

The coalition has frequently talked of rebalancing the economy during its tenure. Chancellor George Osborne announced that he wished to see a Britain 'held aloft by the march of the makers' during his 2011 budget speech. He even broke a decades old British taboo by stating that he wishes to pursue an 'industrial policy'. If the term is to mean anything, it is the recognition that government has an important role in enabling the rebalancing towards manufacturing that the UK needs. Yet rhetoric aside, government ministers are still wedded to a *laissez-faire* ethos when making key decisions that impact UK manufacturing. This report highlights three such decisions where a narrow focus on taxpayer value meant that the government missed opportunities to strengthen British manufacturing capacity. The *laissez-faire* ethos of the last few decades hardly started with the coalition. But if it is serious about promoting a 'march of the makers', the government needs a new ethos.

Economic Rebalancing and the Limits of *Laissez-Faire*

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■ Unintelligent Procurement

The first two case studies are procurement contracts given to overseas bidders said to be more competitive than British firms. In both cases the government followed the 'supermarket shopping' approach to procurement. This mentality treats large scale procurement contracts as similar to consumer purchases of grocery items. Like the frugal consumer, the government picks the lowest priced item that meets its requirements. Defenders of this approach say it incentivises bidders to maximise cost-efficiency. The government should not show any partiality towards domestic bidders as that would dis-incentivise them from maximising efficiency.

The problem with this notion is that the economics of certain industries, such as ship

or train manufacture, are very different from pasta production. There are few buyers, typically only governments, and contracts are often for a small volume of very high value items that take considerable time to build. If, say, a large train manufacturer loses a procurement bid, it may have to wait years before it can bid again. During this time it still has to pay running costs such as staff wages or site maintenance. Since revenue is not forthcoming, the rational response is not to innovate and invest to try and win the next contract. It is to reduce headcount and capacity. Such cutbacks typically have multiplier effects on the wider economy. Once one site closes, other suppliers further 'upstream' are also likely to go bust. This is likely to reduce cost competitiveness which is often dependent upon the strength of the supply chain at home. Consequently, the

train manufacturer is likely to be even less cost competitive when a new procurement contract is up for tender several years later. Large parts of British industry have been caught in a catch 22: they cannot obtain government contracts because they lack the domestic capacity to be cost-competitive, yet that domestic capacity cannot be built without government contracts. In contrast, the overseas firms that beat British firms in procurement tenders operate in industries where capability has often been built up through careful government intervention.

This is not to argue that government should *always* favour British bids *regardless* of cost. Value for taxpayer money should always be an important consideration. But not the *only* consideration. There should be more recognition of the trade-offs involved in procurement decisions: between securing taxpayer value and avoiding inefficiency on one hand, and maintaining domestic capability in key sectors on the other. The problem with recognising trade-offs, however, is that it means these decisions inevitably become politicised. The great appeal of the supermarket approach to procurement is that it absolves civil servants and politicians of the need to exercise judgements for which they are subsequently accountable. Instead, difficult political decisions that involve weighing up several valid but competing criteria are reduced to administrative procedures of finding the lowest price. This is not the way to rebalance the economy.

Bombardier, Derby and Thameslink

The £6bn Thameslink contract is a major undertaking to upgrade the rail route that runs through London between Bedford and Brighton. The current service of 50 trains will be increased to 150 and the peak time capacity on the central London section will be almost doubled. As such, the project requires 1,200 new carriages.¹ On 16 June 2011, the government controversially awarded the contract to build these carriages to German-based Siemens rather than British-based Bombardier. Soon after, Canadian-owned Bombardier announced that 1,429 staff in Derby, comprising 446 full-time workers and 983 agency employees, or half its workforce, were being made redundant. The company was hoping that the Thameslink contract would keep the plant viable until a bid for Crossrail could be made. The government's decision caused much controversy, with the unions, the

media and MPs from both sides among the many voices calling for a reversal of the decision. Shortly after the announcement, Phillip Hammond told the House of Commons:

The procurement was carried out under the terms of the EU directive, and the Siemens bid offered the best value for money on the criteria for appraisal set out in the original competition that the previous Government launched.²

It is worth studying all the elements of Hammond's comments in turn, starting with the issue of the EU directive, which in fact grants more flexibility than Hammond's comments imply. EU Directive 2004/17 details the procurement procedures for the water, energy, postal and transport sectors.³ It is true that the directive allows the application of only two award criteria: 'the lowest price' and 'the most economically advantageous tender'. But a further reading reveals that the directive has an expansive definition of the term 'economically advantageous', which includes criteria 'such as meeting environmental requirements' or 'social requirements... of particularly disadvantaged groups of people to which those receiving/using the works, supplies or services which are the object of the contract belong'. There was scope then for the government to take into account social factors such as the impact of these job losses on the local economy in Derby. Therefore, while the directive was a bureaucratic burden, the decision to award the contract was ultimately the British government's decision.

Instead of a broad range of criteria, the decision was awarded only on one criterion: taxpayer value. The contract specification created by the previous and continued by the current government focuses purely on the cash cost of bids. Siemens was judged to offer the cheapest bid. The government refuses to release details of the respective bids on the grounds of confidentiality. However the strength of the German supply chain was likely a very important factor behind Siemens' cost competitiveness. As Karel Williams points out, German train manufacturers domestically source 55 per cent of their intermediate inputs whereas the British equivalent is only 25 per cent.⁴ The reason for the lack of British capability is a weak industrial policy that has failed to maintain domestic capacity and supply chains. A key problem has been a lack of consistency in procurement flows. The Railway Industry Association (RIA), which consists of the three historic suppliers of rolling stock to the UK, submitted the following data to the Transport Select

Committee's review of rolling stock procurement policy. [see **Figure 1 below**; source⁵]

The collapse in orders following privatisation in 1993 was followed by a five year boom from 1997 to 2002, followed by yet another collapse and then a modest upturn from 2005 until 2010. This volatility makes it extremely difficult for domestic train manufacturers to invest in skills and capacity. As the RIA explained in their submission:

Volatility on this scale is costly both for train builders and for companies in the supply chain: in time of low demand expensive plant is under-utilised, trained staffs are made redundant, skills are lost, and smaller specialist suppliers withdraw from the railway supply chain either voluntarily or through closure. When demand is restored, firms then have to recruit, train, re-open moth-balled facilities, seek new sources of sub-supply and re-climb the learning curve. The process is expensive, wasteful of human and other resources, strongly discourages innovation, drives up the cost of capital and can make long term skills development impossible to achieve. The volatility is difficult enough

*for the train builders to accommodate. Companies in their supply chains have even less visibility of future demand and often find themselves continuously ramping up or ramping down production, both of them costly processes.*⁶

In contrast, the flow of orders for rolling stock in Japan was much more continuous. [see **Figure 2 below**; source⁷]

However, it is not just through variable procurement that British train manufacturing has suffered. Weak corporate governance has also been an important factor. In the 1980s the whole industry, including Derby, was controlled by the nationalised rail company British Rail Engineering Limited (BREL). Since privatisation however, there have been multiple changes of BREL's ownership; the Derby site itself experienced five changes of ownership and at least three changes of management systems and objectives in 12 years.⁸

Figure 1: GB Passenger Rolling Stock Orders Placed 1988 – 2010

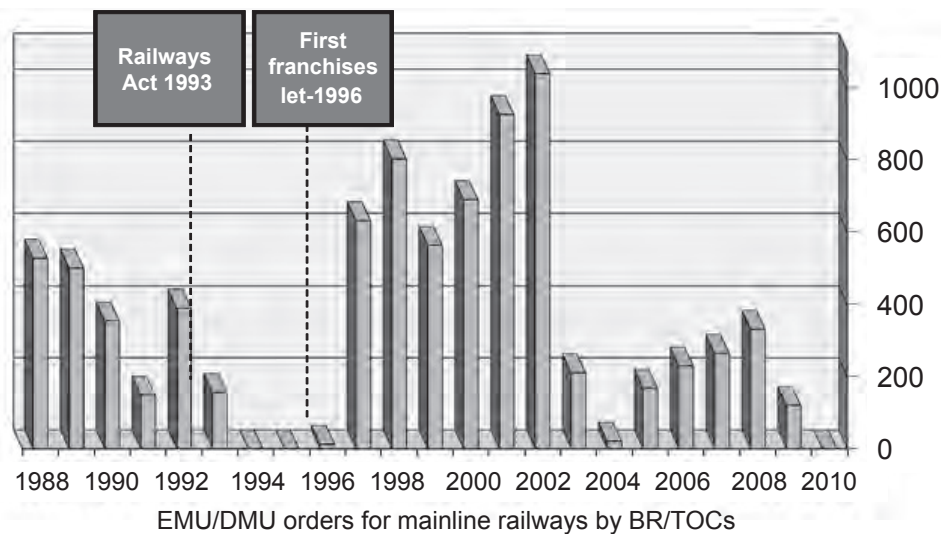
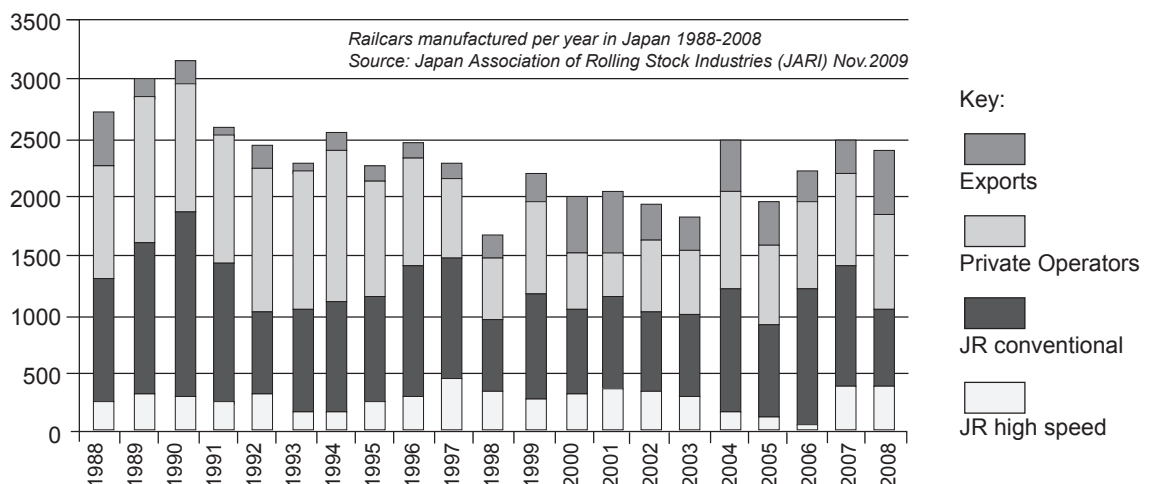


Figure 2: Japan Passenger Rolling Stock Orders Placed 1988 – 2008 (JR = Japanese Railways)



Such re-structuring made investment and forward planning very difficult.

If inconsistent procurement and low investment were the reasons why the British bid was less competitive, then this problem was only exacerbated by awarding Siemens the contract. The government should have at the least considered the impact of such a decision on domestic manufacturing capability. Furthermore, even if all considerations other than taxpayer value are cast aside there are reasons to question the government's decision, which did not account for these potential financial costs: the lost tax revenue as a result of placing the work overseas; the cost of unemployment benefit if (as is likely in a stalled economy) the consequently unemployed do not find new jobs; and the impact on the domestic supply chain and wider economy of placing the work overseas. Karel Williams has performed an alternative cost-benefit analysis taking these criteria into account and concluded that Bombardier should have been awarded the contract. It is true that such calculations always involve estimates and require judgement but, as Williams explains, this is inescapable. Traditional cost-benefit analysis, of the sort the government employed, is undone by its own pretension to 'depoliticise decisions in a world where everything is not commensurable, monetisable and transparent'.⁹

■ **British Shipbuilding and the MARS Tankers Contract**

On 22nd February 2012, an MOD press release announced that the £452m ship-building contract to build four Military Afloat Reach and Sustainability (MARS) tankers was to be awarded to Korean firm Daewoo Shipbuilding and Marine Engineering (DSME).¹⁰ Each of these 37,000 tonne tankers, due to enter service in 2016, are required to support Royal Navy operations around the globe by maintaining the ability to refuel warships at sea. Anticipating criticism of its decision, the MOD also claimed that the deal represented the 'best value for taxpayers' money' and that, while 'a number of British companies took part in the competition, none submitted a final bid for the build contract'. It was also stressed that £150m of associated contracts, including the provision of key equipment and systems, were to be given to British firms. Media reports further quoted government sources as stating that the UK did not have the capacity to

build such tankers.¹¹

First of all, it is worthwhile considering the claim that there was a lack of capacity in the UK shipbuilding industry to build the MARS tankers. It is indeed true that the British shipbuilding industry is much smaller than it used to be. In the 1950s, the shipyards along the river Clyde in Glasgow alone employed 50,000 workers who built half the merchant ships in the world.¹² Today, there are only around 4,000 employees working along the Clyde on two shipyards, both run by BAE systems: the Yarrow yard at Scotstoun and the Fairfield yard at Govan. The Royal Navy maintain the high profile Faslane naval base also at the Clyde, home of Britain's Trident nuclear submarines. BAE also runs the shipyard at Portsmouth. This currently has 3,000 employees, half of whom work on shipbuilding while the other half maintain and upgrade Royal Navy ships based there. The remainder of the British ship-building industry today consists of a handful of smaller yards, such as Cammell Laird in Merseyside.

While the capacity of the British shipbuilding industry is much reduced, the BAE shipyards at the Clyde and Portsmouth retain the capability to build highly sophisticated vessels. In 2010 they finished building the last of six Type 45 destroyer combat vessels.¹³ The Royal Navy website says they are able to 'shield the Fleet from air attack using the Sea Viper missile which can knock targets out of the sky up to 70 miles away if necessary'.¹⁴ The two sites have also been building the country's two new aircraft carriers. The final hull component of HMS Queen Elizabeth was completed late last year and currently both yards are working on the second carrier, HMS Prince of Wales, set to be completed in 2014. The aircraft carriers are 'huge at 280 metres in length, 65,000 tonnes and capable of embarking 40 aircraft – twice the capacity of [their predecessor] HMS Illustrious'.¹⁵ Given such track records at the Clyde and Portsmouth, the claim that the UK lacks the capacity to build the MARS tankers is strange.

The government's claims were further undermined by a leaked letter that emerged two days later on 24th February 2012. The letter was from Giuseppe Bono, CEO of Italian shipbuilder Fincantieri, to then Defence Secretary Phillip Hammond. Mr Bono outlined Fincantieri's bid for the MARS contract, guaranteeing 35 per cent work-share for UK companies. DSME had only guaranteed 20 per cent. Bono also claimed that Fincantieri had an agreement with BAE that, should they win the bid, they would share the design and build of the MARS tankers with BAE, including having one of the tankers built wholly

in the UK.¹⁶ The letter thus called into serious question the government's claims that the UK lacked capacity to build the MARS tankers and that there was no bid on offer supporting domestic jobs. Responding to press queries, then junior defence minister Peter Luff predictably said the Fincantieri bid was 'hundreds of millions more expensive and therefore would have been the wrong choice for UK taxpayers'.¹⁷ As with the Thameslink decision, the only criterion that mattered was the direct cost of the bid for taxpayers. Yet again, it is also questionable whether the decision was justifiable even on these narrow terms.

The government's decision came shortly after BAE's January announcement that it was putting 1,500 ship-building jobs in Portsmouth under review.¹⁸ The shipyard's future is uncertain once work on the aircraft carriers finish in 2014. Work on the next batch of vessels, the Type 26 frigates, does not begin until 2016. There is thus a two year gap to be filled. Portsmouth's position is especially precarious as BAE is said to be leaning towards building the frigates on the Clyde because Portsmouth would require extra investment, whereas the Scottish yards would not.¹⁹ Crucially, the *Guardian* reported that if the ship-building at Portsmouth was wound down, the Ministry of Defence would be liable to compensate BAE under the controversial terms of the 2008 Business Agreement (TOBA) signed by the previous Labour government. This guarantees BAE a minimum of £230m worth of ship-building work annually until 2024, with a cancellation cost estimated to be £630m.²⁰ Placing the MARS contract with Portsmouth may well have secured the future of the yard for the next few years and helped avoid these very substantial costs. Thus the direct financial benefits to the taxpayer of awarding the deal to DSME may have been greatly over-stated.

Over and above these financial considerations, little consideration appears to have been given to the ramifications of British ship-building capacity being further hollowed out. This is all the more surprising in a Tory-led coalition. Ship-building has long been regarded a core part of a country's defence capabilities. There was a time when Tory ministers would have prioritised retaining such capability over maximising short-term value savings. It is also a great irony that the UK government chose to place the contract with a South Korean firm. That country builds more ships annually than any other in the world except China. In 2011, it completed 35,650 gross tonnes worth of orders while China completed 39,496 tonnes and the third largest manufacturer, Japan, completed

19,360 tonnes.²¹ The South Korean shipping industry, including DSME, rose to prominence not because South Korea faithfully applied *laissez faire* principles to its ship-building industry – quite the opposite. Had South Korea applied British procurement principles to its shipbuilding industry, DSME would almost certainly not have been in a position to win the MARS contract.

South Korea witnessed a phenomenal expansion of its steel industry during the 1970s and 1980s. In 1970 the country had only one shipyard but the government encouraged the *Chaebols*, the country's large conglomerates, including Daewoo, to enter the industry. Production increased sixteen-fold, from 163,474 gross tonnes in 1973 to 2,813,920 tonnes in 1985.²² Low labour costs were a critical factor but this rapid rise was also greatly aided by a plethora of state interventions: preferential interest rates from state-owned banks; government guarantees on foreign loans; government investment in complementary infrastructure; and discounted steel prices through the state-owned Pohang Iron and Steel Corporation (POSCO).²³ It was only in the late 1980s when these measures were scaled back. The careful cultivation of capacity in the South Korean shipping industry over decades was a key reason why DSME had a competitive edge when bidding for the MARS contract.

The UK ship-building industry cannot return to the 1950s but nevertheless the MARS contract represented an opportunity to purposefully use government procurement in a way that would have helped secure the remaining British capacity in a strategically important sector. This opportunity has been lost, as it was also lost following the Thameslink decision. In the final section, we will turn to the nuclear sector where the coalition rescinded a loan that could have helped develop future domestic capability in another sector of great strategic importance.

■ British Nuclear Industry and Sheffield Forgemasters

There are two big energy challenges that Britain faces in the next few decades. One is meeting the very ambitious target of an 80 per cent reduction in carbon emissions by 2050. The other is to keep the lights on by replacing lost capacity. The UK's coal plants will be decommissioned after 2016 and only one of a total of nine nuclear plants will be operational after 2023.²⁴ Consequently

And yet the opposite happened. The mammoth thrived, and Britain failed to produce new competitors, agile or otherwise.²⁷

the government estimates that up to £110bn investment in electricity generation and transmission will be required by 2020. There is a strong case for nuclear to continue to play a big part in any future energy mix for three reasons: it is relatively cheap, proven to work on a mass scale and produces little emissions. Recognising this, the government plan to create 16 gigawatts of new nuclear capacity by 2025.²⁵

Given nuclear power's importance, it is all the more baffling why one of the coalition's first measures in June 2010 was to cancel the £80m loan to Sheffield-based engineering firm Sheffield Forgemasters. The loan was initiated by Peter Mandelson, then Labour's business secretary.²⁶ It was conditional on Sheffield Forgemasters building a 15 kilotonne press. These are used to produce the ultra large forgings that are an essential component of modern nuclear reactors. Had the press been built, Forgemasters would have been among the small handful of companies worldwide with such capability. The current government justified its decision to rescind the loan by referring to the need to save money during austerity and saying it was confident that Forgemasters would obtain private funding. Safe to say, such funding was not subsequently forthcoming.

Before analysing Forgemaster's further, it is worth referring to the economics of the energy sector and also briefly to the state of the British energy market. The economics of the sector are very similar to ship-building and train manufacturing. The contracts are simultaneously very long-term, high in value and few in number. Building strong domestic capacity in nuclear power similarly needs strategic direction from the state. As in other British sectors, this has been missing in recent years. The great irony of the privatisation of the British energy sector in the 1980s has been that today the biggest player is EDF Energy, a subsidiary of state-run French firm EDF SA (Électricité de France). EDF operates eight out of the nine plants in Britain, which was not what the architects of privatisation had in mind. Quite the contrary, they envisaged a world where only those power companies left alone by the state to compete in the open market would be successful.

As one commentator points out:

In Thatcherite terms EDF was a public sector mammoth that would inevitably be hunted to extinction by the hungry and agile competitors of post-privatisation countries like Britain. The laws of economics said so.

80 per cent of France's power comes from its 59 nuclear plants, which are managed by EDF SA. The country has the lowest carbon dioxide production per unit of GDP in the world, is the largest exporter of electricity in the world and has the 7th cheapest energy prices in the European Union. This is a success story by any barometer and it has been achieved through what effectively is a state agency. Highlighting this is not to denigrate privatisation per se, nor idealise the often poor record of the nationalised industries which it was intended to improve. It is to point out that pure market forces are not enough to build capacity in the energy sector. The US, while having a private nuclear sector, has a very well established subsidy programme for its nuclear industry, estimated to be worth \$22.5bn in loan guarantees for plants and enrichment in 2011.²⁸

In Britain on the other hand, most of our power generation capacity is now owned by overseas-based firms. For example, the largest offshore wind plant in the world, the London Array, is based in Britain but is controlled by three foreign firms: EON of Germany, Masdar of Abu Dhabi and Dong of Denmark. Furthermore, 90 per cent of the €2bn new supply chain contracts associated with the project has been awarded to overseas firms, with EON claiming that it could not find appropriate wind providers in Britain.²⁹ This hollowing out of energy supply chains means that the domestic economy does not reap as much of the benefit from government energy investments as it could do. The wider multiplier effect of such investments is captured by overseas economies. Given the £110bn investment that the power sector is estimated to need, the opportunity cost for the British economy of not being able to perform much of the supply work at home will be substantial.

The rationale of the Forgemasters loan was to make a tentative step towards strengthening the domestic supply chain in one key energy sector, thereby allowing the domestic economy to accrue more of the benefits from the planned nuclear expansion. Moreover, despite the Fukushima disaster in Japan, the International Energy Agency still predicts that worldwide nuclear capacity will 'grow in absolute terms'.³⁰ Had the loan gone ahead, Britain would have also stood to benefit from this global expansion. Instead, the chance to build capacity in a key sector was lost in the hope that commercial banks would fill the funding gap, which they didn't.

There was a partial U-turn in late 2011 when the government offered a £36mn pound loan for apprenticeships and equipment but it was for much more modest investments than the original loan.

■ Recommendations going forward

What is needed most of all is a change of ethos. There are several lessons to be learnt from these case studies:

Exercise judgement in key procurement decisions:

Judgement and rule-following are different. The former involves the evaluation of competing but valid criteria and making an active decision as to the correct course of action. The latter is far more passive: the decision is made by following a rule. The government's approach to procurement decisions has been to follow a rule – the lowest bid price – without taking into account other criteria – the impact of a decision on the local economy, whether the private sector can fill in gaps following job losses, the long-term impact on British capabilities in a sector, etc. There has to be a shift towards a more multi-dimensional approach in such decisions.

Ensure a steady flow of procurement contracts to key manufacturing sectors:

In awarding both the MARS and Thameslink contracts the government seemed oblivious to the importance of providing stable predictable procurement contracts to domestic firms. This is crucial if we are to maintain capacity in strategic sectors. If train or ship-building firms cannot reasonably predict their future revenue they will be disinclined to make long-term investments in both staff and equipment. There is also an efficiency cost as equipment and staff are not fully utilised during the 'trough' periods of volatile order flows.

Ensure civil servants have private sector experience:

A key problem in all these three case studies was that there did not appear to be anyone in government, whether minister or civil servant, prepared or able to properly evaluate the economic

and business impact of decisions. Important questions did not seem to be asked: Would giving the Thameslink contract to Siemens exacerbate the procurement volatility that has damaged British train manufacturing? Given the expected future demand for nuclear power, what would be the benefit to the British nuclear supply chain of being able to build ultra-modern forgings? What cost would reduced ship-building capacity in the present impose on future defence procurement? Arguably, if there was more experience within government of making commercial decisions, some of these important questions may have been asked. While ministers come and go, civil servants stay for the long-term and provide crucial advice to ministers. A stepped up programme of secondments to the private sector for civil servants could mean they would be better able to advise ministers in making the sorts of decisions reviewed in this report.

Take an entrepreneurial approach and don't be afraid to take risk:

British Leyland and Concorde loom large in the collective British memory and are cited as justification for the laissez-faire approach to manufacturing that the coalition has continued to follow. However, the right lesson from the 1970s is not to abandon industrial policy altogether. But to abandon *bad* industrial policy. The British approach tended to create inefficient domestic monopolies – for example with the merging of two car companies to form British Leyland in the 1970s. However, the (much more successful) Korean and Japanese industrial policy programmes did not undermine strong domestic competition. This meant that, for example, if one firm did not meet its export target, government support could be re-directed to a more able competitor. Just as in the private sector, while some judgement calls may turn out to be wrong, it is very difficult to succeed without being prepared to take some risks. The government should bare this in mind if it wants to secure that much vaunted rebalancing of the economy.

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