Have the benefits of EU membership helped UK exports? A twenty year, 13-sector analysis

Phil Radford

If seamless trade with the EU seriously benefits UK export sectors, then it should be apparent from historical data. The UK export sectors that benefit most from zero tariffs and minimal non-tariff barriers (NTBs) should, comparatively speaking, out-perform those UK sectors that benefit least — at least in exports to EU markets. The issue is a vital one. If, overall, there is no correlation between those UK sectors that enjoy a strong tariff and NTB advantage in EU markets and those that have performed comparatively well in EU exports, then UK trade negotiators are currently on a hiding to nowhere. They will not be able to quantify the value (or price) of a major trade-agreement objective, nor yet will they be able to distinguish a concession from an empty gesture.

The question of whether those UK sectors that are heavily impacted by EU membership have outperformed in EU markets has not been statistically addressed. This is perhaps because answering the question is more complex than might appear. With the exception of 'Apparel', UK's manufacturing exports have uniformly underperformed in EU markets over the past 20 years when compared to exports to non-EU markets. Seven of UK's top 14 sectors have seen their EU exports grow at less than 1.0% p.a. over the past 20 years. Correlating absolute growth rates for exports to EU markets would, therefore, reveal little, and it would take no account of whether a specific sector is genuinely competitive in world markets.

Nevertheless, using Office of National Statistics (ONS) February 2020 trade data, it is possible to identify which of UK's 13-largest goods-export sectors have performed comparatively well in EU markets. This is because ONS provides directly comparable EU/non-EU trade data stretching back just over two decades. A comparative performance for each export sector can therefore be calculated by subtracting the compound annual growth rates (CAGRs) of UK's manufacturing exports to EU countries from the CAGR of exports to non-EU markets, and then using that metric as a benchmark, or yardstick, against which to measure the comparative performance of each sector.

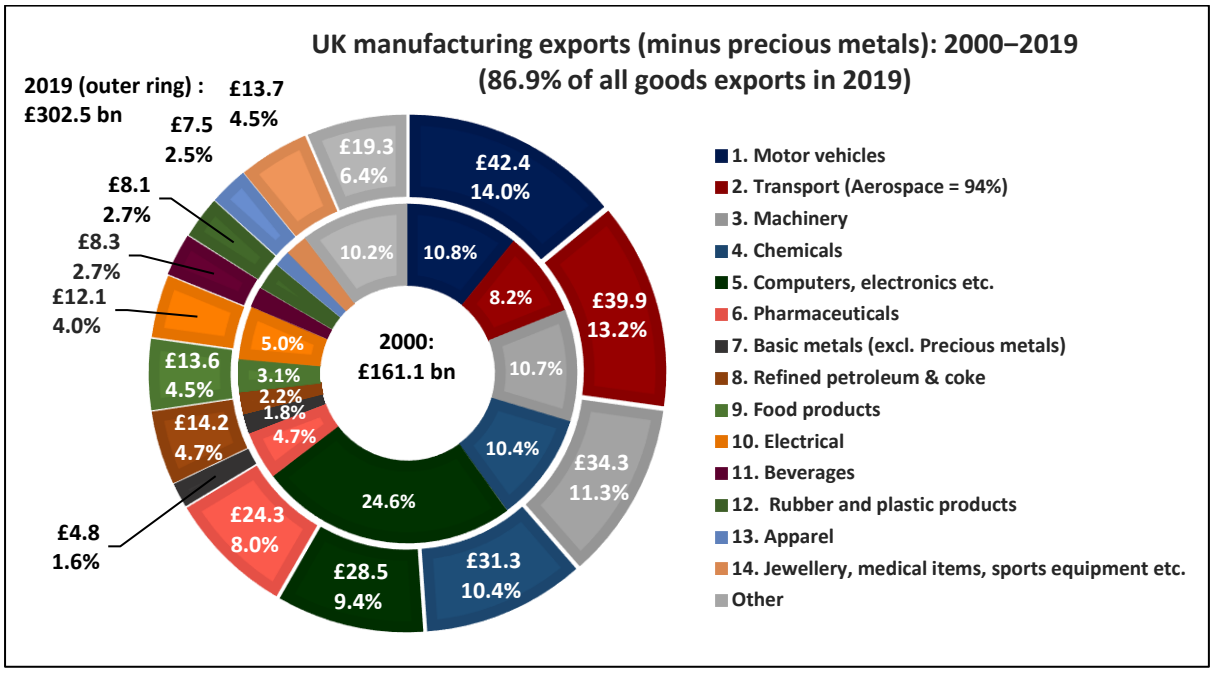
This article is an initial attempt at performing a methodologically sound correlation. It calculates CAGRs for all but one of UK's top 13 manufacturing exports sectors (worth 92% of UK manufacturing exports in 2019), then creates a comparative performance value according to the percentage point (ppt) difference between export growth to EU and non-EU markets. Then it correlates the comparative performance metric against those same 13 sectors, according to the putative advantage (or comparative benefit) they enjoy inside the EU's common external tariff (CET) and the ubiquity and relative impact of harmonised regulation. If tariffs and harmonised regulation really matter in UK trade, there should be a moderate or strong correlation between comparative performance and comparative benefit. '

This article is also a presentation of initial findings. Comments are welcome – in particular on how to assess the relative cost of NTBs, or benefits of the Single Market, for individual UK export sectors. The completed sectoral investigation – with a refined ranking methodology – will form part of a comprehensive sectoral analysis to be published later in the year, with Michael Burrage.

UK's top 13 sector exports, 2000 to 2019

First, what sectors should be analysed? Almost all UK goods exports that are impacted by tariffs and EU market regulation are manufactured goods. Using the ONS' CPA classification – from which all data in this analysis is drawn – the principal exception is 'agriculture, forestry and fishing'. This contributed just under 0.9% of UK exports in 2019. In contrast, manufactured goods delivered 87% of UK goods exports in 2019[1]. So, this analysis concentrates on manufacturing and specifically UK's top 13 manufacturing-export sectors. These 13 sectors delivered approximately 92% of UK manufacturing exports in 2019, or 79.7% of goods exports. Understand how these 13 sectors have performed over the past two decades and analysts get straight to the guts of UK trade performance.

Next, what goods should be excluded? In 2019, UK trade in non-monetary gold intensified spectacularly, deranging long-term export growth calculations. In ONS data, trade in non-monetary gold is captured in line item 24.4 'Basic precious and other non-ferrous metals', which also incorporates trade in silver, platinum, palladium and processed nuclear fuel. The value of exports under this heading jumped from the £10–£12 billion range during 2012–2018, to £24.4 bn in 2019. Since valuations of trade in non-monetary gold cannot be extracted from the precious metals category, or neatly divided between EU and non-EU trade, the value of precious metals has been stripped out of all calculations back to 2000, and the Basic Metals category has been withdrawn from the sectoral analysis. This denudes the current analysis of its seventh most-valuable export sector (in most years), which was worth £4.8 bn after the exclusion of precious metals.



What's left looks like this. In 2019, UK manufacturing exports totalled £302.5 billion, shown in the outer ring. With 'Precious Metals' it would have totalled £326.8 bn; and with all goods exports (including energy), £372.4.8 bn. The UK's top 14 manufacturing export sectors (minus Precious Metals) contributed 93.6% of manufacturing exports in 2019, and the top 13 (minus what's left of Basic Metals) contributed 92%. For perspective, I have added (in the inner circle) the contributions that each sector made 20 years ago – and it is vital to grasp how they have fared since. In short, the Motor Vehicles, Transport (which is almost entirely aerospace-related) and Pharmaceuticals sectors have grown strongly in UK's export mix. Exports of Computers & Electronics collapsed – in EU markets anyway.

The comparative performance of UK export sectors, 2000–2019

To perform a comparative test, the next step was to calculate the 20-year CAGRs for each export sector to EU and non-EU markets. To do this, ONS' differential import/export deflators were applied to the February 2020 data, which transposed all values into 2016 prices.

For readers of previous articles, the resultant CAGR for manufactured exports as a whole during 2000–2019 will not shock. Previous 20-year calculations included 1998 and 1999, during which UK exports to EU and non-EU markets both grow strongly. With 2000 as the two-decade start year, these final years of sustained growth to EU markets drop out of the two-decade time series. Since 2000, UK manufacturing exports to EU have hovered either side of £130 bn (2016 prices), peaking back in 2006. Inevitably, the 20-year growth rate turned negative in 2019, at -0.001% p.a. Barring a miraculous revival of exports to EU, the 20-year CAGR for UK's EU exports will stay negative for the next seven years until the EU peak-performance year of 2006 drops out of calculations. (And a graph showing the trajectories of manufacturing exports to EU and non-EU markets is presented at the end of this article).

Nevertheless, the weakness of UK's manufacturing exports is not the point of this exercise. What matters is how individual sectors have performed against each other — a metric here termed 'comparative performance'. The vital question: have those sectors that are supposed to enjoy a strong, preferential advantage in EU markets (by virtue of high protective tariffs, or seamless access) actually performed better compared to those sectors that don't enjoy a tariff advantage, or where harmonised EU regulation is light or absent.

Manufacturing Sector	CAGR exports non-EU	CAGR exports EU	Comparative Performance (ppts)
1. Motor vehicles	6.6%	-0.1%	**-6.7**
2. Transport (Aerospace = 94%)	4.0%	2.8%	**-1.2**
3. Machinery	2.2%	0.7%	**-1.5**
4. Chemicals	1.9%	0.6%	**-1.3**
5. Computers, electronics etc.	-1.7%	-5.4%	**-3.7**
6. Pharmaceuticals	5.3%	2.8%	**-2.5**
7. Refined Petroleum & coke	3.5%	1.8%	**-1.7**
8. Food products	4.3%	2.9%	**-1.4**
9. Electrical	1.3%	-1.0%	**-2.3**
10. Beverages	3.7%	2.0%	**-1.7**
11. Rubber & Plastics	1.9%	1.0%	**-0.9**
12. Apparel	3.1%	3.9%	**0.9**
13. Jewellery, medical etc	6.2%	4.1%	**-2.1**
All Manufacturing (minus precious metals)	**2.63%**	**-0.001%**	**-2.63**

From the above table, we can see the varying degrees to which UK's manufacturing exports to EU have underperformed exports to non-EU markets. In fact, all underperformed except Apparel, where UK exports notched up a splendid 3.9% p.a. growth, beating non-EU exports by 0.9 ppts. Incidentally, the -2.63 ppts average underperformance (bottom right) is a highly significant number. During the preparatory calculations for the Civitas paper, WTO vs EU, the relative merits of the UK's trade relationships, 1999-2018, Michael Burrage and I calculated that the economies of UK's non-EU trade

partners grew 1.77 ppts faster than UK's EU partner economies over an almost identical 20 year period. Yet the divergence here in manufacturing exports is almost 1 per cent wider – at 2.63 ppts. This strongly implies that something other than – or additional to – EU's slower growing economies is responsible for the strong divergence in manufacturing export performance, as between EU and non-EU markets.

Methodology

One straightforward method for analysing comparative performance is to compare the underperformance of each sector and see which side of -2.63 ppts average it lies. The methodological assumption runs as follows. We can see from the above that, on average, UK's exports to non-EU markets grew 2.63 ppts more quickly each year than to EU markets – and this differential is pretty much a constant whatever time span you choose. But if EU memberships had a positive effect on a particular sector, then we would expect to see the average difference between non-EU and EU CAGRs narrow in that particular sector to less than 2.63 ppts.

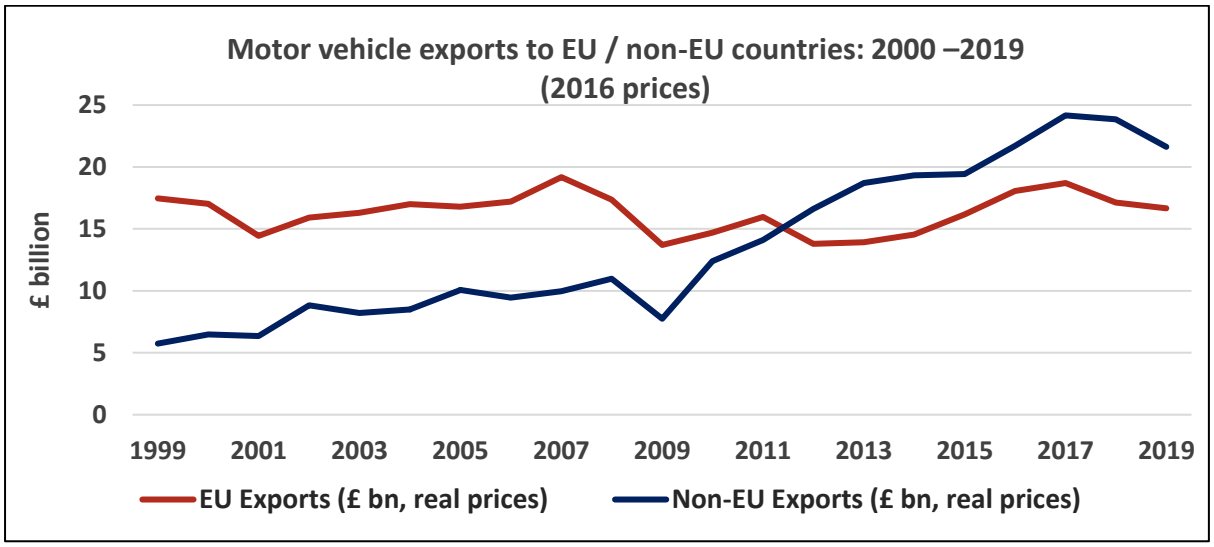
For example, the EU's tariffs on food imports are typically its highest. This gives UK food exporters a highly protected market within the EU, which they do not enjoy outside the EU. This is also a sector where EU regulation is pervasive and ubiquitous. If UK exporters benefited from EU harmonised regulation and high tariff protection, it should follow that UK's Food Products exports should be one sector where that -2.63 ppts differential falls – as in fact it does, to -1.4 ppts (Row 9: 2.9% minus 4.3% minus). Thus, even though UK foods exports have grown very well outside the EU, that narrowing differential – from -2.63 ppts to -1.4 ppts – is a signal that, compared to the rest of UK's manufacturing exports, it is a sector that has benefited from the terms on which UK trades with the EU.

Conversely, in the Transport/Aerospace sector, one would anticipate the reverse. WTO members eliminated tariffs on aircraft and aircraft parts in 1980, so UK-manufactured aerospace parts enjoy no commercial advantage in EU markets. And, in effect, regulation is global – largely because the European Aviation Safety Agency collaborates with the US Federal Aviation Administration on air worthiness certifications. There are no instances where, long term, EU regulators have unilaterally refused to certify Boeing aircraft or GE Engines, and the FAA has unilaterally refused to certify Airbus aircraft and Rolls-Royce engines, though the author is happy to be corrected. The point being, that UK-manufactured aerospace goods do not enjoy preferential access to EU markets by virtue of NTBs having been abolished within the Single Market. Consequently, Aerospace is one of those sectors where the 2.63 ppts differential should widen – as in some sectors they must.

Looking across the 13 sectors, the initial results look grim. The UK's most-valuable export sector, Motor Vehicles should benefit very strongly indeed from UK's EU participation. With a 9–10% protective CET and highly invasive regulation, auto exports should have sold well in EU markets as compared to non-EU markets, to which UK exports do not have seamless access. The opposite occurred. Exports to EU have fallen in real terms since 2000, while exports to non-EU markets have grown by 6.6% p.a. This produces a huge difference in comparative performance of -6.7ppts, which is 4.0 ppts wider than the 2.63 ppts average differential.

As a not-so-insignificant aside, though these percentage-point differences look minor on paper their effect in pounds is vast – especially over 20 years. For example, a chart of UK's motor vehicle exports using the exact same data shows non-EU exports starting at barely one-third the value of EU exports in 2000, overtaking them in 2012, and finishing up last year worth £5.5 billion more. (And a more

dramatic representation of the sheer perverseness of some UK sectors' export performance over the past 20 years it is hard to locate.)



Next down are exports of Transport or more accurately Aerospace goods, UK's second most-valuable manufacturing export sector. Here, the results frustrate expectations in the opposite direction. With no tariff or regulatory advantage, this is one sector where exports to non-EU markets should have outperformed: i.e., the difference between the CAGRs to EU and non-EU countries should widen. The opposite happened. EU exports actually grew surprisingly well, at 2.8% p.a., and certainly faster than for Motor Vehicles. But strange to say, the degree to which EU exports underperformed non-EU exports narrowed, from the manufacturing sector average of 2.63 ppts to just 1.2 ppts. So, comparatively speaking aerospace exports have performed exceedingly well inside the EU, despite the fact they enjoy next to zero competitive advantage in EU markets in terms of tariffs or seamless market access.

Third in the table – and next most-valuable – Machinery defies expectations too. Tariffs are exceptionally low, and frequently zero for the construction machinery in which UK is particularly competitive. Judging NTB barriers or benefits is harder. The author hazards that harmonised regulation probably confers limited advantage on UK machinery manufacturers, on the basis that the EU is unlikely to interfere greatly in the design of capital goods where competition across Europe is usually limited to a handful of companies anyway. If that appreciation is correct, then the expectation is that, like Aerospace, this should be one of the sectors where non-EU exports out-pace EU exports by more than the average 2.63 ppts. But again, in this sector EU and non-EU CAGRs are close, with EU exports underperforming non-EU exports by just -1.5 ppts.

Some sectors do conform to expectations. Food Products carry high and sometimes very high tariffs. The UK's Office for Budget Responsibility estimates average ad-valorem import tariff rates of 7.3% on food, beverages and tobacco[2], although individual items like vegetables and sugars can range to 20–30%[3], while the effective tariff rate for non-EU beef can reach 60%. Similarly, Apparel carries a typical 11–12% tariff. For Food Products, the comparative performance of EU exports drops to just -1.3 ppts as against exports to non-EU markets. For Apparel, EU exports actually outperform by 0.9 ppts. Incidentally, while a 4.3% p.a. growth for food products outside the EU may look impressive – and it is deeply impressive given tariff rates and NTBs outside the EU – it should be pointed out that the actual value to UK is small. Just £4.4 billion or 32% of total food exports were sold to non-EU markets in 2019, with imports even more heavily skewed to EU trade (23.4% to 76.6%).

Pharmaceuticals might be seen to conform to expectations—just. As a sector the UK pharmaceuticals industry gains little commercial benefit from EU membership, since most developed economies abolished tariffs on medicines during the Uruguay Round. Most pharmaceuticals licensing is still executed via national authorities with mutual recognition of each other's assessments. As to be expected, this sector has the third-widest comparative performance outcome at -2.5ppts. That said, the fact that UK's fastest-growing, major manufacturing sector since 2000 (at 4.14% p.a. overall) is also one of the least impacted by EU membership should raise negotiators' eyebrows.

It should be admitted that for some sectors it is exceptionally difficult to judge whether tariffs and regulations confer a strong commercial advantage on domestic producers. Beverages is one. Thus far, this analysis has only considered the degree of protection the EU imposes on non-EU imports, which gives UK producers preferential access to EU markets. But the global playing field for UK exporters also depends on whether countries outside the EU impose high, reciprocal tariffs on UK goods. Sometimes they don't.

For example, judging whether UK beverages exporters gain a substantial, comparative benefit from the Customs Union is a complex assessment. The EU does impose tariffs on many of the beverages that UK imports (wine, for example) but doesn't on the most-valuable beverage that UK exports (whisky). Further complicating the assessment, the US has not, until recently, imposed tariffs on whisky imports, while virtually every country in the Gulf, South Asia and in Asia-Pacific imposes very high tariffs, ranging from 90–150%. And while none of these markets compete in current export value to the US market (at least for Scotch), their potential value is gigantic. Thus, the question of how far the UK should enjoy a putative preferential advantage in EU markets as opposed to non-EU markets is exceptionally difficult to gauge.

For what it's worth, according to ONS, UK's £6.4 billion of exports of distilled alcoholic beverages – which were worth 69.7% of the value of exports in the beverages category – grew by 3.6% p.a. from 2000 to non-EU countries, as compared to 1.3% p.a. to EU countries. The fact that Scotch sales have overcome what are – outside of US – extreme tariffs to grow 2.3 ppts faster than to EU is a counter-intuitive finding. Unlike for food products, two-thirds of alcoholic beverages UK exports go to non-EU markets, however. So, the comparative performance of EU and non-EU exports for Beverages is very important indeed. For Scotland, it is vital.

The Comparative Benefit enjoyed by UK sectors inside the EU Customs Union & Single Market

Answering the question of whether UK sectors generally benefit from the Customs Union and Single Market requires some kind of metric for the putative advantage enjoyed by each sector within the EU. The following approach was adopted. Each sector was scored out of five for tariff impact, and then again out of five for regulatory seamlessness. While the scores for tariffs are probably not contentious, the scores for regulatory impact are tentative. The author invites comments on how to comparatively rank regulatory impact across sectors. The author also acknowledges that most studies assert that NTBs impose a greater burden on exporters than tariffs, and invites per-sector comments on how to qualify the relative impact of the two.

Nevertheless, the attempt has been made. Ascribing high regulatory impact scores for sectors such as Motor Vehicles and Food Products is not problematic. For example, engine-emissions regulations were sufficiently impactful on Jaguar Land-Rover in 2013 as to force the closure of the Defender production line at Solihull [4] the following year. Similarly, EU food regulations dominate the

production, packaging and retailing of food products, including how animals are slaughtered, and their flesh processed and preserved. Chlorinated chickens are, famously, a casualty of EU NTBs. Thus, both sectors score high for regulatory impact.

On the opposite scale, the assertion that EU regulations exert, in effect, a zero-to-mild impact on UK's Aerospace and Pharmaceuticals sectors is not likely to be seriously argued. Nor yet is the low scoring for clothing ('Apparel'), since labelling is hardly the most costly or complex element in the creation of a garment.

Many of the 'middling' sectors are more open to debate. As inferred above, the Machinery sector requires a nuanced assessment. There are thousands of goods in the Electrical sector, and it is unlikely that manufacturers would concur in any given score. For example, Mr Dyson might argue that EU labelling regulations were highly impactful but strongly harmful to the commercial prospects of his own vacuum cleaners in EU markets. He certainly thought so back in 2018, when he won an EU court case on the issue.[5]

With the best information available to the author, each sector has been given a combined 'comparative benefit' score. Thus, Food Products gains a maximum '10' score as the sector that should most benefit from the Customs Union and Single Market, while Aerospace and Pharmaceuticals each gain a minimum '2'.

UK's Top 13 Export Sectors	Tariffs (1-5)	Regulatory impact (1-5)	Comparative Benefit
1. Motor vehicles	4	4	**8**
2. Transport (Aerospace = 94%)	1	1	**2**
3. Machinery	2	2	**4**
4. Chemicals	2.5	3	**5.5**
5. Computers, electronics etc.	2	2	**4**
6. Pharmaceuticals	1	1	**2**
7. Refined Petroleum & coke	2.5	3	**5.5**
8. Food products	5	5	**10**
9. Electrical	2	3	**5**
10. Beverages	1	4	**5**
11. Rubber & Plastics	3	3	**6**
12. Apparel	4	2	**6**
13. Jewellery, medical etc	1.5	1	**2.5**

With the data arranged in this fashion, it is possible to perform a correlation across the 13 sectors. This pitches the comparative performance metric against the comparative benefit score. It should be noted that, according to orthodox trade theory, a positive correlation is to be anticipated. The comparative performance values were expressed in such a way that a small sub-zero value, or even a positive value (as in the case of Apparel) denotes a positive comparative performance in EU trade.

The biggest negative number was for the Motor Vehicles sector, which has achieved the worst comparative performance in EU markets of any sector since 2000. Similarly, the comparative benefit score shown above gives high values to the sectors that should enjoy the greatest putative benefit from EU membership.

Thus, a high comparative performance score should positively correlate with a high comparative benefit if UK exporters have genuinely benefited from UK's EU membership. According to most interpretations a value of +0.3 would denote a weak positive correlation, a +0.5 value a moderate correlation, and a +0.7 value a strong correlation. Meanwhile negative correlations of -0.3, -0.5 and -0.7 would imply the reverse. And a value close to zero implies no linear relationship.

The Correlation

The results are grimly negative. Across all 13 sectors, the correlation generates a value of -0.12. This means that on the above assessment, there is no linear relationship between the comparative benefit enjoyed by a sector in the EU – in terms of tariffs and seamless access – and it's comparative performance in EU markets over the past 20 years.

Sectors included in correlation	% of manufacturing included	Correlation
Sectors 1-5	58.3%	**-0.76**
Sectors 1-10	81.2%	**-0.26**
Sectors 1-13	89.1%	**-0.12**
Weighted Correlation		
Sectors 1-13	89.1%	**-0.45**

Unnervingly, restricting the correlation to just the top five sectors achieves a strong negative correlation, at -0.76, while restricting the correlation to the top 10 sectors, almost achieves a 'weak' negative correlation. It should be noted, incidentally, that to achieve a +0.7 result, consistent with a strong positive correlation would require a comparative benefit scoring so wildly different from the one used as to be implausible.

It is immediately obvious that the correlation fails because of the strong negative relationship in UK's largest trade sectors – Motor Vehicles, Aerospace, and (to a lesser extent) Machinery. These sectors are simultaneously UK's most valuable export sectors, and – together with Pharmaceuticals – UK's fastest growing major sectors. They matter more than the others.

And the fact that the top five sectors alone contribute 58.3% of manufacturing exports – and 51% of all goods exports – implies that a weighted correlation would generate a more accurate representation of comparative performance across UK businesses. Executing this calculation involved recalibrating the table to give UK's auto industry a prominence six times greater than beverages or apparel; aerospace five times; machinery and chemicals four times and so on, each in proportion to their size.

With this refinement, the verdict is brutal. A score of -0.45 implies something between a weak and a moderate negative correlation between the competitive benefit a manufacturing sector secures via UK membership of the Customs Union and Single Market, and its actual performance compared to other export sectors.

Conclusion

The statistical analysis conducted here is capable of refinement. It is an initial methodological attempt based on a detailed, ongoing analysis of UK's sectoral performance over the past 20 years.

Three points are worth noting, however. The sectoral scores for tariff rates are unlikely to change materially following further analysis. Effective tariff rates do not change overnight, so one half of the Comparative Benefit scoring is fairly secure. Only the scores for NTB advantage are likely to change substantially, although the outliers – Motor Vehicles, Apparel and Food at one end, Aerospace and Pharmaceuticals at the other – cannot change much, and in pound-value terms they dominate the correlation.

Neither are the results dependent on the 2000–2019 time period that has been selected. The author has calculated CAGRs for most of the sectors since 2016, using various averaging methods. The CAGR numbers that appear here are consistent with performance during the last 22 years – which is as far back as the ONS data set reaches. In earlier periods, the differential between the CAGRs for aerospace was wider, although that was balanced by the differential for pharma exports being much narrower. The average difference between EU and non-EU export CAGRs remains steady at 2.5–3.00 ppts, although – comparatively – non-EU exports grew faster in the first decade of the assessed period than the second.

Nor are the results for UK's non-EU trade skewed by UK's free trade agreements, or EFTA trade. As part of the preparatory work for the recent Civitas paper, Mr Burrage and I quantified the proportion of UK goods exports that were traded under each trade relationship. The results for 2018 were: EU, 49.11%; World Trade Organisations (WTO), 40.4%; the top 7 FTA partners, 3.9%; EFTA 3.0%, and the rest only 2.1%. So, WTO partners dominate the non-EU category.

What's more, the CAGR for goods exports to UK's top 40 WTO goods exports partners outpaced the other trade partnership types, with a 1999–2018 growth of 3.56% p.a. for WTO partners, as opposed to 3.44% p.a. growth rate for the top 40 non-EU partners. Thus, the non-EU performance results presented here are representative of UK's WTO export performances to within a very tight margin, and overall, they slightly understate them. For the interested, the preparatory spreadsheet used in the above analysis is attached here.

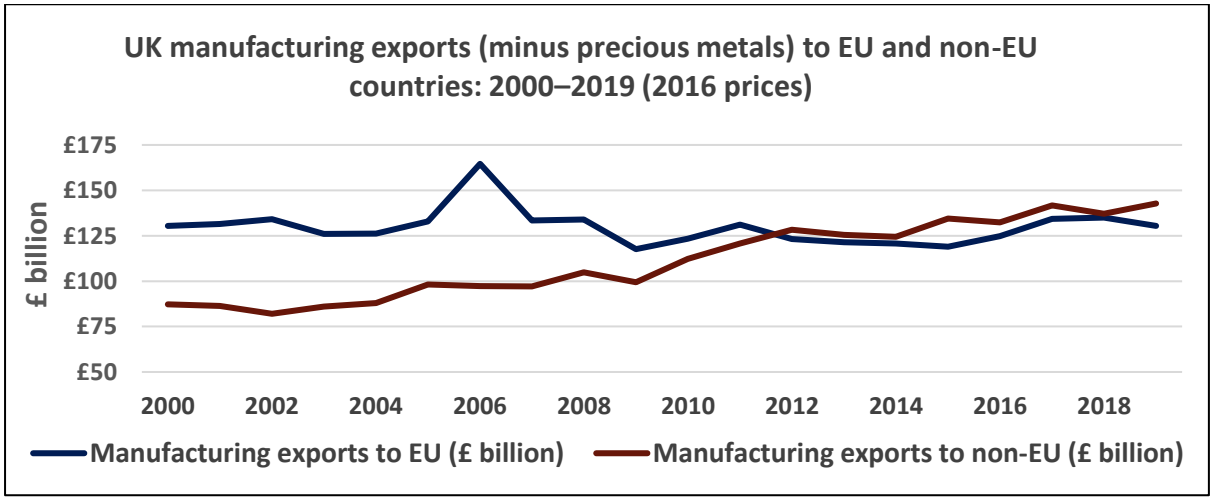
The author hopes to refine the Comparative Benefit methodology such that the correlation is – to use an abused term – robust. To incorporate this correlation into that publication, several statistical challenges will need to be overcome. For example, the fortunes of some UK sectors have changed radically within the 20-year timeframe of this study. UK's exports of pharmaceuticals grew exceptionally well in EU markets from 2000–2009. Since then, pharma exports to EU have plateaued and are now falling fast, while imports from the EU have soared. The result is that UK now has a £10.1 billion deficit in its EU trade in pharmaceuticals in what was, until recently, UK's best-performing major export sector of the past 20 years. Capturing this micro trend within a 20-year CAGR correlation is challenging.

Nevertheless, the following appears clear. Taking each of the 13 manufacturing sectors (worth 92% of UK manufacturing exports in 2018) at equal value, there is no correlation between the manufacturing export sectors that should have benefited from EU membership, and those which, comparatively speaking, actually have. And when the correlation is weighted to reflect those sectors which are most important to UK trade, there is a weak to moderate negative correlation; meaning – the less a sector is supposed to have benefited from the Customs Union and seamless trade over the past 20 years, the better it has performed, comparatively, in EU markets.

What this means is that UK's Department for International Trade may need to reconsider its strategic approach. Whatever factors actually impact the success of UK manufacturing exports, this analysis indicates that tariffs and regulatory alignment are not the most powerful. What's more, they are definitely not the most powerful for UK's largest export sectors such as Motor Vehicles and Aerospace, and are near irrelevant to Pharmaceuticals. Other factors predominate, whether they be changes in corporate investment strategies, state subsidies, or perhaps lower corporate taxation rates in fellow EU member states.

Consequently, if UK trade negotiators in Brussels are currently fixated on Single Market access and tariffs, they may pay a large price – in access or jurisdiction – for a trade deal that delivers no actual benefit to UK exporters, or only benefits UK's least-valuable, or slow-growing sectors.

If this sounds unlikely – and it is blatantly counter-intuitive – then readers should take a second look at the chart showing CAGRs of exports to EU and EU markets, the second chart in this article. There it sits, in the bottom row, stark as death: from 2000-20019, the CAGR of all UK manufacturing exports to EU was 0.0% p.a. This number is not a statistical fluke of the 2019 data release. As the chart below shows, it is a typical reading for UK manufacturing exports to EU over the past two decades, as UK's EU exports hover either side of £130 billion (in 2016 prices). The last years in which UK–EU exports increased sustainably were 1998 and 1999. The peak in EU exports occurred in pre-financial crisis 2016, and the average value of UK exports over the past decade was lower than for the decade before.



This failure to grow manufacturing exports over a 20-year period is an indictment of UK participation in the EU Customs Union and the Single Market, as constructed. It is also a statistical fact, the causes of which economists should debate, hopefully for years. But it is also a challenge for trade negotiators because it poses an urgent question. If zero tariffs and regulatory alignment really benefit UK exports – and if EU economies grew at all during that period – why have UK exports gone nowhere? That is a question that needs to be answered before UK considers what price it is willing to pay for seamless trade with Europe – if any price is worth paying at all.

Notes

[1] After extracting the value of precious metals (ONS CPA: 14.4) from 2019 totals.

[2] Office for Budget Responsibility: Discussion Paper No. 3. Brexit & the OBR's forecasts. https://obr.uk/docs/dlm_uploads/BrexitDiscussionWebVersion.pdf

[3] Protts, Justin; Potential Post-Brexit Tariff Costs for UK-EU Trade. Civitas, 2016

[4] BBC, October 8, 2013. Emissions rules to end Land Rover Defender production. https://www.bbc.com/news/uk-england-birmingham-24446070

[5] BBC, November 8 2018. Dyson wins ruling over vacuum cleaner tests. https://www.bbc.com/news/uk-england-birmingham-24446070