

IEA Discussion Paper No.91

FREEDOM TO FLOURISH

UK regulatory autonomy, recognition,
and a productive economy

Shanker A Singham, Radomir Tylecote
and Victoria Hewson
July 2018



iea

Institute of
Economic Affairs

With some exceptions, such as with the publication of lectures, IEA Discussion Papers are blind peer-reviewed by at least one academic or researcher who is an expert in the field. As with all IEA publications, the views expressed in IEA Discussion Papers are those of the author and not those of the Institute (which has no corporate view), its managing trustees, Academic Advisory Council or senior staff.

About iTCU

The International Trade and Competition Unit (iTCU) at the IEA is dedicated to promoting open trade, competitive markets and property rights, which are the fundamental building blocks of wealth creation and growth.

iTCU works on initiatives around the world which will improve these building blocks in all nations.

We engage at four different levels. First, what countries can do unilaterally to improve their own trade and regulatory systems to promote competition, and remove trade barriers. Second, how bilateral trade agreements can achieve these results. Third, we examine what regional and platform agreements can do to promote trade and competitive regulatory frameworks. And finally, how the global trading system can deliver these goals.

While some of our work is theoretical, such as our work to measure anti-competitive market distortions, iTCU is also acting as a resource on all aspects of the UK leaving the EU and developing an independent trade policy.

Contents

Summary	8
1. Introduction	12
Spectrum of options	12
Criteria for success	18
Precedents and direction of travel	21
The imperative	22
Structure of the paper	23
2. The UK's approach to the EU	25
Outline	25
Rationale	35
3. Pathways and legal frameworks	40
The WTO framework	40
Free Trade Agreements and Mutual Recognition Agreements	53
Surveillance and enforcement	72
Negotiability	73
Conclusion	76
4. Standards: a discussion of UK autonomy in standard-setting	78
Introduction	78
Discussion of the US and EU standards and conformity assessment systems	80
Mutual Recognition Agreements and their relationship to standards and conformity assessment	105
Conclusion: the opportunity for a new UK standards architecture	107

5. Selected major anti-competitive regulations by sector	113
Digital and telecommunications	114
Finance	119
Transport	127
Manufacturing, construction and chemicals	128
Food and agriculture	130
Employment	133
6. Conclusion	135
Appendix: International standard-setting bodies	137
Bibliography	143

About the authors

Shanker Singham

Director, International Trade and Competition Unit

Shanker Singham is Director of the International Trade and Competition Unit of the IEA. He is one of the world's leading international trade and competition lawyers and economists. He has advised governments and companies on trade, global market access, WTO and FTA, competition and regulatory issues. He was an advisor to the Presidential campaign of Mitt Romney (2008, 2012), and Marco Rubio (2016). He was a cleared advisor to the USTR and Department of Commerce in the US between 2009 and 2015, a specialist advisor to the International Trade Committee of the House of Commons in the UK, and has served on the Committee of Experts of Secretary of State for International Trade, Liam Fox. His career has included advising on the transitions in the former Soviet Union, the *apertura* in Latin America, trade negotiations for a hemispheric free trade agreement as well as US bilateral agreements including TTIP, the EU accessions of Poland and Hungary and WTO accessions of China and Russia. He has written over 100 book chapters and is the author of a General Theory of Trade and Competition, one of the first academic books to deal with the interface between trade, competition and regulatory issues. He is also author of the SRB model of Anti-Competitive Market Distortions.

Dr Radomir Tylecote**Senior Research Analyst, Int.Trade and Competition Unit**

Dr Radomir Tylecote is the Senior Research Analyst for the IEA's Trade and International Competition Unit. He has a background in trade and high-tech sectors, and was formerly at the Behavioural Insights Team (BIT), where he was an external advisor to HM Treasury and helped develop the Industrial Strategy Challenge Fund, launched in the Industrial Strategy 2017. He has also developed a harm reduction system for gambling using the algorithm-based detection of addictive behaviours. He has an MPhil from Cambridge University, and his double-scholarship PhD from Imperial College London Business School studied the impact of China's innovation policies on its technology firms and trade.

Victoria Hewson**Senior Counsel, International Trade and Competition Unit**

Victoria joined the IEA's International Trade and Competition Unit in Spring 2018. She is a lawyer and practiced for 12 years in the fields of technology and financial services, before focusing on trade and regulatory policy. She has published work on the implications and opportunities of Brexit in financial services, and movement of goods and the issues in connection with the Irish border. Before entering the legal profession, Victoria worked for Procter & Gamble in the UK and Germany.

As with all IEA publications, the views expressed are those of the authors and not those of the Institute (which has no corporate view), its managing trustees, Academic Advisory Council or senior staff.

The IEA does not accept funding from Governments or their agencies.

Summary

There is no way that Australia would allow another country to decide its regulatory system.

Alexander Downer, High Commissioner of Australia to the United Kingdom, 2018

Withdrawal from the EU must mean regulatory autonomy for the United Kingdom – sovereignty over its regulations. This reflects the democratic mandate of the 2016 referendum and the 2017 manifesto commitments of the Conservative and Labour Parties, and will propel growth and competition in the economy. It is also necessary for the UK to be able to sign advanced trade agreements with countries around the world.

The United Kingdom has a unique opportunity to use withdrawal from the EU to grow its economy and become considerably more productive. It is vital that nothing is done to take these benefits off the table. But for pro-competitive regulation, regulatory autonomy is vital.

- In her Lancaster House speech in 2017, the Prime Minister outlined that Brexit would mean legal independence through an end to European Court of Justice jurisdiction in the UK, and that the UK must be free to execute an independent trade policy, striking agreements with countries outside the EU, outside the Customs Union's Common External Tariff. In her speech at the Mansion House in March 2018, she stated that this meant our regulations would 'achieve the same outcomes' as EU law, but need not be identical.

To deliver an independent trade policy and substantially more prosperous economy, the UK must have the ability to change its regulatory system from the EU's *acquis* when it seeks to do so, and when beneficial for trade agreements. A 30% reduction in regulatory distortions between key trading partners by 2034 could mean GDP up to 7.25% higher than it would otherwise have been.

The UK must be able to deliver the following five points:

- 1) **Autonomy** for the UK to **make its own regulation** (for both goods and services)
- 2) **Autonomy** for the UK to **set its own standards** (for both goods and services), which can include using global standards
- 3) **Autonomy** for a **UK system of conformity assessment** (able to assess conformity to UK and EU standards and regulations)
- 4) **Unilateral recognition** by the UK of EU regulations, standards, and its conformity assessment system (able to assess conformity to EU and UK standards and regulations)
- 5) **Seek recognition** by the EU of the UK's regulations, standards, and its conformity assessment system

For actual withdrawal from the EU to be achieved through an end to EU jurisdiction, and for the benefits of pro-competitive regulation, domestic **regulatory autonomy needs to be the starting point**. But this does not mean divergence in all areas – being able to diverge does not mean one will.

- Mandatory harmonisation of regulation through the alignment of regulations themselves (as opposed to alignment of their goals) would fail to deliver the benefits of leaving. UK lawmakers may choose to retain and follow EU regulations at certain times and in certain sectors, but they must have the ability to choose not to do so.

The regulatory system the UK needs has three components:

- The first is in **regulations** (rules made by an authority, especially for products and services)
- The second is **standards** (demonstrating a product or service meets those regulations, or marks of quality in performance or safety – and where the functioning of the EU's standard system means that continued alignment would imply continued EU legal sovereignty)

- The third is **conformity assessment** (the system of bodies, e.g. firms, laboratories, and professional bodies, which assess conformity to standards, and provide certification).

The UK should be putting forward an open and constructive offer to the EU. Recognition by the UK of EU regulation, standards, and conformity assessment is a necessary part of this open offer. This will mean institutional competition for the UK economy, commercial competition from EU imports, and avoidance of unnecessary trade barriers on imports.

- In turn, while it is to be expected that recognition by the EU will vary by sector, for the EU not to grant recognition to UK regulations, standards or conformity assessment would constitute creating new trade barriers (because at the point of withdrawal there will be UK-EU alignment). Commitments made by both parties in the WTO, international fora, and existing advanced trade agreements present a framework to build on.

Because regulations will still be fully aligned or completely recognised at the point of Brexit, there is a unique opportunity for both parties to offer maximal recognition – achieving **mutual recognition** between the UK and EU.

- This opportunity, where an FTA is being negotiated by parties with identical or fully recognised regulation, is unique. The UK should therefore seek **maximum mutual recognition on day one**, and equivalence mechanisms in the EU that allow this where they do not exist already. Any differences after this that result from the parties changing their laws and regulations should be managed by permitting the withdrawal of recognition where the change results in the parties' regulatory goals not being met.

Negotiating this with the EU will be challenging, but this is too important a principle to abandon. If the EU will not accept it, it will be further isolated in a world where regulatory recognition and good regulatory practice is increasingly the preferred pathway to lowering trade barriers. Pro-competitive regulation is **essential for the UK economy**, and the vital first step is regulatory autonomy. The idea that the UK Government would decide in advance to be **tied to whatever future regulation the other party produces, without UK representation in its institutions, would be extremely unusual**. It would threaten our competitiveness, and our democracy.

- Pursuit by the UK and EU of as much recognition of each other's regulatory systems as possible allows each to diverge and to pursue its policy priorities. In the UK, this should mean the reform of regulations to encourage competition and consumer welfare.

EU regulation is becoming more damaging to consumer welfare and growth, placing the innovative SMEs that are the lifeblood of our future economy at a disadvantage to large incumbents. It is widely acknowledged that the EU is now exporting this prescriptive approach to third countries.

- The **direction of travel of EU regulation** means that, once secured in negotiation, the **gains from pro-competitive regulation will grow over time**. It is precisely this direction of travel that creates the potential gains, and we provide examples across a range of sectors illustrating this.

There have been developments in the global trading system, through the WTO, bilateral and platform free trade agreements, and mutual recognition and regulatory cooperation agreements, which provide a legal framework for the kind of ambitious free trade agreement with advanced regulatory recognition that the UK is seeking and that this paper recommends.

The opportunity needs to be taken now, and the implications of the choices the UK takes are fundamental. **For the return of sovereignty, and for the country's prosperity in the decades to come, without regulatory autonomy, withdrawal from the EU will be incomplete.**

Chapter 1: Introduction

As the UK withdraws from the European Union, the two parties must establish a new trading relationship.

In her Lancaster House speech in 2017,¹ the Prime Minister outlined the Government's policy. She stated that Brexit would mean legal independence through an end to the jurisdiction of the European Court of Justice (CJEU/ECJ) in the UK. She also described how the UK must be free to strike trade agreements with countries outside the EU, and be outside the Customs Union's Common External Tariff (CET), heralding the prospect of trade with the fast-growing Asia-Pacific region in particular, for example Australia and New Zealand.

This paper will consider this combined challenge, and identify what it will require for the UK to:

- have a regulatory environment that is pro-competitive, which will require independence from European legal jurisdiction
- sign these trade agreements, and
- operate in a liberalising manner in the World Trade Organisation and global standard-setting organisations.

Naturally this trading relationship with the EU will also need to cover tariffs and procedures, including customs, which we have discussed in previous papers. We will focus in this paper on how the UK can best maximise its domestic regulatory opportunities as well as negotiating the best possible

¹ <https://www.gov.uk/government/speeches/the-governments-negotiating-objectives-for-exiting-the-eu-pm-speech>

FTA with the EU: there is a wide spectrum of options for how this might be addressed, but the implications of where the UK chooses to be on this spectrum are profound, both for the domestic economic environment, and the capacity to establish advanced trading agreements with other nations.

Regulatory autonomy and the pro-competitive regulation it should lead to are strongly beneficial for the UK's domestic economy. The UK and EU should seek as much regulatory recognition as possible, while allowing for divergence (on both sides) to enable each to pursue their policy priorities, which in the case of the UK we recommend should be to reform regulations to promote and facilitate competition and consumer welfare.

In her speech at the Mansion House in March 2018, the Prime Minister described how the Government seeks a 'comprehensive system of mutual recognition', exceeding what is on offer to third countries outside the Single Market. While UK law would seek to 'achieve the same outcomes' as EU law, it would not therefore need to be identical.² We should begin by understanding the choices before the UK.

Spectrum of options

The spectrum of possible options the UK faces in its relationship with the EU ranges from continued Single Market membership at one end to a 'no deal' scenario at the other.

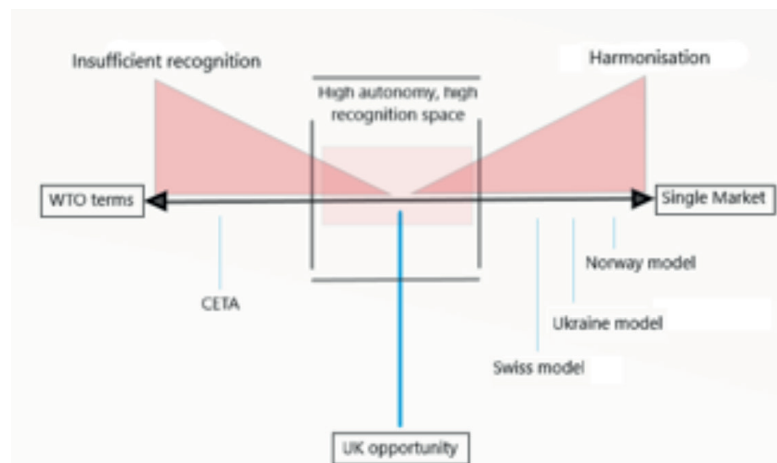
Single Market membership, however, would mean continued UK adherence to the entire body of Single Market legislation, known as the *acquis communautaire*, such that regulations would continue to be made by the EU, with ultimate legal jurisdiction lying with the Court of Justice of the European Union. The policy of the UK Government is that continued Single Market membership is not desirable or compatible with the referendum result – it does not allow the return of UK domestic control over borders, laws and money. Indeed, the closer the UK is to locking into European regulations, the less flexibility it will have to negotiate with others, to change its own regulatory system, or to contribute to liberalising initiatives in the WTO.

2 <https://www.gov.uk/government/speeches/pm-speech-on-our-future-economic-partnership-with-the-european-union>

At the other end lies the **‘no deal’ scenario**. This would mean that both parties, as WTO members, default to WTO terms (while this implies the imposition of tariffs, these are not the subject of this paper, and are considered in our paper *Brexit, Movement of Goods and the Supply Chain*³). The WTO is an international (state-to-state) organisation, preserving national legal sovereignty; unlike the EU and Single Market, it does not feature supranational law-making and enforcement (so, for example, countries that lose WTO rulings do not have to change their offending laws but must pay compensation to the parties they have harmed if they do not, or be subject to retaliatory measures). Operating under WTO arrangements includes its general commitment to non-discrimination in the application of tariffs, and market access and national treatment in the area of services trade, which includes ensuring that domestic regulations are not barriers to trade. WTO members also agree to bind their tariffs to a maximum level. But this would not be optimal for the future UK-EU relationship because it would entail unnecessary barriers, including in potentially limited recognition.

As the diagram below illustrates, this leaves a considerable range of outcomes in between, which we shall outline.

Figure 1: Spectrum of trade agreements and the opportunity for the UK



3 <https://www.li.com/activities/publications/special-trade-commission-brexit-movement-of-goods-and-the-supply-chain>

It is important to note that trade agreements are not simply discrete models as the EU sometimes suggests but rather a spectrum – they are, after all, words on a page. But given the EU’s propensity to talk in the language of models based on agreements that they have already concluded, it is worth looking at models the EU has already agreed. It is clear, however, that an agreement between the UK and EU will need to fit the needs of both parties and will not necessarily be closely based on previous models.

The so-called ‘Norway model’ (as well as the Swiss and Ukrainian arrangements) lies closer to Single Market membership. These models entail considerable harmonisation of laws and regulations.

Closer to the other end of the spectrum, however, the EU-Canada Comprehensive Economic and Trade Agreement (CETA) covers trade in goods and provisions for market access and national treatment in services. But towards this side, there is insufficient regulatory recognition to deliver the kind of low-friction trade with minimal barriers that the UK and EU are seeking.

To analyse these models more fully, we begin with the models which are closer to Single Market membership.

The Norway model

Norway is a member of the European Free Trade Association (EFTA, the other members being Iceland, Switzerland, and Liechtenstein). EFTA itself does not give Single Market access however, which is achieved through the European Economic Area (EEA) Agreement with the EU.

One of the components of the EEA Agreement is the EFTA Court, which resolves disputes. The EEA Agreement requires the EFTA Court to follow the rulings of the CJEU given prior to the date of the EEA Agreement as to the interpretation and application of EU laws incorporated into the Agreement, and to take due account of CJEU decisions thereafter. The European Commission also wishes to see the Court ‘strengthened’, to ‘function as a mirror to EU authorities’. The EEA Joint Committee, comprising representatives from the EU and all EFTA EEA participants, can opt out of changes to legislation, but if they do so, benefits under the agreement will be suspended. For this reason, this right of reservation has never been used. When Norway attempted to diverge from the Third Postal Directive, for instance, the result was the threat of a loss of market access.

Although the EEA Agreement provides for consultation and communication at the early stages of formulating Single Market legislation, as described by the European Parliament itself, in practice, EFTA countries 'have little influence on the final decision on the legislation on the EU side.'⁴

The Swiss model

The Swiss model is somewhat different because, although a member of EFTA, Switzerland is not a signatory to the EEA Agreement. Instead, it has its own extensive set of bilateral agreements with the EU. These include the free movement of people, participation in the Schengen Agreement, and Swiss financial contributions to 'economic and social cohesion' in the new EU member states. Thus the Swiss model is not an 'agreement' as such, but a collection of individual agreements that have developed gradually. The model does not grant Swiss companies unrestricted access to the Single Market for services, and the access Switzerland receives is explicitly in return for accepting free movement.

The Turkish model

The Turkish model, meanwhile, takes the form of a customs union with the EU for industrial goods and processed food (agriculture is excluded from the customs union but covered by other preferential arrangements with respect to tariffs). While this customs union includes the removal of tariffs between Turkey and the EU on the goods it covers, it also requires that Turkey apply the Common External Tariff (CET) on these. This arrangement also includes areas of increasing harmonisation, such as a Turkish commitment to adopt the *acquis* in sectors covered by the customs union, approximate commercial policies, and harmonise intellectual property rights policies. Turkey must also take on the burdens of whatever the EU negotiates in terms of the CET, and must then negotiate its own benefits, but without the leverage of being able to remove tariffs or change regulation in large areas. The Turkey-EU agreement was also begun as a step towards Turkey's intended EU accession.

The Ukraine model

The Ukrainian model is called the Deep and Comprehensive Free Trade Agreement (DCFTA). This means tariff-free access for goods and 'passporting' for services, with immigration addressed by visa liberalisation and work permits. The Ukraine model also includes the alignment of considerable areas of regulation – in competition, state aid, public

4 <http://www.europarl.europa.eu/document/activities/cont/201108/20110818ATT25100/20110818ATT25100EN.pdf>

procurement, and anti-dumping; the agreement plans for integration in foreign policy, defence and security, home affairs, and justice policy. It states that Ukraine is expected to '[achieve] convergence with the EU in political, economic and legal areas'.⁵ Progress here – and whether Ukrainian regulations affecting trade are sufficiently aligned to the *acquis* – will be judged by a joint Association Council, with no right of appeal. In disputes on interpretation of the provisions of EU law with which Ukraine is converging, the ultimate verdict is for the ECJ.

The EU-Canada Comprehensive Economic and Trade Agreement (CETA)

On the other hand, the EU-Canada Comprehensive Economic and Trade Agreement (CETA) is one of the agreements that the EU has signed outside its immediate neighbourhood. CETA is very liberalising in terms of tariffs on goods (though some sensitive agricultural products will remain subject to tariffs). It also has provisions for market access and national treatments in a wide range of services but does not meaningfully address domestic regulation, the most serious barrier to trade in services. Using its own arbitration for dispute settlement, CETA does not involve ECJ jurisdiction.⁶ While CETA does not seek to harmonise Canadian regulation with the EU, neither does it provide for the mutual recognition of regulation between the two parties. However, it does include a regime for mutual recognition of conformity assessment and broad (although non-binding) agreement on regulatory cooperation. But the gaps in provisions for services and the potential it leaves for the EU to refuse to recognise regulation create the potential for barriers to trade between the UK and the EU.⁷

5 http://www.eeas.europa.eu/archives/docs/images/top_stories/140912_eu-ukraine-associatin-agreement-quick_guide.pdf

6 Investment disputes will be dealt with pursuant to a special investment court, which also does not involve the ECJ.

7 When available, the regulatory coherence chapters of the NAFTA renegotiation and the recently closed EU-Mexico agreement would be worthy of study.

Criteria for success

From the above, we can draw out what characteristics the UK needs for its agreement with the EU.

In the first instance, for the mandate of withdrawal from the EU to be fulfilled through an end to EU jurisdiction, and for the economic benefits of an independent trade policy to be realised, domestic regulatory autonomy must be the starting point.

This is because regulatory autonomy is both an end and a means. While no regulatory system is completely unconstrained (international trade law and WTO rules constrain regulatory systems to some extent for any country that wishes to trade with the rest of the world), if it wishes to execute its own independent trade policy the UK will still need the power to design its own regulatory system. The mandatory harmonisation of regulation through the alignment of regulations themselves (as opposed to alignment of regulatory *goals*) precludes such freedom, however. Nevertheless, autonomy would both allow the UK to import with fewer restrictive barriers (by minimising the regulatory burden), thereby nurturing competition, and also allow the creation of the UK's own domestic, pro-competitive regulation, which will enable a more competitive and prosperous economy to emerge. Parliamentary oversight will also prevent any regulatory 'race to the bottom': pro-competitive regulation, i.e. regulation that does not distort markets in anti-competitive ways is not to be confused with deregulation. Pro-competitive regulation minimises the harm to competition, ensuring that wealth is not destroyed in the economy, and prevents entrenched incumbents from using the regulatory system to damage their rivals.

This autonomy (and a pro-competitive regulatory system) has three components. The first refers to regulations (meaning a rule made by an authority, in particular for products and services); then to standards (which show that a product or service meets those regulations, and are marks of quality for performance or safety); and finally, conformity assessment (the system of bodies – firms, laboratories, professional bodies, and others – which assess whether a product or service conforms to one or other of these standards, and provides certification). In her Mansion House speech, the Prime Minister also stated that products would 'only need to undergo one series of approvals, in one country, to show that they meet the required regulatory standards'; to achieve this, 'a comprehensive system of mutual recognition' will be needed, as well as some 'independent mechanism to oversee these arrangements', but not ECJ jurisdiction. One flows from

the other: autonomy in regulations means that without autonomy in standards, UK standards would be essentially meaningless. The creation of separate regulations means that UK standards will need to refer to these (i.e. should standards remain harmonised, UK standards would no longer refer to UK regulations).

There are central questions which must be considered with respect to how a trade agreement deals with domestic regulation.

First, and most importantly, while trade agreements previously focussed on traditional border barriers (e.g. tariffs), they have now moved into the more difficult world of dealing with behind the border barriers and regulatory protectionism. Here, both the UK and EU have made commitments at the WTO, which we shall analyse. The UK and EU Member States have also stated at the OECD⁸ that regulation should in general be the least anti-competitive consistent with the regulatory goal. Both are active in fora like the International Competition Network (ICN), where competition advocacy is part of the agenda, meaning regulation should be promulgated in ways that promote competition, and that a competitive market should be a regulatory goal.

It is in the UK's interest to pursue good regulatory practice (GRP) to allow its economy to move in a pro-competitive direction (and to build on existing GRP initiatives around the world). The goal of GRP is that regulation should not be unduly burdensome (achieved by considering business compliance costs), trade-restrictive (by considering impact on trade) or have anti-competitive effects (by considering impacts on the market). Second, having secured regulatory autonomy and recognition, the UK should also encourage the EU itself to pursue GRP for the benefit of both parties.

While we focus on goods in this paper, to avoid future unwarranted obstructions to trade in either goods or services, this domestic autonomy does not mean that regulations are immediately changed. It is important for both sides to ensure maximum mutual recognition on day one of Brexit and effective management of regulatory developments thereafter. That, at the point of Brexit, regulations will be fully aligned,⁹ allows a unique opportunity for both parties to offer maximal recognition of the other's regulation, standards, and conformity assessment, i.e. mutual recognition between the EU and UK.

8 With the OECD Regulatory Toolkit and the OECD Competition Assessment Toolkit.

9 Or, in non-harmonised areas, fully accepted in all member states.

The UK will also need to have control over its own regulatory system to be able to join other advanced trade agreements with third countries. The most advanced of these is the Comprehensive and Progressive Trans-Pacific Partnership (which we will call TPP). In order to accede to the TPP, the UK would have to be in a position to use its regulatory autonomy to change its regulations. The TPP, like modern FTAs, contains a robust regulatory coherence chapter which refers to the use of GRP that, *inter alia*, also promote international trade and investment. This includes parties agreeing to do regulatory impact assessments which consider alternative approaches that are less costly; agreeing that the impact of regulation on SMEs should be particularly considered; and on competition, applying competition rules in ways that promote consumer welfare and economic efficiency.

The UK's trading agreement with the EU therefore needs to allow: domestic autonomy, the ability to sign advanced trade agreements with third countries, and a smooth exit of the UK from the EU minimising the creation of new trade barriers. The UK's democratic autonomous control over its system of regulation can then be put to work to create a competitive economy.

In sum, regulatory autonomy for the UK is an essential part of any future trade agreement with the EU, including for the areas of regulation, standards, and conformity assessment. The recognition by the EU of that autonomous domestic system as equivalent for the purposes of trade must then also be sought.

All modern or advanced FTAs will have regulatory coherence/coordination chapters. The UK's bilateral FTA with the EU is no exception, and should have provisions which move both parties towards pro-competitive regulation. The FTA's regulatory coherence chapter should also allow the negotiation of advanced mutual recognition agreements (MRAs) on a sectoral basis, granting mutual recognition between the UK and EU of regulation, standards, and conformity assessment between them. While standards and regulations will be aligned and recognised on the day the UK withdraws, the UK from that point will be able to build its own regulatory environment. The offer we describe, which is to the benefit of both parties, therefore consists of the following points:

- 1) **Autonomy** for the UK to **make its own regulation** (for both goods and services)
- 2) **Autonomy** for the UK to **set its own standards** (for both goods and services), which can include using global standards
- 3) **Autonomy** for a **UK system of conformity assessment** (able to assess conformity to UK and EU standards and regulations)
- 4) **Unilateral recognition** by the UK of EU regulations, standards, and its conformity assessment system (able to assess conformity to EU and UK standards and regulations)
- 5) **Seek recognition** by the EU of the UK's regulations, standards, and its conformity assessment system

Precedents and direction of travel

There is now considerable precedent for this autonomy and recognition through the WTO and in the more advanced trade agreements. The WTO mandates that regulations be non-discriminatory and not more trade restrictive than necessary to achieve a legitimate objective, and, in the case of food products, based on sound science.

It is a common myth that the world trading system does not deal with domestic regulation. As we will discuss, the reality is that since the 1947 signing of GATT, the trading system has included disciplines on domestic laws, regulations and administrative actions (see, for example, GATT Article III). More recently, the direction set through trade agreements such as the Australia-New Zealand Closer Economic Relations and Trade Agreement (ANZCERTA, in 1983) and the TPP (signed in its final form in 2017) demonstrates that mutual recognition should be granted where possible, and that all parties should ensure that regulation removes unnecessary market distortions and anti-competitive barriers to international trade within their domestic economy.

Furthermore, in the past the EU has sought considerable mutual recognition, with the United States. This was a much greater challenge than what UK-EU mutual recognition presents, whereby two parties sought mutual recognition of vastly different regulatory systems. In the UK-EU context, this difficulty is reversed. The UK's Single Market membership has meant harmonisation up to this point, so the parties will begin with regulation which can therefore be recognised more straightforwardly. This initial

alignment, with the continuing alignment of *aims* accepted by both parties, creates a uniquely achievable opportunity for maximum regulatory recognition, allowing a mechanism where both parties can do what they have already committed to, which is to move towards pro-competitive regulation. Mutual recognition means that UK products would be marketed in the EU without necessarily meeting single market regulations, so recognition is unlikely to be granted by the EU in all industrial sectors, but this should not preclude the UK pursuing autonomy for its own regulations, even if a limited number of sectors then choose to keep *de facto* similar regulation to the EU.

The Imperative

Countries have always used such negotiation opportunities to get the best for their economies and their futures, and the scale of the opportunity is great.

Brexit presents the UK with an ‘unfrozen moment’, but while this is unique, it is also brief. We have described how, politically, autonomy means withdrawal from the EU can be completed. However, economically, the capacity it creates is for a regulatory environment that is pro-competitive and increases consumer welfare. Vested interests and incumbency usually prevent this kind of reform. This suggests that after Brexit, the opportunity will pass.

To be attainable, the opportunity needs to be taken now. The temptation may be for the UK to tolerate a less demanding agreement in the short term, in the hope of improvement later, but in reality there is unlikely to be practical opportunity for later renegotiation. How the UK leaves the EU will thus determine whether it can lower trade barriers by joining advanced trade agreements, and whether it has the autonomy to release the considerably greater economic growth that, as we will demonstrate, is achievable through pro-competitive regulation. If other countries, either acting independently or in bigger groupings like the advanced platform agreements (e.g. TPP) and in the WTO, see any likelihood that the UK will align strictly and closely to the EU, they are likely to move on with their own agendas, and the unfrozen moment will freeze once more.

The evidence also demonstrates that EU regulation is becoming more damaging to consumer welfare and to growth. Furthermore, it is widely acknowledged that the EU is exporting this prescriptive approach to third countries through harmonisation and market pressure.¹⁰ Examples include the sector-specific Agreement on Conformity Assessment and Acceptance (ACAA) with Israel for pharmaceuticals, which requires full alignment on EU rules for the products covered, and the EU-Switzerland relationship, whereby Switzerland applies EU product standards to its own market (European Scrutiny Committee, 2018).

Without domestic regulatory autonomy, therefore, it is hard to see how the opportunities that arise from withdrawal from the EU can be fulfilled. The direction of travel of EU regulation means that, once secured in negotiation, the gains from a pro-competitive regulatory system are likely to grow over time.

Structure of the paper

In the chapters below, we will discuss how autonomy and recognition can be achieved.

Following the Introduction, Chapter 2, *The UK's approach to the EU*, discusses the importance of and rationale for the five separate points, outlining how the UK can use the UK-EU FTA to deliver a competitive domestic regulatory environment through regulatory autonomy, negotiate other trade agreements and operate decisively in the WTO (including how mutual recognition will function in the context of the Northern Ireland border).

Chapter 3, *Pathways and legal frameworks*, outlines how autonomy, and with it the capacity to create pro-competitive regulation, and mutual recognition, build on established practice at the WTO and in advanced trade agreements and MRAs.

¹⁰ The USTR (2016) states that the EU promotes “adoption of European regional standards in other markets” and “often requires the elimination of non-EU standards as a condition of providing assistance to, or affiliation with, other countries, which can give EU manufacturers commercial advantages in those markets” (see also Chapter 4).

Chapter 4, *Standards: a discussion of UK autonomy in standard-setting*, analyses the question of technical and commercial standards in particular, informed by differences between the EU and US standards systems, outlining the opportunity for an autonomous UK standards architecture.

Chapter 5, *Selected major anti-competitive regulations by sector*, discusses the major EU-originated anti-competitive regulations in effect in the UK.

Following Chapter 6, Conclusion, the Appendix outlines the international standards development bodies in which the UK may play a leading role.

We begin with the opportunity and rationale for domestic autonomy, in the following chapter.

Chapter 2: The UK's approach to the EU

Outline

This chapter outlines the broad proposal which the UK may make to the EU. This proposal, or offer, aims to restore the regulatory autonomy of the UK, to reduce market distortions in the UK, and to encourage the same in the EU. Within a larger UK-EU FTA, this would form part of the desired 'End State' of UK trade with the EU.

Thus, while standards and regulations will be fully aligned on the day the UK leaves the EU, from the day of withdrawal (we now assume after a transition period), the UK would have control of its own regulation. Should recognition not be forthcoming from the EU, it would still be in the UK's domestic and trade interests to choose regulatory autonomy, and to grant recognition to the EU even without reciprocation.

The offer we describe, which is to the benefit of both parties, therefore consists of the following points:

- 1) **Autonomy** for the UK to **make its own regulation** (for both goods and services)
- 2) **Autonomy** for the UK to **set its own standards** (for both goods and services), which can include using global standards
- 3) **Autonomy** for a **UK system of conformity assessment** (able to assess conformity to UK and EU standards and regulations)

- 4) **Unilateral recognition** by the UK of EU regulations, standards, and its conformity assessment system (able to assess conformity to EU and UK standards and regulations)
- 5) **Seek recognition** by the EU of the UK's regulations, standards, and its conformity assessment system

We now discuss the reasoning for the different points of the proposal, beginning with the central question of regulatory independence, or autonomy.

Point 1:

Autonomy for the UK to make its own regulation (for both goods and services)

The establishment of regulatory autonomy, following the mandate of withdrawal, precludes the continuing mandatory harmonisation of regulations (independent of regulations' level of *de facto* elective alignment). Autonomy will control over the shape of these regulations to an elected UK parliamentary system, a political principle which means that it will be for future elected UK governments to decide the nature of any changes to UK regulations.

However, there is also a strong economic rationale for regulatory autonomy as well as direct economic benefits if the UK can make its domestic economy more pro-competitive.

The case for a pro-competitive regulatory environment

Regulation should not distort competition in ways that reduce economic growth. It also should not unfairly favour incumbents by imposing unfair burdens on smaller firms, leading to entrenched incumbency, and a reduction of the innovation which is vital for developed countries' growth.

Single Market regulation now strongly appears to be increasingly anti-competitive in nature, making regulatory autonomy increasingly urgent for the UK (we describe in Chapter 5 some of the most burdensome and anti-competitive examples).

Numerous studies demonstrate that such regulation increases business costs and reduces innovation incentives, market openness, and domestic and international competition, which ultimately reduces economic growth and productivity (Czaga, 2004). The OECD, for example, uses a range of methods demonstrating the base of evidence for the potential of regulatory reform. We outline these here.

First, Miroudot et al.'s (2007) index of pro-competitive reforms include competition indicators (e.g. degree of government intervention and price controls), an antitrust law index, variables on the cost of licenses and permits, and administrative burdens on start-ups (the authors find high-income countries generally have more pro-competitive policies, with most cross-country differences explained by trade policy, followed by investment policy). But they also find impacts from regulatory reform itself: countries with less competitive markets trade less than those with more competitive markets, with a 1 percent decrease in index score; there are additional gains when partner countries undertake pro-competitive reforms. Were developing countries at the same pro-competitive level as high-income OECD countries, exports would be on average 29.7 per cent higher and imports 36 per cent higher, translating into income per capita gains of 3.5 per cent to 10.5 per cent, with more reform leading to larger gains, driven primarily by improvements in the trade component.

Nicoletti and Scarpetta (2003) use an economy-wide composite index of regulation, including industry-level regulation and regulatory

reform, to measure the impact of regulatory reform on productivity. The study finds that lowering entry barriers means faster catch-up to best practice technology in manufacturing. Privatisation also leads to direct productivity gains, but these may depend on whether it is accompanied by adequate promotion of competition in these markets. The study shows that for some European countries, lowering barriers to entry in services to the OECD average over 10 years could boost annual multifactor productivity growth by 0.1-0.2 per cent; removing trade and administrative barriers to entry to the OECD average could increase manufacturing-wide annual productivity growth by 0.1-0.2 per cent.

Nicoletti et al. (2003) assess the importance of border and non-border measures for global economic integration. Using policy indicators including regulations specific to foreign direct investment (FDI), they find that competition-oriented domestic policies (and openness to trade and investment) have important implications for trade and FDI in OECD countries. Countries with restrictive and costly product-market regulations tend to have lower stocks of foreign capital; home (and destination) country anti-competitive regulations also reduce exporting. Notably for the UK, they find the impact of restrictive regulation to be stronger for services.

We outline some of the most burdensome regulations in Chapter 5, while the Rationale below discusses the potential gains in more depth. As Chapter 3 covering the direction of travel of international trade law and policy will also describe, rather than being excessive, a UK request along the lines suggested is the logical next step in the path advanced trade practice is already moving along, to ensure both pro-competitive regulation and as much recognition of countries' regulations as possible.

Point 2:

Autonomy for the UK to set its own standards (for both goods and services), which can include using global standards

Adherence to standards is a mark of quality for a good (or service), but standards may also demonstrate that goods or services meet the relevant regulations of a jurisdiction.

Standards are different from the underlying regulation on which they are based, although the two are often confused. Standards are an essential part of ensuring that consumers understand that product regulation has been complied with by firms; standards can also be used as marketing tools if they are associated with a particular organisation that has a reputation for quality; they can be set for security, health, environmental reasons and consumer information, and can be mandatory or otherwise.

However, if an underlying product regulation to which a standard demonstrate adherence is anti-competitive, or if the standard or the way that companies can become certified to the standard is anti-competitive, a country's standard-setting policy can be an anti-competitive restraint, which can damage consumer welfare.

If, as a result of having control over its regulatory system, the UK diverges from EU product regulation, then by implication it will also need the ability to adopt different standards.

The EU standards-setting system is structured around two main organisations, the European Commission for Standardization (CEN), and the European Commission for Electrotechnical Standardization (CENELEC), which, despite not formally being EU bodies are contracted to and funded by the EU (discussed in greater depth in Chapter 4). The UK's National Standards Body, BSI (originally the British Standards Institute), is a member of these organisations and is mandated to remove existing UK standards when they conflict with the new standards agreed by CEN and CENELEC. We will outline in Chapter 4 how standards autonomy will allow the UK to structure a standards system giving UK bodies ultimate authority over our technical and commercial standards. Were the UK to remain aligned to EU standard-setting, it would in turn not be able to achieve *regulatory*

autonomy, as a large number of EU standards are created following requests from the European Commission.

As EU regulation has become increasingly anti-competitive meanwhile, comparable problems have occurred in the system of EU-originated standards. Non-EU countries, including the United States, as well as SMEs in the UK, are increasingly raising concerns about the limited access granted by these bodies. The history of the UK standards system and the original emergence of product and service standards in the UK, and learnings from the US and EU systems, point to the opportunities for an autonomous UK standards system which can cooperate with international standards organisations.

The goal of autonomy should include improving SME access and predictability while avoiding the burdensome aspects of other jurisdictions' systems. The UK's goal should also be to drive the development of pro-competitive standards in international standards bodies. The process of creating new standards should allow standards which are more relevant to UK firms' technological advantages and preferences, encouraging a pro-competitive and pro-innovation economic environment. It is important to note, however, that the capacity to diverge from EU standards, like regulation, does not make this mandatory in any case and that where a UK standard-setting organisation regarded a current or future EU standard as suitable, it would be able to adopt it; continuing alignment on the other hand would mean that the UK would have to adopt EU standards and regulations even when they were regarded as unsuitable.

Any new system should incorporate safeguards to ensure standards are pro-competitive and that incumbents and other interest groups do not capture the regulatory promulgation processes. This can best be accomplished by giving the domestic competition agency a seat at the table.

Point 3:

Autonomy for a UK system of conformity assessment (able to assess conformity to UK and EU standards and regulations)

The field of standards covers not only the domestic system by which standards are set, but also the bodies which assess conformity to these standards. Conformity assessment procedures include testing and inspection, evaluation, sampling, registration, approval of products, and accreditation. In professional services, conformity assessment can be applied to licensing and qualification, as well as the examination and certification of institutions themselves. Within conformity assessment systems, conformity assessment bodies (CABs) are those companies and other organisations that certify that a required standard is met. These assessment bodies form a broad part of the UK's business ecosystem, covering a wide range of businesses and organisations.

Within the EU, the bodies which test conformity to standards – such as certification laboratories – are called 'notified bodies', and where third-party product testing and certification is required by law, only these organisations (or their subsidiaries or subcontractors) may grant EU market approval. Notified bodies must be designated as such by the European Commission. In principle, any conformity assessment body may be subject to an EU-originated regulation.

In an autonomous UK system, the bodies which could assess conformity to standards would be determined by the UK Government, with regulations under domestic control. As autonomy in regulation leads to autonomy in standards, the same logic applies to conformity assessment. Control of the rules governing its operation would mandate regulatory autonomy and standards autonomy, provided that a governance structure is in place in the UK which ensures that pro-competition concerns are fully expressed in the promulgation process.

Points 4 and 5:

Unilateral recognition by the UK of EU regulations, standards, and its conformity assessment system (able to assess conformity to EU and UK standards and regulations)

Seek recognition by the EU of the UK's regulations, standards, and its conformity assessment system

Unilateral recognition by the UK of EU regulations, standards and conformity assessment (i.e. for the import to the UK of EU goods) is needed for institutional competition, the maintenance of low-friction trade, and the UK-EU competition that is consumer welfare-enhancing. The UK would also seek the same recognition from the EU: we acknowledge that the granting of this would presumably vary by sector; however, broadly, the commercial interest of EU companies is strongly against having trade barriers erected within their UK-EU supply chains.

For the avoidance of disruptions, on 'day one', some degree of mutual recognition by the EU is necessary, in so far as this means recognising UK regulations in the identical state in which they currently stand (as we will explain, failure to do so would likely be a violation of the EU's WTO commitments). We therefore refer to the recognition that differing future regulations can still be satisfactory and achieve the other party's regulatory goals, which the UK can offer unilaterally. While some risk of the erection of trade barriers by the EU would remain, this risk is necessary for the essential capacity of returning sovereignty over regulatory autonomy and with it the ability to pursue the good regulatory practice that allows improved economic growth.

Because mutual recognition involves each party/country committing to the principle that goods can be sold in its jurisdiction in reliance on regulation in the other (Nicolaidis and Shaffer, 2005), this will also accelerate the process of both regulatory competition and product competition by exposing markets directly to the products made to the specifications of the other jurisdiction's mutually recognised standards (Pelkmans, 2003).¹¹

¹¹ In the services context, see also, on the arbitrary and political nature of EU decisions, and equivalence, the International Regulatory Strategy Group publications *The EU's Third Country Regimes and Alternatives to Passporting*, and *Mutual Recognition: a Basis for Market Access After Brexit*.

Where standards also diverge from the EU, the UK should seek the mutual recognition of standards themselves, to avoid the creation of barriers to trade that would serve neither party. Naturally, a UK company that, for example, manufactures components in a European supply chain, may still need to manufacture to an EU standard or standards: this would be left to the commercial requirements of the EU-based 'systems integrator' company, i.e. that which a given UK firm supplies. However, other UK firms, for example, those manufacturing a product for sale in the domestic UK market, would adhere to UK-originated standards post-withdrawal from the EU, which also allows institutional competition between the UK and EU (for instance, should an EU regulation or standard be regarded as superior, it could be adopted in the UK).

In terms of recognition of conformity assessment, the UK would propose that conformity assessment bodies would also be able to assess conformity with EU standards, while allowing EU notified bodies to do the same, to improve access to assessment for SMEs in both jurisdictions. Mutual recognition of this conformity assessment would aim not to increase the testing that companies require for their products. Thus the right to approve UK *and* EU products would be extended to all those capable of conducting tests for their *domestic* market.

While recognition of conformity assessment bodies would usually be determined through a complex process of evaluation of counterparts' conformity assessment systems, in the UK-EU case, the respective organisations are already, by virtue of UK membership, mutually recognised to be sufficient. This should also continue. Both of the European Commission's definitions of MRAs cover conformity assessment: 'traditional' MRAs focus on the mutual recognition of conformity assessment without touching the substance of the standards or regulations being certified; 'enhanced' agreements include equivalence or common rules.

To enhance public confidence, and confidence within the other party, a mutual recognition agreement for conformity assessment could also include *ex post* guarantees for conformity assessment bodies, also administered by a dispute resolution mechanism (this may cover monitoring mechanisms for laboratories, and could include a transparency obligation for the bodies, for the continuing understanding of their technical competence).

Two jurisdictions with an opportunity for mutual recognition would normally face the challenge of agreeing recognition for large swathes of regulation.

The UK-EU situation involves the reverse. Harmonisation and ('managed') mutual recognition up to the point of withdrawal means that, because they begin with alignment and recognition, the parties' challenge is to make divergence manageable, predictable, and mutually understood. This would be facilitated by the continuing alignment of the *aims* of regulation (which is the necessary interpretation of the UK-EU joint report issued at the end of Phase 1 of negotiations¹²).

While it may appear that some form of UK-EU regulatory committee would be a useful forum with which to monitor the regime's application (even if it did not allow either party a veto over the other's new regulations or standards), such a body would be liable to lead to regulatory reform becoming drastically slowed down. There is also a risk that a protocol would develop whereby any significant reform would need to be discussed first by a range of UK and EU stakeholders, making the entire agenda burdensome.

Instead, the UK and EU can establish a dispute settlement mechanism in the ordinary course of a free trade agreement, which can manage differences from the common starting point of completely identical regulation. Such a provision would establish a default position that equivalence is assumed on day one and amendments and new regulations by each side are thereafter communicated to the other. If the other side determines that the regulatory change means that the two sides are no longer equivalent, it can withdraw recognition for the affected goods. Conformity assessment in the affected area would be unaffected and they could continue to be tested and certified to the import market's standards. This would be supported by a dispute settlement mechanism where, *if challenged*, the party withdrawing recognition would need to demonstrate that the offending regulation no longer achieves that party's regulatory goals or does not comply with GRP. While neither party can be made to change its regulations or standards pursuant to such a system, an adverse finding would lead to ordinary trade sanctions or compensation. This means that in the UK and EU, competent authorities would be able to decide whether a regulation, for example, remains functionally equivalent in aims. While some might argue that this would put the UK in a better position than member states of the EU, member states have the ability to influence the regulatory promulgation process in Council.

12 *Joint report on progress during Phase 1 of negotiations under Article 50 TEU of the UK's orderly withdrawal from the EU* (8 December 2017). <https://www.gov.uk/government/publications/joint-report-on-progress-during-phase-1-of-negotiations-under-article-50-teu-on-the-uks-orderly-withdrawal-from-the-eu>

Rationale

To understand more clearly the rationale for this offer, we should first consider its potential costs. We suggest that the central potential costs of taking control of tariff schedules and regulatory autonomy are as follows:

- Costs to UK (and EU) exporters of meeting multiple sets of standards where the UK and the EU have different standards (dependent on level of recognition)
- Costs of moving from the (theoretically) free circulation of goods and services to a system with compliance procedures, checks and potentially restrictions, and initial costs including those of one-off implementation.¹³

However, the potential trade costs of an independent trade policy and regulatory divergence will depend on the nature of the final trade agreement between the UK and EU, and how costs are mitigated. Independent trade and regulatory policy is made more straightforward through various mechanisms, which are, broadly:

- Goods. To the extent that two regulatory systems begin to diverge, recognition arrangements for underlying regulatory systems can be streamlined, with best-practice systems at the border.
- Services. As trade barriers for services are in the regulatory area, regulatory recognition itself reduces disruption, but so does a dispute settlement mechanism (as required under the WTO and in line with OECD regulatory good practice, discussed in Chapter 3 (outlined in the OECD Competition Assessment Toolkit)).¹⁴

13 For the purpose of this paper, we consider the regulatory implications. Customs (border management and customs duties) is dealt with in other papers.

14 We recognise that existing WTO commitments and therefore dispute settlement mechanisms are limited with respect to services at present. It is naturally anticipated that an independent UK will improve the services agenda.

a) The opportunity for regulatory review

UK regulatory autonomy presents the UK with an opportunity to review all EU regulations through cost-benefit analysis and then reform them as required. Much work has been done in the UK, the US, and other OECD members on cost-benefit analysis (such as in the Magenta Book in the UK and the A4 Circular in the US). The benefits of regulation must be clearly stated; weighed against them are the costs of regulation. This means that, prior to regulatory promulgation, costs must be made explicit. We would recommend that the costs be subdivided into the following categories:

1. Business compliance costs. Most regulatory authorities take in some element of business compliance costs in their regulatory promulgation, including the UK's Better Regulation Executive
2. Impact of regulation on trade; and
3. Impact of regulation on competition (e.g. the OECD Regulatory Toolkit and the OECD Competition Assessment).

It is well-known that domestic regulations can have an impact on trade. While the international trading system has focussed historically on border barriers such as tariffs and non-tariff barriers, it has also looked at domestic regulation, even from its inception. As Chapter 3 will analyse, the UK-EU agreement is an opportunity to build on the work that has already been done in this area, and an agreement will not be the first time this subject will be dealt with.

The impact of regulation on domestic competition is also the subject of considerable work to date, much of which has been done in the OECD. Most recently, the OECD Regulatory Toolkit and Competition Assessment examine how countries can ensure that regulation is as pro-competitive as possible consistent with the regulatory goal. By integrating the interaction effects of regulation on both trade and competition, it is possible to construct regulatory promulgation which is guided by the principle of being the least trade-restrictive and least anti-competitive consistent with the regulatory goal.¹⁵

15 The Competition and Markets Authority (CMA) is ideally placed to perform this analysis.

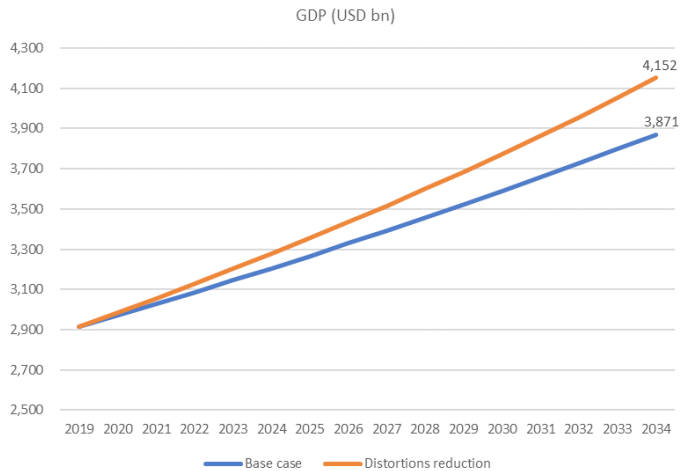
b) The economic stakes are high

The potential opportunity costs of any agreement with the EU that limits UK autonomy over its regulatory policy, such as would be the case where the UK commits to aligning to EU regulations, will be especially severe.

While the first six rounds of the GATT, between 1947 and 1967, focussed on the reduction of tariffs, and although border trade barriers remain important, since the Uruguay Round concluded in 1994 the greatest challenge in trade liberalisation has been in behind-the-border barriers to trade. Removing tariffs is important because they can make products more expensive. But regulation can actually prevent a firm being able to make a product or to export and import at all. An independent trade policy with scope for regulatory divergence can allow the UK to undertake regulatory reform to develop a pro-competitive economic environment (which, through future trade agreements, can then help reduce anti-competitive regulation and distortions in markets around the world).

Estimating the impacts of regulatory reform is challenging, but using a methodology we have developed to measure the pro-competitiveness of domestic, international and property rights policies (Singham et al., 2016), initial analysis of the productivity impact of reduced anti-competitive barriers (or anti-competitive market distortions (ACMDs)) shows how regulatory reform to remove distortions can improve scores in these areas. Assuming that the TPP countries and the UK and US undertake regulatory reform to reduce domestic distortions by 30 per cent¹⁶ over a 15-year period (starting from 2019 when the UK withdraws from the EU), our analysis suggests that if regulatory distortions are reduced by 30 per cent between 2019 and 2034, GDP in 2034 could be up to 7.25 per cent higher than it otherwise would have been. An annual 2 per cent reduction in distortions is estimated to improve GDP by 0.4 per cent. In the absence of any distortions reductions, GDP would grow by c.1.9 per cent year on year, however, so with a two percentage point annual distortions reduction, the annual GDP growth rate could increase to 2.4 per cent (for the UK, US and TPP 11). This is illustrated in the following figure.

¹⁶ A 30 percent reduction in distortions is meant to be a conservative illustration of the potential benefit. While eliminating all distortions is estimated to generate enormous productivity gains, actually eliminating every distortion is likely impossible because it would require perfectly identifying every market failure and finding a perfect policy prescription for correction. There are also immense political obstacles to improving every regulation. We choose a 30 per cent overall reduction because it is conservative and illustrative.

Figure 2: Potential GDP impact of distortions reductions

(Source: IEA analysis)

Extensive work by the OECD and others adds to the case for the UK to use its regulatory autonomy to reduce ACMDs. According to OECD analysis (for a summary, see Czaga (2004), international trade not only helps entrench regulatory reform, but the capacity to create pro-competitive regulation in turn supports market openness. This market openness promotes competition, helping firms become more efficient. The capacity to make better regulation also encourages innovation, as competitive markets develop incentives to improve productivity and adopt new technologies. Conversely, needlessly burdensome regulation increases production costs and harms consumer welfare. Bayoumi, Laxton and Pesenti (2004) find that Euro area GDP could increase by 8.6 per cent should product market regulation improve to US levels. The IMF's World Economic Outlook (2003) found that the Euro area closing the gap with the US in labour and product market reforms could increase GDP by up to 10 per cent; product market reforms alone could increase GDP by 4.3 per cent in the long term through the impacts of pro-competitive policies (International Monetary Fund, April 2003). The greater the autonomy, the more advanced the regulatory reform that can be undertaken, and the greater the opportunity for gains.

The UK ranks relatively highly on some regulatory measures, but these often deal with business compliance costs specifically, not the impact of

regulations themselves (for example, based on a cost-benefit ratio of regulations, US federal regulations may be at least 25 per cent more efficient than their UK equivalents (ACCA, 2010)). The consumer welfare effects of anti-competitive market distortions (ACMDs) and poor regulation are also potentially orders of magnitude greater than trade costs. This means the opportunity costs from not undertaking regulatory reform could outweigh both border barrier reductions and trade costs of any divergence.

The liberalisation of regulations for services is especially important, as services account for around 80 per cent of UK GDP and the UK is the world's second biggest exporter of services. The OECD estimates that a 1 per cent improvement in its Services Trade Restrictiveness Index could increase exports by 0.33 per cent and imports by 0.76 per cent (Miroudot et al., 2007). The extent to which reducing distortions can be achieved depends on the UK having an independent regulatory policy which allows divergence.

The return of UK parliamentary sovereignty over our regulatory environment means greater, not less, scrutiny of new regulation. An MRA with the EU, meanwhile, would be with another generally very developed jurisdiction. Regulatory autonomy with mutual recognition would create a more pro-competitive scenario but maintain alignment of objectives, including in health and safety, consumer protection, and the environment, to allow considerable welfare benefits (Pelkmans, 2003). Evidence from practice to date also shows that downgrading regulation from a consumer welfare standpoint does not seem to occur where recognition has already been adopted (Nicolaidis and Schmidt, 2007).

We will now analyse how trade law and practice has led to the UK being able to make this 'offer' of autonomy and its recognition.

Chapter 3: Pathways and legal frameworks

In this section, we will examine how WTO rules, and bilateral and plurilateral agreements have approached the challenge of reducing and minimising barriers to international trade caused by differing regulations.

The substance of the domestic regulations in a territory (including the elimination of regulatory barriers), and the recognition and acceptance of those regulations by other territories are different questions. This is because the issue is not simply recognition of regulations, but a question of the capacity to eliminate anti-competitive regulation. We will consider both the default legal basis that applies as between WTO members in the absence of other agreement, and some examples in practice of where trading partners around the world have built on the WTO baseline and tailored it to their circumstances and priorities.

The WTO framework

WTO rules set out the international law framework that will apply to the UK and EU in the absence of any other agreement. As we are principally concerned with goods, the main agreements that apply are the General Agreement on Tariffs and Trade 1947 ('GATT'), and the agreements on Application of Sanitary and Phytosanitary Measures and Technical Barriers to Trade (the SPS and TBT Agreements respectively), although we will also discuss the General Agreement on Trade in Services (GATS). Amongst other things, together these agreements:

-
- provide for fundamental obligations to refrain from discrimination in respect of taxation *and* regulation, both as between other members (the most-favoured-nation or MFN principle) and as against domestic suppliers (the National Treatment principle);
 - impose certain disciplines on the substance of domestic regulation and conformity assessment procedures; and
 - set out certain areas where recognition is required and others where parties are required to give consideration to recognition.

The original GATT was the forerunner to the World Trade Organisation. It was founded in 1948 and replaced in 1995 by the WTO Agreement, establishing the body to oversee and adjudicate the rules of world trade, which added a suite of new agreements to the GATT. The GATT was founded on the two fundamental principles, which the WTO Agreement continues: the MFN and National Treatment principles.¹⁷

The National Treatment principle means that, in domestic laws, WTO members may not afford protection to domestic producers by the application of internal taxes and charges or regulations and requirements. Specifically, imported products are not to be subject to taxes and charges in excess of those applied to 'like domestic products' or accorded treatment 'less favourable than that accorded to like products of national origin in respect of all law, regulation and requirements'.¹⁸

The National Treatment principle therefore addresses 'behind the border' questions, applying to domestic regulations. The application and effect of Article III GATT turns on the interpretation of the concepts of 'like products' and what constitutes less favourable treatment and affords protection to domestic producers. This has been developed by case law from the WTO disputes settlement process over time. Factors considered in determining whether goods are 'like products' include end use, tariff classification, consumer tastes, and product quality¹⁹. The case law on discrimination has developed as the GATT; the WTO then moved from mainly addressing border measures and internal rules that explicitly discriminate in treatment of products based on their origin, to dealing with measures that do not

17 Articles I and III GATT, see Singham (2007).

18 Paragraph 5.11, *US-Section 337* (Decision).

19 For example, in the later WTO cases of *European Communities – Asbestos*, and *Japan – Alcohol*.

expressly attach to imported products but in practice have a discriminatory effect on imported goods.²⁰

GATT Article XX, meanwhile, provides potential defence against claims under the national treatment commitments.²¹ Article XX provides that that certain national interests may take precedence over the commitments in the GATT. These broadly relate to the grounds of health, public morals or cultural values, and some other specific safeguards (questions of traditional domestic policy choices). Article XX is a limited and conditional exception. The opening to Article XX makes clear that even when a defending party can demonstrate that the domestic measures in question fall within the scope of Article XX exceptions, they must still show that a measure does not constitute 'arbitrary or unjustifiable discrimination' or 'disguised restriction' on trade. The SPS and TBT Agreements, described further below, were entered into to give further clarity and specificity to these parameters and commitments.

It is notable that the EU has accepted the obligations under the WTO agreement on internal taxes and regulation, and with them the jurisdiction of the Dispute Settlement Body to determine claims in respect of these matters. There have been a number of cases where EU regulations have been challenged. For example:

- the *Beef Hormones* case,²² where a ban on certain beef products was found to be a violation of the SPS Agreement because it was not based on a risk assessment;
- the *Sardines* case, where a measure to the effect that only one of the two species of sardines could be marked as sardines violated the SPS agreement because it did not adhere to a relevant international standard that met the EU's policy objectives;
- the *Asbestos* case, where France's ban on asbestos was found not to violate Article III GATT as the banned products were not considered to be 'like' the alternative non-asbestos substitute products. The ban itself was found to be a technical regulation within the scope of the TBT Agreement, but there was no finding as to whether it violated the TBT Agreement.

20 See, for example, Singham *Ibid.*, and Ehring (2002).

21 There is also an exemption under Article XXI in respect of measures necessary for essential security interests. While this has been rarely used in any significant context, its deployment by the Trump administration may result in a ruling on this.

22 *EC – Hormones* (DS26, DS48).

WTO dispute settlement findings do not compel members to change their law and, with very limited exceptions, do not have direct effect in EU law that would allow individuals to rely on them.²³ Dispute settlement can also take a long time, and the resulting WTO decision will merely say that the particular law is a violation. They do, however, entitle the complainant member to remedies such as compensation for the effects of the violating measure on their trade and the right to take retaliatory measures.²⁴

The General Agreement on Trade in Services (GATS) provides for non-discrimination in respect of the application of regulations and certain other broad commitments on regulation, which apply to all services. Market access and national treatment commitments are more limited and apply only to sectors to which members have positively committed. Regulations for services are more problematic than in goods trade, as they can be applied in a non-discriminatory way and respect national treatment but still constitute serious barriers to trade, for example if the regulation of a service requires a licence that is only available to entities with a presence in the jurisdiction.

For the purposes of this paper, we have focussed on goods trade but from a constitutional and legal perspective, it is useful to note some, albeit limited, progress that has been made on disciplines in domestic regulation in services'. The GATS includes provision on domestic regulation that provide for a framework for countries to recognise other members' services regulations in a non-discriminatory way. There are also specific provisions dealing with domestic regulation in financial services²⁵ (in a limited and qualified way) and telecommunications²⁶ (much more effectively). The Annex on Telecommunications and Reference Paper address access to and use of public telecommunications networks and services and mandate the operation of competition safeguards and the right to interconnection on non-discriminatory terms and at reasonable, cost-oriented rates. These commitments are not directed at international trade specifically, although they do benefit international providers. They are aimed at ensuring competition in telecommunication services within a territory. The EU has accepted and implemented these commitments.

23 As established in respect of the GATT in *International Fruit Company NV and others v. Produktschap voor Groenten en Fruit*, Case 21/72, and applied in the case to the WTO agreements in *Portugal v Council* Case C-149/96.

24 In the case of beef hormones for example, the EU declined to change the relevant regulations and the US imposed retaliatory tariffs on a number of EU agricultural products.

25 GATS Understanding on Commitments in Financial Services.

26 GATS Annex on Telecommunications and associated Reference Paper.

a. The Agreements on Technical Barriers to Trade (TBT) and the Application of Sanitary and Phytosanitary Measures (SPS)

The WTO Agreement on Technical Barriers to Trade and the Agreement on the Application of Sanitary and Phytosanitary Measures (the TBT and SPS Agreements respectively) also prescribe a 'least trade-restrictive' approach to domestic regulation itself. The TBT agreement of 1979 included provisions for trade disputes related to food safety, as sanitary and phytosanitary measures were perceived to be especially likely to restrict trade, but GATT member countries were concerned to create clear rules for their use. This led to the SPS Agreement, which addresses measures connected with the protection of human, animal, and plant health and life.

b. The Agreement on Technical Barriers to Trade (TBT)

The TBT Agreement is binding on all members and exists to support progress improving efficiency and facilitating the conduct of international trade, including with respect to national regulations and standard-setting, such as packaging, marking and labelling and conformity assessment procedures. The TBT Agreement seeks to ensure that these matters do not discriminate or create unnecessary obstacles to trade. It also recognises WTO members' rights to carry out measures for legitimate policy objectives.²⁷

In respect of the substance of regulations, the key provision is Article 2 (Preparation, Adoption and Application of Technical Regulations by Central Government Bodies). It states that with respect to their central government bodies:

2.1:

Members shall ensure that in respect of technical regulations, products imported from the territory of any Member shall be accorded treatment no less favourable than that accorded to like products of national origin and to like products originating in any other country.

2.2:

Members shall ensure that technical regulations are not prepared, adopted or applied with a view to or with the effect of creating unnecessary obstacles to international trade. For this purpose, technical regulations shall not be more trade-restrictive than necessary to fulfil a legitimate objective, taking account of the risks

²⁷ Article 2.3 TBT.

non-fulfilment would create. Such legitimate objectives are, inter alia: national security requirements; the prevention of deceptive practices; protection of human health or safety, animal or plant life or health, or the environment. In assessing such risks, relevant elements of consideration are, inter alia: available scientific and technical information, related processing technology or intended end-uses of products.

Avoiding unnecessary obstacles to trade means that a technical regulation is not to be more trade-restrictive than needed to fulfil a legitimate objective. For example, Article 2.3 requires that regulations shall not be maintained if the circumstances ‘that led a country to adopt technical regulations no longer exist or have changed, or the policy objective pursued can be achieved by an alternative less trade-restrictive measure’. Article 2.8 mandates that, where appropriate, regulations for products are to be specified in terms of performance, instead of design or descriptive characteristics.

These provisions are directed at ensuring that the regulations within a country that have an impact on trade and which all importers and domestic suppliers have to meet are not obstacles to international trade.

There is a strong argument that it would be a violation of the TBT Agreement for the EU to move from accepting that UK regulations are sufficient to meet the EU’s policy objectives on one day, and then after the end of the transition period (if agreed), cease to accept them even without any substantive change to the regulations on either side.²⁸ UK negotiators and their lawyers should base their position on this starting point. Clearly the position becomes more complicated in the event of divergence from the specific regulations and standards that are, or derive from, EU legislation, but problematic cases can be dealt with by dispute resolution, as discussed.

28 As suggested by Lorand Bartels in oral evidence to the Exiting the EU Committee inquiry: The Progress of the UK’s Negotiations on EU Withdrawal, HC 372, 17 January 2018: “[W]hat we have is the EU and the EU member states recognising UK products and UK services as being equivalent to their own. Either there is harmonised legislation or mutual recognition. So long as those legal regimes continue, I cannot see any reason why the EU should not be obliged to continue this type of recognition. This is something that the EU negotiators do not accept, but it follows from WTO law, with one exceptions to do with financial services... the more one diverges from the existing situation the less one can press the case that the EU is obliged to continue to recognise UK legislation, standards and so on. Continuation is the key concept here.” The Progress of the UK’s Negotiations on EU Withdrawal, HC 372 17 January 2018.

The TBT Agreement differs from the SPS Agreement in that it does not mandate recognition of equivalent measures,²⁹ but recognition is encouraged. Under Article 2.7, members are required to ‘give positive consideration to accepting as equivalent technical regulations of other Members, even if these regulations differ from their own, provided they are satisfied that these regulations adequately fulfil the objectives of their own regulations.’ This means that it could be a violation for the EU to refuse on principle (for example because of Single Market integrity concerns) to recognise UK regulations while it is identical, and thereafter if it changes, so long as they continue to ‘adequately fulfil the objectives’ of EU laws.

c. Conformity Assessment

To mitigate the loss of the seamless cross border trade that is possible within the Single Market, we must consider not only the substance of regulations but also mechanisms to ensure that trading partners are satisfied the products that are traded into their markets satisfy their standards, whether that is a recognised regulation in the country of origin or a different domestic regulation in the destination territory. This can be accomplished by recognising conformity assessment procedures and the bodies that carry them out.

Some regulations allow producers to self-certify their compliance. Others, in sensitive or higher-risk sectors, require certification by an authorised third party or conformity assessment body (CAB). If an importing country does not recognise the equivalence of the applicable regulations in the country of origin, goods must be certified to meet the requirements of the destination. Procedures and requirements in connection with conformity assessment can themselves comprise barriers to trade if they are not predictable and non-discriminatory. It is also particularly useful for producers to be able to have their products certified in their home country rather than on entry to the destination, as this reduces the risk of delays at the border.

Accordingly, procedures for conformity assessment are regulated in the TBT Agreement. Having been expanded to include standards for processes

29 This ‘mandate’ in the SPS Agreement is conditional upon the exporting country objectively demonstrating to the importing country that its measures achieve what the latter considers to be its appropriate level of protection. In other words, the importing country’s standard has to be satisfied, provided of course that it too is SPS-consistent.

as well as products, the requirement of transparent and non-discriminatory procedures for issuing product approval includes the range of conformity assessment procedures. The TBT applies the principles of national treatment and non-discrimination to product testing and certification programmes and extends the obligation of national treatment and non-discrimination to laboratory accreditation, recognition, and quality system registration programmes.³⁰

Access for manufacturers of goods in other WTO members must be made available on the same terms as domestic suppliers. The procedures themselves are not to be prepared, adopted, or applied by design or in effect to create unnecessary obstacles to international trade (Article 5). There are a number of other requirements around transparency and adherence to international standards. This would mean that the EU would not be permitted to change its conformity assessment procedures, intentionally or in effect, to make it more difficult for UK manufacturers to be able to demonstrate conformity.

Clearly the biggest immediate disruption would be if UK suppliers were no longer allowed to use CABs in the UK to demonstrate conformity for the EU market. Therefore, Article 6 TBT (Recognition of Conformity Assessment by Central Government Bodies) is important. It provides that members are to ensure 'whenever possible that results of conformity assessment procedures in other members are accepted, even when those procedures differ from their own, provided they are satisfied that those procedures offer an assurance of conformity with applicable technical regulations or standards equivalent to their own procedures.' The provision recognises that this may require consultation to arrive at satisfactory understandings on continued reliance on technical competence of CABs. Members are 'encouraged' to be willing to enter in to negotiations for the conclusion of agreements for the mutual recognition of results of each other's conformity assessment procedures. As the UK and EU already have high levels of harmonisation in their conformity assessment procedures (and the EU has entered into a number of MRAs for conformity assessment), this must be a case where it would be 'possible' for each to accept conformity assessment by bodies in the other's territory. This would not only benefit UK businesses and CABs but also EU and third country businesses who have used UK CABs so the encouragement to enter into an agreement

30 Meanwhile, the TBT extends rules to private standards organisations: *The Code of Good Practice for the Preparation, Adoption and Application of Standards* in Annex 3 of the TBT agreement is a foundation for private standards bodies' rules.

to preserve the trade benefits of continuing recognition should be strong. Article 6 also encourages members to 'permit participation of CABs located in the territories of other members... under conditions no less favourable than those accorded to bodies located within their territory'. The wide use of UK-based CABs by EU and third country businesses means that the EU should be under some pressure to do this.

d. Standards

The TBT Agreement includes requirements for standards as well as technical regulations. Article 4 provides for compliance with a Code of Good Practice for the Preparation, Adoption and Application of Standards.³¹ The Code of Good Practice:

- effectively extends the principles of National Treatment and MFN to the activities of standardising bodies (which, in this context, include the EU's standards organisations);
- requires standardising bodies to 'ensure that standards are not prepared, adopted or applied with a view to or with the effect of, creating unnecessary obstacles to international trade';
- requires them to take part in international standardising bodies, and use relevant international standards where they exist, unless the international standards are ineffective or inappropriate, and avoid duplication of or overlap with the work of international standards bodies; and
- specifies standards based on performance rather than design or descriptive characteristics, wherever possible.

There are also requirements for communication and transparency, including providing information and opportunity for comment by interested parties from any WTO member, not just within the territory covered by the standards body.

One of the most significant TBT Committee decisions relates to international standards.³² The decision lays out the 'Six Principles' that

³¹ Set out in Annex 3 TBT

³² The 2000 Decision on Principles for the Development of International Standards, Guides and Recommendations with Relation to Articles 2, 5 and Annex 3 of the TBT Agreement (from the 2nd Triennial Review).

are central to the process of international standards development: transparency, openness, impartiality and consensus, effectiveness and relevance, coherence, and the development dimension. The most relevant here is the fourth principle, effectiveness and relevance, which is as follows (our italics):

Effectiveness and relevance: In order to serve the interests of the WTO membership in facilitating international trade and preventing unnecessary trade barriers, international standards need to be relevant and effectively respond to regulatory and market needs, as well as scientific and technological developments in various countries. *They should not distort the global market, have adverse effects on fair competition, or stifle innovation and technological development.* In addition, *they should not give preference to the characteristics or requirements of specific countries or regions when different needs or interests exist in other countries or regions.* Whenever possible, international standards should be performance-based rather than based on design or descriptive characteristics.

We shall return to some of these themes (in the EU system) in the Standards chapter, but as a result of this, three statements are clear: standards should not distort the market, innovation or competition; they should not give preference to certain jurisdictions' systems at the unfair expense of others; and they should be based on performance not design prescription. In practice, it has been acknowledged that 'these principles... have gone relatively unnoticed for a decade', but in more recent Reviews (2009 and 2012), members have 'stressed the importance of ensuring the full application of these six principles' (Wijkström and McDaniels, 2013)).

e. The SPS Agreement

The SPS Agreement aims to ensure that a country's consumers are provided with food that is safe to eat, while ensuring that strict health and safety standards are not used to unfairly protect domestic producers.³³ This means that countries are able to set their own standards, but subject to certain disciplines. Measures must:

33 https://www.wto.org/english/tratop_e/sps_e/spsund_e.htm

- be based on scientific principles and risk assessment, and be applied only to the extent necessary to protect human (and animal or plant) life or health;
- not arbitrarily or unjustifiably discriminate between countries which have similar or identical conditions;
- not be applied in a manner that would constitute a disguised restriction on international trade; and
- not be more trade-restrictive than required to achieve their appropriate level of sanitary or phytosanitary protection.

Article 5 sets out a number of factors and considerations to be taken into account in assessing risks and determining appropriate levels of protection. It mandates communication to explain reasons for contested measures³⁴ and requires transparency,³⁵ timeliness, and non-discrimination in control, inspection, and approval procedures.³⁶ Critically, it does not mandate inspections be waived, and even where advanced levels of mutual recognition in sanitary and veterinary measures have been achieved, the parties will still undertake checks on animals and animal products coming into their territories although this too can be waived by agreement, as is the case between the EU and Switzerland, described further below.

The SPS Agreement encourages harmonisation by reference to international standards. Adherence to international standards gives rise to a presumption of compliance of the relevant measures with the terms of the agreement.³⁷

Meanwhile, the SPS Agreement goes further than the TBT Agreement in respect of recognition. It mandates that if another country can objectively demonstrate that the measures it applies create the same level of health protection, even if the measures themselves are different, the importing country is to accept them as being equivalent.³⁸ This is intended to ensure protections are upheld while the greatest quantity and variety of safe foods for consumers, safe inputs for producers, and healthy economic competition are provided (WTO, 2017). Because recognition is mandatory, as is consultation between members that aim to achieve bilateral agreement on recognition of equivalence, the EU is obliged to enter into negotiation

34 Article 5.8 SPS.

35 Annex B SPS.

36 Annex C SPS

37 Article 3 SPS

38 Article 4

with a view to achieving recognition of SPS measures, and is not permitted to condition this on the UK's measures remaining identical. Equally the UK will be mandated to continue to recognise EU measures as equivalent, for so long as they achieve the same level of protection, objectively determined.

The SPS Agreement also established a Committee on Sanitary and Phytosanitary Measures (the 'SPS Committee'), open to all WTO members, as a forum for consultations on SPS measures which may affect trade, and to ensure the SPS Agreement is implemented. While Committee decisions are not legally binding under WTO rules, they do carry significant weight. The SPS Committee's 2001 decision on equivalence³⁹ is particularly important in terms of compelling the UK and EU to continue to recognise the equivalence of each other's measures. It provides (our italics):

1. Equivalence can be accepted for a specific measure or measures related to a certain product or categories of products, or on a systems-wide basis. *Members shall, when so requested, seek to accept the equivalence of a measure related to a certain product or category of products.* An evaluation of the product-related infrastructure and programmes within which the measure is being applied may also be necessary. *Members may further, where necessary and appropriate, seek more comprehensive and broad-ranging agreements on equivalence.* The acceptance of the equivalence of a measure related to a single product may not require the development of a systems-wide equivalence agreement.

...

5. The importing Member should accelerate its procedure for determining equivalence in respect of those products which it has historically imported from the exporting Member.

6. The consideration by an importing Member of a request by an exporting Member for recognition of the equivalence of its measures with regard to a specific product *shall not be in itself a reason to disrupt or suspend on-going imports from that Member of the product in question.*

39 "Decision on the Implementation of Article 4 of the Agreement on the Application of Sanitary and Phytosanitary Measures".

7. When considering a request for recognition of equivalence, the importing Member should analyse the science-based and technical information provided by the exporting Member on its sanitary or phytosanitary measures with a view to determining whether these measures achieve the level of protection provided by its own relevant sanitary or phytosanitary measures.

The last statement specifically does not suggest that regulations themselves need to be aligned.

Free Trade Agreements and Mutual Recognition Agreements

Trade agreements between territories, on a bilateral or plurilateral basis, generally restate the parties' WTO commitments in respect of regulations and technical barriers to trade. Placing existing multilateral commitments in a trade agreement has the benefit of contextualising them for the relationship and bringing them within the scope of the dispute settlement framework. Some go further than the WTO baseline where the parties are able to further liberalise. This is often beneficial more widely than simply for the parties to the agreement, as all countries benefit where a country undertakes to make its domestic regulation less trade-restrictive.

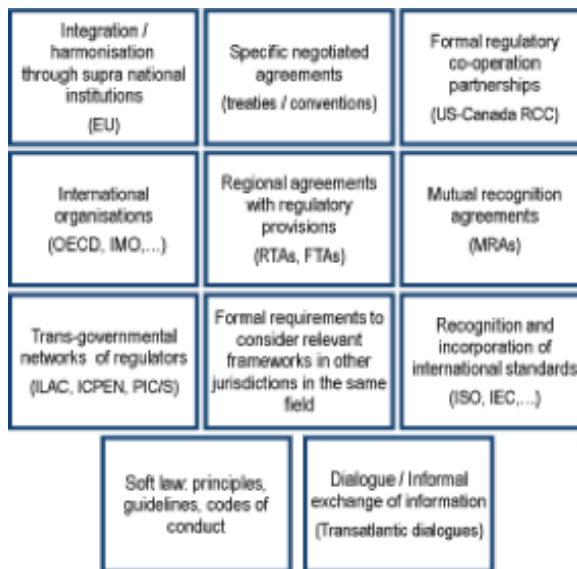
It is useful to consider how other trade blocs and bilateral agreements (including the EU's), which do not entail a customs union or harmonised regulations and institutions, approach the area of regulation and recognition. We have set out below some examples for the treatment of domestic regulation and regulatory recognition in major free trade agreements. The examples are intended to cover the most progressive provisions in the world's leading FTAs, and positions that the EU has been able to agree (or, in the case of TTIP, propose).

We have also examined mutual recognition arrangements in operation between territories outside of free trade agreements, to show best practice, high-functioning arrangements, which could also be adopted between the EU and the UK. There is a critical difference in this area between a) MRAs that provide for recognition of conformity assessment procedures, and b) acceptance of conformity assessment by CABs in the partner country (known as traditional MRAs); and agreements that recognise the substance of the other territory's regulation or standards (known as enhanced MRAs). The latter is rare outside the EEA and the Trans-Tasman arrangement between Australia and New Zealand and tend to be narrow in sectoral scope. Often, especially under EU rules, recognition of the substance of the regulation of another territory is accorded unilaterally and based on close alignment or harmonisation of the partner country, for example in the EU's adequacy regime for data protection, and the equivalence regime in financial services.

The OECD has identified 11 categories of international regulatory cooperation (or 'IRC'), ranging from formal binding, hard-law instruments like treaties to soft-law principles and guidelines and informal regulatory

dialogue. MRAs (both traditional and enhanced) are towards the hard-law end of the spectrum though here too the variation in the substance of the obligations of the parties means that their real effects have also been variable. In most cases though, it has been found (Vancauteren, 2009) that MRAs have a positive impact on trade flows when fundamental conditions such as sound technical infrastructure, implementation in practice, and sufficient trade volumes are present (Correia de Brito et al., 2016).

Figure 3: The 11 forms of IRC, as classified by the OECD



Source: OECD (2013)

MRAs also have non-trade-specific benefits, such as improving administrative efficiency and managing risks and externalities across borders.

Where recognition is granted to a country outside of a full FTA, principles of non-discrimination mean that other countries who meet the same requirements have the right to negotiate the same treatment. This means that even in a no-deal scenario, for the EU to deny the UK the levels of recognition it has given to trading partners such as China, the US and New Zealand may be a violation of Article I GATT (General most-favoured-nation treatment).

It should also be noted that in all the examples given, no party agrees to be bound to the regulation of another or to submit to the jurisdiction of the courts of another party. We will now describe some examples of mutual recognition, both in standalone MRAs and in wider FTAs.

a. Trans-Pacific Partnership (TPP)

The Trans-Pacific Partnership (TPP) was signed initially in 2016⁴⁰, and, after the US withdrew, was renegotiated by the remaining 11 parties and agreed again as the Comprehensive and Progressive Trans-Pacific Partnership (for brevity, we will continue to refer to it here as the TPP). The updated version retains the commitments against unnecessary barriers in the areas of SPS and TBT. Chapter 8 incorporates the technical barriers to trade principles, the objective (outlined in Article 8.2) being ‘to facilitate trade, including by eliminating unnecessary technical barriers to trade, enhancing transparency, and promoting greater regulatory cooperation and good regulatory practice.’

i. Technical Barriers to Trade

Under Article 8.4, a number of key provisions of the TBT Agreement are incorporated into and made part of the TPP. The provisions of the TPP do not go further in terms of the substance of regulations and standards but provide a framework for deeper cooperation, information exchange, and accountability to progress the achievement of the goals of these commitments.⁴¹ Article 8.9 in particular sets out and encourages a range of mechanisms, including promotion of acceptance of the technical regulations of other parties as equivalent and use of existing international and regional mutual recognition arrangements, all of which will be overseen by a joint committee.

The TPP makes particular progress as against the TBT Agreement in the area of conformity assessment. It effectively prohibits localisation requirements⁴² and mandates that CABs located in the territory of another party are given no less favourable treatment than domestically established

40 By Singapore, Brunei, Canada, New Zealand, Chile, Australia, Peru, Vietnam, Japan, Malaysia and Mexico; the United States, also an original signatory, withdrew in January 2017, with the other signatories announcing their intent to revive the deal without the US.

41 Articles 8.7 – 8.9.

42 Articles 8.6(2)(b) TPP.

CABs.⁴³ CABs can apply for determination that they comply with requirements to test and certify products in other parties' territories. This means that even in the absence of mutual recognition of conformity assessment procedures, CABs in any TPP member country can be accredited for certifying products to the regulation of any other country. Obviously, the UK and EU will be looking for broad mutual recognition of conformity assessment procedures so that dual accreditation will not be necessary, but these kinds of provision are still useful to support competition in the field of conformity assessment.

The TPP also encourages and supports mutual recognition of conformity assessment by way of intergovernmental agreements and by use of arrangements between accreditation bodies based on peer review, including by raising a presumption that parties will use mutual recognition arrangements unless they can give reasons not to.⁴⁴

Clearly the UK and EU are in a more advanced position than the TPP countries in respect of alignment and recognition of conformity assessment so the equivalent provisions in a UK-EU agreement would be for the purpose of managing existing recognition and communicating as regulations and processes develop.

43 Article 8.6(2)(a) TPP.

44 Articles 8.1, 8.6(8) (12) (14).

ii. SPS Measures

Under Chapter 7 (Sanitary and Phytosanitary Measures), the TPP contains explicit commitment to reinforce and build on WTO rules for SPS measures. It develops Article 4 of the SPS Agreement by strengthening communication and cooperation, enhancing transparency, and encouraging the development and adoption of international standards and guidelines.⁴⁵

Working from the base of Article 4 of the SPS Agreement (which mandates equivalence recognition for measures that achieve the destination country's objectives), TPP Article 7.8 (Equivalence) requires TPP countries to:

apply equivalence to a group of measures or on a systems-wide basis, to the extent feasible and appropriate. In determining the equivalence of a specific sanitary or phytosanitary measure, group of measures or on a systems-wide basis, each Party shall take into account the relevant guidance of the WTO SPS Committee and international standards, guidelines and recommendations.

The TPP also explicitly requires a collaborative approach to assessment, with a series of commitments on timeliness and transparency. It reiterates the requirement of the SPS Agreement to recognise the equivalence of an SPS measure if the exporting party objectively demonstrates that its measure 'achieves the same level of protection as the importing party's measure' and expands this to measures that have 'the same effect in achieving the objective as the importing party's measure'.⁴⁶

A provision on these terms in a UK-EU Agreement would mandate recognition in respect of all SPS measures of each party, which clearly at present meet these requirements, and would be likely to continue to do so. Import checks are not eliminated but must be based on the risks associated with import and carried out without undue delay and on transparent and science-based criteria.⁴⁷

45 Article 7.2.

46 Article 7.8(6).

47 Article 7.11.

iii. Regulatory coherence

Chapter 25 (Regulatory Coherence), defines regulatory coherence as:

the use of good regulatory practices in the process of planning, designing, issuing, implementing and reviewing regulatory measures in order to facilitate achievement of domestic policy objectives, and in efforts across governments to *enhance regulatory cooperation in order to further those objectives and promote international trade and investment, economic growth and employment.*

The TPP affirms the importance of each party's *sovereign right to identify its regulatory priorities and establish and implement regulatory measures* to address these priorities, at the levels that the Party considers appropriate, but includes a number of mechanisms which are encouraged, though not mandated, in the furtherance of regulatory coherence. In a UK/EU agreement, this chapter would be vital as it could set out the parameters and process to be used to monitor and assess ongoing equivalence of rules in the event that the parties diverge.

iv. Sectoral annexes

The TBT chapter of the TPP includes seven sectoral annexes of measures and disciplines in respect of wine and spirits, information and communications technology, pharmaceuticals, cosmetics, medical devices, proprietary formulas for pre-packaged foods and food additives, and organic products. The commitments in these annexes are procedural or hortatory, and do not deliver substantive recognition. They are aimed at making it more straightforward to meet the regulatory requirements of the TPP members, for example, addressing labelling requirements for wine, and making the process to obtain marketing authorisations for pharmaceuticals and medical devices more transparent and predictable. It is also made clear that a country may recognise the marketing authorisations issued by regulators in another party as evidence that a product meets its own requirements, but this is not mandated in the agreement.⁴⁸

48 TPP Annexes 8A to 8G.

b. Transatlantic Trade and Investment Partnership (TTIP)

Although the Transatlantic Trade and Investment Partnership (TTIP) has not been agreed, and negotiations ran into material differences between the US and the EU, the proposals made by the EU to the US in the areas of standards and regulations are informative. They show a willingness on the part of the EU to work towards convergence and recognition in general and in respect of some key sectors in particular. The proposal on technical barriers to trade was aimed at improving the way the US and the EU work together on technical requirements for products, reducing unnecessary repetition and costs in checking products and improving transparency. It acknowledges that the US and the EU 'often share similar aims when they introduce their technical regulations', but that 'actual standards and procedures for checking products sometimes differ widely [which] can create unnecessary obstacles to trade'. The UK and the EU are not in this situation, as their respective standards and procedures are generally harmonised or otherwise mutually accepted. Logically, as the starting point is so much closer in all respects, progress as against the TTIP offer should be accordingly more advanced in respect of regulations and conformity assessment.

c. New Zealand Mutual Recognition Agreement (NZ MRA)

In 1997, the EU and New Zealand entered into an agreement on sanitary measures applicable to trade in animals and animal products. The objective was to 'facilitate trade in live animals and animal products' between them by 'establishing a mechanism for recognition of equivalence of sanitary measures' maintained by the respective parties and improving communication and cooperation. In effect, the agreement builds on the parties' obligations under the SPS Agreement to accept the equivalence of measures by providing a process to determine equivalence.

It includes a list of sectors (animals and types of meat) where equivalence had been accepted at the date of the agreement and a plan for progressing to determination in the remaining sectors. The agreement was updated in 2015⁴⁹ on the recommendation of its Joint Management Committee, to reflect various technical and legislative developments. This indicates that the parties considered that the agreement has been successful and had been attentive in managing and updating it.

49 See Commission Implementing Decision (EU) 2015/1084.

When products from equivalent sectors are exported, they only require a health certificate, though checks at the border on import may still be carried out as part of post-determination assurance. Each party has the right to carry out audits and verification of the other.

Frontier checks are not eliminated entirely. The agreement provides that all consignments will need to be checked for documentation, and since the 2015 amendment this can be done electronically under the EU TRACES system and the New Zealand E-cert system. Consignments of live animals are still subject to physical checks in all cases.⁵⁰ Animal products for human consumption, including eggs and fish, are to be checked at a rate of 1 per cent (reduced in 2015 from 2 per cent). This would still be material for UK-EU trade, especially at the Irish border,⁵¹ but given the more advanced level of harmonisation and integration between authorities operating behind the border at the outset (including in respect of market surveillance), and the existing specific requirements for the import of animals and meat products from Great Britain to Northern Ireland,⁵² it should be possible to reduce this to zero with only spot checks on consignments.

The annex to the MRA includes a table tracking the respective measures of the parties in respect of all of the products covered and where equivalence has either been determined or is pending subject to further work. Following the principle of this approach, the UK and EU should be able to agree equivalence for all relevant measures. As noted above, if either party declines to do so for reasons that are discriminatory or not based on evidence, this would be likely to be a violation of the SPS Agreement.

The EU and New Zealand both have autonomy to change their respective regulation, and the MRA accommodates this with provisions for cooperation and information exchange. Parties are to give each other early notification of proposed changes in regulatory standards that may affect the agreement, and changes to covered measures may be referred to a Joint Management Committee for review by expert working groups.⁵³ The 2015 update to the agreement was signed pursuant to the work of the Joint Management Committee.

50 There is significant cross-party support for a ban or further controls on live animal trade to and from the UK, so with the exception of trade across the Irish border this may not be a significant issue. See House of Commons briefing: www.researchbriefings.parliament.uk/ResearchBriefing/Summary/CBP-8031#fullreport,

51 Although Northern Ireland currently has a separate animal health and SPS regime from the UK mainland in any event.

52 <https://www.daera-ni.gov.uk/sites/default/files/publications/dard/advice-to-industry-imports-exports-fmd.pdf>

53 See Article 16

A notification process for developments in disease prevalence and animal and public health concerns also exists,⁵⁴ as does the right for a party to take safeguard measures on serious animal or public health grounds. This is similar to the safeguard measures available to EU and EEA member states within the Single Market, pursuant to Article 36 TFEU.

There is no dispute settlement process, however, and either party can terminate the agreement on six months' notice. In practice, under this agreement, management by the Joint Management Committee has been successful, and the parties have endorsed it by updating the system to include more measures and reduced inspection requirements.

d. Australia New Zealand Closer Economic Relations Trade Agreement (ANZCERTA/Trans-Tasman)

The ANZCERTA provides for tariff-free trade between Australia and New Zealand. It includes comprehensive measures directed at reducing and eliminating barriers to trade in goods and services; it is not a customs union, so Australia and New Zealand each retain their autonomy over tariffs and trade policy. ANZCERTA is supplemented by more than 80 bilateral treaties, protocols and other arrangements. They cover areas such as trade, movement of people, aviation, business law coordination, mutual recognition of goods and professions, taxation, healthcare, social security, food standards, and government procurement. One of the supplemental agreements is the Arrangement Relating to Trans-Tasman Mutual Recognition ('TTMRA'), which came into effect in 1998. The parties to the TTMRA are the Commonwealth of Australia, the states and territories of Australia, and New Zealand. Australian states and territories, like states of the USA, have legislative powers, and therefore different regulations in some areas, but no formal border controls.

The TTMRA provides that goods need only comply with the standards or regulations that apply in the jurisdiction in which they are produced or to which they are imported, and may be sold in the jurisdictions of the other parties.⁵⁵ It also provides for mutual recognition in respect of occupations, allowing people registered to practice in New Zealand to practice an equivalent occupation in Australia and vice versa (we focus here on the provision in respect of goods although the UK Government may take note

54 See Article 12

55 Article 4.1.1 TTMRA.

of the provisions on occupation licensing as it develops policy on immigration and commitments in respect of service providers' and workers' access to the UK to provide services, with respect to the EU and more widely).

The TTMRA covers all goods regulation except the following:

- Permanently exempt measures, which are recorded in the arrangement and can be changed and replaced as long as their scope does not increase, but cannot be added to without the unanimous consent of the parties.⁵⁶ They include measures relating to weapons, hazardous substances/industrial chemicals, and quarantine.
- Special exemptions, where further examination is required before mutual recognition applies⁵⁷: all the special exemptions in the original agreement have been removed and there are currently no special exemptions in place (Australian Government Productivity Commission, 2015).
- Temporary exemptions, which can be invoked by a party for up to 12 months to counter a threat to public health, safety, or the environment.⁵⁸ (NB: even where mutual recognition is suspended between Australian states or territories and New Zealand, causing different regulatory requirements between the Australian parties, there are still no formal border controls between them.)

Some laws are completely excluded from the TTMRA, for example, customs control and tariffs, intellectual property, taxation, and international obligations.⁵⁹ The arrangement also does not apply to laws that regulate the manner of sale of goods or the conduct of business, for example, contractual aspects, transport and handling requirements, and controls on persons to whom goods may not be sold.⁶⁰

56 Part 8 TTMRA.

57 Part 9 TTMRA.

58 Article 4.2.1 TTMRA.

59 Article 7.1 TTMRA.

60 Article 4.1.3 TTMRA.

The TTMRA is subject to governance and development through Ministerial Councils in which all parties participate and have voting rights.⁶¹ The role of Ministerial Councils includes determining standards for goods and occupations. A Ministerial Council may make a recommendation for a particular standard or regulation to the heads of government of the parties, and the parties agree to implement the standard or regulation in their jurisdiction unless one-third or more of the heads of government disapprove it within three months after the recommendation. However, this could not be replicated between the UK and the EU, in that the UK would not expect to vote in or be bound by decision of EU institutions or to offer the same to the EU, but the two parties can use a higher level of consultation and compatibility processes that feature in other FTAs and the EEA agreement. We also cover this in discussion of the Regulatory College.

The TTMRA includes a requirement for the parties to carry out five-yearly reviews but does not include formal dispute settlement and is not a legally binding treaty. A Cross-Jurisdictional Review Forum (CJRF), comprising a committee of officials from government departments in each jurisdiction, is responsible for monitoring and promoting the effective operation of the arrangement. Its role includes responding to the five-yearly reviews and recommending improvements to the governments. The Australian Government provides a secretariat to the CJRF.

Parties implement the mutual recognition and any adopted harmonised standards through their legislation, so it is fundamentally an international and inter-governmental, rather than supranational, arrangement (although there has been a progression towards greater harmonisation, especially in food standards and SPS measures, through a joint food standards agency, Food Standards Australia New Zealand). However, the disciplines attached to the agreement of harmonised rules and standards are based on the Codex Risk Analysis Framework, and a number of areas are excluded from the joint arrangement, such as maximum residue limits, food hygiene provisions, and export requirements relating to third-country trade.⁶²

Furthermore, any party can withdraw from the arrangement with twelve months' notice. The most recent review carried out by the Australian Productivity Commission found that the mutual recognition schemes are generally working well, but it made some recommendations on governance matters to ensure that regulators duly implement measures necessary to

61 Part 6 TTMRA.

62 See www.foodstandards.gov.au/about/foodlawandtreaties/Pages/default.aspx

support recognition.⁶³ The TTMRA has proved to be a robust and productive arrangement.

This has been attributed to a number of factors, including a sound regulatory infrastructure, sufficient volume of trade in goods, underlying compatibility in the parties' regulatory systems, the sharing of an existing bilateral platform, consensus on wider geopolitical and macro-economic issues, and a similar high level of economic development (Correia de Brito et al., 2016). Self-evidently, the UK and the EU have all of these factors in place.

e. EU-Canada Comprehensive Economic and Trade Agreement (CETA)

CETA entered into force provisionally in the EU on 21 September 2017. It is the EU's most comprehensive FTA to date.

i. Technical Barriers to Trade

Chapter 4 of CETA deals with technical barriers to trade, covering 'technical regulations, standards, and conformity assessment procedures'. As with TPP, CETA incorporates key provisions of the TBT Agreement. It goes on to build on these existing obligations as between the parties by requiring them to (our italics):

*strengthen their cooperation in the areas of technical regulations, standards, metrology, conformity assessment procedures, market surveillance or monitoring and enforcement activities in order to facilitate trade between the Parties, as set out in Chapter Twenty-One (Regulatory Cooperation). This may include promoting and encouraging cooperation between the Parties' respective public or private organisations responsible for metrology, standardisation, testing, certification and accreditation, market surveillance or monitoring and enforcement activities; and, in particular, encouraging their accreditation and conformity assessment bodies to participate in cooperation arrangements that promote the acceptance of conformity assessment results.*⁶⁴

63 *Ibid*

64 Article 4.3 CETA.

Article 4.4, Technical regulations, provides a way for the UK and the EU to continue to inform each other of the development of regulation. It provides for the parties to:

cooperate to the extent possible, to ensure that their technical regulations are compatible with one another. To this end, if a Party expresses an interest in developing a technical regulation equivalent or similar in scope to one that exists in or is being prepared by the other Party, that other Party shall, on request, provide to the Party, to the extent practicable, the relevant information, studies and data upon which it has relied in the preparation of its technical regulation, whether adopted or being [developed].

Article 4.6 similarly mandates transparency procedures that allow interested parties to participate and for their comments to be taken into account. Parties are required to permit persons from the other party to participate in consultation processes on the same terms as their own nationals. Chapter 4 is to be actively managed by a committee as described in Article 4.7.

CETA does not mandate the recognition of regulation (other than in respect of SPS measures, as described below), but in line with the TBT Agreement, provides that:

[A] Party that has prepared a technical regulation that it considers to be equivalent to a technical regulation of the other Party *having compatible objective and product scope* may request that the other Party recognise the technical regulation as equivalent.

If the other does not agree that the technical regulation is equivalent, it is required to provide the reasons for its decision.⁶⁵ Again, the implication is that the principle which needs to be followed is the similarity of objective, not approach,⁶⁶ and that any failure to recognise a standard with such a similar objective will need explanation.

CETA goes further than TPP with respect to conformity assessment in some sectors, probably due to the closer level of development between the parties and the existence of a separate mutual recognition agreement

⁶⁵ Article 4.4(2) CETA.

⁶⁶ Which is relevant to the concept of "Alignment" which the EU and UK negotiators used in the *Joint report on progress during phase 1 of negotiations under Article 50 TEU on the UK's orderly withdrawal from the EU* dated 8 December 2017.

since 1998. Under a *Protocol on the Mutual Acceptance of the Results of Conformity Assessment*, Canada and the EU have agreed a detailed and specific process by which CABs accredited in their respective territories can be recognised by virtue of its home state accreditation. This requires first that the parties have agreed recognition of the relevant national accreditation body, after which the home accreditation body will be able to accredit CABs for conformity assessment activity for the regulation of the partner country.⁶⁷ The EU 'gold-plates' its requirement for recognition of a Canadian-accredited CAB on the basis that Canada is only permitted to designate CABs for recognition where they meet the specific EU law requirements.⁶⁸ This is in line with the EU's preferred approach to recognition, which is to link it to a certain amount of substantive alignment. This condition is not mirrored by Canada, which requires only that the accreditation body in the EU has been recognised by it. The Protocol agrees recognition of conformity assessment in eleven sectors in view of work already done, and prioritises work towards recognition of a further six.

As the UK and EU start from a position of harmonisation and recognition, an equivalent protocol would not need to include processes for requesting and receiving recognition but should provide for the acceptance of the results of conformity assessment by all existing CABs and a process for managing and monitoring the relationship.

CETA has also achieved some progress in the recognition of substantive regulations. Annex 4A includes a list of Canadian automotive regulations that conform to relevant UNECE standards and are therefore recognised as equivalent by the EU, which is an example of how the TBT agreement can work in practice by reference to international standards.

There is also a Protocol on the mutual recognition of the compliance and enforcement programme regarding good manufacturing practices for pharmaceutical products. Under this protocol the EU and Canada agree to accept certificates of good manufacturing practice ('GMP') compliance issued by an equivalent regulatory authority of the other party for a wide scope of medicinal products and drugs. This does not entail recognition of marketing authorisations issued by regulators in the other party, but it makes it easier to trade in products that do have a marketing authorisation.

67 If a request for recognition of a national accreditation body is declined it must be justified objectively with reasons and state the condition under which recognition would be granted.

68 Article R17 of Annex I to Decision 768/2008/EC.

The protocol is similar to the MRA recently concluded with the US on pharmaceutical GMP described below and the existing MRA in Good Laboratory Practice with Israel⁶⁹.

ii. SPS measures

Chapter 5 addresses Sanitary and Phytosanitary Measures in Canada-EU trade. Article 5.2 states that its objectives include to 'further the implementation of the SPS Agreement'. Article 21.5, on compatibility of regulatory measures, states, 'With a view to enhancing convergence and compatibility between the regulatory measures of the Parties, each Party shall, when appropriate, consider the regulatory measures or initiatives of the other Party on the same or related topics. A Party *is not prevented from adopting different regulatory measures or pursuing different initiatives* for reasons including different institutional or legislative approaches, circumstances, values or priorities that are particular to that Party.' It is therefore clear that a party must be free to set its own domestic regulations. There is some substantive agreement on equivalence. The Annexes to Chapter 5 set out 'principles and guidelines to determine, recognise, and maintain equivalence', and areas where equivalence is agreed. A wide range of sanitary measures are mutually recognised as equivalent,⁷⁰ although phytosanitary measures have not yet been agreed, and recognition in some cases is subject to the Canadian exporter adhering to the relevant EU regulation or special requirement.⁷¹

69 <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX::21999A1009%2801%29>

70 Annex 5-E CETA.

71 Annex 5-E Appendix A CETA.

f. US-EU MRAs

The US-EU MRA was signed in 1998. It covers six sectors under a framework agreement and its approach was influential on the development of MRAs between trading partners around the world. The basic framework provides that the parties will recognise or accept the results of conformity assessment procedures produced by the other party's CABs, in the sectors specified in the Annexes to the agreement. It also sets out certain high-level procedures for the designation and listing of bodies which will be recognised, and governance arrangements for monitoring CABs and exchange of information. A Joint Committee with Joint Sectoral Committees under it comprised of appropriate regulatory authorities and other participants deemed necessary, were established to manage the functioning of the agreement. Each party retains the ultimate authority to determine the level of protection it considers appropriate for the protection of health, safety, the environment and consumers, and the right to take protective measures on products where the requirements of the MRA have not been met or where there is a risk to health and safety. The sectoral annexes include detailed provisions in respect of the rules applicable to conformity assessment in each sector.

Each sector had a transition period from the date of signature to implementation. In practice, the success of implementation has been variable across the six sectors (Correia de Brito et al., 2016), and only two (electromagnetic compatibility and telecoms equipment) are in operation now, although recreational Crafts came in to effect for a few years, before legislative changes moved on such that the Annex no longer applied, and an updated agreement for mutual recognition of inspections of medicines manufacturers has now replaced the Good Manufacturing Practice for Pharmaceutical Products annex.⁷² A separate MRA for marine equipment was completed in 2004.⁷³ In this case, recognition of CABs was supported by harmonisation to international standards of the International Maritime Organisation.

72 www.ema.europa.eu/ema/index.jsp?curl=pages/regulation/general/general_content_001843.jsp&mid=WC0b01ac058005f8ac Note that this relates to manufacturing practices in the production of medicines, rather than the authorisation of the medicines themselves.

73 [http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:22004A0430\(03\)&from=EN](http://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:22004A0430(03)&from=EN)

The EU and US also have a functioning MRA in respect of organic food under which organic products certified to the USDA or EU organic standards may be sold and labelled as organic in both the US and the EU.⁷⁴

It has been argued that the sectors that failed in the main US-EU MRA were not suitable for inclusion at the outset due to regulatory diversity preventing the necessary levels of trust and cooperation being established between respective regulators (Correia de Brito et al., 2016). In the case of the UK and the EU this would not be the case, and even if there were to be divergence from the exact rules and standards in place in the two jurisdictions, the infrastructure and trust levels between regulators would mean that continued recognition of conformity assessment is feasible and desirable. The integration of the business of conformity assessment and reliance by businesses in the EU and around the world on CABs in the UK also makes the case for this compelling. The TBT agreement effectively mandates it.

g. The Swiss Bilaterals

When the people of Switzerland voted in a referendum in 1992 against participating in the nascent EEA, the then European Community and Switzerland set about building a series of bilateral agreements to support trade and other aspects of their relationship. The first seven bilaterals, first concluded in 1999 (Bilaterals I) built on the existing free trade agreement between the parties, and have since been added to in areas such as participation in Schengen and statistics and environment agencies (Bilaterals II). The Bilaterals and the numerous other agreements between the EU and Switzerland, from the 1972 FTA onwards, are technically a series of individual agreements but are highly interdependent. In the case of Bilaterals I, termination of one agreement will lead to all of the others falling away automatically, so they are in effect an 'all or nothing' package.

Bilaterals I included an agreement on technical barriers to trade, which provides for wide-ranging mutual recognition of conformity assessment and of technical regulations that are agreed to be equivalent, and an agreement on trade in agriculture, which provides for mutual recognition of SPS legislation, based on 'approximation', eliminating the need for agricultural products to undergo border checks. These agreements are

74 https://ec.europa.eu/agriculture/organic/eu-policy/eu-rules-on-trade/non-eu-trading-partners/countries/usa_en

complemented by the separate agreement on simplification of inspections and formalities in respect of the carriage of goods and on customs security matters (the 'Customs Agreement').

The agreement on technical barriers to trade is an enhanced MRA. Switzerland is not strictly legally required to adopt the Single Market acquis in technical regulations for goods, but political and economic considerations have meant that Switzerland has approximated its laws in almost all of the sectors covered by the MRA. This means that goods can be produced and certified to a single set of regulations. In practice, 'the extensive alignment and excellent technical infrastructure, as well as the application of much of internal market law inside Switzerland, result in a *de facto* situation which is hardly different from the EEA in industrial goods' (Correia de Brito et al., 2016). Not all goods are covered, and there are some notable absences, such as chemicals, where Switzerland has not adopted the REACH framework in full into its law, and there is no equivalence/mutual recognition arrangement for this sector. Theoretically, it seems that Switzerland could elect to diverge from (or not keep up with) EU regulations that are covered by the MRA, which, if equivalence recognition was withdrawn by the EU, would mean goods meeting Swiss domestic requirements would not be recognised for the EU market, but Swiss CABs could continue to assess and certify goods meeting EU regulations for the EU market.

Substantive recognition has been agreed covering most aspects of agriculture. This is based on the parties agreeing that each considers the legislation of the other to achieve 'the same effects', in the case of live animals, 'identical results', and in the case of animal products, meets the other party's appropriate level of protection (in line with the SPS Agreement). As a result, border veterinary controls for trade in animals and animal products were abolished in 2009.⁷⁵

As a minimum for Northern Ireland, where animal and animal product regulation is already at least partly devolved and treated on an all-island basis, it could be possible to replicate relevant parts of the agriculture agreement and the customs agreement. More generally, the close approximation requires, *de facto* or *de jure* by the EU-Switzerland arrangement would not meet the UK's needs for autonomy and flexibility. The 'all or nothing' nature of the core package and the lack of a unified,

75 <https://www.blv.admin.ch/blv/en/home/das-blv/kooperationen/internationale-abkommen/veterinaerabkommen-schweiz-eu.html>

transparent dispute resolution framework mean it could be seen as unstable and lacking the predictability that businesses and investors seek from a UK-EU deal. It is also incomplete, especially in services, but also in key goods sectors like chemicals, where Switzerland has not replicated REACH, for example.

The EU is known to be dissatisfied with what it sees as the arrangement's institutional limitations, the Council noting in 2012 that 'the approach taken by Switzerland to participate in EU policies and programmes through sectoral agreements in more and more areas in the absence of any horizontal institutional framework, has reached its limits and needs to be reconsidered. Any further development of the complex system of agreements would put at stake the homogeneity of the Internal Market and increase legal insecurity, as well as making it more difficult to manage such an extensive and heterogeneous system of agreements. In the light of the high level of integration of Switzerland with the EU, any further extension of this system would in addition bear the risk of undermining the EU's relations with the EEA EFTA partners'.⁷⁶ This was reiterated by the Council in 2014, as the EU pursues 'an ambitious and comprehensive restructuring of the existing system of sectoral agreements [which] would be beneficial to both the EU and Switzerland. A precondition for further developing a bilateral approach remains the establishment of a common institutional framework for existing and future agreements through which Switzerland participates in the EU's internal market, in order to ensure homogeneity and legal certainty in the internal market'.⁷⁷

The EU considers that the common institutional framework should include deference to the ultimate authority of the CJEU in interpreting relevant parts of the *acquis*, and should not rely on Switzerland's domestic frameworks for surveillance (Gstöhl and Frommelt, 2017). This had been partially accepted by Switzerland, but negotiations towards an institutional framework have not progressed substantially, and indeed have been disrupted by Switzerland's moves against the free movement of people, following its 2014 referendum on the matter.

76 Council conclusions on EU relations with EFTA countries 3213th *TRANSPORT, TELECOMMUNICATIONS and ENERGY Council Meeting Brussels*, 20 December 2012.

77 Council conclusions on a homogeneous extended Single Market and EU relations with Non-EU Western European countries *General Affairs Council Meeting Brussels*, 16 December 2014.

Surveillance and enforcement

The Single Market in goods is not only built on mutual recognition and harmonisation of regulations and standards. Homogeneity within the market also depends heavily on consistent surveillance and enforcement – to ensure that traders within the market adhere to the applicable legislation and that member states enforce the rules in the same way across the market. This is why the EFTA court works the way it does (to respect and advance the principle of homogeneity) and is one reason why the Swiss arrangement has become untenable for the EU (because it departs from that principle). This is one of the main reasons why mutual recognition of legislation on day one of Brexit is not assured. While the substance of applicable standards and regulations will indeed remain identical on day one, one critical feature will not be identical, and that is the surveillance and enforcement framework, which in the Single Market is ultimately overseen by the Commission and the CJEU. The legislation may be the same, but the level of assurance that it will be adhered to and of cooperation between authorities will be profoundly different. In particular, under an intergovernmental treaty, neither side will be able to compel the other to act, whether to enforce or change its law as the *acquis* and the treaties will no longer operate on a constitutional level that they do at present through the European Communities Act as developed and interpreted through case law.

The absence of such unified institutions has not prevented recognition of regulations with third countries however, as we have noted above in certain sectors or, in the case of Switzerland, on a comprehensive basis in respect of conformity assessment and agriculture. Such international agreements are supported by commitments in respect of information sharing and audit/inspection rights and, ultimately, a right for the parties to terminate the agreement/withdraw recognition if they do not agree on continued equivalence of regulations and their enforcement. This informal structure for the highly integrated relationship between the EU and Switzerland is no longer supportable by the EU, and it could be argued would be too uncertain/unstable for the scale of the relationship between the UK and the EU. Establishing an institutional framework that gives assurance on enforcement of equivalent regulations will be as important, as agreeing a framework for establishing and monitoring the equivalence itself.

It is notable that in its slide on the EU/UK Possible Framework for the Future Partnership Discussions published on 15 May 2018, the Commission presented an outline for governance that included a regulatory cooperation

framework within a free trade agreement, and only mentioned services matters in the section on EU Autonomous Measures. While the UK would no doubt wish to go beyond the autonomous measures currently available to the EU in the areas of data protection and financial services that are mentioned in the slide, agreeing a regulatory cooperation framework in the broader FTA would be a welcome outcome. This may be made binding and subject to state to state dispute settlement and accompanied by deep enough levels of cooperation (outside the EU's own institutions) to assure both parties of the soundness and effectiveness of their regulatory systems.

Negotiability

It is important to remember, for the purposes of negotiation, that autonomy, divergence, and recognition are three separate concepts. First, autonomy – UK sovereignty over its own regulation – is the fundamental building block of developing an independent trade policy. What one does with that autonomy determines one's level of divergence. Recognition describes another party accepting autonomy of this regulation, and its potential divergence, as still providing equivalence; the EU has increasingly been providing recognition in cases of jurisdictions that do not have identical regulation or shared institutions.

Next, the directions of travel have demonstrated that the WTO limits any hostile response on the EU's part, such as a refusal to respond positively to a UK offer of mutual recognition. While actual dispute resolution in the WTO takes time and would yield uncertain outcomes (for example, as noted above, the DSB cannot compel either party to change its rules), the value of the dispute settlement mechanism is to limit parties' activities that might implicate WTO rules. The outcome recommended by this paper - that both parties refrain from imposing new and unnecessary barriers to trade – can then be used to create a scenario of regulatory development that can be more predictable for the vast majority of UK businesses than the status quo. This offer by the UK, that mutual recognition follows the separate restoration of regulatory sovereignty, is therefore in line with the expectations of international law.

It would be unusual, to say the least, for a government, in this case the UK's, to decide *in advance* that it would not require the right to determine in future whether a regulation is good for its economy. If the UK declines to pursue regulatory autonomy, then it would be tying itself to the direction of travel in the EU over which it would have no control. Without the 'brake'

of the UK, it is likely that the EU will accelerate its current anti-competitive direction, placing it in even more of an outlier position.

In negotiation with the EU, in the first instance, it is of central importance that the UK's opening position cannot be a request for partial autonomy and recognition, made with the intention of improving the situation in the years after withdrawal. This would constitute the dilution of the central economic rationale behind withdrawal. Departure from the EU and from the Single Market needs to mean that the UK's position as a rule-taker ceases, requiring the UK to regain regulatory autonomy from a Single Market in which it will no longer genuinely influence regulation, which the UK simultaneously requests that the EU recognises. Regulatory autonomy will thus make the UK what is understood to be the norm in international trade, not the exception.

The WTO Agreements to which the EU is a party on Technical Barriers to Trade (TBT) and Sanitary and Phytosanitary Barriers (SPS), provide that as long as both sets of regulations achieve aligned regulatory goals (as objectively demonstrated by the country seeking recognition), technical differences in regulation should not defeat recognition. If the EU refuses recognition in these circumstances, then, as far the TBT and SPS agreements are concerned, there may be a violation. These agreements and other work in the area of recognition suggests that the EU would be behaving differently from the majority of countries in their approach to these concepts.

Meanwhile, other organisations have called for outcomes that also require countries to move towards more pro-competitive regulation. If, as we demonstrate, the EU is moving in an anti-competitive direction, then the UK must have autonomy to move its own regulatory system in a pro-competitive direction. The *OECD International Regulatory Cooperation Toolkit*⁷⁸ and OECD Competition Assessment have, taken together, prioritised the lowering of market distortions and the creation of more pro-competitive regulation. In the *Joint Statement by the United States, European Union and Japan* on market distortions,⁷⁹ and elsewhere, the EU has committed to work to lower market distortions in third countries. The UK will be such a third country once it leaves the EU; given the

78 <http://www.oecd.org/gov/regulatory-policy/irc-toolkit.htm>

79 <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/december/joint-statement-united-states>

direction of travel and the declarations discussed, this is further evidence that the UK will be proposing what is increasingly accepted as normality.

On the question of maintaining the open border between Ireland and Northern Ireland in the context of regulatory autonomy, the UK position would simply be one of continuity. For Northern Ireland, neither the practicalities of autonomy and recognition described in this paper, nor the commitments in the EU-UK Phase 1 agreement of December 2017⁸⁰ are inconsistent with this. Regarding the Phase 1 agreement itself, in this context as for others, the UK position should be that the 'alignment' described refers to the aims of regulation, which also allows Northern Ireland to achieve regulatory autonomy as part of the UK.

We have discussed how SPS provides for the necessary recognition, but GATT Article 24 also allows for special arrangements for frontier traffic, which are intended to allow some flexibility for trade local to border areas. Furthermore, autonomy and recognition are not at odds with the Belfast Agreement (Good Friday Agreement), which does not compel harmonisation, indeed its allowance for coordination committees would not be necessary were harmonisation required. The European Parliament report *Smart Border 2.0* (European Parliament, 2017) concurs with these conclusions, with Lars Karlsson, its author, stating: '[this would be] a border without any new infrastructure... what you would describe as a frictionless border'. HMRC Chief Jon Thompson and Irish Revenue Commissioners Chairman Niall Cody have also stated that the border would not need new infrastructure; the head of Ireland's customs Liam Irwin has said that any physical checks need not take place at the border but at 'trade facilitation [posts] 10 or 15 kilometres back'. The same logic applies to customs clearance, which through technological improvements will quickly become considerably smaller.

While the exact process of negotiation is beyond the remit of this paper, it is important for the UK not to accept opening negative bids from the EU as final or to develop a negotiating position in advance that pre-emptively accepts them. Doing so would risk profoundly limiting what the UK can achieve. It is in the nature of negotiation that the other party will claim that opening bids are unacceptable, in part or in whole: this is simply a fact of

80 *Joint report on progress during Phase 1 of negotiations under Article 50 TEU of the UK's orderly withdrawal from the EU* (8 December 2017). <https://www.gov.uk/government/publications/joint-report-on-progress-during-phase-1-of-negotiations-under-article-50-teu-on-the-uks-orderly-withdrawal-from-the-eu>

the UK returning to such international negotiations as an independent party. It must always be borne in mind that regulatory autonomy is also a means to an end. The end is pro-competitive regulation in the UK and in as much of the rest of the world as possible, which will be good for the UK and for the world. The issue this paper describes may be the most difficult area of negotiation, the area in which there is most disagreement, and the final area to be agreed: but it is also central to the purpose of withdrawal. This means that conceding on this question with the aim of building goodwill in other areas is highly likely to be self-defeating. That it is necessary to create the pro-competitive regulations on which our future prosperity and economic independence itself depends, makes regulatory autonomy, we suggest, a deal-breaker.

Conclusion

Practical and political challenges mean that less progress has been made in the WTO and in trade agreements on regulatory cooperation and recognition compared with the significant progress in the area of border barrier reduction. This is precisely why it is so important to make progress in this critical area of trade policy, and the fact that the UK and EU have identical regulation on day one of Brexit means that an agreement between them can go further than FTAs generally achieve. All the WTO agreements and FTAs described above aim for, and in some cases commit to, regulatory cooperation and recognition. Institutions such as the WTO, UNECE, Codex Alimentarius, and free trade agreements make wide-ranging recommendations and commitments. While more has been achieved in mutual recognition of conformity assessment than in respect of the regulations themselves, the sectoral examples in meat and automotive indicate that recognition of regulations within bilateral frameworks can be done – even by the EU.

The experience of Switzerland, and of the formation and operation of the EEA, demonstrate the EU's prioritisation of homogeneity across the Single Market, and its view that this can only be assured by way of institutional structures. Coupled with the CJEU's protectiveness of its position as the ultimate arbiter of EU law, this makes the UK's case for broad-based participation in the Single Market based on equivalence of legislation (which has been termed 'external differentiation' (Leuffen et al., 2013)) challenging in the absence of joint institutions and, ultimately, deference to the CJEU. However, the wider global examples outlined above indicate

that some level of equivalence-based mutual recognition is both required by WTO rules and usual in EU FTAs and other agreements.

The UK and the EU are already at an unprecedented level of substantive convergence such that, as a starting point, some recognition of regulations and conformity assessment will be required for compliance with WTO rules. It will be necessary to design a mechanism that will allow both sides to develop from the positions on the effective date of Brexit, whilst retaining recognition within agreed parameters. It has been argued that this cannot be done, but if that is so, one would have to question why WTO members, including the EU, approved the TBT and SPS agreements and include regulatory coherence chapters in their free trade agreements, if, when presented with an unparalleled opportunity to achieve exactly what those agreements purport to aim for, political and protectionist interests are allowed to prevail.

The mechanism must not be allowed to become an unwieldy bureaucracy that would effectively block or deter regulatory progress, however, nor must it be allowed to become, like the EEA 'closer to supranational EU law than to public international law' (Gstöhl and Frommelt, 2017).

Chapter 4: Standards: a discussion of UK autonomy in standard-setting

Introduction

Regulatory divergence requires the capacity for autonomy, not only in regulation, but also in standards. This means that UK standards must also be able to diverge. This refers to the domestic system that creates standards and the bodies assessing conformity to them. Otherwise regulatory autonomy is liable to be undercut by being forced to apply a standard set by EU-linked standards bodies.

A standard allows companies and other organisations to demonstrate the quality and safety of products or services. The International Organization for Standardization (ISO) defines a standard as a document that provides requirements, specifications, guidelines, or characteristics that can be used consistently to ensure that materials, products, processes, and services are fit for their purpose (ISO, in CEBR, 2015). Allen and Sriram (2000), meanwhile, suggest four types of standard. The first is the *measure* (e.g. the kilogram or metre); the second is the *process-oriented* or *prescriptive* standard, which is a description of activities or processes;⁸¹ the third type is *performance-based*, where a required performance, not process, is specified (for example, the American Society of Civil Engineers' (ASCE) series of standards developed after Hurricane Andrew in 1992 to ensure mobile homes can resist 100 mph winds; and the final type is for

81 E.g. the American Society for Testing and Material (ASTM) C1028 *Standard Test Method for Determining the Static Coefficient of Friction for Ceramic Tile and Other Like Surfaces by the Horizontal Dynamometer Pull-Meter Method*, which provides the method and materials for performing friction tests.

interoperability among systems, where a fixed format is specified to ensure smooth operation between systems using the same data (for instance in computer-aided design).

The last major study of standards in the UK economy found that standards have contributed towards 37.4 per cent of annual productivity growth (an extra £8.2 billion of GDP in 2013). Standards are used most intensively by the most productive sectors, including aerospace and defence, where productivity (defined as output per worker) increased in the decade after 2005 by 20.1 per cent against 4.9 per cent on average for the UK. Standards boost productivity growth in a symbiotic role with education and innovations. They also benefit companies in four main ways (CEBR, 2015).

First, standards help businesses enhance products' quality and processes' efficiency: 70 per cent of firms state that standards contribute to improving their supply chain by improving the quality of supplier products and services. Second, standards homogenise products, reducing costs: 63 per cent state price competition has thus increased. Third, standards drive product and process inter-operability (as stated by 41 per cent of companies in the ICT sector). Fourth, they make technical information available to all firms (as 54 per cent of companies reported).

The way standards benefit trade is also increasingly being quantified. Impacts on exports range from 0.3 per cent in the energy sector to 9.9 per cent in food and drink manufacturing (CEBR, 2015), with the combined impact of standards on exports in sectors surveyed amounting to £6.1 billion annually (2014 prices), especially due to reduced transaction costs and quality signalling for customers.

The WTO Technical Barriers to Trade Agreement (TBT) conceives of a national standards body which develops standards through national consensus,⁸² able to participate in developing and adopting new international standards and publishing standards in its country, and there now exists an opportunity for BSI to have this responsibility returned. To understand how the UK's standards and conformity assessment system could function, however, we should first understand the two most extensive systems – the EU and US standard-setting and conformity assessment systems – their differences, and the situation of mutual recognition between them. This helps establish the rationale for our recommendations about the UK

82 In Annex 3: Code of Good Practice for the Preparation, Adoption and Application of Standards.

standards system and its benefits for smaller firms, as we outline how the UK can create a system allowing improved competition, innovation, and consumer welfare.

This area is first a question of autonomy (*standard-setting* autonomy, not strictly *regulatory*) with mutual recognition itself intended to be one of the outcomes of this autonomy.⁸³ To inform a new UK standards system, we analyse the differences between the US and EU approach, and the UK system historically.

Discussion of the US and EU standards and conformity assessment systems

a. Outline

Fundamentally, US standards are created by organisations in a market and become accepted if the market uses them.

- This market-based system is coordinated by the American National Standards Institute (ANSI). This private, non-profit organisation coordinates most US standards organisations, which operate by voluntary consensus. ANSI accredits standards-setting organisations, and its guidelines help them create standards in a 'fair and open' way.
- ANSI designates many standards as 'American National Standards'. This is not certification for technical merit, but that development was open and consensus-oriented.
- Most US voluntary standards-setting organisations are open to foreign participants (usually unlike their EU equivalents, discussed below).
- The public sector has an important role. Federal agencies write 'mandatory standards', which constitute around half of standards, including core standards in health and safety. The Department of Defense (DoD), the Food and Drug Administration (FDA), the Occupational Safety and Health Administration (OSHA), and the Environmental Protection Agency (EPA) produce the bulk of these. They are imposed through legislation, regulation, or government procurement contractual arrangements.

⁸³ Standards do not cover regulatory areas, for example, chemicals regulations such as REACH, which are discussed elsewhere.

- The federal government sometimes writes the standards set by standards development organisations (SDOs) into US regulation itself.
- In discussions on their MRA with the US (see below), EU officials were concerned about US regulators' ability to guarantee conformity assessment bodies' competence. In response, the US established the National Voluntary Conformity Assessment Program, which oversees them and shares information with the EU.

The EU system is more *dirigiste*. The European Commission sets 'Essential Requirements' for standards, which are then developed by three core quasi-autonomous organisations, funded by the Commission; around 25 per cent of standards are now made following these direct requests (BSI, 2016), which are announced in the Annual Work Plan to support EU legislation (CEN and CENELEC, 2015) (while 75 per cent of European standards are not developed directly to meet Commission requests).

- These bodies are the European Commission for Standardization (CEN), the European Commission for Electrotechnical Standardization (CENELEC), and the European Telecommunications Standards Institute (ETSI). Their membership is national standards bodies, national telecoms agencies, industry associations, and manufacturers; ETSI's membership includes global corporates (BSI, 2016). Foreign firms without major EU subsidiaries are generally prohibited from participating in CEN and CENELEC; in the limited instances where non-EU participation is allowed, voting is not.
- CEN develops standards in all product sectors not covered by the other two (specialist) bodies.
- The UK has only slightly over 7 percent of the votes on CEN and CENELEC standards (BSI, 2016).
- Member states oversee their own national certification bodies, whose function is also now to distribute, adapt, and replace national standards with EU standards whenever the latter are published. Under the 'standstill principle', when work begins on a harmonised standard, members cannot start or continue their own work on the same subject.
- Using these 'Harmonised Standards' is officially voluntary: a manufacturer could choose a non-harmonised (e.g. US) standard. The burden of proof, however, is then on manufacturers to demonstrate that these products meet requirements, and buyers, insurers, lenders, etc., may not recognise them, which also leads larger commercial clients to demand them of smaller firms. Alternative standards must also be

shown to meet essential EU requirements; product approval is thus much easier to obtain through Harmonised Standards.

- It is often claimed there is no such thing as an 'EU standard' as such, because these standards are written by industry. However, industry participates through organisations sponsored by the European Commission (CEN and CENELEC), which often write standards following its requests. A number of UK SMEs explain that they do not feel able to access this system, which is suited to incumbents; although SMEs participate through BSI, they say they have little influence on the 'final product' (interview data, 2018).
- Assessing conformity to standards where certification is required for placing goods on the market must be by bodies which are EU-certified as competent.

In the analysis below of the US, then EU, systems, we will analyse in more depth, first, the way standards are set, and second, how conformity to them is assessed (much analysis does not give prominence to the distinction between standards and these conformity assessment systems, as conformity assessment bodies can be public agencies, private bodies, public-private hybrids, or the producing companies themselves (Nicolaïdis and Shaffer, 2005)).

b. Discussion of the EU standards system and its relationship with the UK

i. The emergence of EU standards-setting

Before the current EU system emerged, standards were set by member states through their own institutions. According to the EU itself, its rationale for harmonisation, mutual recognition and standardisation was the removal of non-tariff barriers to '[minimise] technical trading differences' (BSI, 2016).

In the European Commission, 'the harmonisation of national rules is one of the three techniques that the Rome Treaty (Article 100) made available to the Commission' to establish and maintain a common European market (Majone, in Guimarães and Faria, 2010). In 1985, the EU launched the New Approach, intended to begin eliminating differences between national laws in these areas, to reduce barriers to intra-EU trade (Pelkmans, 1987), and in the pursuit of full harmonisation of product standards (Bar Council Brexit Working Group, 2017).

The level of legislative harmonisation in the New Approach consists of EU directives defining products' 'essential requirements' (*Ibid*), leaving the European standards bodies CEN, CENELEC and ETSI to develop standards to meet these requirements, through contractual agreement. This also demonstrates, however, that these are in effect EU institutions, and are inherent parts of the Single Market, meaning remaining under their remit would imply legal sovereignty had not been returned. Beyond the mandatory Directives meanwhile, the European standards bodies also produce many 'voluntary' standards (*Ibid.*), analysed below.

This means there now exist the 'Old' and 'New Approaches', and legislation combining elements of both called the 'Mixed Approach' (BSI, 2016):

- For standards, the central concept in the New Approach (from 1985) is separation of high-level 'essential' requirements from the technical specifications needed for product manufacture. This means that one way to meet these essential requirements is to use 'Harmonized Standards' (hENs), defined as a standard requested by the Commission from one of the European Standards Organisations (below) for the purposes of harmonisation legislation.⁸⁴
- Before the New Approach, harmonisation followed what is now called the Old Approach, where legislation covered all aspects of regulated products, specifying all technical requirements, often in detail. This is still used in some *regulatory* areas (e.g. REACH, for chemicals).
- The Mixed Approach, meanwhile, is legislation that reads as a New Approach Directive, but whose implementation measures are regulations with specific requirements, with standards limited to testing methods (such as the Ecodesign Directive).

In 1990, a new EU scheme for technical harmonisation was launched to build on the New Approach, called the Global Approach (Delaney and van der Zande, 2000). It was implemented through two major decisions:

- a) the Module Decision, and
- b) the Regulation on CE Marking.

In the first area, products are categorised under different Modules, covering various levels of complexity. Module A, for example, allows manufacturers

84 By Regulation 1025/2012.

to be responsible for their own conformity assessment (if a product is manufactured to Harmonised Standards, and not unusually high-risk, manufacturers can rely on internal manufacturing checks, and then compile a Technical File and issue a Declaration of Conformity to the appropriate standards). This allows manufacturers to apply the European 'CE Mark', which means that they can sell the product in the EU market (described as 'not a quality mark, nor [a] mark for consumers, [but] intended for Member State authorities [as] the visible sign to those authorities that your product is in compliance with the New Approach Directives' (Delaney, 2008)).

However, other Modules (e.g. for many medical devices) require 'type examination' for their assessment, which can only be carried out by Commission-designated 'Notified Bodies', and the Global Approach also gave common rules for these testing and certification bodies.

According to the European Commission (1988), 'any product, which is introduced on the Community territory, as long as it satisfies the legislation of the importing member country, and is admitted on its markets, will be entitled, as a matter of principle, to the benefits of free circulation in the Community'. However, as Nicolaidis and Egan (2001) have stated, and which still applies, this 'has failed to produce significant results, as member states have used safeguard clauses to restrict the circulation of products, disregarding the EOTC-approved stamps for conformity with 'essential requirements' issued in the home countries', implying EU control over conformity assessment has not produced concomitant ease of access.

ii. The EU standards institutions

The overall direction of standards is thus now set by the European Commission, issuing Directives listing the essential requirements for specified products. These requirements determine which technical standards the standard-setting bodies write and set mandatory technical and safety specifications (although they do not dictate how they should be achieved). The standards these organisations develop therefore have a central role in determining which products may be marketed. The remits of these three EU-funded core standards-developing organisations (CEN, CENELEC, and ETSI), are as follows:

- CEN (*Comité Européen de Normalisation*, or European Committee for Standardization). CEN membership comprises the national standards-writing organisations of all EU member states, three EFTA states

(Norway, Iceland, and Switzerland), Macedonia, and Turkey.⁸⁵ It develops voluntary European standards in all product sectors except the electrical standards covered by CENELEC. It is based in Brussels.

- CENELEC (*Comité Européen de Normalisation Électrotechnique*, or European Committee for Electrotechnical Standardisation). Its 34 European national members are represented by standards bodies (or ‘national electrotechnical committees’).⁸⁶ It develops European standards for electrotechnology, which includes consumer electronics, electricity generation, electromagnetic compatibility, and some IT (although international standards developed by the International Electrotechnical Commission (IEC) form the basis for 89 percent of CENELEC standards). About 35,000 experts participate in CENELEC standards-writing committees. It is also based in Brussels.
- ETSI (the European Telecommunications Standards Institute). ETSI membership is more *ad hoc* than CEN and CENELEC, comprising the public telecommunications administrations of EU and EFTA nations, manufacturers, and trade associations. ETSI develops European Telecommunications Standards, adopted on a mandatory basis by European member states. To speed standards development, its due process requires less consensus than CEN and CENELEC. ETSI is based in Sophia Antipolis, France.

These are the only organisations that may create harmonised European standards; CEN and CENELEC have created around 19,000, with around 160,000 national standards withdrawn as a result. While they create standards for the Single Market, they also promote harmonised European standards at the international level. Thus products complying with other standards (other than CEN-, CENELEC-, and ETSI- led standards) can be sold within the EU, but these must also meet essential EU requirements. However, as we have seen, the burden of proof is on manufacturers, which means product approval is easier to obtain through compliance with the

85 Countries with affiliate or partner standardisation bodies are: Armenia, Albania, Australia, Azerbaijan, Belarus, Bosnia-Herzegovina, Egypt, Georgia, Israel, Jordan, Kazakhstan, Lebanon, Moldova, Mongolia, Montenegro, Morocco, Tunisia, and Ukraine.

86 Current affiliate members are Albania, Belarus, Bosnia-Herzegovina, Egypt, Georgia, Israel, Jordan, Libya, Moldova, Montenegro, Morocco, Serbia, Tunisia and Ukraine. These have also expressed the intention of becoming full members. The affiliation agreement “offers a concrete way for these countries to demonstrate progress achieved in technical harmonization with the EU paving the way for a smooth integration into the European Single Market” (CENELEC, 2017).

'voluntary' standards set by CEN, CENELEC, or ETSI. Participating in their standards-writing is therefore useful for firms that seek to market products in the EU, but unlike most standards-developing organisations, CEN, CENELEC, and ETSI are not generally open to foreign participants, typically only those with major EU subsidiaries. Combined with a lack of due process and lack of early notification, this has been a historical complaint of non-EU countries.

The Office of the United States Trade Representative's (USTR) Analysis of European Standardization and Conformity Assessment Procedures regarding technical barriers to trade also states, 'The EU's approach to standards-related measures, including its conformity assessment framework, and its efforts to encourage governments around the world to adopt its approach, including European regional standards, creates a challenging environment for U.S. exporters... [the] EU's approach impedes market access for products that conform to international standards as opposed to European regional standards, even though international standards may meet or exceed the objectives set forth in EU legislation' (USTR, 2016). The extent to which European standards vary from international standards in equivalent sectors without apparent need also represents a barrier to imports from outside the EU (although this danger may be somewhat reduced by CEN and CENELEC pledges to defer writing standards when ISO and IEC standards exist or are under development in the same product sectors, underscoring the importance of participation by other countries in ISO and IEC committees).

Within the EU, a number of bodies have raised other concerns about the unpredictability of the Directives that mandate new standards. *DigitalEurope* has described the 'significant problems with the implementation of the RE-D (Radio Equipment Directive, 2014/53/EU)', stating, 'Manufacturers typically need at least one or ideally two years to design and test products to meet a Directive such as this. The European co-legislators recognised this and agreed on a transition period from June 2016 to June 2017 [which] was designed to allow manufacturers time to build and test products to over 200 Harmonised Standards (HS) [but] at almost the mid-point in this transition period, only 23 out of these standards have been published in the Official Journal'. (*DigitalEurope*, 2016)

In each member state, national certification bodies now generally function as the distributors and local adaptors of European standards. These national organisations (such as BSI in the UK) must replace former national

standards with harmonised EU standards whenever the latter are mandated and must notify the European Commission's Enterprise and Industry Directorate-General of their own independent standards approvals.⁸⁷ (As this arrangement includes the remaining national standards which have not been harmonised, it has been called a form of mutual recognition *within* the EU, as the latter standards are also intended to be recognised across EU member states.)

Mutual recognition here, unlike in external trade agreements, means a Single Market principle whereby products manufactured in one Member State may be marketed throughout the Single Market (so other Member States may not prevent their supply without explicit, valid reasons).⁸⁸ Mutual recognition applies unless harmonised standards (or regulations), or additional 'national measures' take its place. Harmonised requirements now account for approximately 69 per cent of products on the EU market.⁸⁹ National measures however are permitted only in specific instances:⁹⁰ 'public morality, public policy or public security; the protection of health and life of humans, animals or plants; the protection of national treasures possessing artistic, historic or archaeological value; or the protection of industrial and commercial property' (BSI, 2016). Meanwhile, once a business from outside the Single Market has legally marketed a product in one Member State, it can benefit from free movement of its non-harmonised good within the rest of the Single Market.⁹¹

However, a major Commission report⁹² suggests that the mutual recognition principle between EU member states 'is still not achieving its objectives', with some Member States introducing additional requirements and duplication of testing. If Member States deny a product access to their

87 Generally, adopted CEN or CENELEC standards must be implemented by all members, including those who abstained or voted against. The exception is the "A-deviation", an unusual circumstance where an existing national regulation cannot be altered to meet the proposed standard, a situation which is not intended to be permanent (Bar Council Brexit Working Group, 2017)).

88 This is outlined in the Treaty for the Functioning of the European Union (TFEU, 2009), with more specification in Regulation 764/2008, part of the New Legislative Framework updating and consolidating rules for the single market for goods (BSI, 2016).

89 European Parliament evidence to the European Scrutiny Committee, 2018.

90 Outlined in TFEU Article 36.

91 Lord Henley, Parliamentary Under Secretary of State at the Department for Business, Energy and Industrial Strategy, evidence to the European Scrutiny Committee, 2018.

92 *Evaluation of the Application of the mutual recognition principle in the field of goods* (European Commission, June 2015).

market for illegitimate or disproportionate reasons, and SOLVIT⁹³ does not deal with the issue, 'challenging national decisions through the courts can be costly and time-consuming, particularly for Small and Medium Businesses', and the result can be manufacturers 'choosing not to enter a market' (European Scrutiny Committee, 2018).

A number of the reforms to intra-EU mutual recognition⁹⁴ also appear cumbersome and ineffective: the *introduction of a problem-solving procedure*, for example, means that when a company has had its good suspended from a Member State's market, it may 'permit the home SOLVIT centre to ask the Commission to give an opinion to assist in solving the case. The Commission's opinion will identify concerns and make recommendations'. Furthermore, the mutual recognition principle 'is not absolute' (European Scrutiny Committee, 2018): 'Member States are permitted to derogate from the principle if they can demonstrate that a product is not safe or does not respect the public interest.'⁹⁵

Meanwhile in conformity assessment, that assessments must be performed by European notified bodies also raises testing and certification costs for foreign manufacturers. USTR (2016) analysis however also examined the framework of the New Approach and CE Marks:

In 1985, the EU adopted what is known as the 'New Approach' to the use of standards for products... Products that conform to European regional standards (called European harmonized standards, or hENs) under the New Approach are presumed to be in conformity with the essential requirements. hENs, however, can only be developed through the European Standards Organizations (CEN, CENELEC, and ETSI) as directed by the European Commission through a standardization request. These products can bear what is known as a 'CE mark' and can be sold throughout the EU.

The analysis added that:

[The] costs and uncertainty associated with not using an EN and attempting to demonstrate that use of an alternative standard will fulfil essential requirements is often prohibitive. For example, if a

93 SOLVIT: *solutions to problems with your EU rights*: <http://ec.europa.eu/solvit/>

94 Provided by Regulation 764/2008.

95 The EU's *'Blue Guide' on the implementation of EU product rules 2016* provides an overview of its approaches to mutual recognition.

manufacturer chooses not to use a [Harmonised Standard], it needs to assemble a technical file through a costly and burdensome process demonstrating how the product meets the essential requirements. Even if a manufacturer assembles such a file, there is no certainty that EU or Member State authorities will treat the product as conforming with the EU's essential requirements.

It is therefore difficult to market any products in Europe that lack the harmonised CE Mark. We now consider the position of the UK specifically in this framework.

c. The UK in the EU system: BSI Group and UK standards

The concept of product standardisation was pioneered in the UK, which is still regarded as a thought leader in standards development (CEBR, 2015). The Centre for Economics and Business Research stated in 2015 that: 'the UK has led the world at each stage of the evolution of voluntary consensus standards... The UK was one of the first countries to develop technical product standards and later, the first to develop process standards for quality management (BS ISO 9001), environmental management (BS ISO 14001) and information security management (BS ISO 27001)'.

BSI, the world's first standards institution, was formed in 1901 as the Engineering Standards Committee and became the British Standards Institution in 1929. It registered the 'Kitemark' (originally the British Standard Mark) in 1903. Standardisation spread to Canada, New Zealand, South Africa, and Australia in the 1920s, and in 1942, the British government recognised BSI as the sole national standards-issuing organisation. The years shortly after World War II saw the early international consolidation of standards. BSI organised the Commonwealth Standards Conference in London in 1946, which led to the creation of the International Organization for Standardisation (ISO).

In the early 1950s, Kitemarks spread to a range of products including vehicles, plumbing, and white goods. In 1951, BSI launched consumer representation on products committees, first with the Women's Advisory Committee for advice on products for the domestic consumer (this became today's Consumer and Public Interest Network, organising consumer representation for BSI generally). In 1955, the UK Government began making Kitemarks compulsory for some products, first motorcycle helmets and car seat belts, and BSI opened a testing facility dedicated to Kitemarks.

In the 1970s, BSI launched a series of quality standards for 'management systems' (leading to ISO 9000s).

Despite international expansion, however, since the late 1990s BSI has become more oriented to promulgating and adapting EU-originated standards, being appointed by the UK Government as the UK's National Standards Body (NSB) for the EU. As the NSB, BSI still manages approximately 1,200 committees, with 11,000 members, publishing 2,500 British Standards (BSs) annually (but withdrawing around 1,000 which are defunct or in conflict with new EU standards). However, around 95 per cent of BSI's work is now on European and international standards (BSI, 2016). BSI must report all national standards development to the EU at least annually.

At CEN and CENELEC, BSI constitutes one of the national delegations, with each delegation providing the consensus position of its 'experts and interested parties' (BSI, 2016) via its own committees. The role of CEN and CENELEC, as we have seen, is to uphold the 'single standard model' of the Single Market, meaning 'there is only one standard in use across all the countries of the single market on any given issue' (BSI, 2016). However, when the ESOs make a new standard, 'one national member will lead the activity and other countries will participate depending on industry interest', creating the harmonised standards with the designation 'hEN'. The new standard is decided by weighted voting, giving the UK only 7 per cent of the vote.

However, this risks 'path dependency', or following the technological interests of major corporates (e.g. in other European countries). Indeed, while standard-setting can generate beneficial economies of scale, foster critical mass in emerging industries and reduce transaction costs, it also risks locking in old technologies, restricting choice and creating the excessive influence of dominant players (CEBR, 2015). These are particularly serious risks for SMEs. In a 2015 CEBR study, when representatives were asked about the impact of standards on their firms' competitiveness, although 84 per cent said they enhanced company status, 76 per cent stated that they generated additional costs, 38 per cent an increase in R&D costs, and 5 per cent that they reduced the capacity to export. This also demonstrates how standards are liable to be costly for SMEs should they not reflect the innovation preferences of UK firms, or their appearance be predictable. These are illustrated in the following graph.

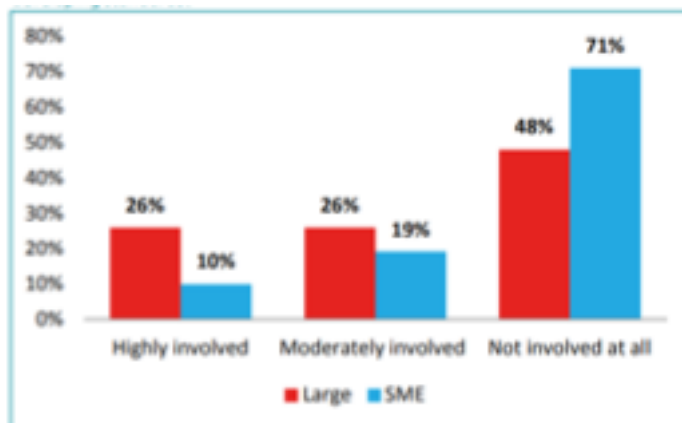
Figure 4: Impact of standardisation on the competitiveness of your firm



(Source: BSI and CEBR, 2015)

Amongst SMEs, however, 70 per cent are not involved in standards development compared to 48 per cent of large firms:

Figure 5: To what extent is your firm involved in developing standards?

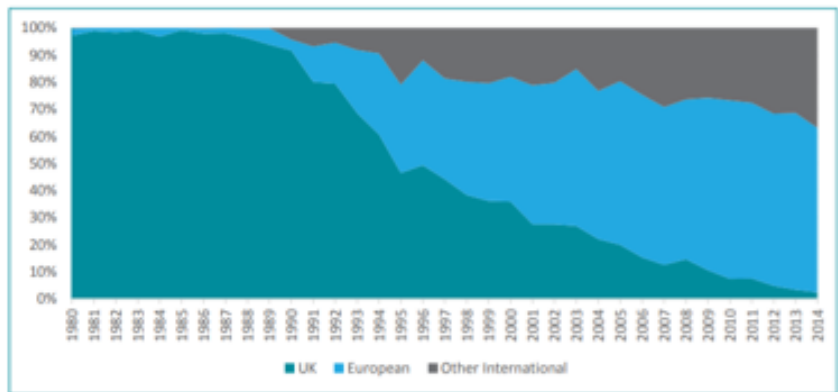


(Source: BSI and CEBR, 2015)

As the graph below demonstrates, the emergence of the European focus has been followed by an extraordinary drop in UK standards in operation in the UK, from 88 per cent in 1990 to 2 per cent in 2014; only 5 per cent

of BSI's work is now on UK national standards (however, as we will discuss, this also demonstrates that the growing use of international standards means that the UK will be able to participate directly in standard-setting in international bodies, without its view first being channelled through CEN or CENELEC).

Figure 6: The BSI standards catalogue



(Source: BSI and CEBR, 2015)

On the assumption that the UK would not be a member of the Customs Union, EFTA, or the EEA after Brexit, BSI would not remain a member of CEN and CENELEC according to their current statutes (although ETSI membership will likely remain unaffected due to its different membership rules). Indeed, BSI (2016) states that continuing membership would 'probably depend on whether the UK continued to commit to the adoption of all European standards (on a voluntary basis as a non-member of the EU) and to the fundamental principles of standstill and withdrawal'. It is therefore not compatible with regulatory autonomy.

However, an autonomous BSI could continue to facilitate UK standards committees in line with their 'standard for standards', BS 0:2016. BSI committee members are typically nominated by an organisation with an interest in its work (trade associations, for example). Nominating bodies must have 'open and non-discriminatory criteria such as to permit representation of any UK interests that share their objectives' (BSI, 2018) although there is no specific restriction on the nationality of these committee members.

It is also important to note that BSI separate their standards and conformity assessment roles (the former based in London, the latter in Milton Keynes). Through a mutual recognition agreement with the EU, we presume that BSI would be expected to secure notified body status to continue its conformity assessment role.

Case study: the CEO of a medium-sized UK steel company

‘The Eurocodes (the European structural design standards) were supposed to create a harmonised, cost efficient and accessible set of design standards for use throughout Europe. Unfortunately they have failed on all three counts.’

In the current system, we have to purchase Eurocodes from BSI to show that we meet the relevant standard [not including non-mandatory design standards], whether or not we manufacture for the domestic market or export to Europe. This is a significant overhead to us and can be a barrier to entry for other small businesses across the UK.

For example, to purchase just one part of the Eurocodes that cover our type of work costs about £2000, which includes a 50 per cent membership discount – this is for just one of ten parts of the Eurocodes that relate to our industry. To trade domestically (as EU mandatory standards take over), we are forced to bear the additional cost while there are well-proven British Standards that in many cases provide a more efficient solution. To a small business the overhead is much more burdensome if not completely unaffordable (and when we export to Europe things get much more expensive).

But once we have bought the Eurocode from BSI it does not end there. There is a wide range of supporting documents, like Non-Conflicting Complementary Information documents (NCCIs) which are necessary to follow the codes; once we have those, we need the national annex documents for each country (some do not yet exist) and buy them separately. The worst part is that Eurocodes have failed in their principal goal of providing one set of codes for use throughout Europe. As each country has their own national annexes, the codes are in effect different from country to country: there is no central repository where these annexes can be bought, so we must hunt country by country for national annex documents, which may then need to be translated into English. This is before

we can even commence design work for exports. It is no wonder that most in our industry do little trade in the rest of the EU.

To interpret each code, each set of NCCIs, and each National Annex document a company needs computer programmes and must train their engineers, designers and draughtsmen, a massive intertwining of requirements. Meanwhile, British Standards have not been updated in some time, as they are no longer really maintained by BSI, so some do not take into account some of the most recent advancements in material science techniques. But the updated information in the Eurocodes has a vast amount of unnecessary complexity. There is no even playing field within the EU, so the EU standards created on this premise have damaged UK business.

Recently, we have designed and helped build 150 buildings in the Caribbean that have held strong against category 5 hurricanes, all of which were designed to British Standards. Any wind-critical design to Eurocodes are at least 20 per cent less economical than British Standards. It is also doubtful we would have been able to win this work using Eurocodes, as we compete on a world stage where use of Eurocodes is rare: our markets in Africa, the Caribbean, Malaysia, and Mongolia trust British standards more than European, so BSI would do more for our exports by updating them instead of working through EU bodies. Countries in Africa and Asia have looked to Britain for their design codes but are now switching to Eurocodes because there is no up-to-date British Standard, yet they do not have the expertise to create their own national annexes. This has led us to see clients specifying buildings in virtually windless countries that could withstand a category 4 hurricane. The cost to these countries is severe, and we in Britain have no answer – without British Standards, they are also likely to choose to use American standards in future instead of Eurocodes anyway, which would also be detrimental. The only winners in this are large companies who enjoy barriers to entry for entrepreneurs.

The Eurocodes were supposed to create a harmonised, cost-efficient, and accessible set of design standards for use throughout Europe. Unfortunately they have failed on all three counts. The ultimate penalty rests with the consumer here and elsewhere if we are forced to use an uneconomical solution.

Our standards are also used in conjunction with Building Regulations (BRegs). British BRegs have always allowed any safe and proven method of design to be used. BSs were safe and proven methods, but the aim of CE marking is to make Eurocodes mandatory throughout the continent. Big established companies (including large multinational organisations) have no trouble jumping through the administrative hoops of CE marking. Small companies, start-ups, and innovators find it extremely difficult. The EU creates standards of unnecessary technical complexity which, along with the EU and domestic regulatory burden, force our prices up. The uneven playing field across the EU means we face unfair competition within it. In the world market, customers are encouraged to seek better value elsewhere.

Yet CE marking does not mean that the product is safe, nor is it a mark of quality. Instead it is a protectionist tool used to keep out the competition. More and more you see projects that stipulate the use of Eurocodes instead of a BS to attain the CE Mark. All this is at great cost to British businesses, their staff, and the UK economy. We think BSI needs to see its charter changed to work in the competitive interests of British industry.

Example of replacement of British Standards by Eurocodes (European construction standards) – Steel design

In British Standards, two codes have governed steel design: BS5950 for buildings and BS 5400 for bridges. These have the following parts (omitting those not relevant to steel design):

BS 5950: Part 1: 2000	Structural use of steelwork in building - Code of practice for design. Rolled and welded sections
BS 5950: Part 2: 2001	Structural use of steelwork in building - Specification for materials, fabrication and erection. Rolled and welded sections
BS 5950: Part 3: 1990 (Section 3.1)	Structural use of steelwork in building - Design in composite construction - Code of practice for design of simple and continuous composite beams
BS 5950: Part 4: 1994	Structural use of steelwork in building - Code of practice for design of composite slabs with profiled steel sheeting
BS 5950: Part 5: 1998	Structural use of steelwork in building - Code of practice for design of cold formed thin gauge sections
BS 5950: Part 6: 1995	Structural use of steelwork in building - Code of practice for design of light gauge profiled steel sheeting
BS 5950: Part 7: 1992	Structural use of steelwork in building - Specification for materials and workmanship: cold-formed thin gauge sections
BS 5950: Part 8: 2003	Structural use of steelwork in building - Code of practice for fire resistant design
BS 5950: Part 9: 1994	Structural use of steelwork in building - Code of practice for stressed skin design
BS 5400: Part 1: 1988	Steel, concrete and composite bridges. General statement
BS 5400: Part 3: 2000	Steel, concrete and composite bridges. Code of practice for design of steel bridges

BS 5400: Part 6: 1999	Steel, concrete and composite bridges. Specification for materials and workmanship, steel
BS 5400: Part 10: 1980	Steel, concrete and composite bridges. Code of practice for fatigue

The equivalent set of Eurocodes are as follows:

EN 1993-1-1:2005	Eurocode 3: Design of steel structures - Part 1-1: General rules and rules for buildings
EN 1993-1-2:2005	Eurocode 3: Design of steel structures - Part 1-2: General rules - Structural fire design
EN 1993-1-3:2006	Eurocode 3: Design of steel structures - Part 1-3: General rules - Supplementary rules for cold-formed members and sheeting
EN 1993-1-4:2006	Eurocode 3: Design of steel structures - Part 1-4: General rules - Supplementary rules for stainless steels
EN 1993-1-5:2006	Eurocode 3: Design of steel structures - Part 1-5: General rules - Plated structural elements
EN 1993-1-6:2007	Eurocode 3: Design of steel structures - Part 1-6: Strength and stability of shell structures
EN 1993-1-7:2007	Eurocode 3: Design of steel structures - Part 1-7: Strength and stability of planar plated structures subject to out of plane loading
EN 1993-1-8:2005	Eurocode 3: Design of steel structures - Part 1-8: Design of joints
EN 1993-1-9:2005	Eurocode 3: Design of steel structures - Part 1-9: Fatigue
EN 1993-1-10:2005	Eurocode 3: Design of steel structures - Part 1-10: Material toughness and through-thickness properties
EN 1993-1-11:2006	Eurocode 3: Design of steel structures - Part 1-11: Design of structures with tension components
EN 1993-1-12:2007	Eurocode 3: Design of steel structures - Part 1-12: General - High strength steels
EN 1993-2:2006	Eurocode 3: Design of steel structures - Part 2: Steel bridges

EN 1993-3-1:2006	Eurocode 3: Design of steel structures - Part 3-1: Towers, masts and chimneys – Towers and masts
EN 1993-3-2:2006	Eurocode 3: Design of steel structures - Part 3-2: Towers, masts and chimneys – Chimneys
EN 1993-4-1:2007	Eurocode 3: Design of steel structures - Part 4-1: Silos
EN 1993-4-2:2007	Eurocode 3: Design of steel structures - Part 4-2: Tanks
EN 1993-4-3:2007	Eurocode 3: Design of steel structures - Part 4-3: Pipelines
EN 1993-5:2007	Eurocode 3: Design of steel structures - Part 5: Piling
EN 1993-6:2007	Eurocode 3: Design of steel structures - Part 6: Crane supporting structures

For each of these there are also national annex documents for 17 EU countries and 4 non-EU countries. Thus, to export to all of these countries it is necessary to purchase 440 documents. This is repeated across the wider Eurocodes, which have 58 parts, for a total of 1,276 documents (which does not take into account NCCIs and other supporting literature).

d. Discussion of the US system

To understand the decentralised rationale of the US system (which the EU itself describes as successful (CEN and CENELEC, 2016)), we start with the role of the American National Standards Institute (ANSI), the private, non-profit organisation coordinating a large number of the US voluntary-consensus Standards Developing Organisations (SDOs) in the US system.⁹⁶

ANSI was formed in the 1960s from the previous American Engineering Standards Committee, founded in 1918 as a federation of SDOs. The central aims of ANSI from its inception were to coordinate the system of voluntary consensus standards development, to promote awareness and use of voluntary standards, and to represent US interests in international standardisation bodies (ANSI does not need to approve government-set standards, which are discussed below). The structure of the system ANSI coordinates is decentralised. Its purpose is to allow standards developers and users to manage standards development themselves, industry by industry.

ANSI sets guidelines establishing a 'consensus-seeking process', whereby standards are to be set in a 'fair and open manner', accrediting SDOs as compliant with these guidelines. By approving many of the standards these organisations create, it designates them American National Standards (this is not certification for technical merit, but that development was open and consensus-oriented, and not seriously conflicting with or duplicating current standards). This shows how standardisation can be an 'often superior policy alternative to regulation, with legitimacy of the voluntary standard achieved within industry through the consensus process' (CEBR, 2015). The ANSI federation includes over 1,000 firms, government agencies, and technical, trade, labour, and consumer groups.

Members of ANSI vary in their level of national or international focus. The IT industry, for instance, emphasises international standardisation and is free to pursue its coordination, but consumer and workplace safety standards are developed by organisations with a stronger national focus (Nicolaidis, 1997).

96 See also: *Developing a True Transatlantic Partnership: A High Standard Trade Agreement to Propel the Global Economy*, Shanker A. Singham, Victoria Hewson and Dr Radomir Tylecote, Legatum Institute, June 2017.

i. Standards Developing Organisations (SDOs) under ANSI: a market for standards

Standards Developing Organisations fall broadly into membership organisations, professional and academic societies, and industry associations.⁹⁷ The decentralised structure of the US standards system includes over 400 private standards developers (Nicolaïdis and Schaffer, 2005). These private SDOs develop most of the standards used by the US private sector, mainly being organised autonomously, by and for an industry, profession, or discipline, to develop voluntary consensus standards. Around 275 engage in 'ongoing' standard-setting; others, having developed standards, may update them. The twenty leading private standards developers by number produced cover a wide range of sectors: aerospace, electronics, automotive, mechanical engineering, chemicals and cosmetics.

In the development of a standard, the oversight board of an SDO, and frequently its membership, review and comment on new proposals. Where an SDO uses ANSI-accredited procedure, it may then choose to have ANSI approve and publicise the standard as an 'American National Standard'. Whether a standard gains widespread acceptance is mainly determined by usefulness to its market sector, in particular manufacturers, purchasers, regulators, testing laboratories, and certifiers. When a standard turns out to be commercially unviable, technologically obsolete, or is otherwise neglected, the relevant SDO will generally discontinue the standard. SDOs develop voluntary consensus standards generally by consensus-seeking activities between private firms, technical experts, customers, as well as other interested parties, and their use is voluntary by industry (examples range from the dimensions of plumbing valve fittings to performance characteristics of automotive structural materials).

ii. Role of the US public sector

The US system is market-oriented, but the public sector plays a major role, with federal, state, and local government agencies involved in standards development, especially in health and safety. Indeed, standards written by federal agencies account for around half of national standards (Nicolaïdis, 1997). These 'mandatory standards' are imposed by legislation, regulation, or through the contractual relationships involved in government procurement.

⁹⁷ ANSI itself is sometimes called an SDO, but for our purposes SDO is taken to refer to the organisations it coordinates.

Mandatory standards are developed outside the ANSI-coordinated system of voluntary consensus although mandatory and voluntary standards overlap. When government standards refer to voluntary standards – which often occurs, the voluntary standards being able to inform government standards – the voluntary standard then becomes mandatory.

Table 1: Examples of SDO

Federal Government
Department of Defense (DoD) Example: General Services Administration (non-defence procurement)
Private Sector
Scientific and Professional Societies Example: Institute of Electrical and Electronics Engineers (IEEE)
Trade Associations Example: National Electrical Manufacturers Association (NEMA)
Standard-Developing Membership Organisations Example: American Society for Testing Materials (ASTM)

(Source: adapted from National Research Council, 1995)

The bulk of ‘federal standards’ are set by the Department of Defense (DoD) and General Services Administration (GSA); others include those by the Environmental Protection Agency (EPA), Food and Drug Administration (FDA) and Occupational Safety and Health Administration (OSHA). Government agencies frequently meet their obligations by adopting the results of voluntary development, sometimes participating in the process. A range of departments produce the remaining standards.

This field also includes the National Institute of Standards and Technology (NIST). Based at the Department of Commerce (DoC), NIST was established in 1901 as the National Bureau of Standards, responsible at the time for weights and measures. Although not a regulatory agency, NIST is active in public and private standard-setting, its physical scientists advancing the science of testing and standardisation.

Finally, ‘*de facto*’ standards refer to those arising from uncoordinated processes in the competitive market, such as when a set of product or

process specifications gains market share, with their standards becoming the norm (National Research Council, 1995). The following table summarises these three main types of standards by development process.

Table 2: Types of US standard

DE FACTO STANDARD	A standard arising from uncoordinated processes in the competitive marketplace. When a particular set of product or process specifications gains market share such that it acquires authority or influence, the set of specifications is then considered a de facto standard. Example: IBM-compatible personal computer architecture
VOLUNTARY CONSENSUS STANDARD	A standard arising from a formal, coordinated process in which key participants in a market seek consensus. Use of the resulting standard is voluntary. Key participants may include not only designers and producers, but also consumers, corporate and government purchasing officials, and regulatory authorities. Example: photographic film speed—ISO 100, 200, 400, etc., set by International Organization for Standardization (ISO)
MANDATORY STANDARD	A standard set by government. A procurement standard specifies requirements that must be met by suppliers to government. A regulatory standard may set safety, health, environmental, or related criteria. Voluntary standards developed for private use often become mandatory when referenced within government regulation or procurement. Example: automobile crash protection—air bag and/or passive seat restraint mandated by National Highway and Traffic Safety Administration

(Source: adapted from National Research Council, 1995)

iii. Relationship with International Standards Development

ANSI maintains an especially a close working relationship with major international standards-setting bodies, the two largest being the International Organization for Standardization (ISO, originally founded through BSI activity) and International Electrotechnical Commission (IEC), where ANSI forms the US representation.⁹⁸ These private organisations develop standards for and with a very wide range of industrial and technological sectors.

The US also hosts the secretariats of ISO and the IEC technical committees (and various subcommittees) in sectors in which it exports in large volumes. Industry sectors that are amongst the top 10 US export industries are covered by: in IT, the secretariat of the International Organization for Standardization/International Electro-technical Commission Joint Technical Committee 1 (ISO/IEC JTC1); in aircraft and space vehicles, the ISO Technical Committee 20 (ISOTC 20); in plastics, ISOTC 61; and in petroleum industry materials and equipment, ISOTC 67 (DeVaux, 2000).

⁹⁸ At IEC, this is through the ANSI-coordinated US National Committee.

iv. Conformity assessment system

Assessment of conformity to standards means independent third parties (and at times by manufacturers themselves, their customers, and regulatory agencies) assess conformity to existing standards. This is also relatively decentralised in the US, and involves four areas (the specific terms below are for manufactured products, but the same concepts apply to processes and services).

The first area of conformity assessment is the *manufacturer's declaration of conformity*, which entails self-assessment by manufacturers using internal testing and quality assurance. The second is *testing of products, parts, and materials*, carried out by independent, private laboratories for manufacturers. The third is *certification*, the formal verification, often through testing by an unbiased third-party, that a product conforms to specific standards (e.g. a product safety certificate from the Underwriters Laboratories). Fourth is *quality system registration*, the independent audit and approval of a manufacturer's own quality system (the management of consistent product quality that includes procedures, training, and documentation).

NIST also has a mandate to phase out federal conformity assessment activities, so that federal bodies are now broadly reliant on private assessors (NRC, 1997), using private activities (apart from, in limited cases, for national security, and some health and safety or environmental assessments).

Mutual Recognition Agreements and their relationship to standards and conformity assessment

The relationship between MRAs, standards and conformity assessment is important. Despite global tariff-reduction, very substantial behind-the-border barriers remain, including duplicative regulatory compliance costs. An MRA can prevent barriers as nations forge more complex infrastructure for testing and approving goods and services, especially in new technological fields. More institutional diversity between jurisdictions can also foster recognition of a wider range of innovation, allowing different countries' firms to innovate to their own competitive advantage and allowing the wider spread of innovations. Broadening mutual recognition is therefore one of the most important parts of advanced trade agreements, especially where future prosperity depends on leading-edge innovation.

a. Outline of the US-EU MRA

Understanding the US-EU MRA of 1997 (whose six sectoral annexes are sometimes informally called separate MRAs) can help inform a UK-EU MRA (and later with others) and a new UK conformity assessment system. The New Transatlantic Agenda (NTA) of 1995 outlined US-EU intentions for transatlantic MRAs in goods. The US and EU then entered into discussion on MRAs in eleven sectors.⁹⁹ Negotiations cut this to six: telecommunications equipment, electromagnetic compatibility, electrical safety, recreational craft, medical devices, and pharmaceutical goods manufacturing practices.

The subsequent framework agreement for mutual recognition came into force on 1 December 1998, and the consequent Transatlantic Economic Partnership (TEP) of that year included a commitment to expand mutual recognition to other goods, and to service sectors. A new MRA was negotiated for marine safety equipment, but was not possible in sectors such as cosmetics and road safety, previously in consideration, and negotiations were not concluded in services, where individual US states have more regulatory power (Nicolaïdis and Shaffer, 2005).

⁹⁹ IT, medical devices, telecommunications products attached to public networks, electrical safety, electromagnetic interference, pharmaceuticals, lawn mowers, road safety equipment, recreational craft, pressure equipment, and personal protective equipment such as helmets.

The agreements were limited to conformity assessment processes, meaning a 'traditional' MRA, but established a transatlantic structure to oversee implementation, with a Joint Committee of US and EC trade officials meeting every six months.¹⁰⁰ However, conformity assessment in the country of production reduces time, expense, and unpredictability in obtaining approval, avoiding the risk of rejection by agencies at the destination, which is especially important for SMEs that may lack the resources to understand destination countries' regulatory systems.

Following EU officials' concern about US regulators' ability to guarantee conformity assessment bodies' competence, NIST also began the National Voluntary Conformity Assessment Program. EU and US businesses also launched the Transatlantic Business Dialogue (TABD) to promote the MRA, and the Trans-Atlantic Advisory Committee on Standards, Certification and Regulatory Policy (TACS), for sector-by-sector recommendations (Shaffer, 2002).

In a 2004 European Commission paper on lessons drawn from the US-EU MRA, the Commission drew a distinction between 'traditional' MRAs and 'enhanced' agreements based on standards deemed to be equivalent to each other or common standards. The Commission also stated that the latter was now preferable (Nicolaidis and Shaffer, 2005).

Meanwhile, the two major complaints by European firms – the need to seek multiple certification across states and the fact that some federal agencies did not recognize certification granted by other bodies (Nicolaidis and Egan, 2001) – are clearly specific to the US. Furthermore, in the US-EU MRA, for numerous US conformity assessment bodies to be granted the status of EU-notified bodies, the US had to be able to give assurance that they could certify to EU standards (Nicolaidis and Egan, 2001); however, this is already known in the UK case.

¹⁰⁰The MRA also created Joint Sectoral Committees to implement the separate annexes.

Conclusion: the opportunity for a new UK standards architecture

The UK has had its standards system increasingly determined by Brussels over the last forty years, which has become more centralised than private sector-led systems, especially the US equivalent.

Foreign companies lacking major EU subsidiaries are prohibited from participating in EU standard-setting organisations, and while using ‘Harmonised Standards’ is officially voluntary, as a manufacturer could choose a non-Harmonised Standard, the burden of proof is on manufacturers to demonstrate that products meet requirements. BSI (2017) states that this single standard model ‘is favoured by industry because it reduced the number of standards that an enterprise may have to consider in order to trade across borders’; it also notes that standards are expected to meet the basic international law principles of stakeholder engagement, open public consultation and consensus. However, the evidence suggests that under the EU arrangements, standards do not meet these principles, and, anecdotally, SMEs suggest that Member State annexes render the cross-border statement inaccurate.

The US approach can help to inform an autonomous UK system, for which the UK should seek an advanced MRA with the EU. We suggest that this should include a continuing ANSI-type role for BSI, coordinating a private sector ecosystem of standard-setting and testing.

Much research into conformity assessment supports a private-led ecosystem with state oversight, permitting state resources to be allocated to areas of more concern, with high product process standards plus post-market surveillance controls. Research suggests that private certification is equally effective at protecting public health and safety (providing certification processes are based on high health and safety standards, with regulatory oversight (Nicolaidis, 1997; Shaffer, 2002)). This means government agencies have oversight of critical regulatory and procurement standards in public health, safety, environment, and national security, with assessment of conformity to those standards being performed by the private sector. Government’s oversight capacity also means evaluating private sector organisations as competent to accredit testing laboratories and product certifiers: this is the role of the non-profit private company UKAS (the United Kingdom Accreditation Service, the national assessor of testing organisations). However, while the UK would

use private SDOs, coordinated by and feeding their standards into BSI for assignment as national standards, the US federal government writing the standards set by SDOs into US regulation appears unnecessary in a UK system (this raises costs to users and in particular to SMEs). UK national standards should still be chosen by industry through the relevant committee (facilitated as BSI committees), also avoiding new burdens for government.

As we have seen, the European Commission ‘announces in advance its requests for standards likely to support EU legislation in its Annual Work Plan’. This is possible in a centralised system, but in an autonomous UK system advance planning would be necessary only by specific standards bodies, in partnership with their members.

The USTR (2016) finds that the EU also promotes ‘adoption of European regional standards in other markets’, which means it ‘often requires the elimination of non-EU standards as a condition of providing assistance to, or affiliation with, other countries, which can give EU manufacturers commercial advantages in those markets.’ This is a strategy by the EU that the UK and its companies cannot remain locked into. American officials are also ‘challenging the EU’s prominence... and its funding of standardization activities’ (Nicolaidis and Egan, 2001); in the International Standards Organization (ISO) and the International Electrotechnical Commission (IEC), ‘the fear that further institutional fragmentation – above all from the EU – could produce entrenched incompatible standards [led] these organizations to lobby their *national* counterparts to join them’ (Nicolaidis and Egan, 2001) (our italics). Withdrawal from the EU therefore heralds the opportunity for stronger representation of UK industry internationally. It also presents an opportunity to establish an autonomous system that is more active in representing the interests of disruptive SMEs, who, in interviews with us and others, express particular dissatisfaction with the EU status quo. The openness of UK standards committees to SMEs, and therefore to innovative competition, helps prevent dominance by incumbent interests. These, through BSI, need the ultimate say on the shape of a UK standard (participation in non-EU international SDOs notwithstanding).

An autonomous UK standards-setting system would therefore not continue to use CE marking domestically although the UK would *recognise* EU products using the CE Mark. This means we should return to fully using the Kitemark, whereby the standard accepted by the one relevant UK

sector SDO, then by BSI, becomes the standard that needs to be met before the UK Kitemark is awarded for the conforming product.

Full UK contributory membership of CEN and CENELEC would also cease. Although some UK trade associations have suggested that their individual industry keep CEN, for example, as the body that ultimately determines their standards, this is not compatible with an autonomous UK system, and would require BSI assigning British Standard numbers to standards agreed at CEN and CENELEC. It has been suggested that leaving CEN and CENELEC would render the UK a 'follower', but the autonomy to set our own advanced pro-competitive standards freely means this would not be the case. Although UK industry can currently set standards through domestic industry bodies, these can be overridden by new European standards from CEN and CENELEC. This in turn incentivises UK incumbents to work through the EU-coordinated system, making future standards unpredictable for UK SMEs, which lack their resources. Furthermore, CEN and CENELEC currently do not provide press releases for all new standards, do not require their Technical Committees to provide 'why documents' and do not assess standards' user friendliness for SMEs; BSI may do all these for UK standards.

The result of this system, according to a number of small business representatives, is that trade associations are not fulfilling their desired function as contributors to, and organisers of, standards committees, but are accepting CEN and CENELEC standards when these are passed down to them through BSI (undermining BSI's reputation as a principles-based coordinator of standards). One defence of CEN and CENELEC membership has been that BSI is able to apply special UK 'annexes' to standards, the provisions that allow Member States flexible interpretations of a standard for their market. However, as we have seen, this also makes the current system harder for SMEs to navigate; firms applying for CE Marks must learn other member states' local annexes when exporting, which some have called 'very burdensome', reporting that, as a result, 'it is actually easier to trade outside the EU'. They suggest that this system is 'very useful for incumbents, but makes it very hard for small firms' (Interview data, 2017).

Standards autonomy will allow BSI to focus more strongly on the international standards work it already carries out. BSI works through ISO and IEC, for example: in the former, UK experts play a larger role internationally than their German counterparts, participating in 95 per cent of ISO committees.

Regarding foreign firms' access to domestic UK SDOs, as in the US, foreign participation could depend on the rules of each US SDO. UK firms should be strongly encouraged to join foreign (e.g. US) standards committees, which can help develop a stronger culture of exporting. UK firms should also be encouraged to attract more international standards committees to the UK. Internationally, the secretariats for Technical Committees are typically awarded to the country that suggests the new committee (when this country does not want to host the Secretariat, others are given the opportunity to bid, pitching their level of expertise). A renewed domestic focus at BSI may allow them to be more pro-active in putting forward these suggestions. Australia's recent securing of the blockchain standards committee is an example of where we have missed out, perhaps unnecessarily. Elsewhere, Japan's standards association has worked to 'increase Japanese firms' awareness of and participation in the international standards organisations', and Japan '[has] begun to represent [a] more equal [partner] to the EU' (Nicolaïdis and Egan, 2001).

BSI may also become an SDO itself in the US, increasing UK reach and broadening UK access to expertise. The domestic conformity assessment role of BSI would continue, with the organisation one of a number able to assess conformity in an open and competitive market.

Surveys of UK firms reinforce this need for openness. CEBR (2015) finds that the two most important benefits of participation in the standards development process for firms are being able to anticipate future market rules and emerging themes in their industry (say 88 per cent of companies); and promoting the industry's interests at a national level (75 per cent). Autonomy in standards does not mean that the UK will always change a standard from an EU one however: if a UK SDO thinks the latter is superior, it can freely adopt it. International standards have also tended to coalesce anyway, because of modern 'systems integrator' companies (e.g. large aircraft manufacturers) outsourcing production of components. Using international standards is also usually found to be beneficial for exports, unless national standards are specifically shown to be superior (Swann, 2010). Allowing competition between standards-setting organisations can lead to better outcomes at the international level meanwhile. Ultimately, companies also do not want to sell lower quality products; EU firms will have an incentive to move their standard towards the UK's if autonomous UK standards lead to superior innovation, and vice versa.

In the round, the UK needs to be able to establish and maintain for its domestic environment the standards it wishes: remaining under CEN and CENELEC precludes this. This is essential for rule-making sovereignty, innovation preferences and advantages, and SME access. BSI will also require either full UK private funding or (some) funding by UK Government. Although UK standard-setting would become domestically autonomous, UK firms could continue to use CE marking for exports to the EU if necessary (any use of CE Marks would be voluntary on a domestic UK basis), but recognition can be sought for (new) UK standards by the EU for CE marking.

While BSI would therefore no longer be a full member of CEN or CENELEC (meaning its representatives would not sit on its standards committees), it is important to remember that this would put it in the same situation vis-à-vis the EU as ANSI in the US (and others), which does not prevent the effective management of a US standards system. However, under the ISO/CEN Vienna Agreement (the latest version going into effect in 2001), up to four ISO committee representatives may attend relevant CEN committee meetings without needing special invitations, and can represent the breadth of views of the ISO committee (ANSI, 2005). This is another route for UK influence: approximately 33% of all CEN-approved standards are identical to ISO standards.

This means that, in standards, recognition should be sought whereby a new UK standard may also receive the CE mark. Full mutual recognition of UK *conformity assessment* should also be sought as a first priority (the EU already has a number of MRAs on product conformity assessment with third countries such as Australia).¹⁰¹

We therefore propose that, in the area of standards, the UK pursue full mutual recognition with the EU in conformity assessment (allowing UKAS an autonomous role in assessing and certifying the UK's conformity assessment bodies). In standard-setting itself, UK standard-setting bodies will be certified to produce the standards which will raise a presumption of compliance with UK regulations, will participate in ISO, but will no longer be full members of CEN and CENELEC. While recognition of standards should be sought, naturally, should UK and EU regulations diverge materially, it may not always be possible to have the same standard demonstrate compliance in both the EU and UK. The UK would of course

101 https://eeas.europa.eu/sites/eeas/files/mra_au_en.pdf. The legal authority for which is found in Articles 207 and 218 of TFEU (Bar Council Brexit Working Group, 2017).

be free to grant recognition to EU standards for demonstrating compliance with UK regulations, where the standard mapped appropriately to the regulation, to ensure that an autonomous UK standard-setting system and the standards it produces are exposed to the maximum possible institutional competition, and to seek agreement with the EU for the same.

Chapter 5: Selected major anti-competitive regulations by sector

The following introductory list outlines examples of major EU-originated anti-competitive regulations in force in the UK. In the areas we highlight, the implication is not that ‘deregulation’ is needed. It is that anti-competitive regulation can be replaced by regulation that is pro-competitive and increases consumer welfare. An anti-competitive regulation meanwhile can have different results: some raise costs for businesses, and some mean actual blockages to trade (GDPR and the limits it imposes on data transfer, for example).

For some major regulations, we discuss the more extensive background to its anti-competitive effects; others we introduce as groups of regulations. Where we highlight administrative costs (according to UK Government Impact Assessments at 2014 prices), please note that these are the costs of *implementation*, and do not cover broader anti-competitive impacts.

‘Regulation’ here means both EU *Regulations* and *Directives*. The former are directly applicable in EU member states, becoming immediately enforceable in law (sometimes subject to additional implementing measures) but are not always given UK Government impact assessment, so many costs remain unknown. Directives, meanwhile, usually need further measures to be transposed into national law, being implemented in the

UK through primary legislation (as an *Act*) or more commonly through secondary legislation (a *Statutory Instrument*).¹⁰²

Digital and telecommunications

The EU concept of the **Digital Single Market (DSM)**, proposed in *A Digital Single Market Strategy for Europe* (2015),¹⁰³ was intended to reduce barriers, but has come to entail more regulation, not less. It comprises 16 initiatives to '*break down national silos in telecoms regulation, in copyright and data protection legislation, in the management of radio waves and in the application of competition law*'.¹⁰⁴ A suite of Directives have been or are due to be updated.

The DSM built on the **EU regulatory framework for electronic communications** (implemented in the UK by the Communications Act 2003, updated by the EU in 2009). This consisted of five directives and two regulations:

- The 'Framework Directive' (2002/21/EC)
- The 'Access Directive' (2002/19/EC)
- The 'Authorisation' Directive (2002/20/EC)
- The 'Universal Service' Directive (2002/22/EC)
- The 'E-Privacy' Directive (2002/58/EC)
- The Regulation on Body of European Regulators for Electronic Communications (BEREC)
- The Regulation on Roaming on Public Mobiles Communication Networks

102 It is useful to note that of the 100 costliest EU regulations in the UK, 93 would still apply if the UK joined the original EEA agreement. These 93 have a cost of £31.4 billion (94 per cent of the total cost). All five costliest EU-derived legislations would continue to apply in the EEA. These are: 1) the UK Renewable Energy Strategy; 2) the CRD IV package; 3) the Working Time Directive; 4) the EU Climate and Energy Package; and 5) the Temporary Agency Workers Directive. *What if...? The consequences, challenges and opportunities facing Britain outside the EU*. Open Europe, March 2016 (also source for immediate implementation costs, unless otherwise stated).

103 https://ec.europa.eu/commission/priorities/digital-single-market_en

104 <http://eur-lex.europa.eu/legal-content/EN/TXT/?qid=1447773803386&uri=CELEX%3A52015DC0192>

The *DSM* and the *EU regulatory framework for electronic communications* have led to a range of anti-competitive measures and regulations, which we outline below:

- **General Data Protection Regulation (GDPR)** (Regulation (EU) 2016/679)

In effect from May 2018, GDPR has extra-territorial reach wherever the personal data of EU citizens is processed. The GDPR regime is suspicious of innovation and inherently protectionist: its prescriptive and complex requirements mean smaller entrants may find it harder to ensure compliance. There is a two-tiered sanction regime – a maximum fine for lesser incidents of either €10m, or 2 per cent of global turnover (whichever is greater). The most serious violations could result in fines of up to €20m or 4 per cent of turnover.

Smaller companies lack the resources to monitor and record compliance with the GDPR, which also obliges businesses to have a dedicated data protection officer. Smaller firms might choose to risk sanction to avoid the substantial compliance costs, making GDPR self-defeating. If firms exit the market because of these measures, anti-competitive outcomes will result.¹⁰⁵

- The European Electronic Communications Code

In September 2016, the Commission proposed a directive to establish the European Electronic Communications Code as part of DSM strategy. If implemented, the Code will recast the existing EU regulatory framework.¹⁰⁶ If the parties then do agree on the Implementation Period until December 2020, and maintain continuity so that the UK will be bound by the *Acquis* during this period, then since it could take two years to implement the new Directive, it is likely the UK will be legally required to implement it by virtue of EU membership. (However, the UK may wish to consider whether there are parts of the Code which it may want to adopt to facilitate UK telecoms providers with cross-border operations in other Member States who want

105 WTO General Agreement on Trade in Services (GATS) https://www.wto.org/english/tratop_e/serv_e/gatsqa_e.htm

106 The Code does not recast the E-Privacy Directive.

to achieve consistency and harmonisation.) The Code has little emphasis on competition or consumer welfare.

The proportionality requirements provide that, at the wholesale level, access regulation can only be imposed on operators with significant market power (SMP) and only where necessary to address retail market failures. Such regulation would apply to local and foreign operators, irrespective of Single Market membership. Under the Framework Directive, the test for a national regulatory authority (NRA) to determine whether the national market contains an SMP is as follows:

An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers (Article 4).

Although the provisions of the Code could be beneficial for UK SMP operators seeking to expand their network access within the EU, it also has anti-competitive effects against new entrants and smaller operators. There is also a concern about the concept of SMP, especially the language 'jointly with others'. The notion that a group of companies, each without market power by itself, can be regarded as having significant market power together without proof of a cartel is concerning from a competition policy perspective. In addition, the Code proposes removal of NRAs' power to directly impose remedies on SMP operators at the retail level, empowering incumbents. We would recommend that this element in particular is not adopted into UK national law.

Enabling investment is a focus of the Code. By way of example, NRAs are not permitted to impose access obligations on SMP operators with respect to network upgrades that are open to co-investment offers on reasonable and non-discriminatory terms. The Code also regulates the role of the Body of European Regulators for Electronic Communications (BEREC); on the UK's exit however, there will be no obligation for Ofcom to remain under the BEREC umbrella.

- **Audiovisual Media Services Directive (AVMSD)**
(Directive 2010/13/EU)

AVMSD requires member states to comply with certain content requirements in exchange for the ability to distribute automatically their country's content to other EU member states; this includes a requirement to reserve a certain amount of airtime for 'European works'. The test for where a media business is established under the AVMSD has also been criticised by some Member States for being difficult to assess and enforce.¹⁰⁷ Meanwhile, works produced in third countries are subject to the airtime allocation requirements for European works and may find it difficult to access the European market. The imposition of local content requirements is a classic example of an ACMD. These rules hamper the ability of content producers to make the investment and production decisions that would be determined by the functioning of ordinary market processes.

- The **Electronic Commerce Directive 2000** (implemented in the UK by the Electronic Commerce Regulations 2002).

Dating from before the DSM and the regulatory framework, the Directive governs online buying and selling, and any service provided for distance remuneration by electronic means. In the short term, the UK will likely maintain national laws aligned to the EU regime. However, the Commission is required to re-visit the provisions of the EC Directive every two years, increasing the likelihood of divergence from UK national legislation. In particular, the EU has proposed legislative measures aligned to its DSM strategy to reduce geo-blocking, increase price transparency, improve regulatory oversight of cross-border parcel delivery, and introduce changes to the enforcement of consumers' rights and guidance.

Geo-blocking is a practice employed by some businesses to prevent consumers from one Member State purchasing goods online or accessing online digital services if they are located in a different one to the provider (geo-blocking should be distinguished from geo-filtering, a practice offering consumer goods and digital content to consumers in a different Member State on varying terms and/or conditions). This can be a barrier to

¹⁰⁷ European Regulators Group for the audiovisual media services report: <https://ec.europa.eu/digital-single-market/en/news/erga-report-territorial-jurisdiction-converged-environment>

consumers and restrict consumer choice of, and access to, goods and digital content. In 2016, the Commission published initial findings of its inquiry into the e-commerce sector in relation to geo-blocking¹⁰⁸ and is proposing an overarching ban.

The question for the UK will be whether it wants to follow the EU in doing so, and ban geo-blocking. We would recommend it does not. While the Commission indicates such practices are anti-competitive, acting as barriers to DSM harmonisation, for a number of reasons a unilateral ban may be harmful to consumers and businesses, particularly SMEs and innovative retailers.

Selling goods cross-border comes at a cost to businesses. To expand sales into different Member States, a retailer needs to consider using country-specific advertising and marketing campaigns, potentially updating IT infrastructure to cope with cross-border orders. If a unilateral ban on geo-blocking is implemented, all retailers would be obliged to offer goods and services for sale cross-border. This would also be a violation of the doctrine of the freedom of contract. Retailers would need to absorb or pass on to the consumer the higher costs of delivery for selling goods cross-border and introduce different payment systems (in the UK, debit cards are often used online, but in some Member States it is common to pay directly into an account or on delivery). Forcing smaller retailers to offer cross-border selling may create disproportionate costs.

The Competition and Markets Authority (CMA) highlighted significant risks in the Commission's proposed introduction of *ex ante* regulation in the absence of economic evidence demonstrating the harm of such practices¹⁰⁹ (but did recognise that some methods of geo-blocking are disadvantageous to consumers, with no obvious benefit outweighing this, in particular automated re-routing, a practice consumers are unable to override which can deprive them of information).

108 http://ec.europa.eu/competition/antitrust/sector_inquiry_final_report_en.pdf.

109 http://ec.europa.eu/information_society/newsroom/image/document/2016-5/competition_and_markets_authority_uk_13450.pdf

As for online retail, arguably there is also a risk that in forcing service providers to give unrestricted access to content, the cost might be an anti-competitive barrier to SMEs and innovative online providers who may struggle to compete with larger incumbent providers.

In sum, the UK's exit means the possibility of leaving the DSM strategy, ensuring SMEs and innovative firms are protected from a regime imposing costs on business without corresponding consumer benefit.

Finance

While the UK would also have regulated in some areas where the EU has introduced financial regulations, many of the EU regulations themselves are subject to considerable 'gold-plating', being more comprehensive or onerous; others the UK would likely not have introduced at all given that they are designed specifically to promote the Single Market or Eurozone (Europe Economics, 2014): these are all, we suggest, good reasons to seek regulatory autonomy. Since the Eurozone crisis, a notable divergence has also occurred, between UK regulation, with its focus on supervisory quality and market incentives, and the extension of regulatory scope, protecting the Eurozone and the curbing of specific behaviours in EU regulation (Europe Economics, 2014).

- **The Solvency II Directive** (Directive 2009/138/EC Jan-16)

Solvency II is a concern because of its anti-competitive potential. It came into force in 2016 and is effectively a new prudential regime for the insurance industry. Lloyds of London state that it cost £300m to implement, and the UK Government impact puts its annual cost at £210m; some operators have exited the market in certain product lines as a result.

Its scope demonstrates how regulation pulls up the ladder for smaller, disruptive entrants who, because of its expense, cannot compete in an industry on whose competitiveness as a major UK service sector we depend. Compliance is costly, barring entry for smaller firms, and costs are likely absorbed by increased premiums for consumers (smaller firms may thus be unable to compete with incumbents who can better absorb costs). Solvency II also involves taxation of loss equalisation reserves and catastrophe reserves, and has made illegal the use of an individual's sex as a risk factor in driving or life insurance calculations. While the UK

had already implemented risk-based regulation under the domestic Individual Capital Adequacy Standards (ICAS), the EU regulation is more draconian.

- **The Alternative Investment Fund Managers Regulations Directive (AIFMD)** (2011/61/EU Jul-13)

Asset management lacks a global body to coordinate a regulatory approach. While the International Organisation of Securities Commissions (IOSCO) and the Financial Stability Board (FSB) are examining industry links to systemic risk for a set of 'good practices', the process remains investigatory. The EU has thus begun regulating the sector: alternative investment fund management is believed to be of systematic importance, and able to create or transmit financial shocks. AIFMD (2011/61/EU) created a European framework to regulate and supervise alternative investment fund managers, venture capital, and hedge funds. However, the regulation has increased transaction costs in many sectors, including some that finance disruptive new firms. This regulation may already have lowered our economic growth (Europe Economics, 2014), and while the UK may have regulated in this area, this could have been without the costs of AIFMD. The Alternative Investment Fund Managers Directive is widely seen as stifling innovation, market entry, and SME growth because of prohibitive compliance costs for smaller firms. Its estimated cost is £1.53 billion p/a.

- **The Markets in Financial Instruments Directive (MiFID II)** (Directive on Markets in Financial Instruments, repealing Directive 2004/39/EC of the European Parliament and of the Council)

MiFID II is an extremely lengthy Directive that builds on MiFID (Directive 2004/39/EC) and took effect in the UK in January 2018. The stated aim of MiFID was to increase transparency across EU financial markets and standardise the regulatory disclosures needed for specific markets. However, implementation of MiFID rules for third country firms were left up to member states. To prevent competitive advantage for those with lighter regulatory oversight, MiFID II aimed to harmonise rules for firms with EU clients. MiFID II covers almost all trading – including bonds and securities, and covers brokers, exchanges, hedge funds and high frequency traders – and is creating a major data-gathering burden.

The central objectives of MiFID II are to strengthen investor protection, reduce the risks of a disorderly market, reduce systemic risks, increase the efficiency of financial markets, and reduce unnecessary costs for participants. For investment banking, research and trading, the relevant aspects of MiFID II are:

- Research unbundling
- Best execution
- Trade reporting
- Transaction reporting
- Contractual documentation

MiFID II requires investment research deemed 'substantive' to be priced and paid separately from trade execution. To be defined substantive, an item of research must pass four criteria:

- Add value through new insights
- Contain original thought
- Show intellectual rigour (avoid self-evident facts)
- Reach meaningful conclusions

MiFID II's requirement for end users to pay for research separately from trade execution is liable to exacerbate the reduction of interest in SMEs, however, which in turn has resulted in reduced analyst coverage, down nearly 30 per cent since 2011, consequently reducing liquidity. Average MiFID II public company costs for an AIM-listed company, such as auditors, annual listing fees, financial reporting costs and compliance costs, are £250k-£400k, which is pushing SMEs away from listed market IPOs, and towards private equity firms or sources of finance such as crowd-funding and platforms with less regulation. MiFID II requires separate research payments and is expected to harm SME capital formation, as sell-side firms focus analyst coverage on large-cap research, reducing the quality and volume of research on SMEs.

MiFID II also limits off-market transactions made on 'Dark Pools' to 8 per cent of trading volumes each year and 4 per cent on a single venue, which will make execution more expensive for less liquid stocks. Dark Pools

allow large block trades to be completed without affecting the market price. Since the limits were activated in March 2018, over 800 EU stocks have breached the trading limits, including 85% of the FTSE100 components (ESMA, 2018). The limits unfairly affect the most traded equity markets more than lower volume markets, and have not resulted in trade moving back onto traditional exchanges. Instead, trade has primarily moved to 'Systematic Internalisers', another form of off-market trading run by large investment banks and market makers.

MiFID II requires transaction reports containing 65 data fields to be stored for every investment and every client, and by buying agent, selling agent and market, which is particularly onerous for firms dealing for private clients. This will mean, for example, that a private client wealth manager with 2,700 clients will create 175,500 data fields (65×2700) every time they invest in a company (the FCA is not able to monitor all this information meaningfully, and on several occasions since MiFID II became operational, its data collection process has broken down due to the sheer volume of data). Trades are timestamped to 100 microseconds and transaction data must be stored for at least five years. Under the best execution requirements, banks and brokers must be able to show customers that their orders were filled at the best available price. This is expensive for brokers, as not every order can actually be filled at this best price, while the broker must make up the shortfall.

- **Capital Requirements Directive IV (CRD IV)** (Directive 2013/36/EU; Regulation 575/2013 Jan-14)

The Capital Requirements Directive IV (CRD IV) is the EU regulatory package that includes prudential rules for banking, investment firms, and building societies. Intended to implement the Basel III agreement in the EU, it includes strengthened requirements for: quantity and quality of capital; new liquidity and leverage requirements, rules on counterparty risk, and macro-prudential standards including capital buffers.

Basel III was intended only to apply to internationally active banks, however as all EU financial institutions have the ability to operate in other EU countries, the EU has decided to apply CRD IV to all EU financial Institutions (parts of Basel III have yet to be implemented in the EU, such as the calibration of the net stable funding ratio). European banks are concerned that they will be forced to raise a far greater amount of high-quality funding for derivative positions than their foreign competition. CRD IV mainly deals

with implementing Basel III, but the EU also used the opportunity of CRD IV to introduce rules on remuneration and harmonise information reporting requirements. It is more prescriptive than Basel III in areas such as higher reporting requirements for real estate exposures, rules on deductions from capital, and rules on composition of capital consolidation buffers and cyclical buffers.

HM Treasury's own response to CRD IV and other regulations (*Response to the EU Commission: Call for evidence on EU regulatory framework for financial services*, February 2016)¹¹⁰ described a number of CRD IV's impacts.

First, HM Treasury suggested CRD IV penalises bilateral trading and 'may go too far', as the increased cost 'potentially disproportionately impacts buy-side firms, such as asset managers and corporate end users, which are major users of bespoke OTC hedging instruments to suit their business needs.' On country-by-country reporting of financial firms' taxation (Article 89, whereby banks and investment firms are required to annually report turnover, profit and tax paid in each EU country in which they operate), '[it] is the UK's view that the simplistic definition of tax paid used in the report risks undermining its objectives.'

The response also described '[i]ncreasing risk concentration,' given the '[o]bligations and incentives for financial market participants to use central counterparties (CCPs) [increasing] the level of risk concentrated in CCPs.' Clearing and trading obligations have meant increased use of CCPs and concentration of risk within them. While CCPs are risk-reducing for participants, the level of risk in CCPs has increased. The requirements for market participants to use CCPs' services '[have] made the financial system increasingly vulnerable to the failure of a CCP', and a 'unilateral European approach to the recovery and resolution of CCPs would run a significant risk of being misaligned with global standards.'

Finally, on the question of bond market liquidity, HM Treasury's response found that '[the] EU's application of Basel agreements on bank capital requirements (in particular, the non-risk based Leverage Ratio measure) has been commonly cited as a cause of poorer liquidity in fixed income instruments... Feedback from financial institutions suggests that regulatory

110 HM Treasury. *Response to the EU Commission: Call for evidence on EU regulatory framework for financial services*. February 2016: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/496887/PU1903_HMT_response_to_EU_consultation.pdf

changes have resulted in repo trading becoming increasingly expensive in terms of balance sheet cost [with] signs of declining liquidity emerging in the gilt repo market [including] reduced willingness to trade’.

- **The Payment Services Regulations 2009**
(Directive 2007/64/EC 2009)

This regulation was intended to create a framework of rules for payments in the Single Market, now in the Single European Payment Area (SEPA), although international organisations, especially IOSCO, are looking at payments in the area of clearing and settlement of financial transactions. Other regulations of concern for their anti-competitive effects include the following:

- **Statutory Auditors and Third Country Auditors Regulations 2007 and the Partnerships (Accounts) Regulations 2008** (Directive 2006/43/EC Apr-08)
- **ECB clearing house location policy**

Intended to enhance Eurozone area stability, this policy appears in fact to be both anti-competitive and directly against UK interests, requiring that clearing houses covering a substantial share of the total market are supervised by the ECB and within the Eurozone, in the belief that this will also ensure stability in a crisis. However, requiring Euro-denominated trades to be cleared in a EU27-based clearing house will reduce the amount of netting-out of positions and increase the amount of capital required to make initial and variable margins. Splitting the market across the EU will also lower the traded volume in any one market, increasing price volatility and investor risk. This result would be completely contrary to the EU’s stated aim of market stabilisation and is a protectionist manoeuvre.

Furthermore, the clearing market is already underpinned by a UK-US regulatory structure. Attempts by the ECB to assert jurisdiction over Euro-clearing would meet with a sharp reaction from the US, which is also considerably larger than the EU market. As the Chairman of the U.S. Commodity Futures Trading Commission J. Christopher Giancarlo stated this year, ‘These burdens will increase the cost of clearing for American businesses that depend on well-regulated futures markets to manage risk in their business operations. This is not acceptable. American markets

must continue to be regulated under American law by US regulators overseen by the US Congress'.¹¹¹

- **Financial Transaction Tax (FTT) introduced under Enhanced Cooperation (IP/13/115)**

The Financial Transaction Tax is not officially being imposed by the EU, but this is happening under 'enhanced cooperation', which the EU describes thus: 'Enhanced cooperation allows those countries of the Union that wish to continue to work more closely together to do so, while respecting the legal framework of the Union. The Member States concerned can thus move forward at different speeds and/or towards different goals. However, enhanced cooperation does not allow extension of the powers as laid down by the Treaties, nor may it be applied to areas that fall within the exclusive competence of the Union. Moreover, it may be undertaken only as a last resort, when it has been established within the Council that the objectives of such cooperation cannot be attained within a reasonable period by the Union as a whole'¹¹² (this allows a small core of countries to move ahead with integration, before their initiatives may be taken up by the EU institutions later). Given its large financial sector, the UK challenged the tax, which is liable to increase costs for consumers and undermine the effective functioning of markets (Europe Economics, 2014). The imposition of a financial transaction tax is anti-competitive and would fall most heavily on the UK and could easily be restricted to wholesale banking and derivative instruments rather than retail banking, which would adversely affect EU consumers.

- **ESMA Short Sale Restrictions (Regulation 236/2012)**

The financial crisis led to concerns about short-selling, in particular that it may add to systemic financial risk. ESMA regulations thus required that investors disclose short positions and settle short trades within four days instead of the previous 30-day limit (Europe Economics, 2014). However, through limiting liquidity and harm to information efficiency in markets, the limits may risk increasing instability. Analysis has suggested that the UK

111 Written testimony of US Commodity Futures Trading Commission Chairman J. Christopher Giancarlo to the US Senate Agriculture, Nutrition and Forestry Committee, Washington, D.C., 18 February, 2018.

112 http://europa.eu/legislation_summaries/glossary/enhanced_cooperation_en.htm; in Europe Economics: *How EU Wholesale Financial Regulation Differs from what the UK would Choose for Itself*, December 2014.

would have opposed outright the imposition of the restrictions. Limits on short-selling prevent fund managers from hedging their risks, taking a long/short position to capitalise on one company outperforming another or merely following analysis that recommends that a company should be sold rather than bought. The idea that purchasing is the only legitimate investment strategy causes the market to be biased to the positive and inflated beyond its underlying value. For a market to remain dynamic, there must be a way for investors to show that their expectation is for a drop in a company's profits or that they disapprove of the company's management.

Short-sale restrictions limit one activity and change the economic calculus of investors. Allowing investors to maintain a short position is an important part of market discipline, and when this is vitiated, this impacts the market in negative ways. Forcing market participants to settle short trades in four days makes it less likely that the disciplining effect on firms will occur.

- **Financial Collateral Directive (2002/47/EC)**

Intended to remove an NTB to financial services and ease transactions within the Single Market by creating a legal framework to accept cross-border collateral, analysis shows this did not address an existing problem for the UK (Europe Economics, 2014) and adds costs for firms.

- **Prospectus Directive (2003/71/EC)**

The Prospectus Directive allows the passporting of documents that meet a single standard, to improve information for investors and help securities offers throughout the EU. The aim was also to extend the Single Market however, and this did not deal with a particular problem for the UK. It has imposed severe compliance costs, to the detriment of the UK and others who had fast and efficient authorisation services.

- **Payment Services Directive (2007/64/EC)**

The Payment Services Directive covers a cluster of measures intended to bring payment services into the Single Market. As the directive demands new infrastructure and imposes high transition costs, while UK finance institutions may have joined an industry-led cross-border payment arrangement, this likely would not have been a regulatory system (*Ibid.*). The Directive also did not deal with any pre-existing challenge in the UK.

Transport

- **The Ports Services Regulation (PSR)** (Regulation (EU) 2017/352)

This regulation imposes a regime on UK ports operators that is unsuited to the diverse UK market. It was designed to improve competition in the mainland EU, where larger and state-owned ports dominate (every British MEP voted against it, however).

A number of other regulations in shipping have potential anti-competitive impacts (costing £409.92m p/a combined), in particular:

- **Ship and Port Facility (Security) Regulations 2004** (Regulation (EC) No 725/2004 Jul-04)
- **Merchant Shipping (Ship-to-Ship Transfers) Regulations 2010** (Directive 92/43/EEC Apr-11)
- **Merchant Shipping (Prevention of Air Pollution from Ships) and Motor Fuel (Composition and Content) (Amendment) Regulations 2014** (Directive 2012/33/EU Dec-14)
- **Motor Fuel (Composition and Content) and Merchant Shipping (Prevention of Air Pollution from Ships) (Amendment) Regulations** (2010 Directive 98/70/EC (amended by Directive 2009/30/EC) Jan-11)

In transport generally, other regulations of anti-competitive concern include a number for vehicles, passed between 2005 and 2013 and costing £211.82m p/a in total:

- **Motor Vehicles (EC Type Approval) (Amendment) Regulations 2008** (Directives 2007/34/EC, 2007/35/EC and 2007/37/EC + Regulations (EC) No 706/2007 and 715/2007 Dec-08)
- **End-of-Life Vehicles (Producer Responsibility) Regulations 2005** (Directive 2000/53/EC Mar-05)
- **Road Vehicles (Approval) Regulations 2009** (Directives 2007/46/EC, 2008/74/EC, 2008/89/EC and 2009/1/EC Apr-09)

Manufacturing, construction, and chemicals

- **Registration, Evaluation, Authorisation & Restriction of Chemicals (2006) (REACH)** (Regulation (EC) No 1907/2006 Jun-07)

REACH is a framework for chemicals manufacture and use in the EU. Its stated aim is to ensure that chemicals produced, imported, sold, and used in the EU are safe;¹¹³ it has an annual UK implementation cost of £44.59m.

The registration/data generation requirement in REACH obliges manufacturers to gather information on new and existing chemicals used by their business and submit the information to the European Chemicals Agency (ECHA) for review and inclusion in its 'central chemicals database'. The UK has the second highest number of REACH registrations. REACH reduces third country exports to the EU by increasing cost and, in some cases, barring products from entering the Single Market. In the National Trade Estimate Report on Foreign Trade Barriers (2017), the US Trade Representative stated: 'REACH impacts virtually every industrial sector... It imposes extensive registration, testing and data requirements on tens of thousands of chemicals. REACH also subjects certain identified hazardous chemicals to an authorization process that would prohibit them from being placed on the EU market unless a manufacturer or user has obtained permission from the Commission... REACH appears to impose requirements that are either more onerous on foreign producers than EU producers or simply unnecessary.' The report added: 'WTO Members have emphasised [the] problems producers have in understanding and complying with REACH's extensive registration and safety data information requirements' (USTR, 2017).

The Commission itself admits that this is '*one of the most difficult pieces of legislation for industry to deal with — in particular SMEs*'.¹¹⁴ Some businesses have moved production overseas to avoid it, or exited the market altogether. Cost of testing can be high, affecting profitability; if a product is restricted or must be substituted, this could mean a collapse in manufacturing processes or supply chain disruption. Manufacturers, importers, downstream users, and distributors will have a requirement to keep records for 10 years after the last supply of substance. Breach of

113 eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3A121282

114 www.euractiv.com/section/science-policy-making/news/smes-warn-of-reach-leakage-ahead-of-eu-chemical-review/

'duty of care' obligations or miscommunicating safety information up and down supply chains could mean litigation. Costs of compliance with such complex regulation mean small firms face disproportionate cost increases, with larger chemical firms better able to absorb compliance costs.

In manufacturing and construction, a range of regulations were released between 2006 and 2014. In waste, these amounted to a £130.1m p/a cost:

- **Waste Electrical and Electronic Equipment Regulations 2006** (Directives 2002/96/EC and 2003/108/EC Jan-07)
- **Waste (England and Wales) Regulations 2011** (Directive 2008/98/EC Sep-11)
- **Waste Management (England and Wales) Regulations 2006** (Directives 75/442/EEC and 1999/31/EC May-06)
- **Batteries and Accumulators (Placing on the Market) Regulations 2008 and the Waste Batteries and Accumulators Regulations 2009** (Directive 2006/66/EC Sep-08 / May- 09)

Food and agriculture

- **The Common Agricultural Policy (CAP) is highly distortive in general. An example of one such policy under the CAP is the Milk Package Intervention Scheme.**

The scheme includes buying-in by member states of butter and skimmed milk powder (SMP) to public storage (a public intervention) with member states to buy these products from private operators at fixed-price quantities between 1 March and 30 September each year (specifically 60,000 tonnes of butter and 109,000 tonnes of SMP at a set price per tonne of €2,217 and €1,698, respectively). Once the ceiling is reached, these can only be offered through a tendering process, not at set prices.

SMP and butter bought by member states are not necessarily sold immediately onto the market, but only when 'market conditions allow'. The current glut in the global market is likely to contract once the Russian import ban on dairy products is lifted; such drastic short-term interventions have raised the price of liquid milk, impacting consumers across the EU.

- **Food Labelling Regulations (1996) and 'origin or provenance'**
(in Directive 2000/13/EC)

In many areas of food labelling, EU standards exceed the Codex Alimentarius General Standards (e.g. in fisheries and aquaculture). Such prescriptive labelling requirements can create complexity and cost for businesses, and consumer uncertainty. It can also be difficult for smaller businesses to absorb such costs, especially in mandatory country of origin labelling (e.g. for beef, pork, poultry, and fruit and vegetables from outside the EU). Uncertainty is also created for businesses – there is no statutory definition of 'place of origin or provenance' in the Food Labelling Regulations (1996) or of 'origin or provenance' in Directive 2000/13/EC (in Codex and the WTO rules, country of origin is deemed to mean place of last substantial change¹¹⁵). This causes smaller businesses in particular to pass on these higher costs of labelling to consumers, and extensive certification requirements act as barriers to trade in agricultural products. These disguised protectionist measures favour EU producers.

115 See www.food.gov.uk/sites/default/files/multimedia/pdfs/originlabellingguid0909.pdf

- EU ban on ractopamine

There are a number of EU bans in the area of technical barriers to trade and sanitary and phytosanitary measures (TBT and SPS, respectively), including of growth hormones in beef and beta agonists. In particular, the EU bans ractopamine, which promotes leanness in meat. Codex has suggested that ractopamine at specific residual levels of 10 parts per billion (ppb) (vs US Food and Drug Administration limits of 30 ppb for beef and 50 ppb for pork) has no effect on human health.¹¹⁶ The WTO has already found the EU ban to be in violation of WTO rules; the European Food Safety Authority interpreted its lack of evidence on ractopamine being harmful as an inability to ascertain a safe *maximum* residue limit for human consumption.

The ban also limits the import of a major food product, artificially raising prices for consumers. This is an example of the EU use of the precautionary principle, meaning products may be banned from entering for non-scientific reasons, effectively another protectionist and anti-competitive measure.

Other regulations in the SPS/TBT area include the requirement to obtain authorisation for certain food products, meaning delays for importers: a scientific information and safety assessment report must be submitted to the relevant Member State competent authority (the Food Standards Agency in the UK), which will decide if an additional assessment by the European Food Safety Authority is necessary. The cost may be prohibitive for smaller businesses.

The US Office of the United States Trade Representative (USTR) has released increasingly critical analyses of the EU approach to its commitments under the SPS (and TBT) framework, and while made on behalf of US companies they also apply to other importers:

U.S. exporters and investors [face] persistent barriers to entering, maintaining, or expanding their presence in certain sectors of the EU market. Some of the most significant barriers [have] endured despite repeated efforts at resolution through bilateral consultations (US National Trade Estimate Report on Foreign Trade Barriers, 2017)

¹¹⁶ See www.foodsafetynews.com/2012/07/codex-votes-69-67-to-advance-ractopamine-limits-for-beef-and-pork/#.WNut5o-cE2w

In Sanitary and Phytosanitary Barriers (SPS), the USTR is concerned about numerous EU measures which, it suggests, 'unnecessarily restrict trade without furthering their safety objectives because they are not based on scientific principles, maintained with sufficient scientific evidence, or applied only to the extent necessary'.

- **The Genetically Modified Food (England) Regulations 2004 and two other Regulations** (Regulations (EC) No 1829/2003 and 1830/2003 Oct-04)

At a cost of £384.32m p/a, the genetically modified (GM) food regulations cover food for human consumption and animal feed, including that if the food contains any GM organism, the label must state this. This is a considerable cost to smaller importers, and risks hindering innovation that stands to improve food security, food safety, and environmental sustainability and reduce malnutrition. Other areas of concern, costing £19.27m p/a combined, include the following:

- **Sheep and Goats (Records, Identification and Movement) (England) Order 2009** (Regulation (EC) No 21/2004 Dec-09)
- **Official Feed and Food Controls (England) Regulations 2009** (Regulations (EC) No 882/2004 and 669/2009 Jan-10)
- **Flavourings in Food (England) Regulations 2010** (Regulation (EC) No 1334/2008 Jan-11)

Employment

- **TUPE legislation ('Transfer of Undertakings (Protection of Employment)', 2006)**

The UK applies the TUPE provisions prescriptively, but application is inconsistent across member states, which can have significant impacts on outsourcing arrangements, for example. Inconsistency of application across Member States makes it difficult for businesses to ascertain whether or not an activity falls within the scope of TUPE, making compliance costly and time-consuming. TUPE has an estimated cost of £6.83m p/a.

- **The Agency Workers Regulations (AWR) 2010** (Directive 2008/104/EC Oct-11)

The AWR provides equal treatment to those who have been with a hirer for 12 continuous weeks in a given job, including rights to equivalent levels of pay for comparable employees (including any fee, bonus, commission, or holiday pay). This means increased cost for businesses that rely on these types of workers (e.g. construction) and have made the UK's labour market less flexible, causing businesses to implement zero hours contracts. These are detrimental to workforce skills, reducing the UK's global competitiveness; the estimated implementation cost is £546.2m p/a. Other regulations of concern, which have a combined cost of £5.1 billion p/a, include the following:

- **The Working Time Regulations 1998 and Working Time (Amendment) Regulations 2003** (Directive 2003/88/EC Oct-98/ Aug- 03)
- **Road Transport (Working Time) Regulations 2005 and Road Transport (Working Time) (Amendment) Regulations 2012** (Directive 2002/15/EC Apr-05)
- **Information and Consultation of Employees Regulations 2004** (Directive 2002/14/EC Apr-05)
- **Transnational Information and Consultation of Employees (Amendment) Regulations 2010** (Directive 2009/38/EC Jun-11)

Flexibility of the labour market is a significant benefit for economies. The above regulations make the market less flexible, and therefore impede the ordinary process of market competition in the labour market.

Chapter 6: Conclusion

The UK's withdrawal from the EU means a new trading relationship. It is already clear that this must mean an end to the jurisdiction of the European Court of Justice in the UK, and the freedom to sign advanced trade agreements with countries outside the EU and that the UK will be outside the Customs Union's Common External Tariff.

With the right decisions, this heralds a UK with a regulatory environment that is genuinely pro-competitive, and which can re-join the WTO to liberalise trade, as well as global standard-setting bodies.

Regulatory autonomy is therefore vital for the UK's economy; without it, the opportunity for pro-competitive regulation at home is lost.

This pro-competitive regulation will require the capacity to diverge from the EU. Without autonomy in regulation, no fully independent trade policy is possible, and the benefits of EU withdrawal cannot be realised. Domestic regulatory autonomy must be the starting point, and harmonising UK regulation through alignment (versus aligning regulatory goals) would prevent this being achieved.

This autonomy is essential for the UK to nurture competition, allowing domestic, pro-competitive regulation for a competitive and prosperous economy. The return of parliamentary oversight for regulation, and the lack of sudden divergence, will prevent a 'race to the bottom': pro-competitive regulation should not be confused with the concept of 'deregulation'. The former allows new entrants to compete, and helps prevent incumbents using the regulatory system to entrench unfair advantage against smaller rivals, retarding the innovation that is at the centre of economic growth. Autonomy will need to be pursued in three components: regulations themselves, standards, and conformity

assessment. Any conformity assessment procedure must be carefully designed so that competition amongst conformity assessment providers can be guaranteed.

For both the UK and EU to achieve the maximum mutual recognition, and predictable regulatory divergence, and for future unwarranted trade obstructions to be avoided, domestic regulatory autonomy means regulations would not be immediately changed. However, the fact that regulations will be identical at the time of the UK's withdrawal from the EU, allows the opportunity for the UK and EU to grant maximum recognition of each other's regulation, standards, and conformity assessment or a scenario of mutual recognition between the EU and UK. But autonomy must be the starting point: it is not simply one of the benefits of withdrawal, but a central requirement of the process that will allow the others to take place. Autonomy is therefore the vital competitive opportunity for an independent UK economy.

Appendix: International standard-setting bodies

We envisage that after Brexit there may be UK representation on a number of the following international and other non-UK organisations, through BSI and otherwise, such as directly through UK companies (please note that some of these already have UK membership). This is intended only as illustrative, rather than constituting formal recommendations, and is a non-exhaustive list.

General

- **ASTM International** (previously the American Society for Testing Materials). Standards developer of technical voluntary consensus standards in a wide range of materials, products, systems, and services, with 12,575 standards in operation internationally. Predates other standards organizations (e.g. BSI).
- **International Bureau of Weights and Measures** (usually given its French acronym BIPM). An intergovernmental organisation and one of three organisations maintaining the International System of Units (SI) under the Metre Convention (*Convention du Mètre*). Reports to the International Committee for Weights and Measures, in turn overseen by the General Conference on Weights and Measures.
- **International Organization for Standardization (ISO)**. An international standard-setting organisation formed of representatives from different national standards organisations, for international commercial and industrial standards, working in 162 countries.

Food and agriculture

- **FAO – Secretariat of the International Plant Protection Convention.** The Secretariat administers the 1951 treaty of the FAO whose aims are securing coordinated action to control or prevent the introduction and spread of plant pests and products.
- **FAO – WHO Codex Alimentarius Commission (CAC).** The Codex Alimentarius Commission sets the Codex Alimentarius, or 'Food Code', and its standards and codes of practice. The Commission is central to the Joint FAO/WHO Food Standards Programme, created to protect consumer health and fair practice in the trading of food.

Pharmaceuticals

- **International Conference on Harmonization (ICH).** The International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) combines regulatory authorities from Europe, Japan, and the US, as well as pharmaceutical industry experts to analyse technical and scientific aspects of pharmaceutical product registration. Its aim is the reduction or elimination of duplication of testing during pharmaceutical R&D.

Telecommunications and IT

- **Accellera Systems Initiative.** A standards organisation for electronic design automation (EDA) and integrated circuit (IC) design. A more 'informal' body than the Institute of Electrical and Electronics Engineers (IEEE), it is the originator of numerous standards, which when adopted more broadly are frequently 'transferred' to the IEEE.
- **Distributed Management Task Force (DMTF).** A computer software trade group simplifying manageability of network-accessible technologies. DMTF creates open manageability standards for emerging and traditional IT infrastructure, e.g. cloud, virtualisation, network, servers and storage. Member firms and partners collaborate in standards.
- **European Computer Manufacturers Association (ECMA).** A standards organisation for ICT systems, established to standardise computer systems in Europe. Membership is international and consists of the producers, marketers, or developers of computer or communication systems.

- **GlobalPlatform.** Creates specifications for secure chip technology. Members use three 'technical committees', five 'strategic task forces' (ID, internet-of-things, mobile, premium content, and security) and two 'regional task forces' (for China and Japan), and membership includes companies in secure chip technology deployment, payment, mobile, government, retail and healthcare. Organisations include mobile network operators, public sector groups and government agencies.
- **International Telecommunications Union (ITU).** A specialised UN agency responsible for information and communication technology (ICT). The ITU coordinates shared radio spectrum use, promoting cooperation in satellite orbit assignment, improvement of developing world telecoms infrastructure, and helps develop international technical standards.
- **Open Geospatial Consortium (OGC).** International voluntary consensus standards organisation involving the collaboration of over 500 commercial, government, and research organisations for consensus development in the areas of geospatial services and content, Internet of Things, and data sharing.
- **Society of Motion Picture and Television Engineers (SMPTE).** An international standards-setting body of film engineers, SMPTE creates standards for TV, digital cinema, audio, medical imaging and IT.
- **Storage Networking Industry Association (SNIA).** Association of producers and consumers of computer data storage networking products whose members ensure 'that storage networks become complete and trusted solutions across the IT community'. Sponsors technical work groups brought together at the Storage Developers Conference (SDC) and the Data Storage Innovation (DSI) conference.

Finance

- **Basel Committee on Banking Supervision (BCBS)**. The forum of banking supervisory cooperation, whose aim is enhancing understanding of supervision and improving banking supervision. Most recently, its Basel III measures aim to strengthen supervision, regulation and risk management.
- **International Organisation of Securities Commissions (IOSCO)**. The association of national securities and futures market regulators. Members are usually member countries' central financial regulators.
- **International Association of Insurance Supervisors (IAIS)**. The voluntary membership organisation of national insurance regulators, which promotes consistent oversight.
 - The **Joint Forum** works under the three organisations above (**BCBS**, **IOSCO**, and **IAIS**), for which it develops guidance for best practice in all three sectors.
- **Financial Action Task Force on Money Laundering (FATF)**. An intergovernmental body setting standards and promoting regulation against money laundering and other threats to international finance.
- **G20: Financial Stability Board (FSB)**. Coordinates international financial standard-setting bodies and national financial authorities in regulation and other policies.
- **International Accounting Standards Board (IFRS)**. The international organisation responsible for global accounting standards (the 'IFRS Standards').

Automotive

- **AUTOSAR (Automotive Open System Architecture)**. An international development organisation for automotive. Develops open and standardised software architecture for automotive electronic control units (ECUs), a partnership formed by major global car and electronics firms.
- **Association for Standardization of Automation and Measuring Systems (ASAM)**. An incorporated association under German law, mainly of automotive manufacturers, suppliers and engineering service providers. Develops technical standards in working groups of experts from its members. Over 140 member-firms internationally, mainly but not entirely in the automotive sector.

Engineering and electrical engineering

- **American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)**. Global professional association for heating, ventilation, air conditioning, and refrigeration, with over 50,000 members.
- **Audio Engineering Society (AES)**. Members are engineers, scientists, academics, and others in the audio sector. AES develops engineering standards in the audio and related media industries.
- **Cable Television Laboratories (CableLabs)**. An innovation R&D lab founded by US cable operators, with system operators worldwide eligible as members. Supports industry development through developing open interface specifications, written with members (specifications help cable operators plot the direction of the industry).
- **International Electrotechnical Commission (IEC)**. The body developing standards and conformity assessment across the fields of electrotechnology.
- **Institute of Electrical and Electronics Engineers Standards Association (IEEE-SA)**. Organisation under IEEE developing global standards in telecoms, energy, nanotechnology, robotics, and elsewhere.
- **NACE International** (formerly the National Association of Corrosion Engineers). A professional organisation of the corrosion control industry, generating standards for coatings, cathode protection, corrosion testing, etc.

Space and aerospace

- **Consultative Committee for Space Data Systems (CCSDS).** Allows government and quasi-governmental space agencies to develop information systems standards. Consisting of 11 member agencies, 28 observer agencies, and over 140 'industrial associates', and support interoperability between member agencies via establishing data and systems standards. Activities are organised around six themes through various working groups.
- **International Air Transport Association (IATA).** Represents world airlines, with 278 airlines from 117 countries. IATA members make up 83 per cent of total 'Available Seat Kilometres'. IATA helps formulate industry standards.
- **International Civil Aviation Organization (ICAO).** ICAO adopts standards in air infrastructure and navigation, border-crossing procedures for aviation, and flight inspection.

Bibliography

ACCA (2010). *Accountants for Business: Coming of age: what next for the UK regulatory reform agenda?*. Association of Chartered Certified Accountants. <http://www.accaglobal.com/content/dam/acca/global/PDF-technical/small-business/tech-afb-coa.pdf>

Allen and Sriram (2000). 'The Role of Standards in Innovation'. *Technological Forecasting and Social Change*, 64:2-3, pp. 171-181. June, 2000.

Australian Government Productivity Commission (2015). *Mutual Recognition Schemes Productivity Commission Research Report*, September 2015. <https://www.pc.gov.au/inquiries/completed/mutual-recognition-schemes/report/mutual-recognition-schemes.pdf>

Bar Council Brexit Working Group (2017). *Brexit Paper 14: Technical regulations and Product Standards*. London: The Bar Council.

Bayoumi, T, Laxton, D. and Pesenti, P. (2004). *Benefits of Greater Competition in Europe: A Macroeconomic Assessment*. European Central Bank: International Research Forum on Monetary Policy. Working Paper Series No.341/April 2004

BSI (2016). *European Standards and the UK*. London: BSI Group.

CENELEC (2017). *The revised 'foreign partnership' agreements of CEN and CENELEC*. Brussels: CENELEC.

Centre for Economic and Business Research (2015). *The Contribution of Standards to the UK Economy*. June, 2015.

Competition and Markets Authority (2016). *CMA response to the European Commission on geoblocking and other geographically based restrictions*. http://ec.europa.eu/information_society/newsroom/image/document/2016-5/competition_and_markets_authority_uk_13450.pdf

Correia de Brito, A., Kauffmann, C. and Pelkmans, J. (2016), 'The contribution of mutual recognition to international regulatory co-operation', *OECD Regulatory Policy Working Papers*, No. 2, OECD Publishing, Paris. <http://dx.doi.org/10.1787/5jm56fqsfxmx-en>

Czaga, P. (2004), 'Regulatory Reform and Market Openness: Understanding the Links to Enhance Economic Performance', *OECD Trade Policy Papers*, No. 9, OECD Publishing, Paris.

Delaney, H. and van der Zander, R. (eds). (2008). *NIST Special Publication 951: Guide to EU Standards and Conformity Assessment*.

DigitalEurope (2016). *Letter from the Office of the Director General John Higgins CBE to the European Commission, Radio Equipment Directive: Significant problems due to delays with Harmonised Standards*. Brussels, 12 December 2016.

Ehring, L. (2002). 'De Facto Discrimination in World Trade Law'. *National and Most-Favoured-Nation Treatment—or Equal Treatment?* (2002) *Journal of World Trade*, 5:36, pp. 921–977, August 2002.

European Securities and Markets Authority (2018). *MIFID II: ESMA Issues Latest Double Volume Cap Data*. ESMA: 7 June 2018.

Europe Economics (2014). *How EU Wholesale Financial Regulation Differs from what the UK would Choose for Itself*. December 2014.

European Commission (2015). *A Digital Single Market Strategy for Europe* (2015).

European Commission (2015). *Evaluation of the Application of the mutual recognition principle in the field of goods* (European Commission, June 2015).

European Commission (2016). *'Blue Guide' on the implementation of EU product rules 2016*.

European Commission (2016). European Regulators Group for the Audiovisual Media Services. Digital Single Market Report. *ERG Report on Territorial Jurisdiction in a Converged Environment*. 24 May 2016. <https://ec.europa.eu/digital-single-market/en/news/erga-report-territorial-jurisdiction-converged-environment>

European Commission (2016). *Report from the Commission to the Council and the European Parliament. Final Report on the E-Commerce Sector Enquiry*. 10 May, 2016. http://ec.europa.eu/competition/antitrust/sector_inquiry_final_report_en.pdf.

European Commission (2017). *SOLVIT: solutions to problems with your EU rights*. <http://ec.europa.eu/solvit/>

European Commission, Directorate A - Economic and Scientific Policy, Policy Department A: Economic and Scientific Policy and Quality of Life Unit (2015). *Overview of EU rules applicable to EEA/EFTA countries in financial services, competition and taxation: Briefing Note*. http://www.eeas.europa.eu/archives/docs/images/top_stories/140912_eu-ukraine-association-agreement-quick_guide.pdf

European Council (2012). *Council conclusions on EU relations with EFTA countries 3213th. Transport, Telecommunications and Energy Council Meeting*. Brussels, 20 December 2012.

European Council (2014). *Council conclusions on a homogeneous extended single market and EU relations with Non-EU Western European countries General Affairs Council meeting*. Brussels, 16 December 2014.

European Parliament (2017). *Smart Border 2.0: avoiding a hard border on the island of Ireland for customs control and the free movement of persons*. Study for the AFCO Committee, European Parliament. [http://www.europarl.europa.eu/RegData/etudes/STUD/2017/596828/IPOL_STU\(2017\)596828_EN.pdf](http://www.europarl.europa.eu/RegData/etudes/STUD/2017/596828/IPOL_STU(2017)596828_EN.pdf)

European Union (External Action) (2017). *EU-Ukraine Association Agreement 'Guide to the Association Agreement'*.

Gstöhl, S., Frommelt, C. (2017). 'Back to the Future? Lessons of Differentiated Integration from the EFTA Countries for the UK's Future Relations with the EU'. *Soc. Sci.* 2017, 6, 121.

Guimarães, M. H., Faria, A. P. and Barbosa, N. 2010. 'Determinants of non-tariff barriers in intra-EU trade.' In: Guimarães, M. H. and Faria, A. P. (eds.), *Product market integration: a multifaceted approach*. Bingley, UK: Emerald.

HM Government and European Commission (December 2017). *Joint report on progress during phase 1 of negotiations under Article 50 TEU of the UK's orderly withdrawal from the EU*. <https://www.gov.uk/government/publications/joint-report-on-progress-during-phase-1-of-negotiations-under-article-50-teu-on-the-uks-orderly-withdrawal-from-the-eu>

HM Treasury (2011). *The Magenta Book: Guidance for Evaluation*.

HM Treasury (2016). *Response to the EU Commission: Call for evidence on EU regulatory framework for financial services*. February 2016

House of Commons Exiting the European Union Committee (2018). *The Progress of the UK's Negotiations on EU Withdrawal*, HC Briefing 372, 17 January 2018.

International Monetary Fund (April, 2003). *World Economic Outlook: Growth and Institutions*. Washington, D.C.: IMF Publishing.

Leuffen, D., Rittberger, B. and Schimmelfennig, F. (2013). *Differentiated Integration: Explaining Variation in the European Union*. Basingstoke: Palgrave Macmillan.

Miroudot, S., Pinali, E. and Sauter, N. (2007), 'The Impact of Pro-Competitive Reforms on Trade in Developing Countries', *OECD Trade Policy Papers*, No. 54, OECD Publishing, Paris.

National Research Council (1995). *Standards, Conformity Assessment and Trade: Into the 21st Century*. International Standards, Conformity Assessment and U.S. Trade Policy Project Committee: Board on Science, Technology and Economic Policy. National Research Council. Washington, D.C.: National Academy Press.

Nicolaïdis, K. (1997). 'Mutual Recognition of Regulatory Regimes: Some Lessons and Prospects,' *Regulatory Reform and International Market Openness*, Paris: OECD Publications, 1996. Reprinted as part of the *Jean Monnet Paper Series*, Cambridge, MA: Harvard Law School.

Nicolaïdis, K. and Egan (2001). 'Regional Policy Externality and Transnational Market Governance: Why Recognize Foreign Standards?'. *Journal of European Public Policy*, 8:3, pp. 454-473. August 2001 (Reprinted in *The Political Economy of Standardization*, Walter Mattli (ed.) Cambridge University Press, 2001.

Nicolaïdis, K. and Schmidt, S. (2007). 'Mutual recognition 'on trial': the long road to services liberalization'. *Journal of European Public Policy*, 14:5, pp. 717-734, August 2007.

Nicolaïdis, K. and Shaffer, G. (2005). 'Transnational Mutual Recognition Regimes: Governance without Global Government'. *Michigan Review of International Law*, Vol 68: 267-322.

Nicoletti, G., Golub, S., Hajkova, D., Mirza, D. and Yoo, K. (2003), 'The Influence of Policies on Trade and Foreign Direct Investment', *OECD Economic Studies No. 36*, OECD

Nicoletti, G. and Scarpetta, S. (2003), 'Regulation, Productivity and Growth: OECD Evidence', *OECD Economics Department Working Papers No. 347*, OECD.

OECD (2007). *OECD Competition Assessment Toolkit*. Paris: Organisation for Economic Cooperation and Development.

OECD (2013). *International Regulatory Co-operation: Addressing Global Challenges*. Paris: OECD Publishing.

OECD (2018). *The International Regulatory Cooperation Toolkit*. Paris: Organisation for Economic Cooperation and Development. <http://www.oecd.org/gov/regulatory-policy/irc-toolkit.htm>

Office of the United States Trade Representative (USTR) (2016). *Analysis of European Standardization and Conformity Assessment Procedures*.

Office of the United State Trade Representative (USTR) (2017). *Joint Statement by the United States, European Union and Japan at MC11*. <https://ustr.gov/about-us/policy-offices/press-office/press-releases/2017/december/joint-statement-united-states>

Open Europe (2016). *What if...? The consequences, challenges and opportunities facing Britain outside the EU*. March 2016

Pelkmans, J. (1987). 'The New Approach to Technical Harmonization and Standardization'. *Journal of Common Market Studies*, 25:3, March 1987, pp. 249-269.

Pelkmans, J. (2003). *Mutual Recognition in Goods and Services: An Economic Perspective*. European Network of Economic Policy Research Institutes Working Paper No. 16, March 2003.

Shaffer, G. (2002). 'Reconciling Trade and Regulatory Goals: the Prospects and Limits of New Approaches to Transatlantic Governance through Mutual Recognition and Safe Harbor Agreements'. *Columbia Journal of European Law*, 9, pp. 29-77 (Fall, 2002).

Singham, S.A. (2007) *A General Theory of Trade and Competition: Trade Liberalisation and Competitive Markets*. London: Cameron May.

Singham, S.A. and Hewson, V. (2017). *Brexit, Movement of Goods and the Supply Chain*. Legatum Institute, February, 2017.

Singham, S.A., Hewson, V. and Tylecote, R. (2017). *Developing a True Transatlantic Partnership: a High Standard Trade Agreement to Propel the Global Economy*. Legatum Institute, June 2017.

Singham, S.A., Kiniry, A.M., Rangan, U.S and Bradley, R. (2016). *Introduction to Anti-Competitive Market Distortions and the Distortions Index*. Legatum Institute.

Swann, G.P. (2010). *International Standards and Trade: A Review of the Empirical Literature*. OECD Trade Policy Working Papers, No. 97. OECD Publishing.

Swiss Confederation, Federal Food Safety and Veterinary Office (2017). *Veterinary Agreement between Switzerland and the EU*. <https://www.blv.admin.ch/blv/en/home/das-blv/kooperationen/internationale-abkommen/veterinaerabkommen-schweiz-eu.html>

Vancauteren, M. (2009). *Trade Effects of Approaches Intended to Facilitate Acceptance of Results of Conformity Assessment: What is the Evidence?* OECD Paper: 2009 Workshop and Policy Dialogue on Technical Barriers to Trade. <https://www.oecd.org/trade/ntm/43691803.pdf>

The White House (September 2003). *Circular-A4*.

Wijkström, E. and McDaniels, D. (2013). *International Standards and the WTO TBT Agreement: Improving Governance for Regulatory Alignment*. WTO Working Paper, 2013.

World Trade Organisation (1998). *Understanding the WTO Agreement on Sanitary and Phytosanitary Measures*. https://www.wto.org/english/tratop_e/sps_e/spsund_e.htm

World Trade Organisation (2000). *Decision on Principles for the Development of International Standards, Guides and Recommendations with Relation to Articles 2, 5 and Annex 3 of the TBT Agreement* (from the 2nd Triennial Review).

The Institute of Economic Affairs
2 Lord North Street
London SW1P 3LB
Tel 020 7799 8900
email iea@iea.org.uk


Institute of
Economic Affairs