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THE IMPORTANCE OF LAW-AND-ECONOMICS FOR REGULATION IN TRANSITIONAL ECONOMIES

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THE IMPORTANCE OF LAW-AND-ECONOMICS FOR REGULATION IN TRANSITIONAL ECONOMIES

INTRODUCTION: TRANSITIONAL ECONOMIES AND "GOOD" REGULATION

Countries with transitional economies wish to encourage enterprise and generate wealth. It is obvious that regulatory structures and institutions play a key role in the environment necessary to promote such aims. The UK Government Department responsible for assisting overseas development published in 2000 a document which refers to the need for

"competent legal and regulatory institutions ... and sensible regulation on health and safety, business registration and trade licensing" (DFID, 2000, para 3.6.2.),

contrasting that with

"a heritage of heavy state intervention, unfavourable government policy, outdated law and excessive regulation [which] still persists, factors that heavily constrain enterprise" (ibid, para 3.6.4).

What are the main characteristics of a "good" regulatory system? The answer to the question has two dimensions. The first relates to **the instruments or legal forms** selected to achieve the desired objectives. These should be appropriate in the light of the economic and social justifications for intervention and of their predicted impact on the regulated community. The second relates to **the procedures or processes** by which the instruments are formulated and applied. Clearly a regulatory regime cannot succeed unless its operation has legitimacy within the community it serves. To this end, certain process values must be recognised, including those of expertise, transparency, and accountability.

In this short paper, I argue that the sub-discipline of law-and-economics provides scholars and policy-makers with essential tools for devising and evaluating appropriate regulatory systems. In the next section, we see how these tools have been developed. There follows an account of how they are applied to the two dimensions of regulation identified above, with particular emphasis on cost-benefit appraisal. In the appendix, I provide a case-study of taxicab regulation, which illustrates many of the themes of the paper.

WHAT IS "LAW-AND-ECONOMICS"?

Law-and-economics involves the application of economic theory and methodology to legal principles and institutions, in order to predict the behavioural response of individuals and firms to different legal forms – the positive dimension of – and to evaluate the capacity of different legal forms to generate allocatively efficient outcomes – the normative dimension. The focus of most of the early law-and-economics literature was on private law (a subject of law which, in its economic impact is of the greatest importance to transitional economies (Rubin, 1998), but which falls outside the scope of my paper). Nevertheless the University of Chicago, where the origin of law-and-economics is to be located, was also a prime mover in the critical evaluation of public law, in particular regulation. Economists there, notably Milton Friedman and George Stigler, had in the 1950s and 1960 remained hostile to Keynesian arguments for state intervention. They sought to show that regulatory structures were not conducive to efficient outcomes. Their work was linked to that of the Virginia School of public choice. The **private interest theory** of regulation which emerged seeks to explain how politicians and bureaucrats may be motivated to meet the demands of private interest groups for regulation of a particular form.

Such an approach proved to very valuable for lawyers who, perhaps naively, had tended to assume that government was predominantly well-intentioned in its approach to regulation, attempting to generate outcomes consistent with the public interest. In their view, if regulation failed, in general this was because it was insufficiently stringent or inadequately enforced. Private interest analysis, as we shall see, was an alternative and powerful tool for understanding regulatory failure. But there was a danger of oversimplifying the debate in the light of such analysis. The policy solution could not always be a crude abolition of interventionist measures since in many areas there existed a significant degree of market failure. The question then became one of investigating whether the measures could be adapted to meet the failures at lower cost - in short, whether a more sophisticated analysis could lead to more efficient solutions.

To meet this challenge, mainstream law-and-economics, which hitherto had applied standard price theory, transaction-cost analysis and organisation theory primarily to private law institutions and principles, developed a new branch of **public interest analysis**, sometimes referred to as "progressive law and economics" (Rose-Ackerman, 1988). The new approach involves a three-stage inquiry. First, there is a need to identify and explain instances of market failure, generally in terms of externalities, information asymmetries or coordination costs

(though distributional goals should not be ignored). Secondly, alternative methods of correcting the failure have to be investigated. Thirdly, the predicted response of actors to the different methods must be assessed, with particular attention to the minimization of administrative costs, notably information and enforcement costs.

Such analysis can lead to the selection of optimal regulatory forms. However, the insights generated by private interest theory also remain important for normative purposes. Predictions of how legislative processes can be manipulated to confer regulatory benefits on powerful interest groups clearly has major implications for the procedural dimension of "good" regulation, because it becomes necessary to explore what constitutional and procedural arrangements can best constrain behaviour of this kind.

REGULATORY INSTRUMENTS AND FORMS

The choice of an appropriate regulatory instrument must, in the first instance, depend on the justification for the intervention. Once the justification, or justifications, has/have been identified, the policy-maker is then faced with a choice between different instruments, each with its own set of advantages and disadvantages. Although other modes of reasoning are not to be excluded, the question then typically becomes one of selecting the instrument which can meet the regulatory objective at lowest cost (Ogus, 1994).

Justifications for Intervention

Logically regulation should only exist where the unregulated market will fail to reach the desired outcomes. But historically governments have perhaps been too ready to embark on regulation without first ascertaining whether the intervention is really necessary. In consequence it is often difficult to identify the exact reasoning which motivated the intervention. Nevertheless, on the basis of the standard literature, we can attempt a non-exhaustive list of the justifications most often cited. These may be conveniently divided into *economic* and *non-economic*.

The main economic instances of market-failure are:

- ?? **Monopolies** or other significant impediments to a competitive market;
- ?? **Inadequate or asymmetrical information** affecting the relationship between suppliers and consumers:

- ?? **Externalities** (spillover effects) whereby activities affect third parties in ways not reflected in the prices set by producers;
- ?? **Co-ordination problems**: though desired outcomes can in principle be achieved by private transactions, the costs of co-ordination are so high that it is cheaper for the law to prescribe conduct.

Among the most important non-economic justifications are:

- ?? **Distributional justice**: the unregulated market leads to outcomes which do not accord with what is a perceived just distribution of resources;
- ?? **Paternalism**: individuals are (in relation to the particular area of intervention) assumed not to be good judges of, or are not trusted to act in accordance with, what is in their own best interest.

It is not always appreciated that, in relation to most of the phenomena described above as justifying regulation, private law remedies exist, capable in principle of solving the problem. So, for example, private property rights are used to internalise externalities and contracts are sometimes not enforceable where they are used in situations of information asymmetry. Arguably, such private solution should take priority because they allow those adversely affected to have their grievances addressed directly, without the heavy hand of state intervention. If that is right, those arguing for (public law) regulation should be able to demonstrate a failure of private law to solve the given problem.

Choice and Design of Regulatory Form

There is a wide variety of regulatory instruments and no consensus on how they should be classified (Mitnick, 1980). To illustrate, the law-and-economics approach, we can take a brief look at main forms used for social regulation which deals with such matters as health and safety, environmental protection and consumer protection and tends to be justified by reference to externalities and asymmetric information.

Prior approval requires that firms, before lawfully engaging in an activity or supplying a product or service, must first obtain a licence or permit from an authorising agency; and for such approval they have to satisfy the agency that certain conditions of quality are, or are capable of being, meeting the regulatory goal. The administrative costs of scrutinising all applications is very high and to these must be added the opportunity costs arising from any delay before the licence is granted. Moreover, significant welfare losses arise if the system is used for the anti-

competitive purpose of creating barriers to entry (Moore, 1961). The benefit from prior scrutiny must therefore be very large to justify, on public interest grounds, these substantial costs.

The **mandatory standards** technique allows the activity to take place without any ex ante control but the supplier who fails to meet certain standards of quality commits an offence and will be subject to pennal or administrative sanctions. Standards can be subdivided into: **performance** (or **output**) standards requiring certain conditions of quality to be met at the point of supply, but leaveing the supplier free to choose how to meet those conditions; and **specification** (or **input**) standards compelling the supplier to employ certain production methods or materials; or prohibiting the use of certain production methods of materials. The most important economic variables in choosing between these types of standards are the costs of being informed on the technological means of achieving the regulatory goals, and the administrative costs of formulating appropriate standards and monitoring compliance (Stewart, 1981). In principle, firms should be given choice as to how to meet the goals, since that encourages innovation in health and safety technology Hence, there is a presumption in favour of less interventionist measures. However, the benefits of such measures might be outweighed by the costs of administering them and/or the costs to firms of acquiring information on the appropriate technology.

Standards (whether performance or specification) may be either uniform or differentiated according to region, industry or firm. Uniform standards are very much cheaper to formulate and enforce and they are less susceptible to being manipulated to protect private interests. But if the public interest goal is to minimise the sum of the costs arising from a given activity and of the costs of modifying that activity to reduce the harm, both sets of cost may vary according to the circumstances of the firm, its location, or the population affected by the activity. Formulating standards on the basis of "average" costs will then inevitably lead to some mismatches and welfare losses. Standards should then be differentiated where the benefits of reducing these losses exceed the additional administrative costs of formulation and enforcement (Latin, 1985).

Rather than impose standards on suppliers, forcing them to adopt optimal loss abatement, legislation may simply require that they **disclose to purchasers and others information** regarding harms or risks which may arise from the activity or product. If regulation forces suppliers to reveal adequate information as to quality/safety, on the basis of which consumers can exercise choice, market transactions will ensure that preferences are met; and there will be

no welfare losses from consumers being deprived of choice, as can occur under a standards regime (Schwartz and Wilde, 1979). Moreover, mandatory disclosure will reduce costs where the consumer is the least cost-abater, notably by responding to published warnings. The administrative costs of formulating and enforcing disclosure rules are also relatively low, given in particular that policy-makers do not themselves have to determine optimal levels of loss abatement.

On the other hand the potential application of this technique is limited since not all those affected by the product or activity will receive the information and be able thereby to adapt their behaviour. Moreover, even within the narrower group of purchasers who can use the information there may be problems. It may be impossible to summarise the necessary information in a form which the great majority will read and understand. The "bounded rationality" of individuals may constitute a further obstacle: there is evidence that individuals tend to overestimate risks associated with low-probability events and underestimate those arising from higher-probability events. Given the often significant costs to purchasers of assimilating information and making decisions, it may be cheaper to force suppliers to adjust the product or service to what purchasers would presumptively have chosen if those intellectual processes had been completed. This solution may be particularly apposite where the costs arising from consumer error are high, for example where death or serious personal injury may result.

REGULATORY STRUCTURES AND PROCESSES

All regulatory systems require a number of tasks to be performed: as an exercise of policy-making, the goals of a regime must be established; those goals must then be translated into the principles and rules which control behaviour; and there must be procedures for explicating and enforcing the principles and rules and for the adjudication of disputes arising from them.

Important structural issues arise in determining how these tasks are to be allocated to different institutions. The determination of an appropriate allocation of power contains dimensions both horizontal (the extent to which authority should be conferred on institutions other than the legislature or executive) and vertical (the degree of control exercised over such institutions). There are, in addition, key process values which assist in conferring legitimacy on the institutional structure and protect it from being diverted away from the public interest regulatory objectives; these include transparency and accountability.

Regulatory Rule Making

Within a single jurisdiction, regulation can be more or less centralised. For the purposes of exposition, assume that a federal state has different provinces. In general, regulation can supply to citizens different levels of protection at different prices, given that the cost of complying with regulation rises with its severity. If it be assumed that citizens across the federation do not have the same preferences, then there is a strong theoretical argument for decentralised regulation. Provincial lawmakers can more easily be informed about local preferences; and, should they reach decisions which do not meet those preferences, then citizens can move to another province where the package offered is more to their satisfaction. For their part, the suppliers of products or services subject to the regulatory controls can engage in trans-boundary trade or establish in regions where they are best able to satisfy consumer demand.

There are, however, obvious problems with this approach. First, it assumes that citizens are well-informed regarding the regulatory package, and alternatives available in different localities, and that migration is an easy option. Secondly, the regulation may have trans-boundary effects. Thirdly, provincial governments may come under pressure from their industries, who bear some of the cost, but none of the benefits, of regulation to override citizen preferences or exploit their lack of information. And if one province succumbs and reduces regulatory protection, the pressure on other provinces to do the same becomes all the greater.

Regulation at a federal level can, in an idealised form, solve these problems. It will also have the beneficial effect of reducing the amount of law as to which those engaged in market transactions, whether suppliers or consumers, will need to be informed. But centralisation generates its own set of serious problems. It has to adopt what its lawmakers perceive to be the common denominator among regional preferences; and what emerges may in fact meet the preferences of only a small proportion of the greater population. Moreover, the very process of searching for the common denominator gives rise to problems of strategic behaviour between decision-makers and agreement will be difficult to obtain.

The above analysis suggests that neither exclusive decentralised regulation nor exclusive centralised regulation will be satisfactory. Some compromise between the two extremes is therefore called for. There should be a tendency to adopt harmonised federal regulation in areas marked to a significant degree by the following features: a homogeneity of preferences across the federation; serious transboundary effects; a strong likelihood, as a result notably of

information problems, for provinces to engage in a race to the bottom. Where these features are not so significant, regulatory rule-making should be left at the provincial level.

Delegation

Legislation often only lays down general principles, delegating the power to make more detailed rules to other institutions. An important policy issue is whether such institutions should be government bureaucrats or rather specialised agencies, to some degree independent of government.

Expertise can be concentrated and accumulated in specialised agencies in a way which is not always possible with government bureaucracies; and if the agency is also responsible for enforcement, that experience can beneficially feed back into the rule-making process. Further, distance from government may reduce the dangers of political interference, encourage a longer-term perspective and (perhaps) facilitate consultation and more open decision-making (Baldwin, 1995).

Politicians may face the dilemma of having to placate powerful pressure groups with conflicting demands. They may recognise that a particular regulatory policy will benefit one group and impose costs on the other. A statute containing a vague principle may gain them the support of the first group, without incurring substantial opposition from the second group. The costs to the latter will become more apparent when the detailed rules are formulated; but, if this task is delegated to an agency, that institution, rather than the politicians, will bear the brunt of the criticism. Such a strategy will, moreover, be favoured by powerful pressure groups if they are confident that they can "capture" the agency for their own ends.

Accountability

We may usefully distinguish between three different forms of accountability (Loughlin, 1986). First, there is **financial accountability**: regulators should satisfy certain standards of financial management; they should minimise administrative costs and not waste resources. This aspect is almost self-evident and most countries have systems of public audit designed to ensure that public authorities and officials operate within their budget and spend resources only for authorised purposes.

Secondly, their procedures must be fair and impartial (**procedural accountability**), such that there is an appropriate framework for making rules and decisions which serve the public interest and for resisting the undue influence of private interests. The principles are commonly grouped under the heading of "due process" (Mashaw, 1985). Where regulators make decisions affecting individual persons or firms, such as the issuing of licences, they are usually subject to the natural justice requirement of a fair hearing. This requirement can be extended to other forms of regulatory rule-making, so that, for example, the regulators are bound to consult outside interests and to publish their proposals. Some are obliged to give reasons for their decisions.

Such procedures, it is often argued (e.g. Birkinshaw, 1996), encourage administrative rationality and thus lead to better rules, in the sense of facilitating adherence to public interest goals and constraining diversion to private interests. But it should it not be forgotten that "open" procedures generate substantial administrative costs and sometimes delays. They might serve to reduce inequalities in the power of pressure groups but, the closer the rule-making procedures are to adjudication, the more likely it is that the decision-makers will strive for outcomes which constitute a compromise between competing special interests that are represented in the proceedings; and that may force them to lose sight of a broader conception of the public interest.

The third form, **substantive accountability**, is the most ambitious. It seeks to ensure that the rules and decisions are themselves justifiable in terms of the public interest goals of the regulatory system in question. But this is not easy to achieve. Certainly scrutiny by legislatures is unlikely to be effective. But experiments have been made with other devices, of which perhaps the most interesting is regulatory impact analysis. Regulatory agencies, when preparing their rules, are in some countries required to issue a statement of the projected costs and benefits which the measure is likely to generate. This should at least impose some discipline on public officials to take account of the economic consequences of what they are doing (Froud et al. 1998).

Judicial review – the power of the independent judiciary to review the activities of public authorities – constitutes an important but also controversial instrument of accountability (Horwitz, 1977). Judges are well-equipped to assume the tasks imposed by procedural accountability. On the face of it, judges might also seem to be appropriate for monitoring substantive accountability. Their independence and autonomy, as well as the rules of the

judicial process, should mean that they are insulated from political pressures to a greater degree than regulatory agencies. On the other hand, if the gates of review are opened too widely, the administrative costs of regulation may escalate and private interests will have an incentive to exploit the process for tactical purposes, thereby frustrating the implementation of public interest goals. Moreover, courts do not possess the expertise normally associated with regulators and the adversarial setting of the judicial process does not always lend itself to grappling with the range of problems encountered. (Fuller, 1978).

CONCLUSIONS AND RESEARCH ISSUES

In this paper, and drawing on the law-and-economics methodology, I have sought to identify the main characteristics of "good" regulation, such as to be considered with the goal of promoting enterprise in transitional economies. The research issues to be derived from these characteristics can be summarised as follows.

?? Regulatory regimes applying to specific sectors

- what are the justifications (economic or non-economic) for the regulation?
- Is there a failure of the market and private law to reach the desired outcomes?
- Are the legal forms used appropriate in the sense of being cost-effective and well-targeted?

?? Regulatory regimes generally

- Is there an appropriate degree of decentralisation and differentiation in regulatory rule-making?
- Is regulatory administration delegated to appropriate institutions?
- Are there appropriate systems of accountability?

APPENDIX

A Case Study Of Taxicab Regulation

"The taxi trade should be a model of textbook economics. There are lots of sellers (drivers), lots of buyers (passengers) and low barriers to entry (the price of care). It isn't. Throughout the world the trade is distorted - by government rules, monopoly, political lobbies, mafias, racial exclusiveness and every other sin in the free marketeer's book".(The Economist, 22 December 1990)

Introduction

Taxicab regulation provides an excellent subject-matter to illustrate the law-and-economics approach to regulation, because there are significant variations between regimes in different jurtisdictions. The allegations that many of these regimes are ill-targeted and/or excessive also enable us to investigate how well the institutional structures perform in meeting public interest objectives.

Quantity controls

Limiting the number of taxicabs permitted to ply for trade is the most direct form of entry control. It has been a feature of most regimes and still operates in many jurisdictions, including London and New York. Given the adverse effects generally attributed to quantitative controls, limiting the availability and variety of services to consumers, and enabling supra-competitive profits to be earned, strong public interest arguments are necessary to justify them. "Excessive competition", by itself, has little meaning (Breyer, 1982, 29-35) and if the concern is rather with possible deteriorations in the quality of the service, these can be addressed by means other than quantitative controls. The same applies to important externalities such as road congestion and pollution.

Where regulation has imposes quantitative limits, it has often conferred considerable discretion on the authority responsible for issuing licences. And such power is obviously open to abuse, encouraging corruption or at least capture by rent-seeking individuals.

There are some quantitative measures which seem to proceed on the assumption that the supply of taxis in a free market will not match demand, although it is difficult to find support from economists for the proposition. But why should regulators be able to assess supply and

demand better than those exercising, or seeking to exercise, the particular trade (Ogus, 1994, 232)? Take, for example, peak demand periods. Regulating the quantity of supply to meet this problem is almost impossible, while in an unregulated market vehicles which have other functions during off-peak periods can enter to meet the demand, the result being reduced costs and prices (Australian Trade Commission, 1999, 17).

Other entry controls and licensing generally

Whether or not quantitative limits are applied, regulatory systems invariably require that both taxicab vehicles and their drivers are licensed. It follows that many of the standards involved in vehicle and driver quality controls have to be verified and satisfied prior to any lawful supply of the service. The administrative costs of such an ex ante scrut iny system are very high. As regulation theorists have been telling us for some time, there is also the risk that standards imposed under such a system are used to limit the number of suppliers, even though they are ostensibly designed only to control quality (Ogus, 1994, chap.10).

What then is the justification for the use of this method of quality regulation? The most powerful argument for the licensing technique is one based on enforcement considerations (Gallick and Sisk, 117; and see more generally, Shavell, 1993). The capital invested and acquired in licence plates by the licence-holder operates as a bond which the latter will forfeit to the authority should he or she, or the vehicle, fail to comply with the quality standards imposed. Reliance on the ex post infliction of financial penalties, notably fines, generates insufficient incentives for compliance, especially where the probability of apprehension is relatively small and the resources available to pay the penalties are limited (Ogus and Abbot, 2002).

Price control

Where road space is very limited and congestion is a major problem, price controls can be used to regulate the demand for taxis relative to that for other forms of transport (Yang et al, 2000, 321). Indirectly, this amounts to a pricing of road use, justifiable by reference to externalities. But there are several more traditional economic arguments justifying price controls (Frankena and Pautler, 1986). First, demand for the services is inelastic since a customer hailing a cruising cab will not be able, at low cost, to compare the price offered with that of an alternative supplier; and the same applies at a taxi stand insofar as there is in

operation there a "first-in; first-out" allocation scheme. In addition, the costs of bargaining a fare may be unduly high, or such as to enable the supplier to exploit the customer.

Of course, these arguments do not apply where cabs are hired by telephone or otherwise in advance. A separate regime, without price (and entry) controls, may thus be established for vehicles which are not allowed to solicit custom in the street or at ranks. Further, it may be possible to dismantle allocation practices at stands enabling customers to exercise freedom of choice. Deregulation of price controls should then be possible, provide that customers have sufficient information as to prevailing tariffs before entering a particular vehicle, and this can be achieved by a "price-posting" regime.

Price controls remain in most jurisdictions and the problems that they generate are typical of a number of programmes which require regulators to estimate what prices would have obtained if ordinary competitive market conditions had existed (Ogus, 1994, 305-317). Historically, the introduction of the meter considerably facilitated the task of pricing individual journeys, but working out a precise formula which captures the marginal costs of supply involves complexities, since "every taxicab ride is a relatively unique service"; the cost is a function of distance, duration and destination (Gallick and Sisk, 1987, 117).

Quality control

Customers hiring a taxi, whether from a stand, by hailing or by pre-trip reservation, will normally be insufficiently informed on the safety and quality of particular vehicles and their drivers. To some extent, the problem may be alleviated where firms supplying in the market are able to develop a reputation for the quality of their service. But since it is only consumers able to identify and select cabs operated by the firm who will be able to rely on this reputation, the argument does not apply to large areas of the market. It is therefore widely accepted that safety and quality regulation is necessary. The more difficult questions are how extensive the regulation should be and what forms it should take.

Let us first examine what systems typically demand of drivers. Uncontroversially they must have the relevant driving skills, competence in the relevant language and a specialist knowledge of the area where they seek custom. Some regimes go clearly beyond what can be accommodated within the information asymmetry justification for quality control. A good

example is the regulation of the driver's appearance. And where the conditions to be fulfilled by the licence-holder are vague, there is always the risk that they can be used to restrict entry on arbitrary grounds.

Quality conditions applying to the taxicab are subject to similar considerations. The consumer information problem can certainly justify regulations concerning the installation and maintenance of meters as well as the means of identifying the cab and its driver. So obviously to the safety of the vehicle. But what are we to make of regulations which, as in London and some other British cities, require that taxis conform to a certain design and appearance? No doubt they may be more easily identified and many customers may be reassured to be conveyed in the traditional format, but if cheaper designs were to meet their needs just as well, why should these customers pay for the increased cost?

Systems Control

Whether, and if so how, taxi services should be organised by the regulating authority raises important theoretical and practical questions. In the first place, we must remember that the services may be viewed as part of a general public transport system and as such subject to public service obligations, for example twenty-four hour availability. More particularly, a municipality or regional authority may, on cost efficiency grounds, wish to substitute taxis for bus, trams or trains; or in other ways use them for public interest purposes, such as the transportation of schoolchildren, the disabled or the elderly (Trudel, 1999). In such circumstances, the authority is effectively hiring the services from suppliers but without the problem of information asymmetry. Ordinary contractual relationships should thus be the relevant governance instrument, although the dimensions of frequency and duration might point in the direction of franchise and other so-called relational contracts which companies will compete to secure (Goetz and Scott, 1981). Positive externalities or distributional considerations might here justify subsidisation.

In some jurisdictions all licensed taxis have to be linked to a centre operating a radio booking system. The key argument is that of economies of scale and scope advanced by Teal and Berglund (1987) on the basis of an empirical study of taxi deregulation in the USA. They contend that, given the customer-specific nature of the taxi trade, large and experienced firms

have considerable cost advantages over small and certainly single-owned taxis. Another regulatory option is to issue cab licences only to taxicab firms satisfying certain standards and with a minimum number of vehicles.

Among other "systems" controls, the convention or rule that cabs entering the rank first must be hired first is of some vintage and has generated some interesting policy debate. We have already seen that such a system is inconsistent with price competition and for that reason has been abolished in those jurisdictions which have deregulated price controls. On the other hand, it obviously avoids the hassle which a free-for-all will generate and that might be particularly beneficial in locations such as airports where space is limited and there is a large flow of passengers requiring the service (Australian Trade Commission, 1999, 16).

Institutions and procedures

The key issues here are the nature of the regulatory authority and the degree of its accountability. Insofar as good taxi regulation requires detailed information on local conditions, then there are clear advantages to decentralised decision-making. However, public choice theory and conventional wisdom suggest that the more localised the decision makers, they are more vulnerable to capture by private interests (Noam, 1982). The optimal solution would then appear to be local regulators, but subject to legislative principles or guidelines which articulate public interest aims and procedures which are transparent and for which the decision-makers are accountable.

The general framework for taxi regulation is often to be found in national (or state) legislation and that sometimes, but not always, includes standards governing quality and "systems". Rule-making of this kind is by a democratically elected body and is transparent, but the principles emerging are often vague, leaving much in the way of discretion to the local regulatory authority. Conversely where, as typically occurs in North America, the rules are to be found in municipal legislation, and thus the result of less transparent processes, they tend to be much more detailed. The national legislative framework may include criteria for the award of licences, but the key role of processing and determining applications is invariably for the local regulatory authority. Normally there are rights of appeal to a specially constituted committee of that authority. Beyond that, there may be possibility of judicial review by a court or tribunal of a more general jurisdiction, thus enhancing the accountability

of the process. On the other hand, in some jurisdictions such review may not enter into the merits of the case, but rather be restricted to ensuring that proper procedures have been observed. Traditionally, it has been assumed that, to protect the public interest, the members of the authority should be entirely independent of the industry. In London, rather anomalously, the police assume this function, but more often it is a commission with members representing, or nominated by, the local government, with the evident risk that local political considerations may unduly influence decisions. The possibility of capture is no doubt reduced if, as in New Zealand, the authority has responsibility for other transport or commercial undertakings.

Of course, if – and to the extent that – the processes of deregulation begin really to bite, and the industry becomes more competitive, the regulatory tasks are less with licensing and pricing and more with safety, achieving fair competition and broader policy questions. In such a context, there is an advantage in securing the industry's cooperation and perhaps granting to it a more substantial input into the regulatory processes (Taxi Study Panel, 1999; 54-57).

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