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Global Champion

The Case for Unilateral Free Trade

A Policy Exchange Report

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Michael Taylor joined Policy Exchange in March 2017 as a Research Fellow in the Economics team. He is an experienced economist, having started his career in the Government Economic Service where he worked on competition policy, competitiveness and productivity. Michael was Chief Economist at the Institute of Directors where his research on the European single currency was influential in making the business case for the UK staying out of the Euro. Later he worked for Merrill Lynch and the economic consultancies, Lombard Street Research and Oxford Economics. His work at Policy Exchange covers all Brexit issues, monetary policy, financial market regulation, agriculture, trade and industrial strategy.

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Foreword

by Alexander Downer

The contours of international trade policy are in contention today in a way that they have not been since President Kennedy launched the process of trade liberalisation in the early 1960s. We are right to remind all governments and trade negotiators of the fundamental principles that should shape policy. They are particularly pertinent for Britain as its Government recalibrates its approach to trade and identifies opportunities to pursue more liberal policies than the present approach of the EU.

As David Ricardo recognised countries benefit from trade even when they may enjoy every advantage over a neighbour provided there remain some differences in the relative efficiencies of their own industries and markets that provide them with an incentive to concentrate on areas of economic activity where they enjoy their greatest comparative advantage.

The case for economies to maximise their economic welfare by specialising in what they are best at doing and trading with other communities to acquire the goods and services that in relative terms they are not so good, is as compelling at the start of the 21st century as it was at the start of the 19th century. Economists are distinguished by their capacity to argue among themselves. The theory of comparative advantage as a fundamental proposition of free international trade, is one of the few areas where economists broadly agree, surveys suggest that 95% of them accept it.

Brexit involves political, economic and intellectual challenges for British politicians and policy makers. They are having to think again from first principles about sovereignty, agriculture and trade. For almost two generations, trade policy for all practical purposes was a policy removed from the political priorities of British ministers. In the judgement of Policy Exchange it is important that future UK trade policy should be informed by a powerful restatement of the case for free trade and the principles of comparative advantage that are central to the intellectual case for trade.

David Ricardo's principle of comparative advantage is as important as ever and should shape international policy in the coming decades. This analysis from Policy Exchange and the implications that it yields should not only inform British policy makers but the judgement of policy makers throughout the world. The European Union has consistently exhibited a mercantilist disposition exemplified by its farm policy and suggested that the principles of comparative advantage could be set aside during the period when the Single Market was constructed. The new administration in the United States has rejected the liberal trade policies of its recent predecessors Republican and Democrat.

The argument for economies to be open to free trade is politically more important today than at any time since the 1960s. As advanced economies struggle to raise productivity and fear secular stagnation and what the classical economists referred to as stationary states, the spur to domestic competition that trade provides is arguably more pressing than ever.

Trade moreover is not a zero-sum equation. As Joan Robinson the great Cambridge economist, who collaborated with Lord Keynes, vividly expressed it – if your competitors closed their ports to your own ships by filling their harbours with rocks you would be unwise to replicate their erroneous behaviour. In the decades ahead, all major economies should remove their tariffs and open their markets to competition. As the UK once again takes its place at the WTO it should take the opportunity lead by example and remove its tariffs. And it would behove other economies to follow that example if they want to increase the prosperity of their people.

Alexander Downer is High Commissioner of Australia – who was previously the country's longest serving Foreign Minister between 1995 and 2007. Downer was born in South Australia and educated at Geelong Grammar in Victoria, Radley College in Oxfordshire and the University of Newcastle on Tyne. He entered Parliament as the Member for Mayo in 1984 and has also served as Leader of the Federal Opposition and as UN Special Advisor on Cyprus.

Executive Summary

Introduction

- Two hundred years after David Ricardo established the principle of comparative advantage, free trade remains politically controversial. From an economics point of however, it remains one of the few uncontroversial propositions of the subject, supported by 96% of economists on both the left and right.

- As many have argued, modern trade has important differences to the world of the nineteenth century: far lower transport costs, greater use of international supply chains and non-tariff barriers often acting as a larger obstacle than tariffs. None of this however, changes or undermines the fundamental economic arguments for unilaterally lowering tariffs. Most of today's arguments against unilateralism based on maintaining negotiating leverage, protecting particular industries or avoiding 'unfair' cheap competition are not new, but would have been familiar in past decades or centuries.

- Many commentators remain trapped in a fundamentally mercantilist worldview: focussing solely on maximising market access for British exporters, with any concessions for imports seen as a negotiating chip to be reluctantly handed over. What really matters in trade however, is lowering barriers into your own economy: directly cutting costs for consumers, and ultimately more important, increasing the competitive pressure that drives up domestic productivity.

- Brexit offers Britain the opportunity to become a global champion for free trade. The Government's current position is that we are going to leave the Single Market, as would happen automatically., in the event of a 'No Deal' scenario. In this paper, we argue that, assuming Britain is going to leave the Single Market, the best way of being a champion of free trade is the unilateral elimination of all our remaining tariffs. Unilateral Free Trade would reduce the cost of living, is one of the most effective means of Industrial Strategy to boost productivity, and would help a Global Britain demonstrate real moral leadership, boosting world trade access and expanding access for developing countries.

What are the benefits of free trade?

- The case for free trade has not changed substantially since Adam Smith and David Ricardo. Free trade boosts economic welfare by increasing specialisation, choice, competition, productivity and diffusing best practice. These benefits do not disappear if tariff liberalisation happens unilaterally, while introducing new tariffs only harms our own consumers. From the repeal of the Corn Laws to Asia opening up to the world, unilateral tariff reduction has historically played a powerful role in boosting trade and growth.

- While few economists would disagree with this big picture, quantifying the importance of changes in trade policy with precision is much harder. We should be more humble about what we do and do not know. Many of the most important long-term effects of trade on consumer choice or productivity are much harder to measure than static price changes. Nobody should be too confident over any specific estimate of the impact of tariff or non-tariff barriers on growth. For what it is worth, however, the Resolution Foundation / UK Trade Policy estimate that unilateral tariff elimination could reduce annual household bills by £160 a year, while the OECD estimates that a 50% reduction in global tariffs from current levels would increase UK GDP by 2.6%.

Do we need to protect strategic or infant industries?

- Ever since *The Wealth of Nations*, protectionists have responded to calls for free trade by claiming that some industries are special and need to be protected for strategic reasons or to allow infant industries to gain the economies of scale needed to compete in world markets. Even if this might have applied in nineteenth century Germany or US – which is far from established – it is not clear how well it applies to an advanced services-based economy like the UK. New emerging industries from FinTech to drones are unlikely to be helped by tariff protection.

- In reality, tariff protection has rarely been closely aligned with the most natural candidates for infant industry protection. Instead, tariffs have largely been targeted on sectors supported by co-ordinated special interests or which are seen as 'strategic'. In practice, most of these arguments are unconvincing. 'Food security', for example, is best achieved by maintaining strong trade links, not by trying to become autarkical in food.

- Given the low average level of tariffs on manufacturing, eliminating our remaining tariffs would be unlikely to bring about an 'end to manufacturing' or drastically change ongoing structural trends. The UK car industry will be more significantly affected by the shift to self-driving and electric than any change in tariffs. By contrast, lowering trade barriers is one of the best evidenced and most powerful forms of Industrial Strategy we know about, with real power to increase competition and productivity. Every additional 10% increase in trade increases the size of the economy by around 2-5%.

Does trade liberalisation increase inequality?

- Globalisation has reduced extreme poverty and world inequality, while British inequality has been flat for over 20 years. Technology and consumer tastes remain more significant drivers of structural change than any shifts brought about by trade liberalisation. All that said, import competition can accelerate existing technology driven changes, and this can have long lasting negative effects on employment and wages, particularly in concentrated local areas.

- Schemes targeted specifically at those affected by import competition, such as the US's Trade Adjustment Assistance, have a relatively poor record. It is hard to disentangle changes caused by trade and technology, while often those hardest hit by a local downturn are not the same as those who directly lose their jobs. Whatever happens to tariffs, the Government will have to do more to reform welfare and adult education to help the career transition of those hit by other structural economic changes like automation.

Does unilateral liberalisation reduce negotiating power?

- While the academic argument for reciprocity in trade negotiations has focussed on terms-of-trade effects, in practice most people have seen it as a way of a maximising negotiating leverage. In practice, there is little evidence that this narrow kind of reciprocity is actually important for negotiations, and historically unilateral action has been as important as reciprocity as a driver of trade liberalisation. The UK cannot be a global champion of free trade, making a principled case for its importance, and simultaneously introduce new tariffs or try to pretend that reducing them is a sacrifice. Trade liberalisation is a global public good – and like other global public goods such as defence, aid or fighting climate change, it requires some nations to take a leadership role rather than default to the level of the lowest common denominator.

- Many worry that pursuing unilateral tariff liberalisation would reduce the chances of achieving a strong UK-EU trade deal. Conversely however, a good deal is more likely if the UK has a realistic 'no deal' fallback – for which, unilateral tariff elimination combined with transitional subsidies for affected industries is the best candidate. In any case, the more likely scenario is that tariff elimination for other counties would only be phased in, allowing it to be introduced after a UK-EU deal was already completed.
- Others argue that unilateral tariff liberalisation cannot compensate for loss of regulatory access to our largest markets. Whatever your view on this however, it is a distinct issue from tariffs. Future decisions over how to manage UK-EU regulatory divergence in standards will be made over fundamentals, not by the UK blackmailing its way by introducing new tariffs. The UK's focus should be on trying wherever possible to secure mutual recognition of regulation, rather than a complete harmonisation that would cut off future trade deals and slow innovation. Even if mutual recognition is not possible, in many cases the UK can unilaterally accept other countries' regulatory standards to reduce non-tariff barriers on imports – for example, fast tracking medicines that have been already tested by the FDA or EMA.

"What is prudence in the conduct of every private family can scarce be folly in that of a great kingdom. If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of the produce of our own industry, employed in a way in which we have some advantage."

- Adam Smith

"[Mathematician Stanislaw Ulam] used to tease me by saying, 'Name me one proposition in all of the social sciences which is both true and non-trivial.' That was a test I always failed. But, now, some thirty years later… an appropriate answer occurs to me: the Ricardian theory of comparative advantage; the demonstration that trade is mutually profitable even when one country is absolutely more – or less – productive in terms of every commodity. That it is logically true need not be argued before a mathematician; that it is not trivial is attested by the thousands of important and intelligent men who have never been able to grasp the doctrine for themselves or to believe it after it was explained to them."

- Paul Samuelson

"Even if your trading partner dumps rocks into his harbour to obstruct arriving cargo ships, you do not make yourself better off by dumping rocks into your own harbour."

- Joan Robinson

"The idea of comparative advantage – with its implication that trade between two nations normally raises the real incomes of both – is, like evolution via natural selection, a concept that seems simple and compelling to those who understand it. Yet anyone who becomes involved in discussions of international trade beyond the narrow circle of academic economists quickly realizes that it must be, in some sense, a very difficult concept indeed... I cannot offer any grand strategy for dealing with the aversion of intellectuals to Ricardo's difficult idea. No matter what economists do, we can be sure that 10 years from now the talk shows and the op-ed pages will still be full of men and women who regard themselves as experts on the global economy, but do not know or want to know about comparative advantage."

- Paul Krugman

"What an extraordinary episode in the economic progress of man that age was which came to an end in August 1914! The greater part of the population, it is true, worked hard and lived at a low standard of comfort, yet were, to all appearances, reasonably contented with this lot. But escape was possible, for any man of capacity or character at all exceeding the average, into the middle and upper classes, for whom life offered, at a low cost and with the least trouble, conveniences, comforts, and amenities beyond the compass of the richest and most powerful monarchs of other ages.

"The inhabitant of London could order by telephone, sipping his morning tea in bed, the various products of the whole earth, in such quantity as he might see fit, and reasonably expect their early delivery upon his doorstep; he could at the same moment and by the same means adventure his wealth in the natural resources and new enterprises of any quarter of the world, and share, without exertion or even trouble, in their prospective fruits and advantages; or he could decide to couple the security of his fortunes with the good faith of the townspeople of any substantial municipality in any continent that fancy or information might recommend. He could secure forthwith, if he wished it, cheap and comfortable means of transit to any country or climate without passport or other formality, could despatch his servant to the neighbouring office of a bank for such supply of the precious metals as might seem convenient, and could then proceed abroad to foreign quarters, without knowledge of their religion, language, or customs, bearing coined wealth upon his person, and would consider himself greatly aggrieved and much surprised at the least interference.

"But, most important of all, he regarded this state of affairs as normal, certain, and permanent, except in the direction of further improvement, and any deviation from it as aberrant, scandalous, and avoidable. The projects and politics of militarism and imperialism, of racial and cultural rivalries, of monopolies, restrictions, and exclusion, which were to play the serpent to this paradise, were little more than the amusements of his daily newspaper, and appeared to exercise almost no influence at all on the ordinary course of social and economic life, the internationalisation of which was nearly complete in practice."

— John Maynard Keynes, The Economic Consequences of the Peace

Introduction

The stockbroker David Ricardo published his famous book in 1817, *On the Principles of Political Economy*, that for the first time set out the theory of comparative advantage.

Decades earlier, Adam Smith had made the argument that a country was no different to a household: rather than try and do everything by itself, it should focus on what it can do especially well and trade with those who are more efficient for the rest.

Ricardo extended this still further. Even if a country was more efficient at producing every single type of good than its neighbours, then trade could still benefit it by allowing it to specialise on its most efficient industry and reduce the opportunity costs from its least efficient. The world's best surgeon may also be a highly efficient cook, but the cost of an hour in the kitchen is an hour he could have spent helping another patient.

This argument went on to be highly influential, cementing Ricardo's reputation as one of the great classical economists. Thirty years later, partly as a result of the ideas put forward by Ricardo, the House of Commons repealed the Corn Laws, unilaterally lowering tariffs and ushering in a new global era of free trade.

Two centuries later, Smith and Ricardo's defence of free trade remains unchallenged, one of the few uncontroversial propositions in economics. An IGM poll of economists in 2012 found 96% agreement with the statement that "freer trade improves productivity efficiency and offers consumers better choices",[1] and not a single figure disagreeing. On both the left and right, many leading economists from Milton Friedman to William Beveridge, Joan Robinson to Paul Krugman have argued against tariffs and for trade. The argument for trade is not an ideological one, but as clear a consensus as it is possible to find in social sciences.

Despite this, free trade remains often politically controversial, and nearly every country maintains an extensive protectionist apparatus of tariffs and discriminatory regulations. Seven years after Ricardo first published in 1824 Macaulay argued that "free trade, one of the greatest blessings which a government can confer on a people, is in almost every country unpopular." As trade economist Doug Irwin argues, sometimes it feels like not much has changed since.

It is not hard to find examples of commentators slipping back into a mercantilist worldview: focussing solely on maximising market access for British exporters, with any concessions for imports seen as a negotiating chip to be reluctantly handed over. This is almost entirely the wrong way around. While exports matter, imports matter more. By lowering barriers into your economy, you can not only directly cut costs for domestic consumers, but ultimately more important, increase the competitive pressure that drives up industrial productivity, wages and our standard of living.

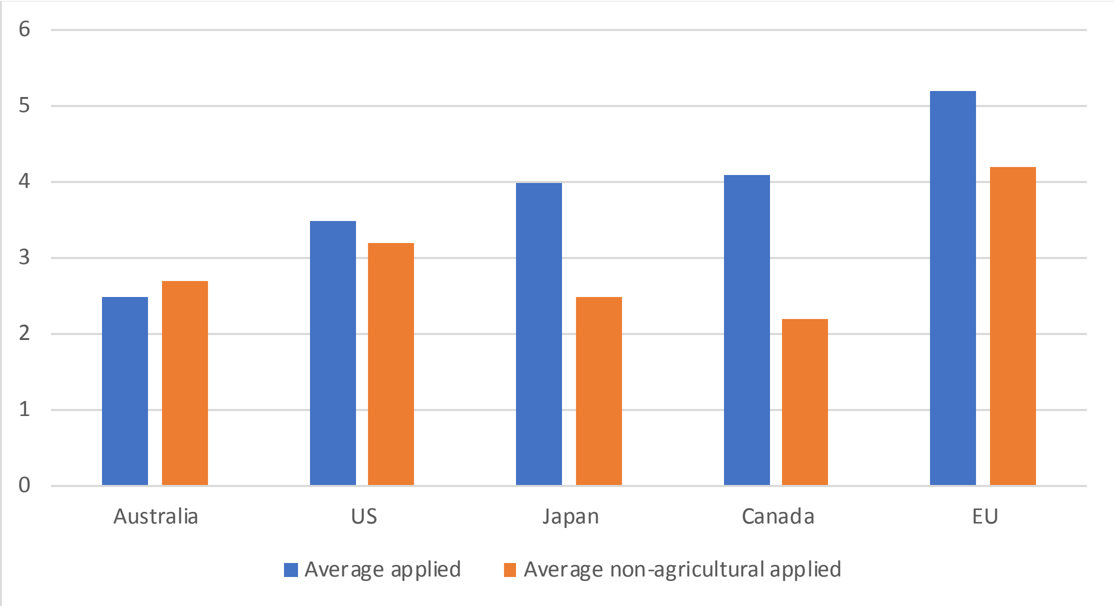
Even *The Economist*, a magazine founded to support the cause of unilateral tariff reduction for agriculture, seems to have resiled from its historical purpose, now worrying that "scrapping tariff barriers unilaterally would draw howls from British farmers and manufacturers.... [Modern trade talks] rely on mutual concessions. If a post-Brexit Britain unilaterally scrapped its barriers, it would lose all its bargaining clout."[2]

Fortunately, despite the fears of a backlash against globalisation, the British people remain well disposed towards trade – if not quite as keen as those in Asia who have seen first-hand its growth transforming effects in recent decades. Recent polling for YouGov found 46% agreeing that globalisation was a force for good, and only 21% who thought the UK should be able to meet its own needs without imports.[3]

Brexit offers Britain an opportunity to become truly, once again, a global leader and champion of free trade.

Despite its rhetoric around trade, the European Union has more often than not been more protectionist than many people realise: imposing high tariffs on countries outside the Customs Union; artificially protecting its farmers with high subsidies; refusing to accept WTO judgements that its product standards were not based on good science, and maintaining them to keep out external competitors; and while not the only country to blame, playing a significant role in stalling international trade liberalisation and the failure of the last Doha multilateral trading round (see Box).

Figure 1: Average tariff barriers (WTO)



Broadly speaking, there are three visions for what Britain's long term post Brexit trading strategy and relationship should be:

- **Stay in the Customs Union**. This would reduce the short term costs and disruption from leaving the Single Market, but leave the UK unable to control much of its regulation or take advantage of new trading deals and a more innovation-friendly system of regulation.
- **Seek new Free Trade Agreements.** The UK would leave the Customs Union, copy the EU's current tariff scheme for its own WTO schedule and then seek to negotiate its own trade deals one by one with other willing nations.
- **Unilaterally eliminate tariffs and reduce non-tariff barriers (NTBs).** The UK would stay in the WTO and seek to negotiate reductions in other countries' NTBs – but regardless, phase out all its own tariffs. Even if the EU imposed tariffs on British exports, the UK would refuse to retaliate, offsetting much of the harm.

In other work such as our paper *Clean Brexit*, Policy Exchange has argued for the virtues of ultimately leaving the Customs Union and seeking new trade deals.

In this paper however, we want to focus on a related but different question. Assume that the UK has left the Customs Union, either because it is the right thing to do, because negotiations have broken down or out of political necessity. What then? Do we really have to impose our own new set of tariffs, despite knowing how harmful these might be to domestic consumers and business productivity?

Our argument is that the default option should be unilateral free trade – and the burden of proof should be on those who would instead seek to introduce tariffs. As recognised by the overwhelming majority of economists, free trade reduces consumer prices, enhances competition, and transfers new ideas. Unilateral Free Trade is both probably the single most effective Industrial Strategy the government could implement to boost productivity, and a clear way for a Global Britain to demonstrate real moral leadership and help developing countries trade their way out of poverty.

In the rest of the paper, we will look in more detail both at the arguments for unilateral free trade and respond to some of the concerns about it:

- What is the theoretical and empirical evidence on the benefits of free trade? Given that tariffs have already fallen significantly since their post war highs, do they really matter anymore?
- Do we need to maintain some tariffs to protect strategic or infant industries? How will we ensure food security or guarantee a thriving manufacturing sector without tariff protection?
- Even if free trade does make the nation better off on average, does it do so at the cost of increased inequality and the 'left behind'? Will lowering tariffs increase structural unemployment?
- Does unilaterally lowering our own tariffs reduce our bargaining power in future negotiations? Would it undermine our ability to reduce more important non-tariff barriers?

BOX: The EU's relationship with free trade

The EU has been perceived by many commentators, politicians and business interests as an instrument that further free trade. However, the notion of the EU in any of its iterations as a paradigm of free trade has always been problematic. In practice, like many other historical trading blocks, while the EU has worked to reduce internal barriers, it has been much less keen at reducing external protection

The period following the Treaty of Rome in 1957 and the establishment of the EEC's initial agriculture and trade policies was significant in the evolution of the modern post war trading regime. It was the period when capital accounts became properly convertible and the US led the world in multilateral liberalisation of tariffs in the Dillon and Kennedy GATT rounds. The American agenda was about getting countries to open their markets and agreeing to lowering tariffs after a protracted period in first half of the 20th century when protection and autarky had become the hallmark of trade policy. Until the Dillon round the US Government was unable to make much progress on a more liberal trade agenda because successive administrations could not secure the co-operation of Congress to pass the necessary legislation. The Trade Expansion Act 1962 gave the President unprecedented power to negotiate cuts in tariffs across the board.

At this stage the EEC entered the international trade arena and took a distinct position that has coloured everything it has done in the following years on trade. White the German Government was prepared to expose agriculture to international competition the French Government was not. The purpose of French policy was to ensure that it could sell its surplus agricultural output across the EEC with as little international competition as possible. The Common Markets' Customs Union and its Common External Tariff emerged in stages in this period.

Against a back drop where tariffs were significantly lowered as a result of the Dillon and Kennedy rounds and the financing of trade was facilitated by the liberalisation of capital accounts, international trade was liberalised and expanded. At the same time however, the EEC emerged as an awkward obstacle impeding the process of liberalisation, and reducing the possibility of an ambitious Kennedy Round. The EEC insisted on a complex disparity procedure to offset a potential asymmetry in benefit where one country reduced tariffs from a much higher level.

The Common Market at its inception consciously asserted itself against the United States and was unwilling to treat America as anything other than a trade rival. This culminated in a 'chicken war' designed to exclude frozen American chicken from the German market. The high tariffs and subsidies that form the Common Agricultural Policy hence forward made the EEC, EC and EU a hindrance to trade liberalisation. Some of the detailed regulation put in place to construct the Single Market earned the sobriquet Fortress Europe, with rules appearing to be framed to protect incumbent local businesses from the challenge of international competition.

The suspicion that the EU was not committed to free trade in any conventional meaning of the words is exemplified by a White Paper on Employment, Competitiveness and Growth published by the Commission in 1993, which included an arresting assertion that the principle of comparative advantage is increasingly redundant:

> 'We must increasingly think in terms of competitive rather than comparative advantages. Comparative advantages traditionally relate to endowment in factors such as natural resources and are therefore fairly rigid. Competitive advantages are based on more qualitative factors and can thus be influenced, to a large degree, by corporate strategies and by public policies. In such a context, factor mobility and the capacity to combine factors effectively and to organize the social consensus on the share-out of value-added are becoming much more important than the initial factor endowment.'

Increasingly, the Commission's starting point was that trade transactions should take place in then context of a framework of rules, that labour market and wider social regulation should form part of the context for trade. This approach to trade coupled with a dogged commitment to maintaining agricultural protection resulted in the EU impeding progress in the further multi-lateral liberalisation of trade in the Uraguay and Doha rounds of trade liberalisation in the 1990s and 2000s.

What are the benefits of free trade?

The theoretical argument for free trade

Ultimately, the case for free trade between countries is the same as the case for free trade between individuals, families or businesses.

Trying to be self-sufficient and do everything by yourself is a fast route to poverty. Even something seemingly as simple as a pencil[4] or electric toaster[5] is next to impossible to construct by yourself, requiring the unplanned co-operation of thousands of individuals. Unlike companies or bureaucracies, markets do not seem to run into diseconomies of scale. The larger the extent of your market, the more you can harness the collective skills and resources of others.

Unfortunately, throughout history politicians have frequently fallen prey to the mercantilist fallacy, believing that a country's economic strength is increased by exporting more than you import, and maximising the inflow of foreign payments. Trade is a zero-sum game. In the early modern period, Britain made extensive use of protectionist tariffs, regulations and subsidies with the aim of increasing the market share of its merchants.

In reality, a country is not like a business or household. Real wealth does not come from how much gold you've accumulated, but the underlying productive capacity of your economy. As David Hume emphasised – and the historical example of Spain and America's gold demonstrated - in the long term a positive balance of trade and the resulting inflow of capital raises prices and wages in the domestic economy, acting to offset any trade surplus. Protectionism cannot make a country richer unless it makes a country more productive – and there is little reason to think that it does.

By contrast, there are multiple mechanisms through which trade benefits economic welfare:

- **Specialisation and exchange.** As Smith emphasised in his famous example of the pin factory, by utilising the division of labour and each specialising in particular tasks, we can benefit from greater economies of scale. On top of this, as Ricardo pointed out, using trade to focus on our comparative advantage reduces the opportunity costs from less productive uses. Given that true autarky is very rare, quantifying the impact of the direct effects from trade is not straight forward – and is likely to differ by country or time. A small isolated country like Iceland would be hurt more immediately from a trade blockade than a transcontiental diversified nation like the US. Nevertheless, we do have a few historical examples of countries being completely cut off from world markets. In the mid nineteenth century, Japan reversed its long held policy of isolation and opened its ports to world trade, increasing GDP by 8-9%.[6] Similarly Thomas Jefferson's decision to close his own ports during the Napoleonic Wars in 1807 is estimated to have cost 5% of GDP.[7] One study estimated that an autarkical US today would cut the income of the median American by 29%, and that of the poorest households by more than twice as much, or 62%.[8]

- **Increased consumer choice.** Beyond lower prices, trade also increases the range and diversity of goods available. Even when a product is not completely banned, the imposition of a tariff can reduce the effective size of the market, making some products on the margin financially unviable. While this is harder to quantify than changes in price, its impact on end consumer welfare can be as much as an order of magnitude higher.[9] Unfortunately, improvements in product variety are often not well captured in traditional economic statistics.

- **Increased competition and productivity.** In the long run, more important than the static effects of trade are its dynamic effects on firm productivity, with estimates suggesting that the gains can be twice or three times as large.[10] Reducing trade barriers intensifies competitive pressure on domestic producers - driving out inefficient producers and allowing resources to be redirected to more efficient uses. Historically there has been a close connection between the openness of sectors to international competition and their rate of productivity growth.[11] Encouraging new entrants from abroad is one of the most powerful ways to avoid oligopolistic domestic markets.

- **Diffusing best practice.** Trading and allowing international companies to invest in Britain speeds up the process of technological transfer or adopting the latest business models or management practices. Britain's car industry has rebounded since the 1980s largely as a result of competent Japanese management.

Even if free trade is theoretically optimal, could trade restrictions still be helpful as a second best measure to tackle domestic market failures that are difficult to address with other policy instruments? While it is possible to show this in some models, most economists would agree with the judgement of Bhagwati and

Ramaswami (1963) that in almost all cases the optimal policy intervention is that which directly targets the specific market failure – and this is especially true for an open economy like Britain.

The empirical evidence on trade

Equally, most empirical evidence strongly agrees with the conclusion that trade increases growth:

- Building off the methodology of Frankel and Romer (1999), **Feyrer (2009)** uses geography and changes in transport technology as statistical instruments to calculate that trade has an elasticity on growth of around 0.5 to 0.75 - that is every additional 10% increase in trade increases the size of the economy by around 5%.[12] (The Treasury, in its calculation of the long term economic impact of Brexit estimated a slightly lower elasticity of around 0.2-03, but cautioned that its result may not include all the positive effects from openness.[13])

- On average, **Wacziarg and Welch (2008)** calculate that trade liberalisations in the second half of the twentieth century increased growth rates by 1.5 percentage points.[14]

Beyond these quantitative estimates, we also have a range of historical case studies pointing to the importance of trade and the impact of unilateral trade liberalisation:

- **The Repeal of the Corn Laws.** After the end of the Napoleonic Wars brought about a radical drop in the price of grain, Parliament introduced a new and historically highly protective Corn Law in 1815. Inspired by the ideas of Smith and Ricardo, the laws were soon opposed by a nationwide campaign, including the creation of what has been called the first nationwide lobbying group the Anti-Corn Law League. A new magazine - *The Economist* - was started to expound the principles of free trade. At the same time, government trade policy largely focussed on seeking reciprocal trade deals, with only limited results and the existence of the Corn Laws encouraging scepticism and retaliatory action in European states such as France and Germany.[15]

  In 1846, partly triggered by the ongoing famine in Ireland, Parliament unilaterally removed the Corn Laws, abandoning the precondition of reciprocity. This was followed by the phasing out of imperial preference, repeal of Navigation Acts and abolition of hundreds of other custom duties. The US rapidly responded with its own tariff reduction[16], while in

1860 the UK and France signed the first modern trade treaty, with the UK agreeing to lower its tariffs on French commodities like wine and brandy, while France allowed in a greater number of British manufactured goods. As significant, was the inclusion in the treaty of a Most Favoured Nation (MFN) clause, guaranteeing that they would share any trade concessions from future negotiations with each other. Over the next fifteen years, a further 46 trade treaties were signed across Europe, with the MFN clause helping create tariff reduction everywhere – and arguably bringing about the first era of globalisation.

- **Australia becomes a free trade champion.** Protection was introduced to Australia soon after federation in 1901, and in the period following the Second World War the country deliberately followed a strategy of import replacement to boost its domestic industries. By 1970, Australia had the highest manufacturing tariffs of any industrial economy, matched only by New Zealand.[17] Unfortunately, worsening commodities prices and the loss of traditional British markets revealed the negative impact protection had had on Australian productivity.

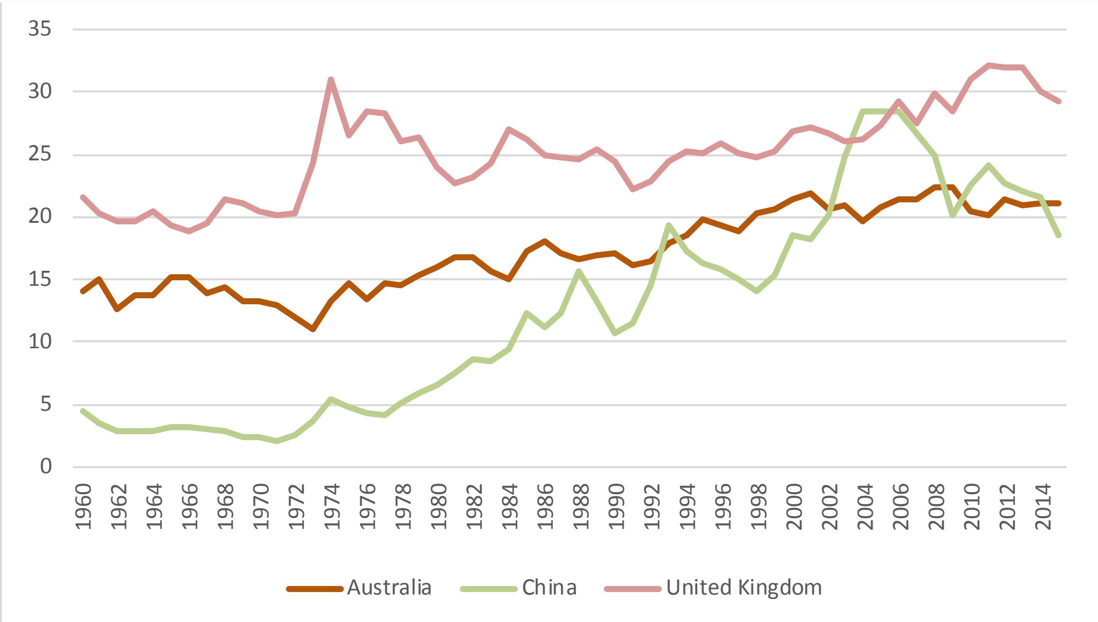
  In the 1960s, import licensing was removed for most products, followed in 1973 by a unilateral 25% cut to all tariffs, and continued reductions thereafter. Somewhat symbolically, the original Tariff Board morphed first into the Industries Assistance Commission and ultimately the Productivity Commission. Between the early 1970s and 2000, total effective rates of assistance fell from 35% to 5%,[18] and according to the WTO, Australia now has among the lowest average tariffs of any major economy. While trade liberalisation is not the only reason for the strength of the Australian economy, it clearly has not held it back. Australia has now grown without interruption for 26 years, the longest recession free period ever experienced by a major economy.[19]

- **China opens to the world.** As part of its planned economy, for much of the post war period over 90% of Chinese imports were controlled by the State Planning Commission's import plan.[20] The net result was slow economic growth, with Chinese trade actually shrinking as a proportion of the word total. In 1977, despite its population, China was only the thirtieth largest trading country.[21]

  Inspired by the success of free ports like Hong Kong and Singapore and experiments with new Special Economic Zones like Shenzhen, from the 1980s on China unilaterally dismantled much of its tight control over foreign trade. Average tariffs fell from a high of 56% in 1982 to 7.5% by

2015, while the coverage of licensing requirements fell from around half of imports and two-thirds of exports to less than 4% and 8% respectively.[22] As a result, imports expanded from just 2.5% of the Chinese economy to over a quarter, while growth accelerated as China took advantage of cheap labour to ultimately become the world's largest exporter.

Figure 2: Import penetration (% GDP, World Bank)



Few economists today would disagree that the substantial barriers to trade introduced in the interwar and post war era were harmful to growth. Given that tariffs have substantially fallen over the last decades, what is less clear is the magnitude of the impact of the tariffs that still exist, with only a few estimates:

- **Anderson, Martin and van der Mensbrugghe (2006)** calculate that removing all trade distortions in goods (including both tariffs and agriculture subsides) would improve world income by 0.7% - but does not include the benefits from increased variety or faster productivity growth.[23]

- **OECD (2011)** estimates that a 50% reduction in tariff and ton-tariff barriers by G20 countries would lead to a long term 6.6% increase in UK GDP. A 50% reduction in tariffs alone by the G20 would lead to a 1.6% long run increase in G20 GDP, while if tariff reduction was global, the increase would be worth 2.6% of GDP.[24]

Similarly, there are only a few quantitative estimates of the welfare impact of unilateral tariff reduction, with the magnitude of the impact depending heavily on the other assumptions made:

- **Minford (2017)** estimates that unilaterally eliminating tariffs and non-tariff barriers on EU and world trade would increase long run GDP by 4%.[25]
- **CEP (2017)** estimates that unilaterally eliminating tariffs improves welfare by 0.3%, but that this is likely to be more than outweighed by the imposition of other non-tariff barriers.[26]
- The **Resolution Foundation and UK Trade Policy Observatory (2017)** estimate that unilaterally eliminating tariffs would immediately save the average household £130 year, with prices falling by an average 0.5%.[27]

The big picture is that while the theoretical and historical evidence for freer trade is strong, we only have limited systematic and quantitative evidence for the magnitude of changes – and therefore, all estimates should be treated with caution. As a recent literature review by Goldberg and Pacnik (2016) points out, empirical estimates struggle to overcome the challenges of measuring the impact of non-tariff barriers, aggregating different measures and overcoming endogeneity. One recent paper, seeking to measure the elasticity of trade to changes in tariffs by sector, found estimates ranging massively from 0.37 to 51.8.[28]

Substantial theoretical disagreements still exist over the extent to which all goods are perfect substitutes, or how much pure distance determines trading patterns. The currently popular gravity models of trade which are much like the Phillips Curve in macroeconomics – derived largely from empirical correlations, but with limited theoretical underpinning behind them, making them vulnerable to potential structural changes such as the digitalisation of the economy. In any case, as previous Policy Exchange work has examined, it is not clear how well they apply to the UK.[29]

While there may be uncertainty about magnitudes, almost nobody disagrees with the central point: tariff liberalisation is good for both consumers and producers, and remains beneficial even if done unilaterally.

The only reason not to undertake it is if you believe that it would have other malign side effects – increasing inequality, or undermining attempts to reduce non-tariff barriers. As we will see, most such side effects are exaggerated.

Do we need to protect strategic or infant industries?

Are some industries special?

While the ideas of Adam Smith and David Hume were to prove extremely influential in Britain, they were not completely unchallenged. Within fifteen years of the publication of *The Wealth of Nations*, Alexander Hamilton argued in his *Report on Manufactures* that protective trade barriers were needed to allow infant industries to become established and enjoy the economies of scale they needed to compete in the world market.

The empirical literature surveying the infant industry effect remains ambiguous:

- In the nineteenth century both America and Germany made use of external tariffs, but at the same time they were simultaneously enjoying significant internal expansion as part of the US's geographical expansion and the protracted process of German unification, boosting effective market size.
- While many advocates of Industrial Policy like to point to the post war success of Japan's MITI, MITI had little to do with Japan's greatest successes in automobiles and consumer electronics, and notably failed in biotechnology and computers.[30]
- Historical case studies suggest there may have been particular examples of tariffs which succeeded in accelerating the development of a domestic industry, such as the steel, rail or tinplate industries in nineteenth century America. However, most cross-industry studies find protection reduces rather than increases productivity.[31]
- From a more theoretical standpoint, even when infant industry effects do exist, given their negative side effects on competition and other part of the economy tariffs are unlikely to be the most efficient policy instrument.

Even if infant industry protection could help a catch-up economy like 19th-century Germany or 20th-century Japan, it is far less clear that they are relevant to an advanced economy like twenty-first century Britain. Reduced economies of scale explain very little of Britain's productivity gap, either with the US or Germany. While the domestic British car industry has declined in relative terms, this is largely down to poor management, the exercise of trade union power and defective industrial relations rather than a lack of protection.[32] By contrast, a recent saviour of the car industry has come precisely through remaining open to investment from foreign firms, from Honda to Tata.

The infant industry argument requires tariffs to be temporary, the industry to be immature and the country to be able to continue to enjoy a comparative advantage in that industry even when the tariffs are removed. In practice, most infant industries fail to 'grow up', with initial protection instead creating a constituency for rent seeking and special treatment that survives long after the industry should have reached maturity.

It is worth remembering that any tax on imports is economically equivalent to a tax on exports ("Lerner Symmetry"). While a country can borrow a small amount, the vast majority of imports are paid for by exports – and it is no coincidence that the two are closely correlated across time and countries. In other words, any attempt to help one export industry with tariff protection will inevitably damage other sectors.

The UK's comparative advantage is largely in business, digital and creative services, or alternatively R&D intensive manufacturing. None of these are natural candidates for tariff protection. It is not obvious that the UK's emerging role as the world's FinTech capital would have been helped by a tariff barrier, while London's wider growing role as the European tech hub has largely been built on the back of culture, the wider research base, skilled workers, and flexible regulation. In order to stay at the innovation frontier, modern industries need to be competitive, highly productive and open to the world's best – none of which is helped by sheltering them behind a tariff barrier.

In practice, tariffs in Britain – and for that matter, in most other countries too – seem to show little connection with the industries that seem the most natural candidates for infant industry protection. As Dowd (2017) points out, among the EU tariffs are a 16% rate on oranges, 16.9% on sports footwear and 15% on unicycles.[33]

By contrast, tariffs are much more tightly focussed on industries that enjoy support from co-ordinated special interests, or are seen as 'strategic':

- **Innovation.** Some inputs or industries it is alleged, particularly in manufacturing, create wider spillover effects on productivity or innovation
- **Security.** The UK needs to require a minimal capacity in some key industries to ensure it cannot be held hostage or see massive disruption in the event of trade dislocation.

Neither of these arguments is very convincing. There is little reason to believe that some industries are especially important for innovation or productivity. While manufacturing is very labour productive, it also requires high levels of capital investment – overall, there is no correlation between the share of manufacturing and a country's productivity. With supply chains increasingly global, most essential inputs can be imported if needed. If any industry is a good candidate for wider spillover effects creating positive externalities in the modern economy, it is probably digital services – but this is inherently hard to tariff.

Similarly, seeking autarky is an impractical way of ensuring security. The UK has not been truly self sufficient for centuries. To achieve this, would require both significant falls in the standard of living as the UK diversified away from its comparative advantage, and massive investment in agriculture, energy, textiles, chemicals, digital communications, pharmaceuticals and so on. Short of a true global catastrophe, the UK is not likely to see a complete Napoleonic style trade blockade from the continent – and even that did not succeed in fully cutting Britain off. Of all the potential global disasters Britain could try and insure against,[34] this scenario is both highly unlikely and the cost of protection disproportionately expensive.

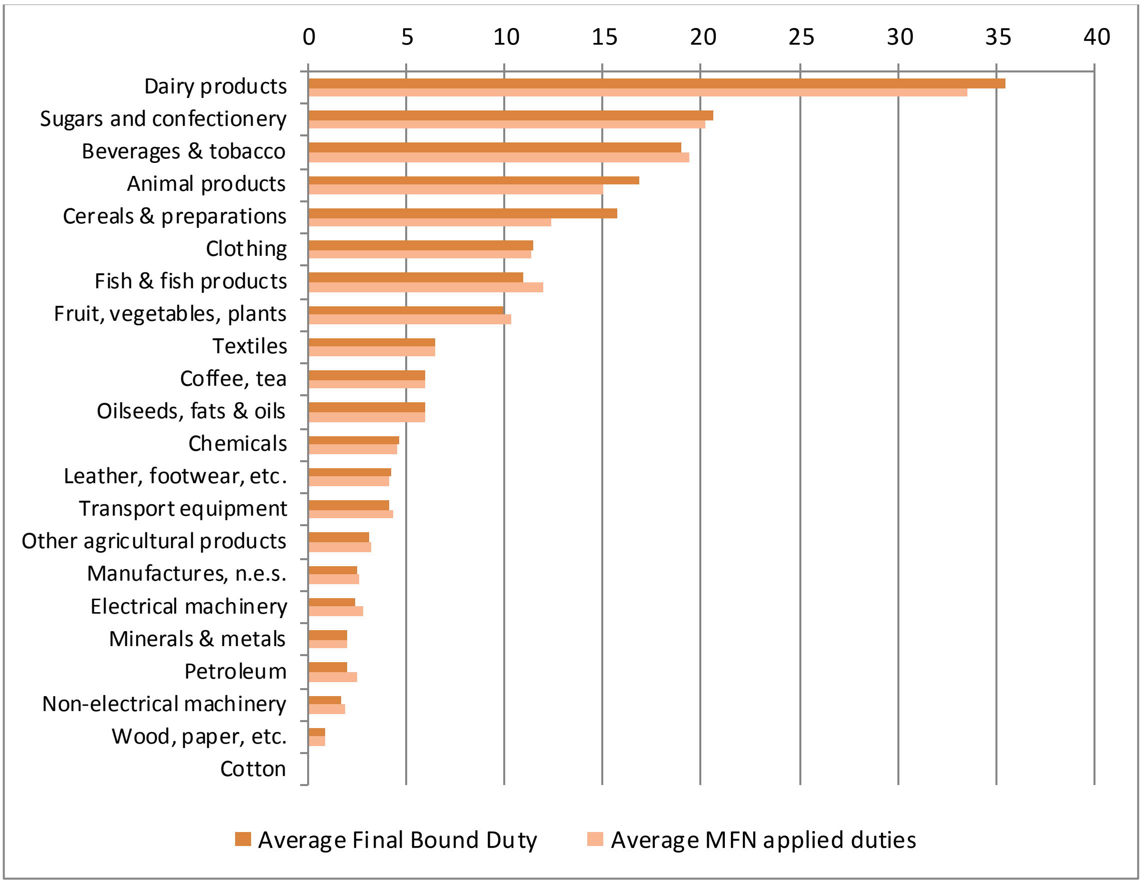
Would unilateral tariff reduction lead to the end of British manufacturing?

Lowering trade barriers is potentially the single most powerful tool we have to increase effective competition and ultimately productivity, ensuring the UK economy focuses on industries and firms where it has a real future comparative advantage. There is as good or better evidence for trade's impact on productivity as any of the Government's ten pillars of its Industrial Strategy: R&D, skills, infrastructure, business support, procurement, export promotion, energy, sectoral targeting, regional policy and institution development.

Beyond this, by introducing greater competitive pressure reducing trade barriers offsets some of the risks that a wider Industrial Strategy will descend into 'picking winners' and entrench incumbents. Embracing unilateral free trade is a good way to ensure leaving the Single Market does not lead to lower levels of trade or competitive pressure, as some economists have feared.[35]

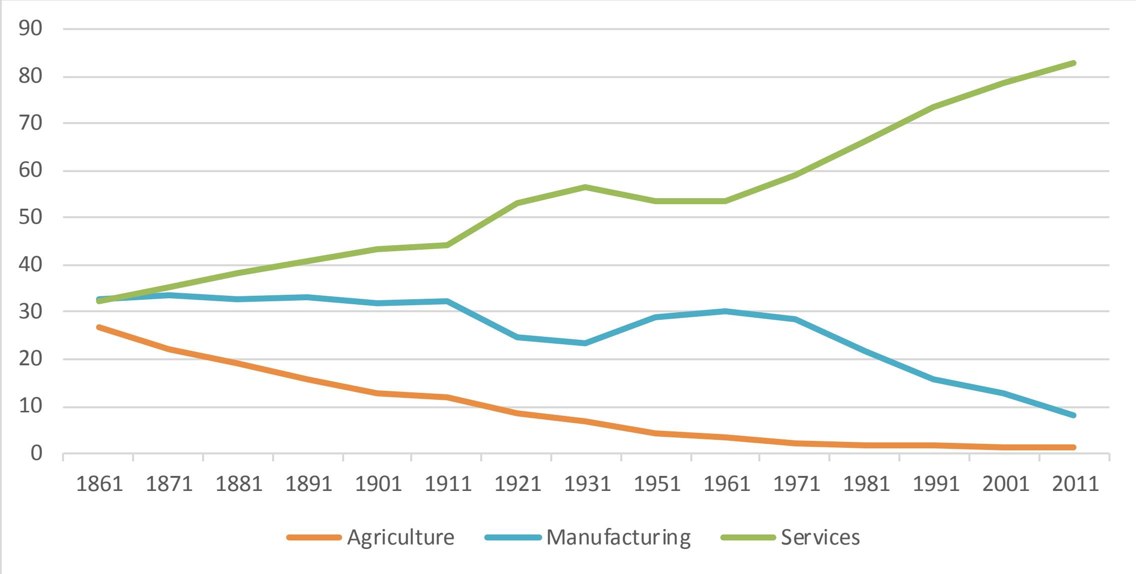
Many commentators however worry instead that unilateral tariff reduction would decimate British manufacturing and, if subsidies are removed, agriculture. Under the Customs Union, the EU still sets very high tariffs on certain agricultural products, textiles, and some manufacturers such as cars, without which many British producers might struggle.

Figure 3: European Union Tariffs by product group (WTO[36])



Putting to one side for now the distributional effects, it would not necessarily be the end of the world if agriculture and manufacturing shrank further as a proportion of the economy. There is no magic level for the share of the economy which has to be manufacturing, with both it and agriculture in relative structural decline as a proportion of employment for decades or centuries. Both agriculture and manufacturing are relatively easy to automate or transport, while services still require a high degree of local skilled labour. Even more significant, as society gets richer consumers have largely chosen to spend their additional income on services rather than piling up extra goods or food. Since 1980, just 13% of the increase in incomes has been spent on manufactured goods.[37]

Figure 4: Share of Employment by Industry (Bank of England)



Whatever happens to trade policy, these trends are likely to continue. Despite the recent political backlash, globalisation is unlikely to go into reverse. Changes in trade policy are only a relatively small factor compared to deeper technological forces. One estimate suggested that the container ship revolution alone was responsible for a 700% increase in advanced economy North-North trade, more than all world trade agreements put together.[38] Looking forward, machine learning, big data and self-driving vehicles will further increase the potential for automation in both agriculture and manufacturing, reducing the need for human labour.

BOX: How would unilateral tariff reduction affect the car industry?

The UK is a major producer and exporter of cars – 1.72 million were made in 2016 and almost 80% of these were exported. Last year these were worth £40 billion and 56% (around £22 billion) of these were exported to elsewhere in the EU. At present the UK, as a member of the EU customs union, imposes 10% tariffs on cars imported from outside the EU. Not surprisingly around 70% of car imports to the UK are from the EU. Removal of tariffs will mean that all cars – no matter their country of origin or indeed the country composition of components could be imported free of tariffs into the UK.

Production of cars in the UK involves complex integrated supply chains with components often crossing borders several times before being used in final assembly. Tariffs on components from outside the EU average 4.5% so their removal would add to the level playing field in the market for cars in the UK. On average 60% of a UK-made car actually consists of foreign sourced components, around 80% of which come from the EU. The remaining 20% of components would have import tariffs removed under unilateral free trade reducing in some cases the costs of domestic production. However, those components that move between the UK and EU potentially may be subject to tariffs imposed by the EU.

The abolition of tariffs on all car imports would create a level playing field for selling into the UK car market, bringing major benefits to UK consumers. Many factors influence the demand for cars in different markets. Toyota's premium brand Lexus is produced mainly in Japan, with the exception of two models made in Canada and the US. Data from Toyota show that North American production can account for at most one-half of US Lexus sales in 2017, so that at least half will be imported. By contrast in Europe 100% of Lexus cars are imported since there is no production there. In 2017 the market share of Lexus was 1.8% in the US and 0.3% in Europe. Tariffs on imported cars are 2.5% in the US and 10% in the EU[39].[*]

The British economy does not have to produce its own food, cars or textiles to be a success – and especially so, if these industries are not sustainable without tariff protection. Australia, for example, recently ended domestic car production.

In practice, however, even if all tariffs disappeared tomorrow, British agriculture and manufacturing would be unlikely to completely disappear:

- By stimulating structural reform and higher productivity, reducing trade protection can actually increase the long term sustainability of an

[*] The text of this paragraph has been edited compared with the original published version of this Report in order to give more detail on Toyota/Lexus sales and production data.

industry. The elimination of most agricultural tariffs in New Zealand actually preceded farming increasing as a share of the economy, while conversely repeated attempts to protect British industry in the post war era did little to increase its viability or turn around decline.

- At 2.5%, the average Customs Union tariff on manufacturing is relatively low, suggesting that the removal of tariff barriers is a minor factor compared to major fluctuations in exchange rates.
- Whatever happens to tariffs, the car industry is likely to undergo substantial disruption in coming decades from the shift to electric, self-driving and on-demand vehicles. Current UK producers will thrive to the extent they can adapt to and even lead on these structural shifts.
- While a post Brexit reform of CAP could lead to some reduction in active farmland, there are likely to be opportunities for decades to come for farmers to receive subsidies to deliver public goods such as environment protection or an improved landscape.

A gradual phase out of tariffs will inevitably create some losers. While the economic liberal reforms of the 1980s helped turn around Britain's post war decline, bringing about a structural change in productivity, they also created new pockets of unemployment and deprivation. How can we mitigate these adverse effects during a move towards unilateral tariff reduction?

BOX: How would unilateral tariff reduction affect agriculture?

Along with cars, agricultural produce is the most protected sector within the EU with large tariffs charged on imports of a wide range of agricultural produce, including especially meat (processed and unprocessed), dairy products and sugar and confectionary. The average tariff on agriculture is 8.5%.

The farming industry in the UK has been operating in an artificial market with zero tariffs on EU imports but significant ones on those from outside the EU. Not surprisingly the "agri-food" industry is more greatly integrated with the EU than other industries: 60% to 65% of agri-food trade is with the EU compared with close to 50% for all industries. UK food exports were £20 billion last year and imports £43billion giving a deficit of £23 billion.

A unilateral removal of tariffs by the UK would inevitably result in major changes to both the demand and supply side of the farming and food industry. On the demand side UK consumers would have access to cheap high quality food from countries such as the US, Argentina, New Zealand and Australia. This adjustment may involve government assistance to smooth the transition, including the phasing out of tariffs and direct subsidies.

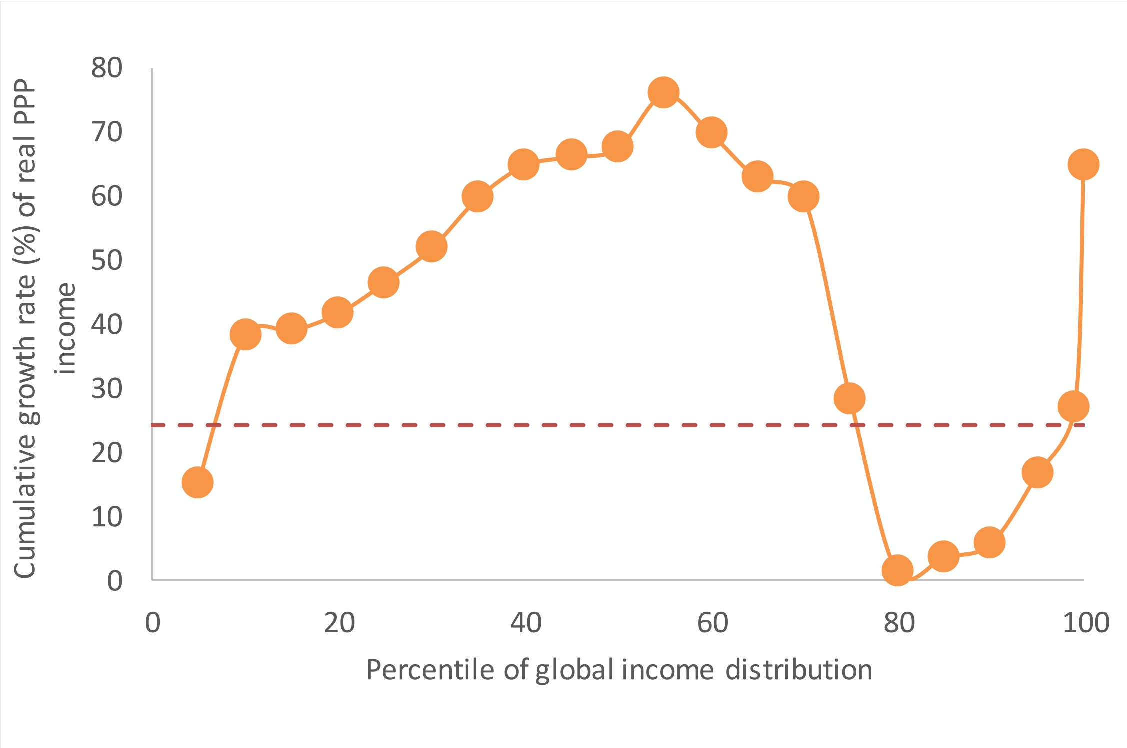
These issues are explored in depth in Policy Exchange's recent report *Farming Tomorrow*, published in August 2017.

Does trade liberalisation increase inequality?

Does free trade leave some regions behind?

The standard story around globalisation is that while it has been good for the global poor and elites in advanced economies ("the 1%"), it has left many middle class workers behind. The authors of the famous 'elephant curve' Lakner and Milanovic (2015) estimate that the median global citizen saw their income increase a cumulative 67% in real terms between 1988 and 2007, whereas the eighth to ninth decile was basically static. This group – some 420 million – belonged almost entirely to the bottom half of the income distribution from mature economies.

Figure 5: Global growth incidence curve (1988-2008, Lakner and Milanovic)



Basic economic theory suggests that income inequality will increase when a country with plentiful skilled workers and relatively few unskilled such as the UK expands trade with an economy with plentiful unskilled workers and few skilled such as China. As the supply of unskilled workers becomes more abundant, their price – or wage – goes down; conversely, high skilled workers become relatively scarce, leading to their compensation increasing.

In practice however, the effects are not quite this straight forward:

- By increasing global productivity, globalisation has also led to a pro-poor reduction in the cost of living in many basic consumer goods, significantly benefiting the middle classes.
- As the Resolution Foundation has argued, the elephant curve is relatively misleading about the fortunes of Western middle classes: uneven population growth explains a significant part of the apparent stagnation of household incomes, while there is significant variation in the experience of different advanced economies.[40]
- The UK, at least until the mid 2000s, has continued to exhibit strong growth in household disposable income and significant growth in the employment market right across the income distribution.[41] While China has continued to grow as a proportion of world GDP, inequality in Britain has not increased for over twenty years.

One reason that middle income households in the UK have continued to prosper is that, as alluded to above, trade is only a relatively small factor compared to other structural changes in the economy.

For much of the last thirty years, the consensus among economists has been that changes in technology rather than trade is the principal explanation for the awkward stagnation seen especially in the American labour market, but to a lesser extent across the West: slow growth for average wages, a hollowing out of the middle jobs and decreasing labour force participation, particularly among men.

The IMF's April 2017 World Economic Outlook, for example, finds that about half the overall decline in labour's share over the last 25 years in advanced economies can be explained by technology.[42] By reducing the cost of investment goods, technology has encouraged the replacement of labour with capital. Since capital tends to be owned disproportionately by those with higher incomes, the effect of technology has been to boost income inequality in advanced economies. Other studies, mainly on the US, have attributed well over half of the job losses in manufacturing to the effects of automation and digitalisation.

There were many reasons for blaming technology rather than trade for increased inequality. Manufacturing jobs have been in decline for many decades before the acceleration of world trade - and while employment has fallen, output has continued to rise, suggesting higher productivity rather than offshoring as the major factor. Much of the rise in inequality started in the 1970s, too early to be explained by China. If trade was the major factor, as theory predicted you would have expected to see a mirroring decrease in inequality in developing countries - but they saw rises instead.

However, in recent years, some economists have started to change their minds. China's accession to the WTO in 2001, and the confidence it gave to invest in export orientated manufacturing, presaged a massive surge of Chinese imports to economies such as the UK and US. While technology is still likely the most significant factor, the sheer 'shock' scale of China's entry into world markets may have created its own transitional short term effects. Recent papers such as Ebenstein et al (2015) and Autor et al (2016) find that increased penetration of trade has negative impacts on wages and employment persisting in local areas up to a decade after the initial shock. As Autor points out, China's share of world manufacturing value grew from 4% in 1991 to 24% in 2012, a sixfold increase that was bound to have dramatic knock-on effects elsewhere.

Similarly, Pessoa (2016)[43] finds that in the UK sectors facing competition from Chinese imports between 2000 and 2007 saw (i) a decrease in workers' earnings (ii) an increase in the number of years spent out of employment and (iii) a greater impact on low paid workers. At the same time however, Pessoa also finds a 2.6% increase in the level of real consumption due to the reduction in prices brought about by trade.

In other words, even in the short term, increased trade has been good for the majority, suggesting that policies that attempt to restrict it are mistaken. However, a trade 'shock' can also have significant negative effects on employment and wages in those sectors most affected. Moreover, these effects persist for a prolonged period for many of the regions and individuals affected.

Regional specialization means that often these effects are concentrated in particular cities or regions, making the negative effects more visible and focused. The effects of economic shocks on regions tend to be long lasting and pernicious. The classic example in the UK is the closure of coal mines in the north of England and south Wales the 1980s and 1990s. Even after 25 years former coal mining communities remain blighted by high unemployment and low levels of labour market participation.

One recent study identified those areas/towns most affected by increased competition from China in terms of increased unemployment, lower wages etc. The study made the case that there was a strong positive correlation between those 'left behind' areas most affected by import competition and the strength of the leave vote in last year's EU referendum. Areas most affected by import competition include Port Talbot (steel), Blackburn (textiles) and Northampton (shoes). All three voted to leave the EU by a greater margin than the UK average.[44]

Any move towards unilateral trade liberalisation should ideally be phased in, giving vulnerable industries and their workers some time to adapt. Nevertheless, like any structural economic shift, there will inevitably be some industrial churn.

How can we help those negatively affected by trade?

Most schemes specifically targeted at those affected by import competition have a mixed record.

Perhaps the oldest and best known example of such a programme is the US Trade Adjustment Assistance (TAA) programme which began in 1962. The TAA is aimed at workers in firms which have suffered a loss of output as a result of import competition or where the firm has shifted production overseas. TAA has an annual budget of around $800 million. Assistance can be given to displaced workers for up to two years to cover the costs of retraining, job search and relocation. For older workers the scheme pays half the difference between previous pay and the lower pay in a new job. The scheme has a patchy history and in its latest form is not being used to any great extent. In the 12 months to September last year only 127,000 workers were receiving TAA. Indeed, most workers affected by import competition receive only a small proportion of their income from TAA. Instead, most income comes from sources such as disability or retirement insurance or federal government income assistance. Evaluations of TAA have tended to conclude that it provides "very expensive benefits for a small fraction of laid-off workers."[45]

The corresponding trade assistance scheme in the EU is the European Globalisation Adjustment Fund (EGF) which began operating in 2007 and has similar aims to the TAA in terms of active labour market policies i.e retraining, education, careers advice for those workers in industries affected by import competition. Direct income support is excluded from the EGF as this is the domain of individual member states. The EGF has an annual budget of €150 million up to 2020 – its measures are co-funded, with 40% of costs coming from the EU member states applying for funds. It is possibly for this reason that the UK (along with several other countries) has not used the EGF and seems very unlikely to do so before leaving the EU. The official position of the UK is that domestic resources for this purpose are better used elsewhere than in EGF schemes. Evaluations to date of the EGF have so far been done by or on behalf of the European Commission and have overall come to relatively positive conclusions in terms of value added.

As the UK's position suggests, one reason trade adjustment schemes have seen limited take-up is the fundamental difficulty in disentangling between the impact of technological and trade driven change. While politically we tend to treat the two cases differently – most people do not feel like there should be compensation for being driven out of business by a more efficient domestic competitor – economically speaking, the two are broadly equivalent.

Looking forward, even in a world of zero tariffs, technology is as likely to continue to be as significant a driver of structural change. Frey and Osborne (2013) estimate that up to 35% of current UK jobs are at high risk of automation in coming decades.

Equally, those most affected by trade are not necessarily the same workers as those who directly lose their jobs. Past experience suggests that many of these workers tend to be relatively highly skilled, which helps them to find new work. This new position, however, is often worse paid, and in the process they displace another less skilled worker who may leave the labour force. Many deprived areas, for example, saw a rise in disguised unemployment for women, despite few of them having worked previously in coal fields.

Not every local economic area sees this kind of downward spiral. Even when the economy is booming, a substantial proportion of jobs are created and destroyed every year – generally with little long term effect on unemployment or labour market participation. For example, between 1998 and 2008, an average of 13.4 per cent of private sector jobs were destroyed a year.[46]

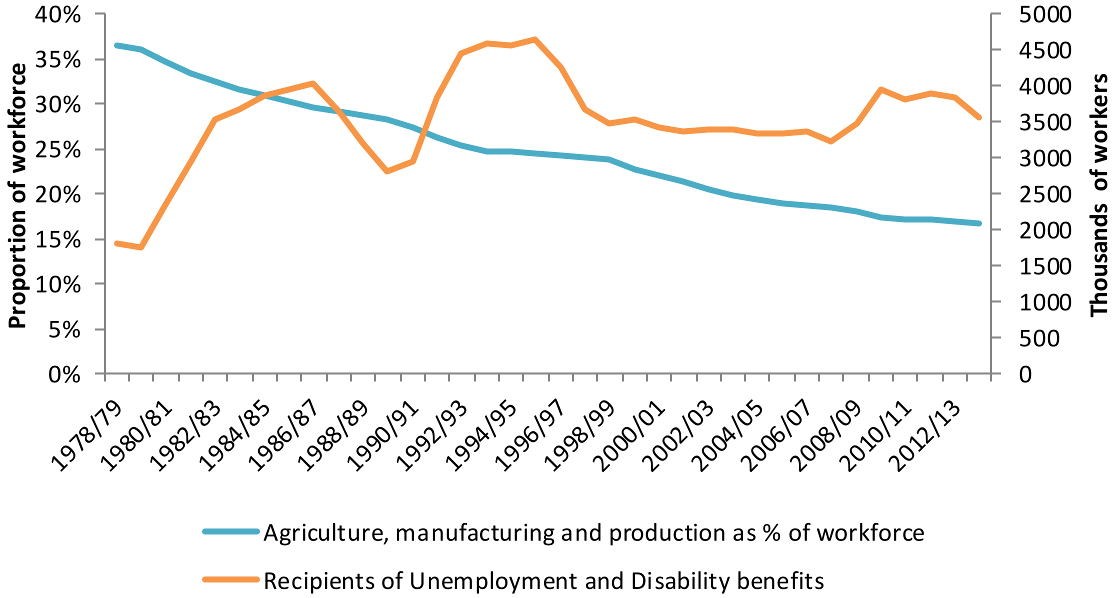
The most significant problems come when a local area is geographically isolated, and a single declining industry makes up a large proportion of employment. The Midlands, for example, has adapted far better to the shift away from manufacturing than South Wales.

Given the low concentration of agricultural workers – even in rural areas, it makes up just 7.6% of employment - a decline in farming is unlikely to have systemic effects or lead to a rise in unemployment. Farmers themselves can be compensated with transitional subsidies, while given their median age is 59, many will be able to retire before subsidies are fully phased out.

However, the more important point is that changes in broad welfare and labour market policy are as or more important than structural changes from trade or technology. Poorly designed incentives can trap workers in structural unemployment, while the right combination can ensure labour supply and demand remain strong. In the 1980s, many workers were placed on disability benefits rather than unemployment benefit (now jobseekers allowance), increasing their distance from the labour market. The loss of 250,000 coal industry jobs, for example, led to little long-term increase in claimant unemployment in mining areas.[47]

The substantial reforms undertaken to welfare from the mid 1990s, including the introduction of Incapacity Benefit, Jobseeker's Allowance and the New Deal workfare programme helped stop the increase in welfare caseloads. While manufacturing continued to decline as a proportion of the economy from the late 1990s on, unemployment, disguised or otherwise, stayed flat.

Figure 6: Structural economic shifts and unemployment



Looking forward, the UK will have to do more work to prepare the economy for the impact of automation and future structural change: taking advantage of digital platforms to improve lifelong learning; experimenting with the tapers in Universal Credit and new forms of conditional welfare; reforming careers advice and reducing the barriers to labour mobility. Even in the short term, the last pre-Brexit official UKCES forecasts estimated that manufacturing employment would fall by 8.6% between 2014 and 2024.[48] Phased in tariff liberalisation may marginally speed this up, but is unlikely to change the deeper trends substantially.

Does unilateral liberalisation reduce negotiating power?

Do trade negotiations need to be reciprocal?

While distribution effects and vulnerable industries may imply a phased in approach, by far the most fundamental argument given against unilateral liberalisation is that it would weaken Britain's hand in future trade negotiations. Trade negotiations, under this point of view, work best when they are reciprocal.

BOX: Trade Negotiations in the Post-War Period

The aftermath of the Great Depression and the Second World War brought about a new era of protection, which it would take much of the second half of the twentieth century to disentangle. First conceived at Bretton Woods in 1944, the General Agreement on Tariffs and Trade was signed by 23 countries in 1947, and over the course of 8 multilateral rounds of tariff negotiations helped tariffs fall from an average 22% to under 5%. As part of the Uruguay Round in 1994, supervision of the agreement was formalised under a new World Trade Organisation.

The failure of the ninth Doha Development Round in the 2000s – chiefly over disagreements over agricultural subsidies – led to a turning away from multilateral negotiation in favour of a new era of proposed bilateral and region based agreements such as the Transatlantic Trade and Investment Partnership (TTIP) and Trans-Pacific Partnership (TPP). With tariffs now already relatively low, the focus of most deals is increasingly on regulatory harmonisation and non tariff barriers.

There are two main arguments given for why reciprocity is important in negotiations: the academic rationale – largely ignored elsewhere – and a more informal theory of effective negotiation.

The academic rationale for reciprocity – see, for example, Bagwell and Staiger (1997) -relies on the idea of terms-of-trade effects. In theory, a country or industry with monopoly power can use an 'optimal tariff' to increase its profits at the expense of other countries by restricting supply to drive up prices – as OPEC has managed to do semi-successfully over the last few decades. In order to avoid this, the argument goes, countries should negotiate reciprocally to avoid a race to the bottom.

In practice, almost no real world trade negotiation is based around the principle of avoiding terms-of-trade effects.[49] It is questionable whether a small open economy like the UK really has market power in many industries, while there is perhaps something a little immoral around deliberately seeking to create a cartel and exploit market power.

The more relevant argument comes over the importance of bargaining power. While it is possible to create a complex game theory model of optimal negotiation strategy, in practice most commentators mean something much simpler. Reciprocity is a basic feature of human fairness – there is a good deal of evidence that this instinct might be innate[50] - and negotiations are more likely to be successful if they adhere to it. Even if you think this framing of reciprocity is a mistake, and follow Joan Robinson in believing tariffs to be equivalent to putting rocks in your own harbour, in practice much of the general population has more mercantilist assumptions. Pretending that reducing tariffs is a hard concession can be a useful to maintain the complicated domestic political coalitions that are needed to pass trade deals.

This is not a new argument. Back in 1931, a collection of essays on tariff policy edited by William Beveridge dedicated a chapter to refuting it, complaining of those, who believed that "the only effective weapon against a tariff is a tariff." He went on to argue that, "[this is] a disastrous misunderstanding of human nature… bargaining with tariffs is bargaining with livelihoods. Those who wish to push on a tariff at once that Free Trade may follow, go one stage further than those who seek peace by preparing war. They seek peace by making war, not by preparing it."[51]

Nevertheless, the importance of reciprocity remains central to arguments over future trade policy, with both the Treasury[52] and the LSE's Centre for Economic Performance[53] relying on it to dismiss the practicality of universal liberalisation. Reciprocity remains at the heart of most WTO negotiations, a relic of GATT's creation in an era of fixed exchange rates and the implied concerns over trade imbalances.[54]

As Beveridge's text argued, however, there is little evidence that reciprocity is needed for trade negotiations – and certainly countries that start highly protected do not seem to have a better record in trade negotiations than those without. Today, countries such as Hong Kong, Singapore and New Zealand that have unilaterally substantially lowered their tariffs have still been able to negotiate extensive numbers of Free Tree Agreements.

In the real world, reciprocity is far more nuanced than tit-for-tat reduction in tariffs. Reciprocity is not measured in the moment, but over the long course of a relationship, whether between people or countries. As famously suggested by psychologist Robert Cialdini, one of the most powerful tactics for influence is the unilateral giving of a favour – waiting for value to be returned, rather than demanding it up front.[55] In the arena of trade, the UK has been precisely most influential when it has first unilaterally lowered its own tariffs – not through strict negotiation.

More to the point, true reciprocity depends on the swapping of real value. The UK cannot be a true global champion of free trade, making a principled case for its importance, and simultaneously introduce new tariffs or try to pretend that reducing them is a sacrifice. If we want to convince the world of the importance of trade liberalisation, we will have to be consistent and demonstrate we mean what we say. Actions are more convincing than words.

It is notable that many who argue for the importance of maintaining negotiating leverage, do not apply the same frame when it comes to other international issues or global public goods, such as defence, aid, science or fighting climate change. Instead, we recognise that waiting for perfect mutual reciprocity is a recipe for retreating to the lowest common denominator – and look to some nations to assert moral leadership. The recent Paris agreement on climate change, for example, allowed nations to make their own commitments for what they would do to reduce carbon emissions. The only reason that trade is seen differently is that people continue to view it through the mercantilist lens of negotiating access for exports – when lowering barriers to imports should be the focus.

As many have argued, tariffs are now both relatively low and only a small part of modern trade negotiations. Given that, it is difficult to see how they can provide much negotiating leverage – especially if the UK is arguing consistently of the harm they create. Modern negotiations are complex enough that, if needed, there are many other regulatory carrot and sticks that can be used, either to create leverage or symbolic political victories. In many cases, the prize of a new trade deal is likely to be a victory enough for a British audience.

Would unilateral tariff reduction undermine a UK-EU trade deal?

In practice, the main trade negotiation that sceptics are worried about sabotaging is a near- term deal with the European Union.

Given certain assumptions, it is easy to see why unilateral liberalisation might looks like a risky policy:

- **"Tariffs no longer matter."** Given their relatively low levels, remaining tariffs have only small impacts on welfare. Liberalisation would increase GDP only in the order of 0.3%.

- **"Focus on your natural trading partners".** As shown by 'gravity models', patterns of trade are still heavily influenced by distance, implying that maintaining good relations with your neighbours should be a priority

- **"Bilateral deals are inefficient."** The best way to pursue widespread tariff reduction is through multilateral or regional agreements, with bilateral deals at best second best.

- **"Trade negotiations are politically useful."** Bilateral trade negotiations create a frame on which to obtain political buy-in, making use of external pressure to overcome domestic special interests.

However, in reality, all four assumptions are questionable:

- **Tariffs have an important effect on productivity.** The direct impact of most remaining tariffs on prices may be relatively low, but their wider dynamic impact on competition and productivity can be an order of magnitude larger. Choosing the right trade policy matters.

- **Distance isn't the only determinant of trade.** It is true that the European Union is Britain's single most important trade partner. To what extent this represents trade diversion rather than geographic fundamentals is not completely clear – the UK's pattern of trade was much more far flung in the first half of the twentieth century. Neither is it clear how relevant gravity models are to an advanced services-dominated economy with long-standing global links.[56] It is hard to see why pure distance, as compared to cultural links, should matter in a digital economy. The EU's share of British exports peaked in 1991, with growth since coming largely from Asia and North America.

- **Multilateral negotiations are stalled.** Both multilateral and regional trade negotiations are a good thing. However, neither is in a healthy state at present. The Doha trade round seems to have permanently stalled, while political hostility to regional agreements is growing in both the United States and European Union. Waiting for total consensus is likely to lead to significant delays before further progress.

- **Trade negotiations encourage special interests.** In the best possible world, trade negotiations can be used to make politically hard domestic choices. Unfortunately, as likely however, is that negotiations create new opportunities for industries and lobbies to co-ordinate on new regulatory demands to exclude new entrants and foreign competitors.

None of this is to say that trade with the EU does not matter. In theory, the importance of a regional trade agreement can be exaggerated – as well as encouraging new trade ('trade creation'), they also can divert trade away from other more efficient providers ('trade diversion'). Measuring the balance between these two is difficult, with econometrics estimates depending heavily on the assumptions made.[57] Nevertheless, most of the literature agrees that the EU has seen more trade creation than trade diversion.[58] (

In practice however, unilateral liberalisation is more a process than a single event. In principle, outside the Customs Union the UK could immediately lower its applied or bound tariffs to zero. Given the shock impact that would create on domestic industries such as agriculture or manufacturing, however, the UK would ideally phase out remaining tariffs and tariff rate quotas over a process of five to 10 years.

The only exception to this would be an abrupt 'No Deal' scenario, in which the breakdown of negotiations leads to the UK leaving the EU with no transition deal and in response, the EU imposes its WTO MFN tariffs on the UK. If this did occur, the UK should not make matters worse by imposing its own tariffs on EU imports – but the WTO's MFN rules would require any unilateral elimination of EU tariffs to be extended to all other countries. This would require emergency time-limited subsidies for affected industries to prevent disruption to specific industries.

The most likely scenario however remains the signing of a special UK-EU trade deal, alongside the gradual phasing out of other tariffs over five to 10 years. This gradual process of liberalisation opens up the possibility for compromise. Any EU deal is likely to be complete long before the process of unilateral tariff reduction for other countries is completed, and so even those who would prioritise a European trade deal should be able to agree to unilateral liberalisation after it is signed.

Would unilateral tariff liberalisation risk higher non-tariff barriers?

While tariffs matter, they only make up around a quarter of the remaining policy barriers to trade. Modern trade deals focus more on other subtler barriers than tariffs, from quotas to distortive subsidies to deliberately protectionist regulatory standards. Some have argued that the concept of a 'trade deal' is a misnomer, with a more accurate description being a 'regulatory harmonisation agreement.' While eliminating the UK's current 3% average tariff may be helpful, such arguments go, it is unlikely to compensate for losing regulatory access to our largest markets.

This, however, is something of a non-sequitur. Regulation matters, but it is distinct from tariffs. Trade negotiations like TTIP and TPP put enormous effort into trying to agree common regulatory standards – the success of which has very little to do with other discussions over tariffs. While retaliatory tariffs are sometimes introduced as 'punishment' for other non-tariff barriers that are seen as unfair, the reverse is rarely true. The EU would be highly unlikely to start allowing imports of American hormone growth beef in exchange for the US lowering its agricultural subsidies. Similarly, decisions over how to manage future UK-EU regulatory divergence in standards for food or medicine will be made over fundamentals – not whether the UK tries blackmail to get its way through a tariff.

More fundamentally, while regulatory alignment can be helpful, we are unlikely to be in a world of complete regulatory harmonisation. Different democracies will make their own choices over issues like safety, environmental or animal welfare standards. Ideally, this kind of policy experimentation can be a helpful way for the world to learn what works and what doesn't. In any case, wherever possible, the UK should be seeking to solely follow the best scientific evidence rather than implicitly protecting its domestic industry.

Economies of scale in regulation can be helpful – particularly in industries like pharmaceuticals with high fixed costs for clinical trials, and larger markets make it easy to find enough patient participants. One estimate suggests that the current regulatory differences between the EU and US costs over $20 billion a year, reducing auto trade by 20%.[59] Nevertheless, many countries and their companies thrive despite not belonging to either of the two giant common regulation areas of the US or EU. Neither do we really want to move to a zero sum world in which individual countries are forced to choose between one of two regulation systems, with little chance to sell between.

One solution to this tension is to focus on regulatory equivalence rather than absolute harmonisation. What we care about it is if a regulation achieves the goal we care about, not the precise method it uses to get there. For all the many differences in car regulations between the US and EU, it is notable that the safety record is largely identical in both. Neither is it clear why if the FDA or EMA have already gone through the (highly) expensive process of approving a drug or medical device the other needs to repeat it.

Focussing on regulatory equivalence rather than harmonisation allows for the creation of a true single market not just within Europe, but across advanced economies. (This was largely the goal of TTIP.) The world is already moving slowly towards greater use of mutual recognition, with over 130 Mutual Recognition Agreements created over the last 20 years.[60]

Beyond liberalising trade, focusing on regulatory equivalence also aligns well with a drive towards greater outcomes-based regulation at the domestic level. By contrast, process specific regulation slows innovation, raises barriers to entry and creates a structural bias in favour of incumbents.[61]

While we normally talk of mutual recognition of regulation, if needed, the UK also has the opportunity to act unilaterally here too. Other countries do not have to accept our regulatory standards for us to accept theirs. While some scare stories have warned that leaving the purview of the European Medicines Agency could lead to unnecessary deaths with pharmaceutical companies targeting the larger market first,[62] there is nothing to stop the UK from automatically green lighting any medicine approved by the EMA (or FDA, for that matter.) Singapore, for example, has a system in which medicines that have already been approved by at least two other reference agencies can skip the normal 270-day authorisation process for a vastly accelerated 60-day route.[63]

In other words, many non-tariff barriers on imports are neither automatic nor inevitable, but will only happen if we choose them.

Unfortunately, the UK has less direct control over non-tariff barriers on exports. While the ideal would be extensive mutual recognition with the EU, this may be politically impractical in the short to medium term. Even in this case however, UK firms would still have the option for themselves of targeting European standards. While the UK would no longer have any direct say over those standards, outside the EU it would have greater ability to influence wider international standards managed by the WTO – and simply by providing a competitive alternative to the EU, it may have actually a strong indirect influence on their evolution. Similarly, it is worth remembering that for many of the UK's most important services exports the Single Market is already incomplete.

To sum up, if the UK is to be a global champion of free trade, there are strong arguments for adopting a unilateral ethos in its approach to regulation and wider non-tariff barriers too. Ultimately however, this is a separate question, and does not need to hold up the technically easier matter of tariff reduction. Whatever happens to regulatory barriers going forward, creating new tariffs is unlikely to be the answer.

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