Understanding Regulation

Theory, Strategy, and Practice

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ROBERT BALDWIN

and

MARTIN CAVE

Diogo R. Coutinho
2001

OXFORD
UNIVERSITY PRESS

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Introduction

Our aim in writing this book is to introduce readers to those practical and theoretical issues that we see as central to the study of regulation. We set out to describe the nature of those issues, to indicate how regulatory practitioners and commentators have dealt with them, and to offer arguments on potential responses to regulatory difficulties. The focus is on experience in Britain but points of more general application arise and are dealt with.

Regulation is a topic that has stimulated interest in a host of disciplines—notably law, economics, political science, sociology, history, psychology, geography, management, and social administration. This is a subject, moreover, that calls for a multidisciplinary approach. To give an example: if economists were to devise technically superb schemes of regulation these would come to little if no heed was paid to the warnings of those political scientists and sociologists who point out reasons why, in the real world, those schemes will not produce the ends the economists anticipated. Similarly, in looking at how such schemes can be implemented, lawyers' messages concerning the limitations of different kinds of rules and enforcement processes should be taken on board. Analogous points could be made from the perspectives of other disciplines. This book is written by a lawyer and an economist but will attempt both to draw from a wider range of disciplinary perspectives and to be accessible across disciplines. Highly technical approaches and terminology will be avoided where possible. It is hoped, therefore, that the analysis offered will prove useful to regulatory studies in a wide variety of areas.

What is Regulation?

Regulation is spoken of as if an identifiable and discrete mode of governmental activity[1] yet the term regulation has been defined in a number

[1] See R. Baldwin, C. Scott, and C. Hood, *A Reader On Regulation* (Oxford, 1998), ch. 1.

of ways.[2] Selznick's notion of regulation as sustained and focused control exercised by a public agency over activities that are valued by a community has been referred to as expressing a central meaning,[3] but it is perhaps useful to think of the word regulation being used in the following different senses:[4]

As a specific set of commands—where regulation involves the promulgation of a binding set of rules to be applied by a body devoted to this purpose. An example would be the health and safety at work legislation as applied by the Health and Safety Executive.

As deliberate state influence—where regulation has a more broad sense and covers all state actions designed to influence industrial or social behaviour. Thus, command-based regimes would come within this usage but so also would a range of other modes of influence—for instance those based on the use of economic incentives[5] (e.g. taxes or subsidies); contractual powers; deployment of resources; franchises; the supply of information or other techniques.

As all forms of social control or influence—where all mechanisms affecting behaviour—whether these be state-derived or from other sources (e.g. markets)—are deemed regulatory. Within this usage of the term 'regulation' there is no requirement that the regulatory effects of a mechanism are deliberate or designed rather than merely incidental to other objectives.

Regulation is often thought of as an activity that restricts behaviour and prevents the occurrence of certain undesirable activities (a 'red light' concept[6]) but the influence of regulation may also be *enabling* or *facilitative* ('green light') as, for example, where the airwaves are regulated so as to allow broadcasting operations to be conducted in an ordered fashion rather than left to the potential chaos of an uncontrolled market.

Issues on the Regulatory Agenda

There is a tendency in modern Britain to associate regulation with the post-privatization control of the utilities by Directors-General and their

[2] See B. Mitnick, *The Political Economy of Regulation* (New York, 1980), ch. 1; A. Ogus, *Regulation: Legal Form and Economic Theory* (Oxford, 1994), ch. 1; G. Majone (ed.), *De-Regulation or Re-Regulation?* (London, 1989).

[3] P. Selznick, 'Focusing Organisational Research on Regulation', in R. Noll (ed.), *Regulatory Policy and the Social Sciences* (Berkeley, Calif., 1985), 363, quoted Ogus, *Regulation*, 1.

[4] See Baldwin, Scott, and Hood, *Regulation*, ch. 1.

[5] On the distinction between command and incentive based regimes see S. Breyer, *Regulation and Its Reform* (Cambridge, Mass., 1982); Ogus, *Regulation*, esp. ch. 11; and R. Baldwin, 'Regulation: After Command and Control', in K. Hawkins (ed.), *The Human Face of Law* (Oxford, 1997).

[6] On 'red light' and 'green light' rules and regulations see C. Harlow and R. Rawlings, *Law and Administration* (2nd edn., London, 1997), chs. 2 and 3; Ogus, *Regulation*, 2.

offices. Media attention focuses almost daily on the activities of such bodies as OFTEL (established by the Telecommunications Act 1984), OFGAS (Gas Act 1986), OFFER (Electricity Act 1989), and OFWAT (Water Act 1991). Regulation has, however, been practised in Britain since at least the Tudor and Stuart periods.[7] In the nineteenth century there was a burgeoning of regulation, with the emergence of specialist regulatory institutions[8] and a host of measures dealing with public health and employment conditions.[9] Developments in the supply of railway, water, gas, and electricity services led to the introduction of controls over prices, safety, and quality of service.[10]

During the twentieth century, public ownership of such utilities as electricity, gas, water, and railways restrained to some extent the development of regulation but a steady growth in regulation nevertheless took place from the 1930s onwards. That decade saw the licensing of goods and passenger carryings by road as well as the advent, in the fishing industry, of marketing boards that fulfilled both operational and regulatory functions.

In the post-war period marketing boards followed in the cotton, crofting, sugar, and iron and steel industries and the first US-style independent regulatory agency was established in Britain in 1954 with the Independent Television Authority. The ITA was innovatory in combining a degree of independence from government with the carrying out of adjudicatory and regulatory, as well as policy-developing, functions. In the United States such independent regulatory bodies had been carrying out key functions of government since the Inter State Commerce Commission was established in 1887 to limit discriminatory pricing by railroads. In the ITA's wake followed a series of regulatory agencies that were created in the 1960s and 1970s to deal with issues in such areas as monopolies, gaming, industrial relations, civil aviation, discrimination, and workplace health and safety.

During the 1980s and 1990s much stress has been placed by governments and commentators on the problems and costs of regulation and the case for deregulating the economy.[11] The privatization drive of the

[7] Ogus, *Regulation*, 6–12; 'Regulatory Law: Some Lessons from the Past' (1992) 12 *Legal Studies* 1.

[8] O. MacDonagh, 'The Nineteenth-Century Revolution in Government: A Reappraisal' (1958) 1 *Historical J.* 52.

[9] P. Craig, *Administrative Law* (3rd edn. London, 1994), ch. 2.

[10] See J. Foreman-Peck and R. Millward, *Public and Private Ownership of British Industry 1820–1990* (Oxford, 1994), esp. chs. 1–3, C. Foster, *Privatisation, Public Ownership and the Regulation of Natural Monopoly* (Oxford, 1992), chs. 1 and 2.

[11] See J. Kay, C. Mayer, and D. Thompson (eds.), *Privatisation and Regulation: The UK Experience* (Oxford, 1986); D. Swann, *The Retreat of the State: Deregulation and Privatisation in the UK and US* (Brighton, 1988); K. Button and D. Swann (eds.), *The Age of Regulatory Reform* (Oxford, 1989); also see the White Papers: *Building Business, Not Barriers*, Cmnd. 9794 (London, 1986); *Lifting the Burden*, Cmnd. 9751 (London, 1985);

same period, however, produced a new burst of regulation, carried out by a host of new regulatory bodies such as OFTEL (1984), OFGAS (1986), OFFER (1989), OFWAT (1990), and the Office of the Rail Regulator (1993). In addition, administrative changes have produced a new Environment Agency in 1996 and from the creation of the National Lottery emerged an Office of the National Lottery to oversee the providing private operator, Camelot.

By the mid-1990s some 25 million customers were served by the main four regulated utilities industries alone, their total annual turnover of £51 billion represented around 8 per cent of the annual gross domestic product of the UK and not only the results of regulation but the processes used to regulate had prompted unprecedented concern. Regulation and deregulation had moved to positions high on the political agenda. Conservative administrations had sought, since 1985, to deregulate, cut red tape, and substitute competitive pressures for regulatory action. The Department of Trade and Industry's Enterprise and Deregulation Unit had been established in that year in order to review all new legislative instruments and assess the compliance costs they would impose on businesses. That body, later called the Deregulation Unit and housed in the Cabinet Office, had, by 1996 started to subject regulations to a newly taxing process of 'regulatory appraisal'[12] but the high point of deregulatory action had come with the passing of the Deregulation and Contracting Out Act 1994 which *inter alia* had given ministers the power to use secondary legislative to eliminate burdens and controls. No rigorous review of the impact of such initiatives was, however, carried out by the Major government and promises of 'bonfires of red tape' were not fulfilled.

It has, however, been in the field of utilities regulation that the most urgent political debates have taken place in recent years.[13] Attention has focused on the issues of efficiency, accountability, and fairness in the system of regulating by means of Directors General and their accompanying offices. A host of books and reports have come from all parts of the political spectrum to put forward a large number of reform proposals.[14]

Releasing Enterprise, Cm. 512 (London, 1988); Department of Trade and Industry, *Burdens on Business* (London, 1985); Cabinet Office, *Checking the Cost of Regulation* (London, 1996), *Regulation in the Balance* (London, 1996); M. Derthick and P. Quirk, *The Politics of Deregulation* (Washington, 1985); V. Wright, 'Public Administration, Regulation, Deregulation and Reregulation', in E. Eliassen and J. Kooiman (eds.), *Managing Public Organisations: Lessons from Contemporary European Experience* (London, 1993).

[12] See *Regulation in the Balance* and Chapter 7 below. Under Labour, the Deregulation Unit was renamed the Better Regulation Unit in 1997.

[13] For a review of this debate see R. Baldwin, *Regulation in Question* (London, 1995).

[14] See e.g. C. Veljanovski, *The Future of Industry Regulation in the UK* (London, 1993); Adam Smith Institute, *Who Will Regulate the Regulators?* (London, 1992); P. Hain, *Regulating for the Common Good* (London, 1994); Centre for the Study of Regulated Industries, *Regulating the Utilities: Accountability and Processes* (London, 1994); D. Helm, 'Reforming the Regulatory Frameworks' (Oxford, 1993); National Consumer Council, *Paying the Price* (London, 1993); C. Graham, *Is there a Crisis in Regulatory Accountability?* (London, 1995 and reproduced in Baldwin, Scott, and Hood, *Regulation*); D. Helm, *British Utilities Regulation* (Oxford, 1995); M. E. Beesley (ed.), *Regulatory Utilities: A Time for Change?* (London, 1996), *Regulating Utilities: Broadening the Debate* (London, 1997); DTI Green Paper, *A Fair Deal for Consumers: Modernising the Framework for Utility Regulation*, Cm. 3898 (March, 1998).

In this volume we deal with the elements of that debate but we are concerned with more than the reform of utilities regulation. We consider, in the first instance, a number of fundamental questions regarding regulation and we look at sectors beyond the utilities in an attempt to draw parallels and learn lessons.

Part 1 of the book, accordingly, reviews a series of general issues in regulation, namely: why regulate at all (Chapter 2); how the origins of regulation and regulatory changes can be explained (Chapter 3); which strategies can be used to regulate (Chapter 4); and which kinds of body can be used to regulate (Chapter 5). It is then necessary to consider what benchmarks can be used in judging whether regulation is good or not—how evaluations can be made in assessing justifications for regulating or for particular regulatory methods. Chapter 6 looks for such benchmarks and Chapter 7 considers in more detail the role of economic appraisals in assessing regulatory activity.

Chapter 8 looks at how regulation can be enforced on the ground and Chapter 9 examines the problems encountered in choosing types of regulatory standards and in setting acceptable levels of performance.

The particular issues that arise with self-regulatory mechanisms and in regulating risks are explored in Chapters 10 and 11. Chapter 12 discusses the ways in which membership of the European Union affects domestic regulation, the problems posed by attempts to regulate an activity across a number of Member States, and potential responses to such problems. Chapter 13 continues the theme of regulating across borders by reviewing the issues arising when there is competition between different regulators, whether this be across national, industrial, sectoral, or issue-defined borders.

Utilities regulation gives rise to a great deal of current interest and to a number of particular concerns. Chapter 14, accordingly, offers a grounding for that discussion by setting out the basic regulatory structures that have been adopted in the post-privatization utilities sectors.

Part 2 then follows with more detailed discussions of a series of issues and concerns that have arisen in the utilities and other regulatory sectors. Individual chapters look at particular issues or mechanisms such as the control of monopolies (Chapter 15); the balance between regulation and the fostering of competition (Chapter 16); price capping (Chapter 17); measuring efficiency (Chapter 18); quality regulation (Chapter 19), and franchising (Chapter 20). Finally, two chapters

deal with issues of special relevance to those assessing the legitimacy of regulatory regimes: accountability (Chapter 21) and procedures and fairness (Chapter 22). Chapter 23 then offers conclusions on approaches to regulatory questions.

I

FUNDAMENTALS

2

Why Regulate?

Motives for regulating can be distinguished from technical justifications for regulating. Governments may regulate for a number of motives—for example they may be influenced by the economically powerful and may act in the interests of the regulated industry or they may see a particular regulatory stance as a means to re-election. Different commentators may analyse such motives in different ways and a variety of approaches to such analysis will be discussed in Chapter 3. To begin, though, we should consider the technical justifications for regulating that may be given by a government that is assumed to be acting in pursuit of the public interest.[1]

Many of the rationales for regulating can be described as instances of 'market failure'. Regulation in such cases is argued to be justified because the uncontrolled market place will, for some reason, fail to produce behaviour or results in accordance with the public interest.[2] In some sectors or circumstances there may also be 'market absence'—there may be no effective market—because, for example, households cannot buy clean air or peace and quiet in their localities.

1. Monopolies and Natural Monopolies

Monopoly describes the position in which one seller produces for the entire industry or market. Monopoly pricing and output is likely to occur and be sustained where three factors obtain:[3]

[1] For detailed reviews of public interest reasons for regulating see S. Breyer, *Regulation and Its Reform* (Cambridge, Mass., 1982), ch. 1; A. Ogus, *Regulation: Legal Form and Economic Theory* (Oxford, 1994), ch. 3; E. Gellhorn and R. J. Pierce, *Regulated Industries* (St Paul, Minn., 1982), ch. 2; J. Kay and J. Vickers, 'Regulatory Reform: An Appraisal', in G. Majone (ed.), *De-Regulation or Re-Regulation?* (London, 1989); B. Mitnick, *The Political Economy of Regulation* (New York, 1980), ch. 5; C. Sunstein, *After the Rights Revolution* (Cambridge, Mass., 1990), ch. 2; C. Hood, *Explaining Economic Policy Reversals* (Buckingham, 1995).

[2] See also J. Francis, *The Politics of Regulation* (Oxford, 1993), ch. 1.

[3] See Gellhorn and Pierce, *Regulated Industries*, 36–7 and Chapter 15 below. On regulating monopolies generally see C. Foster, *Privatisation, Public Ownership and the Regulation of Natural Monopoly* (Oxford, 1992), ch. 6; Ogus, *Regulation*, 30–3; Breyer, *Regulation and Its Reform*, 15–19; Francis, *Politics of Regulation*, ch. 3; E. Gellhorn and W. Kovacic, *Antitrust Law and Economics* (St Paul, Minn., 1994), chs. 3 and 4.

- a single seller occupies the entire market;
- the product sold is unique in the sense that there is no substitute sufficiently close for consumers to turn to;
- substantial barriers restrict entry by other firms into the industry and exit is difficult.

Where monopoly occurs, the market 'fails' because competition is deficient. From the public interest perspective, the problem with a firm occupying a monopolistic position is that in maximizing profits it will restrict its output and set price above marginal cost. It will do this because if it charges a single price for its product, additional sales will only be achieved by lowering the price on the entire output. The monopolist will forgo sales to the extent that lost revenue from fewer sales will be compensated for by higher revenue derived from increased price on the units still sold. The effects of monopoly, as compared to perfect competition, are reduced output, higher prices, and transfer of income from consumers to producers.

One response to potential monopolies is to use competition (or anti-trust) laws so as to create a business environment conducive to competition. Where a 'natural monopoly' exists, however, the use of competition law may be undesirable.[4] A natural monopoly occurs when economies of scale available in the production process are so large that the relevant market can be served at the least cost by a single firm. It is accordingly less costly to society to have production carried out by one firm than by many. Thus, rather than have three railway or electricity companies laying separate networks of rails or cables where one would do, it may be more efficient to give one firm a monopoly subject to regulation of such matters as prices and access to the network. Determining whether a natural monopoly exists requires a comparison of demand for the product with the extent of the economies of scale available in production. If a firm is in a position of natural monopoly then, like any monopoly, it will present problems of reduced output, higher prices, and transfers of wealth from consumers to the firm. Restoration of competition by use of competition law is not, however, an appropriate response since competition may be socially costly and thus regulation of prices, quality, and output as well as access may be called for. The regulator will try to set price near incremental cost (the cost of producing an additional unit) in order to encourage the natural monopolist to expand its output to the level that competitive conditions would have induced.

Not all aspects of a supply process may be naturally monopolistic. As Ogus points out,[5] the economies of scale phenomenon may affect only one part of a given process—for instance the *transmission* of, say,

[4] On natural monopolies see M. Waterson, *Regulation of the Firm and Natural Monopoly* (Oxford, 1988), ch. 2; Foster, *Privatisation*, ch. 6.2.
[5] Ogus, *Regulation*, 31.

electricity, rather than its *generation*.[6] The task of many governments and regulators (at least those committed to minimalist regulation) is to identify those parts of a process that are naturally monopolistic so that these can be regulated while other aspects are left to the influence of competitive forces.[7]

2. Windfall Profits

A firm will earn a windfall profit (sometimes called an 'economic rent' or excess profit) where it finds a source of supply significantly cheaper than that available in the market place.[8] It may do so by, say, locating a rich seam of an easily extracted mineral; by coming upon a material efficiency in a production process; or by possessing an asset that suddenly escalates in value—for example a boat in a desert town that has been flooded. Regulation may be called for when it is desired either to transfer profits to taxpayers or to allow consumers or the public to benefit from the windfall.

The rationale for regulating is strongest where the windfall is due to accident rather than planned investments of money, effort, or research. Where such investments have taken place or where society might want to create incentives to search for new efficiencies, products, or areas of demand, there is a case for allowing windfall or 'excess' profits to be retained. Even in the desert town it may be desirable to encourage some individuals to store boats in order to cope with periodic floods.

3. Externalities

The reason for regulating externalities (or 'spillovers') is that the price of a product does not reflect the true cost to society of producing that good and excessive consumption accordingly results.[9] Thus, a manufacturer of car tyres might keep costs to consumers down by dumping pollutants arising from the manufacturing process into a river. The price of the tyres will not represent the true costs that production imposes on society if clean-up costs are left out of account. The resultant process is wasteful because too many resources are attracted into polluting activities (too many tyres are made and sold) and too few resources are devoted by the

[6] G. Yarrow, 'Regulation and Competition in the Electricity Supply Industry', in J. Kay, C. Mayer, and D. Thompson, *Privatisation and Regulation* (Oxford, 1986).
[7] See Chapter 16 below, and the White Paper, *Privatising Electricity*, Cm. 322 (London, 1988).
[8] See Breyer, *Regulation and Its Reform*, 21. On the 'windfall tax' see below, pp. 233–5.
[9] See Breyer, *Regulation and Its Reform*, 23–6; Ogus, *Regulation*, 35–8.

manufacturer to pollution avoidance or adopting pollution-free production methods. The rationale for regulation is to eliminate this waste—and to protect society or third parties suffering from externalities—by compelling the internalization of spillover costs—on 'polluter pays' principles.

4. Information Inadequacies

Competitive markets can only function properly if consumers are sufficiently well informed to evaluate competing products.[10] The market may, however, fail to produce adequate information and may fail for a number of reasons: information may cost money to produce (e.g. because researching the effects of a product, such as a drug, may prove expensive). The producer of information, however, may not be compensated by others who use that information (e.g. other manufacturers of the drug). The incentive to produce information may accordingly be low. There may also be incentives to falsify information—where, for example, consumers of the product are ill-positioned to challenge the falsification and seek remedies for damages suffered or where they face high costs in doing so. Areas in which consumers purchase a type of product very infrequently may give rise to this problem. The information produced may, in addition, not be of sufficient assistance to the consumer—for instance because the consumer lacks the expertise required to render technical data useful. Finally, collusion in the market place, or insufficient competition, may reduce the flow of information below the levels consumers might want. Producers, as a group, may thus fail to warn consumers about the general hazards or deficiencies associated with a product. Breyer notes that until the US Government required disclosure, accurate information was unavailable to most buyers in that country concerning the durability of light bulbs, nicotine content of cigarettes, fuel economy for cars, or care requirements for textiles.[11]

Regulation, by making information more extensively accessible, accurate, and affordable, may protect consumers against information inadequacies and the consequences thereof and may encourage the operation of healthy, competitive markets.

5. Continuity and Availability of Service

In some circumstances the market may not provide the socially desired levels of continuity and availability of service. Thus, where demand is

[10] See F. Hayek, 'The Use of Knowledge in Society', (1945) 35 *Am. Econ. Rev.* 519; Breyer, *Regulation and Its Reform*, 26–8; Ogus, *Regulation*, 38–41.
[11] Breyer, *Regulation and Its Reform*, 28.

cyclical (for example, as with passenger air transport to a holiday island) waste may occur as firms go through the processes of closing and reopening operations.[12] Regulation may be used to sustain services through troughs—for example by setting minimum prices at levels allowing the covering of fixed costs through lean periods. This would be justified where the extra costs imposed on consumers by pricing rules are less than those caused by the processes of closing and opening services in response to the business cycle. The subsidizing of off-peak by peak travellers will, however, raise issues of equity to be considered alongside questions of social policy. In the case of some products or services—for example water services—it may be considered, as a matter of social policy, that these should be generally available at least to a certain minimum standard. In the unregulated market, however, competition may lead to 'cream-skimming'—the process in which the producer chooses to supply only the most profitable customers—and services may be withdrawn from poorer or more geographically disperse groupings of customers. Regulation may be justified in order to produce socially desirable results even though the cross-subsidizations effected may be criticizable as inefficient and unfair.

6. Anti-competitive Behaviour and Predatory Pricing

Markets may be deficient not merely because competition is lacking; they may produce undesirable effects because firms behave in a manner not conducive to healthy competition. A principal manifestation of such behaviour is predatory pricing. This occurs when a firm prices below costs, in the hope of driving competitors from the market, achieving a degree of domination, and then using its position to recover the costs of predation and increase profits at the expense of consumers. Preconditions for a rational firm to engage in predatory pricing are: that it must be able to outlast its competitors once prices are cut below variable costs and it must be able to maintain prices well above costs for long enough to recover its prior losses. The costs of entry to and exit from the market must, accordingly, allow it this period of comfort before new competition arises. The aim for regulators is to sustain competition and protect consumers from the ill-effects of market domination by outlawing predatory or other forms of anti-competitive behaviour.

7. Public Goods and Moral Hazard

Some commodities, e.g. security and defence services, may bring shared benefits and be generally desired. It may, however, be very costly for those

[12] Ogus, *Regulation*, 43–6.

paying for such services to prevent non-payers ('free-riders') from enjoying the benefits of those services. As a result, the market may fail to encourage the production of such commodities and regulation may be required—often to overcome the free-rider problem by imposing taxes.

Similarly, where there is an instance of moral hazard—where someone other than the consumer pays for a service[13]—there may be excessive consumption without regard to the resource costs being imposed on society. If, for example, medical costs are not met by the patient, but by the state or an insurer, regulatory constraints may be required if excessive consumption of medical services is to be avoided.

8. Unequal Bargaining Power

One precondition for the efficient or fair allocation of resources in a market is equal bargaining power. If bargaining power is unequal, regulation may be justified in order to protect certain interests. Thus, if unemployment is prevalent it cannot be assumed that workers will be able to negotiate effectively to protect their interests (even leaving aside informational issues) and regulation may be required to safeguard such matters as the health and safety of those workers.

9. Scarcity and Rationing

Regulatory rather than market mechanisms may be justified in order to allocate certain commodities when these are in short supply. In a petrol shortage, for example, public interest objectives may take precedence over efficiency so that, instead of using pricing as an allocative instrument, the petrol is allocated with reference to democratically generated lists of priorities.

10. Distributional Justice and Social Policy

Allocative efficiency attempts to maximize welfare but is not concerned with the distribution of that welfare amongst individuals or groups within society. Regulation may be used to redistribute wealth or to transfer resources to victims of misfortune (e.g. injured parties).[14]

Distrust of individuals' rationality or wisdom may also underpin another rationale for regulation—paternalism. As a matter of policy

[13] See generally G. Calabresi, *The Cost of Accidents: A Legal and Economic Analysis* (New Haven, 1970).

[14] See Ogus, *Regulation*, 46–51.

society may decide to overrule individuals' preferences on some issues and regulate—for example by demanding that seat belts be worn in motor vehicles. In the strongest form of such paternalism, the decision is taken to regulate even where it is assumed that the citizens involved are possessed of full information concerning products.[15] On a series of other issues, governments may regulate simply in order to further social policies such as the prevention of discrimination based on race, sex, or age.

11. Rationalization and Coordination

In many situations it is extremely expensive for individuals to negotiate private contracts so as to organize behaviour or industries in an efficient manner—the transaction costs would be excessive.[16] The firms in an industry may be too small and geographically dispersed to bring themselves together to produce efficiently. (This might happen when small fishing concerns in a sparsely populated area fail to make collective marketing arrangements.) Enterprises may, moreover, have developed different and incompatible modes of production. In these circumstances regulation may be justified as a means of rationalizing production processes (perhaps standardizing equipment in order to create effective networks) and in order to coordinate the market. Centralized regulation holds the advantage over individual private law arrangements where information can be more efficiently communicated through public channels and economies of scale can be achieved by having one public agency responsible for upholding standards.[17]

It is noteworthy that this rationale for regulation is based more on the desire to *enable* effective action to take place than on the need to prohibit undesirable behaviour.

12. Planning

Markets may ensure reasonably well that individuals' consumer preferences are met but they are less able to meet the demands of future generations or to satisfy altruistic concerns (e.g. the quality of an environment not personally enjoyed).[18] There is also, as far as altruism is

[15] Ibid. 51–4.

[16] See Ogus, *Regulation*, 41–2; S. Breyer and P. MacAvoy, 'The Federal Power Commission and the Coordination Problem in the Electrical Power Industry' (1973) 46 *S. Cal. LR* 661.

[17] In the transportation sector coordination and regulation by a central agency may be needed in order to organize a route network—see S. Glaister, *Deregulation and Privatisation: British Experience* (World Bank, Washington DC, 1998).

[18] See Ogus, *Regulation*, 54; R. B. Stewart, 'Regulation in a Liberal State: The Role of Non-Commodity Values' (1983) 92 *Yale LJ* 1537; Sunstein, *After the Rights Revolution*, 57–61.

concerned, a potential free-rider problem. Many people may be prepared to give up some of their assets for altruistic purposes only if they can be assured that a large number of others will do the same. The problems and costs of coordination mean that regulation may be required in order to satisfy such desires.[19]

Conclusions: Choosing to Regulate

There are, as seen above, a number of well-recognized reasons commonly given for regulating. It should be stressed, however, that in any one sector or industry the case for regulating may well be based not on a single but on a combination of rationales. As Breyer points out,[20] health and safety regulation, for example, can be justified with reference to a number of rationales—for example externalities, information defects, unequal bargaining, and paternalism.

A second point, to be borne in mind in considering whether to regulate, is that the market and all its failings should be compared with regulation and all its failings. Any analysis of the need to regulate will be skewed if it is assumed that regulatory techniques will operate perfectly. We will see during this book that all regulatory strategies have strengths and weaknesses in relation to their implementation as well as their design. Regulatory and market solutions to problems should be considered in all their varieties and with all likely deficiencies and side-effects if true comparisons are to be effected.

[19] Ogus, *Regulation*, 54. [20] Breyer, *Regulation and Its Reform*, 34.

TABLE 1. *Rationales for regulating*

Rationale	Main aims of regulation	Example
Monopolies and natural monpolies	Counter ten`dency to raise prices and lower output.	Utilities.
	Harness benefits of scale economies.	
	Identify areas genuinely monopolistic.	
Windfall profits	Transfer benefits of windfalls from firms to consumers or taxpayers.	Firm discovers unusually cheap source of supply.
Externalities	Compel producer or consumer to bear full costs of production rather than pass on to third parties or society.	Pollution of river by factory.
Information inadequacies	Inform consumers to allow market to operate.	Pharmaceuticals. Food and drinks labelling.
Continuity and availability of service	Ensure socially desired (or protect minimal) level of 'essential' service.	Transport service to remote region.
Anti-competitive and behaviour predatory pricing	Prevent anti-competitive behaviour.	Below-cost pricing in transport.
Public goods and moral hazard	Share costs where benefits of activity are shared but free-rider problems exist.	Defence and security services. Health Services.
Unequal bargaining power	Protect vulnerable interests where market fails to do so.	Health and Safety at Work.
Scarcity and rationing	Public interest allocation of scarce commodities.	Petrol shortage.
Distribution justice and social policy	Distribute according to public interest.	Victim protection.
	Prevent undesirable behaviour or results.	Discrimination.
Rationalization and Coordination	Secure efficient production where transaction costs prevent market from obtaining network gains or efficiencies of scale.	Disparate production in agriculture and fisheries.
	Standardization.	
Planning	Protect interests of future generations.	Environment.
	Coordinate altruistic intentions.	

3

Explaining Regulation

In explaining how regulation arises, develops, and declines, a number of broad approaches can be adopted.[1] These approaches may set out merely to describe and account for regulatory developments; they may be prescriptive and offer a view on how regulation *should* be organized; or they may serve a combination of these functions. Similarly, accounts of regulation may constitute commentaries on regulatory developments that are delivered with detachment from the sidelines or, together with their proponents, they may participate on the field of play and, intentionally or otherwise, may contribute themselves to regulatory changes.

The part that ideas can play in influencing regulatory developments is itself an issue for debate. Thus, Christopher Hood sees the 'force of ideas' approach as one of four main ways of explaining policy (or regulatory) developments. The essences of the four types of explanation can be set out thus:[2]

1. Where stress is placed on the force of new *ideas* that upset the *status quo* in some way—perhaps through demonstrations of experimental evidence, logical force, or rhetorical power.
2. Where emphasis rests on the pressures of *interests* that act in pursuit of developments that suit their own purposes.
3. Where changes are seen to flow from changes in *habitat* that make old policies obsolete in the face of new conditions—thus economic changes or technological advances may be seen to be driving policy revisions.
4. Where policies are said to *destroy themselves* because of internal problems—as where bureaucratic failings or integral deficiencies of strategy defeat the initial policy and produce changes.

[1] For a detailed review of the myriad varieties of regulatory theory see B. Mitnick, *The Political Economy of Regulation* (New York, 1980), ch. 3 and for a briefer account, R. Horwitz, *The Irony of Regulatory Reform: The Deregulation of the American Telecommunications Industry* (Oxford, 1989).

[2] See C. C. Hood, *Explaining Economic Policy Reversals* (Buckingham, 1994), ch. 1 (Hood's analysis refers to 'policy reversals' but is applied here to policy developments generally).

It can be seen that the first three approaches focus on 'external' influences on regimes, the fourth looks to internally generated factors. Of course, accounts of changes in regulation may not fall always neatly into the above categories since, as Hood acknowledges,[3] overlaps and combinations are inevitable (as where, for instance, powerful interests are seen to produce changes by pressing certain ideas against a background of technological advances). In looking at explanations of regulation, however, the above categorization does assist in teasing apart the elements within different approaches and in clarifying the roles played by those approaches in regulatory developments. We may, for instance, consider not only the relative emphases that particular explanations or schools of thought place on the role of ideas, interests, habitats, or internal factors but also the political and practical influence of those explanations or schools and the nature and origins of the forces that drive such explanations.

Most theories of regulatory origin and development can be seen as types of interest theory, though the force that can be exerted by ideas and arguments is recognized in a number of accounts. Among interest theories a broad distinction can be drawn between 'public', 'group', and 'private' versions.

1. Public Interest Theories

Public interest theories centre on the idea that those seeking to institute or develop regulation do so in pursuit of public interest related objectives (rather than group, sector, or individual self-interests). Proponents of regulation thus act as agents for the public interest.[4] Regulation's purpose is to achieve certain publicly desired results in circumstances where, for instance, the market would fail to yield these. (The grounds given for such action are likely to involve reference to one or more of the reasons for regulating outlined in Chapter 2.)[5]

Consistent with such a vision is an emphasis on the trustworthiness and disinterestedness of expert regulators in whose public-spiritedness

[3] Ibid. 36.

[4] See e.g. J. M. Landis, *The Administrative Process* (New Haven, 1938); R. E. Cushman, *The Independent Regulatory Commissions* (New York, 1941). For a British public interest account see I. McLean and C. Foster, 'The Political Economy of Regulation: Interests, Ideology, Voters and the UK Regulation of Railways Act 1844' (1992) 70 *Pub. Admin.* 313 at 329: 'Our test of seven hypotheses about the origins of regulation has shown that the best-supported is that both Gladstone and the MPs who voted on his bill were moved by their perceptions of the public interest.'

[5] Public interest visions of regulation may complement 'functionalist' accounts of regulatory origins and developments in so far as functionalism sees regulation as largely driven by the nature of the task at hand (as identified in terms of public needs and interests) rather than by private, individual, or self-interests.

and efficiency the public can have confidence.[6] The public interest approach is still defended by some commentators who argue for the development rather than abandonment of this vision.[7]

A number of problems, theoretical, practical, and political, however, beset the public interest view. A first difficulty is that an agreed conception of the public interest may be hard to identify. Instead, many might contend, regulation generally takes place amidst a clashing of images of the public interest. Public interest theories are said to fail to take into account such clashes.[8]

A further problem stems from doubts concerning the disinterestedness, expertise, and efficiency that the public interest approach attributes to regulators.[9] Thus, it has been argued that regulators may succumb to venality and be corrupted by opportunities for personal profit so that regulation is biased by the pursuit of personal interests.[10] Doubts may also be cast on the competence of regulators, which, it may be alleged, may not be sufficiently high to yield public interest ends—perhaps because rewards and career structures may lack the requisite attractiveness or because training needs and disciplinary emphases are poorly attended to.[11] Finally, capture theorists may suggest that public interest theory understates the degree to which economic and political power influences regulation. Thus, it is argued that regulatory polices and institutions often become (or, in some versions, begin life) subject to the influence of powerful regulated parties, or even politicians or sectors of consumers, so that regulation serves the interests of these parties or sectors rather than those of the wider public.[12]

Even for those capture theorists who are prepared to concede that regulatory regimes are sometimes established in pursuit of public interest objectives, the public interest vision may only be persuasive in relation to the earliest stages of the life-cycle of regulatory affairs.[13]

With regard to results,[14] the public interest perspective is prone to attack on the basis that regulation often seems to fail to deliver public interest

[6] See Landis, *Administrative Process*.

[7] See C. Sunstein, *After the Rights Revolution* (Cambridge, Mass., 1990).

[8] See J. G. Francis, *The Politics of Regulation: A Comparative Perspective* (Oxford, 1993), 8. On the public interest as a balancing of different interests; as a compromising approach or a trade-off concept; or as national, social, or particularistic goals see Mitnick, *Political Economy of Regulation*, 92–3.

[9] See G. Stigler, 'The Theory of Economic Regulation' (1971) 2 *Bell J. of Econ.* 3; G. Kolko, *Railroads and Regulation* (Princeton, 1965); Mitnick, *Political Economy of Regulation*, 111–20.

[10] Mitnick, *Political Economy of Regulation*, 94.

[11] See Landis, *Administrative Process*, 66.

[12] See E. S. Redford, *Administration of National Economic Control* (London, 1952), 251–2.

[13] See M. H. Bernstein, *Regulatory Business by Independent Commission* (New York, 1955) (life-cycle theory is discussed below at p. 25).

[14] On which the most telling comment is perhaps that of newly appointed football manager John Bond, who said: 'I promise results, not promises'. Quoted, B. Fantoni, *Private Eye's Colemanballs* (London, 1982).

outcomes. Some observers see this as an indication that appropriate lessons must be learned from failures so that better regulatory regimes can be designed.[15] The message for others is that regulation is doomed to failure and that policies of deregulation should be looked to.

2. *Interest Group Theories*

Interest group theorists see regulatory developments as the products of relationships between different groups and between such groups and the state. Such theorists generally differ from proponents of public interest accounts in not seeing regulatory behaviour as imbued with public-spiritedness but as a competition for power. Some accounts ('Group Public Interest Approaches')[16] do, however, offer explanations of the public interest that take on board competitions between different versions of that interest. Thus, Bernstein points to the role of regulators in carrying out missions that legislators have negotiated between interest groups, consumers, businesses, and other affected parties—missions that effect compromises but are seen by participants, nevertheless, to be endeavours in pursuit of the public interest.[17] Such visions bridge public interest and group interest approaches.

Versions of interest group theories range from open-ended pluralism to corporatism.[18] Pluralists see competing groups as struggling for power and elections as won by coalitions of groups who use their power to shape regulatory regimes. In contrast, corporatists emphasize the extent to which successful groups are taken into partnership with the state and produce regulatory regimes that exclude non-participating interests.[19] A recent variation on interest group theory is that offered by Leigh Hancher and Michael Moran, who employ the concept of 'regulatory space' within which there is an interplaying of interests concerning regulation.[20]

3. *Private Interest Theories*

A third broad approach to regulation stresses the extent to which regulatory developments are driven by the pursuit not of public or group but

[15] See C. R. Sunstein, 'Paradoxes of the Regulatory State' (1990) 57 *Univ. of Chicago LR* 407.

[16] See Mitnick, *Political Economy of Regulation*, 100.

[17] See M. H. Bernstein, *Regulating Business by Independent Commission* (New York, 1955), 76.

[18] Francis, *Politics of Regulation*; G. Wilson, *Interest Groups* (Oxford, 1990); for a pluralist analysis of government see P. Self, *Political Theories of Modern Government* (London, 1985), 79–107.

[19] See O. Newman, *The Challenge of Corporatism* (London, 1980).

[20] L. Hancher and M. Moran (eds.), *Capitalism, Culture and Regulation* (Oxford, 1989).

of private interests. This general approach thus encompasses theories going under a number of names, notably 'economic', 'Chicago', 'private interest', 'public choice', 'special interest', and 'capture'.

Some economic theories hover between group and private interest approaches. Thus, Kolko argued that US regulation originated in self-interested pressure exerted by business groups who sought such governmental action in order to maximize their profits and stabilize markets.[21] There was no diversion or capture from a public interest mission because regulation was established to serve private business interests in the first place.

The 'Chicago' theory as seen in the writings of George Stigler and Sam Peltzman[22] suggested that where there was a failure of competition, or the existence of monopoly, there would be monopoly profit which the legislature would give the regulator the power to dispose of. The regulated industry thus would have an incentive to influence the regulator so as to benefit from a 'regulatory rent' and there would be a market for regulation. This meant that the regulator would be captured by the industry since industry would have more to lose or gain than the regulator and, more generally, that in political contests, compact, organized interests (say, solicitors) would usually win at the expense of a diffused group (say, users of legal services). The commodity of regulation would go to those who valued it most and producers would thus tend to be better served by regulation than the (more diffused, less organized) masses of consumers. This economic approach assumed that all parties involved in regulation are income maximizers (politicians, for instance, seeking votes to maximize their cash incomes); it assumed that all parties are as well informed as possible and learn from experience; and it also assumed that regulation is costless (hence overall efficiency will not be affected by levels of regulation).[23]

The economic approach, as outlined, is thus consistent with public choice theories that stress the extent to which governmental behaviour can be understood by viewing all actors as rational individual maximizers of their own welfare.[24] Organizations and bureaucracies thus fall to be analysed with reference to the competing preferences of the individuals involved.

[21] G. Kolko, *The Triumph of Conservatism* (New York, 1977).

[22] Stigler loc. cit. n. 9 above; S. Peltzman, 'Towards a More General Theory of Regulation' (1976) 19 *J. Law and Econ.* 211. See also R. Posner, 'Natural Monopoly and Regulation' (1969) 21 *Stanford LR.* 548; id., 'Theories of Economic Regulation' (1974) 5 *Bell. J. of Econ.* 335. W. A. Jordan, 'Producer Protection, Prior Market Structure and the Effects of Government Regulation' (1992) 15 *J. Law and Econ.* 151. G. Becker, 'A Theory of Competition among Pressure Groups for Political Influence' (1983) 98 *Quarterly J. of Economics* 371.

[23] Cf. Peltzman loc. cit. n. 22 above.

[24] Public choice theories thus emphasize the force of *private* interests and preferences in governmental decisions, in stark contrast to public interest accounts; see A. Ogus, *Regulation: Legal Form and Economic Theory* (Oxford, 1994), 58–71.

Emphasis is placed on the propensity of such actors to circumvent official regulatory goals and substitute ends that are self-serving and to act in pursuit of such ends as job retention, aggrandizement, re-election, or the accumulation of personal wealth. The public interest is thus relegated to a small role in the establishment, operation, and development of regulatory regimes. Policies are put into effect so as to enhance wealth or utility positions.[25]

Such approaches have been open to question on a number of fronts.[26] Thus, explaining the nature and origins of preferences in the posited 'markets' for regulation proves difficult. Parties may lack determinate preferences on political or regulatory issues and individuals may behave altruistically in certain important respects. They may, for instance, identify with legislative, group, agency, or bureaucratic objectives and may behave in different ways according to the roles they adopt as, say, consumers of services, career strategists, or professional designers of regulatory policies. Regulators or bureaucrats may, moreover, be prevented from acting in rational, self-serving ways by lack of information, expertise, or commitment. Interest groups' activities may affect regulation in a manner that interferes with the realization of private preferences and regulatory bureaucracies may have lives beyond the sums of their parts. Public choice theories, moreover, ignore or underrate such important motives as ideologies, policy goals, emotional identifications, personality limits, prejudices, and moral stances.[27]

Experience, furthermore, seems to pose as many problems for private interest theories as it does for public interest accounts. Deregulatory developments thus seem difficult to account for in terms of the economic theory. Why, for instance, was there a strong deregulation movement in the 1970s if concentrated business interests were in control of regulatory developments?

On this point, one explanation might be that ideas, rather than pure interests, played a crucial role in moves to deregulate—a contention to be returned to in the next section. Private interest theorists, however, have not given up without a fight. Sam Peltzman himself has sought to rethink the economic approach and assess its power to explain regulatory developments, particularly in the period between the mid-1970s and mid-1980s.[28] He argues that regulation tends to produce incentives for firms to dissipate their wealth (e.g. when faced with controlled prices at

[25] See A. Downs, *An Economic Theory of Democracy* (New York, 1957).

[26] See Hood, *Explaining Economic Policy Reversals*, 24 and, generally, P. Dunleavy, *Democracy, Bureaucracy and Public Choice* (London, 1991); P. Self, *Government by the Market?* (Basingstoke, 1993).

[27] Self, *Government by the Market?*, 46.

[28] S. Peltzman, 'The Economic Theory of Regulation after a Decade of Regulation' (1989) *Brookings Papers in Macroeconomics* 1.

a time when costs increase) and that regulatory rents can be eradicated by regulation itself. A point can thus arrive when a return to the position prior to regulation becomes more attractive to regulated parties than continued regulation. Peltzman concludes that although the Chicago theory can tell a coherent story about most of the examples of deregulation (the latter being explicable in terms of the *disruption* of regulatory rents) it does, nevertheless, leave some important questions unanswered—for instance about 'the design of institutions and their adaptability'.[29]

Others have sought to refine the economic approach by considering in more detail the circumstances in which those seeking the profits extractable from monopolistic or protected positions in the market would be most likely to press for, and obtain, favourable regulation. Thus, Wilson has built on the Stiglerian vision to argue that regulation is most likely to be set up to serve the interests of the regulated where a concentrated group with high stakes is able to secure regulation and favourable wealth transfers at the expense of a diffused group with low per capita stakes.[30] In this scenario, the concentrated, high-stake group has incentives to influence regulation that are unmatched by those of the diffused, low-stake population. Lobbying for favourable regulation might, however, be expected to be far less pronounced when both the benefits and costs of public regulation are either concentrated or diffused. In the former instance, opponents of regulation might organize as easily as those seeking regulation and, in the case of generally diffused interests, both the opponents and proponents of regulation find it difficult to organize. Finally, where the benefits of regulation are diffused and costs are concentrated, opponents of regulation might be expected to be better organized and more forceful than those pressing for regulation.[31]

Such refinements of the economic approach fail, nevertheless, to come to grips with one of the core problems mentioned by Peltzman—the lack of any account of the role played by institutional arrangements in the shaping of regulation. Examining this role is essential, say a number of commentators, as an antidote to the idea of parties as rational wealth and vote maximizers. Such institutional positions will be returned to shortly.

The economic approach offers one view of regulatory capture but the diversion of regulation away from public interest objectives may be explained quite differently from the perspectives encountered in other disciplines. Motives can be seen in less simple terms than mere wealth maximization—to include, for instance, ideological, bureaucratic, or social

[29] S. Peltzman, 'The Economic Theory of Regulation after a Decade of Regulation' (1989) *Brookings Papers Macroeconomics in* 40.

[30] J. Q. Wilson, *The Politics of Regulation* (New York, 1980), 357–94. See also M. Olson, *The Logic of Collective Action* (Cambridge, Mass., 1965) and Hood, *Explaining Economic Policy Reversals*, 24–6.

[31] See Hood, *Explaining Economic Policy Reversals*, 25–6.

objectives. Stress, thus, can be placed on the propensity of bureaucrats to seek to maximize agency budgets,[32] or to engage in 'bureau-shaping' so as to create job satisfaction[33] or to maximize the political influence and scope of competencies of the agency.[34]

Contrasts have been drawn between the assumptions of the Chicago school of law and economics—that legislators and regulators seek to maximize their personal wealth—and the position of the 'Virginian' school of political economy which sees legislators and regulators as pursuers of expected votes or ideological ends as well as cash and which gives greater prominence to the interplay of pressure groups.[35] The problem of moving beyond wealth maximization and seeing utility maximization in broader terms is, however, that a loss of predictive power results and it is difficult to attribute relative weights to the various factors (money, votes, ideologies, and other preferences) that are all alleged to be being sought.[36]

Perhaps the best-known capture theory of all does not focus principally on economic interests. Marver H. Bernstein's 'life-cycle' theory makes reference to a variety of forces (internal and external) in accounting for regulatory declines.[37] Writing in 1955, Bernstein described an ageing process in which public interest regulation gave way to capture. Regulation typically begins, on this view, as a policy response to a political call to protect the public from undesirable activity. In the first of four stages of life—termed *gestation*—concerns about a problem result in the creation of a regulatory body. Second there follows *youth* in which the inexperienced regulatory body is outmanœuvred by the regulatees but operates with a crusading zeal. As the first flush of political support for agency objectives dies away, *maturity* follows and devitalization sets in. Regulation becomes more expert and settled but as the agency moves out of the political mainstream it begins to pay increasing attention to the needs of industry. As vitality declines, the agency relies more and more upon precedent when taking decisions and adopts a reactive stance. Finally, *old age*, the fourth stage, arrives to be charactized by debility and decline, resort to ever more judicialized procedures, and the agency giving priority to industrial rather than public interests.

[32] See W. A. Niskanen, *Bureaucracy and Representative Government* (Chicago, 1971).

[33] See Dunleavy, *Democracy, Bureaucracy and Public Choice*, 174–209.

[34] See G. Majone, *Regulating Europe* (London, 1996), 65; id., 'Cross-National Sources of Regulatory Policymaking in Europe and the United States' (1991) 11 *J. Publ. Pol.* 76, 94–7.

[35] See C. D. Foster, *Privatisation, Public Ownership and the Regulation of Natural Monopoly* (Oxford, 1992), 386–8; M. A. Crew (ed.), *Deregulation and Diversification of Utilities* (Dordrecht, 1989), 5–20.

[36] Foster, *Privatisation*, 387.

[37] Bernstein, *Regulating Business*. For criticism of the life-cycle theory see e.g. L. L. Jaffe, 'The Independent Agency—A New Scapegoat' (1956) 65 *Yale LJ* 1068; see also P. Quirk, *Industry Influence in Federal Regulatory Agencies* (Princeton, 1981).

4. Force of Ideas Explanations

The deregulatory programmes of the Reagan and Thatcher administrations prompted some commentators to argue that certain changes in regulation did not stem so much from the pressing of private interests as from the force of ideas.[38] (In such contexts 'ideas' are taken to refer to intellectual conceptions 'which express how and why the government ought to control business'.)[39] Ideas might be distorted by political considerations when being applied but: 'they provide the essential basis of assumed social realities whereby political leaders explain and justify their policies to the public, backed by a media which keeps the range of "realistic" options within narrow limits'.[40]

It has been contended that deregulation, as seen in the United States in the Reagan era, was driven not by interest group pressures but by an intellectually guided process of economic rationalism that managed to benefit dispersed consumer groups at the expense of concentrated producer interests.[41] (Residential consumers, the evidence was said to indicate, benefited from the deregulation.) This argument might itself have difficulty in explaining why certain ideas take root, how ideas can be separated conceptually from interests, or in accounting for the patchiness of deregulation,[42] but in so far as it is conceded that ideas possess a force of their own, the force of ideas approach does usefully qualify economists' emphasis on the market as the key factor in understanding regulatory progressions.[43]

[38] Hood, *Explaining Economic Policy Reversals*, 29; see R. A. Harris and S. M. Milkis, *The Politics of Regulatory Change* (2nd edn., New York, 1996), esp. ch. 1; on the influence of public choice ideology see Self, *Government by the Market?*, ch. 3, esp pp. 65–7. On ideas and policy processes generally see P. A. Hall, 'Policy Paradigms, Social Learning and the State: The Case of Economic Policy-making in Britain' (1993) 25 *Comparative Politics* 275; J. Goldstein and R. Keshane (eds.), *Ideas and Foreign Policy: Benefits, Institutions and Political Change* (Ithaca, NY, 1993).

[39] Harris and Milkis, *Politics of Regulatory Change*, 26.

[40] Self, *Government by the Market?*, p. xii; see also P. G. Hall (ed.), *The Political Power of Economic Ideas* (Princeton, 1989).

[41] See M. Derthick and P. Quirk, *The Politics of Deregulation* (Washington, 1985) and Harris and Milkis, *Politics of Regulatory Change*, who argue: 'we must appreciate the history of the underlying ideas and institutions if we are to understand deregulatory outcomes of the Reagan revolution' (p. 18). Harris and Milkis refer to 'the leadership role played by intellectual and political elites in establishing a new regulatory regime' (p. 25); on the role of ideas in European integration and regulation see H. Wallace and W. Wallace (eds.), *Policy-Making in the European Union* (3rd edn., Oxford, 1996), 22–4.

[42] See Hood, *Explaining Economic Policy Reversals*, 29; J. K. Jacobsen, 'Much Ado about Ideas' (1995) 47 *World Politics* 283; P. Quirk, 'In Defence of the Politics of Ideas' (1988) 50 *Journal of Politics* 31; also T. E. Keeler, 'Theories of Regulation and the Deregulation Movement' (1984) *Public Choice* 103; L. W. Weiss and M. W. Klass (eds.), *Regulatory Reform: What Actually Happened* (Boston, 1986).

[43] For counter-explanations of deregulation see Hood, *Explaining Economic Policy Reversals*, 29–33; Keeler, loc. cit. n. 42 above; Peltzman loc. cit. n. 28 above; Weiss and Klass, *Regulatory Reform*.

5. Institutional Theories

A further group of commentators has been highly sceptical of the rational actor model encountered in the economic approach. Institutionalist theorists centre on the notion that institutional structure and arrangements, as well as social processes, significantly shape regulation—that there is more driving regulatory developments than mere aggregations of individuals' preferences.[44] Individual actors are seen by institutionalists as influenced by rules as well as organizational and social settings, rather than as pure rational choice maximizers, and as having preferences that are influenced by institutional procedures, principles, expectations, and norms that are encountered in cultural and historical frameworks.[45] Regulation is thus seen as shaped not so much by notions of the public interest or competitive bargaining between different private interests but by institutional arrangements and rules (legal and other). Forces acting within regulatory bodies are thus emphasized more strongly within institutionalism than in, say, interest theories.

'New institutionalist' approaches come from a variety of disciplinary roots but share a common scepticism about atomistic accounts focusing on the individual.[46] Thus, within the socio-legal literature attention has been paid to principal-agent problems and the difficulties that elected officials encounter when they have to place the implementation of public programmes in the hands of unaccountable officials and agencies.[47] A

[44] See J. March and J. Olsen, 'The New Institutionalism: Organisational Factors in Political Life' (1984) 78 *Am. Pol. Sci. Rev.* 734; J. Meyer and B. Rowan, 'Institutionalised Organisations: Formal Structure as Myth and Ceremony' (1977) *Am. J. Sociol.* 340; W. Scott, 'The Adolescence of Institutional Theory' (1987) 32 *Admin. Sci. Qly.* 493; W. Powell and P. Di Maggio (eds.), *The New Institutionalism in Organizational Analysis* (Chicago, 1991); R. L. Jepperson, 'Institutions, Institutional Effects, and Institutionalism', ibid.; T. A. Koelble, 'The New Institutionalism in Political Science and Sociology' (1995) *Comparative Politics* 231. B. Levy and P. T. Spiller, *Regulations, Institutions and Commitment* (Cambridge, 1996). See also the discussion in J. Black, 'An Economic Analysis of Regulation: One View of the Cathedral' (1997) *OJLS* 699; 'New Institutionalism and Nationalism in Socio-Legal Analysis: Institutional Approaches to Regulatory Decision-Making' (1997) 19 *Law and Policy* 53.

[45] But for a 'transactions cost' approach to institutional choices, which does make 'rational choice' assumptions familiar in economics literature see M. J. Horn, *The Political Economy of Public Administration* (Cambridge, 1995).

[46] See W. Powell and P. Di Maggio, *New Institutionalism*, esp. ch. 1. (On the birth of 'New Institutionalism' see Powell and Di Maggio, p. 11 and March and Olsen loc. cit. n. 44 above.)

[47] See M. D. McCubbins, R. G. Noll, and B. R. Weingast, 'Administrative Procedures as Instruments of Political Control' (1987) 3 *J. Law Econ. Org.* 243; 'Structure Process Politics and Policy: Administrative Arrangements and the Political Control of Agencies' (1989) 75 *Virginia LR* 431 (McNollGast I and II respectively); R. L. Calver, M. D. McCubbins, and B. R. Weingast, 'A Theory of Political Control and Agency Discretion' (1989) 33 *Am. J. Pol. Sci.* 588. For criticism see J. L. Mashaw, 'Explaining Administrative Process: Normative, Positive and Critical Stories of Legal Development' (1990) 6 *J. Law Econ. Org.* 267; T. Moe, 'Political Institutions: The Neglected Side of the Story' (1990) 6 *J. Law Econ. Org.* 213; Levy and Spiller, *Regulations, Institutions and Commitment*. For a European view see M. Bergman and J. Lane, 'Public Policy in a Principal-Agent Framework' (1990) 2 *J. of Theoretical*

notable contribution has been made by McCubbins, Noll, and Weingast (McNollGast) on this front. McNollGast's concern is that administrative agencies and bureaucrats may tend to act in ways contrary to the objectives established in the original legislative compromise and may do so because of coalitional and bureaucratic 'drifts'. Their argument is that bureaucratic deviations from the desires of politicians and legislatures are inherently difficult to control but a solution lies in the use of the 'administrative process'. Elected officials can design procedures to solve the two central problems of political control: 'First, procedures can be used to mitigate the informational disadvantages faced by politicians in dealing with agencies. Second, procedures can be used to enfranchise important constituents in agency decision-making processes.'[48] Thus, to solve the problem of eroding legislative coalitions McNollGast hypothesize that legislators will 'stack the deck' of administrative procedures (i.e. rig these) in favour of the original winning coalition. The effect is to preserve the thrust of the original policy position (or mandate) in the face of declining cohesion in the original political alliances that produced the policy.

Other commentators have sought to add to McNollGast by arguing that problems of bureaucratic and legislative drift can be controlled not merely by using administrative procedures but also by 'stacking' organizational structures and designs. Jonathan Macey,[49] for instance, has contended that the structure and design of agencies can be manipulated 'in ways that reduce the chance that future changes in the political landscape will upset the terms of the original understanding among the relevant political actors'.[50] Regulatory outcomes are, on such a view, said to be influenced by agency structures which affect the kinds of political pressure that various groups are able to exert on the bureaucrats within the agency.

New institutional economists have, for their part, sought to qualify the standard assumptions of microeconomic theory by focusing on the transaction and arguing that individuals may seek to maximize in accordance with certain preference orderings but they do so in the face of cognitive

Politics 339. For a review of principal-agent theories in regulation see M. Barrow, 'Public Services and the Theory of Regulation' (1996) 24 *Policy and Politics* 263.

[48] See McNollGast I, 244. On bureaucratic and coalitional drifts see M. J. Horn and K. A. Shepsle, 'Commentary: Structure, Process, Politics and Policy' (1989) *Va. LR* 499.

[49] J. R. Macey, 'Organisational Design and Political Control of Administrative Agencies' (1992) 8 *J. Law Econ. Org.* 93.

[50] Ibid. On the role of institutional structures in explaining regulation in the EU see G. Majone, 'The Rise of the Regulatory State in Europe' (1993) *West European Politics*. In their comparative study of telecommunications regulation, Levy and Spiller (*Regulations, Institutions and Commitment*) emphasize that regulatory performance is affected by the political and social institutions encountered in a country. They urge (controversially) that regulation can only be efficient and satisfactory if adequate state mechanisms are in place to restrain arbitrary administrative action by regulators: see pp. 1, 120.

limits, incomplete information, and difficulties in monitoring and enforcing agreements.[51]

From the political science perspective, a special concern is the nature of collective action and the way that political structures, institutions, and decision-making processes shape political outcomes.[52] A number of writers focus on the mechanics of legislating, the way that this affects substantive results, and the efforts of different political groupings to control each other (e.g. committees of the legislature and regulatory agencies).[53]

In sociology and organization theory, the new institutionalism involves not only a rejection of rational actor models but also an interest in institutions as independent variables; in cognitive and cultural explanations; and in units of analysis that are more than aggregations of individuals' preferences, attributes, or motives. Sociologists have devoted particular attention to the nature and conceptualization of institutions and how certain forms of behaviour and understandings become institutionalized.[54] A sociological approach to capture is thus offered by Grabosky and Braithwaite, who suggest that the closer the regulatory institution is to the regulated firm in terms of experience, outlook, and class (the smaller the 'relational distance') and the greater the frequency of agency to firm contacts, the more likely it is that cooperative arrangements and capture will result.[55] Organizational theorists have tended to focus on the

[51] See Powell and Di Maggio, *New Institutionalism*, 3, and L. Putterman, *The Economic Nature of the Firm* (Cambridge, 1986); O. Williamson, *The Economic Institutions of Capitalism* (New York, 1985); D. C. North, 'Government and the Cost of Exchange in History' (1984) 44 *J. of Econ. History* 255; R. Matthews, 'The Economics of Institutions and the Services of Growth' (1986) 96 *Economic Journal* 903; Horn, *The Political Economy of Public Administration*.

[52] See K. A. Shepsle, 'Institutional Equilibrium and Equilibrium Institutions', in H. Weisburg (ed.), *Political Science: The Science of Politics* (New York, 1986). T. Moe, 'An Assessment of the Positive Theory of Congressional Dominance' (1987) 12 *Legislative Stud. Q.* 475; id., 'Political Institutions: The Neglected Side of the Story' (1990) 6. *J. Law Econ. Org.* 213. For an economic approach to issues of political control see R. L. Calver, M. D. McCubbins, and B. R. Weingast, 'A Theory of Political Control and Agency Discretion' (1989) 33 *Am. J. Pol. Sci.* 588.

[53] See W. H. Riker, 'Implications from the Disequilibrium of Majority Rule for the Study of Institutions' (1980) 74 *Am. Pol. Sci. Rev.* 432; K. A. Shepsle and B. Weingast, 'Structure-Induced Equilibria and Legislature Choice' (1981) 37 *Public Choice* 503; Shepsle and Weingast, 'The Institutional Foundations of Committee Power' (1987) 81 *Am. Pol. Sci. Rev.* 85; B. Weingast and W. Marshall, 'The Industrial Organisation of Congress' (1988) 96 *J. Pol. Econ.* 132; E. Ostrom, 'An Agenda for the Study of Institutions' (1986) 48 *Public Choice* 3; K. A. Shepsle loc. cit. (1986) n. 52 above; T. Moe, 'Interests, Institutions and Positive Theory: The Politics of the NLRB' (1987) 2 *Studies in American Political Development* 236.

[54] See e.g. J. Meyer and B. Rowan, 'Institutionalised Organisation: Formal Structure as Myth and Ceremony' in Powell and Di Maggio, *New Institutionalism*. S. Crawford and E. Ostrom, 'A Grammar of Institutions' (1995) 89 *Am. Pol. Sci. Rev.* 582. R. L. Jepperson, 'Institutions, Institutional Effects and Institutionalism', in Powell and Di Maggio, *New Institutionalism*.

[55] P. Grabosky and J. Braithwaite, *Of Manners Gentle: Enforcement Strategies of Australian Business Regulatory Agencies* (Melbourne, 1986). On relational distance see D. Black, *The Behavior of Law* (New York, 1974), 40–8.

role of organizational structures and processes that are of industry-wide, national, or international scope and the extent to which individual choices are guided by shared organizational experiences, expectations, and understandings.[56]

One strand of regulatory theory that has socio-legal, sociological, cultural, and organizational elements is that represented by Leigh Hancher and Michael Moran,[57] who question portrayals of regulation as contests between public authorities and private interests and argue that regulation involves an intermingling of public and private characteristics that makes it more fruitful to focus on the complex and shifting relationships between and within organizations involved in regulation. Hancher and Moran thus look to understand the way that different institutions come to inhabit a shared 'regulatory space' that is marked out by a range of regulatory issues subject to public decision.

How regulatory regimes compete is a further, and distinct, focal point in explanations of regulation and attention may be paid to relations between domestic institutions as well as regulatory competition across borders.[58] In such analyses questions arise concerning the effect of regulatory competition on such matters as: the rigour of standards; the control (or encouragement) of regulatory capture; and the production of even-handed and effective regulatory regimes across national borders.[59]

Finally, mention should be made of the historical and cultural strands of institutionalism. The former tend to give weight to the influence of past decisions, practices, and procedures in explaining regulatory developments.[60] The latter look to the influence on institutions of informal

[56] See Powell and Di Maggio, *New Institutionalism*, 9–10.

[57] See L. Hancher and M. Moran (eds.), *Capitalism, Culture and Regulation* (Oxford, 1989), esp. their chapter 'Organising Regulatory Space'. See also T. Daintith, 'A Regulatory Space Agency' (1989) 9 *OJLS* 534 and C. Shearing, 'A Constitutive Conception of Regulation', in P. Grabosky and J. Braithwaite (eds.), *Business Regulation and Australia's Future* (Canberra, 1993).

[58] See Chapter 13 below; G. Majone, *Regulating Europe* (London, 1996); J. M. Sun and J. Pelkmans, 'Regulatory Competition in the Single Market' (1995) 33 *J. Common Market Studies* 67; C. Scott, 'Competition and Co-ordination in US and EC Telecommunications Regulation', in S. Picciotto, J. McCahery, C. Scott, and B. Bratton (eds.), *International Regulatory Competition and Co-ordination* (Oxford, 1996); S. Woolcock, *Competition among Rules in the Single European Market* (London, 1994); J. P. Trachtman, 'International Regulatory Competition, Externalisation and Jurisdiction' (1993) 34 *Harv. J. of Int. Law* 49; H. Siebert and M. J. Koop, 'Institutional Competition Versus Centralisation: *Quo Vadis* Europe' (1993) 9 *Oxford Rev. of Econ. Policy* 15.

[59] On *comparing* regulation across borders see R. Baldwin and T. Daintith, *Harmonisation and Hazard* (London, 1992) and below, Chapter 11.

[60] See K. Thalem and S. Steinmo, 'Historical Institutionalism in Comparative Politics', in S. Steinmo, K. Thelen, and F. Longstreth (eds.), *Structuring Politics: Historical Institutionalism in Comparative Politics* (Cambridge, 1992); I. McLean and C. Foster, 'The Political Economy of Regulation: Interests, Ideology, Voters and the UK Regulation of Railways Act 1844' (1992) 70 *Pub. Admin.* 313.

rules, procedures, conceptions, myths, ideologies, theories, shared values, beliefs, expectations, and understandings. More particular concerns are cognitive processes, the cultural frameworks of perception, and the relationships between ideas, images or symbols, and practical responses.[61] Influential within cultural approaches to institutions is Mary Douglas's distinction between two basic dimensions of organizations:[62] 'grid' (the degree to which relations are governed by externally imposed rules) and 'group' (the extent to which individuals are incorporated into broader, bounded units). Combining these two dimensions gives four basic ways of life: 'fatalist' (high grid, high group); 'hierarchist' (high grid, low group), 'individualist' (low grid, low group), and 'sectarian' or 'egalitarian' (low grid, high group). Commentators have sought to apply grid-group anlayses in accounting for developments in government and, in using such analyses, have stressed the importance of institutions and groups as well as rule systems in determining social and regulatory developments.[63]

In emphasizing the self-productive aspect of institutions such cultural approaches are consistent with systems theory and the idea that the differentiated functional systems into which society is divided are autopoietic. Each system (law, economy, politics, religion, etc.) is seen to have its own rationality yet to be able to react with its environment so as to self-generate and reproduce.[64] Regulatory developments, accordingly, come to be analysed in terms of the nature, compatibilities, and interactions of autopoietic systems.[65]

[61] See Jepperson loc. cit. n. 54 above; J. Meyer, J. Boli, and G. Thomas, 'Ontology and Rationalisation in the Western Cultural Account', in G. Thomas et al. (eds.), *Institutional Structure* (London, 1987); J. Meyer, 'Conceptions of Christendom', in M. Kohn (ed.), *Cross-National Research in Sociology* (London, 1988); id., 'Society without Culture: A Nineteenth Century Legacy', in F. O. Ramirez (ed.), *Rethinking the Nineteenth Century* (New York, 1988), G. M. Thomas, *Revivalism and Cultural Change* (Chicago, 1989); M. Douglas, *How Institutions Think* (London, 1986); M. Thompson, R. Ellis, and A. Wildavsky, *Cultural Theory* (Boulder, Colo., 1990).

[62] M. Douglas, *In the Active Voice* (London, 1982).

[63] See e.g. Thompson, Ellis, and Wildavsky, *Cultural Theory* and A. Wildavsky, 'The Logic of Public Sector Growth', in J. E. Lane (ed.), *State and Market* (London, 1985) (discussed, Hood, *Explaining Economic Policy Reversals*, 98–9).

[64] See G. Teubner (ed.), *Autopoietic Law: A New Approach to Law and Society* (Berlin, 1988); id., *Juridification of Social Spheres* (Berlin, 1987); id., *Law as an Autopoietic System* (Oxford, 1993); N. Luhmann, 'Law as a Social System' (1989) 83 *NWULR* 136; M. King, 'The Truth about Autopoiesis' (1993) 20 *J. of Law and Society* 218; W. H. Clune, 'Implementation as an Autopoietic Interaction of Autopoietic Organisations', in G. Teubner and A. Febbrajo (eds.), *State, Law and Economy as Autopoietic Systems: Regulation and Autonomy in New Perspective* (Milan, 1992); on autopoiesis and self-regulation see J. Black, (1996) 59 *MLR* 24 and for an introduction, King, 'The Truth about Autopoiesis'.

[65] See Black, loc. cit. n. 64 above and G. Teubner, 'After Legal Instrumentalism? Strategic Models of Post-Regulatory Law', in Teubner (ed.), *Dilemmas of Law in the Welfare State* (Berlin, 1985); M. Wilke, 'Societal Regulation through Law', in Teubner and Febbrajo, *State, Law and Economy*.

Conclusions

A review of major approaches to the explanation of regulation may not exhaustively account for the host of potential theories available. It serves, however, to indicate the main tensions and differences of emphasis encountered in the regulatory literature. It would be optimistic, even rash, to suggest that such theories can be synthesized so that reliable predictions can be made about all or most regulatory processes.[66] Different theories exist at differing levels of generality and have varying applications and uses as explanatory tools. For this reason it makes little sense to say whether one explanation or type of explanation carries more conviction than another without reference to a particular issue and context. What can be said is that in seeking to explain particular regulatory developments, an awareness of the variety of available explanations does help the observer to evaluate the insights offered by different theories, to develop a sense of the limitations of and assumptions underpinning those theories, and to identify the kinds of information necessary for applying and testing them.

The study of regulation has developed in many promising ways in recent years.[67] Thus, interdisciplinary approaches have become more widespread and traditional academic boundaries have been crossed between such disciplines as law, political science, and economics.[68] Regulatory theory has come to draw from an ever wider range of sources, from legal theory[69] to political science[70] and anthropology.[71] Regulatory studies have taken on board new issues and concerns—such as attend the topic of risk[72]—and, from a British perspective, a healthy indigenous literature has developed to supplement previously dominant 'borrowings' from across the Atlantic.[73] Themes and approaches do remain to be developed within the body of regulatory studies[74] but regulation is set to grow in importance not merely as a governmental activity and as a subject for party political attention but also as a focus of academic interest.

[66] See M. E. Levine and J. L. Forrence, 'Regulatory Capture, Public Interest and the Public Agenda: Towards Synthesis' (1990) *J. Law Econ. Org.* 167.

[67] See the discussion in R. Baldwin, C. Scott, and C. Hood (eds.), *A Reader On Regulation* (Oxford, 1998), ch. 1.

[68] See e.g. D. Helm (ed.), *British Utilities Regulation* (1996).

[69] See e.g. the works of Teubner and Black at n. 64 above.

[70] See e.g. Hood, *Explaining Economic Policy Reversals*; R. A. Harris and S. M. Milkis, *The Politics of Regulatory Change* (2nd edn., New York, 1996).

[71] See e.g. M. Douglas, 'Risk as a Forensic Resource' (1990) 119 *Daedalus* 1.

[72] See below, Chapter 11 and e.g. Royal Society, *Risk: Assessment, Perception, Management* (London, 1992) (containing a useful bibliography of risk studies).

[73] See e.g. A. Ogus, *Regulation: Legal Form and Economic Theory* (Oxford, 1994); M. Armstrong, S. Cowan, and J. Vickers, *Regulatory Reform: Economic Analysis and British Experience* (London, 1994).

[74] For discussion see Baldwin, Scott, and Hood, *Regulation*, ch. 1.

TABLE 2. *Explaining regulation*

Type of Theory	Main Emphasis	Key Problems
Public Interest	Regulator acting in pursuit of public rather than private interests. Regulator disinterested and expert.	Difficult to agree a conception of public interest. Scepticism concerning disinterestedness, and public-spiritedness of regulators. Understates influence of economic power and prevalence of capture in regulation. Concern that public interest outcomes often fail to result. Understates competition for power amongst groups.
Interest Group	Regulation as product of relationships between groups and with the state.	Understates role of private economic power.
Private Interest	Role of private economic interests in driving regulation. Incentives of firms to secure benefits and regulatory rents by capturing regulator.	Assumes that parties in regulation are rational maximizers of own welfare. Difficulty of identifying preferences of parties. Possibility of altruism and public-spiritedness. Informational limitations may limit self-interestedness of actions. Role of groups and institutions may be underemphasized.
Force of Ideas	Role of ideas in steering regulatory developments.	It may be hard to separate the force of ideas from the role of economic interests. Explaining deregulation may be difficult.
Institutional	Influence of organizational rule and social setting on regulation. Actors seen not purely as individuals but as shaped in action, knowledge, and preference by organizational rule and social environments. Principal-agent issues and problems of democratic control of implementation.	How to balance institutional explanations with others in accounting for regulatory changes.

4

Regulatory Strategies

If the state wants to control, say, the pollution of a river it may use a number of strategies. The dumping of noxious substances may be made unlawful or, alternatively, the state may give rewards (e.g. tax deductions) to those existing polluters who reduce the levels of their discharges. Looking to other strategies, manufacturers might be compelled to tell the public how much pollution is caused in making each product or rights might be allocated so as to allow the victims of pollution to recover damages from polluters.

Choosing the right strategy for regulating matters. A regulatory system will be difficult to justify—no matter how well it seems to be performing—if critics can argue that a different strategy would more effectively achieve relevant objectives. How, though, can we map out the array of different regulatory techniques? A starting point is to consider the basic capacities or resources that governments possess and which can be used to influence industrial, economic, or social activity. These have been described as follows:[1]

To command—where legal authority and the command of law is used to pursue policy objectives.

To deploy wealth—where contracts, grants, loans, subsidies, or other incentives are used to influence conduct.

To harness markets—where governments channel competitive forces to particular ends (for example by using franchise auctions to achieve benefits for consumers).

To inform—where information is deployed strategically (e.g. so as to empower consumers).

To act directly—where the state takes physical action itself (e.g. to contain a hazard or nuisance).

To confer protected rights—where rights and liability rules are structured and allocated so as to create desired incentives and constraints (e.g. rights to clean water are created in order to deter polluters).

[1] See C. C. Hood, *The Tools of Government* (London, 1983), 5; T. C. Daintith, 'The Techniques of Government', in J. Jowell and D. Oliver (eds.), *The Changing Constitution* (3rd edn., Oxford, 1994).

A number of basic regulatory strategies are built on the use of the above capacities or resources and can be distinguished from each other as follows.[2]

1. Command and Control

The essence of command and control (C & C) regulation is the exercise of influence by imposing standards backed by criminal sanctions.[3] Thus, the Health and Safety Executive may bring criminal prosecutions against occupiers who breach health and safety regulations. The force of law is used to prohibit certain forms of conduct or to demand some positive actions or to lay down conditions for entry into a sector.

Regulators who operate C & C techniques are sometimes equipped with rule-making powers (as is often the case in the USA). In the UK, however, it is common for regulatory standards to be set by government departments through primary or secondary legislation and then enforced by regulatory bureaucracies. C & C thus involves the setting of standards within a rule, it often entails some kind of licensing process to screen entry to an activity, and may set out to control not merely the quality of a service or the manner of production but also the allocation of resources, products, or commodities and the prices charged to consumers[4] or the profits made by enterprises.

The strengths of C & C regulation (as compared to techniques based, say, on the use of economic incentives such as taxes or subsidies) are that the force of law can be used to impose fixed standards with immediacy and to prohibit activity not conforming to such standards. In political terms, the regulator or government is seen to be acting forcefully and to be taking a clear stand: by designating some forms of behaviour as unacceptable; by excluding dangerous parties from relevant areas; by protecting the public; and establishing penalties for those engaging in offensive conduct. Some forms of behaviour can thus be outlawed completely and the ill-qualified can be stopped from practising activities likely to produce harms. The public, as a result, can be assured that the might of the law is being used both practically and symbolically in their aid.

C & C regulation is not, however, problem-free and, during the 1980s in particular, a number of North American socio-legal scholars and

[2] On regulatory strategies in general use see S. Breyer, *Regulation and Its Reform* (Cambridge, Mass., 1982), esp. ch. 8; A. Ogus, *Regulation: Legal Form and Economic Theory* (Oxford, 1994), esp. Parts III and IV; N. Gunningham and P. Grabosky, *Smart Regulation* (Oxford, 1998), ch. 2.

[3] On command and control and alternatives see R. Baldwin, 'Regulation: After Command and Control', in K. Hawkins (ed.), *The Human Face of Law* (Oxford, 1997).

[4] For more detailed discussion of price control mechanisms see Chapter 17 below.

economists alleged a series of weaknesses.[5] Such concerns were echoed by many politicians on both sides of the Atlantic—particularly those predisposed to doubt the value of governmental rather than market-based modes of influence.

Capture

A first worry was that in C & C regulation the relationships between the regulators and the regulated might tend to become too close and lead to capture—the pursuit of the regulated enterprises' interests rather than those of the public at large.[6] A number of versions of capture theory have been put forward.[7] 'Life-cycle' accounts suggest that agencies progress through various stages until, lonely, frightened, and old, they become the protectors of the regulated industry, rather than of the public interest;[8] 'interest group' explanations stress the extent to which regulators can be influenced by the claims and political influence of different groups; and 'private interest' or economic analyses see regulation as a commodity liable to fall under (or to be established under) the sway of the economically powerful.[9]

the regulator needs the industry

The proximity of regulator to regulatee relationships that is associated with C & C techniques might be thought to be particularly conducive to capture in so far as agencies, when drawing up and enforcing rules, must rely to some extent on the cooperation of the regulated firms. Thus, the argument runs, regulators require a good deal of information in order to carry out their functions—say to fix appropriate standards on issues such as acceptable pollution levels or price increases. The primary, and best, source of such information will often be industry. The regulator, accordingly, requires some assistance from the regulated firms in order to make C & C regulation work. This gives the regulated firms a degree of leverage over regulatory procedures and objectives, a leverage that, over time, produces capture.

In response to allegations that C & C regulation is particularly prone to capture it should be noted that many versions of capture theories would attribute capture to factors that operate in a manner unaffected by the particular regulatory technique employed. They might point, for instance, to broad political, institutional, or economic considerations.

[5] See e.g. Breyer, *Regulation and Its Reform*; R. B. Stewart, 'Regulation and the Crisis of Legalism in the United States', in T. Daintith (ed.), *Law as an Instrument of Economic Policy* (Berlin, 1998); id., 'The Discontents of Legalism: Interest Group Relations in Administrative Regulation' (1985) *Wisconsin LR* 685; E. Bardach and R. Kagan, *Going by the Book: The Problem of Regulatory Unreasonableness* (Philadelphia, 1982) Gunningham and Grabosky, *Smart Regulation*, 44–7.

[6] See C. Hood, *Explaining Economic Policy Reversals* (Buckingham, 1994), 21.

[7] For a review of these see B. Mitnick, *The Political Economy of Regulation* (New York, 1980); also see P. J. Quirk, *Industry Influence in Federal Regulatory Agencies* (Princeton, 1981); G. Wilson, 'Social Regulation and Explanations of Regulatory Failure' (1984) 32 *Pol. Stud.* 203.

[8] See M. H. Bernstein, *Regulating Business by Independent Commission* (New York, 1955) and discussion above at p. 25.

[9] See R. Posner, 'Theories of Economic Regulation' (1974) 5 *Bell J. of Econ.* 335; G. Stigler, 'The Theory of Economic Regulation' (1971) 2 *Bell J. of Econ.* 3.

Legalism — Teubner

A second major concern with C & C regulation has been its alleged propensity to produce unnecessarily complex and inflexible rules, and indeed, a proliferation of rules that leads to over-regulation, legalism, delay intrusion on managerial freedoms, and the strangling of competition and enterprise.[10] Eugene Bardach and Robert Kagan have expressed concern at the extent to which US regulators have tended to over-regulate with over-inclusive rules (rules that apply to an unnecessarily wide array of instances or actions) and have given a number of reasons why such problems tend to occur. Firstly, rule-makers find it very difficult to design precisely targeted rules (the informational demands are severe) and the tendency is to avoid such design and drafting difficulties by writing over-inclusive rules. Secondly, for political reasons, regulators tend to respond to particular problems or tragedies with general, or 'across-the board', rules and solutions. This gives the appearance of 'doing something about that sort of thing'. Third, pressures to reduce discretions in favour of the 'rule of law' (so as to make regulatory actions rule-governed) may come from politicians, those regulated, or consumers, and these pressures may induce the excessive production of rules. Fourth, regulators often wish to respond to a mischief before public concern dies down—while the memory of the disaster is still fresh. Working to the resultant short time scales tends to produce rules that are broad-brush rather than precisely targeted. Finally, there is what is dubbed the 'regulatory ratchet'[11] whereby regulatory rules tend to grow rather then recede because revisions of regulations are infrequent; work on new rules tends to drive out attention to old ones; and failure to carry out pruning leads the thickets of rules to grow ever more dense.[12]

In the context of British telecommunications OFTEL has argued that detailed, prescriptive rules can be a barrier to entry, can inhibit competition, and can discriminate between incumbent licensed operators and new entrants. OFTEL has urged a movement away from control by means of detailed rules contained in the licences of those given privileged access, towards 'open state' regulation that is based on general authorizations and which gives a stronger role to general competition and

[10] See Stewart, loc. cit. (1988) n. 5 above; Bardach and Kagan, *Going by the Book*; G. Teubner, *Juridification of Social Spheres* (Berlin, 1987).

[11] Bardach and Kagan, *Going by the Book*, ch. 7.

[12] On responses to these problems see R. Baldwin, *Rules and Government* (Oxford, 1995), 183–5 and below, Chapter 19.

consumer protection laws, backed up by detailed guidance only where necessary.[13]

Standard Setting

Setting appropriate standards has been argued to pose major difficulties for regulators because the informational demands are so severe.[14] Thus, anti-competitive effects must be addressed; the appropriate *type* of standard must be selected—be this an output standard specifying a level of performance or an input standard calling for a particular design or specification of operation or machinery—and the level of exposure to judicial review may be high[15]. Setting the appropriate level of performance is, moreover, technically difficult and liable to be contentious. To give a simple instance, employing the example of pollution again, even if it is assumed that the regulator knows the beneficial values of particular levels of cleanliness in a river, and is clear on social objectives, setting the optimal levels of allowable pollution (the levels that minimize the sum of abatement and damage costs) would require data on the differing abatement costs of all of the various polluters on the riverbank. The efficient level of pollution will, indeed, be specific to each enterprise yet the regulator has usually to produce a generalized rule.

Enforcement

A final major difficulty said to be particularly associated with C & C regimes is that of enforcement. The complex rules attending such regimes have to be brought to bear on the ground by bodies of officials or inspectors but enforcement is expensive, the techniques used give rise to contention, and the effects of enforcement are said to be uncertain.[16] On the latter point, for instance, the rules used in C & C systems may be too narrow or too broad in scope. They may, accordingly, fail to cover conduct that should be controlled or else may constrain activity that should be unrestricted. In addition, there may be problems of 'creative compliance' —the practice of avoiding the intention of the law without breaking the terms of the law.[17]

[13] See OFTEL, *Second Submission to the Culture, Media and Sport Select Committee: Beyond the Telephone, the Television and the PC—Regulation of the Electronic Communications Industry* (London, Mar. 1998).

[14] See Chapter 9 below for a general discussion of standard setting, also Breyer, *Regulation and Its Reform*, 109–19, Ogus, *Regulation*, ch. 8.

[15] See Ogus, *Regulation*, ch. 8.

[16] For further discussion of enforcement see Chapter 8 below and Baldwin, *Rules and Government*, ch. 6.

[17] See below, pp. 102–3.

Regulators employing C & C techniques thus face substantial difficulties of rule use. Not only must the rules employed be capable of enforcement and be accessible to regulated firms or individuals, but the appropriate types and levels of standards must be fixed, problems of scope (or inclusiveness) must be overcome, and issues of creative compliance dealt with. Such problems, moreover, must often be faced in political environments that are unlikely to produce the resources necessary for effective enforcement and are hostile to rules that impose compliance costs on industry or interfere with managers. In the light of such difficulties, some commentators advocate a move away from command-based strategies towards alternative 'constitutive', 'less restrictive', or 'incentive-based' styles of control.[18] The strategies now to be described may be seen as the main alternatives to C & C style of regulation.

2. *Self-Regulation and Enforced Self-Regulation*[19]

Self-regulation can be seen as a substitute for C & C though it might also be portrayed as self-administered C & C.[20] Simple self-regulation usually involves an organization or association (e.g. a trade association) developing a system of rules that it monitors and enforces against its own members or, in some cases, a larger community.[21] Such regimes are commonly instituted in professions or trades so as to hold government regulation and legislative controls at bay (examples may be found in the British advertising, press, and insurance industries).

Self-regulation can be classified as 'enforced' when it is subject to a form of governmental structuring or oversight. A regime may thus be mandated under legislation, as was the case in the UK financial services sector with the network of self-regulatory organizations (SROs) established under

[18] See Stewart, loc. cit. (1988) n. 5 above; Breyer, *Regulation and Its Reform*. On incentive-based regulation see Ogus, *Regulation*, ch. 11. For a European view of the limits of command law see G. Teubner, *After Legal Instrumentalism? Strategic Models of Post-Regulatory Law*, EUI Working Paper No. 100 (Florence, 1984).

[19] For a more detailed discussion of self-regulation see Chapter 10 below.

[20] See I. Ayres and J. Braithwaite, *Responsive Regulation: Transcending the Regulation Debate* (Oxford, 1992), ch. 4; J. Braithwaite, 'Enforced Self-Regulation: A New Strategy for Corporate Crime Control' (1982) 80 *Mich. LR* 1466; J. Black, 'Constitutionalising Self-Regulation' (1996) 59 *MLR* 24. On varieties of self-regulation see A. I. Ogus, 'Rethinking Self-Regulation' (1995) 15 *OJLS* 97.

[21] See Baldwin, Scott, and Hood, *Regulation*, ch. 1, who cite the Advertising Standards Authority as an example of self-regulation with a jurisdiction extending beyond members. On self-regulation generally see A. Page, 'Self-Regulation: The Constitutional Dimension' (1986) 49 *MLR* 141; id., 'Financial Services: The Self-Regulatory Alternative', in R. Baldwin and C. McCrudden, *Regulation and Public Law* (London, 1987); R. Baggott and L. Harrison, 'The Politics of Self-Regulation', in G. Richardson and H. Genn (eds.), *Administrative Law and Government Action* (Oxford, 1995).

the Financial Services Act 1986.[22] Statutes may subject self-regulation to scrutiny and approval by a government department or agency—as is the case with the trade association codes of practice approved by the Director General of Fair Trading under the Fair Trading Act 1973.[23]

Self-regulatory methods have proved popular with a number of governments and commentators.[24] Thus, Ayres and Braithwaite have suggested that systems of enforced self-regulation, under which organizations make their own rules but have to submit them to public agencies for approval, bring a number of advantages as compared to traditional C & C regimes. The strengths of enforced self-regulation have thus been said to be:

- The high level of commitment of firms and associations to 'their own' rules.
- Well-informed rule-making.
- Low costs to government.
- A close fit between regulation and the standards firms accept as realistically attainable.
- Greater effectiveness in detecting violations and in securing convictions where prosecution is necessary.
- The greater comprehensiveness of rules.
- The potential of self-regulatory rules for rapid adjustment to changing circumstances.
- More effective complaints procedures.

Ogus has argued that self-regulatory regimes based on consensual bargaining or involving competition between self-regulatory structures have the potential to meet traditional criticisms of self-regulation if such regimes incorporate some measure of external constraint. Those criticisms, however, possess some force and the following main concerns should be noted:

- The costs to the public purse of approving self-regulatory rules may be considerable.
- The rules written by self-regulators may prove self-serving and may not be immune from the problems afflicting rules in C & C regimes (e.g. difficulties attending legalism, standard-setting, and enforcement).
- The procedures employed to produce rules may be subject to the objection that they lack openness, transparency, accountability, and acceptability to the public and to consumers of services.

main problem of self-regulation: accountability (lack of)

[22] See A. Page and R. Ferguson, *Investor Protection* (London, 1992); C. Mayer, 'The Regulation of Financial Services: Lessons from the UK for 1992', in M. Bishop, J. Kay, and C. Mayer (eds.), *The Regulatory Challenge* (Oxford, 1995).

[23] See Baldwin, Scott, and Hood, *Regulation*, ch. 1 and I. Ramsay, 'The Office of Fair Trading', in Baldwin and McCrudden, *Regulation and Public Law*.

[24] For arguments in favour of self-regulation see Ayres and Braithwaite, *Responsive Regulation*, and Ogus loc. cit. n. 20 above, p. 15.

- Compliance units within firms may not always retain their independence and the public may not trust self-regulatory bodies to apply the rules in the public or consumer interest.
- Where self-regulatory regimes contain powers to make and enforce rules and to sanction transgressors, difficult doctrinal questions may arise as to their broader subjection to the principles of administrative law.[25]
- The public may demand that the government take responsibility for a sector or an issue.

British experience with enforced self-regulation is limited but elements of the approach are encountered. The Health and Safety Executive, for instance, has experimented with self-regulation under supervision and employs self-assessment procedures. Fair trading legislation has relied, particularly in the 1970s, upon trade association codes of practice while financial services regulation has involved a degree of monitored self-regulation.

Enforced self-regulation can, finally, be seen as an important element in techniques where combinations of different regulatory strategies are employed. Ayres and Braithwaite have suggested thinking in terms of a pyramid strategy.[26] Within this approach self-regulation is favoured as the initial response to a mischief and where desired results are not achieved, enforced self-regulation involving greater state monitoring is seen as appropriate. Only when these strategies fail, it is said, should regulation with discretionary punishment, and finally with mandatory punishment, be resorted to.[27]

The feasibility of progressing through different regulatory strategies within such a scheme is a central challenge to be faced by proponents of the pyramidic approach.

3. *Incentive-Based Regimes*

Regulating by means of economic incentives might be thought to offer an escape from highly restrictive, rule-bound, C & C regimes.[28] According to the incentives approach, the potential mischief causer, say a polluter, can be induced to behave in accordance with the public interest

[25] See Black, loc. cit n. 20 above and Chapter 10 below.

[26] Ayres and Braithwaite, *Responsive Regulation*.

[27] See J. T. Scholtz, 'Cooperative Regulatory Enforcement and the Politics of Administrative Effectiveness' (1991) 85 *Am. Pol. Sci. Rev.* 118.

[28] See Ogus, *Regulation*, ch. 11; T. C. Daintith, 'The Techniques of Government'; R. Breyer and R. B. Stewart, 'The Discontents of Legalism: Interest Group Relations in Administrative Regulation' (1985) *Wisconsin LR* 685. On the limitations of incentive-based regimes see J. Braithwaite, 'The Limits of Economism in Controlling Harmful Corporate Conduct' (1982) 16 *Law and Society Review* 481.

by the state or a regulator imposing negative or positive taxes or deploying grants and subsidies from the public purse. Thus, not only can taxes be used to penalize polluters but rewards can be given for reductions in pollution or financial assistance can be given to those who build pollution-reducing mechanisms into their production or operational processes. An example of such an incentive strategy at the broadest level was the proposal by the Chancellor of the Exchequer, Gordon Brown, to cut the vehicle excise duty for the cleanest and smallest cars by £50 in his March 1998 budget.[29]

The posited advantages of such schemes are numerous. They are, for instance, said to involve relatively low levels of regulatory discretion (as compared to C & C systems) because financial punishments or rewards operate in a mechanical manner once the regime is established. These low levels of discretion and structured modes of application reduce the dangers of regulatory capture in so far as regulators are not involved in constant negotiations, close relations, and information exchanges with regulatees as in the usual C & C scheme.

They are also said to leave managers free to manage. It is up to the regulated firm, not the bureaucrat or regulator, to balance the costs of polluting against those of abatement in a particular context and to devise means of reducing the mischief most efficiently. Managers are, accordingly, able to be more flexible concerning their modes of production than most C & C regimes allow.

Incentive-based regimes are, additionally, claimed to involve relatively light burdens of information collection and costs yet to produce results by creating economic pressures. They, moreover, are said by proponents to encourage individual regulated firms to reduce harmful conduct as much as possible (to give an 'incentive to zero') not merely down to the level that is demanded by the standard stipulated in a C & C regime—a standard liable, in any event, to be fairly lax because C & C regulators tend, for political reasons, to have to set a general standard soft enough to be met by poorer performers in the industry without causing financial crises or unacceptable unemployment.

The advantages of incentive regimes can, however, be exaggerated and a number of cautionary points should be borne in mind.[30] Such systems

[29] Mr Brown proposed also to increase the tax on low sulphur diesel by a penny less than ordinary diesel fuel. He was, however, criticized by environmental groups for postponing action on earlier proposals for taxing water pollution and quarrying (see *Financial Times*, 18 Mar. 1998). A differential tax on leaded and unleaded petrol was introduced in Britain in 1987. On regulation by taxation see A. Ogus, 'Corrective Taxation as a Regulatory Instrument', in C. McCrudden (ed.), *Regulation and Deregulation* (Oxford, 1999); also at (1998) 61 MLR. 767; S. Rose-Ackerman, 'Efficient Changes: A Critique' (1973) 6 *Can. J. Econ.* 572; W. J. Baumol, 'On Taxation and the Control of Externatilities' (1972) 62 *Am. Econ. Rev.* 307; P. Burrows, 'Pricing versus Regulation for Environmental Pollution', in A. J. Culyer (ed.), *Economic Policies and Social Goals* (London, 1974).

[30] For evaluation see Ogus, *Regulation*, 250–6 and Breyer, *Regulation and Its Reform*, 278–80.

often have to be put into effect by means of highly complex systems of rules (the field of taxation, for instance, is not one renowned for simplicity).[31] Many of the problems associated with C & C regulation might thus be replicated in putting such systems into effect on the ground. Inspection and enforcement mechanisms might, moreover, have to be employed to prevent regulatees evading their liabilities (e.g. to taxes). The system might, thus, come to resemble C & C regulation and the distinction between incentives and penalty mechanisms might be less than first appeared.[32]

Proponents of incentive systems tend to assume that those regulated operate on the whole in an economically rational manner. In practice, however, many problems (e.g. hazards in the workplace) are the product of irrational, accidental, or negligent behaviour.[33] Incentive mechanisms may, accordingly, influence responsible parties more effectively than irresponsible, careless, or ill-informed individuals or firms—yet it is the latter group who are most in need of regulation. Regulatory lag may also prove a significant problem with incentive regimes because they operate indirectly. Thus, within a firm the effects of tax incentives may have to be transmitted from finance directors through operations managers to floor staff and this, even if successful, may take some time—the fish in the river may long be dead. Incentives may thus prove to be poor regulatory tools where periodic crises occur in the sectors involved or where such sectors are subject to rapid economic change.

A core difficulty with incentive regimes may be predicting the effect on the ground of a given incentive. To continue the river pollution example, it will be very difficult to predict how much a certain tax bite will clean up the river. The effect on each firm sited on the river will differ and will depend, *inter alia*, on the profit derived within each production process from each unit of pollution. Fixing incentive levels may thus make informational demands at least as severe as those encountered within C & C regimes.

The mechanical application of incentives may also bring disadvantages. Within C & C systems, enforcement can be used flexibly in an effort to achieve desired results and to limit the imposition of restrictions on particular firms or individuals where unduly onerous effects would result. In so far as incentive regimes operate mechanically, such tailoring to individual circumstances will not be possible. If a flexible and discretionary approach is adopted in relation to incentives (and there is no reason why

[31] See R. S. Markovits, 'Antitrust: Alternatives to Delegalisation', in G. Teubner (ed.), *Juridification of Social Spheres* (Berlin, 1987).

[32] See Bardach and Kagan, *Going by the Book*, chs. 8, 9, and 10; J. Braithwaite, 'The Limits of Economism in Controlling Harmful Corporate Conduct' (1982) 16 *Law and Society Review* 481.

[33] See Braithwaite, loc. cit. n. 28 above.

this cannot be the case) another supposed difference from, and advantage over, C & C regulation falls away.

Presentationally and politically, a move from C & C towards incentive regimes may prove popular with firms regulated (especially where subsidies are offered) but public concern may arise on the grounds that socially harmful activity is not being stigmatized or condemned and that a licence is being given for undesirable behaviour.[34] Subsidies may be objected to as making payments from the public purse to those engaged in offensive conduct and negative incentives or taxes may be criticized not only for their failure to designate certain acts as unacceptable but also for taking away from industry the very resources that might have been committed to measures aimed at avoiding the undesirable consequences of their actions (e.g. to filtration systems). As far as democratic accountability and access to the regulatory process are concerned, similar consultative and other procedures to those used in command and control regulation may be used. If it is hard to predict the effects of given incentives on the ground, however, it may be difficult to produce the results that such democratic inputs favour and this can be seen as a distancing of accountability and access.

4. *Market-Harnessing Controls*

Competition Laws

A direct method of regulating by channelling market forces is to influence competition within an area. Competition laws can thus be used instead of, or in conjunction with, regulation in order to sustain such levels of competition as will ensure that the market provides adequate services to consumers and the public.[35]

Such laws can also be used to control market behaviour so as to prevent anti-competitive or unfair practices such as 'predatory pricing' by dominant operators (setting prices for one's products below cost in order to drive competitors from the market)[36] or effecting cross-subsidies from monopolistic to competitive sectors.

The telecommunications industry provides an example of competition law being used instead of classical C & C regulation. Thus, in contrast to

[34] See Ogus, *Regulation*, 225; also W. Beckerman, *Small is Stupid: Blowing the Whistle on the Greens* (London, 1995).

[35] On competition law generally see R. Whish, *Competition Law* (3rd edn. London, 1993). For an example of a regulatory agency coming to grips with competition issues see OFTEL, *Effective Competition: Framework for Action* (London, 1995) and for advocacy of a move from C & C or prescriptive rules towards reliance on competition and consumer protection laws see OFTEL, *Second Submission*. On regulation versus competition see below, Chapter 16.

[36] See J. Vickers, 'The Economics of Predatory Prices' (1985) 6 *Fiscal Studies* 24.

the UK's use of a sectoral agency (OFTEL) with sector-specific rules (the Telecommunications Act 1984), the New Zealand Government, on privatizing in the late 1980s, relied on general competition laws, applied in the courts, as a mechanism for influencing the telecommunications industry.

The broad advantages of reliance on competition laws are that they can be applied across the board to different sectors, the need for industry-specific regulation is avoided, and barriers to entry may be lower than in regimes incorporating large numbers of highly prescriptive rules. Consistent principles can also be developed across sectors and there are economies of scale in applying rules broadly.

Competition laws produce lower levels of intrusion into firms' internal decisions than are involved in C & C regimes and flexibility in the industry tends to be greater under competition law regimes than in cases where behaviour is structured by an overseeing agency. Finally, enforcement involves relatively light burdens on the public purse because it depends on private actions in courts rather than action by publicly-funded regulatory agencies. Experience in New Zealand telecommunications suggests, however, that a number of drawbacks can be encountered when heavy reliance is placed on competition laws.[37] The broad principles established in competition laws may, for instance, not provide solutions to operational, technical, or commercial problems. Such issues are left to the parties to resolve in the courts and more effective solutions might, under certain conditions, be produced by a specialist overseeing agency. An agency, moreover, might develop and apply a greater level of expertise than the parties or the courts in dealing with such issues as the economics of interconnections. Guidelines established by a regulatory agency can reduce uncertainties and transaction costs for operators more efficiently than competition laws or the courts.

The courts system may, furthermore, be slow to develop guidelines on central industrial issues. Thus, following difficulties concerning the application of general competition rules to a dispute over interconnection by a new entrant (issues fought from New Zealand to the Privy Council in 1994[38]) the New Zealand Government considered whether a new mix of institutions and rules would be appropriate.[39] One difficulty encountered in relying on judicially developed principles on such issues as interconnection is that rulings only emerge as cases happen to arise. Principles, accordingly, may develop sporadically, slowly, and may leave key issues untouched. Developing such principles, moreover, may involve asking

[37] For reviews of New Zealand experience see: New Zealand Commerce Commission, *Telecommunications Industry Inquiry Report* (Wellington, June 1992); C. Blanchard, 'Telecommunications Regulation in New Zealand: How Effective is "light-handed" regulation?' (1994) 18 *Telecommunications Policy* 154–64.

[38] See *Clear Communication* v. *New Zealand Telecommunications Corp.* [1994] 6 TCLR 138 (1995) 1 NZLR 385 (PC).

[39] See Baldwin, Scott, and Hood, *Regulation*, ch. 1.

the courts to stand in the shoes of business people and to make business decisions.[40] Evidential problems may also compound such reliance on the courts, thus, competition law may have a limited role in dealing with entry barriers where it is difficult to show these have been established on purpose by a dominant undertaking.

To point to some of the problems to be anticipated in using competition laws is not, of course, to say that such laws cannot play a very useful role in combination with other mechanisms of influence, such as C & C regulation in the classical style. Competition laws can thus substitute for excessively prescriptive C & C regulation on some issues and the latter can be used to impose structures and final solutions for industries in circumstances where competition law would be slow to provide answers on these fronts.

Franchising

Franchising is a system control that can be employed in naturally monopolistic sectors to replace competition *in* the market with competition *for* the market. It has been employed notably in the British independent television, radio, and rail industries. The underlying idea is that if applicants for franchises make competitive bids for an exclusive (or at least protected) right to serve a market for a given period and under conditions, they will bid on assumptions of efficient operation and, as a result, consumers will benefit—they will be served by operators who are not under immediate competitive pressure but who will behave in many ways as if they are. A fuller discussion of franchising is offered in Chapter 20.

Regulation by Contract

Government departments or agencies can use the state's wealth and spending power to achieve desired objectives by specifying these in the contracts it agrees with enterprises. It can be stipulated, for example, that parties contracting to supply goods or services shall pay their own employees a minimum wage.[41] The regulatory aspects of the contract may be incidental to the main purpose, which may be commercial, but the effect is to impose a regulatory standard across all firms contracting with the government. There is no need for a command base. A form of

[40] See Commerce Commission, op. cit. n. 37 above, p. 83, quoted G. Bitondo, 'Detailed Regulation v. Competition Policy in Telecommunications: The Case of Interconnection Agreements in the UK and New Zealand' (1996), on file, LSE Regulation Library.

[41] See T. C. Daintith, 'Regulation by Contract: The New Prerogative' (1979) *Current Legal Problems* 41. On governing through contracts see I. Harden, *The Contracting State* (Buckingham, 1992) and N. Lewis and J. Goh, *The Private World of Government* (Sheffield, 1998).

contracting out—Compulsory Competitive Tendering (CCT)—of local authority services has been used by government as a means of reducing service costs and it brings with it local authority regulation of those who provide services under contractual terms. In some sectors, similarly, dependence on public funding has been used as a basis for encouraging both the development of self-regulation and the imposition of 'consensual forms of regulation'.[42]

Tradeable Permits

A further technique that seeks to harness markets is the use of tradeable permits to engage in an activity that has been deemed to require control (e.g. discharging pollutants into a water course). Like franchising, the strategy can be used to control both entry into the market and subsequent behaviour within the market. Examples of the use and advocacy of tradeable permits are to be found. Thus, since 1991 the US Environment Protection Agency (EPA) has sought to control sulphur dioxide emissions by allocating tradeable emission permits to coal-burning electric power plants and in October 1996 the European Commission was reported[43] to be considering recommending that airport take-off and landing slots should be open to trading by airlines rather than allocated by national slot coordinators.

In typical regimes the public agency issues a given number of permits and each of these allows a specified course of behaviour (e.g. a polluting discharge of a fixed amount). Following the initial allocation, permits may be traded and this allows, say, a generating company to switch to cleaner fuels and sell its excess allowances to other firms. The initial distribution of permits may be carried out by auction or according to public interest criteria. The incentives within such systems are provided by the market in permits.

Advantages claimed for the strategy are, first, that permits can be allocated to those who will generate most wealth per unit of pollution. This is because those willing to pay most for the permits will be those who derive the most profit from polluting—in this sense it can be argued (at least on a set of not uncontentious assumptions), that the pollution is being put to the use that society values most. Second, the incentive to reduce harmful behaviour can, as in taxation regimes, operate down to zero since the process of abatement will release permits for resale until the point where no harm is being done at all. Third, managers, again, are less restricted than in C & C regulation because they are free to decide

[42] See Baldwin, Scott, and Hood, *Regulation*, ch. 1; M. Cave, R. Dodsworth, and D. Thompson, 'Regulatory Reform in Higher Education in the UK: Incentives for Efficiency and Product Quality', in Bishop, Kay, and Mayer, *Regulatory Challenge*.

[43] See *Financial Times*, 4 Oct. 1996, p. 1.

whether and how to reduce harmful conduct in order to release permits. Fourth, regulatory discretions (and dangers of capture) are kept low because markets rather than bureaucrats are imposing restraints, and, finally, regulatory costs are low since, once established, the market in permits runs on its own accord.

The problems to be anticipated in relation to schemes with marketable permits are, however, numerous.[44] Enforcement still has to be carried out to prevent non-permit holders from creating harms and to stop permit holders from exceeding the terms of their permits. Inspectorates accordingly require funding. Regulatory lag may also be a problem. If, for example, permits are used to control river pollution, it may be difficult to adjust pollution levels rapidly so as to cope with sudden drops in the river's capacity to absorb pollution (as might occur in a heatwave or drought). The difficulty is that permits are already issued, they are in the market place and bearing a given value. (A response to the difficulty might be to give permits a floating value, one adjustable by the regulator. This would give flexibility but might prejudice the operation of the market and would impose severe informational demands on the regulator.)

Permits, moreover, do not provide the resources needed to compensate the victims of harmful conduct and, politically, permits may create difficulties with electorates since they may be seen as 'licences to pollute'. The system, in addition, demands that there be a healthy market in permits—which calls for such factors as a large number of potential buyers possessed of adequate information. If the market is deficient (perhaps because of uncertainties or lack of information) the value of permits may be low and the incentives to desist from harmful conduct may be weak. (This, it has been suggested, is why there has been a problem in the US Environment Protection Agency's scheme of control for carbon dioxide.[45]) A further problem is that markets in permits may allow hoarding and the creation of barriers to enter into certain markets. This will be more likely where conditions favour collusion between certain large firms. The effects may be generally anti-competitive and may be unfair to less well-resourced firms. As for the areas where markets in permits can be used, some harms or pollutants may have to be prohibited absolutely and, accordingly, the tradeable permit system will be inappropriate. Finally, it should be cautioned that democratic accountability and influence may be low once the system is up and running since the market (and its degree of genuine competitiveness) will govern the price to be placed on pollution. Where markets are imperfect it is also likely that information flowing into the public domain is below optimal levels.

[44] See Ogus, *Regulation*, ch. 7; Breyer, *Regulation and Its Reform*, ch. 8.

[45] See R. Lapper and L. Morse, 'Market Makers in CO^2 Permits', *Financial Times*, 1 Mar. 1995, and B. Van Dyke, 'Emissions Trading to Reduce Acid Deposition' (1992) 100 *Yale LJ* 2707.

5. Disclosure Regulation

Structuring the disclosure of information provides a mode of regulation that is not heavily interventionist. It does not regulate the production process, the level of output allowed, prices charged or the allocation of products. Disclosure rules usually prohibit the supply of false or misleading information and may also require mandatory disclosure—perhaps obliging suppliers to provide information to consumers on price, composition, quantity, or quality (familiar demands in the food and drinks sectors).[46] Disclosure regulation may also involve the supply of information to the public directly by a scrutinizing regulator or governmental official. Thus in October 1997 the Agriculture Minister, Jack Cunningham, first put into action a policy of 'naming and shaming' food manufacturers who failed to comply with regulations on safety, product quality, and authenticity. Following a departmental survey, the Minister named sixteen pork and bacon brands as guilty of failing to declare the added water content of their products. These included suppliers of Tesco and J. Sainsbury.[47]

Disclosure regulation allows consumers of products and services (or even voters more generally) to make decisions on the acceptability of the processes employed in producing those products or services. To rely on consumer or voter preferences in this manner does, however, restrict the potential of disclosure as a regulatory instrument.

The main problems to be anticipated are, first, that users of the information disclosed, be they consumers or other citizens, may make mistakes; they may fail to use the information properly; fail to understand the implications of the data given; misassess risks; neglect to collect the full range of relevant information; lack the resources to research issues fully; and so may come to harm. Second, information users may not respond in anticipated ways to the flow of information. Consumers, when purchasing products, may choose according to price rather than other considerations. They may, for instance, buy cheap products without responding to information suggesting that dangers are involved in consumption or that production of the goods involves a host of socially undesirable consequences (e.g. discharges of polluting effluents).

Third, the costs of producing the information may be excessive, as may the costs of processing it. Thus, if information disclosure rules were employed instead of C & C regulation in relation to food safety, a visit to the supermarket would involve a very lengthy process of scrutinizing

[46] In the food sector there is a pressure group devoted to disclosure—the Food Labelling Agenda (FLAG).

[47] See *Financial Times*, 29 Oct. 1997: ' "Naming and Shaming" over pork product labels'.

labels. It might, in many circumstances, be far more efficient for consumers to rely on the expertise and protection of public regulators and inspectorates rather than depend on their own individual assessments of risks.

Fourth, the risks associated with some products or activities may be so great that policy-makers may feel that it is inappropriate merely to inform affected parties about these matters and C & C methods may be deemed necessary.[48] Fifth, where information regulation is employed there is always a danger that the information will be inaccurate and unjustifiable claims made. Policing of the quality of information will, accordingly, be necessary. This increases the costs of information-based regulatory regimes. Finally, standards may have to be applied to various items of information so that affected parties may make appropriate use of any data given. In the absence of such standards information may be offered in a manner that does not assist, for example, consumers. Thus 'may cause cancer' is a phrase that discloses little concerning the size of any risk of cancer generated by using the product.

Given the above limitations of disclosure regulation, the case for the strategy is liable to be strongest where: the hazard involved is not potentially catastrophic or the difference between high- and low-quality products or processes is not likely to give rise to grave consequences; the relevant information can be processed at a reasonable cost; risks can be assessed accurately by affected parties; consumers of the products at issue, or other affected parties, can be relied upon to give proper consideration to the information given; and the accuracy and utility of information can be monitored and ensured through enforcement at acceptable cost.

6. *Direct Action*

Governments can use their resources to achieve desired results by taking direct action. Rather than set and enforce standards on, say, dust extraction levels in factories, central governments or local authorities can build properly ventilated premises and lease these to private manufacturers. Public ownership of infrastructure can, moreover, be combined with the franchising out of operations (leasing for fixed periods subject to conditions on use and renewal would produce similar results). Long-term investments can, by such methods, be rendered amenable to planning by government and the replacement of unsatisfactory operators can be facilitated. Thus, in the period to 1991, the public regulator in the independent television sector, the Independent Broadcasting Authority,

[48] See I. Ramsey, *Consumer Protection* (London, 1989).

owned and operated the transmission infrastructure and franchised out programme making, and in London the bus transport network is publicly owned but routes are put out to competitive tendering or franchising.[49]

An advantage of direct action is that public money can be used to ensure protection in circumstance where firms, particularly small ones, might not invest in the required measures. A degree of subsidization may, by such means, be effected and public resources used to assist firms to reduce harms rather than to fund C & C enforcement regimes or to apply penalties that take money away from the enterprises that are asked to spend on avoiding undesired consequences.

Such subsidization may give rise to distributional issues—concerning access to subsidized premises, for instance—but there is no reason why the prices of leases cannot be set so as to avoid criticism. A more difficult problem, may, however, be that the public funding of a certain aspect of a production process may encourage firms to build operations around the funded element. As a result, innovation may not be driven by the market and the enterprise's responsiveness to markets and potential new technologies or processes may be blunted. Thus if the well-ventilated manufacturing premises are publicly owned and there are no other controls on dust levels in the air, there is little incentive for the private sector to devise new, more efficient ways to control dust.

7. *Rights and Liabilities*

In the case of the factory that pollutes the river, the state might decide not to tax pollution or impose standards in a C & C regime, but to allocate rights (for example to the enjoyment of clean water) so as to encourage socially desirable behaviour.[50] Thus, the argument goes, the prospective polluter will be deterred from such activity by his or her potential liability to pay damages when sued by the holder of the right to clean water (say, the angling club or the riparian owner downstream). The deterrent effect will be the quantum of expected damages multiplied by the probability of those damages being inflicted. In economic terms the efficient level of deterrence is that which will ensure that the factory owner will spend money on avoiding pollution up to the point where the cost of avoidance exceeds the value of the damage caused by the pollution. (Beyond

[49] See S. Glaister, D. Kennedy, and T. Travers, *London Bus Tendering* (London, 1995) and S. Glaister, *Deregulation and Privatisation: British Experience* (World Bank, Washington DC, 1998).

[50] See generally Breyer, *Regulation and Its Reform*, 174–7; G. Calabresi and A. Melamed, 'Property Rules, Liability Rules and Inalienability: One View of the Cathedral' (1972) *Harv. LR* 1089.

that point it is efficient to let the pollution occur and compensate the 'victims' rather than spend on abatement.)

If society desires this efficient level of deterrence, difficulties are encountered because the precise deterrent effects of liability rules are difficult to predict. Rights and mirroring liabilities may fail to deter efficiently for a number of reasons. Many undesirable events, for example, are the results of accidents, random events, and irrational behaviour. Deterrence, for this reason, does not operate in a mechanical and frictionless manner.[51]

Enforcement costs for individuals may prove discouraging and lead many parties not to proceed to enforce their rights. Coordinating between victims may not always prove feasible or it may involve high transaction costs. Evidential difficulties may reduce to a low level the probability of proving that the harm involved was caused by the actions of the defendant polluter. (If there is only a 50 per cent chance of proving causation this halves deterrence. Uncertainties in the legal rules creating rights and liabilities will have a similar effect.) Many victims in the pool of victims may lack the resolve to proceed against the harm-causer and, to the extent that claims are not pursued, deterrent effects will be sub-optimal.

In reflection of such factors, the harm causer will be likely to be able to settle out of court for negotiated sums that are lower than those that would create efficient levels of deterrence. Courts, of course, might attempt to correct for levels of deterrence that are too low—for example by granting damages that do not merely compensate for harms done but also include a punitive element that makes up for the under-deterrence liable to arise for the reasons cited. The courts will, however, face considerable informational hurdles if taking this course. The judiciary would find it extremely difficult to amass all relevant information about the array of potential actions for damages likely to follow, say, a pollution incident. If such actions are brought separately and serially, the court will not know at a given time in the process how many claims are to be aggregated in calculating total deterrence nor will it be able to assess the gravity of claims to be brought at a future date.

A final problem is that insurance may limit the deterrent effect of liability rules and may generally make deterrence very difficult to assess. Under certain conditions, insurance may spread risks very widely and undermine deterrence. On the other hand, very high or even excessive levels of deterrence (and for firms financial difficulties) may be caused if

[51] See D. Harris et al., *Compensation and Support for Illness and Injury* (Oxford, 1984), 328 and on the deficiencies of liability rules in providing compensation see ch. 12.

insurance is subject to restrictions, withdrawals, and crises so that effective cover at affordable prices is not available. Thus, in the tort sector, what has been described as a crisis was experienced in the mid-1980s in the United States and Canada[52] and it has been the unpredictability of the liability insurance market that has urged a number of North American commentators to look to regulatory devices as alternatives to the tort system.[53]

8. *Public Compensation/Social Insurance Schemes*

Economic incentives to avoid undesirable behaviour can be created not merely by systems of taxation and subsidy but also by schemes of compensation or insurance that link premiums paid to performance records. One field in which a good deal of research into insurance-based incentives has been conducted is that of the working environment.[54] A review conducted in 1994[55] pointed to a number of insurance-based schemes dealing with workplace safety and health around the world. National schemes were encountered in several EU countries, the USA, Canada, Japan, and New Zealand, with strategies under development in Denmark, Poland, and elsewhere. These were all no-fault liability schemes and essentially compensatory, though some also provided means of funding improvements in conditions—as in the French, Swedish, and Albertan systems.

In the typical scheme, workers surrender their rights to sue employers for damages relating to health and safety failings, and, in return, are entitled to statutory compensation, often amounting to full payment of lost earnings plus costs. The employer's premiums depend on their organization's past claims experience.[56]

[52] See V. Finch, 'Personal Accountability and Corporate Control: The Role of Directors and Officers Insurance' (1994) 57 *MLR* 880, 915.

[53] See e.g. G. Priest, 'The Current Insurance Crisis in Modern Tort Law' (1987) 96 *Yale LJ* 521; R. B. Stewart, 'Crisis in Tort Law? The Institutional Perspective' (1987) 54 *Univ. of Chicago LR* 184; M. Trebilcock, 'The Social Insurance—Deterrence Dilemma of Modern North American Tort Law: A Canadian Perspective on the Liability Insurance Crisis?' (1987) 24 *San Diego LR* 929.

[54] See the work of the European Foundation for the Improvement of Living and Working Conditions (EFILWC), a European Community institution, reported in: *Catalogue of Economic Incentive Systems for the Improvement of the Working Environment* (Dublin, 1994) and S. Bailey (ed.), *Economic Incentives to Improve the Working Environment* (Dublin, 1994).

[55] EFILWC, *Catalogue*.

[56] See S. Bailey, 'Economic Incentives for Employers to Improve the Management of Workplace Risk'—paper to W. G. Hart Legal Workshop, 4 July 1995.

A central issue attending such schemes is whether state-administered or private insurance mechanisms should be employed. In relation to private provision, doubts exist concerning the extent to which private insurance companies can be relied upon to provide incentives to improve working conditions. The primary concern of private insurers is not to reduce hazards but to generate profits for shareholders. Such insurers might not be prepared to spend money to isolate poor-risk, dangerous employers beyond profit-maximizing levels. It is true that competition in the insurance market will to some extent drive insurance companies to spend money on discriminating between risks but there are limits to competitive pressures and, in any event, there is a tension between the basic function of insurance (to spread risks) and risk discrimination (isolating poor risks). This tension also imposes limits on the willingness of private insurers to identify poor risks and apply localized economic incentives.

In such conditions, the tendency will be to confine risk discrimination to those sectors in which statistical guidance on the quantum of risks is readily available and affordable. Thus, in motor insurance, with a wealth of accidents, and, as a result, useful data available at reasonable cost, discrimination might be high whereas in relation to workplace safety—where accidents are infrequent but often serious—weak statistics might be expected to lead to low levels of risk discrimination and the linking of cover and premiums to very broadly defined categories of risk.

For such reasons, the European Foundation for the Improvement of Living and Working Conditions (EFILWC) has proposed a publicly administered scheme linking premiums not to statistics on accident records—which were said 'not to make any sense' for firms with under 100 employees[57]—but to factors that could be measured properly such as the conditions of the working environment, the state of the factory's machinery, and so on. Such schemes, said the EFILWC, would encourage the accurate reporting of accidents, whereas reliance on past accident records might be expected to encourage firms to massage their statistical returns—for example, by placing pressure on employees not to report accidents (e.g. by offering bonuses to accident-free teams of workers, and creating peer pressures not to report). Insurance-based schemes might also be combined with the use of incentives to improve conditions by allowing premium reductions to companies taking harm-reducing measures (e.g. moving to the use of low-emission materials or low-noise machines).

[57] EFILWC, *Catalogue*, 19.

The further advantages pointed to by proponents of insurance-based schemes[58] are that they make employers conscious of the costs of their actions. Employers considering increasing pressures on workers to take risks so as to escalate production levels will be aware that the potential extra profits derived from improved production will have to be weighed against the potential increases in insurance premiums that will follow an inspection by the insurance fund. Prevention will thus be given a higher priority by firms than would be the case under C & C regulation because harms will impinge more directly on their profits. Insurance-based schemes are said to offer incentives and financial motivations to *all* employers in contrast with C & C strategies which are so expensive to enforce that they are patchily and poorly applied on the ground.

A further strength claimed for incentive schemes is that they can achieve incentives to go better than fixed standards—indeed, incentives to zero can be instituted. This contrasts with C & C systems which offer incentives to comply with designated standards but not to perform to higher standards. Employers, it is also said, will respond to the emergence of new hazards under incentive schemes without the need for new legislation.

To balance such sanguinity, however, some caveats do have to be entered. Compensation for workers may produce some undesirable incentives. Thus, if compensation is seen as generous or an easy option, this may encourage some individuals to accept injuries, dangers, or disabilities in return for cash. To work properly, moreover, such a scheme would have to involve the periodic inspection and rating of all employers and their premises. The resource implications are huge. Thus, inspection as envisaged would not be possible in the UK using the present staffing and resources of the Health and Safety Executive, whose current scheme of inspection involves, in the case of medium-sized firms, several years between visits. It might, indeed, be argued that the important difference between the proposed insurance scheme and the existing C & C system lies in the assumptions that are made concerning resources; that with a commensurate increase in resources, C & C could achieve as much.

The differences between an insurance-based scheme and C & C regulation may, thus, be liable to overstatement. In the former, inspectors would check compliance with rules designed to limit risks and would penalize non-compliance by imposing an adjusted premium. In C & C regimes, fines or administrative orders take the place of premiums as sanctioning devices. The insurance-based scheme, it could be contended, is merely a C & C regime with a variation in the sanction. Fines, after all, might be described as disincentives.

[58] Ibid. 24–5.

Conclusions: Choosing Regulatory Methods

In deciding whether to regulate or to leave matters to the market it is wise, as noted in the last chapter, to be realistic about the levels of performance that can be expected of regulatory regimes. To compare a friction-free vision of regulation with the imperfect operation of the market is to bias any analysis in favour of regulation. Similarly, in comparing different regulatory strategies, an effort must be made to take into account all the respective difficulties that will be encountered in their implementation. Thus, to compare C & C, with all its enforcement difficulties, to a series of 'less-restrictive' devices that are assumed to be enforceable in a problem-free manner is not to offer a balanced perspective.[59]

Enforcement, as has been noted, is not a difficulty confined to C & C regimes.[60] Nor, moreover, should the *positive* aspects of enforcement be ignored when reviewing C & C regulation. Enforcement procedures can be seen as the lifeblood of many regulatory systems. In Britain, for instance, enforcement practices tend to be more flexible, more administrative, and less prosecutorial than those encountered in the USA, where the most committed critics of C & C are to be found. C & C operates on the ground in a less restrictive and legalistic fashion on this side of the Atlantic and it is the enforcement practices adopted that ameliorate many of the difficulties encountered in C & C regimes.[61] The objections to C & C, it could be said, often relate to a style of applying C & C regulation—one that is not the norm, say, in Britain.

The difference between C & C and other regimes may, indeed, be one prone to exaggeration since, as noted, many or most schemes require implementation through rules—be these command or incentive based. Proponents of C & C have to cope with difficulties of fixing the appropriate level of precision and inclusiveness in rules, of using rule formulations that cope with potential creative compliers, and of incorporating the right kinds of standards.[62] 'Alternative' regulatory methods often need rules, however, on matters such as: *when* incentives will apply; the *conditions* under which franchises will be held or marketable permits transferred; the *kind of information* to be disclosed; the *use* of publicly provided premises; the *extent and form* of liabilities; or the *nature* of premium variations in a social insurance system. Just as enforcement

[59] For an argument viewing C & C as a 'last resort' see Breyer, *Regulation and Its Reform*, ch. 9.

[60] See Ogus, *Regulation*, 250–6; Breyer, *Regulation and Its Reform*, 278–80; R. Smith, 'The Feasibility of an Injury Tax Approach to Occupational Safety' (1974) 38 *Law and Cont. Prob.* 730; P. Burrows, *The Economic Theory of Pollution Control* (Oxford, 1979), 33–5.

[61] See D. Vogel, *National Styles of Regulation: Environmental Policy in Great Britain and the United States* (Ithaca, NY, 1986).

[62] See Chapter 9 below and generally Baldwin, *Rules and Government*.

difficulties cannot be assumed away when moving to alternative or 'less restrictive' regulatory methods, neither, it should be repeated, can those problems that attend rule-making processes.[63]

It should also be cautioned that an historical association between certain regulatory methods and certain styles of implementation—for example between C & C and the use of highly restrictive rules—should not be taken as a demonstration of inevitable or exclusive linkage. In North America in the 1980s an enthusiasm for alternative methods of regulation was to a degree fuelled by concerns that C & C methods had led to a 'crisis of legalisation'.[64] Other possible causes of over-proliferation and complexity in rules can, however, be pointed to. Relevant factors may have been: the particular demands made of regulators by North American judges when seeking to control the rationality, fairness, and accessibility of rules and rule-making processes; the existence of certain conditions leading to litigiousness; the operation of certain statutory rule-making procedures; or the political contexts within which particular regulatory institutions operated.[65] Given the potential relevance of such factors, it is difficult to conclude with confidence that a move from C & C to alternative strategies constitutes even a start in combating excessive legalization. There may be a temptation when considering 'alternative' regulatory methods, to isolate their least attractive features and designate these as C & C intrusions—that, however, is, again, to rig the debate.

Finally, it should be remembered that, in most regulatory contexts combinations of regulatory methods tend to be employed. Thus, potential polluters may face some C & C regulations but also may be subject to licensing or franchising conditions or sets of incentives operating though taxation and subsidy rules. They may have to supply information of various kinds, they are likely to be enmeshed in a network of liability rules, and may be able to avail themselves of publicly provided assets or services. In relation to a given regulatory issue it is, accordingly, necessary to look for the particular mixture of regulatory strategies that will best meet desired objectives—procedural and substantive.[66]

At this point, it is necessary to identify the objectives of regulatory regimes—to establish benchmarks for the evaluation of regulatory systems. Without these it is difficult to say what is good or bad regulation. The search for benchmarks will be discussed in Chapter 6 after we have considered the kinds of bodies that are involved in regulating.

[63] See E. Markovits, 'Antitrust: Alternatives to Delegalisation', in Teubner, *Juridification of Social Spheres*.

[64] See R. B. Stewart, 'Regulation and the Crises of Legalisation in the United States', in Daintith, *Law as an Instrument of Economic Policy*, 108–9.

[65] See e.g. Bardach and Kagan, *Going by the Book*, and R. A. Kagan, 'Should Europe Worry about Adversarial Legalism?' (1997) 17 *OJLS* 165.

[66] See Gunningham and Grabosky, *Smart Regulation*, 14–19; ch. 6.

TABLE 3. *Regulatory strategies: posited strengths and weaknesses*

Strategy	Example	Strengths	Weaknesses
1. *Command & Control*	Health and Safety at Work	Force of law. Fixed standards set minimum acceptable levels of behaviour. Screens entry. Prohibits unacceptable behaviour immediately. Seen as highly protective of public. Use of penalties indicates forceful stance by authorities.	Intervenes in management. Prone to capture. Complex rules tend to multiply. Inflexible. Informational requirements severe. Expensive to administer. Setting standards is difficult and costly. Anti-competitive effects. Incentive is to meet the standard, not go better. Enforcement costly. Compliance costs high. Inhibits desirable behaviour.
2. *Self-Regulation*	Insurance Industry	High commitment to own rules. Well-informed rule-making. Low cost to government. Coincidence of regulatory standards and the standards that industry sees as reasonable. Enforcement efficiency. Comprehensive rules.	High cost of approving rules. Rules may be self-serving. Legalism not necessarily avoided. Rulemaking procedures may be closed to public or consumers. Enforcement may be weak or may favour the industry.

TABLE 3. (*cont'd*)

Strategy	Example	Strengths	Weaknesses
		Flexibility. Effective complaints. Can combine with external oversight.	Public may not trust self-enforcers. Legal oversight may be problematic. Public may want governmental responsibility.
3. *Incentives*	Differential tax on leaded and unleaded petrol	Low regulator discretion. Low-cost application. Low intervention in management. Incentive to reduce harm to zero, not just to standard. Economic pressure to behave acceptably.	Rules are required. Poor response to problems arising from irrational or careless behaviour. Predicting outcome from given incentive difficult. Mechanical, so inflexible. Regulatory lag. Politically contentious as rewards wrongdoer and fails to prohibit offence.
4. *Market-Harnessing Controls* (*a*) *Competition Laws*	Airline Industry	Responses to market driven by firms not bureaucrats. Can be applied across industries. Economies of scale in use of general rules. Low level of intervention. Flexibility for firms.	No expert agency to solve technical or commercial problems in the industry. Uncertainties and transaction costs. Courts slow to generate guidance. Principles develop sporadically.

TABLE 3. (*cont'd*)

Strategy	Example	Strengths	Weaknesses
(*b*) *Franchising*	Rail, Television, Radio	Enforcement is low cost to public. Low level of restriction. Respects managerial freedoms. Allows competition for market as substitute for competition in the market. Managers rather than bureaucrats respond to market preferences.	Evidential difficulties. Need to specify service. Tension of specification and responsiveness/ innovation. Uncertainties impose costs on consumers. Requires competition for franchise but may be few bidders. Need to enforce terms of franchise.
(*c*) *Contracting*	Local Authority refuse services	Combines control with service provision. Sanctioning by economic incentive or non-renewal. Easier to operate than licensing system.	Potential confusion of regulatory and service roles. Poor transparency and accountability. Judicial control weak.
(*d*) *Tradeable Permits*	Sulphur dioxide emissions (USA)	Pollution by greatest wealth producer. Incentive to reduce harm to zero. Managerial freedom considerable. Regulatory discretion low. Regulatory costs low.	Enforcement may require inspectorate. Regulatory lag, lack of rapid response in crisis. No compensation for victims. Requires healthy market for permits. Barriers to entry may be created. Some harms need to be prohibited absolutely.

TABLE 3. (*cont'd*)

Strategy	Example	Strengths	Weaknesses
5. *Disclosure*	Mandatory disclosure in food/drink sector	Low intervention. Allows consumer to decide issues. Lower danger of capture. Useful in low-risk sectors.	Information users may make mistakes. Economic incentives (e.g. price) may prevail over information (on e.g. risk). Cost of producing information may be high. Risks may be so severe as to call for prohibition. Policing of information quality and fraud may be required. Information may be in form undermining its utility.
6. *Direct Action*	State-supplied work premises	Can separate infrastructure provision from operation. Assures acceptable level of provision. Useful where small firms in poor position to behave responsibly. Allows state to plan long-term investments.	Fairness of subsidies may be contentious. Funding costly. Public sector involvement contentious. Innovations may not be market driven.
7. *Rights and Liabilities Laws*	Rules of tort law; right to e.g. light or clean water	Self-help. Low intervention. Low cost to State.	May not prevent undesired events that result from accidents and irrational behaviour.

TABLE 3. (*cont'd*)

Strategy	Example	Strengths	Weaknesses
			Individuals may not enforce due to costs. Evidential difficulties and legal uncertainties reduce enforcement. Victims may lack resolve and information to proceed so deterrence sub-optimal. Difficult for courts to deter efficiently. Insurance may temper deterrent effects.
8. *Public Compensation / Social Insurance*	Workplace safety schemes (USA, Canada, Japan, New Zealand)	Insurers provide economic incentives. Low intervention in management. Low danger of capture. Encourages accurate reporting of incidents. Makes employers aware of costs of activities. Good coverage, applied to all employers. No need to legislate for each individual harm.	Incidence levels may be too low to allow risk discrimination. Tension of loss-spreading and incentive to behave responsibly. Inspection and scrutiny of performance expensive. May operate in very similar manner to command and control mechanism.

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Who Regulates? Institutions and Structures

Regulation can be carried out by a variety of bodies and the nature of the regulating institutions can affect not merely the style of regulation and the strategies employed but also the success with which regulatory ends are achieved.[1]

If 'regulation' takes on board the first two meanings discussed in Chapter 1 (as a specific set of commands or as deliberate state influence) the main categories of regulator can be given as follows:

- self-regulators;
- local authorities;
- Parliament;
- courts and tribunals;
- central government departments;
- regulatory agencies;
- Directors General.

In Britain, examples of each kind of regulator can be pointed to and in relation to each one a number of particular concerns tends to be associated.

1. Self-Regulators

Self-regulation typically involves an organization regulating the standards of behaviour of its membership. The controls at issue may be entirely voluntary and quite informal or subject to degrees of governmental supervision and legislative structuring.[2] Self-regulatory systems have

[1] On British regulatory institutions and their development see A. Ogus, 'Regulatory Law: Some Lessons from the Past' (1992) 12 *Legal Studies* 1; T. Prosser, *Law and the Regulators* (Oxford, 1997), ch. 2; C. Foster, *Privatisation, Public Ownership and the Regulation of Natural Monopoly* (Oxford, 1992), chs. 1–4; R. Baldwin and C. McCrudden, *Regulation and Public Law* (London, 1987), ch. 2. On institutional explanations of regulatory developments see above pp. 27–31.

[2] See Chapter 10 for a further discussion of self-regulation and for a classification of regulatory systems, see R. Baggot, 'Regulatory Reform in Britain: The Changing Face of Self-Regulation' (1989) 67 *Pub. Admin.* 435.