IEA Discussion Paper No.78

BALANCING THE ECONOMY

The hand of government or the invisible hand?

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December 2016

Institute of Economic Affairs

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Summary

- Despite its considerable strengths, the UK economy is seen as having a number of problems, in particular productivity which lags behind some competitors, low levels of investment and persistent regional disparities. Following the referendum decision to leave the EU, there is wide interest in developing a new industrial strategy.
- The Prime Minister and others have spoken of 'rebalancing' the economy away from what is said to be an excessive reliance on financial and other service sectors. This is often taken to imply that manufacturing should be specially favoured.
- Manufacturing remains more important in the economy than is often claimed, and the decline in its share of national output has been exaggerated. All developed economies are experiencing a fall in the relative share of manufacturing and the UK is not seriously out of line with many comparable countries.
- The UK has a growing comparative advantage in services which the government should not attempt to frustrate by favouring manufacturing.
- The past record of industrial policy in the UK is a catalogue of waste and ineffectiveness. By the end of the 1970s it was widely accepted that the strategy of attempting to pick winners and promoting national champions was fundamentally flawed.
- The international record is only slightly more encouraging. Previous models such as France and Japan no longer provide a convincing case for government intervention. More recent examples of apparently successful industrial strategy, such as South Korea, seem to be more ambiguous than their advocates suggest.

- Much attention has been paid to the concept of ‘the entrepreneurial state’, promoted by Professor Mariana Mazzucato. Her analysis sees the state as having been a major contributor to such dynamic innovations as the iPhone and the Internet, and argues that government intervention is necessary to fund far-sighted schemes that are unlikely to attract investment from venture capital.
- Mazzucato’s analysis, however, misreads the contribution of entrepreneurs such as Steve Jobs and is a retrospective rationalisation of interventions which were never consciously planned. Her examples do not provide any guide to future government policy.
- While political pressures mean that the revival of interest in industrial strategy is understandable, it is not clear that the sectorally-based policies being suggested are fundamentally different from those proposed in the past. Governments are still likely to be tempted to intervene for narrowly political motives and it is still assumed that governments possess insights which the private sector is denied.
- The UK’s economy and its population would be better supported by a revival of ‘horizontal’ rather than ‘sectoral’ strategy, concentrating on boosting competition, relaxing planning controls, liberalising energy, deregulating markets and promoting tax reform. The government should also eschew protectionism and excessive restrictions on immigration.

Introduction

Meaningful international comparisons of output are difficult to make, but the UK in 2016 probably ranks as the world's ninth largest economy in purchasing power parity[1] terms, second only to Germany in Western Europe. Comparisons of Gross Domestic Product per head are yet more problematic: the top places are invariably taken by atypical cases such as Qatar, Liechtenstein and Kuwait. Comparisons can be misleading where the demographic make-up, employment rates and shares of wages and profits differ sharply between countries. But the UK is one of a sizeable cluster of rich developed countries with GDP per head over $40,000 and high scores on most quality of life indicators. Apart from the recession in 2008-2009, the economy has grown more or less steadily for two decades, in recent years faster than most of its European neighbours.

The UK economy has strengths and weaknesses. By comparison with much of the world, its institutions are stable and subject to the rule of law. It has highly successful sectors in areas such as finance (albeit with a damaged reputation after the 2008 crisis), pharmaceuticals, business services, aerospace, the creative arts and IT startups. It has universities which generate world-leading research and attract large numbers of overseas students. It is easy to start a business, and there are few barriers to foreign firms that wish to enter the UK. Accordingly, it attracts large amounts of foreign investment. An active Competition and Markets Authority promotes competitiveness, and public sector procurement is open and fair. Product and market regulation is relatively light. Employment regulation, though growing significantly in recent years, remains much less onerous

1 Using nominal exchange rates to compare GDP in different currencies leads to implausible short-term variations as rates fluctuate. PPP enables comparisons by eliminating the effects of price level differences between countries. This increases the relative significance of economies such as those of China and India (Henderson 2015).

than in most European countries. This is the major reason why employment growth has been strong in recent years. Unemployment remains well below the EU average, and far below levels in France, Italy or Spain.

On the other hand it is widely acknowledged that the UK economy has problems. Despite its strong higher education sector, its schools do not produce outstanding results and its record on technical education in particular has been poor for many years. Too many of its workers have limited skills and this is one reason frequently cited for the economy's disappointing labour productivity[2] record. From the 1980s to the early 2000s, the UK reduced much of its 'productivity deficit' with other leading economies, including the United States. However productivity fell sharply in the recession and has been slow to recover, so that currently it is again less than 75 per cent of that of the US and Germany, and indeed is the lowest of any G7 country except Japan.

Slow productivity growth means in turn that real wages cannot grow rapidly. Many lower-to-middle earners have seen their pay grow only slowly, or even fall, in the last decade. There have also been considerable regional variations in the impact of the recession. London, the South East and the East of England have recovered well, the North East, West Midlands and Northern Ireland less so.

The UK has other weaknesses, it is said. It has low levels of investment as a proportion of GDP. It is unable to build sufficient housing to meet the growing demand, and thus house prices have risen to multiples of household incomes which are unmatched in other countries. This has put home ownership out of reach for many and also raised the cost and reduced the availability of rented accommodation. The UK relies heavily on exports of services – especially financial and business services - to offset a huge and growing deficit on goods. Despite reductions in the size of the public sector and high tax levels (a large part of the reason for significant levels of tax avoidance, which disturbs politicians and the public), there is a continuing fiscal deficit, a still-growing national debt and a future burden of public-sector pensions of worrying dimensions. One major area of growing public spending, the National Health Service, seems impervious to reform.

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2 Labour productivity – best measured in terms of Gross Value Added per hour – is a crude measure of the efficiency with which resources are used. Better is Total Factor Productivity, which accounts for capital as well as labour inputs, but it cannot be measured unambiguously and data are not available with the same timeliness as labour productivity. TFP measures, however, tell broadly the same story about the UK's performance relative to other countries.

Although many of these problems have been around for years, concern has been growing since the recession. This has been exacerbated since the EU referendum by fears about the possible consequences of Brexit for trade and investment. There has been a growing feeling that the UK economy has not been serving the nation well and that it needs to be 'rebalanced'. This is the context in which Theresa May's new administration has called for a new industrial strategy, a call echoed by other political parties. Shadow Chancellor John McDonnell, for example, has called for a £100 billion investment programme to start a 'manufacturing renaissance'.[3]

3 https://www.theguardian.com/politics/2016/sep/26/labour-will-offer-interventionist-government-john-mcdonnell (accessed 27 October 2016).

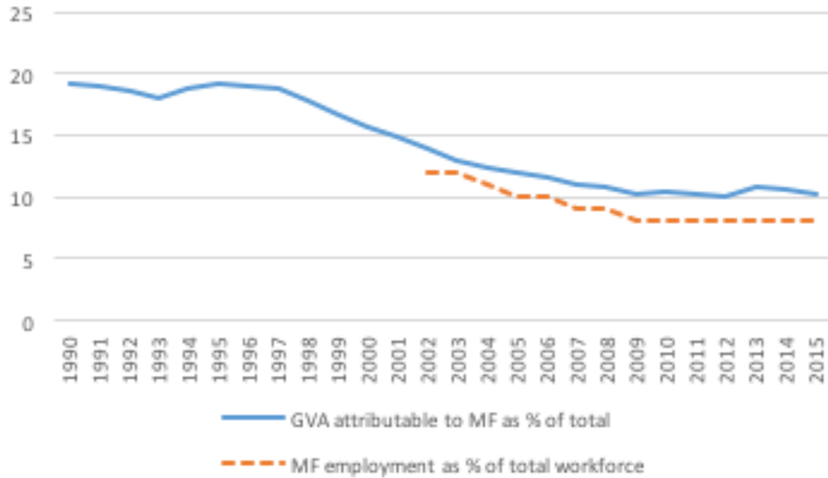
Should manufacturing be the priority?

Proponents of ‘rebalancing’ typically assert that the share of financial and other ‘weightless’ service activities in the UK economy is too large, and the share of manufacturing too small.[4] Manufacturing accounted for more than 30 per cent of UK output in the early 1970s. Since then its share has declined considerably. Figure 1 charts the story for the last quarter-century, with manufacturing’s share of Gross Value Added now around 10 per cent and its share of employment about 8 per cent.[5]

4 Mills (2014/5), for instance, wants to see manufacturing back up to 15 per cent of national output.

5 Gross Value Added is equivalent to Gross Domestic Product at the aggregate level, but regional breakdowns are not possible with GDP so the GVA measure is favoured. The difference between the ratios of GVA and employment reflects the fact that labour productivity in manufacturing is higher than that in the economy as a whole.

Figure 1: Manufacturing in the UK economy



Sources: World Bank; ONS.

Compared with some countries, manufacturing's share of output may seem small. In China, Taiwan and South Korea it is close to 30 per cent. In Germany it is 23 per cent and even in Italy it is 15 per cent (Rhodes 2015). On the other hand, the share in the UK is roughly equivalent to that in France, the Netherlands, the United States and Canada. Moreover, the share of manufacturing has fallen in all developed countries, and even in China and India it is lower than a few years ago. In absolute terms, output in UK manufacturing is higher than it has ever been, significantly higher than in the 1970s. The decline depicted in Figure 1 is a relative one, reflecting the much more rapid growth of the service sector. In 2014, the UK was still the world's ninth or eleventh[6] largest manufacturing power, accounting for 3 to 3.5 per cent of global output of manufactures.

The sector continues to play a very important part in the UK economy, accounting for 44 per cent of exports. In some parts of the country it is more important than others. In the East Midlands 12 per cent of all jobs are in manufacturing, compared with just 2 per cent in London. Moreover, the decline in manufacturing's share of employment and output is misleading. Since the 1980s manufacturers have increasingly outsourced much of their

6 Variations in the figures reflect the choice of exchange rate used for comparisons.

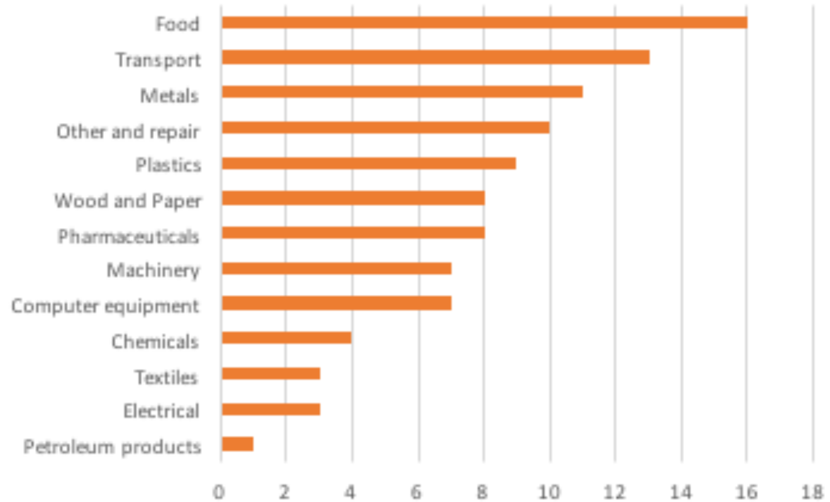
non-core business (Berlingieri 2014). Catering, transport, security and a range of ancillary services which would have been counted as manufacturing output in the past are now typically bought in rather than supplied in-house. It has been suggested that about 19 per cent of the UK's output is still directly reliant on manufacturing business in this wider sense.

An added reason to avoid vague talk about the need for what George Osborne called a 'march of the makers' is awareness that the boundaries between manufacturing and services are shifting in another way. Some 15-20 per cent of the revenue of manufacturers now comes from providing services such as design and development, maintenance and support. Rolls Royce, for example, supplies not just aircraft engines, but a maintenance package throughout their working life. This process has been given the unlovely description of 'servitization' (Hardie and Banks 2014). The increasingly fluid border between manufacturing and services means that policies to favour manufacturing are not as easy to design as they were in the 1960s, when the UK introduced a Selective Employment Tax[7] in a 60s-style attempt at rebalancing.

Despite these qualifications, increased international competition, especially from newly-developing economies with much lower wages and less expensive overheads, has undoubtedly meant that many types of manufacturing have largely left the UK. For example, as Figure 2 indicates, the textiles sector – once a major employer and source of exports – is now a shadow of its former self, accounting for only about 3 per cent of total manufacturing output. What remains is specialist niches – Harris Tweed jackets, Savile Row suits, Shetland sweaters and designer dresses – where a high price is taken as a proxy for high quality, and willingly paid. The inexpensive clothes in Primark or George are all imported.

7 This was a weekly payroll tax proposed by the Cambridge economist Nicholas Kaldor (1966), an advisor to Harold Wilson. It was levied against all employers at a flat rate of 25 shillings (£1.25) per man, and 12s 6d (67.5p) per woman, a considerable amount at the time. Manufacturing employers, however, were reimbursed and given an additional payment per employee, so the tax (which was abandoned when VAT was introduced in the early 1970s) subsidised manufacturing at the expense of services.

Figure 2: Output of manufacturing sectors as percentage of total manufacturing, 2014



Source: Rhodes (2015)

It is clear why particular companies or industries have succumbed to cheaper competitors, but is there a more general explanation of the changing structure of the UK economy? According to Broadberry and Leunig (2013), half the decline in the share of manufacturing in GDP can be accounted for just two factors. One is the fall in the average price of manufactures relative to those of services, which reflects differential scope for increases in productivity.

The other is the low income-elasticity of demand for manufactures: as our income rises we may to some extent go for improvements in the quality of the goods we consume but we do not tend to buy more and more clothes, furniture, household goods or cars. Rather we spend an increasing proportion of our incomes on services such as education, health care, child care, restaurant meals, entertainment and travel.

It is often claimed that much of today’s manufacturing is concentrated in ‘high added value’ sectors, employing highly skilled workers and investing heavily in research. While there is some truth in this – for example, aerospace, pharmaceuticals and biosciences - much manufacturing is rather less glamorous. Figure 2 shows that the largest single manufacturing

sector is food manufacturing which, while not in modern conditions exactly low-tech, is not what most people think of as a high-tech industry. This is an example of a low-paid manufacturing sector which is unlikely to be undercut by foreign competitors because of the need to be close to consumers. Chilled ready-meals and fresh sandwiches cannot easily be imported from India. The same cannot be said of other low-tech manufacturing, which some commentators (for example Mills, 2014/5) would like to see return to the UK.[8]

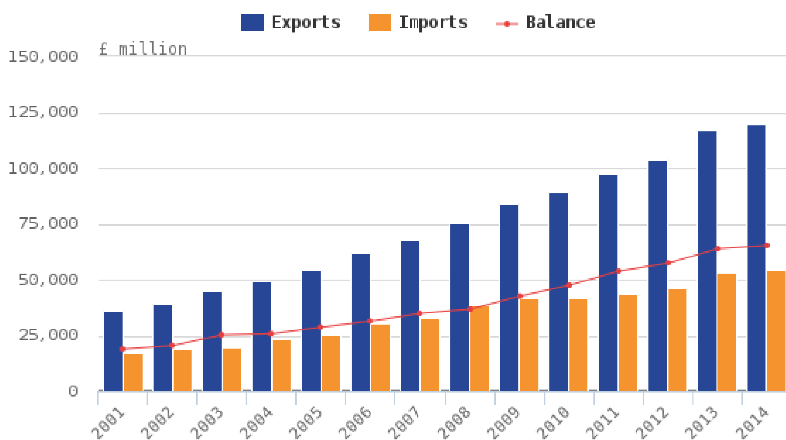
Moreover the manufacturing workforce as a whole is not particularly highly skilled compared with other sectors: the proportion of skilled workers is roughly the same as in the workforce as a whole, and much lower than in sectors such as banking and finance and public administration, education and health. Indeed the decline in manufacturing employment has coincided with a general increase in the level of skills across the economy, and also perhaps with the 'quality' of jobs. Many traditional jobs in manufacturing were tedious, repetitive and often dangerous: the number of work-related fatalities has more than halved in the last twenty years as the UK has switched to an increasingly service-based economy.

Two arguments for placing greater emphasis on manufacturing relate to the sector's export potential and to the scope for productivity gains.

As discussed, it is true that manufacturing accounts for a disproportionately large share of UK exports. However this share has been declining sharply. Many of these exports go to the rest of the European Union, reflecting the way in which the Single Market has favoured manufacturing at the expense of services: there may be no tariffs on goods, but there is no single market in services. Exit from the EU may change this implicit bias towards manufacturing exports to (and imports from) Europe. The UK's comparative advantage seems to be shifting away from manufacturing, as Figure 3 (showing the UK's growing trade surplus in services) suggests.

8 Mills thinks this could be brought about by holding down the exchange rate. Much would depend on the price-elasticities of demand for manufacturing exports and imports – the old Marshall-Lerner conditions much discussed in the days when we still worried excessively about the balance of payments. The potential for getting things seriously wrong in the short run are considerable, and in the long run it is unlikely an artificial exchange rate could be maintained.

Figure 3: UK trade in services



Source: ONS

While productivity has typically increased faster in manufacturing than in other parts of the economy – part of the rationale for the Selective Employment Tax, referred to earlier – this does not seem to have been as marked in recent years, with many service activities showing faster growth in output per head (Valero 2014). In any case, even quite large increases in manufacturing productivity can have only a small impact on overall productivity, given the size of the sector.

In reality there is considerable scope for productivity gains in many service fields where productivity has lagged behind. In retailing, for example, relatively low productivity has been associated with planning restrictions on location and land use and there is potential for improvement. In large parts of the private sector, including but certainly not confined to financial services, market and occupational regulation hold back productivity and could be cut back. In rail transport, restructuring of the franchise system and a determined attempt to reduce trade union vetos over change could offer similar opportunities. Union influence is also a barrier to change in healthcare, education and other parts of the public sector.

So the case for prioritising manufacturing, as a means of boosting overall productivity and economic growth, rests on flimsy grounds. There is certainly no reason to promote manufacturing over services.

The UK's past industrial strategies

The idea that Britain should have an industrial strategy is not a new one. For much of the early post-war period, the need to boost British industry through government intervention was a taken-for-granted feature of political discourse.

At various times, intervention has included such (often contradictory) policies as nationalisation and privatisation, regulation and deregulation, new taxes (such as Selective Employment Tax), tax credits for investment, tax cuts, government investment in infrastructure, import duties, export subsidies, promotion of mergers, tougher competition policy, placing controls on capital flows, liberalising capital flows, encouraging larger firms, encouraging smaller firms, funding research and development, encouraging training and education, subsidising foreign investment, deterring foreign takeovers, supporting UK businesses by using public procurement, opening up public-sector franchises to overseas competition.... This hotch-potch is not an exhaustive list.

The Labour government of the 1940s engaged in a range of nationalisations of what used to be called the 'commanding heights of the economy' – transport, energy, coal mining, steel, and so on. The rationale was often confused, but Labour politicians (and, indeed, much of the wider public) felt that state planning had helped to win the war, and that a benign peacetime government could eliminate waste in nationalised industries, promote technical development and improve both service to the public and the conditions of the workforce.

The Conservative administrations that followed from 1951 to 1964 may have moderated the ideological preference for state intervention, but they largely retained the nationalised sector. Various attempts were made to

improve its efficiency - for instance by setting target rates of return (Spackman 2013) and, towards the end of the period, setting in motion the Beeching cuts to the railway network - but few of its components were returned to the private sector.[9]

Moreover the Conservatives frequently intervened to support (via tax concessions, direct funding and government purchases) British producers, both public and private, in such areas as aircraft manufacture,[10] armaments, nuclear power, shipbuilding and even the early computer industry. The motivation behind these interventions was confused. Often 'national security' – that useful catch-all - was mentioned.

It was during the late 1950s and early 1960s that commentators of all political stripes became increasingly aware of the UK's relative economic decline. Despite historically high rates of economic growth since the war, the UK's output and productivity had not grown as rapidly as those of many of its competitors. Some put this down to not having sufficient clarity from the government about its industrial strategy. The example of France's system of 'indicative planning' was often quoted admiringly: a system of five-year plans which set out strategic directions and used various incentives to induce public and private actors to behave in the planners' approved manner and focused investment in key sectors. Later Japan's Ministry of International Trade and Industry (MITI) was similarly lauded for its role in promoting rapid growth in that country.[11]

The response of Harold Macmillan's government was to set up the National Economic Development Council (NEDC), bringing together representatives of management, trade unions and government in an attempt to reverse the UK's relative economic decline. This was supported by a National Economic Development Office (NEDO) and, later, 'little Neddies' – sectoral working parties.

9 The most significant probably being the steel industry, which was denationalised (the word 'privatised' had not yet been coined) in the 1950s. It was however re-nationalised under Harold Wilson in 1967.

10 It was the Conservatives who began the extremely expensive and ultimately unsuccessful Concorde project. For an analysis of that ill-fated scheme see Myddelton (1997).

11 Interestingly, less attention was paid to the German example, which proved in the long run to be more successful than that of France or Japan. Under Adenauer and Erhard, 'ordo-liberalism', which eschewed government intervention, was the Federal Republic's policy.

The NEDC was retained by Harold Wilson's first administration and played a role in the discussions around the Labour Party's ambitious National Plan. This was introduced by Wilson's volatile deputy, George Brown, in August 1965. It was intended to reduce both public spending and private investment abroad, to promote exports and reduce imports, to control increases in prices and incomes ('voluntarily'), to improve training, to invest in declining regions and to introduce redundancy payments and wage-related unemployment benefits. The objective was to boost output by 25 per cent over a five-year period. However, nothing much came of the Plan, which fell apart following the sterling crisis of 1967.

Another development in this period was a policy to promote mergers, which were intended to facilitate economies of scale and thus boost productivity. The Industrial Reorganisation Corporation (IRC), set up in 1966, promoted and supported around fifty mergers involving 150 companies during its short life. The responsible minister, Michael Stewart, stated that the IRC's aim was to achieve

> 'the optimum size of firm — the firm which is neither unwieldy nor menaces the consumer though the danger of monopoly but which is able to obtain all the advantages of scale which modern conditions of industry make possible'.[12]

Quite how a government body possessed the information and insight enabling it to do this was never made clear. Certainly the IRC's record was unimpressive: one of its 'achievements', for instance, was to create British Leyland, a disastrous development for the UK's motor industry.[13]

The IRC was wound up by Edward Heath's Conservative government. Heath came into office determined to reduce the role of government in the economy. However the pressure of events eventually led him to be almost as interventionist as his predecessors. In 1971 Rolls-Royce faced bankruptcy following a huge cost over-run and was nationalised, while in 1972 an almost complete turnaround in industrial policy was signalled by the passing of the Industry Act, which aimed to promote regional and national economic growth through tax incentives, development grants and so forth. By the end of his period of office in 1974, Heath's government had poured vast amounts of money into 'modernisation' schemes in coal

12 Quoted in Hindley and Richardson (1983).
13 The company was eventually nationalised in 1975 as it faced collapse.

and steel, had tried to shore up the last UK motorcycle producer, and was subsidising businesses to move to the regions.

But the high-water mark of industrial policy in the UK was reached under the Labour government of 1974-79. Initially the responsibility of Tony Benn as Secretary of State for Industry, the bones of the policy were set out in a 1974 White Paper and another Industry Act in 1975. ‘Planning agreements’, originally dreamt up by Stuart Holland and the Institute for Workers’ Control, were proposed between large companies and the government: companies would commit[14] to investment and jobs and in return would receive financial and other support.

A National Enterprise Board was set up to promote greater public ownership (a role which was soon downplayed) and to provide funds for the regeneration of British industry. This was justified as promoting advanced technology in profitable firms, but it was soon directing these funds to shore up collapsing businesses. It is estimated that 95 per cent of the funds it disbursed went on ‘lame ducks’ (Wickham-Jones 1996: 141).

Among such were various attempts to support worker cooperatives: Kirby Manufacturing (an engineering firm), the Scottish Daily News, a newspaper, and Meriden, which made Triumph motorcycles. All were supported when about to collapse: Benn announced that they would become co-operatives as a ‘social experiment in industrial organisation’, but all eventually failed.

It is difficult to disagree with the damning verdict of Owen (2012: 11-12) on this period:

> ‘Even allowing for the exceptionally difficult economic situation which prevailed in the second half of the 1970s, Labour’s industrial policy had done little to strengthen British industry. It had created national champions on the basis of unrealistic assumptions of what these companies were likely to achieve. It had exaggerated the importance of scale as a source of competitive advantage. It had failed to inject new dynamism into technically backward industries. Where whole industries had been taken into public ownership the effect had been to politicise decision-making and to delay adjustment to market changes. Unlimited access to public

14 Benn seems originally to have wanted the 100 largest UK companies to be *required* to sign such agreements, but this was never a political starter.

> funds, as in the British Leyland case, had the effect of insulating managers and employees from the realities of the market.'

Following the return of the Conservatives under Margaret Thatcher, the intellectual case for state intervention was largely discredited. In his influential IEA paper, aptly titled *Picking Losers,* John Burton (1983) set out the theoretical case against interventionist industrial strategy. He pointed out that, in the private sector, persistent loss-making signals that resources are not being used effectively and should be withdrawn from the activity in question. Temporary losses can be handled without government intervention if the market anticipates better performance in future. Business failure and its threat has a positive function in redirecting resources. Thus artificial support of loss-making businesses through state subsidy, as practised by both Labour and Conservative administrations, delays economic adjustment and misdirects resources. Even the more forward-looking idea of assisting new high-tech businesses is unlikely to succeed as governments have no special insights enabling them to pick winners and subsidise their development. Moreover, whether financed by taxation, government borrowing or (as in the 1970s) by inflation, subsidies have harmful direct and indirect effects on unsubsidised companies whose capacity to provide well-paid and secure jobs is diminished.

For Burton, then, governments should avoid selective interventions which hamper adaptation to economic change. More positively, they should create a general environment in which business entrepreneurship can flourish on its own – what has been called a 'horizontal' strategy.

This means privatisation, deregulation, openness to trade, capital and labour mobility, an active competition policy, possibly some general support for improved education and skills training (where there could conceivably be problems of access to capital by self-funders, or perhaps 'externalities' of some sort) and a limited amount of 'blue skies' research (which may have 'public good' characteristics). Markets should in most circumstances be allowed to determine resource allocation and thus the industrial structure of the economy

Under Mrs Thatcher there was a clear movement away from discredited interventionism. The National Economic Development Council was largely ignored (and eventually closed down under John Major). Nationalised industries were broken up and privatised, and deregulation (notably in finance, energy and the labour market) became the watchword. This was

to become the new consensus[15] as the Labour Party broadly continued with the approach under Tony Blair and Gordon Brown.

The growing importance of European Union law in any case ruled out some of the older policies – for instance subsidising loss-making businesses and 'national champions' and using public procurement to protect domestic businesses. The EU has also had a positive effect in promoting, for example, open access to railways and competition amongst airlines.

Now, however, pending Brexit has opened up the possibilities of intervention again. And, following the 2008 crash, advocacy of greater state involvement in resource allocation and decisions over the economy's sectoral composition has grown. Factors behind this intellectual shift include the precedent of government intervention in the bailout of Royal Bank of Scotland and Lloyds during the financial crash; the poor performance of labour productivity since 2008; the worldwide slump in commodity prices, which has affected Britain's oil and steel industries; and recurrent problems in the more regulated areas of economic activity, such as housing, energy markets and the railways.

15 Although concern about 'deindustrialisation' and, later, 'rebalancing' has always continued as a minority position. Michael Heseltine under John Major, Peter Mandelson under Gordon Brown, Vince Cable under the Coalition and even George Osborne more recently have wanted the government to take a more active role in industrial policy.

Industrial policy around the world

The intellectual case for renewed intervention is often buttressed by reference to other countries which seem to have achieved rapid growth while pursuing an active industrial strategy. Does their experience have anything to tell us?

Whilst the record of industrial policy in the United Kingdom has certainly been poor, it cannot be said that the experience of other countries, more and less developed, has been all that different. We briefly consider two salient cases of industrial strategy around the world, one broadly regarded as unsuccessful, the other often used to illustrate the potential value to be had from state intervention in resource allocation.

Latin America

Industrial policy in Latin America between the 1930s and 1970s was characterised by import-substitution industrialisation (ISI). The aim was to favour the growth of domestic industries through direct subsidies and protection from foreign competition. However, rather than create internationally competitive firms, such policies tended to lead to inefficient monopolies or oligopolies focused on their protected markets at home (Robinson 2009). Additionally, these industries tended to be capital-intensive, so that the reallocation of investment towards them and away from more labour-intensive sectors such as services often led to unemployment and low wages in the latter (Krugman 1983). This in turn fed the emergence and persistence of large informal (‘grey’) economies.

ISI was gradually abandoned from the 1970s onwards, but since the turn of the century scholars have documented a return of industrial policies across Latin America, in the form of research and development subsidies, export promotion and other policies commonly found in Europe and North America (Devlin and Moguillansky 2012). This is, however, far removed from the crude activism pursued in the mid-20th century. Moreover, it needs stressing that the countries in this region which have shown the greatest progress in poverty reduction, GDP growth and human development have tended to be those, such as Chile, Mexico, Colombia and Peru, which have pursued domestic market reforms and liberal investment and trade policies (Zuluaga 2015).

The Far East: Japan and Korea

To proponents of state activism, Japan and South Korea – which experienced very rapid rates of GDP growth from the 1950s and late 1960s, respectively – epitomise the benefits of industrial targeting.

For a while it became the conventional wisdom in the West that Japan grew rich thanks to a firm alliance between domestic businesses and government. As remarked earlier, this narrative explained Japanese success as a combination of supposedly judicious protectionism and the strategic guidance of the Ministry of International Trade and Industry.

However, this account has been questioned by Japan analysts for some time. Allen (1978) argued that Japan's economic rise took place alongside significant reductions in trade barriers. In his account, competition between domestic firms was fierce during the 1960s and 1970s, with MITI's strategy often contested by the private sector. He shows that, contrary to received wisdom, Western businesses such as Procter and Gamble managed to achieve large market shares in Japanese consumer markets during this period. Where there was a contrast between the ability of Japanese businesses to compete in foreign markets and foreign businesses' more limited success in Japan, Allen suggests that this just reflected Japanese firms' better understanding of the relevant consumers.

Okuno-Fujiwara (1991) writes of a gradual softening of Japanese industrial policy, describing how, from the early 1960s, 'the private sector started to resist public intervention in favour of [the] free market mechanism' (see Krueger 1995). Krugman (1983) further demonstrates that Japan's success

in steel and semiconductor production was chiefly explained, not by industrial targeting, but by Japan's lower production costs relative to the US and by an effective international division of labour.[16]

A prominent UK-based cheerleader for active industrial policy, Ha-Joon Chang (1993; 1996) has argued that Korean economic development between the 1960s and 1990s had much to do with the pursuit of a national industrial policy. He describes a range of schemes, from credit rationing to import restrictions, export subsidies and the promotion of collusion, as typical of public interventions undertaken during this period. Yet from the 1960s South Korea also liberalised its trade with the West, reformed its exchange-rate and monetary policy to achieve stability, and freed up its labour market (Krueger 1995). The trend was for interventions, especially on a macroeconomic plane, to be ratcheted down between the 1950s and 1990s, even if some state involvement in the economy remained.

There may have been factors which led industrial policy in South Korea to be more effective – or less harmful – than in other places. Chang suggests that Korean policymakers showed greater willingness to withdraw funding from unsuccessful projects than other administrations around the world, weakening the perverse public-choice incentives often associated with intervention (Burton 1983). Such determination did not however prevent Korean financial institutions from becoming overstretched in their lending to domestic industrial conglomerates prior to the 1997 Asian financial crisis, which led to a US-orchestrated international bailout (Baumol et al. 2007).

16 Indeed, to the extent that there was industrial targeting of steel, Krugman argues that it encouraged low-marginal-return production, taking up resources that could have been more productive elsewhere.

Other international evidence

A recent study by Bloningen (2016) examines the impact of protecting the steel industry, a feature of industrial policies in many countries. His cross-country analysis suggests that raising the price obtained by domestic steel producers raises costs downstream, to steel users such as fabricated-metal and machinery manufacturers, and thus significantly reduces exports. In particular, he finds a one-standard deviation increase in steel interventions to be associated with a 1.2 per cent decline in export competitiveness for the average manufacturing sector, and 6 per cent for those that use steel intensively.

A study of 95 state-led road and rail projects in China between 1984 and 2008 (Ansar et al. 2016) finds that, due to cost overruns and benefit shortfalls, as many as 55 per cent of projects had a benefit-cost ratio below 1, meaning a net loss in economic value. Only 28 per cent of projects studied can be considered to have been genuinely economically beneficial. The authors find that infrastructure investment on the scale undertaken by China over the past three decades has increased the country's economic fragility.

Industrial policy and the ‘entrepreneurial state’

Discussions of the economic potential of industrial policy have traditionally centred around the existence of alleged market failures related to economies of scale, externalities and public goods provision (see, for instance, Stiglitz et al. 2013; Krugman 1983). However, in recent years a new line of argument has emerged, going beyond traditional ‘missing markets’ justifications for public intervention, and advocating greater state involvement in resource allocation on the grounds that government is better placed to undertake certain forms of investment.

Professor Mariana Mazzucato (2011; 2015) is the most prominent advocate of this view. In her book *The Entrepreneurial State*[17], she argues that government has often been the unrecognised driver of innovation, providing not just capital but strategic orientation in emergent industries. Her analysis, which focuses on the United States in the post-war period, concludes that such momentous innovations as the Internet and a range of ‘orphan’ drugs[18] would not have happened without state activism. She particularly credits two US government programmes, DARPA (the Defence Advanced Research Projects Agency) and the Small Business Innovation Research (SBIR) programme, with having enabled such discoveries. In Mazzucato’s

17 A phrase which has been picked up by the Left and was, for instance, used by John McDonnell in a Today programme broadcast on Radio 4 in September 2016. McDonnell said: ‘It’s a modern term but it sets out, I think, what other states are doing. The state has a role in the economy, working with entrepreneurs and wealth creators, developing and investing in the long term, in patient, long-term investment in research and development and science, helping people develop the products and the markets in that way to create a prosperous society.’

18 Drugs for very rare conditions, where the research and development costs may outweigh any feasible financial returns.

account, the state is not funding science passively but giving 'mission-oriented directionality' to innovative research.

She also famously sees Steve Jobs' development of the iPhone as simply pulling together and repackaging a number of government-sponsored technological developments, and initially partly dependent on venture-capital-style government funding (Mazzucato 2015: chapter 5). This is linked to an argument that Apple and other large corporations which have benefited from government funding should pay far more in tax and thus obviate the need for fiscal austerity while in turn providing funding for the next generation of state-backed innovation.

Yet reality falls distinctly short of Mazzucato's ambitious vision for the state. First of all, it is remarkable that, given the wealth of evidence on industrial policy in a range of areas, countries and time periods, she limits her analysis to a few decades in a single country and draws a general conclusion from it. As we have indicated, it is undisputed that state intervention in industry has been an unmitigated failure in some places (for example, Latin America), and has badly disappointed in others (such as Britain). Its impact and legacy is hotly disputed even in those countries (such as South Korea and Japan) that seem to have been, at least for a time, more successful. However, *The Entrepreneurial State* seeks to blow away the collective weight of the literature and assert a 'this-time-it's-different' belief by reference to a handful of examples from two comparatively small US government programmes.

Secondly, there is a great discrepancy between the level of state intervention present in those programmes and the role that Mazzucato now advocates for government. DARPA's role was to provide funding to research being conducted in American universities, but the research itself was undertaken independently of state direction (Mingardi 2013: 613). This may explain why Mazzucato terms this type of industrial policy 'decentralised', an apparent contradiction in terms since industrial policy is precisely about the state giving central direction to business decisions. Decentralisation, in this case, amounted to nothing less than academic researchers pursuing their own goals with state funding. Her analysis is, as Mingardi puts it, an 'ex post rationalization of policies that were not necessarily put in place to promote a particular research program'. This is a far cry from 'mission-oriented directionality'.

The same is true for SBIR and the partial deregulation of drug approval for orphan drugs. The former earmarks a small (2.8 per cent) share of research and development spending by US government agencies to be allocated to innovation research being undertaken by small firms. This makes it closer to the traditional understanding of research as a public good necessitating state subsidy.[19] The orphan drug programme is essentially a supply-side measure, aimed at mitigating the regulatory burden on pharmaceutical research for those drugs not targeted at a large patient population.

The argument that state intervention can be entrepreneurial is belied by most of the accumulated evidence on industrial policy. More often than not, governments end up misdirecting investments to low-value activities, crowding out private research spending and falling into the sunk-cost trap, which leads them to throw good money after bad despite poor outcomes (Burton 1983; Kealey 2015; Broadberry and Leunig 2013). Notwithstanding the wide acclaim with which it has been met, *The Entrepreneurial State* is too narrow in its scope and too over-the-top in its policy conclusions to warrant any substantial change in policy thinking.

19 This argument has increasingly been challenged. See Kealey and Ricketts (2014) for an alternative model.

The dangers of a return to activist policy

More than a generation has passed since the majority of UK politicians saw direct government involvement in industry as a sensible strategy for promoting economic growth. While the forces that have revived this idea are understandable, to turn back the clock would be a great mistake. There is no reason to believe that the government is any better at 'picking winners' than it was in the 1950s, 1960s and 1970s. The recent decisions to approve High Speed 2 and Hinkley Point C show that the appetite of politicians for grand and hopeful gestures rather than hard-headed analysis is just as prevalent as it was in the days of Concorde. Moreover, prejudice against finance and financial services is at least as strong as it was when Harold Wilson railed against the 'gnomes of Zurich', while opinion still seems irrationally to prefer manufacturing to services.

As John van Reenen (2014) has argued, 'a modern industrial policy does not fixate on manufacturing'. The manufacturing sector is a mixed bag of high-tech and low-tech: it does not have self-evidently superior powers to boost productivity and exports. Its fetishisation is therefore backward-looking and ignores the many opportunities that exist for innovation and growth in services where the UK has clear comparative advantage – for example, business services, software, the arts and education.

Even in primary production there are many opportunities, especially post-Brexit. Outside the Common Fisheries Policy, there is likely to be a revival of British deep-sea fishing. Inshore there may be opportunities for fish and seaweed farming. And of course there are considerable possibilities

for shale gas extraction[20] if the government is prepared to face down the often irrational opposition of the Labour Party, the SNP, the Green Party and assorted activists.

Considerable scope also exists for productivity gains in public-sector services (the NHS, education and so on) and in regulated private-sector areas such as railways and energy, where inappropriate and ham-fisted regulation has led to growing demands for renationalisation.

The point of criticising emphasis on manufacturing is not to demand government support for services and primary production. It is rather to argue for the state playing a neutral role instead of supporting particular sectors and individual businesses. The UK's economic history since the war shows how easy it is for governments, albeit with the best of intentions, to be on the one hand seduced by distant prospects of technological breakthroughs and on the other by more immediate panic over potential job losses when an important business runs into trouble.

Whatever the shortcomings of the European Union in other directions, at least it has inhibited the worst excesses of the 1970s. Even with Brexit still some time away, it has already been evident that ostensibly pro-market politicians can easily slip into shoring up steel producers and demanding concessions to keep volume car manufacturing in the country. It is difficult to believe they will resist the temptation to go back to trying to pick winners.[21]

20 Apart from the direct returns to investment (and associated employment) in shale gas extraction, evidence from the US suggests that the consequently cheaper energy brings substantial benefits to other parts of the economy (Arezki et al. 2016).

21 One enthusiastic government supporter, London and Westminster MP Mark Field, swears that there will be no picking winners, but simultaneously salivates over the prospect of using procurement contracts, research grants, access to land and tax incentives to support key industries. http://www.cityam.com/252724/theresa-mays-industrial-strategy-isnt-picking-winners-but (accessed 2 November 2016).

An industrial strategy we would support

We are not complacent about the problems facing the UK economy, but clearly it would be a mistake to go back to a time when governments routinely tried to outguess the market. The Prime Minister told the Conservative Party conference that there would be no return to attempts to ‘pick winners’. However, she then went on to claim that the government would – somehow – identify sectors of strategic importance and support them. Examples were mentioned – aerospace, financial services, cars, life sciences – though none seemed obviously in need of help.

This approach should be rejected. If revisiting the past is the thing, the government should reinvigorate the liberalising direction of the 1990s and adopt the ‘horizontal’ rather than the ‘sectoral’ approach – aiming to create a much more competitive economy which is truly ‘open for business’.

Over the last twenty years, regulation of business and employment has become excessive in response to ever-shifting government priorities. This trend should be reversed. For example, the energy sector should be liberalised, lowering costs to consumers and businesses. Subsidies to renewables and emission targets should be scrapped, and perhaps replaced by a neutral carbon tax. Most of the barriers against fracking should be removed.

Huge state investment of the kind advocated by the Labour Party is unnecessary. Rather it should be easier for private investors to come forward and start new businesses. Planning controls should be deregulated and relaxed, making it easier to change land-use and boosting the supply of new housing. And real effort should be put into labour market deregulation post-Brexit, including looking again at working time, the role of unions in

key sectors such as transport, and the apprenticeship levy. Occupational licensing, which increasingly protects producers at the expense of consumers, should be cut back.

Immigration policy should not restrict firms' ability to recruit skilled labour, even if border controls are tightened. And while national security may be a reason to be wary of dependence on Russia and China, this should not be an excuse for general bias against foreign ownership. Indeed, there is probably a case for looking critically at the current public interest tests for takeovers in defence, financial services and the media, rather than making foreign investment more difficult. A thoroughgoing reconstruction of the tax system is also needed, starting with reforming business rates and council tax, and cutting (or, ideally, scrapping) corporation tax (Booth 2016).

Above all, confidence must be restored in the evolutionary vigour of the market process which, despite its vicissitudes, is likely to generate greater prosperity in the long run than a return to the dirigiste industrial strategies of the past.

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Acknowledgements

The authors would like to thank John Mills and the Politics and Economics Research Trust for their generous financial support which has made this research paper possible. This paper is one of a series part-funded by the Politics and Economics Research Trust (registered charity no. 1121849), commissioned from the UK's leading think tanks and policy organisations on the theme of rebalancing the economy. The research findings of this programme will be published during late 2016 and early 2017. Further details are available at www.pert.org.uk.

The authors would also like to thank Phoebe Farrer and Alex Jongwoo Lee for their research assistance.

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