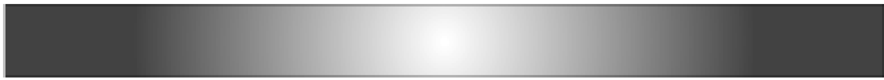


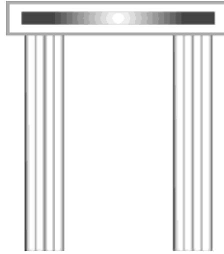
Patrick Minford

Trading on the Future

Brexit Trade Options and the UK Economy

POLITEIA

A FORUM FOR SOCIAL AND ECONOMIC THINKING



POLITEIA

A Forum for Social and Economic Thinking

Politeia commissions and publishes discussions by specialists about social and economic ideas and policies. It aims to encourage public discussion on the relationship between the state and the people. Its aim is not to influence people to support any given political party, candidates for election, or position in a referendum, but to inform public discussion of policy.

The forum is independently funded, and the publications do not express a corporate opinion, but the views of their individual authors.

www.politeia.co.uk

Patrick Minford

Trading on the Future

Brexit Trade Options and the UK Economy

POLITEIA

2017

First published in 2017
by
Politeia
14a Eccleston Street
London SW1W 9LT
Tel. 0207 799 5034

E-mail: secretary@politeia.co.uk
Website: www.politeia.co.uk

© Politeia 2017

ISBN 978-0-9955699-2-8

Cover design by John Marenbon

Politeia gratefully acknowledges support for this publication from

The Foundation for Social and Economic Thinking (FSET)

Printed in Great Britain by:
Plan – IT Reprographics
Atlas House
Cambridge Place
Hills Road

Cambridge CB2 1NS

THE AUTHOR

Patrick Minford is a macroeconomist who holds the chair of Applied Economics at Cardiff University. Before academic life he was an economic adviser to Her Majesty's Treasury's External Division and editor of the National Institute Review. His economic interests include monetary economics, macroeconomic modelling, trade economics and Labour market economics. Recent publications include: *Breaking Up is Hard to Do: Britain and Europe's Dysfunctional Relationship* (IEA, 2016) and *Should Britain leave the EU? An economic analysis of a troubled relationship*, (with S. Gupta, V. Mahambare, V. Le and Y. Xu) Edward Elgar, second edition, (2015).

CONTENTS

Introduction
The Coming Trade Negotiations –
The Government's Strategic Options 1

I. Unilateral Free Trade v Pursuing FTAs 6

II. The Costs: Pursuing Free Trade –
The UK's Options 9

III. Manufacturing Industry:
What the Picture Would Look Like 14

IV. Misplaced concerns about free trade 17

V. Next Steps: Britain's Trading Future –
WTO and the Routes to Free Trade 22

Appendix 1
Current Arrangements – Calculating the Cost 26

Appendix 2
Why Protectionism Must Go 33

References and Bibliography 40

Introduction
The Coming Trade Negotiations: The Government's Strategic Options

The prime minister, Theresa May, has made clear that Britain will leave the EU and the Single Market and seek tariff-free trade with the EU. The UK will also leave the Customs Union and negotiate a bespoke arrangement. The aim is for Britain to be free to establish its own tariff schedule at the WTO …[and] reach agreements, not just with the EU but with old friends and new allies from outside Europe too …' (https://www.gov.uk/government/speeches/the-governments-negotiating-objectives-for-exiting-the-eu-pm-speech)

Mrs. May's eminently reasonable desire to reach a Free Trade Agreement with the EU faces a major obstacle, over which she has little if any control: the possibility that the EU will not agree to any such FTA, instead insisting that only full adherence to the Single Market and Customs Union as currently constituted is available, with its existing obligations of free migration and subjection to EU regulation. There are several variants on this position, such as agreeing to an FTA outside the Customs Union but only with free migration and EU regulation. Any position of this type that insists on free migration and EU regulation breaches the post-referendum 'red lines'.

There is little point in discussing whether this is likely or not, as we simply do not know. What is needed is a trade strategy that is optimal and can adjust to whatever any other country will agree to.

The Trade Negotiations: Dealing with the complexities

Political action is often constrained in practice and we need to consider how the UK government can avoid the worst traps that lie ahead.

There are three key decisions the government must make:

- If no FTA is agreed with the EU prior to exiting the EU and the EU raises import tariffs against us, should we retaliate against the EU by erecting our own import barriers against the EU (the 'Tit-for-Tat Strategy')?

- Should global free trade be pursued on the basis of negotiating FTAs with the rest of the world or by unilaterally dropping our import barriers to zero?
- What policy should be followed with regard to the Common Agricultural Policy (CAP) and its associated tariffs on food?

This analysis will consider these options for the UK's forthcoming trade arrangements once Article 50 has been triggered. It will assess the likely outcomes both to consumers and government revenue and consider the WTO free trade option as distinct from the status quo and the implications for the UK of tariff free trade. It will propose and explain the best course for the UK if the EU refuses an acceptable Free Trade Agreement, providing also an illustration of outcomes for manufacturing industry in terms of profit gains and total gross value. Full details of the many calculations and arguments presented here can be found in Minford and Miller (2017).

I will assume throughout, as implied by the government's policies, that the UK will take charge of its immigration policy and reclaim regulative authority over all areas of activity in the economy. These assumptions imply that we will disregard here the costs imposed by unskilled immigration or by the EU's exercise of its regulative powers in the UK. They also imply that UK membership of the EU's Single Market is an impossibility, since this entails both the supremacy of EU regulation and the acceptance of free migration to and from the EU. Plainly also UK membership of the EU Customs Union is impossible given the UK policy of seeking FTAs and free trade with non-EU countries. Whether an FTA between the UK and the EU involves some limited coordination of tariffs is a matter for negotiation.

The analysis concludes with a summary of proposals for next steps, both for the UK's future trade agreements with the EU and the rest of the world (ROW) and the steps needed, internally on the political front in order to help those producers, who initially would lose out from Brexit, e.g. farmers and manufacturers. An appendix will be included to calculate the cost of current

arrangements and protectionism and explain why it is in the interests of all that that regime is ended.

Some Background to the Discussion

In approaching Britain's negotiations to leave the EU, it is important to remember that the Brexit referendum was essentially a battle between UK producers and UK consumers (that is, all UK households). This is because the main effect of the EU is to raise prices through protection and regulation to benefit groups of producers. Their consumers pay these higher prices. Moreover producers also benefit at the expense of consumers by the taxes levied to subsidise unskilled immigration as well as by the taxes levied to pay directly into the EU budget. On the one side the producers were the farmers and the manufacturers who gained directly from the protection as well as particular groups such as universities, regional assemblies and some City firms such as big banks with large EU business who had a direct interest in EU funding. On the other side were the general householders who did not belong to any of these groups who paid the higher prices or the extra taxation.

The producers cast their argument as 'needing to be in the Single Market'. That may have sounded grand and deserving. But the Single Market is simply the geographic area within which EU regulation creates ease of doing business and around which the EU creates a protective trade barrier as well as mandating free migration. Thus to be 'in' it requires that one submits to the regulation, the protection and the free migration.

Or one can by contrast, as the UK Government now intends, leave the Single Market and sell into it from the outside as other non-EU countries do; then you have your own regulation, you choose your own trade barriers and you control migration from the EU as from everywhere else. In both cases you benefit from the fact that the Single Market exists as an area within which barriers to trade are largely eliminated; but there is a difference in the terms on which you deal with the EU's consumers and businesses.

The calculations in this article show that being in the Single Market is damaging to us compared with the best policy we can follow which is to be outside with no

trade barriers against the rest of the world ('unilateral free trade'), our own regulation and our own migration controls. This is because of the costs of EU protection, EU regulation and of the unskilled migration permitted by the EU. The gains from this best policy take the form of much lower prices and taxation paid by consumers which in the long term give rise to higher output and living standards. Essentially what happened in the Brexit referendum was that for once those consumers were able to examine the whole EU package. This showed that they were being exploited by the producers who dominate politics in normal times through the power of their 'lobbying' activities which amount to a form of political bribery, one permitted them in the interests of paying more cheaply for our politics.

Optimal Trade Policy v Protectionists - The WTO free trade option

One hundred and seventy years ago Robert Peel repealed the Corn Laws even though other countries would not consider reciprocal reduction of their agricultural tariffs. He did so following the free trade arguments advanced by Cobden and Bright; as history later showed Britain led the way in industrialisation as cheaper food and lower living costs raised consumer welfare and triggered reallocation of resources towards their best use. Trade within the low tariff British Empire thrived and ushered in lower tariffs by other countries wishing to participate.

The genius of Cobden and Bright lay in explaining that tariffs were self-harm because they simply raised prices internally above world prices, making consumers worse off and distorting the allocation of internal resources. At that time politicians thought that tariffs gave you more power because they reduced imports and built up your own industry, while if you get others to reduce tariffs you would gain by exporting more and so also building up your industry. This was the doctrine of Mercantilism, which was exactly wrong.

What it ignored was the way in which trade rearranged itself in the long term, given that world trade is highly competitive and goods are priced to make world supply and demand equal. No one country can influence this world price by its tariffs: the effect on world demand is zero or trivial because all it does is reduce

demand for say corn from foreign suppliers and switch it to home suppliers. But the total demand for corn worldwide is the same! So the world price is the same and all that happens is home prices are raised by the tariff. This rise in home prices makes consumers worse off, and causes resources to flow into the protected industry away from other industries where they would be better used. This is indeed self-harm.

For the UK we have estimated this harm from the trade barriers the EU has hitherto levied on our behalf on food and manufactures at no less than 4 per cent of GDP, with an equal fall in consumer welfare; it has done this by raising consumer prices by 8 per cent. Much ink has been spilt by Remain factions on studies by other modellers calculating losses for the UK under the WTO option; but I and others have explained at some length how these studies a) in some cases used implausible models, such as the 'gravity' model where a country's trade faces quite limited long run competition from the world market and b) used highly damaging assumptions about Brexit policies, especially that the UK would adopt protectionist trade barriers against the EU and the Rest of the World.

I
Unilateral Free Trade or Pursuing FTAs?

The government has embraced becoming a leader in global free trade. Broadly speaking, there are two principal routes to achieving this:

1. **Unilateral Free Trade (UFT).** Once Article 50 is triggered, the UK would leave the Single Market, take up its full membership of the WTO, and set zero import trade barriers unilaterally, without seeking concessions from others as a condition of doing so. This is simple to carry out – both conceptually and in practice - and is the swiftest route to tariff-free trade. As the analysis in the first section above shows, even if other countries do not reciprocate by dropping their barriers in return, the UK – as a major net importer - will still be better off economically than by staying in the Single Market. This scenario creates a long-term GDP gain of 4 per cent and a fall of 8 per cent in consumer prices, compared to remaining in the Single Market. Other economic groups who produced forecasts for the WTO option have almost universally refused to model a fully free trade policy scenario.

   Because benefits will begin accruing immediately through lower prices and higher disposable income, the economy will grow more swiftly than through any other route. Therefore, this scenario will enable us to gain these economic advantages more rapidly than any other scenario with the least risk of not doing so. In addition, we envisage the UK continuing to seek FTAs around the world but focused on wider issues of free trade – e.g. further removal of non-tariff barriers and other non-tariff trade distortions on goods, broader market access for services, elimination of agricultural quotas, better investment security, and improved property rights. This will provide a strong signal that the UK is serious about being a leader in global free trade.

   If the EU insists on raising import tariffs against us, we should accept this as explained earlier. Eventually, the EU is likely to realise this is self-harm.

2. **Pursuing FTAs.** Under this approach, the UK would not unilaterally eliminate import barriers but, instead, would attempt to achieve the same objective via negotiating FTAs with other countries. This is more complicated to do, as we do

not know which countries might ultimately agree an FTA, what the result of these negations might be, or how long the negotiations might take. Because the UK would be forced to maintain import barriers during this period against all the countries that have not agreed FTAs, most of the gains will not accrue for some considerable time. Thus, by definition, the realised benefits will always be lower than with unilateral free trade.

A further problem with this route is it commits the UK to indefinite tariff protection against the EU, so raising prices on a wide swathe of our imports. This, as explained above, reduces the long term gain from our trade policies to just half of the full 4 per cent gain achievable, even if we have concluded FTAs with the rest of the world. Consequently, the desired economic benefits will not accrue to the consumer/taxpayer and criticism from those who want to return to the Single Market will be much in evidence. All of this will create uncertainty. More worrying, the UK de-facto effectively becomes a tariff-setting sovereign, so obviously not appearing to be a global leader in free trade**.**

The main argument for adopting this approach is political. It appears more orthodox and gradualist than unilateral free trade and looks responsive to protectionist producers - so it may feel easier and politically safer to pursue. But these apparent advantages must be placed in the context of the economic benefits foregone by consumers and the losses to the national interest. These in turn could make this strategy politically toxic if consumers notice and oppose it; it is worth recalling that the share of employment in farming and manufacturing is only 8 per cent, the other 92 per cent do not gain from EU protection but are harmed by the higher prices it causes.

An additional potential motivation for the government may be to keep these tariffs as ‘bargaining chips’ in FTA negotiations. However, this alleged benefit is exaggerated as tariffs represent a relative small part of total trade barriers. Most countries understand this point and realise that the real prize to be won in FTA negotiations is from reducing non-trade barriers and trade distortions in a much broader sense – including the removal of non-tariff barriers and the wide agenda of access to services and agricultural markets and property rights

protection. Even if we eliminate our tariffs, there is still a large and worthwhile agenda of FTA negotiation to pursue worldwide.

Nevertheless, should the Government go down this route of maintaining the full current EU tariff as its MFN tariff schedule on all countries including the EU, then it will be essential to move rapidly to FTAs with non-EU countries so that the gains in eliminating protection from these sources are reaped as soon as possible. In this context, an FTA with the US will be particularly important as the US is the lowest cost source for not only almost all food products (so nullifying the CAP tariff effects on food prices) but also for a wide swathe of manufactures, from furniture through printing and publishing products to the whole machinery market. US products could therefore replace at world prices the vast bulk of the products currently bought at well above world prices from the EU. Add in FTAs with major food suppliers Australia and New Zealand, and with South Korea as another key world supplier of manufactures, and we would have indirectly eliminated the bulk of the EU protectionism on our goods imports.

II

The Costs

Pursuing Free Trade: The UK's Options

The table below summarises the key outcomes to consumers and government revenue, depending on the decisions the government makes with regard to the three questions discussed above. They are listed in order of decreasing economic attractiveness.

WTO Options vs the Status Quo [1]

	Consumer Welfare	CPI	HMRC Revenue
1. No Import Tariffs [2]	**+4%**	**-8%**	**+7.3%**
2. Import Tariffs on EU only ('tit-for-tat') [3]	**+2%**	**-7.5%**	**+5.2%**
3. Worldwide Import Tariffs on Manufacturers [4]	**0%**	**-7%**	**+2.5%**
4. Worldwide Import Tariffs on Manufacturers & Agriculture [4]	**-4%**	**-1%**	**-2.2%**

[1] All options assume non-tariff barriers have been eliminated
[2] Achievable either via unilateral free trade or with FTAs over time
[3] Would require FTAs with Rest of World
[4] Assumes no FTAs with other countries have been established

It is clear that Option 1 (global free trade created by eliminating our tariffs unilaterally) is far and away the best economic outcome for the country, increasing GDP/Consumer Welfare by 4 per cent, reducing prices by 8 per cent, and augmenting government revenue by 7.3 per cent, relative to remaining in the EU. However, if we cannot agree free trade with the EU (Option 2) but manage FTAs with major world suppliers, we lose half of the welfare gain and some of the other gains. While these outcomes can in theory be achieved either via implementing unilateral free trade or by agreeing FTAs with the rest-of-the-world, it is obvious that the gains will be realised much more quickly via unilateral free trade, the FTA route will never obtain 100 per cent of the gains

delivered unilaterally, and this approach will risk not coming to agreement with some important countries.

In the absence of agreeing FTAs with the rest of the world and at the same time maintaining manufacturing tariffs on the EU (WTO rules would require us to do the same with other countries), this Option 3 would not improve welfare relative to remaining in the EU and government revenue would decline significantly relative to options (1) and (2), in spite of the extra import tariff revenue collected by the government.

Finally, if we also maintain the CAP and its tariffs on food (Option 4), our welfare drops by 4 per cent relative to today, there is virtually no decrease in process, and government revenue decreases. This is a disastrous approach and leaves us worse off than remaining in the EU.

Thus, the decisions government takes with regard to its WTO options will have a defining impact on our prosperity outside the EU.

‘Tit-For-Tat’

It might be thought, in order to encourage the EU to ‘come to the table’, we should keep our 4.8 per cent average tariff on their manufactures, if they decide to apply their 3.5 per cent average tariff on ours. However, as the example of the Corn Laws (unilateral) Repeal of 1846 shows, that is false logic. If they have not agreed to an FTA, our tariffs on them will not dissuade them, as they will have done so essentially on political grounds, despite pleas from their own industries not to do so. Furthermore, the entire history of the EU suggests they are not sensitive to the hardships their policies inflict on EU consumers.

In the longer term, as in the Corn Laws example, they may learn to initiate free trade in their own interests: import tariffs only harm themselves. But this incentive is likely to kick in only over the long term; as noted, we will not dissuade them in the short term by ‘tit-for-tat’. Indeed, in political terms, we are more likely to encourage them to keep their own tariff barriers in the long term if we act aggressively towards them: backing down will be harder for them.

The fundamental point is that if we opt for 'tit-for-tat', we will harm ourselves, denying ourselves half the 4 per cent gain in GDP and consumer welfare coming from accepting imports from the EU at world prices.

In addition, we run the risk of creating havoc in the supply chains of key industries. It is well-known that these supply-chains are extremely sensitive to small tariffs. Under 'tit-for-tat', the damage to supply-chains could be great as the EU has no tax system to use to alleviate the effects, and, under Single Market rules on competition, no national government can support its own industry. UK firms would tend to stop buying inputs from EU firms and would switch to rest-of-world suppliers, once free-trade is established with them. This, in turn, would encourage EU-wide firms to relocate UK plants to within the EU in order to avoid the hit to EU input plants from UK switching. The end result would be a needless case of self-harm.

It is important to put EU tariffs into context when making these decisions. If the UK leaves the Single Market with no zero tariff agreement with the EU, the cost of EU tariffs on UK exports (excluding agriculture) would be only around £3.5 billion a year - about 0.5 per cent of Government spending and a minority of the £10-£11 billion net dividend the UK will receive from no longer making its annual EU budget contribution.

Furthermore, it should be noted – as a consequence of our many years in the Single Market – that non-tariff barriers in goods will not be an issue when we leave. These barriers are created via regulations of 'quality' and anti-dumping duties: they do not exist today between us and the rest of the EU and the creation of any such new barriers cannot be justified. Neither side could make a case for such things; any attempt to do so could be challenged in the WTO courts where all countries desire to maintain good reputations because of continuing WTO disputes in many areas.

Finally, manufacturers are benefiting from the low exchange rate ushered in by Brexit. Even including potential EU tariffs, manufacturers are more competitive

today than they were before the referendum vote. We examine their position in more detail below.

Ultimately, if Sterling regains pre-Brexit parity and industry has not yet adjusted to a post-Brexit environment, the government's industrial strategy can take measures that support our industries. We would want anyway to help our manufacturers adjust to the new post-EU world of more competition and less protection - details of this can be found in the Appendix.

In summary, not only does 'tit-for-tat' deprive us of half the gains from free trade and potentially cause substantial short-run disruption to supply-chains, but it also creates an added aggression that could make it difficult for the EU to climb down in the longer term.

Of Critical Importance: Leaving the CAP and eliminating its tariffs on food

The CAP involves the government in contributing to EU farm subsidies, only a small part of which returns to UK farmers: this money forms part of our EU budget contribution.

It is absolutely essential, whatever other decisions are taken, that the UK government withdraws totally and unconditionally from the CAP and all its associated tariffs on agricultural products. The key damage to the UK economy from the CAP comes from the massive raising of farmers' prices by some 20 per cent, according to our and OECD estimates. The knock-on effect on the economy comes through increasing land and consumer prices, both of which have large indirect effects on both the structure of the economy and on consumer welfare.

We have calculated through our World Trade Model that any policy retaining the CAP's tariffs causes substantial damage to the economy (between a 1 per cent and 4 per cent reduction in consumer welfare compared with the current situation), even if unaccompanied by UK tariffs on manufactured imports. This is because the rise in land prices induced by CAP tariffs greatly distorts the shape of the economy and because it raises consumer prices by around

7 per cent - about the same as the whole of current EU protection on both it and manufacturing. Details of these and all our other calculations, as well as of the World Trade Model on which they are largely based, can be found in Minford and Miller (2017).

Given this damage to our economy from the CAP, support that the government gives to farmers via CAP on social and environmental grounds should be channelled directly to them. The effects of such direct support can be economically neutral and of quite limited budgetary cost if it is untied to the size of farms or crops but linked instead to particular goals such as preserving the rural environment and enabling farmers to reach adequate incomes in return for carrying out such goals.

III
Manufacturing Industry
What the Picture Would Look Like

Short and Long Term Effects on Manufacturing Revenues

What would be the situation for manufacturing firms? For a typical manufacturing firm, the overall situation after Brexit would be influenced by a combination of four main elements – (1) price decreases from enhanced world competition, (2) improved competitiveness resulting from the lower value of sterling – currently 15 per cent (Cardiff-EfB macro-models suggest this could continue for around five years), (3) the payment of EU tariffs and (4) the payment of UK tariffs on EU/ROW inputs. These elements would interact differently, depending on the destination market for the firm's products:

1. In the home market, firms would face stronger competition from the rest of the non-EU world; on average, prices could fall in the short-term by around 20 per cent and long-term by a lesser amount of about 10 per cent. Against this - for about five years - the competitive effect would be offset partially by the lower value of sterling.
2. As far as the EU market is concerned, the situation would be similar: firms would lose the 3 per cent tariff revenue paid to the EU but enjoy the drop of 15 per cent in sterling. While EU competitors' prices would remain at current levels in Euros because of continued EU protection against the rest of the world via both tariff and non-tariff barriers (EfB projects this long term at about 10 per cent), UK firms would not face non-tariff barriers, as UK firms, by definition, already satisfy these and new non-tariff barriers could not be levied on the UK for either regulatory or anti-dumping reasons. Thus, UK Firms could keep their Euro prices the same while remaining competitive in the EU market, thereby increasing their profits per item sold by 12 per cent of gross value from the exchange rate fall minus the EU tariff imposition.
3. Economics similar to those in EU markets would apply to markets in the rest of the world where UK firms are already competitive at world prices but they would enjoy higher sterling prices and profits due to the exchange rate fall.
4. Firms would pay UK tariffs on inputs from EU and ROW. We assume UK input tariff rate is 3.5 per cent on inputs of £325bn (total output) minus £160 bn (value added) = £165 bn., making a tariff input payment of £5.8bn. However for the

proportion of output being exported a full rebate applies: this proportion is 69 per cent and so only 31 per cent of this is payable = £1.8 bn

Therefore, for, say the first five years post-Brexit, UK manufacturing would make profit gains on the order of £24.8 bn, or 16 per cent of extra gross-margin on manufacturing industry's total gross value added of £160 bn.

	Home Market (£100 bn)	**EU Market** (£110 bn)	**ROW Market** £115bn)	**TOTAL**
Price Impact	-20%	0	0	
EU Tariff Impact	0	-3.5%	0	
UK Tariff Impact				**-£1.8 bn**
Sterling Impact	+15%	+15%	5%	
TOTAL	**£5bn**	**+£12.6bn**	**+£17.25**	**+£23 bn**

After five years, assuming the exchange rate reverts to pre-Brexit levels, the impact on manufacturing industry would be negative by about £14billion, a 9 per cent reduced gross margin on total gross value added. We assume with FTAs ROW (case 4) that firms manage to relocate their inputs to ROW sources at 0 tariffs (compared with assumed UK tariff on inputs of 3.5 per cent); this eliminates the UK tariffs paid on inputs. Thus, for five years, manufacturing would enjoy a highly profitable transition period due to the exchange rate. If, during this five-year period, the industry were to raise its productivity by 1.7 per cent annually, it would be able to erase any negative impact from Brexit. This compares with average manufacturing (labour) productivity growth since 1970 of 2.9 per cent per annum. Such an increase in productivity seems to be something the industry - freed from EU constraints - could easily take in its

stride, continuing its march 'up the value-added chain' towards a hi-tech manufacturing sector:

	Home Market (£100 bn)	EU Market (£110 bn)	ROW Market £115bn)	TOTAL
Price Impact	-10%	0	0	
EU Tariff Impact	0	-3.5%	0	
UK Tariff Impact				**0**
Sterling Impact	0	0	0	
TOTAL	**-£10bn**	**-£3.8bn**	**0**	**-£14 bn**

***Relocates EU inputs to ROW which is tariff-free under ROW FTAs, eliminating UK tariff charge on inputs.**

In cases here there are no FTAs with the ROW the above relocation of inputs to ROW does not occur and so manufacturing profits are lower by £1.8bn, requiring productivity to grow 0.25 per cent more.

IV
Misplaced Concerns about Free Trade

Free trade will hurt jobs'. This was said repeatedly by the Remain side, for example by George Osborne and David Cameron, during the referendum campaign, about leaving the EU for free trade with the world as a whole under WTO rules. Since the referendum the Chancellor, Philip Hammond, also remarked to the Treasury Select Committee that he was concerned about the effect on jobs of leaving the Single Market; more recently as he has enthusiastically espoused the government's policies on going for world free trade his concerns have no doubt been mitigated.

As we hope this paper makes clear, however free trade comes about, whether by unilateral action or by negotiating FTAs with the rest of the world including the EU, what it implies is that we abandon our trade barriers against other countries' products. This brings down prices for our competing products to world levels, in eliminating the protection they previously enjoyed from EU trade barriers. As we have explained, the best estimates we have of this protection are that for both food and manufactures it averaged 20 per cent.

What this fall in prices does is create competition in these sectors. Competition in turn means that these home industries must raise productivity to match the lower prices from abroad. Like all competition this implies that resources including labour are reallocated to wherever their use is best. We routinely accept this process in the economy all the time, understanding that it is part of the economy's constant adjustment to its best resource use. We also understand that it does not diminish the total number of jobs; in fact as productivity rises, so do wages and this may well encourage more people to join the labour market, so raising employment. Because the UK has a flexible labour market - in which wages move as needed to generate jobs equal to the supply of labour people offer - what happens is that anyone released from one sector by these changes finds a job in another sector where expansion is occurring. When considering this process we do not worry about the fact that some sectors are contracting, others expanding; we understand that this reallocation is happening and we do not emphasise that the contracting sector is 'losing jobs.' In the short run yes, jobs are lost in that sector, but as the other sectors are expanding, jobs are being

created there. Even if for some reason there is a lag between the job creation and the job contraction, we understand that the expansion will soon kick in. Thus it was for example recently when 'austerity policies' necessitated a contraction in public sector jobs; we know well that this was far more than offset by the expansion of private sector employment.

So it is with the adjustments following on from free trade. There is no difference. Furthermore, we know that three major factors are favouring the jobs expansion that will rapidly take up the slack if any that might appear in the sectors losing protection. The first is that the exchange rate has fallen some 15 per cent and is stimulating profits and so expansion across the whole traded sector. The second is that the world economy is currently recovering towards faster growth, with the eurozone emerging from recession into a positive recovery, and the US similarly moving to faster growth with the new president's deregulation and tax-cutting agenda. The third is that much of manufacturing is already hi-tech or is moving quickly in that direction: this implies that productivity growth is easily being achieved that can restore profitability long term even at lower domestic prices, making it possible for the sector to expand or certainly limit contraction. In section III of this paper I show some of the ways these factors work over the short and medium term to favour manufacturing.

'Will we not be defenceless if we abandon our tariffs unilaterally?' Many politicians and others who comment on these matters show a concern that by getting rid of our own trade barriers we disadvantage ourselves because we may fail to negotiate 'tit-for-tat' reductions in trade barriers by others. This was a recurring concern in the debates surrounding the Corn Law repeal and the subsequent progress of the industrial and farming revolution. Continental countries in many instances maintained trade barriers while we eliminated or greatly reduced ours. These countries were motivated by mercantilist ideas, as explained above.

As we have already seen, there is a big gain from eliminating our own trade barriers: prices come down, consumers are better off, and competition pushes resources into their best uses. From achieving this from Brexit we calculate as

we have seen a rise of 4 per cent in welfare and GDP, and an 8 per cent fall in consumer prices.

But are we somehow losing out from failing to use these trade barriers as ‘bargaining chips’ to bring down others’ barriers against us? To this the firm answer is No!

What other countries achieve with their protection is self-damage: they raise prices of our goods to their consumers and so lower their welfare, encouraging inefficient home industries to replace our sales with their production. Its effect on us is simple: we sell less to them but we divert our output to other parts of the world market with no loss of profits because world prices at which we sell remain the same. Consider why: the protecting countries do not affect their total demand for these products nor do they increase their total supply of them since they still face world prices on what they export to the world market. So total world demand and supply is unaltered and so also therefore is the world price; all that happens is that some of their output is diverted to their home market, in an amount exactly equal to the UK’s loss of sales to it. This means that in other markets there is unsatisfied demand which we supply with the output we previously sold to the protecting countries.

As we explained above in the short term it does not seem to be like this: we ‘sell less’ and so seem to be losing. Yet trade diversion rapidly kicks in as our exporters look elsewhere. It is the analogue of the competitive process, repeated here in the processes of world trade competition: as trade to one area contracts, so it opens up in another.

The challenge that economics sets politicians is to imagine the whole economic transmission process and not to be mesmerised by ‘first round’ effects that are visible to the naked eye on impact.

Some people argue against this on the grounds that we have ‘monopoly power’ in world markets. This means that we have the power to raise the prices of what we sell by restricting its supply; and also the power to reduce the prices of what we buy by restricting our demand. If we had such power, then it might pay to set

tariffs on our imports because we could force down the prices we pay. It could also pay to induce other countries to reduce their tariffs on our goods because then we could raise the prices we sell at, given that this would raise demand for them in their markets.

However, this argument looks singularly misplaced in the modern globalised world of trade where free entry by new firms, often making entry from a quite alternative market (think of Google planning electric driverless cars), is constantly driving prices to the competitive equilibrium. One has only to remember the fate of firms like Blackberry and Nokia that seemed to have such monopoly power to see that it would at best exist for a rather short period; and that no prudent corporation would risk such extinction by trying to raise prices and cheat on quality.

Sometimes it is said that the City has monopoly power because it is so dominant in some markets. Indeed in forex dealings according to the BIS it has some 40 per cent of the world market. Yet, even here the competition is sharp: New York has nearly 20 per cent, Singapore and Tokyo each around 6 per cent , with many other competing centres around the world sharing the remaining 28 per cent . It is plain that the City cannot rest on its laurels even in forex where it is probably at its most dominant. As for other areas of finance, McKinsey has put the total world finance market at around $11 trillion; the City's revenues are of the order of $300 billion, around 3 per cent of the world market, roughly the same as the UK's share of world GDP. So in most areas of finance the City is a small provider in a highly competitive world market in which it is clearly far from dominant.

I have never found executives in any area of industry that have not thought there was something 'special' about their product that would cause it to enjoy some advantage over competitors. Alas, the pressures of the marketplace are ubiquitous and relentless. It is this competitive pressure that is ultimately why the only really important aspect of trade policy is the setting of one's own trade barriers.

'Must we not keep our own trade barriers as bargaining chips to achieve the government's plans for FTAs around the world?' Not at all. It so happens that the major areas where governments today are seeking FTAs are such things as intellectual property rights, services, public procurement and the judicial protection of investment capital. Many tariffs have been reduced to modest levels; non-tariff barriers are being disciplined by world standard-setting agencies. Agricultural protection is a problem still, and has especially been practised by the EU. But by getting rid of our tariffs on food and manufactures we both gain immediately large welfare and competition improvements while also leaving a huge area of general global trade negotiation, which can benefit all sides, much like a GATT round. The Legatum Institute has argued powerfully for such a round to take place among well-disposed Anglosphere countries with shared legal systems; it seems from statements by many of these countries that there is a shared interest in such talks and resulting FTAs.

We take up these issues further in appendix 2.

V
Next Steps:
Britain's Trading Future - WTO and the Routes to Free Trade

As everyone knows it is one thing setting out an economically advantageous policy and it can be quite another getting it implemented in practice given all the constraints and hazards of the political process.

Trade Deals – Future options

As we go into negotiations under Article 50 we can summarise all this as follows:

- *An acceptable FTA with the EU is worth striking.* If this could be achieved then the currently planned orthodox strategy of pursuing FTAs with other countries, particularly the US, could bring us to the overall gains of free trade over a reasonable period of time. The main risk along this route is that we concede too much protection to our industry in order to reach an EU deal; another risk is that we get bogged down in FTAs with other countries over all sorts of producer demands from either side. We need constantly to remember that our main interest as a nation lies in eliminating as much tariff protection as possible as quickly as possible; and stop up the mouths of our producer groups in all these negotiations.
- *What if the UK fails to reach an acceptable FTA with the EU?* In this case our best strategy is to 'walk away' and eliminate our tariffs unilaterally on the EU (and by implication under WTO rules of non-discrimination on all other countries), and not to engage in 'tit-for-tat'. We will then immediately reap the full gains from free trade. We can pursue FTAs with the Rest of the World on such broader issues as service and investment access, property rights and public procurement.
- *What if in spite of this we do go for 'tit-for-tat'?* If we do go for 'tit-for-tat' and maintain current EU tariff protection rates against the EU, and so by implication under WTO rules also against the rest of the world, then there will be an urgent need to reach FTAs with major world suppliers of food and manufactures, notably the US, so that we can reap some of the gains from free trade. Once we have done so, we should also gradually reduce our tariff rates against the EU and any other

country with whom we have not yet signed an FTA. Then by this route finally we reach the full gains of free trade.

So there are various, some of them rather winding, routes to free trade. It is essential to our welfare as a nation that we make sure, whichever route we go down, that it ends up with free trade as above.

Next Steps – Helping producers and other vested interests to adjust

We learned from Mrs. Thatcher's governments that much ingenuity and energy should be devoted to bringing people, including all the major vested interests, along with the policy process.

(i) Producer interests damaged by the Brexit consumer revolution

- Farmers: A new regime is needed for farmers, which recognises that many largescale farmers can manage perfectly well but that there will need to be direct help for smaller and more vulnerable farmers, given our environmental aims as a country.
- Manufacturers: Our manufacturers are losing their protection and will need to adjust to more competition from the rest of the world in their home market: this is a reasonable requirement to which they must respond with higher productivity as the majority who sell on world markets already do. After all they have been rather lucky to be protected by the EU for so long, quite against the intentions of the Thatcher supply–side reforms of the 1980s. They are vociferous about the costs they will now face of selling into the Single Market. As it happens these are not very large, around £3.5 billion being the tariff costs they will face. There will be no way the EU can deny they meet product regulations by refusing pieces of authorisation or other tricks, unless it wants to be defenestrated rapidly in the WTO courts. I showed above how in fact manufacturing will actually be in a strong position post-Brexit because of two main factors: the Brexit fall in the exchange rate in the short term and in the long term its proven capacity to raise productivity.

These two sets of actions deal with the major producer interests damaged by the Brexit consumer revolution.

- Other Groups: There are numerous other groups that benefited from the channelling of UK money into the EU and back: various regions of the UK received special EU grants and universities benefited from EU funds for research. Universities also band together with EU and other counterparts to collaborate in research: this activity will not cease on Brexit as this collaboration can continue. A Committee of Compensation for loss of EU funds should be set up to deal with the many demands arising from losing these EU funds. The basic principle can be 'complete but efficient compensation'. Our contribution to the EU is usually measured by netting out these 'receipts' so by compensating these recipients there is no loss of net EU receipts. An element of saving can be achieved by allowing for the inefficiency usually involved in these grants: there are complex rules surrounding how they are spent which can reduce their practical value to recipients substantially.

Summary of the Routes to Free Trade

What we see from all this is that the free trade aims of Mrs. May's government can be achieved whether the EU agrees an FTA with us or not, either by moving rapidly on FTAs with others and then gradually removing any remaining tariffs or by simply removing our tariffs on all from the start or, if FTAs are sticky to get done, at any point along the way. The only really important thing to remember is that for the UK to become stuck in any of the positions along these routes where free trade is not yet achieved is to fall into an avoidable trap. At any point along these routes it is possible for the government to default into free trade unilaterally should others fail to be cooperative over acceptable FTAs, whether it is the EU or other countries. The key point is that the big identifiable gains we stand to make over trade from leaving the EU are all to do with the damage we inflict on ourselves via the tariffs we levy on others - it is these that damage us by raising prices to our consumers and reducing the competition our producers must face in consumers' best interests.

The ever-present and noisy complaints of producers should not blind the government to these basic gains that were demanded by their voters in the Brexit referendum. That referendum put consumers firmly in the decision-making frame; to disappoint them in order to please producer constituencies could be the biggest political mistake of all for this government. In a fascinating way that referendum has turned the calculus of politics, normally dominated by producers, on its head: consumer voters rule OK.

Appendix 1

Current Arrangements - Calculating the Cost

Having examined exactly what the SM is and seen that it conveys benefits in facilitating trade inside the EU that non-members also enjoy, let us examine the net benefits for the UK of leaving the EU, getting rid of the EU's protectionist regime, and trading both with the EU and the rest of the world under unilateral free trade.

Assumptions and Models

The main point of economic activity is the welfare of our citizens and we measure this by their consumption or 'living standard'. An economy has finite resources and the aim of economic policy is to maximise their consumption potential from these resources. Sometimes you hear commentators talking about investment as an aim of policy, but this is nonsense! Investment is a cost; it is consumption deferred whose only justification is a return in higher future consumption. We take account of the need to invest when we measure consumption benefits; because these are only included after deducting the costs of necessary investment and maintenance.

Trade contributes to this consumer welfare aim by increasing the value of what can be consumed from what is produced by exchanging it in trade with other countries. In much of the discussion of Brexit from the Remain side the emphasis was on the problems of producers, notably how important to them was the Single Market. Remarkably none was focussed on the problems of consumers in accessing best value from the rest of the world.

Yet the key fact about the EU is its promotion of protectionism via its customs union barriers against the non-EU world. It is odd that the EU should be protectionist externally when it aims to increase competition and free trade internally. The reasons for this take us too far back into the origins of the EU in the thought of economists like Jean Monnet: essentially something akin to mercantilism, the theory popular in the 18th century that an economy's strength depends on how large its exports are, seems to have prevailed in this thinking, that the EU's best interests were promoted by protecting its own industries and fostering its exports, while using imports as a source of scarce revenue for the infant state and to help pay for measures like the Single Market.

The most well-known, indeed egregious, example of the EU's protectionism is in food, where the Common Agricultural Policy creates a system of fixed tariffs and

also variable tariffs or subsidies designed to keep the internal price of food at target levels. The latest estimate of the producer subsidy equivalent for food from the OECD is around 20 per cent. Almost all of this is due to this protective system.

Less well-known is the protection of manufactures, mainly via non-tariff barriers. The average of the tariffs on manufactures, depending on how you weight them, is between 2 and 4 per cent. But comparisons of EU prices with lowest world prices suggest that non-tariff barriers make up another 16-18 per cent; it could be much more if we use crude estimates of Chinese prices. However these are not well researched and if we base our estimates solely on OECD prices which have been gathered with great thoroughness we obtain a price discrepancy at the border or factory level of around 20 per cent. The big fuss made by UK producers over being inside the Single Market largely reflects the fear of losing such protection and having to sell into the EU from outside the Customs Union; if the Customs Union protection around the SM was negligible it would be of little consequence. Those who criticise our estimates as too high have still come up with big estimates of the effects on our exports of being excluded from the SM!

To calculate the effects of EU membership on goods trade we assume that the UK leaves the EU Customs Union and its associated Single Market entirely, and substitutes unilateral free trade, thus sweeping away the EU protectionist arrangements in favour of free entry for foreign products under standard UK regulations for product standards in the UK market. We review this using a standard world trade model in which trade is determined by comparative advantage under full competition. In this model all markets for goods and services 'clear', in the sense that prices move to equate demand and supply; this final situation or 'general equilibrium' is discovered by computer methods and hence the model is known as a Computable General Equilibrium (CGE) model. We chose this model for two reasons.

First, it corresponds to the realities of the long run behaviour in which we are interested for the analysis of a long run change in trade regime like leaving the EU. Those who trade in world markets are well informed about the qualities of the products they buy for onward sale to distribution chains in each country. Little 'imperfection' can survive this knowledge. Different types of laptop or luxury car or refrigerator are ruthlessly evaluated by their characteristics and each characteristic is

priced. Besides good information there is ample competition, with traders from many countries selling into many countries with no entry barriers to this world market. Under these conditions the products a country will sell depend on the resources that it has within its borders. We can assume that capital flows freely between countries because in the modern world there are few controls left on how savers invest around the world. But a country's supplies of unskilled and skilled labour depend on how its training and education system has developed over time, while its supply of natural resources is essentially God-given. It is these last three resource supplies that govern what it will produce according to 'comparative advantage'.

Second, this model does well in analysing trends in world markets over time. The biggest trend in recent decades has been the emergence of globalisation, with manufacturing production shifting in large quantities to the 'emerging market' economies. At the same time we have seen big changes in wages and employment in developed countries, with rising inequality and unemployment. Another factor in the mix was the progress of computerisation of manufacturing production. In a major piece of work (Minford, Nowell and Riley, 1997) we used this world trade model to examine these changes and whether they could be accounted for. We found that an equally-weighted combination of globalisation and computerisation could give a good empirical account of all these changes.

These two factors, theoretical and empirical, gave us reasonable confidence in using this model for the major trade regime change for the UK of leaving the EU, with its implications for our trade not just with the EU, with which just over 40 per cent of our trade takes place, but with the rest of the world for the other 60 per cent.

The Cost of Protection – World prices, tariffs and national prices

We now turn to our CGE model of trade to obtain measures of the cost to the UK and the EU of this protectionist policy. The model's workings suggest that in the case of manufacturing, a tariff on manufactures for example acts to raise a country's price of manufactures. Then because manufactures use a lot of unskilled labour its expansion drives up unskilled wages. In order to force other industries to economise on the unskilled labour manufacturing needs for its expansion, the other traded sectors contract. The non-traded sector's size moves close to proportionally with the whole economy as demand for non-traded goods is related proportionally to total

income, apart from any effect of its changing relative costs brought about by the tariff. The rise in tariff raises consumer prices so that consumers are less well off than they would have been buying the manufactures more cheaply from abroad.

In reaching our estimates for the long run effects of Brexit under the WTO free trade assumption we assume that over the next decade or so (our 'long run') the existing 20 per cent protection gradually gets whittled down to 10 per cent by general international pressure - much as can be observed in previous decades. We therefore apply a tariff - equivalent rate of 10 per cent to the CGE model.

It might seem on the face of it that 10 per cent protection in agriculture and manufacturing is not a very large or significant amount. It raises prices in these two sectors by 10 per cent over the world price, while leaving service prices at world levels. For those used to macro models of short to medium run behaviour relative price movements of different sectors of this order occur regularly; for example world raw material prices can double or triple and greatly affect retail prices of sectors using those materials. Yet we do not observe huge sectoral output swings in the economy.

The difference here is that we are computing the long run effect of permanent relative price changes of these sectors. The sectors with higher prices pay higher wages, both skilled and unskilled, for the workers they need; they pay more for land and they use more capital whose price is fixed in world markets. What our CGE model shows in the Table is that resources are heavily attracted out of the service sector into agriculture and manufacturing. In fact we assume that output in agriculture is capped (effectively by control on the land that can be used in this sector) in our model by government policy; so that the attraction into this sector is frustrated by rising land prices. However for manufacturing no such limit is placed and the result is a substantial boost to manufacturing at the expense of services.

The effect of raising prices for these two sectors by 10 per cent is first a substantial, 7.5 per cent, rise in the cost of living. Wages of unskilled workers go up more than this, 14 per cent, because they are disproportionately used in manufacturing. But skilled workers' wages fall by 11 per cent, being disproportionately used in service industries. Landowners do well, with land prices soaring 47 per cent. We see in

these figures how the politics of vested interests works; unions representing unskilled workers, farmers and other landowners, as well as manufacturing businesses, will clearly support being inside the EU.

Yet the effect of shifting output into sectors where their productivity is less than the price paid by consumers is an overall loss of welfare for UK citizens; these citizens would value more the output lost in services whose production contracts 32 per cent. The loss of welfare, measured by the loss of potential consumption by UK households, is 3.3 per cent. This potential consumption change is measured as the change in the value of all output deflated by its consumer price cost (i.e. the change in [nominal GDP/CPI], minus the change in the value of resources used to generate it). In other words the welfare effect is the percentage change in the resources available for consumption to UK households.

This cost is computed as if the protective measure is a tariff. However the customs union acts as a tariff in its effect on outputs and consumption; but the equivalent of the 'tariff revenue' (i.e. the extra cost of imports due to the protection) is disposed of differently. There is revenue on imports from outside the EU; this revenue (paid by UK consumers) accrues to the EU itself but it is already counted in the UK's net contribution (after rebate and EU spending on UK projects). There is also 'revenue' accruing to EU businesses that sell protected goods to the UK because they can charge higher prices: this revenue is not counted elsewhere and is a cost to UK consumers. Our businesses also gain more from other EU consumers on their exports; so the 'net revenue' paid by UK consumers to EU consumers is the tariff times the net imports by the UK. For manufacturing where we have large net imports (about 8 per cent of GDP) this net revenue transfer amounts to 0.8 per cent of GDP on the 10 per cent tariff-equivalent we have assumed. For agriculture the workings of the CAP on transfers between countries for agriculture are complex and are already counted in the net UK contribution. So in sum the total cost to the UK of the protection of agriculture and manufacturing is 4.1 per cent of GDP.

Some politicians attach totemic significance to manufacturing; we have heard quite a few arguments since the 2010 election that the economy should be 'rebalanced' towards manufacturing. One can see why the vested interests listed above would want this; it is no doubt to appeal to these interests that politicians make these

arguments. But there is no economic case for encouraging output in sectors which would otherwise contract as a result of market forces. For such a case there would have to be some disparity between social and market values; yet there is no such disparity. Similar arguments were made two centuries ago for preserving agriculture with a similar lack of basis.

Leaving the EU and eliminating this protection would, according to these figures, raise service output and greatly reduce manufacturing as narrowly defined here in the long run. The reason for this is fairly simple: as the UK has developed in the decades since the economy began to be liberalised in 1979, there has been a big rise in the share of skilled labour in the workforce. By now approximately 50 per cent of university-age people go to some form of higher education or equivalent. This has favoured the expansion of skill-intensive industries of which the service industries are the principal examples. We can also include in these industries the design or hi-tech element of manufacturing, which is a service industry; 'manufacturing' in the national accounts includes this, inside the manufacturing firms it comprises. So the hi-tech service activity currently included in manufacturing (on some measures it may be as high as one third) would not be reduced but just reclassified. These workers are engaged in jobs that require the use of their brainpower and associated skills. The actual making of things, manufacturing in the original sense of 'metal-bashing', has contracted hugely in the UK. What the CGE model tells us is that in the absence of EU protection this type of manufacturing would largely disappear, leaving only the hi-tech manufacturing that uses skilled labour intensively.

This result should not be regarded as very shocking. The strongly declining share of manufacturing in GDP has been an unremitting trend feature of the UK since the 1980s; it would be intensified by leaving the EU, and eventually we would be left only with those parts of manufacturing that involve design and hi-tech skills, as one would expect in a relatively small country heavily endowed with skilled and educated labour.

We can note that there is a good demand for unskilled workers in the non-traded service sector (distribution, construction, utilities and so on) which cannot be substituted by bringing in cheaper substitutes from abroad. As this non-traded sector is around half of the economy, one can see that if roughly half the labour force is

unskilled it will be fully employed in the non-traded sector and there will be little of it left over for the manufacturing sector. Plainly EU protection, as we have seen, raises the wages of unskilled workers; but if there was a case for redistribution to these workers because they were poor, then this would already be done by public redistribution policy. This policy area is extremely active in the UK, as evidenced by the high progressivity of the tax-benefit system. There is no case for using protection to help carry out this policy since it is clumsily directed at the issue and so, as we have seen, creates a big cost for the economy as a whole.

It turns out that the costs to EU citizens of the EU tariff on agriculture and manufacturing are roughly the same as those for the UK. Thus when the 10 per cent tariff is levied EU-wide including in the UK, the UK effects shown below are more or less replicated in the rest of the EU. The only difference for the rest of the EU is that there is a small net revenue gain due to the net revenue transfer from UK to Rest of EU (RoEU) consumers; but as a percentage of the much larger RoEU GDP total it is only 0.15 per cent of their GDP. Thus the total welfare cost to RoEU is just under 3 per cent of GDP. What we see here is that the dominant ideology of the EU is corporatist and mercantilist, aiming to benefit producers of manufactures and food at the expense of consumers.

If we take this analysis and apply it to Brexit under the WTO free trade option we can see that these costs are eliminated as compared with the status quo and therefore with the EEA-status quo option now being touted by Remainers and the old establishment consensus. In summary the gains from trade given by our full Brexit comes to 4 per cent of GDP.

On top of that come the gains from substituting UK for EU regulation and from introducing a Green Card immigration system that would stop any unskilled immigration that did not pay for itself via taxes.

Appendix 2

Why Protectionism Must Go

It might be thought that the estimates given in preceding chapters are all very well but that if we left the EU there would be a quite separate problem of being 'outside' the EU 'market' as well as 'excluded' from other markets with which the EU has signed free trade agreements (FTAs). The IEA-prize-winning paper on Brexit (Mansfield, 2014) recommended that the first activity to be undertaken after Brexit should be a general negotiation of FTAs with Uncle Tom Cobleigh and All. What are we to make of such arguments? Is it true that there are gains in trade terms from leaving the EU and yet that we are vulnerable to problems of 'access' to all such markets?

Trade Agreements? How Relevant?

What we need to understand is that if some other countries set up barriers against our trade, it would have no implications for the world prices of the types of products we produce. Those prices are set in all the markets of the world. If our producers faced some extra tariffs in some markets this would have no effect on the world price of the goods we produce. The UK produces a small fraction of world exports in virtually all product markets. These UK exports will be more expensive in the markets with extra tariffs but the impact on the overall demand for these products will be zero or negligible.

When a country sets up a tariff on a UK product, total demand for the product does not change; all that happens is that demand shifts from the UK product to the rival foreign products. Because there is no change in total demand for the product its world price also does not alter.

We can pursue the matter in more detail. What will happen to the UK supplies that are not demanded in this market? Other countries will now be supplying more to this market. But as world prices are unaltered all countries including the UK are producing the same total output as before. It is plain that there will be a general diversion of trade between markets: the UK sells less in the protecting market, and sells more elsewhere, while the other countries sell more in the protecting market and less elsewhere.

This apparently paradoxical result comes from the workings of 'general equilibrium', that is the final situation after all effects have been worked out. Often

commentators focus on the immediate effects of a policy; this is known as 'partial equilibrium'.

It might seem difficult to assume that each country's total output of this commodity will remain the same. Could not the UK be forced to produce less given that this one market has demanded less of this product? But this would violate the industry's responses! If world prices are the same and it has willing workers and capital supplying this original amount of output, a fall in demand triggers a search for new markets to sell the profitable unsold output. This search is rewarded by finding the extra unsatisfied demand in the other markets where other suppliers no longer can supply so much.

Some might argue that particular firms have invested in the now-protected market and will find it difficult to switch to new markets. This might be so; the interests of firms are always to keep their existing markets because for them and their contacts they can make more money there than in new markets. If the industry supplies new markets the benefits might well accrue to other firms. However from the UK's national viewpoint this is not our concern. This reveals that trade policy as seen by firms with their own interests and markets is not the same thing as trade policy seen from the nation's viewpoint. This is important to realise because of the stridency with which these firms may enter the policy debate to protect their own vested interests.

The effects of trade policy must not be confused with the effects of general issues for the economy. We generally keep these effects separate and assume the economy is in equilibrium with respect to other issues when trade policy changes occur. For example if the UK is suffering from high unemployment, then it needs a set of policies that focus on raising aggregate demand and on removing any supply-side impediments to employment. It would be stupid to use trade policy to do this, since this has in general little if any effect on either aspect. So the way to compute the best available policies is to assume the economy is in a reasonable equilibrium with respect to these general aspects and then see what trade policy can do to improve that through its own idiosyncratic effects.

These are not easy ideas to grasp for those not used to international trade theory. Most people think in terms of 'market access' and the bilateral bargaining between

producers and the country to which they are selling. But this is not how world trade works - except in the very short run which is soon over and so not relevant to a long-term shift like leaving the EU.

This illustrates what is known in international trade theory as the 'importance of being unimportant'; a small supplier in world markets such as the UK, faced with a tariff from country X, would simply divert supply to another market and so keep its price unchanged, passing the tariff on to the consumers in country X. The UK is too small to affect the world price of most goods/products it sells - hence it is 'unimportant' at the world level - and by implication no protectionist actions by other countries affect the prices of UK products because these are world prices which such protectionism does not affect.

This powerful argument implies that the calculation of the UK's net trade gains is immune to what third countries decide to do with their trade barriers on UK products, and is explicitly based on the assumption that the EU indeed raises its usual Most Favoured Nation (MFN) barriers on UK products so that UK export prices in the EU market revert to world prices.

This point applies by obvious extension to the whole range of potential trade agreements.

Thus the trade agreements the EU has concluded with a wide range of (mostly small) third countries can continue if the countries involved are willing. If they are not they can lapse. In either case these countries will sell to the UK barrier-free.

Or consider trade agreements with the US and China. By the same argument above, although these countries are large any tariff they reduce on UK products would simply divert demand to other suppliers and not affect the world price of these products. There would be no effect on UK output or exports, simply trade diversion.

EU Protectionism V the UK - No long term effect

Consider EU protectionism against the UK post-departure. Under WTO rules the EU must levy the same barriers against the UK as against other non-EU countries such as Japan and the US. The WTO outlaws discrimination. In our calculations above we assume precisely this situation under which UK producers no longer receive the 'preference' over world suppliers generally: as a result the UK producers receive the

world price like these others. We showed above that though these producers lose profits, consumers gain far more in lower prices.

But suppose that after Brexit, the EU creates some new trade barrier specifically targeted at the UK. Plainly this is illegal under WTO rules, as being discriminatory. There is no evidence that the EU would act illegally in this way. It would be extremely bad for UK-EU relations for the UK to have to take the EU to court in the WTO justice system; plainly the UK would win and the EU would have to conform to WTO rules. Such a scenario is plainly unlikely and perhaps ridiculous.

However, notice that the long run damage of such an action, as long as it is undertaken, is only to the EU itself, because it raises prices of UK goods or services to EU citizens, diverting demand to other country sources. Yet from the UK's viewpoint this diversion, as we have seen above, is not damaging in the long run. World prices of these products remain the same and we sell more elsewhere, just as others sell more in the EU. One can think of this as an additional reason to illegality why the EU would not do anything so silly.

It is true that such stupid actions do cause some short run costs of transition, both for us and for EU firms, because of the unnecessary redeployment of sales forces etc. But again this added cost to both sides simply reinforces the case that such discriminatory action will not be taken by the EU.

An extreme example of total protection against the UK has been suggested by North (2016) and similar arguments have been advanced by Tyrie (2016). North argues that the WTO option is dangerous because the EU could deny the UK the piece of paper certifying that UK products satisfy EU product rules (Mutual Recognition Agreements), even though it does supply this to other countries like Japan, the US and China. This would amount to an absolute denial of market access by the EU to UK products! Clearly outside the EU the UK would reach an agreement on mutual recognition of standards just like these other countries. Any refusal by the EU to reach such an agreement while doing so with all these other countries would be, as above, discriminatory under WTO rules and therefore justiciable in the WTO courts like any other discriminatory actions. The UK would of course take the EU to court at once if there were any such denial; and the courts would decide rapidly against the EU since plainly it is a huge and outrageous discrimination.

Again this would be an act of gross self-harm by the EU since it would absolutely deny their consumers access to UK goods and services at any price! Again too in the long run it would not harm the UK because of the same trade diversion argument. But plainly both sides would suffer large short run costs of disruption to existing sales channels etc. Even to consider such behaviour by the EU seems wrong, suggesting absurdly that the EU could behave quite irrationally at huge cost to itself, putting itself beyond the pale in international relations.

The City, Financial Service, EU Protectionism

A number of City firms are concerned about what the EU might do in the way of financial protectionism, which is not so actively policed by the WTO. Euro-bond clearing has been mentioned as something that might be denied to the City. Then we have 'passporting' and 'equivalence', where it is argued that the EU might deny UK retail firms the financial passport and argue that there was not UK 'equivalence' of regulations so that wholesale firms too could not sell into EU financial centres.

All these actions are discriminative policies with respect to financial trade which operates no differently in theory from any other sort of trade! Discrimination is in principle also justiciable under the WTO GATS. Only if it can be shown that EU actions were required for prudential reasons would such action not be against the GATS; it is hard to see how protectionism could be justified as prudentially necessary, though clearly this cannot be ruled out. In the end if an authority is bent on protectionism, it may be difficult to prevent.

But all the arguments about EU protection as self-harm with no long run effect on UK output of these financial services apply here too just as above to goods trade. Again there would be some short run transition costs all round to UK and EU firms which add to the discouragement to the EU to undertake such actions. But the long run (and hence the key and dominant) costs are for the EU and nil for the UK.

There is however more to the matter in this case from the EU's viewpoint which should discourage it from going down this route. The EU generally prizes capital mobility into and out of the EU: as an objective it is enshrined in the Maastricht Treaty. The reason lies in the management of monetary union. The gains from monetary union come from the reduction in currency and financial barriers to trade

and investment. Plainly capital mobility makes these as low as possible. This is an additional reason we are unlikely to see such financial protectionism.

We see from this that all the vigorous City pushing of these issues as reasons for staying with the EEA-status quo option is simply the voicing of vested interests; it has nothing to do with the UK's national interest. We may also note in passing that the City, like other service industries in the UK, will gain massively from the lower cost base created by a full Brexit through lower prices and taxation; getting a 'deal' for the Single Market at the expense of a full Brexit with no deal would cost them dearly.

Yet a further reason is that such behaviour against the conduct expected of members of the Basel club of central bankers, the Bank for International Settlements, which is the issuer of international regulations that central banks are supposed to follow uniformly. Each central bank and associated financial regulator is supposed to adhere to a 'level playing field' across the main world markets. The reason for this is that if financial crisis hits, central banks have to cooperate over banks' cross-border assets and liabilities. Protectionism of one country's banks interferes with this cooperation. Therefore the ideal of free capital mobility and common non-discriminatory regulations is striven for. In effect the BIS acts as an adjunct of the WTO for financial affairs - and indeed the Governor of the Bank of England, Mark Carney, is chair of the Financial Stability Board, the arm of the BIS charged with overseeing actions by the world's central banks to promote financial stability.

However, suppose that after all some EU protection against the City did occur and that had the effects in diverting financial product demand away from City firms to their competitors in the EU, would they affect UK financial product output? No! By the same arguments as above for goods, there would simply be a redistribution of UK exports from the EU to the rest of the world where they would replace EU exports.

Clearly there have been many expressions of concern within the City about this perceived threat of EU protectionism in financial services. Visions of financial firms being lured to Frankfurt, Paris and Amsterdam have been floated in front of some credulous politicians' eyes by City lobbyists. Yet the truth is quite mundane: the City stands to gain greatly from Brexit through two main channels. The first is the

shift of UK resources into traded services such as the City because these are the UK's sectors of comparative advantage. Our estimate is that this could boost the City by around 10 per cent in size. The second is the reclaiming of regulation away from the EU's to the UK's jurisdiction: as explained carefully by Reynolds (2016) the UK's common law regulative environment is cost-reducing compared with the civil law approach from the EU. Thus the Financial Centre model he talks about would thrive outside the EU.

What then would be the effects of EU protectionism (which we can think of as some partial qualification of equivalence)? Our estimates suggest that EU business dependent on passporting forms less than 10 per cent of the City's total business (written evidence of Economists for Brexit to House of Commons Committee on International Trade, December 2016). Some of this business would be diverted to other EU providers; we are not talking about massive amounts of the City's business, therefore. As explained above, this diversion of demand would not affect world prices of the financial products traded in the City, whether they are wholesale to firms located here or abroad or retail to customers located around the world; the reason is that it is just a diversion, not an effect on the total demanded by the EU. With world prices the same the profits of City activities remain the same; the output would be the same therefore and it would be diverted to other non-EU markets. There is a nice symmetry here: the EU sells more in the EU, we sell less - they sell less elsewhere, we sell more. There is simply a relocation of existing output: known as 'trade diversion'.

Of course in the short term some City firms specialising in EU business will lose out and may find such business diversion difficult. However, we must also bear in mind the general long-run gains the City as a whole will make for the two reasons above, and note that these will be widely shared, including by these firms who may lose EU business. This makes any case for compensation for such short term losses quite tenuous.

One could go on with more examples of the follies of protectionism and why we in the UK if we abandon protectionism have nothing to fear from it. The essential point is that in countries doing it protectionism is self-harm arising either from intellectual confusion (associated with 'mercantilist' ideas) or from the lobbying of vested interests.

References and bibliography:

Ashton, Paul, Neil MacKinnon and Patrick Minford (2016), 'The economics of unskilled immigration to the UK economy', downloadable www.economistsforbrexit.co.uk.

Blake, David (2016), 'Measurement without Theory: On the extraordinary abuse of economic models in the EU Referendum debate', downloadable www.economistsforbrexit.co.uk

Dowd, Kevin (2016), 'Lies, Damn Lies and the Treasury's Brexit Reports', downloadable www.economistsforbrexit.co.uk

Hatcher, Michael, and Patrick Minford (2016), 'Stabilisation policy, rational expectations and price-level versus inflation targeting: a survey', *Journal of Economic Surveys*, 2016, vol. 30, issue 2, pages 327-355.

Howe, Martin (2016), *How to Leave the EU*, Politeia

Liu, Chungping and Patrick Minford (2014), 'Comparing behavioural and rational expectations for the US post-war economy', *Economic Modelling*, 2014, vol. 43, issue C, pages 407-415

Mansfield, Iain (2014), 'A blueprint for Britain - Openness, not isolation', IEA, London, downloadable www.iea.org.uk.

Minford, Patrick (2016), 'The Treasury Report on Brexit: a Critique', downloadable www.economistsforbrexit.co.uk

Minford, Patrick (2016), 'The Brexit Consensus Bug', downloadable www.economistsforbrexit.co.uk

Minford, Patrick, Eric Nowell and Jonathan Riley (1997) 'Trade, Technology and Labour Markets in the World Economy, 1970-90: A Computable General Equilibrium Analysis,' *The Journal of Development Studies*, Vol. 34, No. 2 December 1997, pp.1-34.

Minford, Patrick, with Sakshi Gupta, Vo Phuong Mai Le, Vidya Mahambare and Yongdeng Xu (2015), *Should Britain leave the EU? An economic analysis of a troubled relationship,* second edition, December 2015, pp. 200, Edward Elgar.

Minford, Patrick and Edgar Miller (2017), 'What shall we do if the EU will not play ball? UK WTO Trade Strategy in A Non-Cooperative Continent', downloadable www.economistsforfreetrade.com

North, Richard (2016), 'Flexcit - a plan for leaving the European Union', The Leave Alliance, version 8, downloadable www.eureferendum.com/documents/flexcit.pdf.

The British Bill of Rights: Protecting Freedom under the Law
Jonathan Fisher

Paying for the Future: Working Systems for Pensions and Healthcare
L. Schuknecht, M. Dauns and W. Erbert

What's the Point of the Human Rights Act: The Common Law, the Convention and the English Constitution
Dinah Rose QC

The UK Government Spending Ratio: Back to the 1930s?
David Smith

Magistrates Work! Restoring Local Justice
Stanley Brodie QC, John Howson, Simon Reevell

Working Systems: Towards Safer NHS Nursing
Tony Hockley and Sean Boyle

Nuclear Options: Powering the Future
R. Cashmore, D. Mowat and S. Taylor

Working Welfare: Contributory Benefits, the Moral Economy and the New Politics
Frank Field

The Financial Sector and the UK Economy: The Danger of Over-Regulation
J. *McFall, K. Matthews, P. Minford, D. Green, J. Dannhauser, J. Hodgson, S. Cochrane and D. Smith*

Latin for Language Lovers: Ancient Languages, the New Curriculum and GCSE
D. Butterfield, S. Anderson, K. Radice and D. Sullivan

Primary Problems for the New Curriculum: Tougher Maths, Better Teachers
David Burghes

History in the Making: The New Curriculum: Right or Wrong?
D. Abulafia, J. Clark and R. Tombs

University Diversity: Freedom, Excellence and Funding for a Global Future
Martin Rees

Realistic Recovery: Why Keynesian Solutions Will Not Work
Vito Tanzi

Freedom, Responsibility and the State: Curbing Over-Mighty Government
J. Rees-Mogg, M. Vickers, Z. Goldsmith, J. Morris, J. McCartney, J. Stevenson, C. Whittaker, F. Bruce, S. Reevell and D. Mowatt

Subscribe to Politeia's Publications!

For £35 a year (£30 standing order) you will receive an electronic copy of each of our publications, plus hard copies of two new publications on request, and, if you wish, free hard copies of your choice from our back catalogue. You will also receive advance notice and invitations to Politeia's conferences and flagship events, with guest speakers from the UK and overseas.

More information can be found on our website: www.politeia.co.uk. Or, write to the Secretary, Politeia, 14a Eccleston Street, London, SW1W 9LT or at secretary@politeia.co.uk

A Selection of Recent and Related Publications

Triggering Article 50, Courts, Government and Parliament
D. Abulafia, J. Clark, P. Crisp, D. Howarth, S. Lawlor and R Tombs

Prosperity not Austerity: Brexit Benefits – Britain's New Economy
John Redwood

A Blueprint for Brexit:The Future of Global Financial Services and Markets in the UK
Barnabas Reynolds

How to Leave the EU: Legal and Trade Priorities for the New Britain
Martin Howe QC

The EU: An idea whose time has passed
Roger Bootle

Ruling the Ruler: Parliament, the People and Britain's Political Identity
Sheila Lawlor

Joining the World: Britain Outside the EU
Nigel Lawson

Banking on Recovery: Towards an accountable, stable banking sector
Lord McFall, S. Kamall, G. Lyons, F. Capie and others

Dumbing Down the Law: The SRA's Proposals for Legal Training
Anthony Bradney

As the UK prepares to leave the EU and its Single Market, it aims to become a world leader in global free trade. The prime minister intends to reach trade agreements with the EU and the rest of the world and for the UK to establish its own tariff schedule at the WTO. How can such aims best be achieved? What routes exist and what are the likely outcomes of each for Britain's economy?

In *Trading on the Future: Brexit Trade Options & the UK Economy*, the distinguished trade economist Patrick Minford explains the economic context of different trading arrangements, assessing the costs and benefits of the principal routes. Unilateral Free Trade could lead to an early boost for Britain's consumers and its economy, while pursuing FTA arrangements may have its political appeal. Minford outlines the short and long term effects for manufacturing and illustrates the impact for UK manufacturing industry.

Professor Minford concludes with practical advice on how the UK can overcome potential obstacles in the negotiations with the EU and at the same time help domestic producers to adjust.

£8

POLITEIA