From old to new industrial policy via economic regulation

di Mark Thatcher

ABSTRACT
Major institutional reforms that have introduced economic regulation in Europe and elsewhere appear to have ended traditional industrial policies of favouring selected national champion suppliers. Privatisation, the delegation of powers over mergers and acquisitions to the EU and independent competition authorities, new rules to ensure competition and prohibit state support to favoured companies and the end of planning, all appear to have led to a regulatory state. However, the article argues that regulatory reforms have in fact provided additional or alternative instruments for policy makers to favour European or international champion firms. The article analyses the different institutional reforms to show how they have provided instruments for policy makers to construct larger Europeanised and internationalised champion firms, shape markets through mergers and acquisitions, aid selected firms in liberalised markets, and to plan policies in ways that privilege chosen firms. It concludes that regulatory institutions are compatible with new forms industrial policy.


1. Introduction

Industrial policy and economic regulation of markets are usually seen as opposites. Industrial policy involves political choices to favour selected ‘champion’ firms. In contrast, economic regulation is based on legal rules focused on competition. Major literatures on (neo)liberal institutions and the ‘regulatory state’ have argued that regulation designed to ensure competition and implemented by unelected institutions has increasingly replaced industrial policies in Europe and elsewhere.

However, this article challenges the proposition that economic regulation and industrial policy are always in conflict. It argues that they can be compatible, and indeed in Europe, the spread of economic regulation has in fact given rise to a new form of industrial policy. It does so by distinguishing the institutions of market regulation from instruments and their uses. It argues that although in Europe, traditional national industrial policies have been greatly reduced, market regulation designed to promote competition has provided new instruments, which have been used to support European champion firms.

The article begins by outlining the key features of traditional industrial policy and the literature claiming a cross-national move towards ‘liberal’ economic in-
stitutions and a ‘regulatory state’. It draws on recent ‘statist’ literatures, which suggests that far from being diminished, state action can recur, but in new forms and that the state continues to promote domestic firms despite liberalised markets. It seeks to develop this theme by showing how institutional changes have reduced or ended traditional industrial policy instruments but provided new ones to give rise to a new form of industrial policy in Europe. It examines four related major institutional changes in regulation to illustrate its argument: privatisation; merger control; regulation of competition; medium-term planning. Empirically, it focuses on ‘regulated industries’, such as energy, telecommunications, railways, airlines, water, finance, chemicals and pharmaceuticals, since these were at the core of traditional industrial policy in Europe and have seen the greatest change towards regulatory institutions. Its conclusion suggests the processes through which the creation of regulatory institutions has aided or permitted the rise of a new form of industrial policy in Europe.

2. From industrial policy to a regulatory state? A statist alternative

For several decades after 1945, ‘economic regulation’ was a term rarely used outside the US. Instead, many markets were dominated by national ‘industrial policies’. Although several definitions of ‘industrial policy’ exist, at their core lies the concept that the state seeks to influence the supply side of the economy. In Western Europe, industrial policies involved explicit state support for ‘national champion’ firms and/or for specific sectors. They were pursued by elected politicians and their departmental civil servants executives at the national level, and sometimes also at subnational levels, together with the senior managers of state-owned and privately-owned ‘national champion’ suppliers, as well as representatives of labour. The state played direct roles in the structuring and operation of economic market. It enjoyed considerable discretion and formal powers which it used to favour selected ‘national champion’ firms as part of objectives other than just ensuring competition, notably relating to developing the overall economy, national prestige or political advantage.

Such industrial policies were dominant in many sectors – notably the network industries, but also others such as banking, finance, mineral extraction and parts of manufacturing. They were seen in most West European countries, as well as Latin America and parts of Asia. Some national champion suppliers were privately owned. Others were publicly-owned firms that sought to compete with private firms. Finally, there were publicly-owned monopolies, notably in network industries such as telecommunications, energy and transport. Although not organised and presented as commercial entities, these suppliers were central to implementing policies of prioritisation of certain sectors, developing technologies and supporting other, more commercially oriented domestic firms.

Of course important cross-national differences existed. Industrial policies in France were marked by ‘dirigisme’ and ‘grands projets’ which saw close cooperation between the state and selected public and private suppliers and gave

rise to technological advances on sectors such as high speed trains, telecommunications, nuclear energy and aerospace\(^3\). In contrast, Britain was often unable to promote such projects due to the gaps between public and private sectors, constraints on public spending and the power of the financial sector\(^4\). Industrial policies in Italy were marked by a multiplicity of actors and coordination being undertaken by IRI.

Industrial policy rested on an institutional framework that provided many instruments for national governments. One key pillar was public ownership of producers in major sectors such as banking and finance, manufacturing and extractive industries, or indeed sometimes entire industries, notably the network industries (then often called ‘public utilities’). A second was that governments held most formal powers over mergers and acquisitions, providing influence over market structure. Third, governments enjoyed discretion and powers to support selected suppliers, be these state owned or privately owned – most legal powers lay in the hands of nation states who could make rules about the extent and form of competition and applied them. They had to act within constitutional and legal limits, but these were broad, as judicialisation was low. Finally, governments engaged in planning, often creating specific organisations and frameworks that set targets and determined investment.

The most important cross-national contrast concerned the US, which had ‘regulation’. Policies often took the form of formal rules and there was a higher level of judicialisation compared with Europe. Regulation was based on institutions that differed somewhat from those in other capitalist countries. Public ownership was low, with private ownership of almost all firms, including in telecommunications and finance. Regulatory powers were held by independent ‘commissions’, with their own members appointed for fixed terms of office, such as the FCC (Federal Communications Commission) or SEC (Securities and Exchange Commission). Nevertheless, the US was seen as an exception. Interestingly, and importantly for the argument here, regulation did not prevent the US from having its own forms of industrial policy, notably the promotion of large firms, barriers to overseas entry and a powerful ‘military-industrial complex’.

However, from the 1980s onwards, the institutions traditionally underpinning industrial policies in Europe were abolished or reformed: state-owned enterprises were privatised; governments lost many legal powers over monopolies and mergers both to the European Commission and to national ‘independent regulatory authorities’ (IRAs); they also lost legal powers to support selected suppliers, as legal monopolies were ended, competition was enshrined in law as a major principle and objective of policy and the powers of the EU and IRAs grew; planning organisations were abolished or severely weakened. These changes formed part of the spread of ‘liberal’ economic institutions that reduced the direct role of the state to shape markets and more broadly the (re)turn to neo-liberal ideas centred on competitive markets and a strong but limited state dedicated to policing such competition\(^5\).

---

Table 1 summarises the altered institutional framework.

<table>
<thead>
<tr>
<th></th>
<th>Industrial policy</th>
<th>Regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Large scale public ownership of suppliers</td>
<td>Privatisation of many state-owned enterprises and suppliers</td>
</tr>
<tr>
<td>Powers over market structure</td>
<td>Government powers over mergers and acquisitions</td>
<td>Powers over monopolies and mergers held by the EU and independent regulatory agencies</td>
</tr>
<tr>
<td>Aiding selecting suppliers</td>
<td>Government powers and discretion over support for selected national suppliers</td>
<td>Powers and regulation to ensure ‘fair competition’ given to EU and independent regulatory agencies</td>
</tr>
<tr>
<td>Planning</td>
<td>Planning organisations and medium/long-term plans for outcomes and investment</td>
<td>Planning greatly limited – investment and outcomes to be determined by market competition</td>
</tr>
</tbody>
</table>

Institutional and ideational changes appeared to end industrial policy. Indeed, one influential line of analysis suggests that they have led to the development of the ‘regulatory state’ or ‘regulatory capitalism’⁶. Although neither neo-liberalism nor the regulatory state analyses suggest the end of the state, its role was argued to be fundamentally different from that in traditional industrial policy. It was argued to become much more indirect, with central parts being played by non-majoritarian institutions, notably independent regulatory agencies (IRAs)⁷. In contrast, elected politicians, government departments and nationalised industries were argued to have lost importance. Regulation was to be focused on ensuring competition, unlike the multiple wider or political goals of industrial policy. Equally it was highly legalised, in contrast to the discretionary and highly politicised style of previous policy. Finally, supranational regulation, especially by the EU, was growing. Overall, an active role for national governments enjoying discretion to shape markets and privilege national firms seemed to be in decline or even largely terminated.

However, claims for a move towards a more indirect and competition-focused state role have recently faced a new growing ‘statist’ literature. This argues that far from retreating, the state remain a central actor in markets and although old forms of state action may decline, new forms can arise⁸. Indeed,

a new economic ‘constitution’ can be born. It argues that even in the face of internationally open economic markets, states pursue policies that favour selected domestic firms, seeking ‘economic nationalism’ or ‘economic patriotism’. It distinguishes between the aims of policy – which can be highly nationalistic and selective – and the forms of policy, notably its instruments. Hence it argues that states can engage in selective liberalisation, which favours certain national firms which gain from the opening of markets. Thus liberalisation of markets can form part of state strategies to aid domestic firms. This is especially so because the state also re-regulates competition, which offers opportunities to shape markets and favour certain firms, either by aiding competition or by limiting it and seeking to protect existing suppliers. Hence focusing on traditional forms of industrial policy such as subsidies or tariffs may miss newer instruments that operate through selectively extending competition and influencing its operation. Studies suggest that even the US has found new instruments to pursue industrial development, through a largely invisible development network state, particularly to promote new technologies.

The economic crises of the 2000s have drawn further attention to the roles of the state, since in many countries governments stepped in to rescue failing firms, subsidise others or lead restructuring. Thus there is a developing debate about whether liberalisation and regulation of markets mean the end of an active state that privileges certain firms. Although the term ‘industrial policy’ is rarely used, this is at the core of the discussion. The statist analyses claim that the state has discretion to shape competition which it uses to favour selected firms, whereas work on the regulatory state claims there is a movement towards less political discretion and more legal or quasi-legal application of rules in pursuit of extending competition, so that national states can no longer favour privileged firms such as ‘national champions’. The ‘statist’ literature is valuable in countering work that has underplayed the continuing direct roles of governments in markets, roles that were strongly revealed after 2008. Equally, it is very valuable in distinguishing aims and instruments. But it calls for analysis of the processes whereby certain kinds of state activity in markets arise. Finally, comparison between past industrial policy and current state activities could be valuable in assessing what remains from past policies and what is new.

The following sections therefore discuss the key institutional changes in the


move towards regulatory institutions, looking at how it has affected the instruments available to policy makers (elected and unelected). They examine whether and how the institutional changes have affected instruments for pursuing industrial policy, defined as the capacity to select and favour certain firms. They compare the current instruments available following (neo)-liberal institutional changes with those provided by previous institutions to examine whether new forms of industrial policy have developed to replace or overlay traditional forms.

3. Privatisation

Public ownership of suppliers lay at the heart of post-1945 industrial policy in Europe. It was very wide in most countries, covering network industries such as telecommunications energy, railways, water and airlines and often stock exchanges. However it also extended to manufacturing, such as cars, aerospace, mineral extraction and working (coal, steel, oil), large parts of finance (banking, insurance) and transport. Public ownership varied a little in extent across countries (for instance, being somewhat more limited in the UK than say France and Italy) and form (being more national in France than Germany, or more indirect in Italy through IRI than in France).

Public ownership of suppliers provided governments with direct and indirect policy tools to promote industrial policy. It provided suppliers who could then enjoy privileged treatment, often in the name of ‘the public good’. In network sectors, this took the form of legal doctrines of ‘service public’ or ‘servizio pubblico’. Public ownership aided governments to structure markets, deciding how many suppliers should exist and their size; indeed, nationalisation of firms in the 1960s, 1970s and 1980s was often linked to merging several suppliers in order to create large ‘national champion’ suppliers (for instance, in cars or steel). Thereafter, state-owned suppliers allowed provision of orders and other forms of support to privately-owned firms. Other policy instruments were influencing prices, investment and the selection and development of new technologies. Government policy choices about which firms and sectors to support often passed through the decisions of state-owned suppliers.

Privatisation has swept through Europe, as well as other parts of the world. In Europe, ‘privatisation’ has at least two senses: legal transformation into a company; transfer of ownership from the public to the private sector.

In the first sense, almost all suppliers have been privatized – including postal


operators (e.g. Deutsche Post, the Post Office, La Poste). Moreover, in the second sense, ownership of many state-owned enterprises has also been transferred to the private sector. Thus for example, most telecommunications operators, banks, car companies and airlines have been sold off\(^\text{18}\), plus a majority of energy suppliers. Even some railway and postal operators have been privatised (e.g. Deutsche Bahn and the railways in the UK).

At first sight, privatisation might seem to prevent or at least restrict industrial policies. The ‘public interest’ rationale for favouring selected firms is greatly weakened if they are privately-owned. Equally, their owners will seek profits, and their managements will face pressures to maximise ‘shareholder value’ in the short-term, rather than following government policies. Firms can be expected to set prices and investment for their strategies rather than government ones.

However, whilst privatisation may have weakened traditional instruments, it has also offered alternative instruments that allow national governments to follow new forms of industrial policy. Legal privatisation has aided state-owned suppliers to become more clearly ‘national champion’ firms. They have adopted commercial practices and identities, expanded into new competitive markets and sought to expand abroad. Examples here are postal and railway operators such as La Poste or SNCF in France.

Moreover, legal privatisation and then partial sale of state shares have aided state-owned enterprises to expand, especially overseas, and hence become larger ‘international’ state-owned champions. The state-owned firms have been able to raise capital both directly and by borrowing, since such companies enjoy good credit ratings. In turn the capital has permitted these partially privatised firms to take cross-shares in other companies or purchase them. Legal and partial privatisation have also helped state-owned firms to form alliances with fully privately-owned firms. Thus for example, Gaz de France was partially privatised which allowed it to merge with Suez to form a large French-based international gas firm, while EDF too has become the largest European electricity firm, buying up many overseas producers, especially in Europe. Similarly, ENI and ENEL have been partially privatised, and been able to expand abroad.

Even full privatisation has offered instruments for governments to pursue industrial policy. It has created powerful fully-privately owned firms such as Telecom Italia, British Telecom, British Airways or BP. These are internally and externally organised to compete and expand both domestically into new markets and internationally. In turn, national policy makers have been able to promote them through new means. Thus for example, as suggested by work on ‘liberal’ nationalism or ‘economic patriotism’, the UK sought international liberalisation of air transport as part of a strategy to aid British Airways\(^\text{19}\). Similarly, it and other European countries such as France pressed the US to allow overseas purchases of American network operators (for instance, in telecommunications), offering liberalisation and privatisation as part of the creation of international alliances with American firms to gain\(^\text{20}\). Thus for instance, Euro-

---

\(^{18}\) For example, British Telecom, Telecom Italia, France Télécom/Orange, Deutsche Telekom.


pean governments have sought liberalisation of markets and acceptance of overseas takeovers in the US and in Latin America in markets such as telecommunications and airlines. At the same time, national governments have offered these private internationalised champions state support through regulation, international negotiations or protection against takeovers (discussed below). Suppliers that were previously organised as domestic ‘public services’ akin to welfare services (e.g. network industries) or as clubs (e.g. stock exchanges), are now international firms but with strong links to one or more nations, representing a significant extension of industrial policy.

Finally, legal privatisation has been combined with the development of new forms of public ownership. Companies backed by government guarantee have been created, which have private company structures but are in fact a public responsibility. Thus for instance, in the UK, although the railway infrastructure was sold to the private sector in 1996, when the operator, Railtrack in 2001, collapsed, it was taken over by Network Rail – which is legally has a private company but whose debt is guaranteed by the state (indeed, after a long debate, the UK government was obliged to include it within state spending and debt). State ownership through state-owned banks and lenders offers a further form of public ownership. Thus for example, the Cassa Depositi e Prestiti, the Kfw (Kreditanstalt für Wiederaufbau) or the Caisse des Dépôts et Consignations all have substantial share holdings. New forms have been created with ‘sovereign wealth funds’ such as the French Fonds Stratégique d’Investissement or the UK ‘UK Financial Investments’, a ‘private’ company which holds the state’s bank shares following rescues of RBS and Lloyds. Indeed, it should be noted that while significant privatisation has taken place, public ownership has returned in these new forms, especially after the financial crisis of 2007/8.

Hence privatisation has offered national policy makers alternative instruments for industrial policies, notably through creating partially privatised international champions, private law firms that are an indirect state responsibility and then fully private firms that are nationally – rooted and supported. The changes arising from the shift from traditional public ownership to private law and private ownership are summarised in table 2.

<table>
<thead>
<tr>
<th>Traditional industrial policy</th>
<th>Privatisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public ownership</td>
<td></td>
</tr>
<tr>
<td>Public suppliers as part of protecting public interest</td>
<td>Private law state – owned companies</td>
</tr>
<tr>
<td>Creation of state – owned national champions</td>
<td>Creation of partially state – owned international champions and expanded national-based private champions</td>
</tr>
<tr>
<td>Direct public responsibility via ownership</td>
<td>Indirect state responsibility through guarantees and state holding companies</td>
</tr>
</tbody>
</table>

21 For example in the ‘open skies’ negotiations by the UK and France to open up transatlantic traffic for BA and Air France.

4. Structuring markets – Mergers and acquisitions

A key purpose of structuring markets in traditional European industrial policy was to develop large ‘national champions’, both publicly and privately – owned, with the aim that these suppliers would enjoy economies of scale and world-market size. National policy makers held powers over mergers and acquisitions; indeed, in some countries there were no specific merger authorities and very few legal rules. Governments could use their powers to allow mergers and acquisitions that formed part of their industrial strategies, notably expansion by ‘national champions’, including state-owned enterprises. Conversely, governments could block undesired market restructuring, especially hostile foreign takeovers. Just the threat of such action was usually sufficient to ward off overseas predators, a situation that prevailed even in a ‘liberal’ market economy such as the UK.

A major institutional change since the late 1980s has been the great reduction of the legal powers and discretion of national governments over mergers and acquisitions. Thus for instance, under the 1989 European Merger Control Regulation, most large mergers and acquisitions are decided by the European Commission – with thresholds that catch most major acquisitions. The Commission acts almost entirely using competition criteria – whether the merger creates a ‘significant impediment to competition’ and has little legal scope for looking at other criteria. Even when mergers fall under national jurisdictions, almost all European countries have created independent competition authorities who act under legislation that is focused on whether a merger could impede competition. Often elected politicians have lost their previous direct powers over mergers – for example, in the UK, under the 2002 Enterprise Act, government ministers can only block a merger on very narrow grounds such as national security.

Yet while these institutional changes in merger powers, in combination with privatisation and the end of legal monopolies, have reduced the scope for traditional industrial policies to structure markets, they have paradoxically contributed to the development of European champions. Most large mergers attempted have been between European firms, either cross-border or domestic. Thus in three major sectors – banking, energy and telecommunications – 60% of all mergers were cross-border European ones (i.e. forms from at least two separate EU member states), 14% were domestic within an EU member state and only 14% were non-EU firms merging with European ones. Even these small figures in the last category over-estimate the entry of non-European firms into the EU as they include European firms taking over non-EU ones and hence represent internationalisation of European firms rather than real non-European entry into European markets. Although the European Commission

---

23 Since 1997, aggregate worldwide turnover of more than 2.5 billion ECU and combined aggregate turnover in each of at least three Member States of 100 million ECU, with the turnover of at least two of the firms being more than 25 million ECU and aggregate EU-wide turnover of at least two of the firms being 100 million ECU (Regulation 1310/97).


has only used competition criteria in making decisions, the interpretation and application of those criteria have permitted many mergers to be approved. Thus for example, between 1990 and 2009, only 2 out of 394 mergers in telecommunications and energy were prohibited by the Commission and not a single one in banking out of 187 cases.

The result has been the development ‘European champions’ as well as larger national ones through mergers and acquisitions. Firms that were previously largely domestic have both retained their home base and also expanded in other European countries. Some are privately owned champions – for example, French banks such as Crédit Agricole or la Société Générale or the UK-based mobile operator Vodafone. Others are previously state-owned suppliers who have become commercial enterprises – for instance, Euronext, which was built from the French, Belgian and Dutch stock exchanges, and then merged with the New York Stock Exchange. A third group are partially state-owned firms, such as EdF, Enel, Eni or Orange (formerly France Télécom). All have grown thanks for substantial mergers and acquisitions that the Commission has approved. Very importantly for industrial policy, the Commission and national regulatory authorities have permitted vertical (re)integration by large firms in sectors such as energy or transport, including in domestic markets. The result is that a small number of major firms (often 3-4) now dominate important segments of most national markets in network industries such as mobile telecommunications, the fixed line network, energy distribution and generation and parts of finance.

Although national policy makers, especially governments, have lost many legal powers over mergers and acquisitions, their interventions have continued, using alternative instruments. At times, they have encouraged mergers between certain firms. Sometimes, this takes place early in the process, before formal merger control begins. It can start through privatisation itself, as national officials choose to create or strengthen national or Europeanised champions through their choice of purchasers. Thus for example, France, under the centre-left Jospin government, transferred a large part of Aérospatial to the privately-owned Matra corporation to create EADS – a European champion. A third instrument has been for governments to select ‘white knights’ or favoured partners for national champions, which allow them to influence the dominant market players. Some of these are domestic firms but others are international. One example of the former is the merger between Gaz de France and Suez in 2008, which prevented the latter company falling into rival hands, while in 2007 Telecom Italia was ‘saved’ from the attentions of AT&T by the Spanish operator Telefonica taking a large stake, as was Alitalia, whose ‘Italian’ status was secured in 2008 by a sale to a consortium of domestic investors. In all these cases, the governments played a central role in orchestrating the white knight manoeuvre.

Conversely, national policy makers have been able to discourage unwanted mergers and takeovers, especially by non-European firms. For a start, states still maintain large shares in some firms or ‘golden shares’, which although under great legal attack, create potential commercial obstacles in terms of de-

26 M. ThATCHER, European Commission merger control: Combining competition and the creation of larger European firms, cit.
27 Telefonica in 2014 began to exit its stake.
28 Later Air France took a large stake, but then in 2014 the Arabian airline Etihad took a major share.
lay and controversy. Hence for example, the French state retains substantial shares in firms such as France Télécom/Orange and GDF-Suez. Governments and IRAs can also modify or threaten to modify regulatory frameworks so make certain acquisitions more or less attractive. A major example occurred in Italy when the US firm AT&T seemed poised to acquire Telecom Italia – the Italian government and also its IRA began to threaten to restructure the telecommunications system to enforce vertical separation between the network and services, which would have made Telecom Italia much less attractive; when AT&T withdrew its interest, vertical separation also ceased to a possible regulatory option. Finally, politicisation of mergers and acquisitions has sometimes hindered acquisitions. In banking, certain takeovers have become highly politicised, raising domestic opposition and discussions of unwanted foreign takeovers – seen for instance, in Italian banking in the 2000s (e.g. bids for Antonveneta and BNL were bitterly resisted, amongst others by Antonio Fazio, then governor of the Bank of Italy). Even in Britain, the most 'liberal' economy in Europe for takeovers, the American firm Pfizer’s attempt to take over Astra Zeneca in 2014 created considerable political controversy, with parliamentary questions and committee enquiries, and was quickly ended.

Table 3 summarises the instruments available to national policy makers under traditional industrial policy and then in the new institutional framework in which many powers over mergers and acquisitions lie in the hands of the EU and national independent competition authorities.

Table 3. – Powers over mergers and acquisitions

<table>
<thead>
<tr>
<th>Traditional Industrial Policy</th>
<th>Regulation by the EU and independent competition authorities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase of domestic firms by state-owned enterprises to create 'national champions'</td>
<td>Cross-border mergers and acquisitions to create European champions</td>
</tr>
<tr>
<td>Mergers and acquisitions among privately-owned firms</td>
<td>Sale of state-owned enterprises to selected privately-owned firms</td>
</tr>
<tr>
<td>Prevention of mergers and acquisitions of domestic firms by overseas firms</td>
<td>White knights</td>
</tr>
<tr>
<td>Prevention of mergers and acquisitions of domestic firms by overseas firms</td>
<td>Golden shares</td>
</tr>
<tr>
<td></td>
<td>Regulatory changes</td>
</tr>
<tr>
<td></td>
<td>Political attention</td>
</tr>
</tbody>
</table>

5. State support for selected firms in competitive markets

Under traditional post-1945 industrial policy, national policy makers could direct support to selected suppliers through a series of instruments. The most obvious was legal monopoly, which prevented direct competition and allowed policy makers to set prices. This was closely linked to public ownership, especially in network industries. However, even when competition was permitted by
law, the state could shape and limit it through national standards, which privileged firms found easy to meet whereas others (especially foreign companies) found such standards difficult and expensive to comply with. They could also influence or indeed set ‘administered prices’. Equally, policy makers could provide direct and indirect subsidies to favoured suppliers. In addition, they could provide support through public orders, and less directly through publicly owned banks or cooperation over research and development.

Regulatory institutions have greatly curbed the legal scope for such instruments. Thus for instance, legal monopolies in almost all network industries have been outlawed by EU law and replaced with re-regulation of competition designed to ensure ‘fair and effective competition’. Equally, non-tariff barriers to trade, including national standards, have mostly been outlawed by EU and international law. State aid and public procurement are regulated by the EU, which legally is bound to prevent discrimination on grounds of nationality. Government subsidies are regulated by EU rules on state aid, and have greatly been reduced – for example, for the EU as a whole, it went down from 1.085% of GDP in 1992 to 0.669 in 2000 to 0.521% in 2012. Public financing of investment has been severely constrained by fiscal targets and by the privatization of state-owned banks. Systems of government-determined ‘administered prices’ have been greatly curbed.

Nevertheless, national policy makers have found considerable scope for aiding selected ‘national’ or European champions. Although legal monopolies have largely been ended, licensing (or authorisation) and licence conditions have offered powerful tools to aid national champions in many industries – from network sectors to finance. Sometimes the number of licences affects how many suppliers exist in a market. Even when ‘competition’ is an official policy objective, governments can protect existing suppliers through obstructing new licences. One example is French third generation mobile telecommunications networks, where initially only three licences were issued and it took years for a fourth 3G licence to be issued, thereby protecting existing French suppliers (Orange, SFR and Bouygues). But perhaps more important are licence terms which influence the attractiveness of entry and the extent to which firms are really competitors. Thus for example, rules about sharing of infrastructures affects whether there is competition in providing such infrastructures or whether just in resale, which matters greatly for outcomes such as price and competitive pressure. Equally in areas such as banking, rules about ‘structural separation’ that involve dividing banking activities, capital requirements, passporting of bank account numbers or specific additional obligations for ‘systemically important’ banks affect the number of effective players in markets and the attractiveness of entry. Sometimes stricter regulation has effects such as reducing the attractiveness of entry and hence protecting existing national champions – for instance, capital requirements in finance.

Another key element of licensing concerns tariffs. Although widespread administered prices have been ended, some governments still have limited legal powers over prices for final services. Thus, for instance, the French gov-

---


Government holds powers over the setting of basic energy tariffs. However, of much greater importance is direct regulation by IRAs of tariffs in major industries, especially network sectors. Hence for example, many energy, communication and rail prices are controlled by formulae interpreted and sometimes set by IRAs. In turn, this allows scope for IRAs to influence the profitability of major suppliers, who are often ‘national’ or European champions, such as EDF, Orange or Telecom Italia. More indirectly but equally important, licence terms affect which costs are included in calculating tariffs, which are often based on a ‘cost plus’ formula, notably in infrastructure industries. A key issue is whether investment and capacity costs are allowable: if costs such as spare generating capacity or universal service are included, then existing suppliers can both reinforce their market share and also protect profits. In recent years, concern about ensuring sufficient capacity in sectors such as energy or telecommunications has increased, and even the European Commission has officially underlined its importance.

Whilst formal non-crisis state aid has fallen over recent decades, new forms of state support have emerged. Governments and central banks have offered explicit or implicit guarantees to major national champions in times of need – from France Télécom in 2002 to large banks and financial institutions after the crisis of 2007 (e.g. Monte dei Paschi di Siena in Italy in 2009 and 2013). Cross-subsidies for desirable policy aims represent another instrument. These have been used for example in the energy sector to favour renewable energy in several countries, including Germany. Tax arrangements offer another instrument – they can be designed to favour certain sectors (e.g. finance) or to transfer financial responsibility for risky, large debts (e.g. the costs of nuclear waste disposal or ‘toxic debts’ in banks). Long-term state orders and agreements provide a further instrument for national policy makers to promote selected firms. Sometimes this is direct, as when orders are given to such firms. But at other times, it is less visible, as when policy makers negotiate with overseas states, offering access to domestic markets in return for orders from those states for national champions. Thus for example, UK and French policy makers have welcomed investment by sovereign wealth funds from countries such as China and Qatar, in return for which they have sought orders and market access for favoured national companies in fields such as nuclear energy and banking. These ‘quid pro quos’ allow policy makers to aid national champions to gain overseas orders.

Although national standards that hindered overseas entry have been under attack from both EU law and the growth of European and international standards. Some follow traditional technological standards – i.e. concern equipment. Thus for instance, the EU has set standards for new mobile communications networks that apply across Europe. But many standards are now regulatory, especially by the EU as part of the single market process. They concern matters such as capital standards, provision of information or accounting, in industries from finance to energy. Creating these standards is often slow and involves detailed European negotiations. EU regulation to remove specific barriers to cross-border trade such as cross-national energy grid capacity particularly aid the development of large, pan-European firms.

Thus while traditional instruments of state support such as subsidies, orders and national standards have become increasingly legally constrained, new instruments for supporting selected firms, notably national and especially Europeanised champions, have emerged. Table 4 sets out the traditional and new tools available for state support.

Table 4. – State support for selected firms

<table>
<thead>
<tr>
<th>Traditional Industrial Policy</th>
<th>Liberalisation and re-regulation of competition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal monopoly</td>
<td>Licensing</td>
</tr>
<tr>
<td>National technological standards</td>
<td>European and national regulatory standards</td>
</tr>
<tr>
<td>Prices set by governments</td>
<td>Regulated tariffs</td>
</tr>
<tr>
<td>Subsidies</td>
<td>State guarantees; cross-subsidies; tax arrangements</td>
</tr>
<tr>
<td>Public orders</td>
<td>Long-term state contracts; overseas orders</td>
</tr>
<tr>
<td>State-private cooperation on R&amp;D</td>
<td></td>
</tr>
</tbody>
</table>

6. Planning

Medium and long-term planning was a central part of industrial policy after 1945. In most countries, it was led by governments and specialised planning agencies. Their activities involved not just setting macro-economic targets but also public signalling of investment priorities for both the public and private sectors (for instance, special importance was given to certain industrial sectors such as energy or telecommunications). Planning often also meant selecting particular technologies (e.g. a particular technology for nuclear energy), and balancing different objectives, such as national autonomy, regional development, building a technological lead or national security. Forms of signalling varied across countries. In some, such as France, centralised national agencies set out goals for several years, and sought to allocate or direct investment to sectors. In others such as the UK, planning was much more indicative.

Although medium-term official government macro-economic planning has been mostly ended, and planning organisations abolished or downgraded (even in France), new forms of sectoral planning have emerged. Governments have set medium and long-term targets for sectors such as energy, transport and telecommunications. Frequently, these targets concern the behaviour and decisions of privately – owned firms, and have translated into long-term investment programmes and contracts – from nuclear energy to ‘fourth generation’ communication networks to high speed rail programmes, in countries as diverse as Britain and France. Equally, independent regulatory agencies engage in a form of planning by their decisions concerning which costs are allowable in setting price controls and their direct negotiations with major suppliers over medium-term investment. One example concerns water in the UK, where the regulator has set price formulae according to plans for capital
spending and agreed targets for such spending, thereby in effect engaging in medium-term investment planning.

Policy makers have also implicitly or explicitly influenced choices of technology through their sectoral investment plans and also tax and (cross) subsidies. Hence for instance, governments and IRAs have taken very direct roles in decisions about energy mixes, notably between nuclear and renewables, through instruments such as nuclear and renewable levies, long-term investment contracts for nuclear energy or regulation of tariffs and rights to sell renewably-generated electricity. In transport, government planning decisions about new airports or high speed train lines (e.g. the current debate about where to locate a third London runway or the planned HS2 high-speed rail link in the UK or the Turin-Lyon rail link) all shape choices about transport technology. In contrast to traditional industrial policies, the technologies chosen have often been developed by European or international groups – for instance, European high speed rail or airlines or different forms of energy generation offered by consortia such as Airbus or specially-created consortia that bring together national firms and European champions such as EDF and Areva.

Although competition has been a central regulatory goal, other objectives have become increasingly important, especially in the 2000s, many of them similar to previous industrial policy aims. Security of supply has achieved increasing prominence, especially in energy, and been a major argument for new nuclear power stations and also for building storage and grid capacity. Regional development has driven policies about transport, such as new high speed rail links (e.g. HS2) or airport capacity. Externalities, regional development and also equality have all been important considerations in policies for broadband and mobile networks.

These aims however, have often been pursued through a combination of direct financing and regulatory instruments. Direct financing has come from both national governments and from the EU, through its structural funds and more recently, its plans for investment programmes run through the European Investment Bank. However, they also occur through regulatory instruments, which are much less visible. Thus achieving security of supply and additional capacity can occur through price formulae that allow infrastructure providers to pass on certain costs. Equally, medium-term price controls can be linked to investment programmes (e.g. in water, energy or transport). They can also be achieved through regulation that allows sharing of infrastructure (e.g. for telecommunications), which in turn makes certain investments more profitable.

The relationship between planning and individual national champion firms is less strong today than the heyday of industrial policy, when it involved explicit choices about support for individual firms. Nevertheless, the long-term planning of the 2000s does aid a limited number of firms, since many regulated markets are dominated by a small number of European champions. Thus for example, regulation and planning to ensure high investment in new mobile networks generally aids existing major suppliers such as Orange or Vodafone. Indeed, the European Commission itself, supposedly the guardian of competition, increasingly supports concentration of sectors such as network industries in order to ensure high levels of investment and coverage.

---

32 For instance, in 2014 it approved both a merger between Telefonica Deutschland and E-Plus, reducing the number of mobile operators in Germany from four to three – see EUROPEAN COMMISSION, Case M.7018, Telefonica Deutschland/E-Plus; equally, a Directive in 2014 encour-
Table 5 summarises the contrasts between the instruments for planning under traditional industrial policy and then with regulatory institutions.

Table 5. – Instruments for planning

<table>
<thead>
<tr>
<th>Traditional industrial policy</th>
<th>Regulatory institutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public priorities and targets for sectors</td>
<td>Sectoral target outcomes for private suppliers</td>
</tr>
<tr>
<td>State funding for investment in selected sectors</td>
<td>Public agreement to private investment plans; tax; cross-subsidies</td>
</tr>
<tr>
<td>Choice of certain national technologies</td>
<td>Choice of internationally-available technologies</td>
</tr>
<tr>
<td>Public orders and coordination in pursuit of wider aims than competition – e.g. regional development, national autonomy, security, technological lead</td>
<td>Regulatory instruments in pursuit of wider aims – e.g. security of supply,</td>
</tr>
</tbody>
</table>

7. Conclusion

National policy makers pursued traditional industrial policies using instruments available from a well-established institutional framework. Some elements of that framework continue to exist, such as limited explicit public ownership or direct state subsidies and state aid. However, as studies on the spread of (neo-)liberal institutions and the regulatory state rightly identify, major reforms have replaced many past institutions with new regulatory ones. Privatisation, the transfer of powers over monopolies and mergers to the EU and national competition agencies, rules designed to ensure ‘fair and effective competition’ and the abolition or weakening of planning mechanisms have all represented a move towards competition-based regulation of markets. They have ended or limited traditional instruments of industrial policy.

However, when looked at closely, these regulatory institutions have not ended industrial policy. Instead, they have offered new instruments for national policy makers. Legal and ownership privatisation have offered instruments to shape the development of partially – state firms or fully private firms, as well as indirect forms of state ownership. The transfer of powers over mergers and acquisitions and a focus on competition have allowed mergers and acquisitions by existing large European firms. Re-regulation of competition has provided several tools to aid firms, from licensing and licence conditions to regulatory standards. The decline of formal planning and previous planning organisations and increased reliance on ‘the market’ to direct choices of technologies and investment have permitted governments and independent regulatory agencies to plan and attempt to influence market choices through their orders and multiple objectives for a well-functioning market.

The outcome has been a new form of industrial policy, operating through a

combination of both traditional and newer regulatory instruments. It is centred on aiding selected firms, particularly aiding Europeanised or internationalised champion firms. These firms have a historic link with a nation state, often being former national champions, but have increasingly expanded abroad. Some are majority state-owned such as EDF. Others are minority state-owned such as GDF-Suez, ENI or ENEL, or indirectly state owned such as Deutsche Post or Lloyds and Royal Bank of Scotland. But many are state-supported privately-owned firms – from network operators such as Telecom Italia, British Telecom or British Airways to banks such as Barclays or Société Générale.

Why have the new regulatory instruments not ended industrial policies? One set of reasons lies in the very nature of institutional reform: often change occurs through ‘layering’ in which new institutions are created ‘on top of’ existing ones or through decay, in which old institutions remain but are left to decline. Hence public ownership or planning organisations have not been entirely abolished. Second, more importantly, there are several different types of market structures that can be used to create competitive markets. Thus different forms of public ownership can be combined with competition. Equally, there are several possible meanings of ‘competition’ and modes of determining its protection in merger and acquisition control. Finally, initial attempts to focus purely on competition rapidly failed. Other objectives such as security of supply, aiding politically influential firms and national development rapidly re-emerged. Making markets is an inherently political activity, and national policy makers have sought and found instruments to continue with industrial policies.

The case of industrial policy supports wider arguments by recent ‘statist’ literatures. Far from disappearing, state activity has both shaped liberalisation and internationalisation of markets and adapted to these changes. National policy makers have found new instruments to aid selected firms. The present analysis advances such work by suggesting which instruments have arisen and by examining how regulatory reforms have provided these new instruments.

---

34 Cf. CLIFT-C. WOLL, op. cit., J. LEVY, op. cit., V. SCHMIDT, op. cit.