Industrial Strategy: What it is, what it isn't, lessons from history

One: Introduction

There's widespread recognition that the number one challenge facing the country is the economy. The Prime Minister has said that it's his most important mission. Growth has consistently underperformed since the Great Financial Crisis. In the twenty years before the crisis productivity grew at around two per cent a year. In the near twenty years since productivity grew by less than one per cent.

Whilst this is true in all the major western economies, the slowdown has been particularly sharp here. Market dynamism - where resources move to the most productive sectors and most productive firms has fallen since 2008. But the biggest issue is our historic low levels of investment.

As John Van Reenan has said "The UK productivity challenge can be summed up in three words: investment, investment, investment". We have systematically underinvested compared to our competitors. Our capital stock per worker is half the level in France. No wonder French productivity is higher despite more restrictive labour laws. This is the central challenge we need to address.

The size of the prize is immense. Whilst slightly slower growth doesn't bite in any one year, over time the power of compounding kicks in. If we'd maintained growth at the pre crisis rate the economy would be around a third larger than it is today. Imagine being 30 per cent richer. Challenges such as investing in the climate transition, tackling poverty and strengthening our defence would feel much more tractable. To put it into numbers the economy would be around 800 billion pounds larger. Tax revenues would be over 250 billion a year higher. You could effectively have the NHS for free.

And for me this is personal. I grew up in Liverpool in the 1980s. As some of you will remember they were tough times. I've seen the impact of slow growth at first hand. I saw what happened when business investment dries up, firms stop exporting. Wages are flat and jobs are cut. Families and communities don't have the opportunities they should. Horizons are narrowed.

This is why economic policy, and in particular industrial strategy, is so important to get right.

I have worked in Whitehall for over twenty years. Working on economic policy in Downing Street, Cabinet Office, transport and the business department. I've worked for ministers from all political parties. I've been responsible for policy successes - and policy failures.

Through my time in the civil service my appreciation of learning from history has only grown.

My first role was as an economist in the Prime Minister's Strategy Unit working for Geoff Mulgan. He built a great culture, one willing to go back to first principles, to ask why rather than just accept something as the way it had always been done. Crucially it was a culture that valued the use of evidence, with teams encouraged and expected to connect with the world leading academics, learn from other countries and learn from the past. I have been particularly influenced by the Neustadt and May book Thinking in Time - which set out how the careful analysis of history, individuals and institutions can lead to better decision making.

And the continuity of the civil service means that someone has previously been grappling with the same issues you were currently grappling with. The context may have changed - technology advanced, social norms shifted. But opening the files gives an insight into how they were looking at the issue, what played out as expected, what didn't. It holds up a mirror to your thinking and provides a challenge to your implicit assumptions.

As Permanent Secretary of the Department for Business and Trade I am responsible for developing the government's industrial strategy. Tonight I will set out what I have learnt from history about industrial strategy. What it is, what it isn't and what makes for success.

Two: Industrial policy in the UK

So what’s the history of industrial strategy in Britain. Even the phrase “industrial strategy” can elicit strong opinions. The concept is contentious here in a way in which it isn’t in other countries.

Partly this is a reflection of its chequered history.

Fifty years ago the incoming Labour Government, fresh from a surprise victory over Edward Heath, published a White Paper - The Regeneration of British Industry. Just fifteen pages long - I wish modern white papers were a similar model of brevity and clarity. It set out how we had been falling behind our competitors. It proposed a series of planning agreements with major manufacturing firms across the economy. A new National Enterprise Board would take stakes in private sector companies with the aim of raising investment. In practice it was consumed by the problems of British Leyland.

However the repeated crisis of the late 1970s fatally undermined confidence in an activist industrial policy, both here and across the west. The 1980s heralded a shift in focus to competition and open markets. Industries were privatised, and made to compete for customers and investment. Sweeping union reforms and wider deregulation aimed to increase productivity and growth through the power of market forces.

This focus on competitiveness continued under the New Labour government. Gordon Brown summed up the approach saying “The best industrial policy for success in a global economy is to help markets work better”. The 1998 competitiveness white paper - over 60 pages long - focused on the government’s role in getting the foundations right. This was the height of the dot-com boom - technology was centre stage. The New Labour growth model was based on an analysis of the “five drivers” of productivity - investment, enterprise, skills, competition and science. Sectoral policy only merited three paragraphs in passing.

The shock of the Great Financial Crisis reopened the debate on industrial policy. Peter Mandleson’s New Industry, New Jobs White Paper of 2009 described a new industrial activism. It explicitly recognised the role of government in shaping markets to build “sustainable growth that addresses the social, economic and environmental challenges of the future”.

This approach of active government support for growth sectors was continued by Vince Cable in the coalition government. The 2010s saw the creation of new institutional structures to support this new activism. The Automotive Propulsion Centre and Aerospace Technology Institute to support the development and deployment of low carbon technologies. A new British Business Bank to finance small business. A network of Catapult centres was created to bridge the gap between universities and business in the technologies of the future.

However the contested nature of industrial strategy has been seen in the somewhat stop-start approach since 2015. The Cable industrial strategy was stopped, and a new approach was launched by Greg Clark in 2017.

This strategy - at a whopping 254 pages - offered a comprehensive diagnosis of Britain's economic strengths and weaknesses. It was built around three pillars - strengthening the business environment including skills, innovation and competition policy, negotiating sector deals with different parts of the economy and a series of grand challenges, designed to bring together business, universities and public investment to tackle societal problems.

A change of Prime Minister and Chancellor in 2019 ultimately led to the formal closure of the industrial strategy. However despite not having an overarching strategy - many of the individual programmes and institutions were maintained. For example the investment in battery technology development through the Faraday centre helped to land Tata's investment in a UK gigafactory. Andy Haldane - who chaired the Industrial Strategy Council - drew on the diagnosis and approach when developing his Levelling Up White Paper.

We've had many attempts at industrial strategy, with some common themes and some successful initiatives. However too often interventions have been sub-scale and somewhat homeopathic. None have had the durability needed to make a material difference.

Three: What it is, what it isn't

So looking across the last fifty years - and to the rest of the world - what can we draw out to define a modern industrial strategy? As with any definition it's important to have sharp edges to it. We need to be clear about what it isn't as much as what it is.

Let me suggest five characteristics

Firstly, it's about the shape and composition of the economy, not just another label for growth policy.

Growth policy is about getting the foundations right. A competitive, dynamic market, high quality infrastructure, an effective planning system and a highly skilled workforce. This is what does the heavy lifting.

The industrial strategy is about the type of economy you want. Implicitly or explicitly government policy helps to shape the structure of the economy. Rules on work visas determine which sectors can bring in foreign workers into which types of job. Planning regulations determine what counts as nationally significant infrastructure - as seen with the recent inclusion of data centres. Employment rights - for example the Make Work Pay reforms - affect the quality of jobs, the inclusivity of growth, and the sectoral mix of the economy.

The question - which is ultimately a political question - is how much to lean into this. One approach is to minimise the extent to which government decisions shape the economy. This would suggest a sector neutral planning regime, a visa system which looks solely at income levels rather than identifying shortage skills. This is the approach of the 1980s, 90s and early noughties.

In contrast government can set out an explicit vision for the economy, identifying growth sectors and making conscious decisions how best to support them. This is the approach of the new Labour government. As my Secretary of State Jonathan Reynolds has said they want an economy which is green, inclusive and secure.

The challenging global context increases the need for the government to have a perspective. The four mega trends - the four Ds - of demographic transition, the need for decarbonisation, opportunities of digitalisation and the need to strengthen our resilience and defence - makes it harder for governments to have a neutral view about the shape of the economy. We need to be explicit about what sovereign capability we need, what we are happy to source on global markets and from whom. For example it would be crazy to promote a UK solar panel industry, but crazy not to have sovereign steel capability. This is particularly important given a potential fifth D - the risk a deglobalisation or globalisation 2.0.

Secondly, it’s about the whole of the economy, not just manufacturing.

The phrase industrial strategy can be a bit of a misnomer. It can be seen as just focusing on manufacturing, and trying to increase output, exports and jobs in that sector. And in fairness some industrial strategies do just that. The 1974 industrial strategy was explicitly focused on 40 manufacturing sectors. One of the goals of the Biden Inflation Reduction Act has been to increase the number of high quality manufacturing jobs and restore production in the United States.

But this isn't appropriate in the UK context. We have deep strengths in advanced manufacturing - especially engines, wings and design. However 80 per cent of our economy is services based. Even in the early post war period, manufacturing never exceeded 30 per cent of total employment. Technology means manufacturing needs fewer and fewer people. We shouldn't underestimate the complementaries between sectors - management consultants advise automotive companies - or even the fuzziness of definitions - over half of Rolls Royce's revenues is from services, power by the hour, rather than one off sales of kit.

If a government is serious about shaping an economy it needs to look at a lot more than just the 10 per cent that is defined as manufacturing. Singapore, for example, in its Economy 2030 vision has an ambition to "grow the services sector and anchor Singapore as a leading, vibrant hub for businesses, lifestyle and tourism". Advanced manufacturing is important for the UK. But in our recently published green paper half of the eight growth sectors of the economy are services - creative, digital, financial and professional.

Thirdly, it's about using a wide range of policy interventions, not just subsidies.

The discussion of industrial strategy typically focuses on the level of financial support being provided. One of the questions regularly raised is whether Britain has the balance sheet to support hand outs on the scale of the Inflation Reduction and Chips Act. The easy answer is no we don't, and nor does any country without a global reserve currency.

But I would also argue that even if we could afford that scale of intervention, it would be a mistake to limit industrial policy just to the design and allocation of subsidies. Let me be clear - in some sectors, for some companies, at certain times subsidies will be critical in securing investment. The development of the next generation of aircraft engines will take decades and billions before it sees any revenue. Very few companies have the balance sheet to support that investment on their own. But financial support should be targeted, timely and temporary. This includes the use of government guarantees and contracts for difference. To use a football analogy its a forensic moneyball approach - not splashing out on high profile signings.

But if we look to some of the most successful industrial interventions, they have deployed a wider set of policy tools. In the UK - despite its professed historic institutional scepticism- the Treasury has successfully run an implicit financial services industrial strategy for decades. When we were in the European Union, Ministers would go to Brussels ready to promote or prevent regulations informed by the interests of our major institutions. The Big Bang reforms of the 1980s, support for Canary Wharf redevelopment in the 1990s and the Jubilee line extension all helped to create an environment where London could become the global financial centre.

There are similar examples in other sectors. The requirement on the BBC to have a quarter of programmes produced independently helped to catalyse the creative sector, as did film tax credits introduced under the coalition government. In life sciences the 100 thousand genome project helps to anchor the industry in the UK.

In this way modern industrial strategy encompasses a wide range of economic interventions. It is regional economic policy, how Mayors help shape and grow their local economy. It's about a country's innovation policy and how it uses missions - as championed by Mariana Mazzucato - to galvanise the public and private sectors to achieve social goals.

Fourthly, it's about how to compete and prosper in an open, global economy. It's not about protectionism.

Now the history of industry strategy is closely connected to the use of protective tariffs. In the United States, Alexander Hamilton, the first US Treasury Secretary, used tariffs as part of wider strategy to strengthen the economy. Strangely this was not included in the musical.

However as the recent study by the Petersen Institution shows, this strategy of industrialisation through import substitution has at best a mixed track record. In the post war period it was championed in South America as a route to diversification away from dependence on commodity exports. However the lack of competitive pressure, combined with rent seeking led to inefficient industries that struggled to innovate and grow.

East Asia provides a contrasting - and more successful - approach. There industrial policy was designed in the context of a rapidly globalising economy. Japan, South Korea and Taiwan all grew through competitive, export focused sectors. In fact it was the need to compete globally that helped drive innovation and efficiency. Alongside targeted incentives - export promotion and trade finance were some of the main tools deployed by governments across the region.

And this open, outward facing approach includes investment. As I've set out, the challenge for the UK economy is how to increase business investment - of which around 20 per cent is from foreign direct investment.

We know that inward investment can have an outsized impact. Not just through the direct jobs it creates, but by helping to transform and modernise both the sector and local region in which it's based. You only need to look to the impact of Nissans investment in Sunderland in the mid 1980s. Along with Toyota this helped spark a transformation in the UK auto industry, and helped foster an extensive supply chain network offering high quality jobs across the north east. This investment didn't happen by chance. It was actively targeted by my department, with the active involvement of Margaret Thatcher. Ironically a time when industrial strategy was seen as being very much out of fashion.

This is particularly important in the UK context. We have a long standing culture as an open, outward looking, trading nation. Trade is 70 per cent of our economy, compared to just 27 per cent in the United States. In international surveys we consistently have some of the highest levels of support for free trade. In a recent Pew survey 50 per cent said growing trade and business ties were a very good thing. This was the highest of any developed country and 19 percentage points higher than the United States, 18 higher than France and 17 higher than Germany. Unlike in many countries, there is no constituency for protectionism.

Fifthly and finally it needs to recognise the roles and responsibilities of different levels of government.

Too often industrial strategy has been seen purely as a national strategy, something driven from the centre, with local government playing at best a reactive role.

But this is to ignore the importance of local insight, local knowledge and critically the importance of local ownership of any plan. Communities need to have a shared vision for how their areas will prosper and thrive over the coming years, where it has strengths and where it needs to improve. Local leaders are often better placed to bring together a package of policy interventions behind a specific long term plan. And they can find it easier to provide the long term consistency that investors need.

The success of Greater Manchester, through the leadership of the Mayor and inspirational officials like Sir Howard Bernstein shows what is possible. Building a coalition for growth. Making effective use of evidence and expertise. Having an entrepreneurial approach to policy. And crucially saying the course over years and decades.

The Greg Clark 2017 industrial strategy was the first one to explicitly recognise the importance of a local institutions, place and agglomeration. In this way it was much more in line with what happens in other countries - for example the role of the German lander and US states.

As Ed Balls showed in his recent Kennedy School paper on regional growth policy, there are a wide range of views about how best to design the appropriate policy architecture to achieve this. For example how funding and accountabilities should be aligned. However within the UK there is clearly an emerging consensus on using the Mayoral Combined Authority as the core building block of a renewed local tier.

Four: Lessons from history

So this is my definition of industrial strategy. Setting a direction for the whole economy, how it will compete, pay its way in an open, competitive global economy, using the full range of policy levers, and all tiers of government to attract investment. It needs to align work across three dimensions - the national business environment, sectoral strategies and bottom up plans from local areas.

But industrial strategy isn’t easy to get right.

Dani Rodrik identifies two challenges any industrial strategy needs to overcome - information and capture. How can government have the information needed to correctly design interventions? And how can government prevent lobbying for private, rather than public benefit? The risk is government isn’t able to say no, and rather than picking winners, is saddled with subsidising losers.

The failures of the 1970s led to an overcorrection. These challenges shouldn’t be a council of despair. Government policy will inevitably shape the structure of the economy. So the question is not whether to have an industrial policy, but how to use lessons from history to best to design and execute the strategy.

I’ve drawn five lessons from the UK and across the world.

Firstly - You can’t escape history

When you look at the most successful examples of industrial policy in advanced economies, they build off existing deep comparative advantages. Post war Germany focused on building a balanced, manufacturing sector based on exports. It emphasised its mittelstand and invested in technical education and work skills. Regional banks along with the KfW provided patient capital. Business and unions collaborated to combine innovation and productivity with high wages and job security. All of this drew on its deep rooted tradition of engineering and craftsmanship. The apprenticeship system built off the old guild system. Germany has strong regions, with deeply embedded production clusters such automotive in Bavaria and steel in the Ruhr.

A successful UK industrial strategy needs to work with the grain of our existing institutions and industrial structure. It needs to recognise that a 2.7 trillion economy with an 5 trillion capital stock cannot be designed afresh. A blank sheet of paper approach is doomed to failure.

The foundation of any strategy needs to be a clear eyed assessment of our relative strengths as a country - what makes us distinctive. At the recent investment summit at the Guildhall a number of consistent themes came out from my discussions with investors. Expertise in content and creativity across a diverse range sectors - manufacturing and advertising, video games and AI, education and culture. A global outlook, with extensive historic, if complex, links across the world. And a long history of financial and professional services dating back to the 17th century coffee houses and the Glorious Revolution.

Secondly - Metrics matter

One way to tackle the risk of lobbying, of capture, of supporting losers is to be clear about what counts as success. A risk with industrial strategy is to have too many diffuse, ill defined goals. Instead you need to set sharply defined metrics to test what's working and what's not.

These metrics need to be set at the right level. Whilst the ultimate objective is growth, productivity and higher living standards, it is hard to connect them to individual interventions. As Giles Wilkes identified in his review of Industrial Strategy - these variables adjust slowly, and are influenced by a wide range of factors outside the scope of industrial policy. Instead you need to have a set of more proximate metrics - for example business investment, skills, R&D, exports and job creation in the specific growth sectors. For me a test of success is the number of $100bn companies that we have based in the UK.

But having metrics only matter if you're willing to learn and adapt. You need to be ready to stop interventions that aren't working, and double down on those that are. Whilst you need to give interventions enough time to mature, the sunk cost fallacy can result in good money being thrown after bad. The National Enterprise Board of the late 1970s spent too much time, energy and money keeping failing companies on life support, rather than fostering industries of the future.

The best interventions recognise uncertainty upfront, and design in opportunities to change or stop based on experience. The 2017 industrial strategy challenge fund developed by John Kingman, Mark Walport, and Patrick Vallance was very effective in this regard. It had a series of societal challenge based funds - clean growth, ageing society, future of mobility and AI - with flexible stage gate funding.

Thirdly - Build in competition

It’s very easy in designing an industrial policy to be influenced by a particularly compelling pitch from business. If only the government would invest, change a regulation, approve a planning decision then investment, exports and jobs will follow.

And even if the pitch is right - and support would be truly additional - you need to test whether it is the best thing you could be doing. Money and attention are in short supply in government. You need to be very conscious of the opportunity cost of any intervention. Supporting this company, this sector means that you are not supporting someone else.

Greg Clark when he was Business Secretary said the test of a good strategy is that in involves choices. The question is how those choices are made. You need to be sure that you're not just dealing with companies that make it through the front door, that are well connected, that have effective public affairs teams. It means actively reaching out to new entrants, the challengers. The strategy needs to fosters entrepreneurialism and market dynamism - which has been declining across all developed economies bar the United States since the financial crisis.

Sometimes it will be more appropriate to do a direct negotiation, for example when a multinational is choosing where to locate a new production facility or research centre. But the default should be an open, competitive process. This means a focus on sectors rather than individual companies. This is the best way to identify the best opportunities and ensure value for money. For example the open calls used by ARIA - the Advanced Research and Innovation Agency.

Fourthly - Stick at it

Consistency matters. When companies make investment decisions its with a multi-year perspective. It's not about whether the policy environment is right now, it's about whether over the next five, ten, twenty years this is a good place to do business. They want to understand how they fit into the economic and industrial strategy of the country.

This is why the stop-start, contested nature of industrial strategy has undermined business investment. Diane Coyle has identified lack of consistency as the central failing of industrial policy in the UK. Companies need to know that a priority this year will continue to be a priority next. When you look at the most successful industrial strategies - be it Singapore, post war Germany or South Korea - they have a consistent, coherent proposition about how and where the country will compete.

Policy needs to reflect different political priorities over the electoral cycle. But changes need to evolutionary rather than revolutionary if industrial policy is to have an impact. In the UK both life sciences and renewables shows what's possible with sustained, consistent policy interventions.

This can be supported by effective institutions. The Office of Budget Responsibility and the Climate Change Committee have helped to improve the quality of fiscal and energy policy over the last two decades. In Australia the Productivity Commission provides independent advice, guidance and challenge on the performance of the economy.

The new Industrial Strategy Council, chaired by Claire Barclay aims to tackle this long standing weakness in the UK and will be put on a statutory footing. We also need to strengthen the capability and capacity local institutions - in particular the Mayoral Combined Authorities - which have the potential to provide long term consistency of approach.

Fifthly - Partner with business

One of the most important points to remember when designing industrial policy is that ultimately this is about businesses and whether they will invest. Following the budget there has been a lot of focus on public sector investment. But business investment is over three times the size of public sector investment. It's business investment that will ultimately drive productivity, wages and growth.

Technical policy design, for example full expensing, is obviously important. But business investment decisions are also a question of behaviour change. It's about encouraging a CEO to commit capital, take risk. This is in part social psychology.

Industrial strategy needs to create a sense of excitement. Make people look at country and ignite the animal spirits of investors. Choose France was successful because it offered a compelling vision, built a sense of momentum through their investment summits and encouraged businesses to look at France in a different way.

This is why sector councils can be so important. If designed properly, with a clear purpose and strong leadership, they are a way for businesses and government to work together, overcoming the information asymmetries, to create a shared strategy for the sector. An exemplar is the Life Sciences council, under the leadership of Sir John Bell. It brings together the leading chief executives, Ministers and officials to agree joint commitments to grow the industry. This collaborative, joint approach helps overcome the information challenge and ensures buy in and commitment.

However there is a tension. Collaboration can slide into lobbying if not managed properly. The business voice needs to be challenged. You need to engage with new entrants as well as incumbents. But there is a the mirror risk of being too cynical, of holding business at arms length and as a result not understanding what will really shift investment decisions. Ultimately it comes down to the capability and expertise of the civil service teams.

Five: Conclusion

So these are my five lessons

You can’t completely escape your history

Metrics matter

Build in competition

Stick at it

Ultimately it’s a partnership with business

And let me leave you with a some reflections before we open for discussion

Despite the contested nature of industrial policy, the real question is not whether, but how it should be designed and delivered. Different governments will rightly make political decisions on how much to lean into shaping the economy - where on the spectrum they want to go. But all modern governments will have profound influence on the structure of the economy explicitly or implicitly.

Getting industrial strategy right involves complex policy and institutional design. It needs rigorous use of evidence and evaluation. It needs both consistency of approach and a flexibility to adapt and learn. Strong institutions - building on the experience of the Climate Change Committee and Office for Budget Responsibility - can help government achieve the right balance.

But in my experience the most important factor is a strong a partnership approach. Between business, unions, local leaders, universities and government. It's only through collaboration - and yes challenge - that you can create the sense of shared goal, the sense of shared endeavour needed to unlock business investment, and ultimately drive the growth, productivity and higher living standards that the country needs.

Will it be different this time? The global context - demographics, decarbonisation, digitisation, defence and potential deglobalisation - means that government has to make explicit choices about the shape of the economy it wants. What sovereign capability it needs, what its happy to buy and from whom. Business recognises this and wants the UK government to have a vision for how it will compete over the next decade.

This means that for the first time there is alignment across government - in particular across the Treasury, Downing Street and Business department - that we need an explicit industrial strategy. Nothing is certain, but the stars are aligned in a way I haven't seen in my twenty years in Whitehall. We have a real opportunity to mobilise investment at the scale needed to improve productivity, create high quality jobs and deliver the growth we need.

Thank you.