

Capture Mechanisms in the Transport Sector

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Abstract

The paper aims at shedding a light on how the "capture" mechanisms defined by the public choice theory operates in the transport sector. The paper presents in its first part a definition of the concept of "capture" (prevailing of private/concentrated interests on public/dispersed ones), of public objectives and private or egoistic interests for politicians, bureaucrats, regulated companies and contractors. Then the relationships between subjects and actors are described in depth alongside with capture instruments and the role of "hidden agendas". Some relevant examples in the transport sector are given for illustration and remedies in order to pursue the public interest are analyzed.

1. Introduction

Capture is pervasive in virtually all economies—a major source of economic inefficiency, limiting economic performance. As an illustration of the more general phenomena, we examine capture in the transport sector. Actually, it is often assumed that decision makers behave in a manner consistent with the public interest. Public choice, on the contrary, assumes that people are guided chiefly by their own self interests and, more important, that the motivations of people in the political process are related to incentives, sometimes similar to those of people in the market. The issue is particularly relevant in consideration of the fact that almost all the decisions in the field of transportation involves public institutions as planners, regulators and owners of infrastructures and companies. In Section 2 we present the literature addressing the subject. In Section 3, 4 we describe the private and public interests involved in the decisional process and in Section 5 and 6 the role of the different subjects. Section 7 present some relevant examples of capture and in Section 8 we discuss some possible remedies. Section 9 concludes.

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2. Theoretical background

For many decades since the enactment of the Interstate Commerce Act of 1887 (and in various forms since Adam Smith), the central tenet of regulation theory had been that, where a market failure takes place, a public intervention is both necessary and beneficial. This approach was based on a view of governments as benevolent and omniscient and their actions an unqualified good. However, the fact that the market is not perfect does not imply that necessarily a public intervention is better. The government may fail too.

The prevailing view was first subjected to rigorous analysis in James Buchanan and Gordon Tullock's (1962) seminal book, *The Calculus of Consent*, which rejected the notion of political decision making as a dispassionate pursuit of the common good.

Buchanan and Tullock recognized that the same forces of self-interest operating in the market also shape the political decision-making process. This means that interest groups try to influence the results of the regulatory process lobbying for special privileges, an activity known as "rent seeking".

George Stigler (1971) introduced the related concept of regulatory capture in an article entitled "The Theory of Economic Regulation" where he states "as a rule, regulation is acquired by the industry and is designed and operated primarily for its benefit."

Moreover, well-organized minority interest groups may have a disproportionate influence on government policy through 'logrolling'—vote trading by legislative members to support each other's initiatives—while more diffused concerns, such as those of consumers and taxpayers, are more difficult to support because voters are "rationally ignorant" (Downs 1957; Olson 1965). Since they know that the expected benefits of information—the possibility for a single vote to make a difference—are small relative to the costs, people buy little information.

Self-interest can also influence the choices of regulators. For example, the decision of deregulating a sector may put the regulators out of business. Abel (2002) shows that the U.S. local telephone markets with price-cap regulation had witnessed less net fringe entry and subsequently contained smaller competitive fringes during the period studied. These findings imply that the widespread adoption of price-cap regulation by state public utility commissions has contributed to slow competition. A political economy explanation of the regulators' behavior is regulators may act to maximize budgets (Niskanen 1971). Abel (2002) finds some support for the budget expansion hypothesis. Commissions in states that have adopted price-cap regulations have, on average, 71 more staff members than commissions that have not.

Posner (1971) argued that the prevalence of cross-subsidization in many regulated industries cannot be explained by a "pro-producer" regulator and indicates that also groups of consumers have a demand for and an influence on regulation. This kind of regulation could achieve distributive and allocative aims usually dealt with through taxation.

A further qualification of the capture mechanism is given by Peltzman (1976) who argues that no single economic interest is likely to capture a regulatory body. Consumers as well as producers can try to influence political outcomes. The politicians allocate benefits in a manner designed to maximize their own utility, in accord with the usual marginal conditions. There is essentially a political auction in which regulation is “sold” to the highest “bidder” where “bids” take the form of votes, contributions, or other forms of support.

According to Becker (1983), different groups exert pressure on the political process to get benefits. This leads to a deadweight loss—the difference between the winner’s gain and the loser’s loss—that represents a constraint on inefficient regulatory policies. Rising marginal deadweight loss forces winners to “spend” more to overcome losers’ pressure to avoid escalating costs (Peltzman 1989).

Similarly Levine (1981) argued that for small redistributions of income, private interest will dominate the public one, but if public losses become substantial then there will be an incentive for the system to correct itself, and the public interest will assert itself in the process once again.

Expanding on the analysis of Peltzman and Levine, Keeler (1983) concludes that regulation is motivated by a combination of public-interest and special-interest concerns. If this were not the case, welfare-enhancing reforms, such as the deregulation of various economic sectors which occurred since the 1970s would not have happened.

Empirical support of Peltzman’s thesis is provided by Becker (1986) who also states that the public interest is better protected when the public’s awareness and voting participation are high.

3. Public objectives

The objective of the public has a high ideological content, therefore we adopt a minimal set of possibly agreed-upon values, while keeping open the possibility of alternatives.

The standard objectives are in two basic categories (Yamano and Ohkawara 2000; De la Fuente 2004): efficiency and equity, adding perhaps a specific environmental objective. Employment is a category in-between; it has both efficiency and distributive content.

Sometimes equity and efficiency are in conflict. Getting rid of excess public employment in a context of a recession can well be efficient, but with a high social cost. Other conflicts emerge on the environmental side. The transition to less-polluting production can generate higher prices, which in turn affect more the low-income groups and the level of employment.

Also on the means and tools to be used to reach these objectives it is common to have fierce disagreements, from strictly fiscal policies to more “in kind” provision of social services.

Therefore the field looks far less clear-cut than our initial categories suggests. Also the overall level of income of a community plays an important role, for example setting the level of the socially unacceptable poverty threshold (Ravaillon 2001). And the same can be said for the acceptable level of inequality of the distribution of wealth and income.

Nevertheless there is little doubt that these rough categories of objectives—efficiency and equity—are legitimate and proper for any public policy. This is in sharp contrast with “egoistic” objectives that we analyze next.

The transport sector that we have assumed as a relevant case study is actually prone to market failures, i.e. it sees a widespread presence of public policy and investments, and specially so in Europe. Infrastructures are natural monopolies, with different degrees of contestability. But there are many legal monopolies as well, especially in rail services, and in local public transport. The sector produces also a wide range of external costs, in terms of accidents, air pollution, congestion (albeit this is a peculiar externality, known as “club externality” (Buchanan 1965), since it affects only the social groups that generate it). Climate changing emissions are also present, even to a degree often overvalued in the media (actually only about 14% of the total).

Income distribution objectives are also present, both among different social groups, and in order to foster the development of less developed regions.

Nevertheless all these political reasons of public intervention have to remain under the obvious constraint of efficiency, which up to a certain degree can, and have to, be measured. In turn, this implies that also social objectives have to be measured (for example, CO2 reduction per dollar spent, or increased welfare obtained for a specific social group). Otherwise any “capture” phenomenon can easily be justified in generic “social” terms.

A good example of “pork barrel spending” (Frisch 1998) in dubious projects is related to the universal claiming of “Keynesian objective”, without further specifications (how many jobs created compared with a different project?). Sometime blatantly useless projects are even justified only in terms of a “vision of the future”.

4. Private interests

It is necessary to define the possible “egoistic” objectives of all the actors involved in regulatory and/or planning activities, both within an active (the regulators) and a passive role (the regulated ones), in order to analyze the possible interplays of these objectives, often known as “hidden agendas”.

The active subjects are of two main types: the politicians (elected) and the bureaucracy.

Politicians have a main, common, and totally legitimate objective: to be re-elected (Downs 1957). And this, in fact, even if legitimate, is generally a hidden objective. Who would explicitly state that the constituency of a politician comes first, ahead of the general, or long-run public interest? The maximum obtainable is a statement of coincidence of these objectives, in each specific case, in order at least to strengthen the position of the supporter of a specific policy in the public arena.

In addition to re-election, there are the traditional windfalls of power. From media visibility, to legitimate “exchange of favors” with private interest (if a “good” policy is successful, but, as a side effect, enlarge the business of a specific firm of sector, it is only natural that they express gratitude, even in legitimate forms, after the end of the political career of the promoter). There are also the less

legitimate egoistic objectives, like “log rolling” (Tullock 1959), i.e. supporting inefficient policy of other politicians in order to obtain support for their own “pet projects”.

The second type of active subject is the bureaucracy. Obviously its objectives partially overlap with the politician in charge, able to “remunerate” the more “obedient” ones, but the bureaucracy has also a specific set of its own. These are related to clout-mainly the total amount of money that the bureaucracy is able to manage (even if efficiently managed), and the degree of “discretionality” of this management, that is per se a factor of power (Niskanen 1971).

The objectives of the regulated actors are more straightforward: getting the largest possible benefits from the regulators, both in monetary and in other forms. The well-known general term for this set of private objectives is “rent seeking” (Tullock 1967).

There are also cases, as we will see later, where the capture mechanism is stronger for the political decision-makers than for the managers of regulated public companies, generating paradoxical outcomes.

5. Subjects and actors

The levels of “capture” mechanisms are traditionally two: the elected politicians toward their electors, and the regulated companies toward the politicians and the decision makers at every level (Buchanan and Tullock 1962).

Within a voting mechanism, the natural and legitimate dominant objective of the politician is to be elected or re-elected. And therefore her constituency (the “electoral base”) becomes critical. If it is a national vote, the “market of consent” can be broad, promising everything to everyone, but focusing on the “swing vote” component of the electoral body. In addition, the social groups able to influence a wide quantity of votes play an important role (Buchanan and Tullock 1962).

The media, the unions, specific social groups (for example, farmers, other industrial sectors), and in general “special interests” may become actors in this process.

The exchange of egoistic favors within the political sphere, that may well be legitimate, but tend to make impossible, or difficult, the attainment of general welfare goals, however defined and explicitly declared.

The final result is a substantial deception of the electoral body. The general interest is declared, but special interests able to condition the electoral results will be repaid with future benefits.

Even easier is the special interest favored in local-based elections. Often no major deception is in play here. The politicians compete in promising public money to local constituencies, even if this may be overtly detrimental to the public interest (as we have seen, its name is well-known in the American political jargon as “pork-barrel policy”).

The second form of “capture” is by far the best known: the “exchange of favors” between private and public companies and the political and administrative sphere.

The companies are by definition “rent seekers”, a concept perfectly coincident with “profit maximizers” in logical terms. We have already described the basic rationale of this mechanism. But many more tools are available: media support, sponsoring think tanks and events favorable to a political party or to single individuals.

An important tool in the hands of the regulated companies is known as “asymmetry of information” (Akerlof 1970). The companies know well their trade, and are perfectly capable of “massaging” data and information in such a way to pursue their “egoistic” goals, for example describing themselves as fully efficient, or under market pressure while they are basically dominant or plainly monopolistic, or “demonstrating” the high satisfaction of their customers. These statements can be found in almost every budget report of the European rail companies.

As we have said previously, there is also an extreme form that can be called “reverse capture”, when the political sphere bypasses the managers of the regulated industries in exchanging favors (for example, in terms of wages and reduction of workloads) with the workforce, often via the labor unions, when an election date draws near (the concept of “reverse capture” will be the object of a specific paper from Boitani, A and Ponti, M). We will see some practical cases in a later section.

6. Private versus public companies

We have seen some aspect of the behavior of the regulating actors (elected politicians, public officers). In order to improve our understanding of the capture mechanism, we will discuss in some detail the motivations and instruments of the other side of the picture—the regulated actors.

The regulatory literature makes an effective and general assumption, defining “rent seeking” as the dominant goal of regulated companies. This definition nevertheless encompasses quite different situations. Actually, the term “rent” defines both direct economic advantages and more complex ones.

In general, these advantages are quite different for public and private companies. By public company, we mean one that is owned by the state, rather than the U.S. term of a company whose stock is publicly traded. State-owned companies get no direct advantages from extra-profits (or monopolistic rents): these revenues accrue to the State itself. The managers, the workers, and to a certain extent also the suppliers are better off if production costs grow, not if profits do. Higher wages and salaries, lower productive effort, less working hours (implying a wider workforce), less pressure for low-cost, high-quality inputs, are all definite advantages for a regulated public company. All of them are cost-increasing factors.

In contrast, the private regulated company tends to minimize its costs, and in this sense to become efficient, in order to increase its profit within a regulated price setting. Similarly as with a public company, there are advantages in lowering the quality of a service or of a product, as far as the company has monopolistic powers.

A remarkable exception can come from the private regulated company. In certain cases, the company can have large advantages “buying” social and political backing from the employees and the suppliers, in order to keep a favorable situation, such as beneficial regulation (Conyon 1991). It is a kind of “trade-off”. Part of the rent is spent against the risk of losing it in the medium term. For example, it is quite common to see strikes from the workers and political pressures to allow for keeping (public and private) monopolies. Clearly this would be perfectly consistent for a public company, but far less so if the workers of a private company were not themselves sharing part of the rents. This was an observation made by Lenin himself.

A correct understanding of the different types of capture mechanisms seems indispensable in order to set up effective regulatory actions.

7. Some relevant examples

Public transport

Regulation of public transport (local and long distance) is usually deemed necessary for economic, environmental and social reasons.

But in most countries public intervention has not been limited to define barriers to entry, prices, service planning but has been extended to the ownership of local and national companies.

Public ownership and the absence of competition increasingly undermined effective management, innovation and operational efficiency: present unit cost of bus local transport in continental Europe are about twice those of the deregulated UK market, drivers’ productivity about 40% lower and the average salary 85% higher (Ramella 2002).

Moreover, while in the urban areas there are places and times of the days when congestion represents an external cost which is not internalized, in some countries, particularly in Europe, on average, taxation on fuels fully internalize all external costs (IMF 2014); and environmental external costs represent a minor share of it.

Also the social motivations for subsidies seem not well grounded: user of public transport are not only or even mainly poor or people unable to use a car. The main common characteristics of public transport users is the destination of their travels that is the central areas of large urban areas. But many poor live and work in the peripheral areas where public transport does not constitute a real alternative to the car. This fact for example emerge clearly for the Italian situation in a research on the social aspects of modal split (CENSIS 2008)

In the recent decades, many high speed rail lines have been built around the world; often, these projects are fully funded by taxpayers. But the distribution of high speed trains users by socio-professional groups is highly skewed in favor of high income groups. According to Prud’Homme (2011), trains, particularly high speed trains, offer a classic case of taxes levied on the poor to subsidize the rich.

Moreover, trains have been protected from long-distance coach competition by legally erected entry barriers. In particular, until recently, legislation in France explicitly prevented direct competition to SNCF services (Van de Velde 2009). In Germany the express coach market has traditionally been strongly regulated by the National law and the railway protection has been fiercely defended by DB (ibid.).

In the U.S, according to Morrison (1990), Amtrak's federal subsidies are roughly equal to its social benefits but gains are highly localized in the Northeast corridor while in the rest of the United States the balance is negative. Furthermore, the Federal Transit Administration's 'buy American' provisions mandate that transit agencies first offer contract to domestic producers increasing the cost of capital purchases (Winston 2010).

Planning of infrastructure

With a few exceptions, all over the world, the public decision to build a new infrastructure is not based on an economic evaluation (cost benefits analysis) not even in terms of comparing and prioritizing different projects. And when such analysis are provided, costs are on average underestimated and traffic (a proxy of benefits) overestimated, particularly in the case of rail projects (Flyvbjerg et al. 2003). A relevant case is the project of an international rail tunnel connecting France and Italy: the official traffic forecasts have been kept by the promoters very optimistic, even if the traffic on that corridor has been sharply declining. And this happened both on the existing rail and roads links, and well before the start of the present economic crisis: according to the official forecast, traffic volumes in the main corridor will reach about 60 million in the year 2035 and 100 million ton in 2053 more than four times the present value (22,4 t, a third less than fifteen years ago)

National governments—or supranational institutions—usually take the burden of financing the largest shares of costs even if for most projects benefits will mainly accrue to a tiny share of the population: users of the new infrastructure and in some cases—for example in the case of a new subway—local car users. This institutional arrangement makes possible “log-rolling”: a hidden general agreement based on reciprocity between local/specific interests in order to promote each other's project. An example of this approach is represented by the Trans-European Networks for Transport (TEN-T), a network constituted by “corridors” typically thousands of kilometers long with no consideration of the served traffic and of any economic and financial analysis (Ponti et al. 2013): as hosting one or more of these corridors was a precondition for obtaining European funding, but above all an “external” legitimization of “politically favored” projects, every country or group of countries began to promote a growing list of projects.

Environment (CO₂ emissions)

The standard approach to environmental policy is the so-called Pigouvian taxation (which accords to the “polluters pay” principle). A global carbon price is the obvious coherent tool for dealing with GHG emissions (Cramton et al. 2015). However, this approach is rarely used. Instead, countries prefer to adopt domestic and even sectorial emissions targets. As the marginal cost of abatement varies in a wide range (McKinsey 2010), both between countries and sectors (with variations from + 60€ to – 80€, in case

of “double dividend” technologies), this policy leads to an increase of the total cost to reduce the GHG emissions to a predetermined level. Moreover, in Europe, as an average present specific taxation on fuel is higher than all the externalities of transport (IMF 2014) and about ten times higher the maximum price quoted for CO₂ within the EU emissions trading system (EU ETS). While inefficient, it is to be believed that this strategy is appreciated (and sustained) both by bureaucrats whose role is the more expanded the more specific is the regulation adopted and by sectors which get benefits from it. Stephen Holland and al. (2011) provide evidence that in the US policy makers have favored measures that subsidize low carbon fuels instead of much more efficient policies such as a transport-sector cap & trade program because the former option leads to a right skewed distribution of gains and losses where many: a few areas gain considerably while the others have small losses. They also show that campaign contributions are correlated with a district’s gains and these contributions are correlated with Parliament Members’ vote on related legislation.

Fuel taxation

While, as we have seen before, in the European Union taxation on fuels fully internalizes all external costs, in most countries, prices are set at levels that do not reflect the marginal cost of motor vehicle use and, especially in the developing ones, fuels are heavily subsidized: in Venezuela, e.g., is subsidized at about 0.65\$ per liter (IMF 2014)

Highways concessions

As shown by Beria et al. (2015), at worldwide level, excluding China which is regulating rate of return of investment, properly said toll regulatory tools—tendering, price cap or other mechanisms to achieve and improve productive efficiency—are used only for one third of the highways network and even there often only by name as there is no periodic revision of efficiency gains or, as in the case of price-cap regulation in Italy and France, the productivity factor does not deal with the actual profits. Profits on the invested capital for some concessionaires, in particular in Italy, have sometimes reached astonishing levels, up to 1.000% (Ragazzi 2008).

Railways

In the case of railways, infrastructure providers are generally not subject to an ex-ante regulation aimed at obtaining efficiency in costs and consequently in the charges applied to the train operators. Charges are usually defined by the infrastructure manager itself or in accordance with the Ministry or another public agency (Laurino et al. 2015). Price-cap has been proposed but not yet applied in Germany (Link 2012). Prices of services provided by vertically integrated operators (private provision or concession) are not usually regulated either. Also in the U.S. the regulation policy seems rather weak, with very high levels of profit for the providers of the services and the tracks for freight (supposed with a strong market power, and de-facto a cartel), and protest by the final users (Kimes 2011).

Airline sector

Various examples of regulatory capture can be found within the airline sector in the United States.

One case of is the proposal of auctioning of air slots at New York airport. This policy was obviously pro-competitive. It had essentially two supports in addition to economists: new entrants (low-cost airlines), the White House (and therefore the Secretary of the Department of Transportation), and the Department of Justice. Everyone else was opposed: the Port Authority that manages the New York City airports (a power broker), the Federal Aviation Administration that regulates the airline industry, the incumbents (legacy airlines), and Congress (captured by the incumbents and the Port Authority). After years of planning, rulemaking, and near implementation, Congress passed a law that forbid the FAA from spending any funds on implementing auctions. The law came just a few weeks before the first auction was to occur.

At least two kinds of barriers to entry are to be found (Winston 2010):

- Airport authorities prevent new entrants from providing service at certain airports by prohibiting airlines from offering flights that exceed 1,500 miles at New York LaGuardia airport and, with the exception of six cities, which exceed 1,250 miles at Washington's Reagan National.
- Federal laws prevent foreign airlines from competing in U.S. air transportation markets.

Capital investment in the U.S. airline industry is limited by a foreign ownership cap of 25 percent. Also in Europe there are many examples: the protection of incumbents companies goes from the "grandfather's rule" (incumbents can keep they historical, precious slots without even paying for them), to several legal actions against the most important and aggressive new entrant, formally defending competition rules, but apparently forgetting the anti-competitive rules kept in place in favor of the incumbents. And also Europe forbids foreign competitors both of taking the full control of local airlines and operating freely in the internal market (Ponti, Boitani, Ramella 2013)

Ocean shipping and ports

In the US, the Merchant Marine Act of 1920 (Jones Act) intended to protect the domestic shipbuilding industry, requires that all goods transported by water between American ports be carried only by ships that are built in the United States, owned by American companies, flying the American flag and crewed by U.S. citizens².

Rate and entry regulation persisted until 1998, longer than it did for other modes of transport; because of local regulation and work rules, terminals are unable to operate on a 24/7 basis (Winston 2010).

The majority of European ports are un-regulated natural monopolies, often heavily subsidized by the State on strictly political basis, within a special public regime completely unrelated with the regulation of other infrastructure, i.e. airports.

² In early 2015 Senator John McCain filed for an amendment that would essentially annul the Act which: "has for too long hindered free trade, made U.S. industry less competitive and raised prices for American consumers".

Highways construction

The main example here can be found in the United States. First, it may be noted that the federal program leads toward a uniform distribution of resources across states and in doing so investments don't maximize social surplus.

Moreover federal regulation (Davis - Bacon Act, passed in 1931) stipulates that "prevailing wages" be paid; as prevailing wages have been generally interpreted as "union wage", labor cost is usually higher than the marginal product of it (Winston 2010).

8. Remedies

Financial responsibility

At present, a large part of the financial responsibility for investments accrues to the state (or federal) level even if demand for transport—with the exception of air and sea transport—occurs mainly on short distances and consequently benefits resulting from the construction of a new infrastructure are almost exclusively local. These framework conditions lead local transport authorities as well as other actors involved in the decision process such as constructors and consultants³ to submit applications which present the projects as favorably as possible: the cost of optimism bias will be allocated to the population nationwide.

It would therefore be desirable a shift of the financial responsibility to the local level which should bear the burden of increased taxation to fund infrastructure projects: in this way the incentives to move forward on high cost and low benefit projects would be reduced. Taxpayers would be better able to constraint self-serving politicians and register their "voice" (Hirschman 1970) at the ballot box.

From a theoretical standpoint, public funding of infrastructures is deemed desirable, among other reasons, because of positive externalities and allocative efficiency gains that may be achieved particularly in the case of rail (and subway) lines; as a rule, these projects receive an upfront payment equal to the full cost of the investment. As benefits are related to the real patronage of the infrastructure (while its construction leads to negative externalities) it would be preferable that the decision to go ahead with a project would be conditioned to the willingness of private subjects to finance a significant part of the project without a public guarantee and compensate them in proportion to each year's traffic and benefits achieved. This requirement would lessen if not eliminate the risk for ordinary citizens who are the least able to protect themselves: only very few of them seem to be aware of the unrealistic demand forecast and environmental benefits often used to justify infrastructural projects.

³ "Consultants win work by pleasing clients, and they rarely please clients by pouring cold water on their pet schemes" (Kay 2013); moreover, if a project advance through the business case, a consultancy company generally follows it through all the stages.

From second best to first best policies

As seen before, public financing of collective transport is a second best approach to a first best policy based on the internalization of external costs. This approach is in many circumstances ineffective because it induces current users (and pedestrians and cyclists) to make more and longer trips which partially offset the potential gains and it does not discriminate between car users with largely different level of congestion and environmental costs. Moreover there is evidence that, particularly in the case of public owned enterprises protected from competition, subsidies leak into higher costs and lower productivity (Bly and Oldfield 1986).

In the past, congestion based charging strategies required expensive charging systems. This condition is rapidly changing thanks to the information and communication technologies which are leading to cost reductions. Charging schemes, based on automatic number plate recognition are already being implemented or considered and may be soon be tailored to each segment of a road network thanks to the possibility of identifying the position of a device without GPS (Cramton and Geddes 2015).

The level of price required to get the optimal level of congestion would provide planners with information about the amount and location of additional investment; in highly dense congested urban areas underground roads may play a larger role than we now see.

Levinson (2013) suggests that the current framework characterized by public ownership and management of road with funding primarily derived from taxes on fuels should be replaced by one where regulated public utilities, such as those already established in other sectors, would be in charge of management and financing through the sale of bonds covered by charging for road use leaving to the political level only the task to prevent abuses of monopoly power.

Public companies privatisation

Niskanen (1971) argues that public monopolies are particularly able to extract revenue from politicians while providing low quality and high cost services. In fact, public ownership of transport firms, along with the absence of competition, has been the cause of X-inefficiencies and rising production costs. In the case of local public transport in the United Kingdom outside London, privatization and deregulation, led to a decrease of cost by around 50% (Ramella 2002). Efficiency gains have been achieved in various experiences of competition for the market such as local public transport in London and in some Northern European countries and Germany. Other countries have formally adopted the same approach but where the State or local authorities have remained owners of the previous monopolists, competition didn't develop in a meaningful way as predictable in absence of a level playing field (public companies are both owned by the subject responsible for the bid and usually don't face the risk to bankrupt).

Institutions

Independent regulatory authorities have to play a larger role, not in the sense of substituting the political role in strategic choices, nor in creating another large bureaucratic "parallel" body, but only in order to guarantee a "tertiary" evaluation of policies, able to limit the political discretionary power.

It is well known that even the independent regulators are appointed by the very same political actors that we have defined as subject to “capture”. So the only possible solution is that the independent institutions are endowed with real powers and technical tools (i.e. evaluation capabilities) to pursue their objectives, that are mainly related to efficiency, and not with objectives with high political content, like income distribution, that are by their nature linked with the political sphere.

No “technocratic” illusion has to be allowed here: it is well known that efficiency and income distribution are often not completely separate. As always, we are describing here a second-best solution. In order to improve on the real powers of these independent bodies that we recommend, the American solution (as different from the European one) seems to be more effective: the judiciary has to play an active role in the process (a kind of “embedded” one), being already in principle separated from the political sphere. For example, in the Italian case, a separate residual possibility of asking for a supplementary level of judgment, above the one of independent authorities, have actually severely reduced their dissuasion powers. This is probably due to the natural tendency of separated judging bodies to reaffirm their specific role and powers, and linked, on top of that, to the limited technical competence in regulatory matters present in the judiciary.

The issue here, as usual, is not the morality of the persons involved, that are by definition randomly distributed, but best possible incentives given to the relevant institutions.

9. Conclusion and further research

As shown in so many examples, “capture” seems to be a very widespread political and economic phenomenon. Probably it is per se a component of the democratic process, a kind of “price to be paid”, knowing that the purely technocratic, perfectly efficient alternative is both practically unfeasible, and perhaps not even desirable. Nevertheless, it is an issue of great relevance in order to understand and improve the political action, above all increasing its transparency and accountability.

This issue is also rarely debated and analyzed, even within the cultural place where it mostly belongs: the regulatory authorities. We have tried to present an overview of the theoretical aspects of this issue and described some possible remedies.

Further research may clarify the peculiarities of each mode of transport and geographical area.

The role played by specific interest groups in shaping the decisions of governments responding to environmental issues (and particularly climate change) may be further deepened .

Finally, what can be learned by the (few) cases of decisions which reflect the "general interest"?

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