Four Industries and a Funeral?

Import Substitutions—a Test of the Possibilities in the Glass, Paper, Steel and Automotive Sectors

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Dr Alan Reece proposes that a Cabinet Minister for economic growth should oversee a department dedicated to increasing Britain’s manufacturing output. The Government, he argues, should aim to encourage an increase in output of £10 billion per year over the next ten years. To do this, each manufacturing sector should be examined for growth opportunities. The initial focus should be on reducing imports, recognising that in the short-term it will be easier for domestic manufacturers to focus on the home market and out-compete importers.

I have attempted to provide a short initial assessment of four sectors: paper, glass, steel and motor vehicles. This assessment provides a rough blueprint for a government sectoral analysis, recognising that the Government would be able to dedicate far more time and resources to the task. For three of the sectors, paper, glass and steel, the government-imposed increases in the cost of energy was the main obstacle to growth.

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up in the UK, Dr Palm, head of Palm Paper, said: 'The reason for building a newsprint mill in the UK is the lack of domestic supply. About 1.2 million tonnes have to be imported every year.' ONS PRODCOM statistics reveal the extent to which Palm Paper's investment could reduce Britain’s reliance on newsprint imports. In 2009, Britain consumed £802 million of newsprint of which £403 million or 50 per cent was provided by imports. Palm Paper plans to produce 400,000 tonnes of newsprint annually. ONS figures indicate that the UK imported 994,000 tonnes of newsprint in 2009, down from 1.2 million tonnes in 2008. This fall in imports by approximately 200,000 tonnes is the result of six months production by Palm Paper which began operating in June 2009. A full year’s production at the plant reduced imports by a further 200,000 tonnes, with newsprint imports totalling 806,000 tonnes in 2010.

In 2012, the Spanish paper and packaging group SAICA plans to open a paper mill in Partington Wharfside, near Manchester. The plant plans to produce 400,000 tonnes of 100 per cent recycled container board each year, to be made into corrugated packaging. ONS PRODCOM figures show that in 2009 the UK consumed 2.2 million tonnes of corrugated paper and paper board including corrugated cartons, boxes and cases. Of this, 2.2 million tonnes, approximately 200,000 came from imports. If only a quarter of the SAICA plant’s production supplied the domestic market, Britain could halve its demand for corrugated paper and corrugated paper imports. If half of the Partington Wharfside production met domestic demand the UK would be self-sufficient, although this is not likely to be the case as there will always be some imports of corrugated cartons, boxes and cases which come in the form of packaging of other products.

Despite being dismissed as a ‘sunset industry’, the evidence is that expansion is possible in Britain’s paper industry. Although UK domestic paper production fell by one million tonnes between 2000 and 2006, and the number of mills and employees in the industry fell by two thirds, production in 2009 was still close to 1989 levels. Furthermore, new investment in the industry has made paper production more efficient, closing inefficient mills and reducing the number of employees through automation and improved production techniques. The result is that the UK is still an attractive location for paper production, one in which international companies are keen to set up new factories. If the UK is going to reduce its reliance on imports, and increase manufacturing output by £10 billion a year for ten years, the paper industry provides a means of working towards this. Sadly the Government is not supporting domestic paper manufacturers and the industry’s future is in jeopardy. Its future is as uncertain as another important British manufacturing sector: the glass industry.

Glass
In 2006, before the recession, the UK produced 3.4 million tonnes of glass, around a tenth of EU glass production. Despite a dip due to the recession, which hit the construction and automotive sectors badly, there is little suggestion that appetite for glass products will fall in the future. Increasing demand abroad and stable domestic demand is expected, making a successful glass industry an important asset for the UK economy. Despite strong domestic production, the UK is a net importer of glass: in 2006 imports totalled two million tonnes with exports totalling 1.3 million tonnes. In monetary terms, Britain’s international trade in glass and glassware for 2010 totalled £1.3 billion for imports and £646 million for exports.
Some imports represent a mismatch between UK production and domestic demand. For example, the UK imports a significant amount of green glass as wine bottles. Despite this, the UK still imports many glass products which are produced domestically. Furthermore, as in the paper industry, there is evidence that the UK is an attractive location for glass production and recent investment has reduced the country’s reliance on imports. In 2008, British Glass reported 2006 figures which indicated that the UK was a marginal net importer of fibre glass. It was envisaged that with the decision in 2008 by URSA Insulation to open a new plant in Yorkshire, this situation could change. However, according to Government statistics, the UK was already a net exporter of fibre glass, in terms of value, by 2008, before production at the URSA plant began. HM Revenue and Customs figures published alongside the ONS’ PRODCOM statistics show that in 2008 the UK imported £163 million and exported £173 million of glass fibres—a trade surplus of £10 million. In 2009 imports fell by £21 million.

Glass is an important sector for reducing imports because there is strong domestic demand for its products. Glass fibres are used in the construction industry for insulation. Flat glass is also used in the industry for windows, and this is another product of which Britain is a net exporter. The construction industry will remain in the UK as long as demand for new properties exists. It would be advantageous if the industry were not forced to import more of its raw materials, something we are already seeing in the cement industry. Glass, especially flat glass, is expensive to transport, providing domestic producers with an advantage. The investment by URSA Insulation indicates that the UK is still an attractive location for glass production and domestic manufacturers can still benefit from the advantage of being a local supplier. Aside from supplying domestic customers that are wedded to the UK, domestic glass manufacturers also supply more mobile businesses. Since the closure of MG Rover in 2005, Britain’s high-volume vehicle manufacturers have all been foreign-owned. Nevertheless these manufacturers still source some parts, including glass parts, from UK suppliers. In 2009 Britain was a net exporter of rear-view mirrors for vehicles with a small trade surplus of £3 million. Despite this, 74 per cent of domestic demand was satisfied through imports worth £56 million. The challenge for Britain is to encourage its internationally competitive glass component manufacturers to increase production, utilise their local advantage to supply downstream businesses, and reduce the country’s reliance on imports.

As with paper, Britain’s glass industry has shrunk in terms of production sites and employment. Yet, as with paper, the glass industry has made significant efficiency improvements in the last 20 years, halving the amount of energy required to melt a tonne of glass. Furthermore the industry has not uniformly witnessed closures. 2002 saw an additional flat glass manufacturing facility opened by Guardian Glass in Yorkshire and in 2006 Quinn Glass opened a cutting-edge glass container production and filling plant in Cheshire, not to mention the new URSA plant. Due to efficiency improvements, only around 7,000 people are employed in the industry directly. However, it is estimated that there are 100,000 people in primary, secondary and upstream/downstream activities. While it is still the recipient of significant investment, Britain’s glass industry is under threat. Facing similar pressures to the paper industry, most notably the rising cost of energy, UK glass manufacturing represents both an opportunity and a concern for the British Government. Recent evidence has demonstrated the industry’s propensity for domestic expansion: glass can contribute to the £10 billion annual increase in manufacturing output for which Dr
Reece has called. However, if the Government does not act to halt current developments, the industry’s demise will worsen the balance of payments problem.

**Steel**

In 2006 the British steel industry produced 13.9 million tonnes of steel, a year broadly representative of annual production since 2001. In 2009 10.1 million tonnes of steel were produced, the recession resulting in a sharp drop in demand. The relatively stable level of steel production over the last decade indicates the continued success and viability of the British steel industry, despite having to respond to a number of significant threats. This is important because of steel’s ubiquity as a manufacturing material. UK manufacturers have relied on a responsive local steel industry as part of their supply chains, and this will remain the case in the future. The UK is a net steel exporter with exports exceeding imports by 1.5 million tonnes, resulting in a positive trade balance of £2.1 billion in 2009. However, British demand for unfinished steel products in 2009 was 7.9 million tonnes of which 3.7 million tonnes were met by imports. This indicates that there could be opportunities for the British steel industry to capture a greater share of the domestic market.

Steel is used in many of Britain’s leading industries; industries witnessing significant expansion. One such industry is aerospace. In November 2010, Tata Steel announced a £6.5 million investment in its Stockbridge plant to increase production of aerospace steels. As a result of this investment, output of these steels will increase by 30 per cent. Tata’s goal is to capture more of an expanding domestic supply chain. Peter Hogg, General Manager of Tata Steel Speciality, said: ‘As demand for aerospace steel increases, it’s vital we have the ability to increase our production of this highly technical and demanding product, which is used in aircraft landing gear, engines, wings and other safety-critical components.’ Fortunately for the UK, Tata steel’s investment will ensure that Britain does not rely on imports to meet increased demand for steel in the aerospace industry. Nevertheless future increases in demand may have to be met by imports, especially if the Government fails to create favourable conditions for steel production.

Of all the sectors investigated, steel perhaps provides the single best opportunity for increasing manufacturing output and reducing British imports. This is in part due to its ubiquity, but also because it is a necessary material for many expanding or new industries which the Government plans to support. The Conservative-led Coalition is keen to burnish its environmental credentials, promising to increase the amount of electricity generated from renewable sources, particularly wind turbines. Sadly for British industry, it is calculated that, at present, only six per cent of the current stock of UK wind components are produced by domestic firms. Wind turbine towers usually contain between 150 and 250 tonnes of steel; any increase in wind turbines in Britain provides an opportunity for domestic steel producers. This opportunity was recognised by Tata Steel who, in December 2010, invested £1.3 million in its Scunthorpe plant to produce steel for wind turbines. Tata’s investment and others, such as that of Sahaviriya Steel Industries, which bought Teesside Cast Products from Tata Steel in February 2011, demonstrates how the British steel industry is still an attractive target for investment, especially when there is domestic demand for steel. While current demand for steel in the developed world is not as buoyant as in rapidly-developing nations, new products and technologies will undoubtedly stimulate increased demand. However, this demand will have to be met by imports if British steel production is made chronically uncompetitive. Sadly this is already happening. Tata Steel recently announced it
was cutting 1,500 jobs in its Yorkshire and Teeside plants because of ‘uncertainty about the level of further unilateral carbon cost rises that the UK government is planning’. Further closures are almost certainly inevitable, unless the Government’s misguided renewable energy and climate change policies are halted.

The automotive sector

The UK automotive sector directly represents 2.4 per cent or over £8.5 billion of the British economy in terms of gross value added and employs around 700,000 people. Despite significant exports, the UK is a net importer with a trade deficit of around £10 billion in 2010. The latest PRODCOM statistics are for 2008 and are very detailed, but figures for ‘motor vehicles with a spark ignition internal combustion engine greater than 1500cc’ are reasonably representative of the whole sector. They show that domestic production was valued at £7.8 billion, exports at £6.5 billion and imports at £7.6 billion.

Unlike our main European competitors, the UK no longer has any indigenous, high-volume vehicle manufacturers, such as Renault in France or Volkswagen in Germany. Nevertheless the UK is still home to the fourth largest automotive industry in the EU, although the sector is composed of foreign-owned companies such as Toyota and BMW. There is however, a growing concern amongst those in the industry and in government that the UK may soon only be an assembly location for automotive manufacturers, with the research and development (R&D) and component manufacture taking place abroad. R&D expenditure as a percentage of gross valued added (GVA) in the automotive sector fell significantly in the UK compared to rival nations. Between 2003 and 2006 R&D expenditure as a percentage of GVA fell from above ten per cent to below five per cent. During the same period, expenditure remained constant in France and Germany at 15 and 25 per cent respectively. In 2007, the last year for which comparable figures are available, the UK spent €6,700 on R&D per employee in the automotive industry, compared with €7,900 in France, €11,900 in Austria, and €16,100 in Germany. Without R&D the UK will lose the technological advantage it has over low-cost assembly locations. If this is lost, there will be little reason for foreign-owned, global companies to base their assembly plants in the UK. The result will be that they take advantage of the cheaper labour or the greater component manufacturing base of other EU states.

Addressing this issue will require an increase in domestic production, not just an increase in UK assembly plants. Without an indigenous volume manufacturer, the UK must endeavour to grow its supply chain, the ‘most critical issue facing the automotive industry in the UK’ according to the Chairman of General Motors in Europe. The Government appears to have recognised this and has conducted an investigation into opportunities for reducing imports of automotive components. Currently, domestic vehicle manufacturers only source around 36 per cent of their components in the UK. Keen on increasing this amount, the Government has highlighted a number of component areas where it hopes domestic manufacturers will be able to increase output and supply more parts to vehicle manufacturers. For seven components (seats, bumpers, suspension systems, clutches, gearboxes, drive axles and steering components) earmarked by the Government, official figures indicate that current UK demand for these products is £3.9 billion of which £2.3 billion, or 59 per cent, is met through imports. The data suggest that there may be scope for reducing Britain’s reliance on imports. However, the challenge is encouraging domestic vehicle manufacturers to source more components in the UK. A greater challenge is posed
by components which are not widely produced in the UK, such as electronics. Looking forward, there are also very few companies in the UK developing low-carbon automotive components, such as hybrid engines or electrochemical fuel-cells.

Having recognised the opportunities and challenges facing the British automotive industry, the Government now needs to work out a strategy. This strategy needs to concentrate on increasing domestic output and focus on reducing imports, using the local advantage which domestically-based suppliers have over their foreign competitors. Dr Alan Reece has estimated that the UK economy requires £10 billion of extra production every year. The automotive supply chain generated approximately £3.2 billion of added value in 2008, meaning that growth in this already substantial industry would make an important contribution to this goal. However, this growth will not occur naturally: the UK must become the prime location for inward investment.

Increasing manufacturing output requires the creation of favourable business conditions for domestic businesses. It is often remarked that foreign-owned manufacturers contribute less to the British economy than indigenous ones. This is attributed to the fact that international businesses are quick to relocate when economic conditions deteriorate: choosing to close down overseas production sites rather than those in their home country. Furthermore, the difficulty of taxing multinationals continues to plague all governments, although there is no reason, in principle, why an indigenous multinational should pay more tax in Britain than a foreign one. However for the UK to significantly increase manufacturing output, as Dr Reece has made clear is necessary, foreign firms must be encouraged to set up production sites in Britain to contribute to this. This is particularly important in the automotive sector, which lacks an indigenous high-volume vehicle manufacturer.

Testifying to the UK’s success as a location for inward investment, the country is the top location for investment in the EU for Japanese vehicle manufacturers and tier one suppliers. Historically Britain has often led other European countries as a location for multinational businesses looking to supply the single European market. However, the country’s past should not be seen as guaranteeing similar success in the future. A number of reforms need to be made to make sure that Britain is a more attractive location than its European competitors. One, ensuring that there is a stable supply of energy at the lowest possible price, will be discussed further below. Other important reforms which must be made are:

- A reduction in personal and corporation taxes and a simplification of the tax system.
- The provision of capital investment and R&D incentives outside of the tax system for the many multinational firms that pay only some of their tax in the UK.
- The creation of a financial system attuned to the needs of manufacturers.
- In the long-term, the government needs to ensure that the British labour force has the right skills and training to meet the needs of vehicle and component manufacturers.
- There must be subsidies available to reduce the cost of inward investments by vehicle manufacturers. Similar subsidies should also be available to large component manufacturers, if they intend to supply components not currently produced by British manufacturers, thereby adding to the domestic supply chain.
These reforms are necessary, not only to attract businesses to the UK, but also to improve the conditions for firms already located here. The Government needs to recognise that truly removing the ‘barriers to enterprise’ should lead to an increase in total manufacturing output, not just shifting current output from British to foreign-owned companies.

*The cost of energy – a special problem*

The Government’s March 2011 ‘Plan for Growth’ stated: ‘we need to tear down the barriers to enterprise’, and its November 2010 growth review recommended setting up sector working groups to do this. The department for production proposed by Dr Reece would examine what specific barriers existed in different sectors, and how removing such barriers could help increase manufacturing output. In the paper, glass and steel industries there is one main barrier: rising energy prices.

Energy costs make up 11 and 7 per cent of the costs of glass and steel production, energy costs in the paper industry are higher at approximately 14 per cent. Energy costs significantly influence a manufacturer’s competitive position, and mobile firms will always have an incentive to relocate to another country where energy costs are lower. Currently British electricity prices are amongst the highest in the EU. In 2008 the Department for Business, Enterprise and Regulatory Reform (BERR) published the ‘UK Renewable Energy Strategy’ which assessed the contribution of the government’s climate change policies to the cost of industrial gas and electricity prices. In 2009 the Department for Energy and Climate Change published ‘The Renewable Energy Strategy’ which set out the cost implications of the UK’s plan to produce 15 per cent of energy from renewable sources by 2020. These two documents indicate that renewable energy and climate change policies could add 70 per cent to industrial electricity prices and 30 per cent to industrial gas prices by 2020. Price increases of this magnitude would be immensely damaging for the paper, glass and steel industries, and their survival would be put in serious doubt. Furthermore destruction of these industries would not bring accompanying environmental benefits; production would simply move abroad to take advantage of cheaper energy and less stringent environmental regulation.

Current climate change and renewable energy policies are misguided, and risk making the UK severely uncompetitive. There is a bewildering number of complex climate change and renewable energy policies, a situation which will be made worse by new legislation. While this complexity, in itself, poses a serious challenge, two policies are of particular concern. The first is the decision by the Government to set the UK a target of 15 per cent for renewable energy production by 2020, by its own admission: ‘the most challenging of any EU Member State’. This will drive up the cost of energy as energy providers pass on costs to consumers. Secondly, the Government has also decided to set a carbon price floor, which will ensure that the price of carbon in the UK is above that of the EU. Carbon in the UK will not be allowed to drop below a certain price, even if it is above that in Europe, generated through the EU Emissions Trading System. Both actions threaten to make Britain the most uncompetitive location for energy intensive industries, both in the EU and internationally. High energy costs affect not only large energy users but all manufacturers and will be a significant barrier to expanding manufacturing output. Far from tearing down the barriers to enterprise, the Government is erecting new ones, which will reduce manufacturing output and increase the country’s reliance on imports.
Conclusion

If Britain is to increase its manufacturing output by £10 billion per year for the next ten years, a rigorous assessment of the sectors where this is possible is required. This assessment should identify the barriers to expansion. This essay has looked at four important manufacturing sectors and found that it is realistic to encourage major increases in home production in place of imports. The Government, however, needs to play its part by ensuring that Britain has a financial system fit to serve the manufacturing sector. Above all, it needs to rethink decisions, such as its current climate change and renewable energy policies. What is important is that the Government commits itself to increasing output and looks at how it can encourage this, sector by sector. Such commitment is required if the Government is really serious about rebalancing the UK economy.
Notes


4. ONS PRODCOM statistics 2009 (last available figures). EU PRODCOM statistics allows for a comparison of UK production, UK exports and UK imports. Unlike using balance of payment data, which is classified in terms of Standard International Trade Classification, and UK production data, which is classified in terms of Standard Industrial Classification, PRODCOM’s import, export and production data is all classified the same, and so can be compared. PRODCOM statistics are compiled annually by the ONS. Information is gathered on manufactured items and the survey covers 21,500 businesses, 234 industries and 3,866 products. The data can be used across the EU and so the EU sets standards for data collection, which are as follows: In each Member State at least 90 per cent of production in each (four digit) class of NACE Rev. 1 product must be recorded, and any enterprise of 20 or more employees should be taken into account.


18. UK Steel, *Key Statistics 2010*.


http://www.guardian.co.uk/business/2011/may/20/tata-steel-job-losses-yorkshire-teesside


HM Revenue and Customs, UK Trade Info, 2010 Figures.

Excluding goods vehicles and motor caravans for more than ten people.


Eurostat data on gross R&D spending and number of employees in various European automotive industries.

http://www.bbc.co.uk/news/business-13179589

Holweg, M., Tran, Y., Davies, P. and Schramm, S., Growing the Automotive Supply Chain, the Way Forward, Automotive Council UK, 2011.

Holweg, Tran, Davies and Schramm, Growing the Automotive Supply Chain, the Way Forward, p. 2.

PRODCOM statistics compiled by the Office for National Statistics, 2009 figures.
