People vs. Democracy (Harvard University Press, 2018). See also Dani Rodrik, 'The Double Threat to Liberal Democracy', Project Syndicate, 13 February 2018.

13. Robert Kaplan, The Return of the Marco Polo World (Random House, 2018). See also Kishore Mahbubani, Has the West Lost It? (Allen Lane, 2018).

14. See Jochen Bittner's recent text in Die Zeit, which addresses how the need for Heimat, leading to the notion of 'patriotism' Heimat as a concept, can stir controversy because of its Nazi-era echoes.

15. Ruchir Sharma, 'Prosperity is no lock on popularity', New York Times, 27 April 2018.

16. The status of being accountable to the voters who gave a mandate to top public servants.

17. Dani Rodrik, 'The Inescapable trilemma of the global economy', 27 June 2007 (personal blog). See also his essay 'The Double Threat to Liberal Democracy', Project Syndicate, 18 February 2018.

18. The euro functioned as an undervalued Deutschmark and guilder, fuelling exports; the euro operated also as an overvalued lira, escudo and peseta. This fostered the emergence of large imbalances between north and south in the eurozone.

19. See also 'The End of the Democratic Century' by Yascha Mounk and Roberto Stefan Foa, Foreign Affairs, May-June 2018. This issue contains a set of texts listed under the generics 'Is Democracy Dying?'

20. Nikolai Kondratiev, a renowned Russian statistician who passed away in a Soviet gulag. He identified successive secular (very long-term) cycles (40-60 years) driven primarily by technological developments; these cycles would mirror social tensions and culminate in major conflicts. Joseph Schumpeter also thought in terms of long-term cycles in his 'Theory of Economic Development' (1911), where he emphasises 'revolutionary' technology clusters that change society's technological basis.

21. See also Richard Haass, 'Liberal World Order, R.I.P.', Project Syndicate, 21 March 2018. Haass blames the attitude of the Trump administration towards the order established after World War II, and its global impact.

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How far can trade policy go in promoting European values?

The EU can and should use trade agreements to promote European values but not at the expense of its economic interests, argues Luisa Santos he discussions around trade policy have seen the emergence of a new narrative. The focus was shifted from trade as a means to increase market access and promote EU companies' competitiveness to new aspects such as transparency, inclusiveness and the need to mitigate negative consequences of trade and globalisation.

A critical juncture for the EU's trade policy was the European Commission's *Trade for All* Strategy published in October 2015. It explicitly states that the EU's trade policy should *"not only project our interests, but also our values."* Since then, the debate on what objectives trade policy could and should seek has intensified within the European institutions and civil society.

This debate is in large fuelled by three interconnected perceptions:

1. Europe's traditional foreign policy tools, including development aid and multilateral diplomacy in forums like the United Nations and International Labour Organization (ILO) are perceived by some as not delivering sufficient results in a reasonable period of time in areas such as human rights, environmental protection or labour rights.

2. These instruments are seen as having failed to achieve their objectives (ie. compel third countries to alter their policies in the desired direction) due to insufficient incentives and weak avenues for enforcement.

3. As the world's largest common market, the EU wields considerable economic power and should use this leverage in its trade policy to achieve the above-mentioned goals that go beyond "traditional" market access objectives.

This line of reasoning has led many civil society actors, members of the European Parliament, and some member states to call for an expanded list of foreign policy goals to be achieved through the EU's trade policy. Concretely, this means that the EU is asked to increase its list of demands vis-à-vis a given third country before a preferential trade agreement between the two parties can be signed. Examples of such demands include, but are not limited to, respect of the Paris climate accord, prior ratification of ILO conventions, implementation of human rights conventions and corporate social responsibility guidelines, and adoption of high environmental standards.

The EU's free trade agreements can support goals such as improving labour, environmental and health standards, since higher standards abroad not only contribute to global sustainable development but also to a level playing field for European companies In this view, the EU's trade policy is seen as capable of delivering on all of these value-driven foreign policy goals. However, this approach risks overloading the trade policy agenda. If the EU's demands prior to any free trade agreement (FTA) negotiations increase in both scope and intensity, two detrimental outcomes are more likely.

The first is that a potential negotiation partner could use the EU's non-trade related demands to extract larger economic concessions from the EU. The second is that such excessive demands could deter the third country in question from concluding any trade deal with the EU. In the latter case, the EU's trade policy risks becoming ineffective, projecting neither European economic interests nor European values.

For the European business community trade policy should remain focused on its core objectives that are opening markets and improving trade and investment conditions for companies. This is even more important now that we are facing a wave of protectionism and increased market barriers. The EU's free trade agreements can support goals such as improving labour, environmental and health standards, since higher standards abroad not only contribute to global sustainable development but also to a level playing field for European companies.

However, labour rights, environmental protection, climate change mitigation and gender equality should not be the primary goals of the EU's trade policy. Just as FTAs should not be seen as the primary instrument for delivering on these objectives. For instance, the EU cannot and should not duplicate and consequently undermine the work of the International Labour Organization. Similarly, we believe that EU trade policy should not duplicate but complement the work of the Conference of the Parties (COPs) on climate arrangements.

In an era of global supply chains, the economic growth is happening mostly in emergent markets. Many of them, like China, have already become leading trade powers. Europe cannot afford to be naïve and lead this battle on

its own. The EU can and should use trade agreements to promote European values but not at the expense of its economic interests.

Luisa Santos is Director for International Relations at BusinessEurope

The EU's pivot to Asia

Fraser Cameron considers the unforeseen consequences of global uncertainty, and how the EU has seized the opportunity in deepening EU-Asia relations ne of the unforeseen consequences of the increasing global uncertainty, largely due to President Trump's unpredictable behaviour, is a deepening of EU-Asia relations. President Obama's 'pivot to Asia' which involved several trips to the region and receiving ASEAN leaders at an unprecedented summit in California, was ditched by President Trump as soon as he took office.

His first action in the White House was to withdraw from the Trans-Pacific Partnership (TPP) trade deal and call into question the usefulness of America's security alliances in Asia. These actions plus his attacks on international institutions caused consternation around Asia, from Australia to Japan, and led many countries to reach out to the EU as a predictable and staunch supporter of a rules-based world order.

The EU has been quick to seize the opportunity signing free trade agreements (FTAs) with several Asian countries, reviving the idea of an EU-ASEAN bloc to bloc deal, and also increasing its political and security engagement with the region.

In July, Presidents Tusk and Juncker had successful summits in China and Japan. In August, Federica Mogherini, the EU's energetic, foreign policy chief, spent ten days in the region cementing ties with a range of partners. Trade commissioner, Cecilia Malmström, has also been very active in Asia promoting closer trade ties. Several other EU commissioners as well as ministers from member states have also visited the region highlighting the growing EU engagement with the Asia-Pacific region.

EU-Asia relations will be further deepened at the biannual Asia-Europe meeting (ASEM) in Brussels in October. Although largely a talk feast, it provides a unique forum for over fifty European and Asian leaders to discuss global issues. ASEM also provides an opportunity for many side meetings. For example, there will be an EU-Korea summit involving President Moon before ASEM begins.

Asia rising

The growing importance of Asia for the EU is easy to understand. It is home to two-thirds of the world's population. It has been the driver of global growth for the past two decades. It is now the EU's biggest trade partner, with some €1.5 trillion in two-way trade in 2017 and over €800 billion of European FDI going to Asia in 2016. There is also an increasingly large amount of Asian FDI coming to the EU. All projections show that these figures are likely to increase in coming years.

Furthermore, it is quite clear that most global problems, from climate change to migration, cannot be resolved without Asia's input. It is also true that there are many unresolved security issues in Asia, from the Korean peninsula,

Just as the EU is paying more attention to Asia for political, economic and security reasons, there is a reciprocal growing Asian interest in strengthening ties with the EU which is now viewed as a stable and predictable actor through the South China Sea to Kashmir. But most observers are impressed at the ability of Asian countries to live with these unresolved disputes and carry on promoting business ties. For example, despite poor political relations between China and Japan, and China and Taiwan, all three are closely linked via just-in-time supply chains.

Just as the EU is paying more attention to Asia for political, economic and security reasons, there is a reciprocal growing Asian interest in strengthening ties with the EU which is now viewed as a stable and predictable actor, compared to the uncertainty that characterises the United States under Trump.

The constant refrain from all Asian leaders in recent months is that they do not wish to see the current rules-based international system destroyed. Hedging is now the name of the game. Asian leaders can no longer rely exclusively on Uncle Sam and they do not wish to fall under the Chinese steamroller. There is thus a new enthusiasm for the EU as the principal defender of a rules-based order.

EU-Japan FTA

This enthusiasm was most marked by the July agreement on an EU-Japan FTA. Prime Minister Abe, despite his multiple golf rounds with Trump, concluded that it might not be sensible to place all his eggs in the American basket and it was time to deepen relations with the largest trade bloc in the world. The economic and trade agreement was complemented by a wide-ranging political agreement that should lead to closer cooperation in foreign and security policy.

The FTA (known as the EU-Japan Economic Partnership Agreement) is the biggest free trade agreement in the past two decades and creates significant new opportunities for selling European goods and services to the fourth richest economy in the world with 127 million citizens.

According to the EU, the deal should lead to a 13% increase in exports to Japan with the food sector, textiles, chemicals, machinery, cars and business services likely to benefit most. EU companies could save up to €1 billion a year on customs duties compared to what they are required to pay today upon exports to Japan. EU companies will also benefit from higher standards for example on motor vehicles, on food and on wine additives.

Particularly interesting are the provisions for trade in services, currently worth €28 billion to EU firms, including advanced provisions on movement of people for business purposes. The EPA also covers sustainable development, core labour standards, natural resource management, environmental protection and dispute settlement mechanisms. Both sides also agreed to recognise each other's data protection systems as 'equivalent', which will allow data to flow freely between the EU and Japan, creating the world's largest area of free flow of data.

EU-China

China and Europe trade on average over €1 billion a day. Given that China is the EU's biggest source of imports and its second-biggest export market, there are inevitably some disputes. On the EU side, there are concerns about a lack of transparency, industrial policies and non-tariff measures that discriminate against foreign companies, strong government intervention in the economy, resulting in a dominant position of state-owned firms, unequal access to subsidies and cheap financing, and poor protection and enforcement of intellectual property rights. On the Chinese side, there are complaints that the EU has reneged on a promise to grant China market economy status and its growing protectionism.

Although the EU and China have signed impressive documents outlining their mutual desire to deepen their strategic partnership, relations had stagnated in the past couple of years over the above trade disputes. The July summit was significant in that both sides were able to agree a lengthy statement, something that they could not achieve in the two previous EU-China summits.

Trade issues were still central at the summit but both sides sought to emphasise areas of cooperation rather than divergence. Leaders expressed support for the rules-based multilateral trading system and agreed to set up a working group on reform of the WTO.

Both sides also agreed an exchange of market access offers that should give an impetus to the negotiations for a bilateral investment agreement. China confirmed its commitment to acceding to the WTO government procurement agreement (GPA).

There were also other positive outcomes at the summit including MoUs on the circular economy and an emissions trading system plus an oceans' partnership covering fisheries and marine pollution. Finally, both sides discussed connectivity – taking stock of progress in the EU-China connectivity platform – and exchanged views on the digital economy, including how to avoid introducing market access barriers through their respective cybersecurity regulations.

Remarkably, the EU and China are more on the same page when it comes to Iran, climate change and preserving the UN system than with the US. President Xi, who has recently cemented his power base in China, also views the EU as a solid anchor in an uncertain world. There are of course areas of dispute such as human rights between Brussels and Beijing and it remains to be seen how China's highly ambitious Belt and Road Initiative can be linked to the EU's forthcoming policy on enhancing connectivity between Europe and Asia.

EU-Korea

Korea was the first Asian country to sign an FTA with the EU in 2012. Since then EU exports of goods to Korea increased almost 60% and exports of services increased nearly 50% over the same period, turning trade deficits

into surpluses. Two-way FDI also saw a 50% increase in the past five years. Businesses in Korea and Europe have expressed satisfaction with the FTA although there are calls for some adjustments in some sectors.

The EU and Korea also have a political and a security agreement allowing for close cooperation in foreign policy. Ahead of the planned October EU-Korea summit, Mogherini visited Seoul in August for talks with her opposite number. The visit demonstrated the EU's support for the tricky negotiations to denuclearise the Korean peninsula. The EU has been a strong defender of the UN sanctions policy against North Korea. Apart from the DPRK, Brussels and Seoul increasingly agree on major foreign policy issues and Mogherini was able to explore opportunities for further cooperation during her visit.

EU-India

India is currently the fastest growing economy in the world and a strategic partner for the EU, representing a sizable and dynamic market of 1.25 billion people. But the negotiations for an FTA, launched over a decade ago, have proved difficult. Sticking points include improved market access for some goods and services, government procurement, geographical indications, sound investment protection rules, and sustainable development.

The EU is India's number one trading partner while India is the EU's 9th trading partner, sandwiched between Korea and Canada. The value of EU exports to India is much smaller than with China. Exports grew from just €24 billion in 2006 to €38 billion in 2016. Indian exports to the EU were of a similar scale. But export of services to India has almost tripled in the past five years and FDI doubled. There has also been a sizeable increase in Indian FDI to Europe. Both sides recognise that there is vast potential to increase trade but the EU remains disappointed at the unwillingness of India to open its market while India criticises the EU for its restrictive visa policies.

ASEAN

The EU is a strong supporter of the ten-nation association of south-east Asian nations (ASEAN) provided considerable financial support and technical assistance. ASEAN is handicapped by its small budget and secretariat plus its insistence on unanimity for all decisions.

Some have questioned its lack of leadership, a role that used to be played by Indonesia. There are also many internal problems that affect relations with the EU. For example, the drug war in the Philippines, the treatment of the Rohingya in Myanmar, and one party or military rule in a number of ASEAN countries.

There have been numerous action plans to try and boost EU-ASEAN relations that celebrated their 40th anniversary in 2017. The EU is keen to upgrade relations to a strategic partnership but it has proved difficult to agree a response from the ASEAN side.

There are currently negotiations for an open skies agreement which would further boost the booming tourism trade between the EU and SE Asia. There is also renewed talk of an EU-ASEAN free trade agreement but given the disparate size of the economies between ASEAN members this will be a difficult undertaking.

Despite its many internal problems, the EU is keen to promote the centrality of ASEAN, with its commitment to multilateralism, international rules and its culture of consultation and inclusiveness. It believes that its own experiences in resolving disputes could be useful in reducing tensions in the South China Sea and elsewhere.

Australia/New Zealand

Australia and New Zealand have also moved to deepen their relations with the EU. In July both countries opened

negotiations for an FTA with expectations for a swift deal, possibly before the end of the mandate of the Juncker Commission. The biggest problem area will be agriculture, given the efficiency of farmers in both Pacific countries.

Mogherini also visited Australia and New Zealand in July, describing them as 'like-minded supporters of the rulesbased, multilateral system'. Given the unpredictability in Washington, Canberra and Wellington are also engaged in a major debate about their future security. They too view the EU as a stable partner in a turbulent world.

An increased security role

In May, EU foreign ministers agreed to enhance the EU's security cooperation with Asia though intensified consultations, capacity building, training programmes and joint exercises. The EU is already working with ASEAN on sensitive issues of maritime security, cyber security and the prevention of violent extremism.

Now the plan is to expand on this soft security agenda to cover conflict resolution and peacekeeping (the EU has already engaged successfully in Aceh, Indonesia), counter terrorism, police and coastguard training, combatting illegal fishing, military to military contacts, and anti-piracy (a number of Asian partners have already participated in the EU-led Operation Atalanta in the Red Sea).

Upping the EU role in Asia will not be easy. The Asian security landscape is shaped by a large number of factors: strategic competition between the big powers; historical grievances; ethnic and religious tensions; governance failures; competition for resources, territory and influence, all compounded by expanding defence spending and capabilities, including nuclear capable states.

This volatile mix explains the EU's vital interest in supporting overall stability in Asia and advancing a rules-based approach to promote effective security structures. On the Asian side, it is the current occupant of the White House

that is driving Asians towards a closer relationship with the EU. It is a relationship that could shape the future of the world.

Fraser Cameron is Director of the EU-Asia Centre

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Best LuxuryAsset Manager

Tax reforms accelerating with push to lower corporate tax rates

Tax Policy Reforms 2018 describes the latest tax reforms. Pascal Saint-Amans says there is a crucial need to continue addressing equity issues and environmental challenges ith monetary policy starting to return to normal in many countries, support provided by fiscal policy, including to a large extent through tax policy, has become more significant. Many countries have eased their fiscal stance to stimulate the economy by lowering taxes, increasing government spending, or both. The OECD's recently-published *Tax Policy Reforms 2018* highlights that the focus of the most recent tax reforms has been on cutting taxes on businesses and individuals with a view to boosting investment, consumption and labour market participation, continuing a trend that started a couple of years ago.

Among the countries that introduced the most significant tax reforms were a number where tax reform was long overdue. The United States introduced the most sweeping tax reform, which completely overhauled its tax system, including both business and personal taxes. The year 2018 also saw the entry into force of significant tax reform packages in Argentina, France and Latvia. Broad tax reform packages are consistent with the view that tax systems should be considered as a whole and that, as opposed to looking at tax policies in isolation, the focus should be on the efficiency and equity effects of the overall tax system.

Other countries have introduced tax measures in a more piecemeal fashion, but many of these measures are a step in the right direction. A number of countries have sought to encourage greater labour market participation, most notably through the expansion of earned income tax credits. Efforts have also been made to broaden tax bases and to continue the fight against international corporate tax avoidance, in line with the commitments made by countries to implement the minimum standards and recommendations agreed upon as part of the OECD/G20 Base Erosion and Profit Shifting (BEPS) project. Administrative improvements and anti-fraud measures, in particular in the area of VAT, were also among the measures commonly adopted to enhance efficiency and collect greater tax revenues. Going forward, however, greater action and coordination will be needed to avoid certain risks:

 With global economic growth now closer to longer-term norms, the need for additional short-term fiscal stimulus is significantly lower. Fiscal policy choices should avoid the risk of excessive pro-cyclicality and be focused on medium-term challenges. Despite being on a declining trend, public debt and deficit levels remain high in many countries.

Tax policies should continue to focus on inclusiveness to ensure that improvements in incomes and standards of living are shared widely across the population

As economic times improve, there is an opportunity to rebuild fiscal buffers, which will ultimately give more room for policy stimulus in the event of any future downturn. The focus of tax reforms should also shift to supporting the longer-term drivers of growth and equity. In this context, it is particularly important that tax reforms be financed in a manner that ensures their long-term sustainability.

Continued cooperation will also be important to prevent harmful tax competition. So far, while the declining
trend in the average OECD corporate tax rate has gained renewed momentum since the crisis, corporate
tax rate reductions are still less pronounced than before the crisis. Besides, the countries that introduced
corporate tax rate cuts in 2018 included some of the countries that had the highest tax rates in 2017.

If anything, these countries appear to be engaged in a *"race to the average"* rather than in a *"race to the bottom"*, with their recent corporate tax rate cuts now placing them in the middle of the pack. There will be much interest in observing how countries respond to this trend in the future.

The report also highlights the crucial need to continue addressing equity issues and environmental challenges, which remain significant despite progress in recent years.

Tax policies should continue to focus on inclusiveness to ensure that improvements in incomes and standards of living are shared widely across the population. This is especially true in a context where positive developments in terms of employment are being overshadowed by wage stagnation, especially for low-wage workers. While there have been continued cuts in personal income taxes for low and middle-income earners, these have typically been small.

In general, there is still ample scope to strengthen inclusiveness through tax systems, in particular by continuing to lower-labour tax wedges on low and middle-income workers, removing tax expenditures that disproportionately benefit the wealthy, and ensuring the effective taxation of personal capital income. Efforts to partly shift the financing of welfare systems from social security contributions towards general taxation could also be pursued further.

Identifying the winners and losers of tax reforms and adequately compensating those who will lose out from new tax measures, particularly where they are at the bottom of the income and wealth distribution forms part of an inclusive tax agenda.

Progress on environmental taxation is urgently needed. While some progress has been achieved regarding the taxation of energy use, recent tax increases have not been meaningful enough to encourage significant carbon abatement outside of road transport. Aligning energy prices with the costs of climate change and air pollution is a central element of a cost-effective environmental policy.

More generally, an increased emphasis should be placed on environmental taxation to encourage changes in behaviour that deliver improved environmental outcomes and help raise the levels of revenue collected from green taxes, which can be used to finance cuts in more distortive taxes.

Pascal Saint-Amans is Director of the Center for Tax Policy and Administration at the OECD

The missing profits of nations

Between 1985 and 2018 the global average statutory corporate tax rate fell by more than half. Thomas Tørsløv, Ludvig Wier and Gabriel Zucman argue that profit shifting is a key driver of this decline erhaps the most striking development in tax policy throughout the world over the last few decades has been the decline in corporate income tax rates. Between 1985 and 2018, the global average statutory corporate tax rate fell by more than half, from 49% to 24%. Why are corporate tax rates falling? The standard explanation is that globalisation makes countries compete harder for productive capital. By cutting their rates, countries can attract more machines, plants, and equipment, which makes workers more productive and boosts their wage. This theory is particularly popular among policymakers. It permeates much of the discussion about tax policy, for instance the decision by the US to cut its corporate tax rate from 35% to 21% in 2018 (eg. Council of Economic Advisors 2017).

But is it well founded empirically? Today's largest multinational companies don't seem to move much tangible capital to low-tax places – they don't even have much tangible capital to start with. Instead, they avoid taxes by shifting accounting profits. In 2016 for instance, Google Alphabet made \$19.2 billion in revenue in Bermuda, a small island in the Atlantic where it barely employs any worker nor owns any tangible assets, and where the corporate tax rate is zero percent.

Mapping where profits are booked globally

In a recent paper (Tørsløv *et al.* 2018) we argue that this profit shifting is a key driver of the decline in corporate income tax rates. By our estimates, close to 40% of multinational profits were artificially shifted to tax havens in 2015. This massive tax avoidance – and the failure to curb it – are in effect leading more and more countries to give up on taxing multinational companies. The decline in corporate tax rate is the result of faulty policies in high-tax countries, not a necessary by-product of globalisation.

Our estimate that 40% of multinational profits are shifted to tax havens is based on new macroeconomic data known as foreign affiliates statistics. These statistics record the amount of wages paid by affiliates of foreign

multinational companies and the profits these affiliates make. In other words, they allow to decompose national accounts aggregates (wages paid by corporations, operating surplus of corporations, etc.) into 'local firms' and 'foreign firms'. We draw on these statistics to create a new global database recording the profits reported in each country by local versus foreign corporations. This enables us to have the first comprehensive map of where profits are booked globally.

Using this database, we construct and analyse a simple macro statistic: the ratio of pre-tax corporate profits to wages. Thanks to the new data exploited in our paper, we can compute this ratio for foreign versus local firms separately in each country. Our investigation reveals spectacular findings.

Close to 40% of multinational profits were artificially shifted to tax havens in 2015, and this massive tax avoidance – and the failure to curb it – are in effect leading more and more countries to give up on taxing multinational companies In non-haven countries, foreign firms are systematically less profitable than local firms. In tax havens, by contrast, they are systematically more profitable – and hugely so (Figure 1).

While for local firms the ratio of taxable profits to wages is typically around 30%-40%, for foreign firms in tax havens the ratio is an order of magnitude higher – as much as 800% in Ireland. This corresponds to a capital share of corporate value-added of 80%-90% (compared with around 25% in local firms).

To understand these high profits, we provide decompositions into real effects (more productive capital used by foreign firms in tax havens) and shifting effects (above-normal returns to capital and receipts of interest). The results show that the high profits-to-wage ratios of tax havens are essentially explained by shifting effects.

Overall, we find that close to 40% of multinational profits – defined as profits made by multinational companies outside of the country where their parent is located – are shifted to tax havens in 2015. Our work provides transparent, easy-to-compute metrics for policymakers to track how much profits tax havens attract, how much they gain in tax revenue, and how much other countries lose. These statistics, which we will update regularly online, could be used to monitor the impact of the policies implemented to reduce tax avoidance.

We then trace the profits booked in tax havens to the countries where they have been made in the first place – and would have been taxed in a world without profit shifting. This allows us to provide the first comprehensive view of the cost of profit shifting for governments worldwide. We find that governments of the EU and developing countries are the prime losers of this shifting. Tax avoidance by multinationals reduces EU corporate tax revenue by around 20%.

When we look at where the firms that shift profits are headquartered, we find that US multinationals shift comparatively more profits than multinationals from other countries. This can be explained by the specific

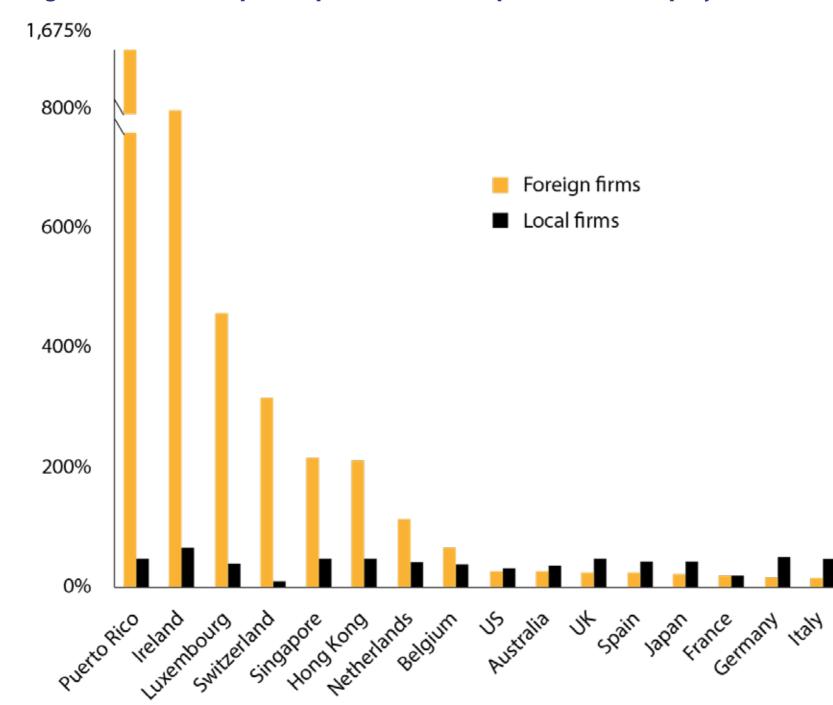


Figure 1. Pre-tax corporate profits (% of compensation of employees)

incentives contained in the US tax code before 2018 and by US Treasury policies implemented in the 1990s that facilitated this shifting (Wright and Zucman 2018).

Non-haven countries steal revenue from each other while letting tax havens flourish

Why, despite the sizable revenue costs involved, have high-tax countries in Europe, developing countries, and the rest of the world been unable to protect their tax base? We show theoretically that the fiscal authorities of high-tax countries do not have incentives to combat shifting to tax havens, but instead have incentives to focus their enforcement effort on relocating profits booked by multinationals in other high-tax countries.

Chasing the profits booked in other high-tax places is feasible (the information exists), cheap (there is little pushback from multinationals, since it does not affect much their global tax bill), and fast (a framework exists to settle disputes between high-tax countries quickly). This type of enforcement crowds out enforcement on tax havens, which is hard (little data exist), costly (as multinationals spend large resources to defend their shifting to low-tax locales), and lengthy (due to a lack of cooperation by tax havens).

Consistent with this theory, our analysis of data on tax disputes between tax authorities shows that the vast majority of high-tax countries' enforcement efforts are directed at other high-tax countries. In effect, non-haven countries steal revenue from each other while letting tax havens flourish.

This policy failure is reinforced by the incentives of tax havens. By lightly taxing the large amount of profits they attract, tax havens have been able to generate more tax revenue, as a fraction of their national income, than the US and non-haven European countries that have much higher rates. The low revenue-maximising rate of tax havens can explain the rise of the supply of tax avoidance schemes documented in the literature – such as favourable tax rulings granted to specific multinationals – and in turn the rise of profit shifting since the 1980s.

Our findings have implications for economic statistics. They show that headline economic indicators – including GDP, corporate profits, trade balances, and corporate labour and capital shares – are significantly distorted. The flip side of the high profits recorded in tax havens is that output, net exports, and profits recorded in non-haven countries are too low. We provide a new database of corrected macro statistics for all OECD countries and the largest emerging economies.

Adding back the profits shifted out of high-tax countries increases the corporate capital share significantly. By our estimates, the rise in the European corporate capital share since the early 1990s is twice as large as recorded in official national account data. This finding has important implications for current debates about the changing nature of technology and inequality (eg. Piketty and Zucman 2014, Karabarbounis and Neiman 2014). Our work provides concrete proposals to improve economic statistics and the monitoring of global economic activity.

Thomas Tørsløv is a PhD student and Ludvig Wier is a PhD candidate at the University of Copenhagen, and Gabriel Zucman is an Assistant Professor at UC Berkeley

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Best Superyacht Crew Insurance

Trump's economic gamble with trade wars and tax cuts

John Rapley assesses Donald Trump's tax and trade policies, and argues that he could win big or lose everything icture the US-China trade spat as a boxing match (Donald Trump probably has). The US is the slugger – the pulverising champion – and China is the fast-rising challenger. A bit like George Foreman against Muhammad Ali in the *Rumble in the Jungle*. The champion slugger both can and must land a knockout punch early – because he hasn't trained to go the distance. If he doesn't, he's in trouble.

The early rounds appear to be going Trump's way. Reports from Beijing suggest the Chinese leadership was caught off guard by the intensity of Trump's early assault. As if expecting him to jab gently to probe their defences, they were rocked on their heels by the ferocity of the barrage: some US\$200 billion of tariffs on Chinese imports, with more where that came from.

Although China emerged from the 2008 global financial crisis in better shape than most countries, thanks to a US\$4 trillion stimulus programme, the resulting investment boom sent China's gross debt soaring. Worse, much of the investment yielded low returns, making some debt difficult to service. A severe economic hit now could drive up defaults, possibly inducing a financial crisis. China is vulnerable.

In contrast, the US has rarely looked stronger. Real GDP growth recently surpassed 4% while the unemployment rate is below that. And, to further swell his arsenal, the president got Congressional Republicans to cut taxes, pumping another estimated US\$1.5 trillion into the US economy over the next decade, with most of the gains expected in the first three years.

In short, the US can withstand almost any punishment that China can mete out in the coming months. Investors are thus betting on the US. Since Trump first announced tariffs, the Chinese currency and stock markets have plunged, whereas America's bond and stock markets have barely hiccupped. Indicating how painless it's all felt, Trump told CNBC, *"We're playing with the bank's money"*.

'The wrong moment'

Were the fight to last beyond a few rounds, however, American stamina would quickly wane. Outside the White House, most economists believe the US is now probably at the peak of its business cycle, and some worry that the tax cuts may actually worsen the downturn when it comes.

Former Fed chairman Ben Bernanke echoed a view widespread among economists that the tax cuts came at 'the very wrong moment'. Because fiscal stimulus is generally considered most effective at the opposite end of the business cycle, amid recession, the long-term impact on economic growth may be minimal to nil. The principal

There are suggestions the Chinese leadership is now adopting a long-term view of the trade conflict, interpreting it as a strategic attempt by Washington to thwart China's rise effect of the tax cuts may thus be to redistribute some future growth to the present – supercharging the economy today and worsening the recession when it comes. Or, as Bernanke put it, *"In 2020, Wile E Coyote is going to go off the cliff, and he's going to look down"* – the stimulus will run out just as Trump is campaigning for reelection.

It's as if before leaving the locker room, the champion gorged on candy bars instead of whole grains. He came out swinging, but will be spent by the middle rounds.

Taking the punches

Of course, the Trump administration begs to differ, touting the wage gains and new investment that will result from this influx of new money, thereby permanently raising the economy's growth rate. That is, of course, possible. But not, on present evidence, likely.

Although it's still early days, so far the vast majority of the tax cuts have been used by corporations to pad profits and buy back shares. This supports share prices, not to mention any executive compensation packages tied to those share prices. But while a rising stock market creates a wealth effect, and thus stimulates consumption, there's been little new investment beyond what one would expect at this point in the business cycle.

When the burst of consumption tapers off, there won't be new output to pick up the slack. Nor, for that matter, will workers be in a position to step up. So far, less than 3% of the tax money has gone towards improving worker compensation, and most of that has taken the form of one-time bonuses. Real wage growth remains sluggish.

As Muhammad Ali knew on that steamy Kinshasa night when he stepped into the ring with George Foreman, title fights are determined less by who can do the most damage as by who is willing to take the most punches. There are suggestions the Chinese leadership is now adopting a long-term view of the trade conflict, interpreting it as a

strategic attempt by Washington to thwart China's rise. Were the Beijing leadership able to find a way to survive the early rounds of this contest, it may be prepared to go the distance.

Donald Trump, on the other hand, may find himself facing voters in the midst of a recession, or at least when the shine is fading from the economy. Who knows? As happened to George Foreman in 1974, he may face his knockout punch well before distance.

John Rapley is a Visitor to the Senior Combination Room, St Edmunds College, at the University of Cambridge

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Best Bank for Wealth Management and Personal Banking

The Chequers proposals are damaging: there are better alter alter alter at the second of the second

Patrick Minford considers the Chequers proposals, and finds that the initial proposals are damaging to the UKs national interests and suggests a better route for the UK ince the ill-fated Chequers Cabinet meeting on Friday July 6th much has been written about the faults of Theresa May's proposals that were agreed that day. In brief these are that they subject UK farming and manufacturing to EU Single Market regulations. We also agree to maintain social (including labour) and environmental regulations currently mandated by the EU, which govern much of the activity across the whole economy.

This means that we cannot alter these EU standards, many of which discriminate against non-EU suppliers such as the US, when we enter into Free Trade Agreements, FTAs, with the rest of the world; we can reduce or eliminate tariffs but we cannot eliminate the protection created by EU standards.

The New Customs Partnership Mark 2 now supposedly makes setting lower or zero tariffs on non-EU FTA partners feasible; however, doubts remain about the practicality of this proposal too. Finally, some formula about enhanced EU migration in the proposals implies that there will also be free migration in some degree from the EU.

Needless to say, these elements all damage the UK's economic interests. Our FTA strategy will be less beneficial as we can eliminate less protection and also get less return access from other non-EU countries. We will be unable to optimise regulations in major parts of our economy that will be subject to continued EU rule. Finally, we will not gain control of our borders.

The situation is aggravated by the fact that these are just initial proposals to the EU and they may well lead to further concessions against the UK's national interests.

In this short piece I deal with two questions: first, for what reasons did Mrs May take this route? Second, what better route could be taken and how would it deal with those reasons?

Why did Mrs May choose this route?

There is a short answer to this question: UK farming and manufacturing, 'industry', wanted it. Whether it was the CBI and such titans as Airbus or JLR, or the Institute of Directors and Chambers of Commerce representing smaller businesses, or a host of individual trade associations, a more or less unanimous howl went up from them that they wanted existing regulations to continue uninterrupted by any new bureaucratic uncertainty. For them it was immaterial who set these regulations or how; they allowed industry to do what it now does and industry did not want them disturbed.

Over the coming months it is essential that politicians start to get a grasp of the WTO world and its workings. Once they do so, the Plan B of Canada+ will come into focus as the superior way to go This view was supported across Whitehall, most strongly by the Industry Department (DEIS) and the Treasury, who leaked the notorious *Cross-Whitehall Report* claiming that there would be huge costs to trade and GDP in border barriers between the UK and the EU if we had a Canada+ trade agreement; and still larger barriers of course in the event of No Deal. Only if industry stayed within the Single Market in goods could the threat of new barriers be removed.

Whitehall and industry combined to make a formidable lobbying force, and dominated No 10's thinking. It also strongly influenced Tory rebels such as Dominic Grieve and Nicky Morgan. It was put about that the 'interests of the economy' dictated a 'soft Brexit' in which industry stayed in the Single Market.

What is interesting and a matter for relief is that this argument was not deployed in respect of services, at least in recent months. It has become understood that services are different, that the Single Market in services is of little importance, and the City requires UK regulation by the Bank of England, which has helped to emphasise this point.

As services are 80% of the UK economy, the fact that they are not being involved in these proposals means that service regulation at least can be optimised by the UK government. However, even this will be hamstrung by commitments under the Chequers Proposals to keep social and environmental regulation unchanged.

What better route could be taken and could it deal with industry's concerns?

There is of course a far better route: Canada+. This would mean we would have zero tariffs between the UK and the EU, and also zero non-tariff barriers, together with freedom to set whatever standards were best for the UK home market. Standards on EU exports would of course remain in place as those mandated by the EU; standards on UK imports would be free for us to determine as part of our domestic decisions on standards.

If we liberalised these to permit goods from non-EU countries to be sold here, we would not discriminate against EU imports - they would be free to impose their own current EU standards, which would also meet our new liberalised standards which would be more embracing of variety from around the world.

What then of the threatened surge in barriers between us and the EU? The simple point is that there is no such threat. Any such surge would be completely illegal under WTO rules. Border procedures must be seamless and effectively costless; if existing standards on both sides are met by industry, as they already are, then there can be no sudden withdrawal of trade permissions.

What has happened in our internal political debate is that extreme ignorance of how the WTO works has allowed a Project Fear to take hold among industrialists and the Civil Service interacting with them. They have assumed that the WTO world is a lawless world in which 'hostile governments' can 'make trouble'. Yet WTO law is plain - it mandates seamless border procedures and outlaws discrimination on standards.

Furthermore no-one in their right mind would claim that either the UK or the EU would defy international law: both make a particular point of adhering to it, given the centrality of international law to the Treaties on which both take their stands.

How to get back on course?

The present Chequers proposals threaten the UK's economic interests. They will damage our regulation, undermine our FTAs with the rest of the world, and perpetuate uncontrolled and subsidised unskilled immigration from the EU. Furthermore, they may lead to more compromises which worsen these aspects even more. We have not heard the response from the EU but it would be surprising if they did not demand such further compromises.

At some point these proposals as they shape-shift with increasing compromises will become impossible to get through the UK Parliament and will also raise huge concerns in the electorate. For the Conservative Party this could become a suicide mission. The outcome could well be a collapse into No (Trade) Deal as Parliament refuses to ratify them. This default into a WTO-rules based world, discussed in the next section, would be a good outcome for the UK if a poor one for the EU. But it is increasingly being emphasised by the UK government, and even the EU Commission, as a likely scenario.

However, industry, the Civil Service and Tory rebels need to understand that their fears about a plain Canada+ agreement with the EU are quite misplaced. Canada+ would give all the security over border treatment that would occur under the Chequers proposals. But it would also permit the UK to set its own regulations throughout the economy, sign FTAs with the rest of world in the knowledge that less discrimination on standards and so freer trade can be in the policy mix, and recover control of its borders.

Once the government had switched to the proposal of Canada+, the EU's reaction is known: indeed it offered this outcome some months ago. Why would it not do so again? The UK will be a third country from end-March 2019; from a legal perspective, being outside all the EU's institutions, the only possible agreement for the UK is a trade agreement with the EU as a third country like Canada or Japan.

The problem all along with Mrs May's proclaimed desire for a 'deep and close relationship' with the EU has been that this contradicts third party status. It is 'half-in, half-out'. Yet the irony is that one does not need to have 'deep, close' relations in order to trade with the EU in a frictionless manner, most especially when you start from a situation where all your goods industries satisfy existing standards for exports, in both directions.

If either we or the EU were to stop goods at the border on the Friday after Brexit on the grounds that they do not satisfy required standards, when on the Monday before Brexit the very same goods satisfied them, it would be a blatant breach of WTO rules, leading to an immediate WTO court case to outlaw it.

What if the EU refuses to enter into a Canada+ trade deal?

Should the EU refuse to enter into a Canada+ deal, then a plain WTO trade arrangement where we have no EU trade deal at all will work just as well for us. The reasons are the same: 'access' to the EU market for us and for the EU to ours is protected under WTO rules. The border must be seamless and as we each satisfy each other's export product standards there can be no denial of recognition of each other's standards without breaching the rules on non-discrimination.

The only impediment to our trade will be tariffs on goods each way. These are on average rather low, at around 4%. However, they will have a negative effect: on the EU, not on us. To understand why think about how when we leave the EU we will sign FTAs with many countries around the world from which we will therefore buy at world prices with no tariffs imposed from our side. Apart from benefiting our consumers this creates strong competition between all producers, whether domestic or foreign.

EU producers are no exception; they will have to meet these prices to sell anything much here at all. So any tariffs we impose they will have to absorb. As for our producers selling in the EU they too will sell at world prices since their competitors here would quickly undercut them if they charged more. Therefore any EU tariffs on them will be paid by EU importers, who can easily do so as EU prices are higher because of the trade barriers on world producers.

What this all means is that if we leave the EU without a trade agreement, under WTO rules, and therefore with no transition (which is dependent on a trade deal), the EU carries the burden of paying about £13 billion a year

tariff revenue to HM Treasury, it loses our £39 billion budget contribution for the transition period, and the world competition from our FTAs kicks in two years early. This can be costed in present value at around £500 billion. On the other hand we gain present value of £650 billion.

Much nonsense has recently been talked about 'no deal' halting air traffic, upsetting pensions, derailing N Ireland's electricity deal with Ireland and much else. However, these matters have nothing at all with 'no trade deal' which is the issue here. They are the basic meat and drink of any competent government to resolve as they deal with the necessary separation from the EU under Article 50, which indeed was created for this very purpose.

For these negotiations about practical matters to fail one would need to assume that the EU and the UK were planning some sort of acrimonious divorce amounting to a level of implicit warfare. Since they are both allies in NATO, cooperating on security, and supposedly maintaining friendly diplomatic relations into the future, this would be a serious failure indeed.

It would imply that one would kiss goodbye to good cross-Channel relations indefinitely. It would not stop Brexit however; it would merely reinforce in the British mind the picture of basic EU hostility and strengthen the urge to leave at any cost. For this reason it is reasonable to dismiss failure to agree these basic matters; indeed it has been said repeatedly by both sides that 80% of them are already agreed.

No trade deal is another matter: here agreement is held up by the 'theology' of the EU's Single Market and Customs Union and their associated Four Freedoms, as well as by the failure of the UK side to understand the nature of the WTO rules-based world. It may well be that agreement cannot be reached on trade, at least in time for the UK's March 2019 departure from the EU. In this case the 'WTO-based option' is a desirable one from our viewpoint, less so from the EU's- as on top of the monetary loss above it would be technically bankrupt on its budget to 2020 without our budget contribution, given that it is not allowed to borrow. This should persuade the EU to agree to Canada+. But if not, it is their loss.

Conclusions

So bad is the mess into which the poorly thought-out Chequers proposals have plunged the UK and so much worse is it likely to get as negotiations with the EU proceed, that course alteration looks inevitable and certainly highly desirable, as soon as possible. Over the coming months it is essential that politicians start to get a grasp of the WTO world and its workings. Once they do so, the Plan B of Canada+ will come into focus as the superior way to go.

However, if the EU refuses to cooperate even on that, we should simply go to WTO-rules based trade arrangements all round. This will bring us the full gains from Brexit and by bringing them faster with no burdensome transition period and tariff revenues from the EU, provide an additional fillip on top.

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More details of all these arguments can be found in: https://www.economistsforfreetrade.com/wp-content/uploads/2018/06/Why-a-World-Trade-Deal-exit-from-the-EUmay-be-best-for-the-UK-Final-15.06.18.pdf Patrick Minford 'The economics of Brexit: getting the best deal for the UK', downloadable from www.politeia.co.uk

Free trade between the EU and US: a match made in heaven

The EU and US have recently expressed a desire to aim for zero tariffs and non-tariff measures between them. Hylke Vandenbussche, William Connell and Wouter Simons estimate the gains from such a deal uring the first part of the Trump presidency, talks between the US an EU regarding a preferential agreement, the Trans-Atlantic Trade and Investment Partnership (TTIP), were put aside and instead bilateral import tariffs between the trade partners increased. It is only very recently that the presidents of both the EU and the US have expressed their desire to aim for zero tariffs and non-tariff measures between the two trading partners (European Commission 2018).

While these declarations seem to entail a less ambitious agenda than the agreement that was in the make under the Obama presidency, it conveys the political will to further liberalise trade between the EU and US.

What are the potential gains from such a mini-TTIP, which now only involves lowering import tariffs and non-tariff measures on goods and services between the US and EU? The bilateral tariffs are already quite low, as shown in Figure 1. In 2014, the unweighted average US ad valorem tariff on EU products was around 2.1% and the average EU ad valorem tariff on US products was 6.4% (Vandenbussche *et al.* 2018). No tariffs apply to services trade. Therefore, the potential gains from further liberalisation seem to come from non-tariff measures (NTMs), which involve all other trade distortions and are the main obstacle in EU-US trade.

Acemoglu (2012) and Johnson (2014) suggest that any evaluation of trade policy or a free trade agreement such as TTIP or a mini-TTIP should consider global value chains and production networks worldwide rather than bilateral trade flows alone. Building on this idea, in new research we develop a new methodology to evaluate different trade policy shocks such as free trade between the US and the EU (Vandenbussche *et al.* 2018).

We argue that trade between two bilateral trade partners cannot be considered in isolation, but should be considered as part of a global value chain that also involves third countries trade. Take the car sector as an example. When the US steel sector supplies an input to a Mexican tire producer which is subsequently shipped to a German

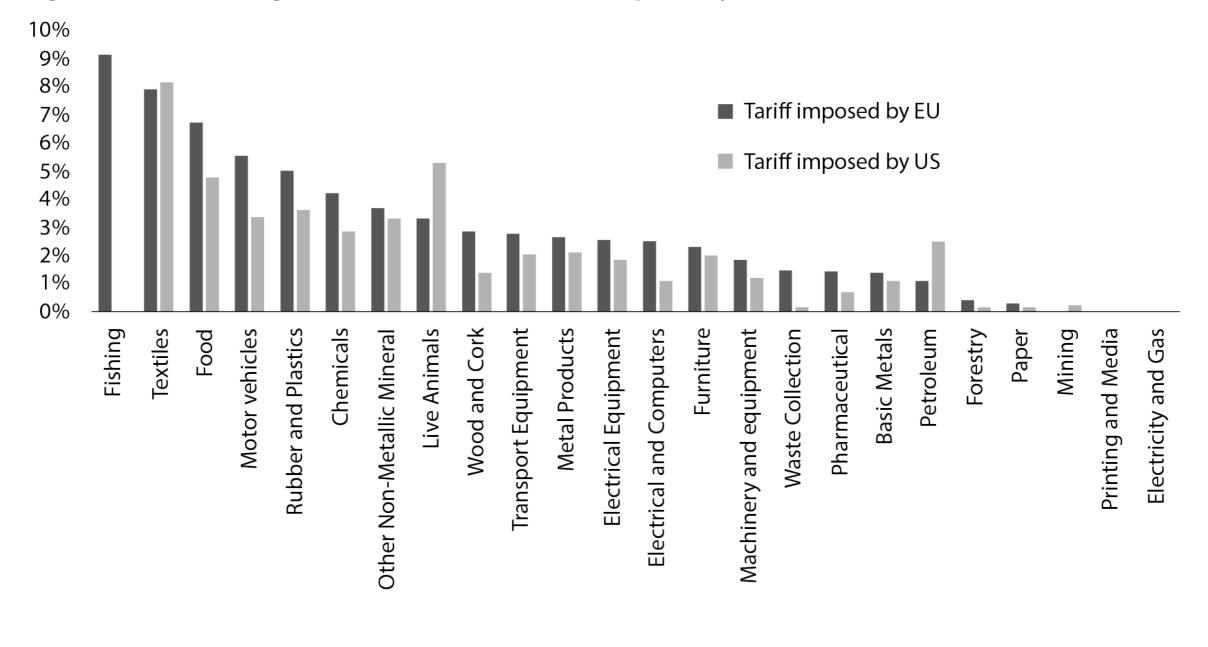


Figure 1. Current average most-favoured nation tariffs imposed by EU and US

Source: Vandenbussche et al. (2018).

car assembler as an intermediate input, a US tariff on German cars will not just affect German exports to the US but will also affect US exports to Mexico.

A full assessment of the effects for the US of bilateral trade liberalisation with the EU thus requires an analysis of global input-output linkages that exist between all sectors including those of third countries. The example shows

... taking into account global value chains and inputoutput linkages in production... free trade would substantially benefit both the EU and the US, and these gains would result from the reduction in nontariff barriers rather than tariffs that a zero US import tariff on EU cars will indirectly also affect US exports to Mexico, driven by the increased German car sector's demand for Mexican tyres. A traditional bilateral gravity analysis between the US and EU can therefore not suffice for assessing the effects of reduced tariffs between them, since direct trade would be missing many of these indirect production linkages.

Most of the earlier studies on trade policy shocks, and TTIP in particular, rely on simulating a single-sector computable general equilibrium model with perfectly flexible labour markets and full employment. While these studies are very useful in generating long-run estimates at the level of the country, they offer little guidance when it comes to the short-run impact.

In the short run, economies only slowly move to a new trade equilibrium because it takes time for wages to adjust and for supplier networks to change. Labour markets do not perfectly adjust and unemployment exists. Thus, there appears to be room for a study that documents the short-run impact that the EU and the US are likely to experience on their transition path to a long-run new equilibrium.

A short-run impact assessment then allows for estimates on job gains and losses. Below we describe the results of a short-run study on the effects of more free trade between the EU and the US, which corresponds to a mini-TTIP. We document the potential employment effects on both sides of such an event.

A network model of trade

We develop a Dixit-Stiglitz 'love for variety' trade model with input-output linkages at sectoral level. This generates a network model of trade in value added that incorporates all global sectoral input-output linkages. The approach is a multiple sector one and focuses on the short-run impact of trade liberalisation.

The advantage of using input-output data is that Leontief input-output coefficients are available which trace all the upstream input linkages in order to clearly separate the foreign from the domestic content of sectors. Leontief coefficients are very different from technical coefficients, which are often used in other TTIP studies and only provide the origin of inputs from the first-round upstream production phase.

We provide a closed form analytical solution that rests on a derivation of the input-output Leontief coefficients with respect to tariffs. The short-run focus of the analysis implies that productivity growth and innovation which are likely to occur in the longer run are left aside, with the focus instead on the short-run trade creation effects ceteris paribus. The short-run focus also implies that we do not consider migration, foreign direct investment, supplier switching, or trade diversion that may reinforce or mitigate some of the short-run effects.

The existing empirical literature on trade diversion suggests that its mitigating effects are small in magnitude compared to the trade creation effects. Our results are therefore bound to capture most of the adjustment effects. The network trade model is then calibrated using the 2016 release of the World Input-Output Database (WIOD). This database includes 43 countries with 56 sectors, of which around 30 are service sectors.

Our methodology is complementary to the existing literature in a number of ways.

First, it documents the short-run production and employment effects that countries will face on their transition path under TTIP. Most alternative models in the literature take a long-run approach by assuming that wages adjust and labour markets are perfectly flexible, and therefore cannot say anything on job effects that are bound to occur. We take a more short-run and pragmatic approach when it comes to employment effects of TTIP. Without explicitly modelling the labour market, but by relying on existing employment elasticities at the sector level from the literature, short-run employment responses under EU-US free trade are obtained.

While the model predicts the changes in production that EU-US free trade brings, the employment elasticities at the sector level provide an estimate of how jobs will respond to changes in production. Wages are considered fixed in the short run and unemployment is assumed to exist such that additional jobs can be filled.

Second, our analysis includes multiple sectors with input-output global value chain linkages between them. This contrasts with the many single sector models whose predictions assume that all sectoral adjustment has already taken place. The multiple-sector approach allows us to document job effects by sector, using sector-specific tariffs and trade elasticities.

Third, as the production linkages between two countries typically differ greatly across sectors, our sectoral approach yields a more precise assessment of the indirect network effects of a trade shock and how tariffs in one sector can have production spillovers in other domestic and foreign sectors, as illustrated by the car sector example above.

Results of US- EU trade liberalisation

We find that a mini-TTIP can boost bilateral trade between the EU and US, as well as permanently increase production in value added and employment both in the case of a shallow and a deep trade agreement. A shallow trade liberalisation is assumed to involve zero tariffs while NTMs remain at their current level. A deep trade liberalisation is assumed to additionally reduce 50% of the existing NTMs. This is justified by the idea that not all NTMs can be reduced since some arise because of language and cultural differences that are unlikely to change. The results of more EU-US free trade under a shallow versus deep mini-TTIP are summarised in Table 1.

In comparison to the literature, the short-run effects shown in Table 1 are somewhat smaller than the longer-run estimates that circulate in earlier literature (Felbermayer 2016). In the short run we expect an increase in GDP of

Table 1. Free trade between US and EU: short-run effects

Type of agreement	Coverage	Value added gains (% GDP)		Job gains (1,000 jobs)	
		EU	US	EU	US
Shallow TTIP	Zero tariffs + Current NTMs	0.26	0.11	200	50
Deep TTIP	Zero tariffs + Reduced NTMs	1.3	0.79	1,000	350

Source: Vandenbussche et al. (2018)

1.3% for the EU and 0.79% for the US in the case of a deep mini-TTIP. Other studies on average find the gains from TTIP to be around 2% of GDP for the EU and about the same 2% of GDP for the US.

While the short-run gains seem to already capture most of the adjustment, it is logical given that long-run studies' gains are somewhat higher as they also consider technology updates and innovation, foreign direct investment flows, migration, and trade diversion, which can all reinforce short-term gains.

Predictions of short-run job gains are around 350,000 jobs for the US and around one million jobs for the EU in the deep free trade scenario. With a multiple-sector input-output approach, it appears that the EU28 as a whole

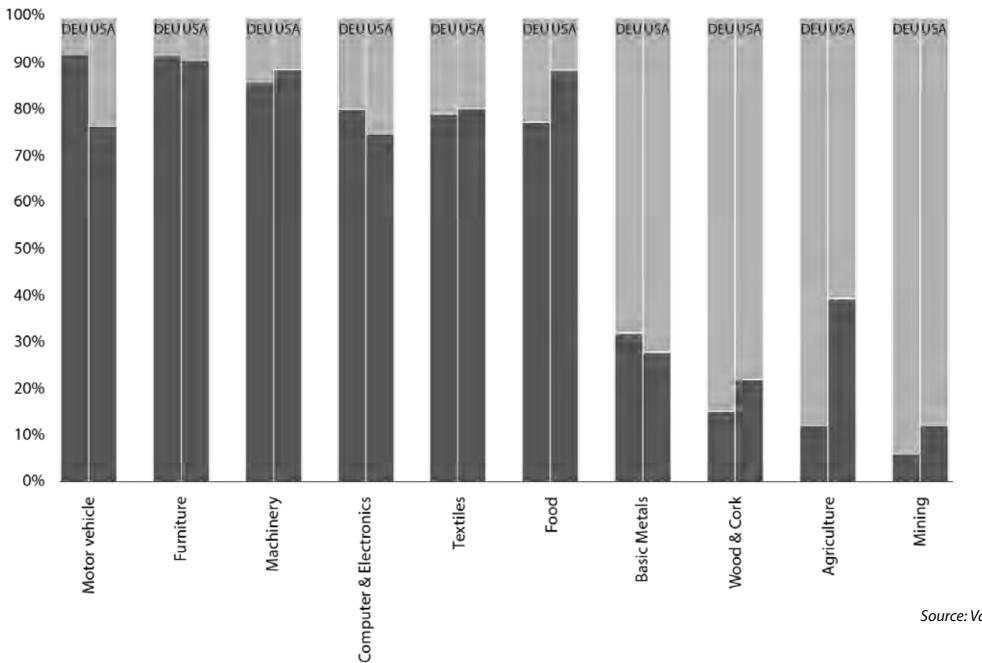
stands to gain relatively more from TTIP than the US, both in the case of a shallow and deep TTIP. One of the main underlying reasons for this result is the more closely integrated EU28 production network both across sectors and countries, which only a multiple sector approach can bring to the forefront.

A new insight arising from our study is that indirect production effects are stronger whenever a sector is more upstream. This is illustrated in Figure 2 where we decompose the gains from EU-US free trade into direct and indirect effects for two countries – Germany and the US. Direct production gains are defined as an increase in domestic production in the sector coming from a tariff reduction faced by the direct exports in that sector. Indirect production gains come from tariff reductions in other more downstream sectors.

Figure 2 shows that for an upstream sector like German base metals, the production gains from trade liberalisation come from 30% lower tariffs by the US on imported base metals from Germany, but 70% of the production gains in German base metals result indirectly from trade liberalisation in other downstream German or other EU sectors to which it supplies. The same holds for the US upstream base metals sector.

In contrast, for a more downstream sector like German motor vehicles, most of the production gains come from lower US tariffs on motor vehicles. The German motor vehicles sector does not benefit much from tariff liberalisation in other sectors besides its own.

When traditional gravity analysis is used to assess bilateral free trade, these indirect production effects are not taken into account as the analysis abstracts from input-output linkages between sectors. We thus show that the measurement bias arising from traditional gravity analysis to assess the economic gains from bilateral free trade agreements such as TTIP are larger whenever a sector is more upstream in the value chain and supplies to many other sectors (eg. the case of the base metals sector).



Indirect impact

Figure 2. Direct and indirect production gains from TTIP (%)

Direct impact

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Source: Vandenbussche et al. (2018)

The EU country that stands to gain most (in relative terms) from TTIP is Ireland, followed by Germany, Belgium, and the Netherlands. This heterogeneity derives from the sectoral composition of these economies and the centrality of their key sectors in the EU production network.

This confirms the results of Acemoglu *et al.* (2012) and others, who claim that it is a sector's network centrality that determines the impact of an aggregate shock through a cascade effect in the input-output network. A sector that faces large tariff reductions may not have strong aggregate effects if it is not well connected to other sectors, whereas a sector facing small tariff changes can have a large aggregate impact if it is central in the economy and supplies to many other sectors. Hence, from a macro point of view, this granular approach to free trade agreements is important.

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Endnotes

1. This joint declaration occurred in July 2018 when President Juncker visited President Trump.

2. TTIP was about liberalising trade in goods and services as well as the liberalising investment and public procurement.

3. NTMs refer to standards and regulatory differences caused by geography, language, preferences, culture or history amongst others.

4. Felbermayr (2016) provides an excellent overview of existing long-run computable general equilibrium studies of TTIP. 5. The market structure that we assume is perfect competition, similar to Eaton and Kortum (2002), Caliendo and Parro (2015) and others. 6. Input-output tables do not reflect the underlying firm heterogeneity in a sector. This discrepancy between firm-level inputs and sector-level inputs was recently documented by de Gortari (2017). But firm-level data is typically only available for one country and does not hold information beyond first round inputs which does not make it suitable for a full assessment of trade policy shocks.

7. Konings and Murphy (2006) provide estimates of employment elasticities with respect to value added in manufacturing and services.

8. We use existing sector-level trade elasticities from Imbs and Méjean (2017), to arrive at 16 different sectoral elasticities in manufacturing.

9. Berden et al. (2009) provides estimates of the reduceable part of NTMs in the US-EU trade relations at sector-level and finds that on average only 50% of NTMs are reduceable.

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Best Credit Insurance Provider

The impact of Brexit on the property industry

UK property has continued to remain a popular investment. Paresh Raja considers the current trends and examines what the future might hold n the two years following the 2016 EU referendum – the unexpected result of which cast doubt over the future of the national economy – the UK property market has proven remarkably resilient. Worth an estimated £5.9 trillion to the British economy, UK property has continued to remain a popular investment destination despite uncertainty surrounding the country's withdrawal from the EU.

Property in the UK has traditionally been an attractive asset class for both domestic and international investors, and this is reflected in the rise in national house prices since the year 2000. Moreover, demand for real estate has not been deterred by the EU referendum result. In fact, at the beginning of 2018, 53% of the British public would rather invest in traditional asset classes such as property instead of opting for newer classes.

The same study, conducted by Market Financial Solutions (MFS), revealed that 63% of UK adults regard property as a safe and secure asset. Accompanied by large volumes of foreign investment into commercial and residential real estate, positive domestic investor confidence therefore continues to stimulate growth in the sector.

With Brexit inching closer – the 29th of March 2019 marking the UK's official departure date from the EU – the country is preparing for series of significant political and economic reforms. It remains largely unclear, however, what exactly the nature of the UK's changing relationship with the Single Market will mean in practical terms.

Although negotiations between the UK and the European Commission have yet to clarify what can be expected in the coming months and years, current trends in the property market offer useful insight into what the future might hold for the industry.

A promising outlook

As with all major sectors, the property market reacted immediately to the EU referendum result, with house prices

dropping as a result of the vote. Financial commentators also feared people would be ultimately dissuaded from property investment in the UK, leading to cynical forecasts about the future of the housing sector.

This sudden dip in confidence post-referendum, however, proved to be short-lived. The property market quickly picked up once more, and since then, house prices have continued to rise across the UK. In fact, an index released jointly by the Office for National Statistics and the Land Registry revealed that that the average house price in

... the current direction of the property market indicates a positive outlook for the future of the sector. The upcoming political and economic changes could bring new opportunities for domestic and international investors alike looking to secure a property in the UK December 2017 – just six months after the EU referendum – was some £12,000 higher than in December of the previous year.

The steady rise has continued until the present date – in July 2018, the national house price average reached a new high of £230,280 according to recent figures by Halifax. Driven most notably by the impressive growth in the midlands and North East of England, this trend is a promising sign for investors and prospective homebuyers hoping to invest in the property in the near future.

Fuelled by strong confidence in the market, the demand for property remains persistently strong. The latest Emoov National Property Hotspots Index shows demand across London has increased by 2% since the beginning of 2018, while overall nationwide demand has gone up by an impressive 8% so far this year.

Difficulties faced in securing a property

High demand for property across the UK has led to a national housing shortage, with the government struggling to keep up the supply of housing to satisfy demand. This has increased the number of people unable to complete on property transactions.

The presence of length property chains, for instance, in a competitive housing market can make it even more difficult to secure a property acquisition. Being stuck in a property chain – that is, being unable to purchase a new house without completing the sale of a current one – increases the risk of a property falling through and can have a huge effect on the overall growth of the market.

Property chains are such a great problem for prospective buyers, that a recent survey conducted by MFS revealed that more than half (55%) of Britons strongly support the introduction of anti-gazumping measures.

With banks tightening their rules after the EU referendum to prepare for potential economic shocks, the process of obtaining a mortgage from a traditional, high-street lender has become more burdensome and lengthier. Earlier this year, analysts at Capital Economics revealed that 19% of lenders had reported a fall in approved loan applications – the highest reading seen in over 5 years. Any delays in the application or lending process can lead to a fall-through of a sale.

The recent interest rate hike – which saw the Bank of England raise the base rate from 0.5% to 0.75% – is unlikely to make a significant difference to the property market. However, this increase does mean that the interest rate is the highest is has been in the decade since the 2008-09 financial crisis.

The cost of obtaining a mortgage will thus be slightly higher – however those currently struggling to pay of an existing variable rate or tracker mortgage are likely to feel the biggest strain. This change means that these borrowers now face higher rates of repayment, adding further pressure on UK households.

A higher interest rate might also mean that banks will now exercise even more caution when it comes to approving mortgage applications. Already faced with rigid regulations and lending rules, it is likely to become even more difficult for prospective homebuyers to obtain finance to fund their property purchase.

A rise in alternative finance

Alternative finance options such as bridging loans are becoming increasingly popular with investors and homebuyers, giving them the flexibility to quickly and confidently complete on property acquisitions. And especially with the risk of house sales falling through due to delays in obtaining funding, alternatives such as a short-term bridging loan secured on a current asset can allow prospective buyers to quickly take advantage of the opportunities on offer.

A failure to obtain funding in good time can risk prospective homebuyers losing out on a property. MFS recently revealed that 33% of those who have experienced a failed property deal in the last ten years have encountered problems due to delays from the bank providing their mortgage. A further 16% of buyers said that their purchase fell through because, despite having a mortgage in principle, the lender later rescinded the agreement.

Alternative finance is therefore a convenient option for those in need of a temporary solution to a shortage of funding. And with high demand for property, having access to quick finance is crucial to completing on a house purchase.

Looking to March 2019

Looking to March 2019, the current direction of the property market indicates a positive outlook for the future of the sector. The upcoming political and economic changes could bring new opportunities for domestic and international investors alike looking to secure a property in the UK. With house prices continue to rise, alternative finance solutions will also continue to provide support for those that are looking to take advantage of future real estate opportunities.

The under-supply of housing remains the biggest property concern; however, the current Conservative Government has pledged to deliver 1 million homes by the end of 2020 and half a million more by the end of 2022. With strong demand for property and evident Government intention to boost the supply of available housing, awareness surrounding alternative finance instruments such as bridging loans will ensure investor are able to act confidently and quickly.

Paresh Raja is CEO of Market Financial Solutions

Why corporates virtuesignal: conscience or cover-up?

Robert Oulds examines the origins of corporate virtue signalling, and argues that brands need to change their approach to connect with customers

ccording to Dr Clay Routledge 'we are living in an era of woke capitalism in which companies pretend to care about social justice to sell products to people who pretend to hate capitalism.'

Didn't you feel good when your proposal to spend a not insignificant proportion of your marketing budget on supporting a right-on cause. It was an easy win. I can understand why you sought to align your brand with saving the lesser spotted migratory one-legged trans whale, and a worthy cause it may be, but it will no longer offer the benefits that you seek. Indeed, it will soon prove counter-productive. Let's consider why, but first we need to understand the process that is underway, consider what drives this such decision making.

You may feel that the widgets and other manufactures' or your online app have an opinion on social issues. Really? They are often presented as such. It is understandable why corporations desired to align and fund the copious amount of politically correct causes. This strategy was once at the cutting-edge of thought leadership. The brave new world certainly had a claim to represent the modern era, it was the future once and many aligned their brand with societies seemingly rapidly changing mores. Signalling through advertising or sponsorship support for this social upheaval was once a practical and profitable decision.

The funding and ramming home messages about your organisations values will have also helped fend-off a culture that could have led to an excessive number of law suits from any number of employees that wish to use diversity legislation and employment law to settle their grievances. Yet, the fear of litigation is just one small aspect behind corporate virtue-signalling.

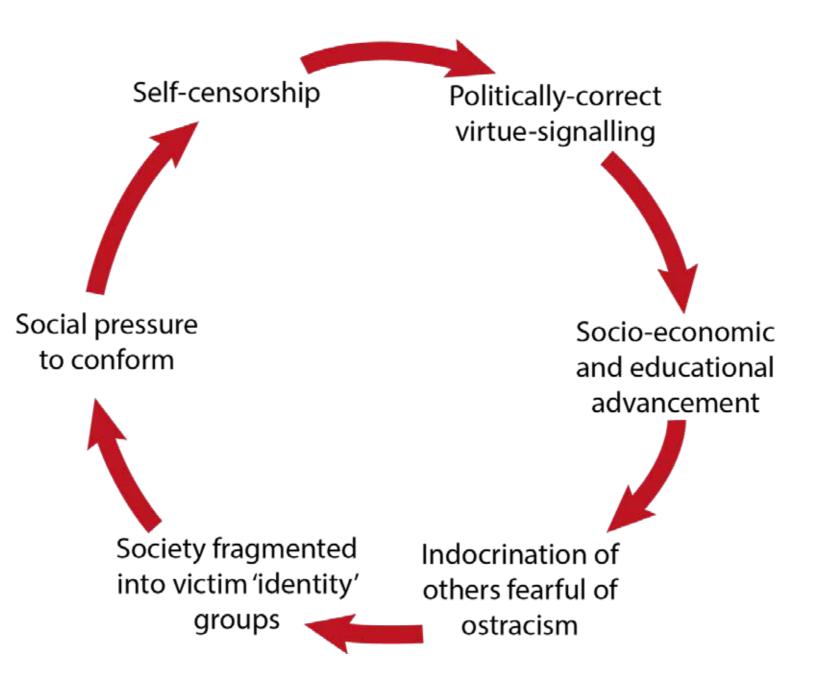
Aligning with identity politics and supporting whatever 'group' claims to be persecuted by the phantom white capitalist patriarchy, or whatever the latest mantra is, has proved to be an almost cost-free way of showing that one

cares and that your brand has a social conscious. When state socialism was an ever-present danger to the bottom line and returns for shareholders, one would not have promoted the ideas of what is lazily called the 'left'.

Since the collapse of Marxism abroad and state-run industry at home, being progressive, once a set of economic values, has become a very different ideology. It has morphed into a series of social values for which one can subscribe to with no price to pay. One can be a member of this club without having to promote restrictions on private property or higher-taxes.

Both governments and politically correct businesses are increasingly perceived as being belittling towards people

The virtue-signalling cycle



All one needs to do is make some vacuous statements about diversity and inclusiveness and equality and sign a small cheque to the whale and take some time out of your busy schedule to consume some champagne and prawn cocktails at an event alongside the great and the good. One may even get a glimpse of Bono or Meryl Streep. It's the easy decision to make and provided an economic advantage.

It is quite clear why businesses felt the need to virtue-signal, it was an extension of corporate social responsibility. Whilst one is ruthlessly, understandably and even justifiably limiting your tax bill and right-sizing the extent of your liabilities workforce and updating their Ts&Cs, one can send the message that your organisation is righteous.

Yet, there is more behind this phenomenon, ultimately it is a psychological projection of the values of a wannabe metropolitan illiberal elite. Understanding this and what is happening in society shows that there is a need for corporations to quietly call and end to their politically correct love in.

There is an innate human desire to do good, or at least appear so and at least many are quite naturally highly reticent of appearing to be some kind of 'ist' or even a 'phobe'. This may lead some to overcompensate and indeed there is a new intolerance that demands this be so. Let us consider the cycle of social and economic pressure at work.

This cycle drives how we think. It is driven by people who proport to celebrate differences, yet a diversity of ideas is strangely absent from the heterogeneity celebrated by the political and cultural establishment. Alongside the widely reported increase in food intolerances, society is suffering from 'ideallergy', an intolerance of other people's ideas. It's creating an environment where only group-think can be tolerated. Indeed, diversity and identity politics is the new intolerance.

The process by which this has occurred is analogous to a virus. It is an epidemic disease so powerful that it has a cytopathic effect on society, changing the cognition and behaviour of its hosts. The messaging is all around and increasingly loader, unsurprising as its followers inhabit an echo chamber.

The politico-moral consensus from supranational institutions and global corporations is mutually rewarding. It allows them to present themselves as being kind and open, essentially good, while reinforcing their position as world leaders. Mark Zuckerberg admitted that Silicon Valley is an 'extremely left-leaning place'. Moralising to the tune of identity politics is a lucrative cover for profiteering monopolies such as Facebook, YouTube, Google and Twitter.

Although these corporations are culturally on the Left, their perspective on business regulation is more of the libertarian Right. Aggressively limiting their taxation liability is an interesting juxtaposition with their liberal-left persona. As propagators of the virus, social media companies are as effective as a contamination of water supply.

It's time the corporate world moved beyond virtue-signalling. Its proponents are victims of a cultural virus. This manifests in a moral hegemony that subverts conventional social norms and quashes dissent. In this delusional condition, people may seem to be acting with autonomy, but the forces of conformity are such that their freedom is limited, and their utterances merely regurgitate group-think.

The body politic has become infected and so have many boardrooms. Like the growth of bacteria in a Petri dish, the subversive tenets of political correctness have spread as a pinking of the public discourse. This is the virus at work. This cultural virus is named 'moralitis'. The causes, symptoms and prognosis are now known and prevention and treatment are available. Anyone seeking to be at the cutting edge of brand development needs to realise that

attitudes are changing, one can no longer allow their brand to make a politically correct faux pas and be mocked by your own customers.

A corporate decision to indulge in either advertising that celebrates identity politics or the patronising of sectional interests is no longer promoting diversity, it is merely divisive. It is fair to say that many people are quite simply fed-up with being preached at. Particularly, when it is known why these messages are being bombarded at their customers by a business that only has one real intention, and especially when it's the same propaganda that comes from government. Both governments and politically correct businesses are increasingly perceived as being belittling towards people. This is what you risk aligning with, it's a debate that is increasingly being politicised and it is not where you want to be.

The energy in public discourse is with those that reject dogmatic and politically correct virtue signalling. Indeed, those that repeat ideological socially-liberal mantras are beginning to be seen as out of touch and in many cases ridiculous. Despite attempts by social media near monopolies to shut down free speech the reach and impact of those who mock identity politics and its inherent contradictions are growing, they are becoming ever more popular. The trend is away from empty talk of diversity.

Free speech advocates are now the cutting edge. The zeitgeist is now with the other side of the political spectrum. It is becoming apparent that attempts at virtue-signalling are one's psyche trying to differentiate your socio-economic status from the lower orders, yet they are your customers.

The loss of rationality from public discourse and reckless abandoning of evidence in favour of politically correct moralistic mantras damages the civitas. In the long-term this cannot be good for business either. Only the most complacent rent seeker is willing to allow a 'you can't say that culture' to fester. Most businesses should value those

who can think for themselves and have the courage to articulate their ideas. The fact that the reasons behind corporate virtue signalling are now known necessitates a change. Advertisers and those with responsibility for a brand need to change their approach.

My advice to you, as a senior officer that has a direct input into how your organisation is portrayed, is that beyond boardroom group-think the reality is that 'your' brand belongs to your customers, even those who are talked-down to by the moralising government. Aligning your company and your career with the real divisive strand in social and political discourse, that is those who are offended by almost any statement, will no longer give you the return you seek. It was once a wise strategy, but times have moved on. Celebrate freedom of thought and speech, its risqué but it is the future.

Robert Oulds is the Director of the Bruges Group and the co-author of *Moralitis: A Cultural Virus*

Moralitis A Cultural Virus

Robert Oulds (Bruges Group) & Niall McCrae (King's College London)



Why corporates virtue-signal: Conscience or cover-up?

The latest Bruges Group research Moralitis: A Cultural Virus discussed the causes, symptoms, prevention and treatment of political correctness are discussed.

Don't embarrass your brand by regurgitating group-think and divisive identity politics.

For further details and to make your purchase please contact: Robert Oulds **The Bruges Group** 246 Linen Hall, 162-168 Regent Street, London W1B 5TB T: 020 7287 4414 E-mail: robert@brugesgroup.com

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From the great moderation to the great recession and beyond

Don Kohn considers what we can learn from the last global financial crisis. He says that complacency in good times can ultimately store up problems for the global economy and financial system any lessons have been learned from the global financial crisis and slow recovery – including lessons for crisis management and for monetary policy at the effective lower bound for interest rates. I am going to reflect on the buildup of vulnerabilities during the good economic times and how to protect against that in the future. I fear memories may be fading; banks in the United States are profitable and well capitalized, and their requests for regulatory relief are falling on sympathetic ears in some quarters.

Regulations can undoubtedly be made more efficient and effective, but now would seem a propitious time to review the lessons of the years before the crisis so as to avoid the trap of forgetting and repeating history.

Lesson 1: Hyman Minsky was right: long periods of prosperity contain the seeds of their own destruction, operating through the financial system.

Many types of financial vulnerabilities have been identified as the proximate 'causes' of the global financial crisis (GFC) – increases in leverage, greater maturity mismatches, migration away from banks to lightly regulated 'shadow banks', opaque and mispriced derivatives. But the underlying cause was complacency mixed with hubris. That mindset led the private sector to take what turned out in hindsight to be misunderstood and inadequately compensated risks, and it led regulators to be far too relaxed about what was happening.

The complacency was an understandable response to a long period of expansion with minor and infrequent recessions and low and stable inflation – the great moderation. The reasons for this good performance were many and some are permanent. Financial innovations allowed more sophisticated risk sharing and consumption smoothing; private nonfinancial businesses were tracking sales and managing inventories much better; central banks had improved policy frameworks to focus on price stability.

Surely the good times would last. Real estate prices could only rise; default probabilities could be forecast from recent benign history, so mortgage risk could be sliced and diced into tranches that would behave in a predictable way – a judgment validated by the credit rating agencies; compensation could be based on short-term profitability because the long-term held no special risks; eurozone countries would not default on their sovereign debt.

Public distrust of technocrats has greatly increased since the GFC. Many factors have contributed to that, but a sense that the crisis response favoured the financial sector over the general public has surely played a role Complacency extended to the public sector watchdogs who were lulled by the reported rude health of financial institutions and came to believe that the private sector had the knowledge and incentives to police itself. In those circumstances, light-touch, principles-based regulation would facilitate private sector innovation and be sufficient to limit any macro risks.

We economists were complicit. We built models in which financial frictions played no serious role. The influence of financial variables on the economy could be summarized in a few interest rates and asset prices that were determined in efficient markets that incorporated all available information.

Sadly, we had to relearn what Minsky had taught us many years ago.

Finance matters. When vulnerabilities mount in financial structures – what Minsky called speculative and Ponzi finance – cycles can turn quickly and downturns build on themselves¹. Negative developments for finance and spillovers to the economy are much more likely when tail risk – the unanticipated drop in real estate prices, the threatened default on the debt of a eurozone government – materializes in the context of easy credit conditions and extended balance sheets following a period of rapid credit growth.

In those circumstances, seemingly small shocks can result in very adverse feedback loops between finance and the real economy. Fear and uncertainty about the scale and incidence of the losses undermine access to funding, forcing fire sales of assets by lenders and sharp reductions in credit availability².

These financial developments can have substantial externalities – collateral damage to households and businesses, most of whom are innocent bystanders in the preceding financial exuberance. Private sector participants in financial markets will not price these externalities.

Notably, in this story, the culprit is regulatory and private market failure, not too-easy monetary policy. In the US we experienced a small overshoot of our inflation target in 2006/07. Policy perhaps could have been a little tighter and less predictable, but the main problem in my view was the private and public decision-making that resulted in a Minsky cycle.

Lesson 2: John Donne also was right: *"No man is an island."* In a globalized financial system, developments readily cross-national lines. What happens in the US, eurozone, or Chinese financial markets will have effects far beyond the borders of the nation or the currency area.

One example is the global saving-investment imbalances that contributed to the build-up of risks. The other side of large current account surpluses and rising levels of reserves in China and other Asian countries in the first part of the 2000s was increasing debt and current account deficits in the US and elsewhere. And extra global savings put downward pressures on interest rates that encouraged leverage and rising asset prices³.

Moreover, the risk of the subprime mortgage loans originated in the US, partly in response to these incentives, was widely shared as was the risk of default by eurozone governments. When those risks crystallized, when instability emerged, the effects also were shared globally – often through interconnections and interdependencies that were opaque or even invisible beforehand.

The sharp reduction in credit availability as lenders rushed to save themselves spread the cut-back in spending around the world. But when it came to responding to instability and protecting from the consequences, countries generally acted in their own self-interest. They took account of potential adverse spillovers on other countries largely because they saw those spillovers as affecting their ability to achieve domestic objectives.

Lesson 3: Still, the great moderation and globalization had important benefits.

Compared to an environment of frequent recessions and variable inflation, steady growth and low predictable inflation, by reducing macroeconomic uncertainty, help households better plan their lifetime consumption and saving and judge the risks they can take. Businesses can invest and plan for the medium and longer-term with more confidence. The implication of market price signals for shifts in supply and demand can be more easily interpreted. Predictable and more stable economies should foster better allocation of capital and faster productivity growth.

Greater openness in global product and financial markets, in turn, has lifted millions out of poverty and has promoted more efficient resource allocation and faster growth.

We need to find ways to save the gains while reducing the costs – protecting against the downside consequences of increasing complacency in growing economies in a globalized financial system.

Lesson 4: Macroprudential policy is a promising addition to the regulatory toolkit that should help to mitigate the risks of Minsky-type financial cycles, enabling us to retain the benefits of monetary policy focused on sustaining the price and economic stability experience of the great moderation.

Good microprudential policy – institution-by-institution oversight – is the basic building block of financial system safety and soundness. Supervisors can assess the risk-management capabilities of an institution as well as the adequacy of its capital, liquidity and earnings prospects relative to its particular risks.

But microprudential policy is not a sufficient tool for preventing the speculative and Ponzi finance Minsky warned us about and sustaining financial stability. For that we also need macroprudential policy – a policy that looks at the

whole financial system with its interconnections, correlated positions, and vulnerabilities to economy wide and system wide tail risks – to make sure that enough resilience is built in to compensate for effects and externalities that are not apparent on an institution by institution basis. Macroprudential policy tries to assure that the financial system itself does not amplify shocks and will continue to deliver its essential services, even after severe, unexpected developments.

Some of those systemic externalities arise from structural factors – for example, institutions supplying very large amounts of services that can't readily be replicated in failure, or market utilities that facilitate flows among many institutions, such as central clearing.

These institutions must be held to higher standards for capital, liquidity and risk management, commensurate with the greater potential spillover from their failure. In the US, Dodd-Frank was very much focused on strengthening these SIFIs to make the financial system more resilient and less likely to need taxpayer assistance, to safeguard the access to financial services for households and businesses.

But the lesson of the great moderation is that countercyclical macroprudential policy is also required to damp the potentially destabilizing increases in vulnerability that build during good times. Capital in financial institutions should be required to increase in those good times as risks of complacency and stretched financial positions rise.

That capital might not do much to damp the asset cycles themselves, but it will help to mitigate risks from the natural human tendency to project that recent good times will continue, constraining the speculative and Ponzi finance on the upside so that institutions and markets can continue to lend and offer opportunities to manage risks when asset cycles turn down. At that point, the extra capital can be released to support lending.

This, of course, describes the countercyclical capital buffer (CCyB) of Basel 3. And increases in this buffer have come to be used in a number of jurisdictions as economies and banking systems have recovered from the GFC, including in the UK where I serve on the Financial Policy Committee that sets the CCyB.

Setting this requirement does have its challenges, including identifying and scaling vulnerabilities in environments in which, as is often the case, indicators are giving mixed signals, and then calibrating the appropriate CCyB setting. A second challenge to macroprudential policy more generally is identifying and dealing with financial vulnerabilities outside the banking system where they could be lodged in lightly regulated entities and markets. And a third is avoiding arbitrage across geographical jurisdictions that simply pushes risk around globally integrated financial markets. We have made progress on all three of these fronts since the GFC, but more remains to be done.

Despite these challenges, global financial stability would be better assured, in my view, if more jurisdictions, including the US, adopted a more active use of the CCyB – making sure that banks and other intermediaries retained enough capital in the upswing now going on to safeguard their ability to deliver essential services at reasonable prices in the next downswing.

Stress tests are a critical building block for gauging the appropriate level of countercyclical capital. To construct stress scenarios, policy makers must assess the risk environment and build explicitly countercyclical explorations of tail risks – embodying larger falls as incomes and asset prices reach higher levels. Transparent and credible results are essential to maintaining public confidence and bank access to funding when buffers are released.

Stress tests should be a key input into a decision about the CCyB, but they are not a substitute for explicitly setting countercyclical capital buffers. The CCyB is a highly visible measure of the assessment of the authorities about

the system-wide risk environment; in many jurisdictions it applies more widely than just to the subjects of the stress tests; and it can be increased or decreased on short notice when the risk environment changes rapidly and unexpectedly.

However, the CCyB alone will not be the most efficient or even a sufficient way to mitigate many financial stability risks. For example, mortgage lending against residential real estate has been the culprit in quite a few financial sector problems in many jurisdictions. And the externality from troubled housing markets can come from the cutbacks in spending by borrowers who are struggling to service their debt as well as from lenders.

The ability to set minimum standards for mortgage lending should be in the tool kit of every macroprudential authority and that authority should be willing to use it countercyclically. Here again, I'm afraid that the US falls short of even having the typical macroprudential tools, much less of an intention to use what controls there are to foster financial stability.

Active use of macroprudential policies should enable monetary policy to remain focused on price and economic stability in the medium run. Under most circumstances, macroprudential tools of the sort we have been discussing are likely to be far more effective dealing with financial stability risks than would be the interest rate tools of monetary policy, whose comparative advantage is countering real and price shocks.

With two goals – price and financial stability – and two sets of tools, we should be able to come close to having our cake and eating it too – sustained expansion at low stable inflation rates uninterrupted by periodic financial crises⁴.

Lesson 5: Public understanding and support is critical to sustaining effective policy – and that includes countercyclical macroprudential policy.

Public distrust of technocrats has greatly increased since the GFC. Many factors have contributed to that, but a sense that the crisis response favoured the financial sector over the general public has surely played a role. We didn't do as well as we needed to connecting the actions to stabilize the financial system and encourage the recovery to the welfare of individual households and businesses.

Tightening regulation in good times when the financial system is perceived to be strong, and easing requirements when developments threaten to weaken it, will not be intuitive to many people. Banking lobbies will be opposed to increases in capital requirements or greater restrictions on loan terms, and they will try to rally the public to their perspective by citing increased costs of credit. People worried about protecting taxpayers and deposit insurance funds will be hesitant to buy into any relaxation when the cycle turns.

We need to be active now in explaining to the general public as well as to their elected representatives the public benefits of countercyclical macroprudential policy and reminding them of the lessons learned about increasing complacency in good times leading to the kinds of serious economic deprivations we experienced not so many years ago.

Donald Kohn is a Member of the Financial Policy Committee of the Bank of England

Endnotes

1 See https://www.economist.com/economics-brief/2016/07/30/minskys-moment for a nice summary of Minsky's thought.

2. This is similar to the message of recent work at the IMF on GDP at risk: Looser financial conditions can raise growth in

the near term but also increase the likelihood of a significant slowdown or even recession in the medium-term, a tradeoff that is amplified when there has been a credit boom.

https://www.imf.org/en/Publications/WP/Issues/2018/08/02/The-Term-Structure-of-Growth-at-Risk-46150

3. Some of these thoughts were developed by Ben Bernanke in:

https://www.federalreserve.gov/boarddocs/speeches/2005/200503102/

4. See Kohn https://www.bankofengland.co.uk/speech/2017/cooperation-and-coordination-across-policy-domains for a discussion of macroprudential and monetary policy tools.

This article is based on a speech delivered at the 200th Anniversary of Danmarks Nationalbank, Copenhagen, 7 September 2018

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A financial union for the euro area

How much should the economic and monetary union be deepened? Poul Thomsen shares his thoughts

s the European policy machinery kicks into action again after the summer break, I welcome this opportunity to share some thoughts. The question put to me is how much more deepening of the economic and monetary union is needed. This is a big one. There is no simple answer.

My approach will be to focus on the core issue of private risk-sharing. I want to discuss what it really means, what holds it back—and what concrete steps can and should be taken to push it into a higher gear. Recognising that every roadmap needs a destination, I want to lay out a vision for a true financial sector union for the euro area.

It follows that I shall discuss the banking union and the capital markets union. But I will also try to advance the debate one step further by discussing a truly integrated financial markets union—a union that can be more than the sum of its parts.

I will focus on finance because—as I will explain—I see this as an area where meaningful progress is within reach where progress can be made by taking small steps now. Much of this work, I believe, can be done within the confines of the current political consensus—we are not talking about Treaty change. We are talking about letting the technical experts hammer out mutually acceptable compromises. I will return to this.

But before I do so, let me first spend a few minutes reminding you of what we at the IMF see as the end-goals for a more-complete economic and monetary union. And here, of course, I will be reiterating a vision that we at the IMF have laid out many times over the last few years.

When we look to the medium term, envision a euro area architecture equipped with a full complement of public and private risk-sharing mechanisms. In the fiscal area, we advocate for the adoption of a modestly sized yet potentially powerful central macroeconomic stabilisation capacity. In the financial sector, we support putting

in place a common deposit insurance scheme and a common backstop for both bank resolution and deposit insurance.

As we have argued, such risk-sharing mechanisms need to be carefully designed to ensure incentive compatibility. And by this I mean that every step toward greater risk-sharing must be accompanied by parallel steps toward greater risk-reduction. The future configuration should be one that carefully balances individual responsibility with solidarity, both at the level of member states and at the level private financial institutions. There is in my view no other way forward.

> ... it should be possible to bridge the gulf between those who are calling for greater fiscal risk-sharing and those who worry about moral hazard and permanent transfers

Let me at the outset be very clear on the point about individual responsibility. No amount of progress on the common architecture in the coming months and years will fundamentally change the fortunes of euro area countries when the next major shock or downturn hits. I have said this often.

Resilience will continue to rest on fiscal adjustments and structural reforms at the national level. Here, unfortunately, we see far too much complacency. Let me be direct, progress on the banking and capital markets unions, and even on a central fiscal capacity, will not prevent some countries from being forced to undertake large pro-cyclical fiscal adjustments when the next shock or major downturn hits.

When this happens, such countries will no doubt regret not having done more while times were good—regret have a much too procyclical stance during what is still a period of robust and strong growth throughout the euro area.

It is critical that all member countries respect the Stability and Growth Pact. It is critical that our friends in the European Commission enforce these rules consistently. Every club needs rules to thrive.

Yes, steps are needed to simplify the SGP, but these must be matched by steps to ensure better compliance and stricter enforcement. We at the Fund detect support for the need to eventually make the fiscal rules less complex—something that we would strongly support—but it does not seem to be a political priority at this juncture.

On fiscal risk sharing, in contrast, there is an ongoing dialogue on a common euro area budget, or some mechanism to support public investment in individual countries. While we see the recent proposals falling short of the full-blown countercyclical facility that many observers consider critical for the long-run stability of the eurozone, we are encouraged that discussions continue.

As many of you may know, earlier this year the IMF waded into this debate by tabling a proposal of our own for a central fiscal stabilization capacity. Let me emphasise that we very much view this as a proposal not just to establish an element of public risk-sharing, but also to improve compliance with the fiscal rules.

Our idea, quite simply, is that it should be possible to bridge the gulf between those who are calling for greater fiscal risk-sharing and those who worry about moral hazard and permanent transfers—to explicitly link central support for economic stabilisation to fiscal risk-reduction, that is, to better compliance with the rules.

Our proposed fund seeks to encourage saving by member states with limited fiscal space—to encourage them to build buffers—by requiring regular contributions from all euro area countries while at the same time making transfers conditional on compliance with the fiscal rules. By having transfers triggered automatically by a readily observed cyclical indicator linked to unemployment, our proposal explicitly sets out to smooth macroeconomic shocks.

Our analysis shows that a fund financed by a relatively modest annual contribution from member states—say, about one-third of one percent of euro area GDP—could act as a powerful stabilizer. It would not substitute for national fiscal responsibility, nor completely offset large shocks, but it certainly would help.

Moreover, in the event of large shocks there will always be a role for ex post risk sharing, through official assistance subject to policy conditionality, provided by the ESM. Now we understand, of course, that Europe is not a political union, and agreeing architectural change is a complex business.

From such a perspective, then, our proposal might appear politically unrealistic, despite explicitly making access to transfers conditional on obeying the rules. But even if it takes time to build consensus, we are convinced that

greater fiscal integration in the eurozone will eventually only happen by bridging the fundamental divide between risk-reduction and risk-sharing. Our proposal is a way to build this bridge.

Not long ago, there had been signs that Brexit and broader geopolitical challenges from both East and West might breathe new life into European efforts to take major, fundamentally political steps to advance the eurozone's shared architecture. I still hope that this will be the case, but it appears that major, pathbreaking initiatives are not likely any time soon.

We see undercurrents of discontent and euro-skepticism feeding into poll results across the union. We see basic challenges to the European project, challenges that governments new and old cannot afford to ignore. We see at best a limited consensus on what comes next. The June summit delivered an outcome that fell short of the elevated hopes of only a few months earlier.

I think it is right, therefore, for me to focus on goals that I consider achievable even in the current political context. My basic premise is that it is vital that scarce political capital be used well: to find achievable wins and lock in meaningful progress, wherever possible.

At the Fund we have long argued for more public and private risk-sharing—both are essential. Today, as I mentioned, I would like to focus on facilitating more private risk-sharing through the financial markets.

Private risk-sharing is mentioned often but explained rarely. What does it mean? There may be different definitions, but I refer, quite simply, to the diversification of risk exposures by financial intermediaries in the euro area, across both national borders and economic sectors.

I mean moving to a union where equity capital in one jurisdiction can support prudent risk-taking in another jurisdiction; where deposits in one country can fund sound lending in another; and where financial and nonfinancial firms alike can issue equity and debt into a European capital market, to a European investor base. I mean making another push to achieve the original vision of a European banking and capital markets union, that of finance without borders.

Let me start with banking. Everywhere in the world, banks sit at the heart of finance. Even in the jurisdictions where capital markets are the most developed—and here I refer of course to the United States—banks exert an influence that extends far beyond their relative share of financial sector assets.

Modern banking groups are complex animals. Some units of the group focus on the bread-and-butter business of retail banking, accepting demand deposits and making loans, from relatively standardised consumer credit lines or residential mortgages to more bespoke commercial real estate or SME financings.

Some focus on trade finance, or automotive finance, or credit cards. Some units focus on buying loans and bundling them into special purpose vehicle structures, earning securitization fees and raising wholesale funds. Some units focus on managing proprietary trading portfolios of securities and derivatives.

Some focus on managing segregated portfolios on behalf of their clients. Others may underwrite insurance products. Yet others may provide depositary services to mutual funds and pension funds or prime brokerage support to hedge funds.

And somewhere in the group structure there will often be a centralized treasury unit issuing commercial paper and channeling intra-group liquidity to where it is needed most. I could go on, but I think my point is made. In the real

world, there are no neat dividing lines between banking and the capital markets. In the real world, bankers often run nonbank finance. Let us be clear: banking is the pivot of finance.

It is appropriate, therefore, that Europe has pursued banking union in advance of capital markets union. Anything else might have put the cart before the horse.

Having explained why I want to start by discussing banking, let me spend a few minutes recollecting the past. While this will be familiar ground to most of you, the tenth anniversary of the global financial crisis should be a time to pause and reflect on the road traveled.

In its old-pre-crisis configuration, cross-border banking integration in the EU relied heavily on passporting, whereby any bank incorporated in any member country enjoys permission to establish branches in any other member country. Under the old model, however, there was a dangerous disconnect between cross-border banking activity and its oversight. Back then, the responsibility for official oversight of cross-border bank branches within Europe rested almost entirely with the national supervisor in each group's home country.

But this model, built around supervision as a national competency, allowed some national supervisors to favor their own so-called 'national champions, tolerating excessive asset expansion and risk-taking both at home and abroad.

What developed was a macro-significant flow of funds within the euro area, where of course there was no currency risk. The highly rated, too-big-to-fail, so-called core banks enjoyed strong liquidity for at least three reasons. First, they were seen as a preferred destination for European retail savings and wholesale funds.

Second, they increasingly attracted petrodollars post-9/11. Third, they actively borrowed in the US credit markets, including to raise dollar funding to finance their large US securities portfolios—one can think of this as a transatlantic wholesale funding pipeline. At the fringes of this great funding game, cheap euro liquidity was also channeled to euro area countries hungry for more credit. There, it helped finance cheap lending on increasingly lax terms, lending that in many cases inflated unsustainable local asset price bubbles. That was Europe's old banking union.

Then, of course, came the day the music stopped. To be precise, that day was ten years ago. We all remember, it was a Monday. In New York, Lehman Brothers filed for bankruptcy, an event that would send shockwaves around the globe.

With a force none could have predicted, wholesale funding markets froze all over the world, trade financing collapsed, goods and services trade fell off a cliff, banks started to drop like dominos, and fiscal coffers were forced open.

Almost immediately as Lehman went down, European authorities rushed to intervene its European subsidiaries, before liquidity and collateral could be spirited away to the parent. Then AIG very nearly collapsed. Then the US money fund industry suffered a run.

It kept getting worse. By the end of September 2008, Wachovia, the fourth largest banking group in the United States, required government money, while in Dublin the authorities issued a blanket guarantee to the entire Irish banking system. In mid-October, the US government announced a blanket guarantee of its own, and moved to force-feed taxpayer capital into the nine largest US bank holding companies. All across Europe there was a chain reaction of emergency taxpayer support.

Everywhere, money ran for the perceived safety of home. Parent funding of cross-border bank branches within Europe disappeared overnight, precipitating credit contractions, asset price collapses, and deep recessions in the host jurisdictions.

And so, in the space of just a few weeks in late 2008, the old European banking union gave way to a harsh new reality of home bias and cross-border fragmentation, with most national authorities preferring to host highly capitalized cross-border bank subsidiaries rather than cross-border branches. Much of this reality remains in evidence today.

What did Europe do in response? The short answer is: a lot. Leaders came together to mandate the construction of a new and better banking union. In the relatively short period since that apex decision in June 2012, Europe has traveled a great distance. I find it truly remarkable to note that, as recently as six years ago, there was no Single Supervisory Mechanism or Single Resolution Mechanism. A lot has changed.

Today, the European Central Bank has a formidable banking supervision arm, and the Single Resolution Board is an emerging piece of the European institutional set-up.

There can be little doubt that the operationalisation of the SSM has fostered a step improvement in the quality of banking supervision across the euro area. Joint supervisory teams assigned to all major European banks comprise both national and ECB personnel, always headed by an ECB bank supervisor. This, among other important new supervisory features, greatly limits the scope for the bad old 'national champion' approaches.

And we have seen from the various bank failure cases over the last year or so that the fledgling SRB is learning to implement the new rules embodied in the SRM Regulation and the Bank Recovery and Resolution Directive—the

BRRD—without triggering major adverse spillovers. Where once taxpayer bail-outs were commonplace, today there is a growing insistence that bail-in needs to happen, that private stakeholders must be made to pay the price for risk-taking gone bad.

Taking these positive observations, let us say that the cup is half full. But the cup is also half empty. There is a lingering impediment to a truly integrated banking union, an issue that has become better understood over time. It is called ring-fencing.

What does ring-fencing mean? It means, in a nutshell, that countries do not yet fully trust the new supervisory and resolution arrangements, despite all the progress made. Quite rationally then, national authorities seek to protect their economies and their taxpayers by ensuring that banks maintain sufficient capital and liquidity within their own jurisdictions.

The problem, however, is that such defensive measures also tend to limit the free flow of capital and liquidity across borders, and thus act as barriers to a fully integrated banking union.

The SSM and SRM are by construct dependent on national resources and fragmented national rules, which limits their freedom of maneuver. Member states, in turn, neither fully trust the ability of the SSM to ensure prudent behavior in banking, nor the ability of the SRM to properly charge back the costs of bank failure to the banking industry.

Given these doubts, national authorities still erect barriers to protect their economies and taxpayers. Especially in the host jurisdictions, they take steps to ensure that if banks within their borders fail, then they fail with enough remaining buffers to limit any potential need for fiscal support.

But this self-protection, stemming from national fiduciary duty, stands in the way of a single banking marketplace. It acts as an additional impediment to cross-border mergers and acquisitions. It leaves large banking groups asking why they must pay large sums as resolution levies to the Single Resolution Fund, yet still not enjoy some of the fruits that the new banking union was supposed to bring.

Arguably, such groups charge their customers more than they would if they were better able to move their capital and liquidity across jurisdictions. So: what remains to be done?

To bring some structure to the debate, I would like to propose two axes of attack: on the one front, a push to scale back member states' ability to ring-fence; and, on a second front, an effort to reduce their incentives to do so. Let me elaborate on each of these in turn.

First, on the ability to ring-fence. This has much to do with taking further steps to enhance banking supervision. The ability of national authorities to maintain barriers to the cross-border flow of bank capital and liquidity stems from various gaps and provisions in the EU rulebook.

Examples of such barriers include the inability to allow capital relief at the subsidiary level even when there are explicit solvency guarantees from the parent in another EU jurisdiction, and the refusal in some EU jurisdictions to relax large exposure limits for cross-border intragroup transactions.

Not only does this fragmentation along national lines hinder private risk-sharing across the euro area, it also reduces the SSM's ability to push for further risk-reduction in banking. In important areas such as the proper classification and provisioning of legacy assets, overseeing banks' corporate governance, imposing penalties for

non-compliance, or overseeing major acquisitions, the ECB still lacks the direct powers it needs to conduct fully effective banking supervision.

But the good news is that many of these impediments, both to cross-border flows and to strong oversight, can be fixed at a technical level, in many cases by amending the so-called single rulebook—the package comprising the Capital Requirements Regulation, the Capital Requirements Directive, the BRRD, the Deposit Guarantee Schemes Directive, and the attendant technical standards.

As I mentioned at the outset, much of this work can be done within the confines of the current political consensus—we are not talking about Treaty change. We are talking about letting the technical experts hammer out mutually acceptable compromises.

Nonetheless, even in these relatively technical areas, let no one underestimate the inevitable resistance from national and private vested interests. Change will not be easy, and one can expect many battles to play out here in Brussels and other capitals. The key, I believe, will be for all parties to remember that a more-integrated banking market will offer substantial benefits for all—it is not a zero-sum game.

Let me now turn to my second axis of attack: a set of concrete steps to reduce countries' incentives to ring-fence. Principally, in my view, reducing such incentives requires steps to further improve and harmonize bank resolution arrangements.

We can agree that bank failure needs to be handled within a unified, transparent, and predictable framework, one that protects financial stability while minimising costs to the economy, surviving banks, and taxpayers. We can

agree that bail-ins must indeed become the norm, and bail-outs the systemic exception. The challenge is how to get there.

Solutions are already in train. For the larger, more complex banks where contagion can be a real concern, there should be enough loss-absorbing liabilities—the BRRD's 'minimum requirement for own funds and eligible liabilities' or MREL—so that undercapitalization can be remedied by equity write-downs and debt-equity conversions without burning senior unsecured debt or uninsured deposits.

And in cases where the least-costly solution to protect insured deposits of a failed bank requires some public support, such support should come from the common resources of the Single Resolution Fund. In such ways, individual member states will be protected from having to shoulder the costs of banking failure alone. And that, in turn, will help soften the need for ring-fencing and self-protection.

So the path to borderless banking, I would say, rests also on steps to achieve a better bank exit framework. We are not there yet. The recent experience showed that the system still permits bank liquidations under national procedures that vary widely. It also reminded us that the EU state aid rules still allow national governments to provide taxpayer money to banks in liquidation subject to burden-sharing requirements that are less exacting than the BRRD rules. I am tempted to call this a loophole.

So, in exit policy as in bank supervision, there is still plenty of technical work to be done. Rather than diving into the details, let me simply note that the IMF has tabled a wealth of concrete recommendations over the summer. I commend the work of our Financial Sector Assessment Program team that recently completed its evaluation of the euro area's new framework. Its reports are rightly being seen as essential reading for those involved in further upgrading bank resolution in Europe.

I would, however, like to emphasize one specific action that goes beyond technical change and requires political support: to secure the much-discussed common backstop to the Single Resolution Fund.

It is encouraging that the June summit requested detailed proposals in this area. To be frank, I will not argue that such a backstop will be an immediate game-changer for bank resolution. A few back-of-the-envelope sums show that it would not be called upon in anything but a severe crisis, and no such crisis is in our baseline. But it is symbolic, as one further step toward curbing national incentives to ring-fence, and it rightfully belongs in a well-designed resolution toolkit.

Ideally, the backstop should be large and automatic, allowing the Single Resolution Board to draw on it at short notice and without condition. I urge European policy makers to press forward and get this done.

I noted earlier that the IMF also strongly supports early adoption of the European Deposit Insurance Scheme, or EDIS. Here, however, reaching agreement will need to overcome multiple obstacles, including at the political level.

Some of the strongest banks in the euro area fear that their contributions to EDIS will end up financing losses at weak banks elsewhere. In addition, some governments in the member countries with the strongest balance sheets worry that EDIS could become a system of permanent state-to-state fiscal transfers through the back door—transfers that are expressly forbidden under the Treaties—despite it being in the first instance a privately funded scheme.

In principle, both concerns can be addressed by risk-based insurance premia, properly calibrated. Nonetheless, my own personal view is that progress on EDIS will require parallel progress on reducing the pervasive home bias in

banks' holdings of home-country sovereign securities. And that, in turn, is a complex and contentious area, one that I cannot do justice to today.

The important thing is, I do not see roadblocks to common deposit insurance as barriers to progress in other areas.

Let me now turn relatively briefly to nonbank finance. This, of course, is an extremely broad area, spanning everything from financial market infrastructure to securities underwriting to insurance, with much in between. In some areas, such as mutual funds eligible for marketing to retail investors—the so-called UCITS regime—Europe is a world leader. In others, such as harmonised financial reporting, there remains more work to be done.

I cannot do justice to the multifaceted challenge of developing and integrating nonbank finance in Europe in the minutes I have remaining. So, after briefly noting that initiatives range from corporate insolvency harmonization to SME securitisation, let me just focus on one specific and important part of the topic: regulatory oversight of the securities and derivatives markets.

I mentioned at the outset that these markets are uniquely well developed in the United States. I will not claim to be an expert on how this came to be. Perhaps it has to do with the long US history of banning commercial banks from engaging in securities underwriting, under the Glass–Steagall Acts, which is in sharp contrast to the European model of universal banking.

Perhaps it reflects the strong federal powers vested in the US Securities and Exchange Commission, for the securities market, and in the Commodity Futures Trading Commission, for derivatives.

Whatever the answers, it seems clear to me that the European capital markets union endeavor could benefit from further study of the US example as part of its ongoing search for a guiding framework.

Allow me to offer one related observation. I think it is important to bear in mind some basic differences between banking and capital markets oversight. In banking, the mandate is to ensure safety and soundness, meaning, to reduce the risk of failure; this is pursued through regulations and, more importantly, through prudential supervision to proactively limit risk-taking ex ante.

In the capital markets area, in contrast, there is no mandate to reduce the likelihood of failure; here, the focus must be on ex post punishment for breaches of conduct-of-business rules focused on truth, transparency, and disclosure.

One question that arises, I think, is whether Europe needs a centralized financial markets agency. At present, the European Securities and Markets Authority—ESMA—is mostly a standard-setting body, with direct regulatory authority only over the rating agencies and trade depositaries. In every other area of the European securities and derivatives markets, regulation and enforcement remain national competencies.

Has this resulted in a push for national champions and a race to the bottom, as was once the case in banking? Is there therefore a case for a 'super-ESMA' vested with broad, pan-European regulatory powers? To me, the answers to these questions are not obvious—but they seem important, and well worth further study.

As the thinking advances, I would like to inject one cautionary note: despite my general advocacy for strong financial sector oversight, there remains a role for a light touch in some areas. There is a concern doing the rounds that, as the country with the deepest financial markets and financial market expertise exits the EU, a certain heavy-handedness might take root. To some extent I share this concern.

Market regulation must be fit for purpose, and proportionate to the risks. In the securities and derivatives space, Europe must guard against any perception that public support would be forthcoming in a crisis—intermediaries must be allowed to fail. This will ensure that market discipline remains in the front seat. There can be no room for moral hazard.

My basic premise has been that scarce political capital must be used well. I have identified finance as a key area where we should push—meaningful progress is within reach. Here, I believe, much of the necessary work can be done within the confines of the current political consensus—we are not talking about Treaty change. We are talking about letting the experts hammer out compromises to take forward the banking and capital markets union projects. But I am under no illusion that this would still encounter strong resistance from vested interests.

In banking, the task is to further strengthen supervision and resolution. To be concrete, the task is to systematically remove the remaining national fragmentation from the single rulebook. This will maximize the effectiveness of the new framework in controlling excessive risk-taking, and will ensure robust risk-sharing when banks fail.

And that, in turn, will reduce the need for individual countries to protect themselves with ring-fencing measures that also act as barriers to cross-border flows—I believe there can be a virtuous circle between less fragmentation and more trust.

In nonbank finance, I have focused on one aspect: ensuring robust oversight of the securities and derivatives markets. Here the mandate must be to ensure truth, transparency, and disclosure. The question can be asked if there is a case for a 'super-ESMA' with pan-European regulatory powers. But one must also guard against overreach, and allow intermediaries to fail, so that market discipline can flourish.

In my vision for a European financial union, the current preference for subsidiarisation and other defensive measures at the national level will recede over time as fragmentation is reduced. Eventually, this will allow a return to a banking model centered on cross-border branching. While this might sound like a case of 'back to the future,' prudence will be embedded in a way that bears no semblance to the bad old days of forbearance and arbitrage that took Europe to crisis a decade ago.

Poul M Thomsen is Director, European Department, at the International Monetary Fund

The euro area: current status and challenges

Monetary policy has played the key role in the recovery, but cannot remain the only game in town, says Luis de Guindos. He adds that we now need action in other policy areas – notably fiscal policy and structural reforms n my remarks I would like to review the economic developments in the euro area, explain our recent monetary policy decisions and reflect on the necessary reforms of Economic and Monetary Union, or EMU.

Recent economic developments

Economic growth in the euro area remains solid and broad-based, as confirmed by the latest data. Preliminary figures show that real GDP grew by 0.4% quarter-on-quarter during the second quarter of 2018.

In the first half of 2018, growth weakened from its very high rates of last year, partly reflecting lower exports, compounded by temporary supply-side constraints at national and global level.

Although growth has slowed earlier than anticipated, we expect the expansion to continue. In fact, the current expansion is shorter in length and smaller in size than historical averages. It has lasted just five years and real GDP is now 10% above the trough in the first quarter of 2013¹. In the past, growth phases lasted, on average, seven and a half years from trough to peak, with GDP increasing 21% over the same period.

While risks surrounding the euro area growth outlook remain broadly balanced, uncertainties emerging from increased global protectionism, the finalisation of the Brexit negotiations and vulnerabilities in emerging markets have become more visible than a few months ago.

The ongoing expansion has led to strong employment gains. Since the beginning of the recovery, around 8.4 million jobs have been created. Euro area unemployment declined to 8.2% in July, the lowest level in almost ten years. This is particularly relevant in Spain, where unemployment declined by almost 11 percentage points from the peak of the crisis, to 15.4% currently. Almost two million jobs (1.9) have been created since the start of the recovery.

Thanks to the recovery in labour markets, consumer spending is still robust. The steady rise in compensation per employee has increased household disposable income. Moreover, consumption benefits from an easier transition from unemployment to employment and increased job security. Lower unemployment not only pushes up the disposable income of those who find a job, but also reduces the perceived risk of job loss, giving workers less incentive to hold precautionary savings.

Completing the banking union with the establishment of EDIS, its third pillar, and firm moves towards capital markets union, promoting deep and liquid bond and equity markets, are necessary reforms of the financial sector

The investment outlook remains solid on the back of improving profitability and favourable financing conditions. According to the July bank lending survey, credit standards for loans to enterprises and households have loosened further.

Moreover, net demand for all types of loans has increased and is expected to grow in the next quarter too, supporting loan growth. In Spain, credit standards for new loans eased across all segments. While net demand for loans to enterprises remained unchanged, it increased for loans to households.

We are therefore confident that the underlying strength of the euro area economy will continue to support the sustained convergence of inflation to our aim in the medium term.

According to the flash estimates, HICP inflation edged down to 2.0% in August from 2.1% in July, mainly reflecting higher energy prices. On the basis of the latest oil futures prices, headline inflation is expected to hover around the current level for the rest of the year.

Although measures of underlying inflation remain generally muted, they have risen from previous lows. Looking ahead, underlying inflation is expected to pick up towards the end of the summer, supported by our monetary policy measures and strengthening domestic price pressures, which are sufficiently robust to counter the downward pressure from the euro's appreciation in 2017.

Domestic price pressures have gradually risen on the back of the ongoing economic expansion, the resulting absorption of economic slack and rising wage growth. In particular, the tightening in labour markets supports the pick-up in nominal wage growth both across countries and sectors.

Non-wage domestic cost pressures and the stronger pricing power of domestic firms are further contributing to higher prices. Moreover, domestic producer price inflation for non-food consumer goods increased further in June, with the year-on-year growth rate at its highest level since late 2012. Services producer price inflation has been on an upward trajectory since the second quarter of 2016.

Against this backdrop, the ECB's Governing Council carried out a thorough assessment of price and wage pressures and the inflation outlook at its meeting in June of this year.

Monetary policy stance

The Governing Council carefully reviewed the progress achieved towards a sustained adjustment in the path of inflation, guided by three criteria: convergence, confidence and resilience.

For convergence, headline inflation should be on track to reach levels consistent with the Governing Council's inflation aim of below, but close to, 2% over the medium term. In line with this criterion, the June Eurosystem staff projections see headline inflation reaching 1.7% in each of the next three years. These are the latest in a series of projections that have pointed to a convergence of headline inflation towards the Governing Council's inflation aim.

Regarding confidence, uncertainty around the projected path of inflation has diminished. Moreover, underlying inflation has increased from the very low levels observed in 2016 and is expected to rise amid an expanding economy, high levels of capacity utilisation and labour market tightening. Stronger underlying inflation pressures, in turn, should pass through to headline inflation.

In terms of resilience, the projected path of inflation is expected to be maintained even after a gradual ending of net asset purchases.

On the basis of this assessment, the Governing Council concluded that substantial progress has been made towards a sustained adjustment. Given the underlying strength of the euro area economy, together with well-anchored longer-term inflation expectations, we are confident that the sustained convergence of inflation towards our aim will continue in the period ahead, even after a gradual winding-down of our net asset purchases.

As a result, we took a number of decisions in June. First – subject to incoming data confirming our medium-term inflation outlook – we anticipate reducing the monthly net asset purchases from €30 billion to €15 billion at the end of September 2018 and ending net asset purchases at the end of December 2018.

Second, we intend to continue reinvesting the principal payments from maturing securities purchased under the asset purchase programme for an extended period of time after the end of net purchases, and in any case for as long as necessary to maintain favourable liquidity conditions and an ample degree of monetary policy accommodation.

Third, we expect the key ECB interest rates to remain at their present levels at least through the summer of 2019, and in any case for as long as necessary to ensure that the evolution of inflation remains aligned with our current expectations of a sustained adjustment path.

Together, these measures will continue to provide the necessary degree of monetary policy accommodation to bring inflation back towards a level that is below, but close to, 2%. Looking ahead, monetary policy will continue to be firmly guided by the outlook for price stability and our stance will evolve in a data-dependent and time-consistent manner.

Having reflected on the current economic situation in the euro area and the corresponding monetary policy stance, let me now turn to the future, notably to governance of EMU.

EMU governance

The ECB's monetary policy measures introduced since 2014 have been essential in supporting the robust recovery and paving the way for inflation to return towards our objective. Similarly, the removal of some of the institutional and structural factors that contributed to the crisis helped maintain that recovery. Nonetheless, the architecture of EMU is still incomplete in many ways.

Further reforms are needed to make the financial sector more stable. As the euro area's financial system is predominantly bank-based, completing the banking union remains a key priority. We gladly welcome the agreement on the European Stability Mechanism, or ESM, as the backstop for the Single Resolution Fund. If implemented swiftly, it will create confidence in the effectiveness of resolution and make the sector as a whole more stable.

Most importantly, we need to make headway in establishing the third pillar of the banking union, the European Deposit Insurance Scheme, or EDIS. Ongoing discussions have been held up on the premise that risk reduction must come before risk-sharing.

However, substantial risk reduction has already taken place. The significant banks' Common Equity Tier 1 ratios – a key indicator of bank health – are now 67% higher than they were ten years ago. And further reduction of non-performing loans and toxic assets in the portfolios of some large banks is under way.

Moreover, risk-sharing can help reduce risks. In its envisaged steady state as a fully mutualised fund, EDIS would reduce the risk of bank runs and allow full fungibility of deposits across the euro area, thereby mitigating the risk of financial fragmentation. EDIS would hence help contain market panic when crises hit and reduce the fallout for taxpayers, as costs can be borne by the banks themselves². Risk-sharing and risk reduction are thus mutually reinforcing.

At the same time, we need to make progress in developing a genuine capital markets union. Deep and wellintegrated cross-border funding would improve the private sector's capacity to absorb local shocks, reducing the burden on fiscal policies. A capital markets union would provide various additional benefits. For example, harmonised insolvency frameworks would make it easier for banks to deal with non-performing assets, thereby facilitating orderly risk reduction.

Beyond these necessary reforms in the financial sector, more economic convergence is needed to make EMU resilient.

At the national level, structural reforms remain a priority in order to increase the growth potential and resilience of local economies. While a full, transparent and consistent implementation of the Stability and Growth Pact is essential, country-specific recommendations, or CSRs – issued under the European Semester – should be given similar importance.

CSRs provide guidance to member states on how to address reforms and macroeconomic imbalances. They have a broad focus on fiscal-structural policies, framework conditions, and labour and product markets. In light of persistent imbalances, the track record in CSR implementation remains poor. Over the past five years, most CSRs

were, at best, only partly addressed by member states. This is unsatisfactory, especially as the economic recovery provides a favourable environment for reform.

At the same time, member states should agree on broad-based and balanced institutional reforms to facilitate better collective outcomes. These dimensions – action at the national and supranational level – should be seen as complementary.

Improving the crisis management framework at the supranational level would make EMU more resilient. In this regard, the ECB welcomes the commitment to strengthen the ESM made at the recent Euro Summit.

Moreover, the euro area would benefit from a common stabilisation function. Such an instrument could provide macroeconomic support in the event of euro area-wide recessions, thereby maintaining convergence and reducing the burden on monetary policy. However, such a fiscal instrument should not undermine incentives for member states to pursue sound policies at the national level.

Conclusion

Growth in the euro area economy is solid and broad-based. The underlying strength of the economy continues to support the sustained adjustment of inflation towards our objective.

Following strong growth rates in 2017, the recovery in the euro area has slowed down in 2018, however. The duration of the current expansion, which began in 2013, is still below the historical average. Its amplitude, the percentage gain in GDP relative to the trough, is also low by historical standards.

At the same time, downside risks to growth, notably related to the threat of protectionism and the rise in trade tensions, remain prominent. The outlook for US monetary policy moves and vulnerabilities in emerging markets add to the overall uncertainty, as does the limited progress on the Brexit discussion.

Solidifying the institutional architecture of EMU is essential in order to foster cohesive economic performance without fragmentation or excessive imbalances. Monetary policy has played the key role since the financial crisis but cannot remain the only game in town.

We now need action in other policy areas – notably fiscal policy and structural reforms. There is a need for responsible fiscal policy, given the levels of public debt. Some countries should take advantage of the ongoing recovery and favourable financial conditions to reduce debt burdens, whereas countries with fiscal space should increase their public investment.

Likewise, significant steps should be taken on the structural policy side, with a view to increasing potential growth in the medium term. Measures to improve the functioning of labour and product markets and to strengthen procedures for the correction of macroeconomic imbalances take prominence here.

A robust economy relies on sound economic governance. Reforms at the national and EU level are needed to uphold a stable financial system and a resilient monetary union. A common stabilisation function, which - in the spirit of a true counter-cyclical fiscal policy instrument – would maintain convergence in the event of large shocks, is an overriding priority.

Completing the banking union with the establishment of EDIS, its third pillar, and firm moves towards capital markets union, promoting deep and liquid bond and equity markets, are necessary reforms of the financial sector.

Attaining these goals is highly relevant for financial stability, further integration, private risk-sharing and economic growth.

Luis de Guindos is Vice-President of the European Central Bank

Endnotes

1. See also Camba-Mendez, G and Forsells, M, "The recent slowdown in euro area output growth reflects both cyclical and temporary factors", Economic Bulletin, Issue 4, ECB, 2018. 2. Carmassi, J, Dobkowitz, S, Evrard, J, Parisi, L, Silva, A and Wedow, M (2008), "Completing the Banking Union with

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This article is based on a speech delivered at La Granda courses, Asturias, 31 August 2018

World Commerce Review is pleased to announce that the Isle of Man Ship Registry has been awarded the Best Shipping Registry 2019.

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Best Shipping Registry

People on the move: migration and mobility in the European Union

Migration is one of the most divisive policy topics in today's Europe. Uuriintuya Batsaikhan, Zsolt Darvas and Inês Goncalves Raposo assess the immigration challenge facing the EU igration is one of the most divisive policy topics in today's Europe. In this publication, the authors assess the immigration challenge that the EU faces, analyse public perceptions, map migration patterns in the EU and review the literature on the economic impact of immigration to reflect on immigration policies and the role of private institutions in fostering integration.

Immigration tops the list of challenges of greatest concern to European Union citizens. While in some years immigration has been primarily driven by economic motives and family reunification, in the last few years Europe has experienced a major surge of refugees fleeing wars and conflicts in Syria, Afghanistan, Iraq and other countries. The arrival of a large number of asylum seekers in a short period has created huge administrative, border-protection and financial difficulties in several EU countries, and even led to a partial suspension of the border-free intra-EU travel area.

The public perception of refugees and other immigrants has been shaped by the devastating conflicts in a number of EU neighbourhood countries and the tragic deaths of migrants seeking to cross the Mediterranean Sea. Concerns are also voiced frequently about the difficulties of integrating people with different cultural backgrounds.

At the same time, there are economic and political reasons to allow the immigration of workers, students and family members, while the provision of humanitarian assistance to refugees is a key value of the European Union. Meanwhile, the public understanding of simple facts about migration is sometimes far removed from reality.

We assess the immigration challenge that the EU faces. We analyse public perceptions, extensively map migration patterns in the EU, review the literature on the economic impact of immigration and analyse the integration experiences of immigrants to the EU. We also reflect on immigration policies and the role of private institutions in fostering integration.

Chapter 1 provides an overview of the EU's demographics:

- Population growth due to natural change (the balance between live births and deaths) has declined from 0.8
 percent in the 1960s to essentially zero. In 2015, the EU saw a natural population decline for the first time at
 least since 1960.
- Net immigration into the EU was close to zero from the 1960s to the early 1980s, when it started to increase. Since 1992, net immigration has been a more important source of population increase than natural change.

... there are economic and political reasons to allow the immigration of workers, students and family members, while the provision of humanitarian assistance to refugees is a key value of the European Union

• The large inflow of refugees in 2015-16 was not historically unprecedented. However, the circumstances of immigration, the composition of flows of immigrants and the uneven distribution of asylum seekers across EU countries were unprecedented.

Chapter 2 uses a range of surveys to analyse the public perception of immigration:

- EU citizens have become relatively less concerned about economic issues and more concerned about immigration and terrorism. Surveys show that citizens tend to associate terrorism with immigration.
- Europeans are more negative about immigration than people on other continents.
- On average though there are major differences between countries EU citizens perceive that immigrants take more jobs than they create, and take out more fiscal resources than they put in.
- There is a major difference between public perceptions of migration from other EU countries and immigration from outside the EU. Support for intra-EU mobility has increased and exceeds two-thirds of the EU population. Support for extra-EU immigration is generally lower.
- We do not find support for the hypothesis that the high share of foreign citizens in a population, or a rapid increase in their share, fuels anti-immigrant sentiment. In fact, we find some evidence for the opposite. It seems that the perception that immigration could be a problem, rather than the actual presence of immigrants, has greater influence over public support for immigration.
- There is a huge gap between perceived and actual stocks of immigrants, with most people over-estimating

the proportion of foreign-born people in their countries.

• EU citizens generally disapprove of the way the refugee crisis was handled in Europe. Nevertheless, a large majority of Europeans is in favour of a common European asylum policy and increased EU efforts to fight illegal immigration.

Chapter 3 analyses immigration into and emigration from EU countries in terms of source and destination countries and educational levels. It also considers the movements of posted workers within the EU:

- Annual emigration of EU citizens (to both EU and non-EU countries) was relatively stable at about 0.29 percent of population from 2009-15. The highest levels of emigration were from the central and eastern European EU countries, and the lowest levels were from southern Europe, where recently increased emigration rates have not yet reached the EU average. The cross-border mobility of EU citizens remains well below intra-country mobility within the United States and other large countries.
- Posted workers from central and eastern European countries account for a mere 0.15 percent of the
 population in north-west EU countries, which makes it surprising that the revision of the EU Posted Workers
 Directive (96/71/EC) has received such prominent attention in EU policy debates.
- In 25 countries, the return of citizens who previously emigrated does not compensate for overall emigration; the exceptions are Cyprus, Denmark and Malta.
- Emigration from central and eastern European countries has created major labour shortages. However, the immigration of these central Europeans to north-west EU countries did not take away jobs from local workers

at a significant scale; labour shortages in various industries increased in north-west EU countries in parallel to the arrival of central and eastern European workers. The labour shortage problem was already significant before 2008, but has become even more severe in recent years and requires urgent attention.

- In earlier years, non-EU citizens immigrated into the EU primarily for work, but in recent years, humanitarian reasons have become dominant with about 1.2 million asylum applications in both 2015 and 2016. The expected number for 2017 is 640,000.
- European countries assess asylum applications very differently. The acceptance rate in EU countries varies from 15 percent to 85 percent. It is rather unlikely that the composition of flows of asylum seekers explains these large differences. A more likely explanation is differences between countries in the implementation of the EU's asylum rules.
- The disproportionate distribution of refugees between EU countries entails excessive burdens for some EU member states. Fair burden sharing is essential.

Chapter 4 reviews the literature on the economic impact of migration, particularly in relation to fiscal policy and labour markets, and considers the economic impact of sudden inflows of refugees and asylum seekers:

- There is a lack of conclusive evidence that immigrants take jobs from, or depress wages for, natives. Instead, the impact on the host country depends on migrant characteristics and the host country's economic and institutional factors.
- The fiscal impact of migrants is generally found to be small and depends on migrant characteristics. Migrants

make a greater fiscal contribution the younger and better integrated into the labour market they are, while family and elderly migrants as well as refugees tend to be a fiscal burden. The literature results on whether migrants might cluster in countries with generous welfare systems and make a smaller contribution to public finances are mixed.

The initial fiscal impact might also change in time, for example, labour migrants with a positive fiscal contribution might bring family members later and they might retire, when their fiscal contribution turns negative. Or the initial fiscal burden of refugees might turn to positive fiscal contribution when they integrate into the labour market.

- Studies on sudden inflows of refugees suggest that restricting refugees' access to the labour market leads some to enter the informal economy, limiting the evaluation of their economic impact.
- There is consensus that the economic impact of migration on receiving countries is largely influenced by the composition of migrant flows. Migrants who come for work reasons or for the short term are associated with better economic outcomes for receiving countries.
- The swiftness of integration also plays a non-negligible role; the faster migrants are integrated into the labour market, the sooner they actively contribute, through taxes and social contributions.

Chapter 5 examines how Europe integrates migrants. Given that integration is time consuming, we focus on the experiences of earlier waves of immigrants:

• Effective integration would imply that first-generation migrants do not perform much worse than the native-

born population on various indicators, while second-generation migrants are expected to have similar levels of activity and achievement as the native-born population.

- With the exception of a few countries, integration has fallen short. The labour force participation rates of second-generation immigrants are close to those of native populations, and above those of first-generation immigrants, only in the UK, Sweden and France, suggesting successful integration processes. In most other EU countries, second-generation migrants participate less in the labour force than first generation migrants, and much less than natives.
- Unemployment rates among second-generation migrants tend to be higher than rate among the native population, even in the UK, Sweden and France.
- Better educated immigrants are much more likely to be employed than poorly-educated immigrants, highlighting the role of education in successful integration strategies. The share of people with a low level of education is much higher among the non-EU-born population than the native-born and other-EU-born populations.
- More immigrants than native workers feel that they are overqualified for their jobs, raising questions about the recognition in the EU of the qualifications of migrants.
- Young immigrants are much more likely than native-born youth to leave school early (with the notable exception of the UK).
- The children of immigrants tend to underperform in educational terms compared to the native population.

However, in Ireland, the UK, Portugal, Latvia and Hungary second-generation migrant children achieve better scores than the native population.

- Foreign citizens tend to have lower incomes. However, it is difficult to disentangle whether lower average incomes are connected to the lower average education levels of immigrants, or are because of discrimination.
- EU integration policy scores are rather poor compared to Canada, Australia and the US, especially in education.

Chapter 6 studies the financial inclusion of refugees, which poses major challenges. Our findings are informed by our own survey on the views of financial institutions on the regulatory environment and attitudes toward financial inclusion:

- The necessary tightening of regulation to tackle money laundering and terrorist financing has made it more difficult to offer financial services to refugees, even though there have been a number of European efforts to foster financial inclusion. Most banks regard EU know-your-customer requirements as somewhat or overly restrictive in terms of offering financial services to refugees.
- Supervisory authorities have issued guidelines on the financial integration of refugees only in about half of the EU countries. All EU countries should prioritise the issuing of such guidelines.
- The urgent need refugees have to open a bank account is blocked by identification requirements that are not designed to accommodate to their situation. A European identity document for refugees and a pan-European registry of refugees, to which financial institutions should have access, would greatly foster financial

inclusion.

- Financial institutions generally do not provide specialised products or are not equipped to deal with the specific needs of refugees, and show little interest in doing so. Simplifying existing regulations or recommending best practices could facilitate the process of settlement by refugees in their host countries.
- Private-sector initiatives, such as offering micro-credit to refugees, offering short-term employment and
 providing internet access would facilitate their inclusion. The private and public sectors should work together
 on the integration of refugees.
- Public-private partnerships, on issues such the establishment of common and robust principles for financial inclusion, private sector support for the set-up of national and pan-European refugee registries, cooperation on training of refugees and social inclusion, should be explored.

We offer in chapter 7 twelve policy recommendations related to public dialogue (1), refugees (2-7), integration of immigrants (8-11) and labour shortages (12):

1. Address negative perceptions of migrants: public understanding of immigration is often far from reality, making it important to disseminate accurate information about various aspects of immigration.

2. Protect the EU's borders and fight illegal immigration: while various measures have been introduced, 85-90 percent of the EU population would like to see additional measures.

3. Continue to build partnerships with neighbourhood countries, which can help to contain refugee and

immigration inflows into the EU, facilitate the successful and safe return of ineligible migrants and provide information about eligible migrants.

4. Provide additional funding for border protection, neighbourhood partnerships and immigrant integration: a small percentage of the EU budget is spent on these areas, which we find insufficient given that immigration is a priority concern of citizens.

5. Ensure the consistent implementation of the EU's asylum rules: the widely different rates of acceptance of asylum seekers in different EU countries suggest different implementation of the EU's asylum rules. Clear guidelines are needed for the evaluation of asylum applications and their consistent implementation.

6. Address the very uneven distribution of refugees among EU countries: relocation of refugees from, and financial support to, heavily impacted countries is essential. Countries that resist accepting refugees for political and ideological reasons should make large enough financial contributions instead of being forced to accept refugees.

7. Improve identification of refugees by issuing a European ID to each refugee and creating of a pan-European registry of refugees, linked to national central registries: such instruments, established with European financing, would greatly facilitate the identification and integration of refugees.

8. Learn from the best integration practices: only a few European countries can be regarded as successful in terms of integration of immigrants. Cooperation with the private sector and social partners should also play a role in improving integration systems.

9. Combat educational and spatial segregation: early childhood education, language and professional training for recently arrived immigrants, and better access to higher education for young and second-generation migrants, are essential for their integration and to limit spatial segregation.

10. Ensure the EU strategy for integration is well articulated with national governments and other institutions: the EU's 2016 Action Plan on the integration of third country nationals (COM (2016) 377) includes several useful initiatives which should be better implemented by member states.

11. Review financial regulation to promote the financial inclusion of refugees: regulation should strike a balance between the fight against money-laundering/financing of terrorism and the economic integration of refugees. At the minimum, all supervisory authorities should issue guidelines on financial inclusion of refugees.

12. Address labour shortages in EU member states by fostering labour force participation, increasing the pool of labour for the private sector through reduced public-sector employment, education and specific training programmes and by overhauling the tax/social security contribution system to promote higher net wages, while keeping gross wage costs and fiscal revenues unchanged

Such movements of people pose major challenges for policymakers. EU countries must integrate immigrants while managing often distorted public perceptions of immigration. To meet the challenges, a better evidence base is needed that accurately describes the scale of the challenge, the impacts of immigration on European labour markets and public finances, the successes and failures of EU countries in integrating immigrants, and the hurdles refugees face, such as financial inclusion.

This Blueprint offers an in-depth study that contributes to the evidence base and sets out twelve policy recommendations related to public dialogue, refugees, integration of immigrants and labour shortages.

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The pursuit of inclusive growth in Africa

The economic priority for Africa is development. Tao Zhang outlines how the International Monetary Fund will continue to support the continent with policy advice, capacity building, and financial support frica is a continent that holds immense opportunity. It has a huge demographic dividend, plenty of natural resources, and untapped potential in many sectors. Countries in the region have made considerable progress in development, but the job is not over.

I will focus on the priorities for ensuring sustainable development. And, make no mistake, the number one economic priority for Africa is development. This means further improvement in living standards, growth that is inclusive, and sustainable financing from its partners.

Global context – recovery becoming more uneven

Let me start with the global outlook. We recently released our growth forecasts for the world economy. Global growth is projected at 3.9 percent in 2018 and 2019, in line with our April forecasts. But the expansion is becoming less even, and its rate appears to have peaked in some major advanced economies.

In the United States, growth continues apace at 2.9 percent this year and 2.7 percent in 2019. However, momentum in the euro area, Japan, and the United Kingdom is weaker than we anticipated six months ago.

Growth in emerging and developing economies is expected to remain strong at 4.9 percent this year and 5.1 percent in 2019. Sustained momentum is expected to be seen in the African region as well. Overall growth in sub-Saharan Africa is projected at 3.4 percent this year, rising to 3.8 percent next year. With growth rates exceeding those of population, many countries should see increases in per capita incomes.

Yet even among this dynamic group of emerging economies, growth prospects are becoming more uneven. Rising oil prices, escalating trade tensions, higher yields in the United States, and market pressures on emerging markets' currencies are challenging the outlook. Think of the recent experience of Turkey or Argentina.

These challenges are likely to persist, and this is why we see rising downside risks to the outlook even in the near term. An escalation in trade tensions can derail the global recovery and further depress medium-term growth.

At the same time, financial conditions remain accommodative. Spreads are still compressed, valuations in some markets stretched, and volatility low. However, these conditions can change suddenly. Countries with higher debt could be especially affected by tightening in global financing conditions.

By 2035, the number of sub-Saharan Africans reaching working age of 15-64 years will exceed the rest of the world combined – adding about 110 million workers. This is a trend with potentially significant implications for both the region and the world Clearly, the global backdrop is challenging for the sub-Saharan Africa region. This provides more urgency for policies to lock in recent achievements and provide opportunity to all its citizens.

Sub-Saharan Africa – significant progress

Before we look at how to secure a brighter future for the region, let's step back for a moment to see how far it has come. Over the last two decades, the region has made great progress in improving economic and social conditions.

For instance, real per capita incomes have risen 50 percent on average in the region. Importantly, per capita income doubled in Mozambique, Angola and Rwanda, and tripled in Ethiopia. These are remarkable gains.

At the same time, infant mortality rates fell dramatically – from 108 to 55 per 1000 live births for the region as a whole. Countries like Angola, Malawi, Liberia and Rwanda saw the largest improvements. During this period, growth was supported by reforms and improved macroeconomic policies. It also benefited from a boom in commodity prices that helped commodity exporters, and increased trade and investment flows.

These are great achievements, yet much more is needed. The region needs to create sustained, strong and inclusive growth to achieve the UN Sustainable Development Goals and reap the demographic dividends. Africa is the youngest continent in the world. This is both a challenge and an opportunity.

By 2035, the number of sub-Saharan Africans reaching working age of 15-64 years will exceed the rest of the world combined – adding about 110 million workers. This is a trend with potentially significant implications for both the region and the world, in terms of new markets and investment opportunities.

Yet realizing the full potential of these demographic trends means creating 20 million jobs every year through 2035. This is twice the average number of jobs created every year during 2011-2017.

Unleashing opportunity in Africa – the way forward

So how can the region capitalize on its demographic potential to attain the SDGs and achieve higher and more inclusive growth? In my view, this will require upholding the multilateral spirit of cooperation by all parties involved. Countries in the region should do their part by getting their house in order; and development partners should help by ensuring 'sustainable' sources of financing.

What does this mean in practice? For countries in the region, it means reducing macroeconomic vulnerabilities and raising growth potential. And here I see two important priorities. One for the short term; the other for the long term.

The first priority is to reduce vulnerabilities from debt. It is urgent. Public debt ratios have increased markedly over the past five years – from an average of 30 percent of GDP to over 50 percent currently. In some countries, the increase in debt is driven by development and infrastructure needs. In other countries, it reflects the impact of the large decline in oil prices in 2014. And in others, it was the migration of off-balance sheet liabilities to the public sector.

If the growing debt trends in Africa continue, rising interest costs from higher debt would divert resources away from education, health and infrastructure.

The priority therefore is to reduce vulnerabilities from debt. The emphasis should be on domestic revenue mobilization and improved debt management. This will create space for investment in physical and human capital and social spending.

Many countries in the region have seen significant improvements in collections. Tax revenues are above the tipping point of 13 percent of GDP in two-thirds of the countries, compared to just one-third in 1995. Still, this leaves more than 16 countries with less than 13 percent of GDP in tax revenue.

At the same time, oil exporters have seen a sharp decline in their revenue intake, from 31 percent of GDP in 2012 to 18 percent in 2016. Clearly, the emphasis on domestic revenue mobilization needs to be sustained.

The second priority to raise long-run growth is to revive private investment. For many years, low levels of private investment were offset by public expenditures. Yet, faced with growing public debt vulnerabilities, it is unclear how long this trend can continue. Some countries have pursued public-private partnerships, but these efforts have had varying success.

At the same time, initiatives such as China's Belt and Road Initiative and the G20 Compact with Africa provide an opportunity to support private investment. This includes institutional reforms that can encourage foreign direct investment and support public-private partnerships.

But for these initiatives to be effective, sub-Saharan African countries should ensure a transition from public to private investment. This requires maintaining macroeconomic stability and improving regulatory and insolvency frameworks. It also means increasing intra-African trade and deepening access to credit.

Here, Africa can offer the world important lessons on financial inclusion. We have recently published a paper that pulls together lessons from 16 pilot countries in Africa on policies to expand access to credit¹. Facilitating this handover from public to private investment also requires alternative, non-debt creating ways of financing the

region's large infrastructure needs. By some estimates (AfDB), these needs amount to US\$130-170 billion per year. Such financing should minimize risks to economies in the region.

Conclusion

There is tremendous potential to catalyze private funds for infrastructure investment. And longer-term, non-debt creating capital investment will not only help address the infrastructure needs of the region. It will also deepen capital markets, promote further trade integration, and provide significantly higher returns to incremental capital.

The IMF will continue to support the continent in these development efforts through policy advice, capacity building, and financial support where needed. We will also collaborate with other international financial institutions and development partners to support the region in realizing its demographic potential, and achieving sustained and more inclusive growth. This would be a huge opportunity – for Africa and the entire world.

Tao Zhang is IMF Deputy Managing Director

Endnotes

1. IMF 2018. Macrofinancial Linkages in Shallow Markets: Experience from the African Department's Pilot Countries. Departmental Paper 18/12.

This article is based on a speech delivered at the BRICS Summit, South Africa, July 24, 2018



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Bermuda: leading the way in fintech

In early 2018 Bermuda launched a fintech initiative to become a global technology hub. Caroline Caton reviews how legislation is achieving this goal

Fintech and distributed ledger technologies

In early 2018, the Island of Bermuda seized the opportunity to grow its own economy by launching an overarching fintech initiative the aim of which is to solve many of the problems that are plaguing technologists globally, and to demonstrate to the world that it is serious about the development and growth of fintech-related technologies. The Bermuda Government recognizes both the capabilities and potential disruptive nature of this emerging industry and has positioned itself to be a pioneer in this sphere.

With fintech, Bermuda is building on its ability to remain nimble while capitalising on its long-recognised expertise in crafting and enacting quality regulation. To do so, it is leveraging its significant expertise in regulatory management to build a robust regulatory framework and create a unique environment that prioritizes regulatory certainty, investor confidence, and compliance with international Know Your Customer (KYC) and Anti-Money Laundering/Anti-Terrorist Financing (AML/ATF) regulations. This framework aims to mitigate risks related to financial crimes, consumer fraud, market manipulation and unethical business practices.

With regard to distributed ledger technologies, the desire to develop and use them in Bermuda was heavily influenced by how these tools are used worldwide and how much potential they have to make a positive social impact on their environments.

At the forefront of Bermuda's development in the field is the Hon. Wayne Caines, JP, MP, Minister of National Security. In an interview with *The Blockchain Executive*, Minister Caines stated:

"Blockchain has revolutionized how people can have transactions, medical records and access to healthcare and business. It has evolved from just digital asset exchanges to now helping improve peoples' lives. It invites companies to give populations access to opportunities in their own country and reduces some of the need for big banking mechanisms and their subsequent fees. We don't plan on ending poverty, homelessness and refugee status overnight but we will continue to work towards making the world a better place."

He added that in Bermuda "One area where we are implementing blockchain technology is the Land Title Registry which will help eliminate disputes that arise when a will is misplaced. As the blockchain is transparent and you can't change the contents; it can't be fraudulent. This brings a level of assurance to those who are using the system that what they are seeing is accurate."

With fintech, Bermuda is building on its ability to remain nimble while capitalising on its longrecognised expertise in crafting and enacting quality regulation

A holistic approach

Bermuda is committed to creating a model platform that will lead the world starting today. To do this, Bermuda is engaging into the field holistically by aligning government leadership, regulatory and legislative strength, and public-private sector partnerships with innovation, efficiency, and transformative thinking. In doing so, it is adopting a prudent yet well-paced approach to building a legislative environment that is well suited to the industry and to its parameters.

The Minister explained that "Digital asset businesses that have set up in Bermuda have a responsibility to help educate the population in the field, teach them about how they can take part in this new industry, and to govern themselves both ethically and morally. Fintech companies are naturally very collaborative and they have expressed interest in helping within the overall economy, such as agriculture and education. This collaboration has proved incredibly helpful as many international consultants were used to help inform the blockchain development in Bermuda."

With education being a key component of Bermuda's fintech initiative, the Government of Bermuda has begun to implement additional legislation and regulations focused on educating and training the Bermudian population in the field. The Fintech Development Fund Act 2018 was enacted to regulate the capital meant for supporting education and training initiatives related to the fintech and distributed ledger technologies.

This will assist in cementing partnerships between the Island and its fintech new-comers as they create new jobs and help re-skill the existing labour force: investment from said new-comers in businesses, education and infrastructure for the Island is anticipated. This in turn will enhance the work of the Ministry of National Security and the Department of ICT Policy & Innovation, digital asset businesses, the Ministry of Education, the Bermuda College, the Department of Workforce Development and more.

The ultimate goal for this training is to reach three local core demographics: students from primary to high school, college students who are finalising their career-path decisions, and adults who wish to engage in reskilling and retraining. Providing development opportunities to the working population will help to ensure sustainability and economic growth by giving it a foundation of core skills, including but not limited to programming, data analytics, and compliance.

Additional legislation

The Island is quickly progressing towards becoming a global hub for fintech enterprises through ground-breaking legislation that will govern the industry. As part of the overarching framework, three innovative pieces of legislation –in addition to the Fintech Development Fund Act 2018 - have been passed so far to boost Bermuda's fast-emerging fintech sector:

1) Digital Asset Business Act 2018

This law (DABA) is the next step in Bermuda's development and implementation of a globally-recognised standard (commonly referred to as the 'Bermuda Standard') for regulating the fintech sector in Bermuda.

DABA will regulate digital asset business carried on in or from within Bermuda and provides that a person cannot carry on digital asset business in or from within Bermuda unless the person is a licensed undertaking, to be regulated by the Bermuda Monetary Authority (BMA). This Act is expected to serve as a global model of best practices for the regulation of digital asset service providers.

2) Companies and LCC ICO Amendment Act 2018

This amendment was brought about to govern how Companies and Limited Liability Companies (LLCs) wishing to raise funds via an initial coin offering (ICO) will need to conduct themselves.

It requires potential investors and owners to meet the 'Bermuda Standard' on beneficial ownership and transparency, which is highly regarded by regulators the world over.

ICO regulations have also been established to help clearly define the minimum required information for ICOs and outline compliance measures that a company or LLC must adopt when conducting an ICO. ATF/AML regulations were used as a blueprint for the compliance measures.

3) Virtual Currency Business Act 2018

This law introduces the restricted banking license to allow for trading in crypto-currency. Entities applying for this license will be subject to the same robust compliance schedules and scrutiny as those applying for a traditional license.

This Act includes extensive consumer protection so that the BMA, in its role as the regulator, can protect clients of virtual currency businesses. It is planned that the Proceeds of Crime Act 1997 and the Anti-Terrorism and Proceeds of Crime Act of 2008 will both be amended to add virtual currency businesses into their text.

About Fintech Bermuda

The Bermuda Government has carved out a leadership position in the formulation of the world's first digital asset legislation (Digital Asset Business Act) as well as a strong legislative framework for ICOs. Go to fintech.bm for more information.

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Economic policy for artificial intelligence

Policy will shape how AI affects society. Ajay Agrawal, Joshua Gans and Avi Goldfard consider policies that will influence diffusion and policies that will address the consequences of AI egardless of whether one adopts a pessimistic or optimistic view of artificial intelligence, policy will shape how it affects society. This article looks at both the policies that will influence the diffusion of AI and policies that will address its consequences. One of the most significant long-run policy issues relates to the potential for artificial intelligence to increase inequality.

Artificial intelligence (AI) technologies advanced rapidly over the past several years. Governments around the world responded by developing AI strategies. France released its national AI strategy in March 2018, emphasising research funds, ethical issues, and inequality. China stated a goal of being the top AI country by 2030. The EU, Canada, Japan, the Obama administration, the Trump administration, and many others have put forth their own plans (Sutton 2018).

Pessimistic views of the impact of AI on society are widespread. Elon Musk, Stephen Hawking, Bill Gates, and others warn that rapid advances in AI could transform society for the worse. More optimistically, AI could enhance productivity so dramatically that people have plenty of income and little unpleasant work to do (Stevenson 2018). Regardless of whether one adopts a pessimistic or optimistic view, policy will shape how AI affects society.

What is AI?

While the Oxford English Dictionary defines artificial intelligence as "the theory and development of computer systems able to perform tasks normally requiring human intelligence", the recent excitement is driven by advances in machine learning, a field of computer science focused on prediction. As machine learning pioneer Geoffrey Hinton put it: "Take any old problem where you have to predict something and you have a lot of data, and deep learning is probably going to make it work better than existing techniques". Recent advances in AI can therefore be seen as a drop in the cost of prediction. Because prediction is an important input into decision-making, in recent work we discuss how AI is likely to have widespread consequences as a general purpose technology (Agrawal *et al.* 2018a, 2018b).

There are two aspects of AI policy.

- First, regulatory policy has an impact on the speed of diffusion of the technology and the form that the technology takes.
- Second, a number of policies focus on mitigating potential negative consequences of AI with respect to labour markets and antitrust concerns.

Much of economic policy for AI is simply economic policy. For the diffusion of AI, it resembles innovation policy. For the consequences of AI, it resembles public policy and competition policy

Policies that will influence the diffusion of AI

Machine learning uses data to make predictions. The biggest constraint on AI in many settings is the ability to acquire useful data. This creates privacy concerns. Therefore, privacy policy has a direct impact on the ability of organisations to build and implement AI. Too little privacy protection means that consumers may be unwilling to participate in market transactions where their data are vulnerable. Too much privacy regulation means that firms cannot use data to innovate.

While the existing empirical work does not focus on AI specifically, the evidence to date suggests that most government-mandated privacy regulation slows technology adoption and innovation, suggesting a tradeoff between the right to privacy and the speed of innovation (Goldfarb and Tucker 2012). This means that any government strategy focused on AI – particularly with the aim of fostering a local AI industry – should weigh the potentially conflicting interests of data producers and users, especially with respect to privacy. Perhaps more than any other regulation, rules around privacy are likely to influence the speed and direction of the application of AI in practice.

Liability rules will also impact the diffusion of AI (Galasso and Luo 2018). Firms will be less likely to invest in the development of AI products in the absence of clear liability rules. Autonomous vehicles provide a useful example. A number of different companies will participate in the development of a self-driving car. If a car gets into an accident, would the sensor manufacturer be liable? The telecommunications provider? The vehicle manufacturer? Or perhaps an AI software firm?

Without clear rules on who is liable, all may hesitate to invest. If autonomous vehicles would save lives, should manufacturers of non-autonomous vehicles be held to higher standards than current law requires? This would accelerate diffusion of the safer technology. In contrast, if the increases in liability focus is primarily on newer technology, then diffusion will slow.

In addition, similar to other technologies, advances will be faster with more research support, well-balanced intellectual property law, and the ability to experiment in a safe way.

Policies that address the consequences of AI

A common worry about AI concerns the potential impact on jobs. If machines can do tasks normally requiring human intelligence, will there be jobs left for humans? In our view, this is the wrong question. There are plenty of horrible jobs. Furthermore, more leisure is generally considered to be a positive development, although some have raised concerns about the need to find alternate sources of meaning (Stevenson 2018). The most significant long-run policy issues relate to the potential changes to the distribution of the wealth generated by the widespread use of AI. In other words, AI may increase inequality.

If AI is like other types of information technology, it is likely to be skill-biased. The people who benefit most from AI will be educated people who already are doing relatively well. These people are also more likely to own the machines. Policies to address the consequences of AI for inequality relate to the social safety net.

While some have floated relatively radical ideas to deal with the potential increase in inequality – such as a tax on robots and a universal basic income – the AI context is not unique in weighing the costs and benefits of social programmes from progressive taxation to universal healthcare.

In the shorter run, if AI diffuses widely, the transition could mean temporary displacement for many workers. Acemoglu and Restrepo (2018) emphasise a short- and medium-term mismatch between skills and technology. This means that policy preparation in advance of the diffusion of AI should consider both business cycles and education policy. Technology-driven layoffs concentrated in location and time are not unique to AI. They were a feature of factory automation and the mechanization of farming. For education policy, there are many open questions. Should we emphasise social skills and the humanities if machines increasingly are able to do technology-related prediction tasks? Should the education system evolve to focus more on adults? How do the skills needed as AI diffuses differ from the skills currently provided through the education system?

Another policy question around the diffusion of AI relates to whether it will lead to monopolisation of industry. The leading companies in AI are large in terms of revenue, profits, and especially market capitalisation (high multiples on earnings). This has led to an increase in antitrust scrutiny of the leading technology firms from governments (particularly the European Commission) and in the press (see, for example, *The Economist's* 20 January 2018 cover story, *"The new titans, and how to tame them"*, and their subsequent story, *"The market for driverless cars will head towards monopoly"*, on 7 June 2018).

Much of this antitrust scrutiny focuses on the role of these firms as platforms, not on their use of AI per se. The feature that makes AI different is the importance of data. Firms with more data can build better AI. Whether this leads to economies of scale and the potential for monopolisation depends on whether a small lead early in the development cycle creates a positive feedback loop and a long-run advantage.

Much of economic policy for AI is simply economic policy. For the diffusion of AI, it resembles innovation policy. For the consequences of AI, it resembles public policy (the social safety net) and competition policy (antitrust). We summarise aspects of economic policy for AI in Table 1.

Although AI is like other technologies in many respects, it is unusual in a few important dimensions. Specifically, AI is both a general-purpose technology (GPT) – ie. it has a wide domain of applications – as well as an 'invention of a

method of invention' (IMI) (Cockburn *et al*, 2018; Agrawal *et al*. 2018). Cockburn *et al*. assert that "... *the arrival of a general purpose IMI is a sufficiently uncommon occurrence that its impact could be profound for economic growth and its broader impact on society.*" They assemble and analyse the corpus of scientific papers and patenting activity in AI, and provide evidence consistent with the characterisation of machine learning as both a GPT and IMI.

The implication concerns the returns to investments in AI policy design. Due to the breadth of applications, the cost of suboptimal policy design will likely be significantly higher than with other technologies – or the benefits of optimal policy greater. Furthermore, the returns to investments in policy design are not only a function of the direct effects, where AI *"directly influences both the production and the characteristics of a wide range of products and*

Table 1. Aspects of economic policy for artificial intelligence

	Policies that affect the diffusion of AI	Policies that address the consequences of Al
Policies that are distinct for Al	Privacy, liability, data accessibility	Education
Policies that are similar to previous generations of technology	Research support, intellectual property, regulatory prohibitions (enabling safe experimentation)	Business cycle, social safety net, antitrust, capital taxation

services", but also the indirect effects because "AI also has the potential to change the innovation process itself, with consequences that may be equally profound, and which may, over time, come to dominate the direct effect" (Cockburn et al. 2018).

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Authors' note: the points we raise in this column are based on Agrawal et al. (2018a), which in turn builds on discussions at the 2017 NBER Conference on the Economics of AI in Toronto and the associated conference volume (Agrawal et al. 2018c).

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World Commerce Review is pleased to announce that Bermuda has been awarded Best Digital Jurisdiction 2019.

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Best Digital Jurisdiction

European'techlash' or milestone in antitrust enforcement?

Cristina Caffarra, Oliver Latham, Matthew Bennett, Federico Etro, Pierre Régibeau and Robert Stillman argue that the European Commission's decision on Google Android has economic merit and falls within established legal precedent he European Commission's decision to fine Google €4.34 billion for abuse of market power has been accused of being politically motivated and of risking higher prices for consumers. As mobile search is the key gateway to access information, we should be concerned about dominance in this market for its potential distortionary effects on innovation and consumer outcomes across multiple other markets.

On 19 July 2018, the European Commission announced it was fining Google €4.34 billion for "[using] Android as a vehicle to cement its dominance as a search engine". The decision has already been described by various commentators (including President Trump) as politically motivated, reflecting an ongoing 'techlash' by the European competition authorities against successful (US) tech firms. It has also been accused of undermining Android's 'free' business model and risking higher prices for consumers.

This misses the mark. The European Commission's theory of harm is economically well founded and there are legitimate questions on the effects of Google's conduct on innovation and consumers.

What the Android case is not about

A few 'myths' need to be dispelled before one can sensibly discuss the merits of the Commission's analysis.

Myth 1. This is another case about Google abusing its market power in search. No. While Google has been accused of using its market position as a search engine to undermine its competitors, this case is about Google using its dominance elsewhere (the Google Play app store) to *entrench* its position in search.

Myth 2. The European Commission assumes away competition between Google and Apple. No. The 'theory of harm' is consistent with significant *retail* competition between iPhone and premium Android devices like the Samsung Galaxy. The question is not whether Android and Apple devices are in competition with each other at this

retail level, but whether this 'indirect constraint' is sufficient to undermine Google's upstream market power in its relationship with phone manufacturers. It is not.

Myth 3. There cannot be anticompetitive effects when competition is 'a click away'. No. A key question in the case is the extent to which granting a search engine or app default status results in significant changes in its level of usage. This is a purely empirical question. The evidence points to material effects.

... this is a market of real import – mobile search is the key gateway to access information, and we should worry about dominance in this market for its potential distortionary effects on innovation and consumer outcomes across multiple other markets **Myth 4.** This is the end of 'free' installation and means consumers having to pay more. It is not clear how Google will react but, even if it was to make some changes to the way Android is monetised, this is not necessarily a bad thing. If manufacturers face the true costs and benefits of choosing between operating systems and default search engines, it seems likely the outcome will be more competition and innovation in aggregate, not less.

What was the 'theory of harm' in the Android case?

Google's conduct was pursued under competition rules addressing 'abuse of dominance'. The central concern in the Android case is that Google's contracts with smartphone manufacturers made access to its Google Play app store contingent upon the manufacturers pre-installing Google's search app and making Google Search the default search engine on their devices. Google Play was not made available to consumers through any other channel – an original equipment manufacturer (OEM) who wanted to offer Google Play would have to agree to these terms¹.

The concern was that this combination of pre-installation and default status, cemented by contractual restrictions with exclusivity effects, limited the scope for rival search engines to gain traction. Search engines exhibit scale effects: in order to 'train' a search algorithm one needs a sufficient volume of data, but accessing such data requires a sufficient volume of queries.

Absent Google's conduct, a natural entry/expansion strategy for a search engine would have been to pay manufacturers for default status in order to get an initial volume of queries which could be used to improve the quality of its product and compete more effectively. Google's practices made such strategies more difficult as any search engine would have needed to compensate smartphone manufacturers for the loss of GP – something which may be prohibitively costly even for a rival with comparable, or even superior, search technology to Google.

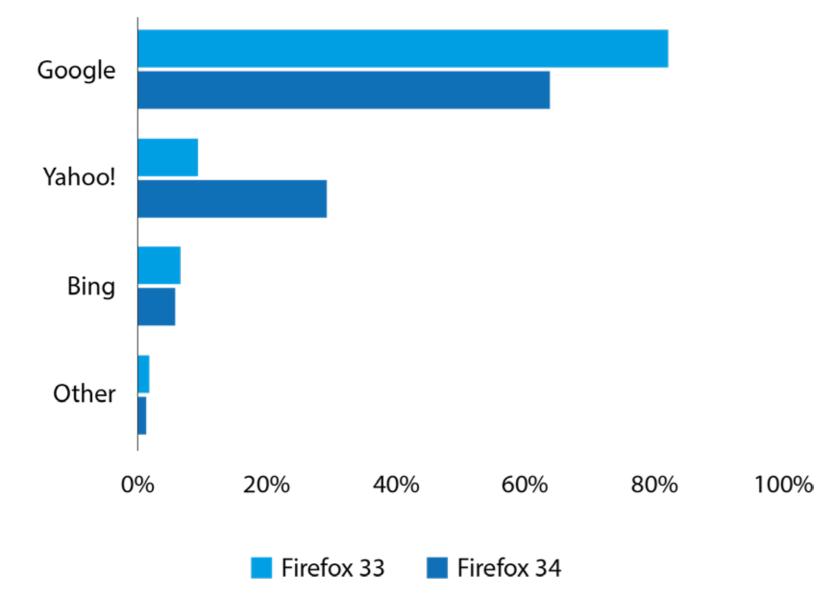


Figure 1. Impact of default status in Firefox

Source: Searchengineland.com based on Statcounter.com 7 January 2015

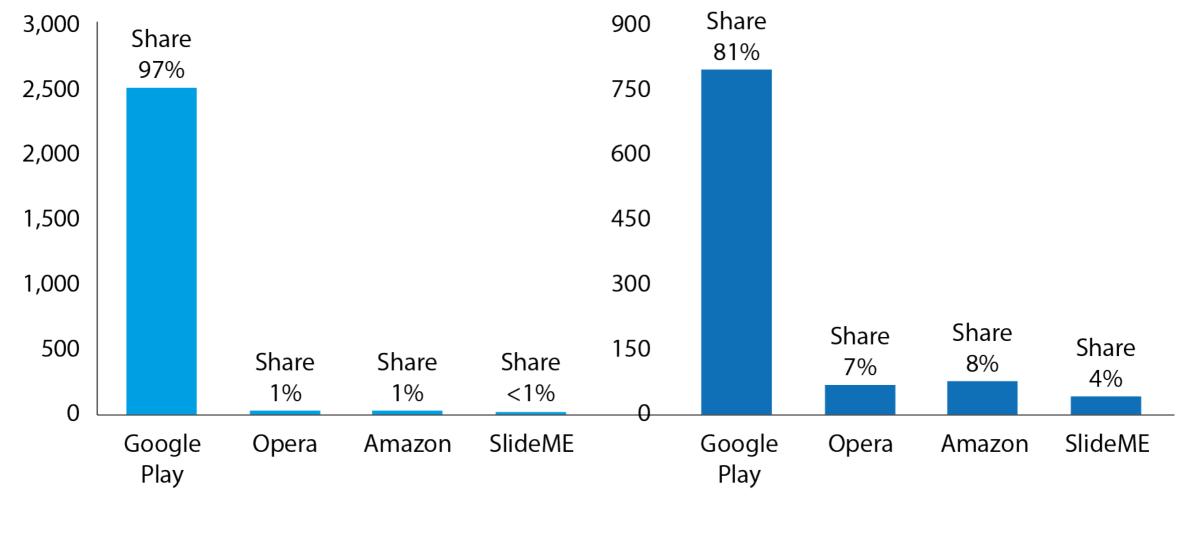


Figure 2. Worldwide download statistics for four Android app stores in 2013

Monthly downloads (millions)

Number of apps (thousands)

Source: 'Android App Store Market Overview', Onepf.org, 2013, accessed February 2015.

At the heart of the Android case therefore is a story in the tradition of the antitrust cases brought against Microsoft (where the accusation was that Microsoft was bundling its operating system and browser to prevent the emergence of rival browsers that could 'morph' into alternatives to Windows). The concern is *not exotic*, but the facts need to be shown to stack up: is Google Play in a position of significant market power? Is default status sufficiently important to 'foreclose' rival search engines? What are Google's anticompetitive incentives?

Why the Commission's case stacks up

 Default status matters. While it might be tempting to dismiss concerns on the basis that 'competition is a click away', the evidence in fact shows that default status is a powerful tool to influence user behaviour. It is significant that Google reportedly paid Apple \$1 billion for default status on the iPhone in 2014 and upwards of \$3 billion in 2017.

Why pay so much if default status is unimportant and consumers will naturally gravitate to their preferred search engine? Data on consumer behaviour also show a tendency towards 'default bias'. When Yahoo paid Mozilla for default status in Firefox 34, it saw a 20 percentage point increase in its share relative to users of Firefox 33.

- Google Pay is critical for manufacturers of Android smartphones. It accounts for the vast majority of app downloads on the Android platform as well as a large share of available apps. More generally, the evidence seems to us to supports that Android manufacturers cannot compete effectively without Google Play.
- Android is a key distribution channel for mobile search engines. Google's conduct would not prevent rival search engines from competing if they had a wide range of alternative distribution channels besides Android.

Figure 3. Indirect restraints

1. Google degrades quality of GP/increases price to Android developers 3. Some consumers respond by leaving the Android ecosystem to get an iPhone instead

OR







2. GP developers pass-on degraded services/higher prices to users (eg. by raising prices or leaving the platform) 4. Would enough consumers do this to undermine GP's market power?

?

However, Android accounts for upwards of 70% of mobile devices and the remainder primarily run on iOS where Google Search is also set as the default.

• These concerns have a strong economic pedigree. Cases of this type have to contend with the 'one monopoly profit theorem' (OMPT): why would Google choose to monetise Google Play by 'colonising' other markets rather than simply charging a higher (positive) price for manufacturers wanting to install it?

First, Google's conduct is consistent with existing models of 'dynamic leveraging' in which a tie can increase barriers to entry and preserve an existing monopoly (eg. Choi and Stefanadis 2001, Carlton and Waldman 2002).

Second, research conducted specifically with the Android case in mind has shown how the presence of 'zero price constraints' can act to 'break' the OMPT. Intuitively, because search is a two-sided market where revenue is generated on the advertising side, a monopoly search engine would ideally want to pay users to use its service. However, as paying users is impractical, a search engine may not be able to fully monetise its monopoly in search. This creates an incentive to use market power elsewhere (eg. in its app-store) to promote its search engine even to the detriment of more efficient rivals².

Is the European Commission ignoring Apple?

The Commission is being criticised for ignoring competition between Apple and Android in focusing on 'licensable' app stores. However, there is no inconsistency between this approach and the existence of material retail competition between Apple and Android devices. The decision as to whether to install Google Play/Android on a device rests with the manufacturer, not the consumer. Manufacturers cannot install non-licensable app-stores (such as Apple's). So, can *indirect competition* at the retail level undermine the hold Google has over manufacturers?

What do we mean by indirect constraints?

There are circumstances where 'indirect constraints' can negate an 'upstream' firm's market power. But the evidence points to Google Play having significant market power notwithstanding them (eg. because of significant differentiation between Apple and Android devices in terms of price/functionality, and inter-platform switching costs). Furthermore, the fact that Google was also the default search engine on Apple means that these kind of indirect constraints cannot really solve the issue of Google denying scale to rival search engines.

The European Commission's decision has economic merit and falls within established legal precedent. More importantly, this is a market of real import – mobile search is the key gateway to access information, and we should worry about dominance in this market for its potential distortionary effects on innovation and consumer outcomes across multiple other markets.

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Endnotes

1. The Commission also raised concerns about Google making access to Google Play conditional on manufacturers not installing 'forked' versions of Android but we do not consider this aspect of the case in this note.

2. See Choi and Jeon (2018) and Etro and Caffarra (2017). The latter builds on the former and explicitly considers the role of payments to manufacturers, showing that Google has an incentive to engage in a tying strategy to better extract

consumer surplus in the presence of price constraints or differentiation in consumer preferences concerning Google Play, and that such a tying strategy forecloses entry and harms consumers

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Authors' note: the authors of this column all worked on this matter on behalf of Yandex, a Russian search engine, both before the Russian FAS and the European Commission. This note does not represent the views of CRA, nor those of other CRA experts.

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Google at 20: how a search engine became a literal extension of our mind

Google's products have become integrated into our everyday lives. Benjamin Curtis argues that there are some deeply troubling issues we urgently need to address e are losing our minds to Google. After 20 years, Google's products have become integrated into our everyday lives, altering the very structure of our cognitive architecture, and our minds have expanded out into cyberspace as a consequence. This is not science fiction, but an implication of what's known as the 'extended mind thesis', a widely accepted view in philosophy, psychology and neuroscience.

Make no mistake about it, this is a seismic shift in human psychology, probably the biggest we have ever had to cope with, and one that is occurring with breathtaking rapidity – Google, after all, is just 20 years old, this month. But although this shift has some good consequences, there are some deeply troubling issues we urgently need to address.

Much of my research spans issues to do with personal identity, mind, neuroscience, and ethics. And in my view, as we gobble up Google's AI driven 'personalised' features, we cede ever more of our personal cognitive space to Google, and so both mental privacy and the ability to think freely are eroded. What's more, evidence is starting to emerge that there may be a link between technology use and mental health problems. In other words, it is not clear that our minds can take the strain of the virtual stretch. Perhaps we are even close to the snapping point.

Where does the mind stop and the rest of the world begin?

This was the question posed in 1998 (coincidentally the same year Google was launched) by two philosophers and cognitive scientists, Andy Clark and David Chalmers, in a now famous journal article, *The Extended Mind*. Before their work, the standard answer among scientists was to say that the mind stopped at the boundaries of skin and skull (roughly, the boundaries of the brain and nervous system).

But Clark and Chalmers proposed a more radical answer. They argued that when we integrate things from the external environment into our thinking processes, those external things play the same cognitive role as our brains

do. As a result, they are just as much a part of our minds as neurons and synapses. Clark and Chalmers' argument produced debate, but many other experts on the mind have since agreed.

Our minds are linked with Google

Clark and Chalmers were writing before the advent of smartphones and 4G internet, and their illustrative examples were somewhat fanciful. They involved, for instance, a man who integrated a notebook into his everyday life that

To have one's smartphone suddenly taken away is akin to having a lobotomy. Instead, to break the addiction/integration and regain our mental health, we must learn to think differently, and to reclaim our minds served as an external memory. But as recent work has made clear, the extended mind thesis bears directly on our obsession with smartphones and other devices connected to the web.

Growing numbers of us are now locked into our smartphones from morning until night. Using Google's services (search engine, calendar, maps, documents, photo assistant and so on) has become second nature. Our cognitive integration with Google is a reality. Our minds literally lie partly on Google's servers.

But does this matter? It does, for two major reasons. First, Google is not a mere passive cognitive tool. Google's latest upgrades, powered by AI and machine learning, are all about suggestions. Google Maps not only tells us how to get where we want to go (on foot, by car or by public transport), but now gives us personalised location suggestions that it thinks will interest us.

Google Assistant, always just two words away ("Hey Google"), now not only provides us with quick information, but can even book appointments for us and make restaurant reservations.

Gmail now makes suggestions about what we want to type. And Google News now pushes stories that it thinks are relevant to us, personally. But all of this removes the very need to think and make decisions for ourselves. Google – again I stress, literally – fills gaps in our cognitive processes, and so fills gaps in our minds. And so mental privacy and the ability to think freely are both eroded.

Addiction or integration?

Second, it doesn't seem to be good for our minds to be spread across the internet. A growing cause for concern is so-called 'smartphone addiction', no longer an uncommon problem. According to recent reports, the average UK

smartphone user checks his phone every 12 minutes. There are a whole host of bad psychological effects this could have that we are only just beginning to appreciate, depression and anxiety being the two most prominent.

But the word 'addiction' here, in my view, is just another word for the integration I mentioned above. The reason why so many of us find it so hard to put our smartphones down, it seems to me, is that we have integrated their use into our everyday cognitive processes. We literally think by using them, and so it is no wonder it is hard to stop using them. To have one's smartphone suddenly taken away is akin to having a lobotomy. Instead, to break the addiction/integration and regain our mental health, we must learn to think differently, and to reclaim our minds.

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World Commerce Review is pleased to announce that the Isle of Man Aircraft Registry has been awarded Best Global Aviation Registry 2019.

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Best Global Aviation Registry

The economics of the Google Android case

Alexandre de Cornière and Greg Taylor argue that the case offers a great example of the need to consider the implications of the market's two-sidedness general challenge facing competition authorities in the digital era is learning how to apply the traditional tools of competition policy in multi-sided platform environments. This column argues that the Google Android case offers a great example of the need to consider the implications of the market's two-sidedness. It also argues that bundling can, in fact, be profitable by virtue of its effect on competition once one accounts for some of the key features of mobile app markets.

In July 2018, the European Commission fined Google €4.34 billion for illegal practices related to the Android mobile operating system. A key objection raised by the Commission revolves around licensing terms that prevent manufacturers from preinstalling Google's app store (Google Play) unless they also agree to preinstall other Google applications, including Google Search and Google's web browser (Chrome).

The Commission argues that Google Play is a 'must have' feature for device manufacturers because it is by far the most important app marketplace for the Android ecosystem. Faced with the need to carry Google Play, manufacturers are left with little choice but to also preinstall the other applications in the bundle. This, argues the Commission, has significant potential to negatively affect the vitality of competition in the markets for mobile search and mobile web browsers.

Indeed, evidence suggests that the default application configuration is a key determinant of consumer choice (over 95% of search queries on Android devices are made via the pre-installed Google service; for Windows Mobile, where Google Search is not preinstalled, the figure falls to less than 25%).

In sum, concerns were raised that bundling Search with the Play store results in most manufacturers installing, and consumers using, Google Search by default, restricting the ability of rival search providers to compete on merits.

Bundling and theories of harm

Several observers have drawn a parallel between the Android case and earlier cases in which Microsoft was found to have illegally bundled the Windows operating system with its own web browser (Internet Explorer).

However, the key economic concerns at play in those cases were quite different. The consensus that emerged in the aftermath of the Microsoft cases is that bundling was motivated by a desire to foreclose competition in the web browser market in order to protect the primary monopoly, the Windows operating system (Carlton and Waldman, 2002).

A general challenge facing competition authorities in the digital era is learning how to apply the traditional tools of competition policy in multi-sided platform environments Indeed, Microsoft feared that a competing web browser might itself become a platform capable of running applications, and thus a substitute for Windows. In the Android case, by contrast, there is little fear that Google feels the need to protect the core monopoly (Google Play) from any particular threat.

Rather, the primary concern is that Google is leveraging the dominance of Google Play to achieve an unfair advantage in the more competitive markets for mobile search and web browsing applications.

This distinction is significant because it raises the question of whether Google could really profit from this kind of leverage strategy. Indeed, if Google Play is so valuable to manufacturers, Google could simply license it at a high price and let them install the search engine and browser of their choice.

This is in a nutshell the traditional 'Chicago School' line of reasoning, arguing that anticompetitive motives cannot explain the observed bundling. Later research (eg. Whinston 1990) highlighted conditions under which anticompetitive bundling can be profitable, namely, when it deters the entry of potential rivals and allows the firm to charge monopoly prices.

In the Android case, this theory is not really convincing – Google's main competitors for search and web browsing are large, well-established firms (such as Microsoft) that are growing rather than reducing their investment in the market.

Without any logically consistent theory for why bundling might lead to profitable leverage, one should lend more credence to the idea that bundling is motivated not by anticompetitive intent, but rather by the kinds of efficiency gains outlined in Google's argument.

A new theory of harm

In a recent paper (de Cornière and Taylor 2018), we show that bundling can, in fact, be profitable by virtue of its effect on competition once one accounts for some of the key features of mobile app markets.

These features are:

- the existence of revenues for developers when consumers use their applications (eg. advertising revenues for search engine apps), which induces developers to offer 'slotting fees' to manufacturers to be installed as default – for instance, Google is said to pay Apple \$3 billion to be the default search app on the iPhone; and
- a form of complementarity between applications the presence of an application such as Google Play on a device increases the demand for this device, which means that more consumers will also use this device's default search engine, generating more revenues for its developer.

Given that devices featuring Google Play sell more units, competition between search engine apps to be installed as default should result in high fees paid to manufacturers.

By bundling Google Play and Google Search, Google deprives its rivals from the potential complementarity, and reduces their willingness to offer payments to manufacturers. Indeed, search rivals would expect that any manufacturer who would install their application as default would come without Google Play, and would therefore sell fewer units. Facing less aggressive rivals, Google can offer smaller payments to manufacturers in exchange for being installed as default.

Among its objections, Google argues that bundling allows royalty-free licensing – if applications were offered on a stand-alone basis, Google would charge a high fee to manufacturers to install Google Play, which would result in higher prices for consumers.

We highlight a different effect, namely, that bundling reduces the price that Google has to offer to manufacturers for them to install its search engine as default.

The main effect of bundling is thus to shift the rent from the manufacturer to Google. This in itself is not necessarily problematic (if Google is more efficient, total welfare and consumer surplus are unaffected). The issue is that even if a rival search engine was more efficient than Google (and thus willing to bid more if they were on an equal footing), in many cases this strategy would prevent it from being installed on most devices.

Would a ban on bundling restore efficiency in this market? Our results indicate that this is not necessary. Indeed, a multiproduct upstream firm like Google could achieve the same outcome by using a strongly asymmetric pricing structure – charging a high price for Google Play, and offering a large subsidy for Google Search.

One way to prevent this would be for competition authorities to regulate application pricing, by imposing a price cap on Google Play and/or a price floor on Google Search or Chrome, a solution which has its own problems (what should be the regulated prices? How should they evolve over time?).

Conclusion

A general challenge facing competition authorities in the digital era is learning how to apply the traditional tools of competition policy in multi-sided platform environments. Economists have consistently argued for a rational approach that acknowledges specific forces that arise in two-sided markets.

The Android case offers a great example of the need to consider the implications of the market's two-sidedness. A one-sided analysis might raise doubts about the potential for anti-competitive bundling in this environment. But acknowledging the two-sidedness leads us to a new theory of harm (Choi and Jeon 2016, Caffarra *et al.* 2018).

Indeed, the hallmark of a platform is that one side of the market (eg. app developers) benefit more (eg. through app revenues) from a platform that has many members (eg. consumers) on the other side. It is the existence of this benefit and its sensitivity to the popularity of the platform with consumers that is the key to the reasoning outlined above.

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Best Aviation Association

The Digital Freedom Pass: emancipation from digital slavery

Dennis Snower argues for reform in the form of a Digital Freedom Pass. The person can then choose which identification to share, with whom, and when, allowing emancipation from our current digital slavery igital identity management is currently undertaken by central identity providers, with users providing their data free to digital networks that own their digital identities. If users leave their digital networks, they must leave all their digital possessions, including their digital identities, behind. This system is analogous to slavery. It is neither efficient nor equitable. Users have no assurance that the value of the free data they provide bears any relation to the value of the free services they receive. The digital networks have overwhelming market power relative to their users.

Imagine a new form of slavery – call it slavery 2.0. Slaves provide free labour for their owners; in return, the owners give them free food, clothing and shelter. Furthermore – and this is the new twist – slaves are free to leave their owners whenever they wish, but when they do so, they must leave everything behind – their belongings, their friends and acquaintances, their reputation and all other external aspects of their identity. Would a labour market built on this system be considered efficient and equitable?

The obvious answer is: silly question, of course not! But this silly question turns out to be supremely important for us nowadays, because in the digital world we are all slaves 2.0. We provide information about ourselves for free. This free labour enables digital networks – such as the 'Big Five' (Apple, Facebook, Amazon, Google, and Microsoft) – to amass vast fortunes.

In return, we receive free apps and other internet services. We are free to leave any networks to which we belong, but when we do so, we must leave everything behind – the information about us, our contacts, our ratings, our digital identities on those networks. We have no property rights on the data we generate, and only by generating such data can we derive benefit from our digital networks. This relationship between the digital networks and their users is digital slavery 2.0.

An inefficient and inequitable system

This system is inefficient, since economic markets cannot generate efficiency when the commodities transacted – information about individuals in return for some free internet services – are free. It is analogous to old-style slaves providing their free labour in return for free food, clothing, and shelter. There is of course no guarantee that, for every individual, the marginal value of the free internet services is equal to the marginal value of the users' information.

A comprehensive solution – offering true emancipation – is feasible. We have the knowledge and technology to implement it. All that is required now is political will On the contrary, we have every reason to believe that the value of the information supplied by users to the network owners far exceeds the value of the internet services that the users get for free – much like the marginal value of slave labour far exceeded the marginal value of the food, clothing, and shelter that the slaves received. People with high skills in generating valuable data have no incentive to employ their talents for this purpose if data are supplied for free. Costless data also gives people no incentive to develop skills that could improve internet services¹.

These inefficiencies are tolerated by the digital network providers, since what they lose from these inefficiencies they make up handsomely through the market power gained through digital slavery 2.0. Hal Varian, the chief economist at Google, argues that data nowadays are plentiful and thus virtually worthless, whereas the designers of the networks are scarce and thus generate most of the value of the digital network services.

This argument is self-serving. It is analogous to arguing that slave labour, in the heydays of slavery, was plentiful and that most of the value was generated by the designers of the slave plantations. It is impossible to assess the marginal contributions of data users and network designers when one of these groups works for free. Furthermore, as Posner and Weyl (2018) note, it is far from clear that the marginal value of the data generated by network users declines with the amount of data, given that the data are used to handle more and more complex problems (such as face and emotion recognition and predictable cognitive processes).

The system is also inequitable, since the owners of the digital networks wield overwhelming power. They own the access to the digital data on which their users rely, much as old-style slave-owners owned the access to their slaves' basic necessities. The fact that the slave-owners provided something of value to their slaves did not make the exchange of slave labour for basic necessities equitable. The slave-owners were in a position to exploit their market power to their own material advantage, much like the digital networks nowadays are doing.

The solution: digital emancipation

There is a straightforward solution to this monstrously unjust and wasteful system: digital emancipation. Just like the emancipation from old-style slavery gave the slaves property rights over their own services, so emancipation from digital slavery must give users property rights on the data they generate.

Since users currently don't have property rights on their data, they generally don't know how their information is used. They are subject to manipulative advertising that exploits their data. They are vulnerable to attack by hackers. They are largely powerless in the hands of global digital monopolies. They are vulnerable to digital automatisation, enabling machines to take over the routine work they perform, without giving them the opportunity to put new, user-generated work in its place. All these problems could be overcome by giving digital users property rights over their services.

A small but growing number of insightful policymakers are calling for this reform. Recently, at the Global Solutions Summit, Chancellor Merkel suggested that digital data be priced and users be able to sell their data. It is not worth being half-hearted about this reform – improving data protection, granting users more information about how their data is used, etc. – though doubtlessly there will loud voices from the digital special interest groups calling for half-heartedness.

A comprehensive solution – offering true emancipation – is feasible. We have the knowledge and technology to implement it. All that is required now is political will.

The solution could be called the Digital Freedom Pass (DFP). It involves giving each person the digital equivalent of a wallet that contains verified pieces of his or her digital identity. Specifically, it gives each person a private key for an unlimited number of recipients, who can access the encrypted data only if they possess the corresponding

public key. The person can then choose which identification to share, with whom and when. This makes the person 'sovereign' over his digital identity, commonly called 'self-sovereign identity' (for excellent summaries, see Der *et al*. 2017 and Tobin and Reed 2017).

In the tech world, a 'digital identity' is information about an entity (for example, an individual) that represents that entity. The digital identity arises from the use of personal information and the actions of individuals on the web. In the real world, you are the provider of your own identity, since you generate the characteristics that enable others to recognise you. On the internet you have an 'identity provider', who provides you with an identifier (often a password) in a specific domain that proves that you are you.

Currently, identity providers focus on those of your characteristics that are relevant to the organisation and its objectives, without independent regard to you and your objectives. These identifying characteristics belong to the organisation, not to you. Consequently, you wind up with a large number of online personas at a large number of different organisations. By contrast, a 'self-sovereign identity' puts your identity into your own hands.

Digital identities need to be 'secure', which means that they pass requirements of privacy and trustworthiness. 'Privacy' means that only authorised recipients can access your digital identity; 'trustworthiness' means that the information contained in your digital identity is correct. The Cambridge Analytica scandal and other misdeeds suggest serious problems concerning privacy. The absence of authoritative background checks for much of the information that users provide to the digital identity providers creates problems of trustworthiness.

Prerequisites for achieving digital emancipation

Self-sovereign identities put the individual in control of his or her digital identity, giving her full access to her own data – something that is virtually unheard of under the current digital regime. An individual's digital identity

needs to be persistent, portable, interoperable, and secure (see Allen 2016 for a more detailed description of these requirements). These are all recognised to be important prerequisites for the achievement of freedom in the digital space.

Since individuals are in charge of their digital identities, they will need to take responsibility for satisfying these prerequisites themselves. In order for people to do so, they will need public support in managing their digital identities. For example, they will need to have access to convenient digital sources of evidence for the correctness of their information they provide and receive (through digital signatures of third parties to prove authenticity)², procedures ensuring transparent consensus concerning the content and conduct of transactions, and systems ensuring consistent usage rights for the individual's data.

The implementation of such systems can draw on decentralised ledger applications such as blockchain (which verifies the accuracy of one's data decentrally, as it does for Bitcoin) and smart contracts (eg. Jacobovitz 2016, Meitinger 2017). These applications permit us to look up decentralized identifiers without involving a centralised directory. They allow people to authenticate their data about themselves by using decentralised, verifiable credentials.

Since digital identities are meant to function across legal jurisdictions, it will be vital to specify an international legal framework relevant to each transaction. For this purpose, the EU General Data Protection Regulation (GDPR) uses the principle of Lex loci solutionis, in which transactions are associated with the citizenship of the individuals involved.

What I refer to as the Digital Freedom Pass covers the entire constellation of self-sovereign identities, along with supportive technologies and legal systems, and standardised interfaces. The DFP makes users central to the

administration of their identities. It enables users to use their identity across multiple locations, but only with their consent. Since decentralised identities are difficult to access, they are also difficult to hack.

The prerequisites for the establishment of the DFP require public support, much as governments were required to build the internet and give people access to it. Meeting these prerequisites should be easier, cheaper, and much faster than the large public efforts of the past, such as building water, rail and road networks during the Industrial Revolutions. All that is required is the appropriate political will.

Such a scheme has already been conceived and is running in some limited domains. OpenID, an open standard and decentralised authentication protocol, allows users to control their personal data by enabling them to be authenticated by other users without the need for external identity providers.

ID2020 is a public-private partnership aiming provide every person on earth with access to a personal, private, secure, persistent, and portable digital identity (ID2020 2017) in support of the UN Sustainable Development Goal, Target 16. The DFP could drive such initiatives. The Swiss municipality of Zug has introduced a distributed leger system to implement self-sovereign identities for its residents. Microsoft aims to support decentralised identification technology through Microsoft Authenticator.

The DFP provides a basis for the sale of user data to digital companies. The proceeds from such digital sales could be taxed and the revenue used to extend and upgrade internet access, as well as to reduce the cost of internet access for disadvantaged groups.

But the DFP will not happen by itself. There are too many digital companies with vested interests in maintaining control over their users' data. Slavery also did not disappear by itself. For the DFP to be successful, it needs broad

adoption. For broad adoption in the EU, it must be made a legal requirement for the EU. The DFP could play a central role in the creation of a European digital single market and is consistent with the DGPR. Progress on this front could put the EU at the vanguard of a movement to emancipate people worldwide from their current digital slavery.

The rise of powerful digital monopolies – linked to the rise of inequalities in major market economies, large-scale manipulation of digital users for political purposes, and the widespread inability of digital users to grasp the business purposes that their data serves – threatens to undermine market economies and democratic processes. The DFP would spearhead a reversal of these alarming trends, since it would give us property rights over our most important possession – information about ourselves – and thereby would give us our most valued freedom in the economic realm: the freedom to choose.

Dennis Snower is President of Kiel Institute for World Economics and CEPR Research Fellow

Endnotes

1. These and other sources of inefficiency are explained in the insightful book Radical Markets, by Posner and Weyl. 2. For details on how this can be done, see Rannenberg et al. (2015).

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Be more trusted

World Commerce Review interviews Gerhard Oosthuizen about the exciting future for payment enablement technologies

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South Africa. Entersekt are leaders in authentication, app security, and payments enablement technology, offering a highly scalable solution set with a track record of success across multiple continents.

Gerhard provides the organizational and operations heft to turn vision into reality. His role at Entersekt represents the CTO function in its purest and most exciting form. Entersekt's purpose is to design and build high-performance, market-leading software and support systems for an international customer base with extremely high expectations.

Please describe the background to Entersekt.

Entersekt started back in 2009, with a team of only five. Our aim was to become a world leader in the mobile security industry. We're now a global company of more than 130 employees, with clients in Africa, Europe, and the United States. Our goal is to stay ahead of the fraud curve, which so far, we've succeeded in doing remarkably well. By anticipating future threats and changes in the market, we're able to provide our clients with solutions that not only protect them, but give them the freedom and ability to innovate, unhindered by fear of digital crime.

What key advantages does it (scan-to-pay) offer?

When you get to a store to shop with plastic, you take out your banking card and the merchant will accept it. It's straight-forward, and everyone involved knows what to do. When you want to make a mobile payment, there's still a lot of confusion. You are often left uncertain as to which third-party app you should use. Some merchants even support multiple companies' QR codes, further complicating the matter. To make a payment using your mobile, you have to:

- Download the right third-party app
- Register as a user
- Load your card information

At every one of these steps, there's a high chance that you'll give up and use your card to pay instead.

With scan-to-pay, our goal is to make mobile payments easy. We've designed this feature to appear in the mobile banking app, which means that there is no new app to download, nothing to register, and your card is pre-loaded. This feature is immediately available to all users of the banking app, increasing the amount of people able to

transact using this method. All the customer does when they get to the store is scan the QR code. Irrespective of what code it is, our scan-to-pay offering will resolve it, and allow you to pay in a secure, convenient, and consistent way.

How is the m-commerce/e-commerce market developing?

Mobile payments are now a top three consumer priority for banks on a global stage. QR codes are being standardized (with EMVCo having recently published a new standard). Tokenization and 3-D Secure 2.0 will be key focus areas for card associations. As such, we believe these measures will become major factors in e-commerce acceptance.

How will the technology benefit the retailer and customer?

The retailer will have the potential to learn more about the user. The technology is, of course, also incredibly secure and, with risk or liability reduced, there are lower fees.

For the consumer, their shopping experience will become more convenient – no 3-D Secure pop-up that requires an OTP, just a simple in-app push notification that will prompt you to approve your transaction. They also benefit from knowing that their payment experience is as secure as it is seamless, which in turn benefits the retailer – when customers trust the experience, they tend to transact more freely (and frequently). In the future, technology like this will also offer the ability to hook into instant loyalty programs and offers.

Is the market truly global or fragmented?

It's still quite fragmented. Our approach is to at least create a consistent experience for the consumer. Market forces will, however, eventually drive financial institutions and other payment providers towards global standards, and we help to enable that in the markets we play in.

What is the future of this technology, and what should we look out for?



There's so much possibility once you have the consumer and merchant directly connected. Some of what I can talk about is instant enrollment at ecommerce merchants, automatic loyalty discounts, and instant insurance (on items just purchased). Imagine a world where you did not need to register at every merchant website and did not have to swipe your loyalty card every time you get to the store. Imagine paying via email address instead of having to get banking details from the third party, adding a beneficiary and then paying... there are certainly a lot of exciting opportunities and possibilities on the horizon. World Commerce Review is pleased to announce that Hermes Aviation Consulting has been awarded Best Aviation Consultancy 2019.

The World Commerce Review awards celebrate achievement, innovation and excellence across several fields of endeavour. Our award programs are tailored to provide a comprehensive analysis of the very best in each market.

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The selection panel took into account product innovation, on-going customer support and best practice criteria as well as a continuing commitment to deploying the best possible solutions for the benefit of their clients.



Best Aviation Consultancy

Central bank digital currency: why it matters and why not

The potential benefits and risks of digital central bank money for use by the general public have been widely debated. Dirk Niepelt looks at the consequences of substituting outside for inside money ar into the 20th century, central banks commonly offered accounts not only to a select group of financial institutions but also to non-banks. This liberal approach has given way to a monetary arrangement where access to electronic central bank money('reserves') is generally restricted to banks. When households or non-financial firms pay electronically, they use privately issued money (eg. bank deposits), not central bank money.

This arrangement is increasingly being questioned. Following Tobin (1985), many have proposed a form of digital central bank money for use by the general public– 'reserves for all', or RFA – and have debated potential benefits and risks¹. The discussions typically lack a model, and fundamental economic issues often remain obscure while questions regarding technical implementation (eg. crypto or not) receive a lot of emphasis. The key macroeconomic aspects of central bank digital currency– namely, the consequences of substituting outside for inside money – remain under researched.

Equivalence

In a recent paper, I propose an equivalence result to help shed light on the seconsequences (Niepelt 2018). The proposition is in the spirit of Modigliani and Miller (1958), Barro (1974), Wallace (1981), or Chamley and Polemarchakis (1984). Its purpose is to provide a benchmark, not the most realistic description, in order to identify key conditions for equivalence, and thus potential sources of non-equivalence. The macroeconomic perspective I adopt emphasises balance sheets and budget constraints. It contrasts with partial equilibrium intuitions inspired by models in the tradition of Diamond and Dybvig (1983) which underlie many arguments in the debate.

The basic intuition for the result is as follows. Inside money serves as a store of value and a means of payment. RFA can equivalently serve these functions if they are accompanied by fiscal interventions. Inside and outside money

thus can be substituted against each other, subject to appropriate fiscal interventions, without macroeconomic consequences.

Store of value

Whether the central bank issues outside money or the banking sector inside money is irrelevant for aggregate wealth. It might, however, be relevant from a distributional point of view, for example because inside and outside money have different payment characteristics. But distributive implications can be sterilized by appropriate transfers.

'Reserves for all' could increase the incentive to extend credit but might undermine political support for implicit financial assistance to banks. However, the effects need not be disruptive What about 'crowding out'? Inside money is both a private sector asset and liability and therefore does not increase private sector wealth. Outside money, in contrast, constitutes a private sector asset and public sector liability. Does this imply that outside money absorbs private savings that otherwise would have funded physical investment? No, because taxpayers ultimately are responsible for covering public deficits, public debt (including outside money) does not increase private sector net worth (Barro 1974).

At the aggregate level, the crowding out argument is therefore invalid unless it relies on fiscal myopia. At the disaggregated level, crowding out certainly may occur when issuance of outside money or other forms of public debt redistribute tax burdens across groups with different propensities to save. But this redistribution can be offset by appropriate transfers.

Means of payment

For outside money to replace inside money as a means of payment, banks could sell a corresponding amount of assets to the central bank in exchange for reserves. In effect, banks would replace loans or securities on their balance sheets with reserves and a share of their deposits currently used for payments would be 'backed' by these reserves – a situation akin to having non-banks use reserves as means of payment. The extent of 'maturity transformation' in the banking sector would be reduced.

This would again have distributive implications because banks would earn a lower spread on their assets net of liabilities. To offset these implications, the central bank could refund to banks their lost seignorage profits such that, on net, banks' profit streams would remain unchanged. The modified balance sheet structure of banks and the compensating transfers from the central bank would render explicit what is implicit in the current monetary system: the lender of last resort (LOLR) guarantee provided by the central bank, and the value of that guarantee².

The process of credit extension would not change. Banks would continue to screen and select projects that receive financing before selling the loans on to the central bank or using them as collateral to obtain central bank loans.

Non-equivalence

The equivalence proposition relies on a series of conditions. Probably the most important ones relate to bank and central bank incentives.

Banks

Changes in the balance sheet structure of banks could affect the incentives to exert screening and monitoring efforts. How strong this effect would be, and whether it would result in stronger or weaker incentives, is unclear as this would depend on the regulatory framework; after all, depositors do not currently play a meaningful monitoring role but mostly rely on the government. If banks reduced their efforts and adopted an originate-to-distribute business model, then this could work in the direction of relaxing credit standards and originating more rather than fewer loans – just the opposite of what many commentators fear.

Central bank

Once an equivalent change of fiscal-monetary policy renders the implicit LOLR guarantees explicit, the political support for them would likely change – the equivalent fiscal-monetary policy would no longer constitute an equilibrium policy. Whether the support would rise or fall depends, among other factors, on the degree of competition in the banking sector.

Time consistency would leave its mark as well (Kydland and Prescott 1977). Fiscal-monetary policy in the current monetary regime is time consistent, by definition. In a regime with less inside money, the ex-post incentive

compatibility constraints of policymakers would change because the state variables determining their choice sets evolved in different ways.

What lies at the root of the ex-post incentive constraints in the current regime – namely, that private money creation puts the central bank at a second-mover disadvantage and effectively forces it to serve as LOLR during liquidity crises – could change when less inside money is issued and transfers become explicit.

Another potential source of non-equivalence concerns asset management. Under the assumptions underlying the equivalence proposition, the central bank would not directly intervene in the process of credit allocation but refinance banks at the same conditions as it currently does as a LOLR. But whether this would be politically sustainable is questionable. Credit extension could rather become more politicised and this might change investment.

Conclusion

The proposal to issue digital central bank money for use by the general public enjoys surprisingly strong support among finance practitioners but equally often faces scepticism, particularly in central bank circles. A typical line of argument put forward by the sceptics emphasises that the traditional approach has served us well, and that a change of regime could have disruptive effects.

But the 'traditional approach' has evolved over the years and will continue to evolve; and in the absence of a clear counterfactual, it is difficult to assess whether it really has worked 'well'. Moreover, from a macroeconomic point of view, RFA need not have disruptive effects and if it does have such effects, they might well occur in other areas or

have different signs than what is commonly suggested. For example, RFA could increase the incentive to extend credit but might undermine the political support for implicit financial assistance to banks.

Dirk Niepelt is Director of the Study Center Gerzensee and Professor at the University of Bern

Endnotes

1. See Niepelt (2018) for an overview over contributions to this debate as well as to related discussions on narrow banking and the future of cash.

2. Again, there are parallels to public debt whose dominant component in many countries is implicit.

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Data quality - the lifeline of successful Al adoption

Al requires large amounts of data to drive the decision-making processes. Jan Hanika finds that a successful deployment of Al also requires a suitable information infrastructure rtificial intelligence (AI) is improving quickly and we are moving rapidly towards a future where technology can complement and augment human capabilities. That means it will soon outperform humans in providing many services, but AI requires large amounts of data to drive the decision-making processes that use machine learning applications.

This is an advantage for the financial services sector which has a long history of accumulating and utilising information. The challenge though is, as the old saying goes 'garbage in – garbage out'. That is particularly true of machine learning which takes in raw data and converts it into something useful and so needs the right data 'in', to get the right insights 'out'.

Early adopters of AI have applied machine learning to very large data sets where algorithms can detect patterns and learn how to make predictions and recommendations by processing data and experiences. High quality data, however, is vital to the success of this process, and the potential of AI won't be realised if firms continue to capture data based on out-of-date analogue business processes.

Just being an early adopter is not enough, successful deployment of AI also requires a suitable information infrastructure and a recognition that AI will not fix the loopholes in existing information logistics system. If the infrastructure was originally built to support analogue processes, companies will run into problems, not to mention frustration and lack of trust from leaders when the output is inconsistent. You can build an amazing house, but if your foundation, in this case data, is faulty, it will not matter how well the house was built.

Assuming that the use cases of the AI machine are in place, companies need to decide what data to feed the machine. To define, gather and process that data effectively, they need to set up a governance framework and think about strategies to ensure the completeness and accuracy of the data.

Good data governance is about multi-disciplinary responsibilities

That governance framework is a pre-condition for sound information logistics. The board and senior management can then promote the identification and management of data quality risks and deploy adequate resources to tackle them. It is also important to recognise that the design, build and maintenance of information architecture and the supporting IT-infrastructure is just as important for internal as for external services. To break through organisational silos, responsibility for data ownership and quality assurance needs to be cross-functional and rest in multi-disciplinary teams.

The ability to generate accurate and reliable data that supports internal and external services is the core ambition for most businesses

Complete data means looking in unexpected places

Once a governance structure is in place, an audit of data completeness should take place. To deliver the greatest insights, AI needs data from across a range of functions and multiple sources across the organisation. This needs to include dark data – the hidden data sources that can bring added business value.

Accessing this dark data may mean tapping into the large amounts of information found in excel spread sheets, or unstructured data such as communications (for example phone, mail, chat or the digitalisation of documents that have been archived). To mitigate the risk of human errors, data aggregation should, where possible, be automated, making it important to check the level of automation of processes, especially repetitive ones involving substantial amounts of data.

Accuracy by engineering the single point of truth

The ability to generate accurate and reliable data that supports internal and external services is the core ambition for most businesses. But without a unified process and sound metrics there will be a gap in data orientation, making it difficult to detect which data is 'white noise' and which is genuinely valuable. Inconsistent labelling due to a lack of data models and standards between systems in the company is usually the cause of this confusion.

Another problem is that business rules might have been implemented inconsistently, making it difficult to understand how data is changed while processed. The result can be an unnecessarily complicated architecture, often referred to as 'hairball architecture'. The opposite, and most desirable, option is to create a centralised information architecture where standardised data is collected and entered only once to provide a single version of the truth.

The cost of erroneous data in decision-making can be extremely high and employing departments to analyse information and make corrections is costly and time consuming. It also means organisations can become much slower to change, for example in response to competition, service innovation or new regulations. Implementing a principle of having one version of the truth simplifies the management of the data and keeps quality consistent over time.

There is no shortcut to high quality data. Hard work and focused investments are needed to get to the root cause of any issues. This is often forgotten when AI projects are initiated but as the project develops, companies will face escalating budget demands to fix data issues lower in the pipeline. As in building a house - it's better to start with the architectural plans, rather than the interior design of the penthouse.

No substitute for becoming totally digital

It is not possible to leapfrog a fundamental digitalisation journey and go straight to AI-enabled decision-making. The scale of investment in technology and people required can be huge, but a fundamental digitalisation transformation is needed before AI decision making can be enabled. As the industry is facing an increasingly competitive environment with pressures on margins, downstream cleaning and cleansing of data will not be economically viable.

Al is just one of many new technologies that can deliver more value to external and internal customers, but they will only create value if the data that feeds them meets their needs. Firms cannot prepare for Al by looking at the symptoms of data problems, they need to address the root causes of any poor data quality.

So in summary, there are three critical steps needed to build a robust framework that enables true digitalisation and AI applications. The first is to build a cross disciplinary data governance framework that has the authority

and budget to implement change. The second is to carry out an audit of data completeness throughout the organisation to understand what and where data is, including dark and unstructured data, and promote automation for data aggregation.

Finally, organisations need to move toward a centralised system architecture where the goal is that standardised data is collected and entered only once. These steps may be costly and they will take time. But if these fundamental changes are not made, organisations will just be putting band aids on a broken system.

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For more information, visit www.paconsulting.com/industries/financial-services/

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Brian Stuart-Young International Banker of the Year

Patents, intellectua property rights and their social utility

Deepanshu Mohan examines the structure of intellectual property, patent inflation and what can be done to cultivate innovation "A wise (wo)man will always allow a fool to rob her/him of ideas without yelling 'Thief'... If (s)he is wise, (s)he has not been impoverished... Nor has the fool been enriched The thief flatters us by stealing... We flatter her/him by complaining."

Ben Hecht, A Child of the Century¹

he imperative to innovate and cultivate a creative environment in a large working age population like India throws a number of policy-centric questions across a wide range of subjects. These feature deliberations around reforms in education policy; creating direct incentives for enhancing self-entrepreneurial opportunities within/across centres of learning; facilitating an ease of entry for new firms within tech-based innovation sectors; and, ensuring protective measures for potential innovators through intellectual property rights.

How the 'wise' (borrowed from the quote above) may protect their and others capability to innovate against those categorized as 'thieves'? To what extent a highly IPR regulated society may affect creative capabilities amongst individuals? This essay discusses some of these questions on the social utility of IPR regulations with a greater emphasis on one of the aspects of IPR ie. patents- which in the context of India- can be identified as one of the emerging areas of analytical scrutiny.

Before getting into the details of patenting and its relationship with social innovation, let's start with the basic conceptual structure of intellectual property. One can define Intellectual Property (IP) as "the creations of the mind that include inventions; literary and artistic works; designs and symbols etc. used +in commerce".

Protected in law, IP takes many regulatory forms as patents, copyright, trademarks and trade secrets. The historical objective of IP (observed for centuries) more or less has been centered on balancing the interest of the innovators

by protecting their innovation and giving them the opportunity to profit from it with the given needs of the society, at a given time.

It is in this regard one often tends to observe a conflict of interest emerging from innovators who may tend to use regulatory mechanisms under IP laws to maximize their own interests (say, consolidate or expand their market position and profit share) as against those advocating the social value and utility of certain innovations for a greater common good.

Whether it is patents or any other regulatory form of intellectual property, it is pertinent to acknowledge the role of IP as a *necessary evil* for stimulating pathways of research and development by providing a protected income incentive for the innovator In this context, one of the most debated aspects of IP laws remains centered on regulatory aspects such as patenting and the nature of its effectiveness in both - promoting and protecting innovative capabilities of individuals.

A patent guarantees its holder an exclusive right through a monopoly on the use of the knowledge it generates. The grant of a patent includes a defined period (usually, twenty years from the date of issue but can be longer), after which the knowledge may fall into the public domain. Three simplistic criteria determining the patentability of an innovation usually feature: a discovery that is not obvious (non-obvious); that, may not be covered by 'prior art' (novelty) and must be seen to be useful (usability).

As argued by Jean Tirole (2016) - "Patenting is a public process and allows patent holders to manage their intellectual property as they wish, for instance to sell exclusive licenses if they do not want to exploit the innovations themselves".

Developing trends in (new) patent regimes

The historical practice of patenting can be dated back to ancient Greece, later spreading to parts of Florence, Venice by the fifteenth century. Over the last three decades with a rapid expansion of businesses in form of global multinational companies and increased awareness about IP rights, we have seen a patenting inflation (substantial increase in patent applications and grants) particularly in countries like the China, United States, Japan, Germany etc.

This considerable increase in applying and granting patents can be traced to several reasons. First, there have been incentives for patent offices to facilitate this, particularly within the US where before the America Invents Act of 2011, the Patent and Trademark office was indirectly encouraged to grant patents rather than to refuse them.

Second, governments have more often than not, broadened the definition of 'patentable inventions' to include biotechnology, life sciences, software programs and business methods.

Third, with rapidly expanding forces of economic globalization and oligopolization of market segments, big corporations are gaining control of emerging market spaces and using sovereign patenting laws to consolidate their competitive advantage in a given market (as seen in countries like China, South Korea).

In the Indian context one observes a contrarian scenario ie. is of low patentability of innovations in spite of a rising number of patent applications recently. A combination of factors: administrative glitches in examining the quality of patents filed (due to a high workload of patent examiners); low levels of public R&D spending and a lack of information on patenting traditional knowledge forms (say, in pharmaceuticals)-paint a picture of a *low tech-based innovative capacity* in India's manufacturing and service sector (including the IT sector that employs a massive, skilled labour force).

While it may be useful to understand the reasons for a low case of patentability of innovations in India, perhaps, a more important question here could be to see if increasing patent applications and patent grants actually increase innovative capacities within/across commercial activities (in case of other countries) or how an increase in patenting may produce counter-productive effects.

The latter seems true when we carefully analyze the case of countries like China and the US which witness the highest degree of patent inflation, projecting considerable (adverse) effects for innovators and the socio-business nature of a given commercial activity.

Counter-productive effects of patent inflation

The economic consequences of a high degree of patent inflation echo substantial effects. Some patents have the potential to capture economic value without representing a major advance for society. Say, the Amazon's 1999 US patent on '1-Click Ordering' which protected Amazon's sole use of the idea that an online retailer could keep information about customers (on billing, delivery addresses, credit card details etc.), so, that it does not have to ask for them again and again when the customer makes the purchase.

In terms of any benefits accrued from such aspect of patenting which featured legal costs (involving court casesincluding one in 2007), this particular patent fulfilled a much lesser societal value. Websites reflect an absurd list of patents applied for in recent applications.

Another effect of *patent inflation* today is with respect to the multiplication of 'gatekeepers for a given technology', reflecting a high accumulated amount of licensing fees that is subsequently imposed on users. This is particularly relevant in the case of biotech and software sectors, which feature a multitude of patents held by different owners (becoming the 'gatekeepers for a given technology'). Such patent thickets lead to an accumulation of royalties that have to be paid for licenses by users and further distort input-output costs of production involved.

To deal with such a problem of *'royalty accumulation'*, competition authorities are trying to encourage the use of patent pools- seen as agreements among different firms to jointly market licenses for a group of patents related to the technology concerns and belonging to given members of the pool. Patent pooling is effective as far is it allows technology users to acquire a comprehensive license and restrict patent-competition. The formation of such patent pools allow what some economists term as *'coopetition'* (an amalgamation of 'cooperation' and 'competition'). Unfortunately, such an activity of patent pooling also gives firms (involved in pooling patents), an opportunity to raise prices tacitly by colluding (termed *tacit collusion*).

What can be done?

"When we think of an economic problem, the first answer that occurs to us is not always the correct one." (Tirole, 2016). It is difficult to offer any uniform prescriptive solution to a very case sensitive and situation-dependent problem which is often the case in analyzing most IP related cases (in patenting or otherwise). Perhaps, this is exactly what makes the subject of IPR more complex particularly in times when global value and supply chains are deeply interconnected due to the effects of digitization with the phenomenology of markets reflecting complex network effects.

For example, in case of information technologies where users of technology have to coordinate if they want to interact, it may be easier to set specific standards to ensure for example, app developers of a certain smartphone conform to some technical standards set for Apple's iOS or Google's Android. Here, a standard-setting organization that is (cap)able of considering alternative technological approaches involved in a given commercial activity can then establish a standard with a given set of functions (for users, tech. developers etc.) to incorporate into their technological choices.

Nonetheless, standard setting process can enable a monopoly rent seeking behaviour amongst big corporations which is a common problem. When standards are breached, court cases proliferate, legal costs go up and quite often the courts (or regulatory authorities) lack the information to make a 'reasonable' decision.

Cultivating institutions of innovation

From an economic standpoint, technology-based innovations in any stage of development in a society require two things: *innovators* and *finance*. Unless the state and other regulatory agencies are able to nurture an environment for ensuring a right balance of incentive structures for both, the interests of innovators will perpetually outbalance the needs of the society (than the other way round).

An imagination to foster innovation puts more emphasis on role of universities and other advanced research institutes (than corporations per se) in facilitating a high-quality training of young individuals, pursue state of the art research and encouraging self-entrepreneurial opportunities. Incentives matter more in this regard than uniform regulatory prohibitions.

If the ultimate objective is to cultivate an environment of innovation or in Schumpeterian language promote 'creative destruction' where new innovations drive out old innovations, it is important to avoid any uniform, policy-based prescriptions on matters of intellectual property (at least, in case of patenting).

From the perspective of India where most markets are in a nascent stage of evolution, any radical effort made to significantly control or regulate pricing while restricting entry possibilities of young (self-started) firms is likely distort to incentive structures, proving to be counter-productive to the innovation cycle.

Whether it is patents or any other regulatory form of intellectual property, it is pertinent to acknowledge the role of IP as a *necessary evil* for stimulating pathways of research and development by providing a protected income incentive for the innovator.

However, the actual evidence to check whether IP (and the law or policy protecting it) leads to the desired goal of enabling innovation within any given commercial activity must qualify to a periodic process of scrutiny to understand what kind of regulation works and doesn't work-particularly for economies transitioning across different stages of economic and social development.

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Endnotes

1. The quote has been slightly modified to make the author's point more gender inclusive.

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What should the EU do about the Turkish currency crisis?

The Turkish lira has been under significant pressure in recent weeks. Grégory Claeys and Guntram Wolff discuss the EU's exposure to possible crisis in Turkey and how the EU should react

What is the problem?

The Turkish lira has lost more than 30% of its value against the US dollar since the beginning of this year. After the political escalation of tensions between the US and Turkey and the increase in tariffs on some Turkish imports last week, the lira was temporarily in free fall. The situation seems to have stabilised now, but there are still significant questions on the economic situation.

Turkey has, according to the IMF, about 23% of short-term external debt – ie. about \$180 billion of external debt – mostly from non-financial corporates that needs funding. The IMF has warned of the overheating economy for some time and called for more caution on the fiscal guarantees on banks' loan programmes and other implicit liabilities. Nevertheless, Turkey's public-debt-to-GDP ratio is limited to around 28% and the deficit is above 3%. The current account deficit is above 5%. So the overall numbers indeed suggest that a correction in macroeconomic policies is needed.

It is too early to say that Turkey will need a bail-out programme, as some have suggested. Certainly, if the political conflict with the US escalates, the nervousness in markets towards funding Turkey will increase. And while the lira has stabilised in the last few days, the whole situation certainly calls on European policy makers to reflect on what should be the EU's position towards Turkey.

What are the reasons for the EU to care?

There are three main reasons for the EU to care about the current Turkish crisis. First, a financial crisis in a neighbour country of the EU could have a direct negative impact on the EU economy, mainly through the exposure of its banks operating in Turkey (in particular from Spain, France, Italy and Germany) and through trade with Turkey.

Compared to the size of the European economy, these exposures to Turkey are relatively small and should be manageable. However, even though the European recovery started in 2013, some European countries are still vulnerable – as could be seen in the reactions of bond markets for Greece and Italy.

To what degree Turkey's economic problems will lead to a strong loss of confidence in other emerging markets is a moot point. The fall in the rand, the rupee or the Mexican peso suggests some contagion – but there are also more cautious assessments: direct contagion should not be very strong, but there are some global common causes

... the EU's best approach is to wait and see how Turkish domestic politics evolves. But, in the meantime, the EU cannot be an indifferent bystander. It needs to develop its own policy line and its proper instruments now that drive an increase in risk spreads for emerging markets, such as the normalisation of monetary policy and the strengthening of the dollar. With Turkey's GDP standing at roughly \$900 billion, the economic ripple effects of a possible deepening of the crisis in Turkey should be manageable for the EU.

The second reason to worry about a crisis in Turkey is because of possible political knock-on effects and resulting changes in Turkey's migration policy. Turkey is a transit country for most refugees, but also economic migrants, that want to come to Europe from the Middle East and Asia. The EU has a deal in place with Turkey on Syrian refugees. Could a financial crisis change politics so much that it would lead to a change in Turkey's approach to migration? The answer to that question is of great importance to the European Union.

Finally, geopolitical considerations are also important. President Erdogan has already announced that his country could turn its back on the West and look for new allies. Turkey has been a NATO ally since 1952 and has for a long time played an important supporting role in the Middle East for western countries.

Moreover, Turkey is still officially an EU accession country. Turkey might find it difficult to identify other allies that would be able to fund it in case the crisis deteriorates strongly. However, that view presupposes a rational approach to the situation. So the EU should be carefully considering the geopolitical threat, as it would obviously have strong implications for the EU.

What are the instruments the EU has at its disposal if Turkey was to request help?

The IMF is the obvious candidate to provide financial assistance to a country with a textbook balance-of-payments crisis, in clear need of dollar funding. However, even though the US does not have a veto right in the executive board of the IMF, de facto it might be difficult to put in place an IMF programme without the US agreeing to it. And such an agreement could prove difficult to reach these days, given the current stance of the US administration

towards Turkey and its recent decision to impose sanctions and to double tariffs on Turkish steel and aluminium.

If an IMF programme is difficult to reach (or if Turkey does not want to deal with the IMF) and EU countries think it is in their best interest to avoid an escalation of the crisis in Turkey, the EU could try to organise a financial support package on its own. In fact, the EU has some instruments to raise funds and provide financial assistance to countries experiencing financial difficulties.

In particular it could use its Macro-Financial Assistance (MFA) programme, reserved for non-EU partner countries. This has been used in recent years to help countries of the EU neighbourhood such as Tunisia, Jordan, Moldova, Georgia and Ukraine.

What makes it difficult to intervene for the EU?

However, using an MFA programme for Turkey might prove difficult. First, the EU explicitly states that *"a pre-condition for granting MFA is the respect of human rights and effective democratic mechanisms"*, which might be difficult to justify for Turkey after the systematic crackdown on the Turkish press and political opponents of the last two years.

Second, the involvement of the IMF is also considered necessary as an "MFA is also conditional on the existence of a non-precautionary credit arrangement with the IMF and a satisfactory track-record of implementing IMF programme reforms".

Third, the amounts of MFA loans are generally quite limited and far from what a Turkish bailout would require in the current crisis (the largest MFA involvement – to Ukraine – amounts in total to only €3.4 billion). In fact, to cover potential defaults on these loans, the EU has established a Guarantee Fund for External Actions that needs

to represents 9% of the liabilities and that is constituted by gradual payments from the EU budget (see Regulation 480/2009) thus limiting considerably the lending capacity of the MFA.

In conclusion, what should the EU do?

The question of whether to provide support to Turkey first and foremost depends on the Turkish government actually wanting support. But deciding to support Turkey is a difficult political question for the EU.

First, it should be clear that EU countries are more vulnerable to a possible Turkish meltdown than the US due to their geographic proximity. The EU should therefore quickly develop a common position and be able to act with appropriate instruments. That suggests that the EU's MFA instrument should be made independent of IMF decisions, which is not the case as it stands today.

Second, the EU needs to form a clear view on whether such an instrument should be a way to advance democratic values, or whether the EU should have a more functional approach – like the IMF – and limit conditionality on specific macro-structural policies.

Some European politicians such as Bundestag Green member Cem Özdemir already announced that no support should come from the EU *"without a return to democracy and rule of law"*. But asking for political change in the context of financial assistance could dramatically backlash in Turkish domestic politics. It could be used by Erdogan as an argument that the West and the EU are part of a conspiracy against him and Turkey. The EU thus needs to walk a careful line.

However, good governance is fundamental for the long-term well-being of Turkey and for the implementation of sound economic policies. One of the reasons for market nervousness towards Turkey is grounded in the fact

that the Turkish president has appointed his son-in-law to be the finance minister, casting doubt on the quality of policies.

In the end, the EU's best approach is to wait and see how Turkish domestic politics evolves. But, in the meantime, the EU cannot be an indifferent bystander. It needs to develop its own policy line and its proper instruments now.

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Why universal basic income costs far less than you think

In light of the huge benefits available from a UBI, it's a waste of time to argue over wildly inflated cost estimates. Elizaveta Fouksman says the numbers are out there – we can pay for a basic income Ant to get rid of poverty, lessen inequality and provide financial stability in a world of precarious work? Well, why not simply give everyone enough money to ensure basic sustenance? This is the deceptively simple solution proposed by advocates of universal basic income (UBI). Just transfer enough money to everyone, every month, to guarantee a basic livelihood. The policy is universal and unconditional (you get it no matter who you are or what you do).

This means no bulky bureaucracy to administer the programme, or onerous reporting requirements on the poor. Nor do you have to wait to file paperwork to benefit: whether you lose your job, decide to strike out on a new career path or take time away from work to care for a family member, the money is already there.

But the UBI movement has a major problem: both critics and even many supporters don't understand how much the programme would really cost. To calculate the cost, most people just multiply the size of the monthly income (say, \$1,000) by the population (it's universal, after all) and – voilà – a number that seems impossibly expensive.

But this is not how much UBI costs. The real cost – the amount of money that actually needs to be taken from someone and redistributed to someone else – is just a small fraction of these estimates.

The key to understanding the real cost of UBI is understanding the difference between the gross (or upfront) and net (or real) cost. Here's a simple example: imagine a room with 15 people who want to set up a UBI for the room of \$2 per person. The upfront cost of the policy would be \$30. The ten richest people in the room are asked to contribute \$3 each towards funding it. After they each put in \$3, raising the total \$30 needed, every person in the room gets their \$2 universal basic income. But because the ten richest people in the room contributed \$3, and then got \$2 back as the UBI, their real, net contribution is in fact \$1 each. So the real cost of the UBI is \$10.

Estimates that just multiply the size of the UBI by the population of a country do the equivalent of claiming that the cost of UBI in the room above is a whopping \$30. But the real cost in this scenario – the money redistributed from the wealthy – is only \$10.

The billionaire's dilemma

It's important to understand who will be gaining money through a UBI and who will be contributing to it. The common mistake is to double count the net contributors. Yes, they get a UBI, but in contributing to the UBI pot they first return their UBI, and then throw in some money on top of that. So it's incorrect to count them when calculating the true UBI cost.

It's important to understand who will be gaining money through a UBI and who will be contributing to it. The common mistake is to double count the net contributors This is a fundamental point that often gets missed: those that are taxed to pay for the UBI will get some of that cost back – by getting their UBI. You can also think about it in reverse: while the UBI goes to everyone, the rich in effect give it back in the first chunk of taxes they pay, so you don't need to count their UBI in cost estimates.

This also resolves UBI's 'billionaire's dilemma' – why give someone like Bill Gates a basic income? The answer is that Gates would simply return that UBI through his taxes – and help pay for others. But if Gates becomes suddenly destitute, the UBI will still be showing up for him to use every month. And since his tax bill will drop, he'll become a net beneficiary rather than contributor.

True costs

Any UBI estimate that just multiplies the size of the UBI by the population is a red flag that the cost has been overinflated. A true cost estimate will always discuss who the net beneficiaries will be, who the net contributors will be, and the rate at which we gradually switch people over from being beneficiaries to being contributors as they get richer (this is sometimes called the claw-back rate, the withdrawal rate or the marginal tax rate – which is not an overall tax, but simply the rate at which people start to return their UBI to the communal pot as they earn more).

Cost estimates that consider the difference between upfront and real cost are a fraction of inflated gross cost estimates. For instance, economist and philosopher Karl Widerquist has shown that to fund a UBI of US\$12,000 per adult and US\$6,000 per child every year (while keeping all other spending the same) the US would have to raise an additional US\$539 billion a year – less than 3% of its GDP. This is a small fraction of the figures that get thrown around of over US\$3 trillion (the gross cost of this policy). Karl's simplified scheme has people slowly start contributing back their UBI in taxes to the common pot as they earn, with net beneficiaries being anyone individually earning less than US\$24,000 a year.

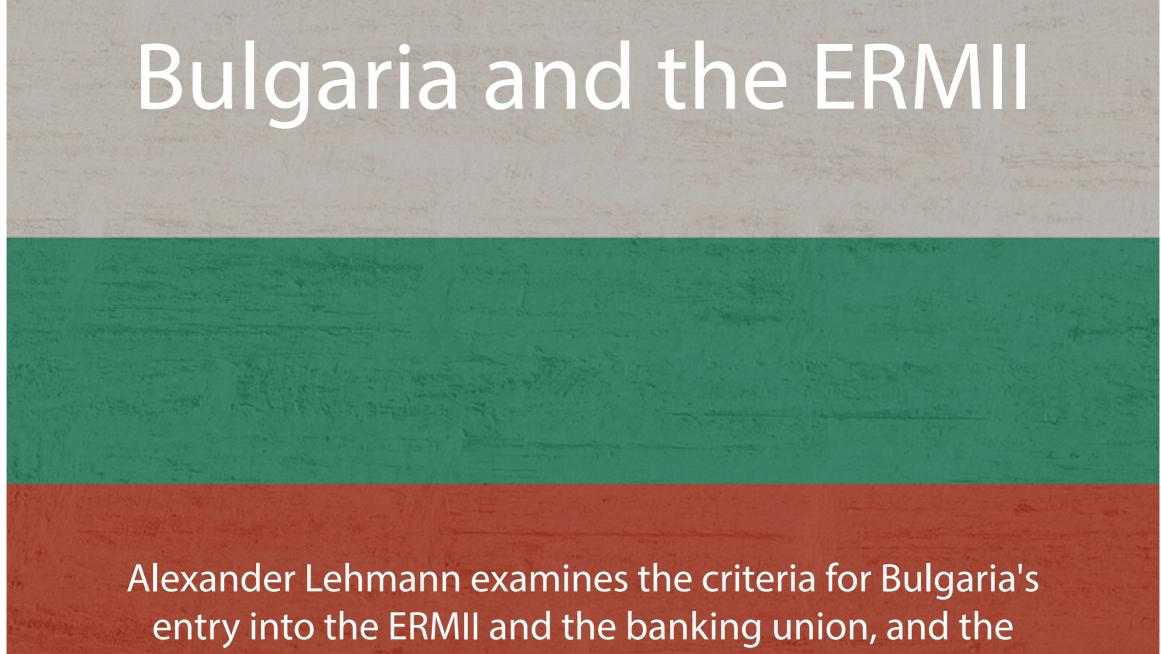
This point still holds if you're raising money for UBI from other sources than income or wealth taxes. If you use a corporate or data tax, or a natural resource or carbon tax to finance a UBI, you are still redistributing money that would otherwise ultimately be profits that go to Google shareholders or BP executives. And you're taking less away from them than you would think – because they too get a UBI. So the money they end up losing through the new tax is offset by the UBI they receive. The same holds if you're paying for a UBI by reshuffling your budget.

Some people get confused and question whether UBI is really universal if only a portion of the population actually ends up with extra income, while another portion pays for it. But any policy that is universal yet redistributory works this way. Public transit, roads and schools are all universal benefits, but some people pay a lot for their funding through their taxes, while others enjoy them for free or at a lower cost.

In light of the huge benefits available from a UBI, it's a waste of time to argue over wildly inflated cost estimates. The numbers are out there – we can pay for a basic income.

Elizaveta Fouksman is a Leverhulme Early Career Fellow at the University of Oxford

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precedent it sets

he Eurogroup in July clarified Bulgaria's path into the European Exchange Rate Mechanism (ERMII). This will be preceded by a close cooperation with the ECB in the context of the banking union, which in turn will depend on fulfilling a number of commitments on financial sector supervision and structural reform. Once ERMII entry has been agreed there will be no option by other currency union members to veto euro adoption. Bulgaria would then become the first EU country to accede to the economic and monetary union (EMU) since Lithuania did so in 2015.

Following a devastating debt and banking crisis, Bulgaria has successfully operated a currency board since 1997 with a rate irrevocably fixed to the German mark and the euro. It would seem that exchange-rate stability can be easily maintained.

But there have been persistent doubts about the quality of banking supervision in Bulgaria. Membership in the banking union is therefore desirable and has been actively promoted by Bulgaria (see the previous Bruegel research and blog on this topic). Three-quarters of Bulgaria's banking sector are foreign-owned, but in 2014 the country saw runs on its locally owned third- and fourth-largest banks, and the collapse of the latter. Only last year, indictments were brought against the main owner of that bank, and senior central bank managers.

Common supervision will now be prepared over the coming year, including a stress test of the banks. In addition, Bulgaria has made a number of wide-ranging commitments – including on governance, legal and judicial reforms – which it seeks to implement over the coming months.

These commitments seem desirable in their own right – but which are essential for participation in the banking union, and can they realistically be implemented within the short timeframe that is envisaged? The conditions can be summarised under five headings:

 Strengthen bank and systemic supervision. This is an essential addition to the euro-entry criteria and, in light of Bulgaria's recent crisis, clearly very relevant. Within Bulgaria's currency board regime the national bank is experienced in applying 'macroprudential' supervision and has already had some success in stemming a credit boom ahead of the financial crisis. The two conditions seem well defined, realistic and desirable for entry into the banking union.

In its bid to join the single currency Bulgaria has made commitments on financial supervision but also wider structural reform which set a precedent for future applicants for participation in the exchange rate mechanism ERMII. Most conditions, though not all, are justified by the additional demands of the banking union. But the envisaged timeline seems ambitious, and verification will not be straightforward Strengthen supervision of the non-bank financial sector. It is less clear why this is essential for entry into the banking union, within which a common standard of bank supervision and procedures for bank resolution have been established. As in most new EU member states, Bulgaria's non-bank sector is small, accounting for about a quarter of system assets.

A recent review flagged problems in the capitalisation of some insurance companies and risks to benefits accruing from pension funds. The supervisor is outside the central bank, and may have failed in some of its tasks. While these are important issues in financial supervision, the relevance for bank soundness and potential resolution costs within the banking union is less clear.

- Strengthen the **anti-money laundering framework**. This seems a timely and sensible addition to the requirements for banking union membership. As was clear in the recent banking crisis in Latvia, even a hint of operational and conduct risk can have immediate consequences across the banking system. The implementation into law of the latest EU Directive should be straightforward to verify, and could be done swiftly. Empowering the independent financial crimes unit and establishing the information exchange with the supervisor may prove to be more protracted processes.
- Address gaps in the insolvency framework, and strengthen the judiciary. Poor insolvency regimes and inefficient judiciaries are a key reason for the slow pace of non-performing loan (NPL) resolution in many member states, where provisioning is often inadequate. Different creditor rights and problems with enforcement will limit integration between national financial markets. In the case of Bulgaria, an extensive report flagged a large number of shortcomings relative to best practice in the World Bank's insolvency standards.

The average time to resolve insolvency is over three years, though this is by no means the worst in the euro area. Best practice in insolvency law is easy to define and clearly desirable for a well-functioning and open financial system. But implementation will crucially depend on the reform of the judiciary, which will be much harder to monitor.

 Align legislation with the OECD Guidelines on corporate governance of state-owned enterprises (SoEs). This seems the most ambitious of the conditions, and the one least relevant to membership in the banking union. It sets a high hurdle for other future applicants in emerging Europe with traditionally extensive state sectors, importantly for Croatia as another likely applicant. There is a sizable sector consisting of about 800 state enterprises in Bulgaria, accounting for about 6% of output.

This is large, though not necessarily out of line compared to others in the currency union. In its country assessments the Commission has pointed out weak performance in the sector. It does not follow that the state sector poses a direct risk to financial stability, and in fact this issue is scarcely mentioned in the latest IMF assessment. It is no doubt possible to reflect the OECD standards in national legislation in the coming months, but implementation within the administration could be lengthy. For instance, a state-ownership agency will need to be resourced and empowered. Governance practice within enterprises will likely lag such standards for some time.

Bulgaria's recent banking crisis underlined important shortcomings in financial supervision. This is now to be addressed relatively swiftly, and a full stress test should give further confidence. But since EU accession in 2007 there has been a long history of delayed structural reforms, which the Commission has tracked through its so-called Cooperation and Verification Mechanism.

As the Eurogroup expects to follow a similar approach with other member states seeking to join ERMII, it should be mindful that structural and governance obstacles to deep financial integration cannot be overcome quickly.

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This article was originally published on Bruegel

The great fiscal lever: an Italian economic obsession

Alessio Terzi argues that the efficiency of Italian investment is currently low. Specific measures can be taken to improve this situation and only once this is done should the public investment lever be used forcefully ive me a fulcrum and a lever long enough, and I shall move the world" – so the great Greek mathematician Archimedes used to say. In the Italian macroeconomic context, many are similarly convinced that if only we pushed more on the fiscal lever, we could set in motion an economy that has stagnated for almost 20 years, and put it back on a positive growth trajectory.

This school of thought is well illustrated by a recent quote from Finance Minister Giovanni Tria, who explained how *"public investment will be the [government's] silver-bullet to foster growth"*. This, in his view, will generate enough GDP expansion and fiscal space to finance the spending promises included in the coalition agreement, such as a pension counter-reform, a flat tax, and a universal basic income. The same fiscal convictions are behind the demand in the coalition agreement that public investment be excluded from deficit computations in EU fiscal rules.

These views are not consigned to anti-establishment parties, rather they are pervasive across the political spectrum. For a long time, similar positions have been advocated by former prime minister Matteo Renzi, for example. Even Confindustria, the General Confederation of Italian Industry, would be in favour of an increase in VAT if used to finance more public investment, as this *"would foster growth and reduce the debt-to-GDP ratio"*.

Figure 1 shows the public capital stock, expressed as a percentage of GDP, in three European countries of broadly comparable size. *Prima facie*, by historical standards, there does not seem to be a comparatively small (or shrinking) public capital stock in Italy. Germany, on the other hand, is what a country with a chronic lack of investment looks like, as discussed in detail by my colleagues Roth and Wolff (2018). Even France, a country known for its large public sector, has a capital stock 10 percentage points smaller than Italy.

Moving beyond capital stocks, proponents of an Italian public investment boost usually refer to the recent economic literature on secular stagnation in a low interest rate environment. Building on the IMF World Economic

Outlook (WEO [2014]), for example, some have reported how "[it] finds that increased public infrastructure investment raises output in both the short and long term".

As such, Mr Tria's views would seem vindicated. The key, however, is in the continuation of the sentence – specifically "[...] particularly during periods of economic slack and when investment efficiency is high". Building on OECD data, Figure 2 shows Italy's output gap. As of next year, actual GDP will be above potential, making it hard to argue along the lines of an economic slack.

In the Italian macroeconomic context, many are convinced that if only we had a large enough fiscal lever, we could set in motion an economy that has stagnated for almost 20 years

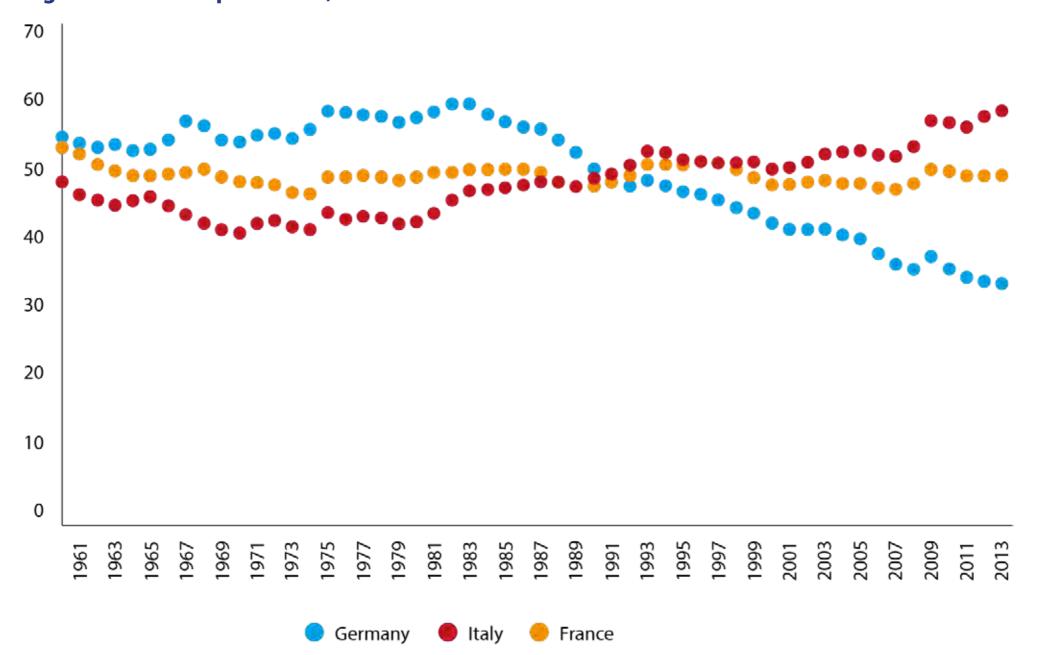


Figure 1. Public capital stock, % of GDP

Source: IMF Investment and Capital Stock Dataset, 2015

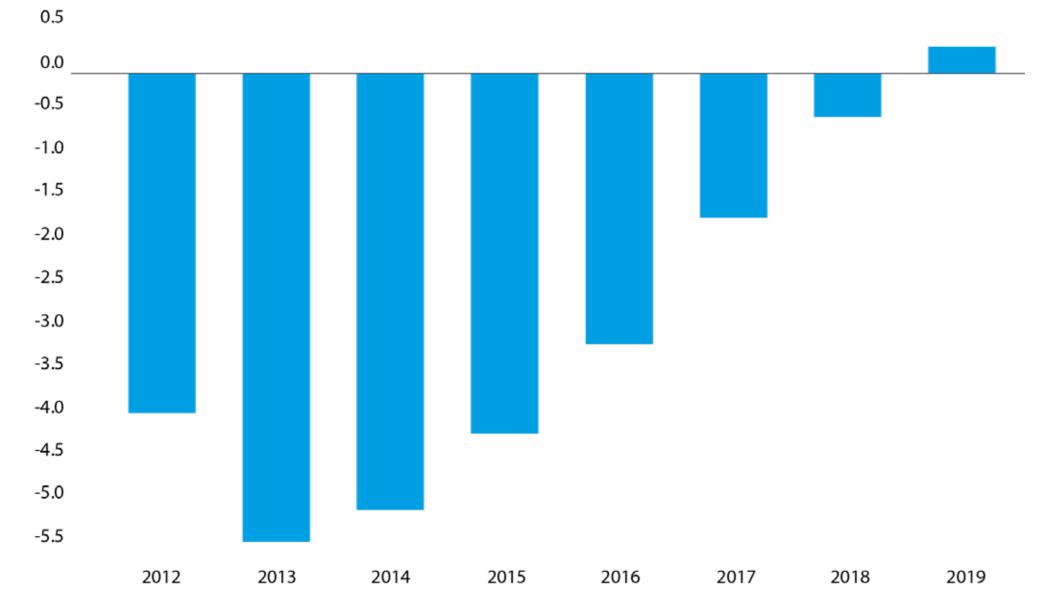
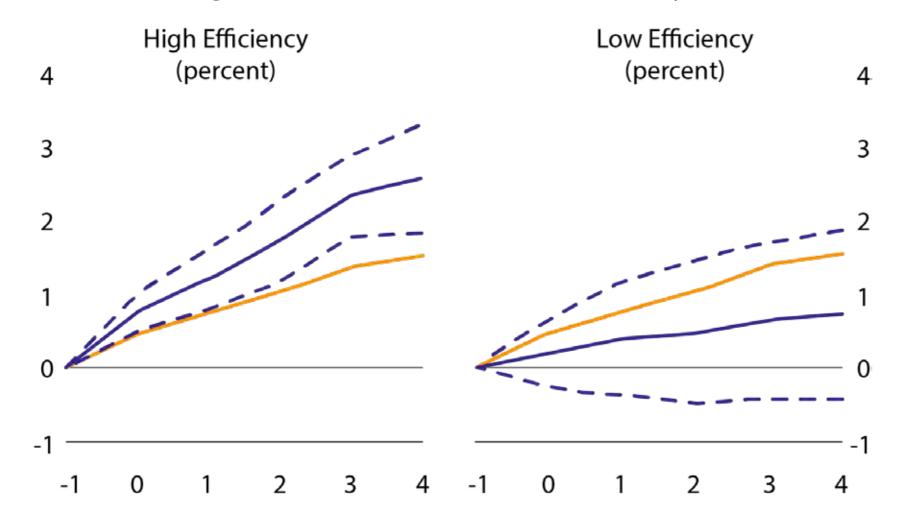


Figure 2. Deviations of actual GDP from potential GDP as % of potential GDP

Source: OECD

Figure 3. IMF estimates of the impact of a p.p. of GDP increase in public investment at t=0 in advanced economies for high (LHS) and low (RHS) investment efficiency



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Source: IMF

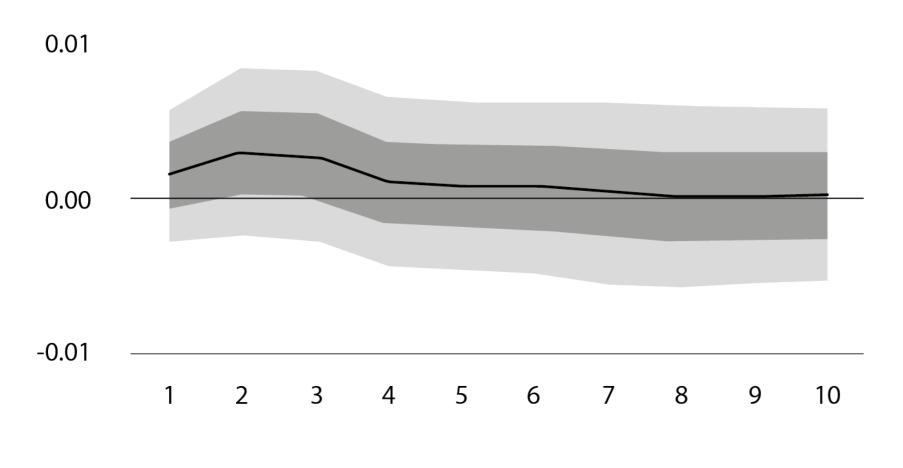


Figure 4. Impact of a public investment shock on GDP in Italy

Source: De Jong et al (2017)

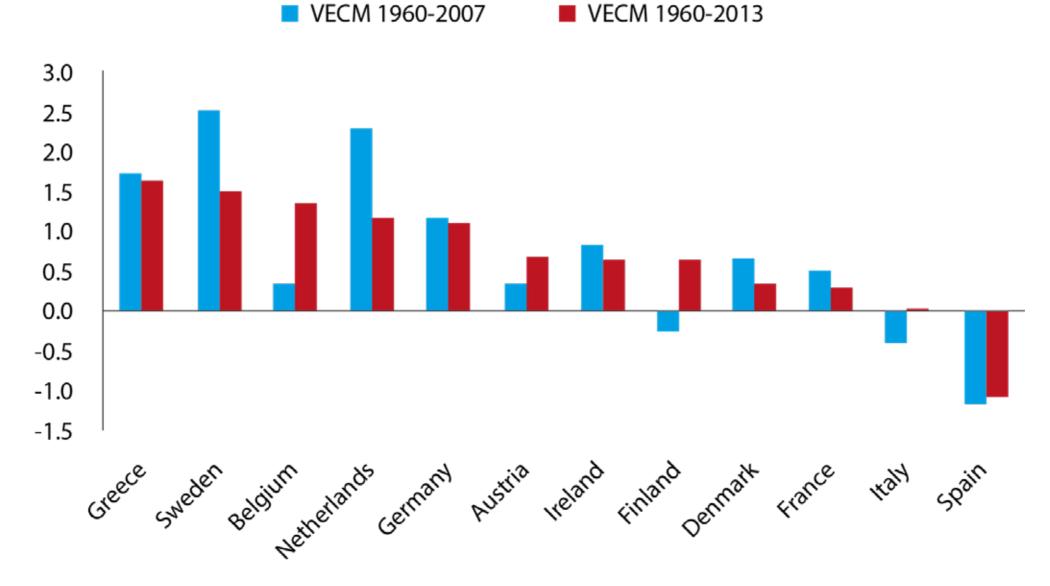


Figure 5. Long-term impact of a public investment shock in selected euro area countries

Note: numbers denote long-run (10-year) responses of GDP to a one-standard deviation in public capital in a Vector Error Correction Model calibrated over the period 1960-2007 and 1960-2013. Source: De Jong et al (2017)

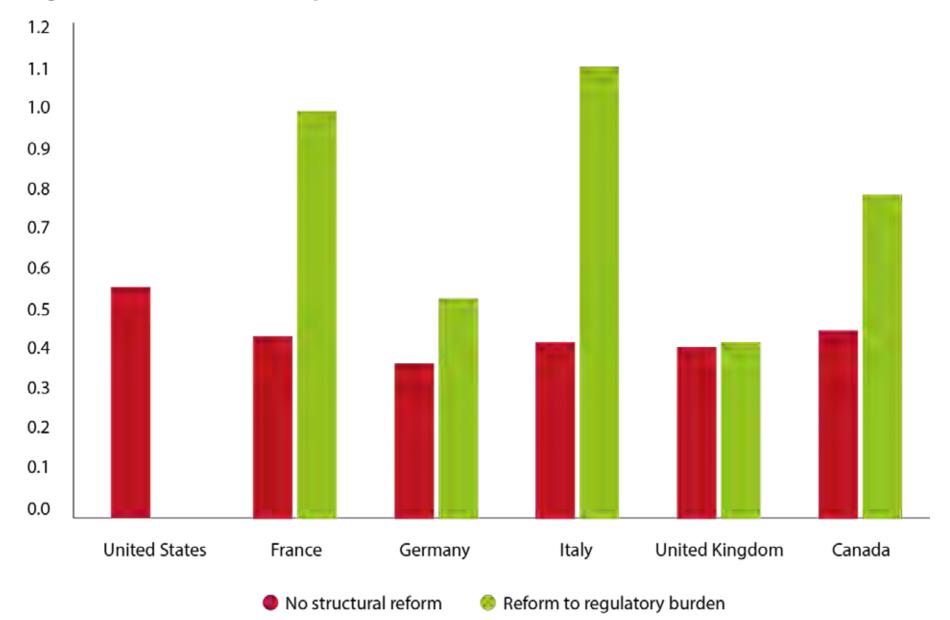


Figure 6. Short-run GDP impact of an investment shock when combined with structural reforms

Notes: In the scenario with structural reform, the regulating burden is assumed to be reduced by 10% stemming from anti-competitive product-market regulation in upstream sectors Source: OECD, 2017

Moreover, the IMF WEO (2014) explains how "debt-financed projects could have large output effects without increasing the debt-to-GDP ratio, **if** [emphasis added] clearly identified infrastructure needs are met through efficient investment". When this is not the case, even after four years, the multiplier effect of public investment in advanced economies is not significantly different from zero (see Figure 3).

The key empirical question is then how efficient public investment in Italy is. Building on data since the 1960s, De Jong *et al* (2017) calibrate a country-specific VAR model for Italy and show how a shock in public capital stock does not have a statistically significant impact on growth, neither in the short- nor long-term (Figure 4).

The international comparison in this respect is particularly striking, as Italy has some of the lowest long-run multiplier effects of public investment in the euro area (Figure 5).

What this means is that the efficiency of, and hence the return on, (public) investment is low. Therefore, the mantra that public investment will pay for itself does not seem to hold in the Italian case. As discussed in depth in Bank of Italy (2012), as long as the origins of such small returns are not identified and corrected, the public investment lever will remain short and ineffective.

These origins can include poor selection of projects – due to bad political practices in the best case, and corruption in the worst case – poor project implementation, and bureaucratic hurdles that prevent project completion, just to mention a few. These factors are found to be particularly relevant when exploiting cross-regional heterogeneity in Italy (Fiorino *et al* 2012).

The findings of OECD (2017) seem to resonate with these results. In particular, they show how Italy positively stands out among advanced economies in the short-term impact of investment, when this is combined with structural reforms.

Supporting structural reforms as a more likely way to foster a growth acceleration than an investment boost is also a recent analysis by Peruzzi and Terzi (2018). In particular, we show how a sudden investment ramp-up (public and private) is the least likely way to spark a growth acceleration, meant as a positive structural break in long-term growth. As a matter of fact, all the growth accelerations observed in Europe over the past few decades were preceded by significant structural reforms and none by a sharp ramp-up in investment.

From a political economy perspective, the likely reason for this Italian obsession with deficit-financed public investment is that it postpones hard choices. Everybody can agree with more investment, especially when it is debt-financed, as it does not unsettle vested interests. This is particularly true in a low-interest environment where the risk of a sovereign debt crisis is perceived as muted.

This column does not suggest that public investment should be demonised. However, it aims to propose a more optimal timing of economic policy. Identifying country-specific bottlenecks that curtail investment selection and efficiency should take priority, and actions should be taken on this front in the form of structural/public sector reforms¹.

This will increase the return on public investment. Ideally, at the same time, one could restructure the overall composition of public expenditure to open up fiscal space for investment spending². Once that is done, the public investment lever should be used, exploiting the (now-enlarged) multiplier effects.

In the words of former IMF official Carlo Cottarelli, it is more useful to understand how to spend better, before spending more.

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Endnotes

1. Even from a strict Keynesian demand-side standpoint, increasing the efficiency of project selection in good times implies that the latter can then be quickly activated during downturns.

2. For more on this, see Roberto Perotti's insightful book 'Status Quo'.

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Beyond Nord Stream 2: a look at Russia's Turk Stream project

Simone Tagliapietra considers Russia's Turk Stream project and analyses the strategic impacts on Europe or Europe, thinking about energy security means thinking about Russia. First in January 2006 and then in January 2009, gas pricing dispute between Russia and Ukraine led to the halt of Russian gas supplies to Europe via Ukraine – its primary transit route. This generated economic damages for Europe, notably in South-Eastern European countries heavily dependent on Russian gas for both electricity generation and residential heating.

Europe responded to these gas crises by adopting an energy security strategy mainly focused on reducing its dependency on Russian gas supply. The high priority given to Russian gas supplies arose because: (1) gas represents about one quarter of the European energy mix; (2) about one third of this gas is imported from Russia; and (3) in contrast to oil or coal, it is not possible to bring large amounts of gas to where it is needed if the corresponding infrastructure is not in place.

In the midst of the 2014 Ukraine crisis, concerns about a potential politically motivated disruption of all European gas supplies from Russia lifted again energy issues to the top of the European agenda and led to the creation of the EU Energy Union.

While Europe developed its energy security strategy, Russia also developed its own strategy, primarily aimed at maintaining its share in the European gas market in the future. To do this, Russia primarily intends to secure its supplies by diverting all its gas transit to Europe away from Ukraine by 2020.

In view of achieving this target, in 2015 Gazprom signed an agreement with major European energy companies to construct Nord Stream 2, a pipeline aimed at diverting away from Ukraine 55 billion cubic metres per year (Bcm/y) of gas transit, by expanding the existing direct link – Nord Stream 1 – between Russia and Germany.

Since 2015, Nord Stream 2 has been at the centre of all European discussions concerning the EU-Russia relations in general, and the European energy security in particular. But as endless political discussions in Europe are being held on this pipeline project, the pipes of another similar Russian pipeline project – Turk Stream – are already being laid by Gazprom at the bottom of the Black Sea.

Since 2015, Nord Stream 2 has been at the centre of all European discussions concerning the EU-Russia relations. But as endless political discussions in Europe are being held on this pipeline project, the pipes of another similar Russian pipeline project – Turk Stream – are already being laid by Gazprom at the bottom of the Black Sea Launched by Russia president Vladimir Putin in December 2014 during a state visit to Turkey, Turk Stream is a pipeline projected to deliver 31.5 Bcm/y of gas to Turkey and Europe. As in the case of Nord Stream 2, also this project is not aimed at carrying additional volumes of gas, but just to partially replace flows that currently reach Turkey and Europe through Ukraine.

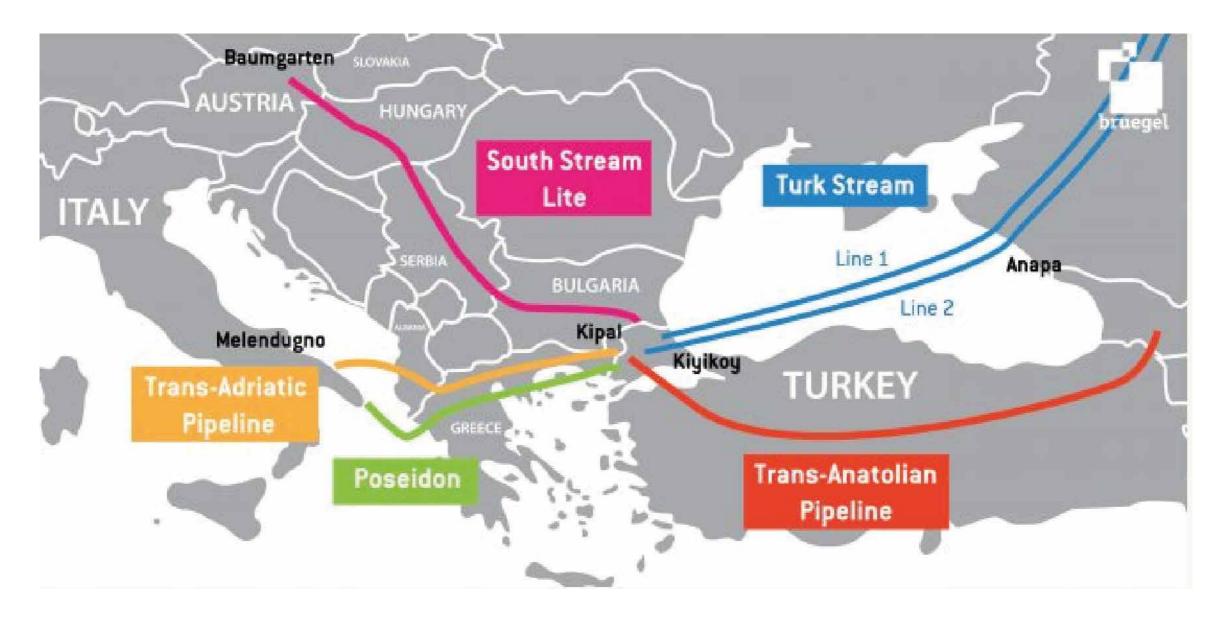
Turk Stream comprises two lines, each with a capacity of 15.75 Bcm/y. Line 1 is designed solely to supply Turkey, while Line 2 is intended to deliver gas to Europe.

After a year of works, construction of the offshore part of Line 1 was completed on April 30th 2018; the onshore parts remain under works. With the construction of Line 2 also progressing, both lines of Turk Stream are expected to be finalised by the end of 2019.

However, due to EU anti-monopoly rules Gazprom, as a supplier, is prohibited from operating gas pipelines inside the EU. The Russian company is thus currently exploring potential alternative options with European gas grid operators for bringing the 15.75 Bcm/y capacity of Turk Stream's Line 2 to European markets.

The first option would be to link Turkey and Austria with a pipeline running through Bulgaria, Serbia and Hungary. This pipeline has been dubbed 'South Stream Lite', as it would roughly follow the path of the proposed South Stream pipeline, which was scrapped by Russia in 2014 following opposition from the European Commission.

Not by coincidence, elements of the original South Stream project are recently being revived by Bulgaria and Serbia. Bulgarian gas grid operator Bulgartransgaz recently acquired a series of assets with the aim of creating a Balkan gas trading and transport hub. Bulgartransgaz and Serbia's Gastrans have also started to explore gas



companies' interest in utilising potential pipelines connecting Bulgaria to Hungary. From Hungary, pipes could run to Austria via planned or existing routes.

The second option would be to link Turkey and Italy with a pipeline running through Greece. The feasibility study for such a pipeline was conducted in 2003 by Greece's public gas supply company DEPA and Italy's energy company Edison. The development of the project – named Poseidon – was then covered by an intergovernmental agreement signed in 2005 between Greece and Italy.

When, in 2013, the group of companies operating Azerbaijan's Shah Deniz II gas field – which constitutes the main source of the Southern Gas Corridor – chose the Trans-Adriatic Pipeline (TAP) to link the Trans-Anatolian Pipeline (TANAP) to Italy, the Poseidon project was eclipsed. It has only recently been revived, based on the potential opportunities of linking Turk Stream to Italy, as well as a potential pipeline running from Israel to Greece – the East Mediterranean pipeline – to Italy.

The third option would be to make use of the spare capacity of the TAP. The 800km-long pipeline – currently under construction – will serve to deliver 10 Bcm/y of Azeri gas to Italy, starting in 2020. However, the TAP's capacity can be expanded to 20 Bcm/y with the addition of new compressing stations. The pipeline also has a physical reverse-flow feature, allowing gas from Italy to be diverted to South East Europe if energy supplies are disrupted or more pipeline capacity is required to bring additional gas into the region.

This flexibility could make the TAP a very attractive option for Turk Stream. However, considering that Turk Stream's Line 2 is not intended to deliver an additional supply to Europe, but just to divert part of the existing supply that currently enters Europe via Ukraine, existing contracts between Gazprom and European partners – such as Italy – should also be taken into account.

In this regard, South Stream Lite could offer the most viable option for Gazprom, as it would not require the change of existing contracts with European partners, on which the delivery point for contracted supplies is set at Austria's Baumgarten. Gazprom will certainly announce a decision on the preferred route very soon, as it targets first gas flows to Europe via Turk Stream as soon as early-2020.

The speed of these developments should not surprise anyone. Russia seeks to cut its current 90 Bcm/y of gas transit via Ukraine down to 10-15 Bcm/y after 2019. With Nord Stream 2 under fire from European policy makers, Turk Stream clearly becomes an essential bargaining chip for Russia in the 'great-game' of Ukrainian gas transit.

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NBAA-BACE comes to Orlando at exciting time for business aviation

Ed Bolen looks forward to NBAA-BACE, which brings together key aviation contacts from around the world to a single meeting place to get critical work accomplished B

usiness aviation offers the unparalleled ability to link communities and companies around the world, and this is a very exciting time for this vital international industry. Deliveries of new aircraft are up, new airframes with exciting capabilities are reshaping the market, and business aviation operations are on the rise in nearly every market across the globe.

All this energy and enthusiasm with be surging throughout NBAA's Business Aviation Convention and Exhibition (NBAA-BACE) taking place October 16-18 in Orlando, FL. The third-largest trade show in the United States, NBAA-BACE brings together key aviation contacts from around the world, including current and prospective business aircraft owners, manufacturers and customers to a single meeting place to get critical work accomplished.

Approximately 25,000 attendees from across North America and around the globe will come to Orlando for NBAA-BACE, where they find more than 1,100 exhibits at the Orange County Convention Center (OCCC) showcasing the latest products and services available to help companies of all sizes travel safely, efficiently and securely.

Additionally, more than 100 aircraft of all sizes and for all missions will be featured between the main outdoor static display at Orlando Executive Airport (ORL) and at the indoor static display on the OCCC exhibit floor.

Dynamic speakers are another hallmark of NBAA-BACE, and this year's event will kick off with the Day 1 Keynote presentation by internationally recognized aviation innovator Bertrand Piccard, a pilot of Solar Impulse 2, the first aircraft to fly around the world without using a drop of fuel. Piccard will inspire attendees with his personal story and pioneering spirit, demonstrating all that is possible in aviation and beyond.

NBAA-BACE also provides an impressive venue to continue the vital dialogue between regulatory authorities and business leaders about the benefits of business aviation and discuss policies affecting the industry. Among the

featured speakers this year will be Dan Elwell, acting administrator of the U.S. Federal Aviation Administration (FAA), and Louisiana congressman and business aviation advocate Rep. Ralph Abraham (R-5-LA).

Vital educational opportunities and safety presentations

In keeping with its role as an international show, NBAA-BACE also presents an important opportunity for to learn more about the many important issues facing the global business aviation community. This year's event will host more than 50 education sessions addressing a wide range of topics of interest to readers of *World Commerce Review*.

With the international business aviation community growing and changing so rapidly, the only way to stay ahead of the curve is by putting yourself in the middle of it all For example, a session about the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) will discuss the impact on business aviation from this global, market-based measure to help achieve goals for carbon neutral growth from 2020. Other scheduled sessions include discussions about forthcoming aviation technologies such as electrically-powered aircraft; weather forecasting tools; workforce retention and training; and business management and leadership.

The future of business aviation has never felt so exciting - or so close. Returning to the NBAA-BACE exhibit floor for 2018 is the Innovation Zone, hosting a wide range of informative discussions on such forward-thinking topics as expanding opportunities for unmanned aircraft systems (UAS) in business aviation; new fuels, efficient airframes and advances in propulsion systems; and vertical takeoff and landing (VTOL) aircraft that could revolutionize urban transport.

This year's event will also host vital discussions about operator safety, including the debut of NBAA's inaugural Small Operator Symposium on Monday, October 15 prior to the official opening of NBAA-BACE. This new symposium will specifically address issues facing operators with two airplanes or less.

The symposium's sessions will present information on areas specific to those issues faced by small flight departments, including a look at where small flight departments can learn how to properly address safety issues on a practical basis, and how a safety management system can help an operation of any size.

Also taking place October 15 is NBAA's 10th annual Single-Pilot Safety Standdown, featuring interactive learning opportunities, expert speakers and lively peer-to-peer discussions exploring practical tips to enhance operational safety and risk mitigation.

Scheduled presentations include a detailed analysis of single-pilot business aviation accident data and leadership briefings from NBAA President and CEO Ed Bolen and other industry officials.

Following the theme of *Safety Begins with You*, NBAA's fourth annual National Safety Forum on Thursday, October 18 will address the basics of maintaining skills and understanding automation in aircraft; examine the physiology and psychology that affects human performance and explore the relationship of leadership and professionalism in aviation safety.

Advancing careers and attracting new talent to industry

Workforce concerns remain a key issue affecting business aviation. NBAA recognizes the value in exposing students to the global business aviation industry to inspire them towards successful and rewarding aviation careers and providing opportunities for existing business aviation professionals to network with their peers and identify paths for advancement.

Middle school, high school and college students are invited to a day of student-focused programming and opportunities at the 2018 Careers in Business Aviation Day. Taking place Thursday, October 1, this important event will include a networking roundtable where college and university students may connect directly with business aviation industry leaders to discuss professional goals and get advice on how to best prepare for a rewarding career.

On Tuesday afternoon, NBAA's Coffee Social offers the chance for attendees to meet with the NBAA Board of Directors, Regional Representatives and committee members. Later than evening, the YoPro Networking Reception, hosted by the Young Professionals in Business Aviation (YoPro), will provide a fun, lively setting for attendees to engage with rising business aviation professionals.

In addition to these opportunities, the Innovation Zone will host a variety of sessions shining a light on the young professionals changing the face of business aviation, with panel discussions examining practical strategies for developing young talent, as well as how the industry must attract the next generation of employees while also reaching younger customers.

With the international business aviation community growing and changing so rapidly, the only way to stay ahead of the curve is by putting yourself in the middle of it all. NBAA-BACE offers more exhibits, more aircraft on static display and more opportunities for education and networking than any other event dedicated to this vibrant and strong industry.

On behalf of NBAA, I look forward to seeing you in Orlando from October 16-18 where the very best of the strong and vibrant international business aviation community will be on proud display.

Ed Bolen is President and CEO of the National Business Aviation Association (NBAA)



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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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