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Government Failure – Four Types

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Abstract: Economists tend to see the market as a default option for social order and a role for government only when markets fail. Developing a convincing analysis of the role of government in economic processes, however, needs to start by considering government failure in its own terms. Drawing on insights from institutional economics, law and economics and the philosophy of law, emphasizing the necessity of rules for the economy, this paper develops the concept of government failure. The paper identifies and develops four different types of government failure. Government can set rules for economic processes and actors that are (1) too specific, (2) too broad, (3) that are arbitrary, or (4) that conflict with other rules it has set out to address other, related issues (possibly primarily non-economic). Government failure is illustrated in the context of Intellectual Property Right (IPR) law as it relates to Anti-Trust law.

Keywords: anti-trust law, government, government failure, intellectual property rights, rules in the economy

JEL Classification Codes: K0, H10, P16

> "1. We regard the state as an agency whose positive assistance is one of the indispensible conditions of human progress."[1]

The way in which economists have looked at the state and its effects on the economy has fluctuated substantially over time (Medema 2003). In contrast to what the first substantial article in the first constitution of the American Economic Association holds, governments are now largely seen as affecting the workings of an economy negatively if and when they do more than a "Night-watch state" would. Nowadays,

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economists tend to see the market as a default option for social order and a role for government only when markets fail.

Markets are typically believed to fail under circumstances of (excessive) externalities that are either positive or negative, in cases when public goods are traded, in cases of increasing returns or a natural monopoly creating market imperfections, or, possibly, according to some, to correct unequal distribution of wealth or income. Some economists, such as social and institutional economists, have been more amenable to a role for government in the economy. Its role, when explicitly investigated, is sometimes seen as benevolent in principle. In addition, institutional economics recognizes that markets cannot function if not embedded in a broader set of interrelated institutions.

Developing a convincing analysis of the role of government in economic processes, however, needs to conceptualize government failure in its own terms. Government failure is not necessarily the flip-side of the coin of market failure: there is no theory of "non-market failure" of government as of yet (Wolf 1997, 24).[2] Drawing on insights from institutional economics, law and economics, and the philosophy of law, this paper develops ideas of government failure. To see what exactly the role of government can be in an economy, one can approach from the opposite direction, asking, "When will a government fail?" We propose a framework for understanding government failure from a social and institutional economic perspective. The paper identifies and develops four different types of government failure. Government can set rules[3] for economic processes and actors that are (1) too specific, (2) too broad, (3) that are arbitrary, or (4) that conflict with other rules it has set out to address other, related issues (possibly primarily non-economic). This non-exhaustive list of government failures gives rise to different kinds of problems for the economy, which will be elaborated upon in the paper in the context of Intellectual Property Right (IPR) law as it relates to Anti-Trust law in particular.

Failing Governments and Failing Markets

In mainstream economics, the market is the default way in which order is deemed to emerge. There are, however, different sources for order in society (Dolfsma 2009, ch. 4). At the same time, many economists only believe there is a role for government when markets fail, making the proper role of government a limited one. Some economists believe that governments will inherently fail given the assumptions about what drives individual behavior including that of government officials. Given that government officials are in a special position, their behavior can, in particular, be failure prone. Public choice theory and the theory on rent seeking are prime among these economic theories (Buchanan 1968; Krueger 1974; Tullock 1989).

When mainstream economists discuss possibilities of failing markets and how to address these, the topic of Pareto efficiency enters. Economists tend to be in a bind, however, about what to argue for. They both argue with Kenneth Arrow that rules for making decisions cannot both be democratic (non-dictatorial) as well as lead to Pareto optimality. A feasible form of government will then always fail to provide Pareto

optimality, and might even deteriorate a situation when it intervenes. Markets, however, also inevitably fail since there will never be a situation that is required, in theory, for markets to succeed where there is a market for all possible goods, for all possible times, in all possible circumstances. If any such market is not there, Pareto optimality will not arise. Insights from the economics of information indicate as much (Stiglitz 1994). The "Theory of Second Best" then says that whenever at some point Pareto optimality is not reached, the grounds for seeking to change circumstances on other aspects or dimensions so that conditions for reaching Pareto optimality may be met are no longer there.

The conservative stance of mainstream welfare economics (Dolfsma and Dannreuther 2003) hinges on the way in which the market is conceptualized: as a space void of social relations, values and supra-individual entities such as institutions. Looking at market processes as necessarily institutionalized and subject to (changing) rules will also provide a different perspective on what may make governments fail.[4] This is what this paper aims for. The argument developed here, while not necessarily at odds with views from economic theories on public choice and rent seeking, develops a different argument. The role of government is, for an institutional economist, more than "the provision of public goods and the reduction of public bads *through* taxes, public purchases and grants" (Boulding 1982, 420, emphasis added). In particular, perhaps even more importantly than re-allocation of resources, a government formulates and maintains rules in the economy.

Rules in the Economy

By now the importance of rules to understand the economy and economic development has become clear to many economists. Some economists maintain that an orderly and thus rule-governed economy can do without rules issued and maintained by a government, at least in some circumstances (Ellickson 1991; Ostrom, Walker and Gardner 1992), but most acknowledge that a government is necessary or even a prerequisite for most modern economic activities (Glaeser and Shleifer 2002; Greif 2006). A role for the government is mostly acknowledged addressing issues related to property rights, including intellectual property rights, and also in relation to contract law. Even when a national government is absent or weak, players with authority and legitimacy underpinning a set of rules make economic development and prosperity more likely. Sometimes this has been a non-government authority such as the Catholic Church, especially during the Middle Ages (Ekelund et al. 1996).

Even within an otherwise connected economic and legal sphere, such as the United States in the early decades of its existence, rules set out by a (local) government can profoundly affect the direction in which economic development is headed as well as overall levels of income or income distribution (Kim 2009). The basis for contract law in Massachusetts has been the will theory, whereas the basis in Virginia was the fairness doctrine from the common law tradition. While the latter allows a judge to annul a contract after it has been agreed upon by the parties, the

former does not. Trade and investment are more likely to render benefits in the former.

This strongly suggests that, for a number of possible reasons, the rules that a government sets out are less than fully plastic (Acemoglu et al. 2001, 2005). If economists in the neoclassical tradition acknowledge a role for government at all, the often implicit assumption is that the rules it sets and even the kind of government in existence are fully plastic such that optimal outcomes can always be attained by tweaking them (cf. Niskanen 2003). Some economists are more likely to acknowledge the path dependence of (government) rules than many other lines of thought within economics (Wunder and Kemp 2008), being aware to the unavoidability of incomplete laws either as an unavoidable necessity but also as something purposefully sought (Fon and Parisi 2007).

Government Failure in a Rule-Infested Economy

The proper role of the government is an issue of ideological discussion that goes to the heart of people's convictions of a politico-philosophical nature. At the extremes are the idea that government should be a night-watch state focusing on issuing a minimum number of rules related to commerce and (national) safety, on the one hand, and the idea that the state should be concerned with the proper functioning of the entire economic system on the other. The extreme position among the latter is associated with communist ideas. In the current economic situation of economic crisis (McCarthy and Dolfsma 2009) ideas about a government being actively involved in markets without taking full control of them, most prominently advocated with John Maynard Keynes, have gained quite a bit of currency once again. The proper functioning of the economy is then seen to relate to issues of addressing *systemic* risks to the economy that are to be expected when the banking system or the automobile industry fail as a whole.

Whatever one's views, scholars will recognize that government[5] must formulate rules for the functioning of society. In a Marshallian tradition, government failure is discussed in terms of the *effects* of any particular set of rules formulated by the government. When rules of a government lead to a concentration of (political) power in the hands of a few, when they lead to overly bureaucratic administration, or when they give rise to a government which is unaccountable, government may be said to have failed.

In the discussion here, we conceive of a government failure in four different ways, inspired by insights from the philosophy of law. The paper thus does not address the effects of government rule-setting activity, but looks at the nature of the rules. Government failure then is not the inverse of market failure as discussed by economists. When discussing the possibilities and kinds of government failures, we will not assume a rules-free State of Nature or situation behind a Veil of Ignorance. The paper will rather discuss possible government failure in the face of a particular set of existing set of rules (cf. Hamilton 1932; Dolfsma 2009). The failure will thus be in a context of a government changing, adding or taking away rules, which may turn out

to cost some or even all members of society and benefit others. In addition to the considerations of a consequentionalist kind about the greatest good for the greatest number, there may be distributional issues that affect parties' deontological claims. Rather than merely addressing this from a consequentionalist perspective, as Fon and Parisi (2007) do, the perspective developed here may be conceived of as more of a deontological one.

The non-exhaustive list of four different ways in which government can fail will draw mostly on scholarly work in the philosophy of law. When formulating rules, then, government can be (1) too specific, (2) too broad, (3) arbitrary, or (4) setting out rules that conflict with other rules it has set out to address other, related (possibly primarily non-economic) issues possibly for the same practice.[6] It seems, but this paper will not explicitly address this topic, that these cases of government failure give rise to lobbying and rent-seeking.

Obviously these categories relate to Sullivan's (1992) distinction between rules and standards along a "continuum of discretion." Rules, as Sullivan refers to them, offer less discretion than do standards since they "bind the decision maker to respond in a determinate way to the presence of delimited triggering facts" (Sullivan 1992, 58; cf. Ehrlich and Posner 1974). Standards suggest decision makers refer back to background principle. The discussion of a government setting out more or less general rules seems to be alluding to what is known as a Roman law, rather than a case law, tradition. In Anglo-Saxon case law, jurisprudence proceeds as verdicts are expressed and explained in courts about particular cases with reference to cases that have been decided upon previously. In the Roman law tradition that prevails in other parts of the world, the legislative part of government sets out general rules that civilians follow. The executive part of government sees to it that the rules are followed, while the third part of the *trias politica* or separation of powers, the judiciary part, may further elaborate on the rules set out.

Too Specific Rules

Ehrlich and Posner (1974, 262) argue that "a perfectly detailed and comprehensive set of rules brings society nearer to its desired allocation of resources by discouraging socially undesirable activities and encouraging socially desirable ones." In their view, rules cannot be too specific, if only because rules set out by a government are fully plastic (cf. Frezal 2006; Sørgard 2009). Specific rules reduce uncertainty by making a ruling in a dispute more predictable as decision makers are led to act more consistently by being involved in a more transparent process. The cost of the legal process is also reduced if only because of the speed with which a final judicial resolution is reached. Attempts at deregulation by a number of governments in recent years may be perceived as an attempt to reduce the specificity of rules and in doing so correct an undesirable situation. Many of these attempts have failed. A rule being too specific is then seen as one kind of government failure.

Overly specific rules require that a government has to consider vast amounts of information of very diverse kinds. Rules formulated by the government that are very

specific will soon become obsolete as circumstances change and need re-formulation (Ehrlich and Posner 1974). Not only will this be costly in itself for the rule-maker, but also uncertainty to society is increased. Overly specific rules, even when addressing a specific set of phenomena that is limited in number, will, however, relate necessarily and intimately with other rules. Such interrelatedness, even if no conflict between rules is involved, will make changing a rule difficult and costly. Changes to a rule may necessitate re-considering the other, related rules. Changing other rules too will hurt agents, who may need to be compensated if a government is not to become an unpredictable bully making arbitrary decisions. Such arbitrariness may affect the principle of equality before the law and the legal security that has been shown to foster commerce (Greif 2006). This applies perhaps in particular to rules related to property, bankruptcy, labor contracts, and enterprise (cf. Kim 2009).

Too Broad Rules

Specific rules produce rascals (cf. Le Grand 2003). If rules are too broad, however, the "rules of the jungle" apply. The weaker party — economic actors such as consumers, employees, and Small and Medium sized Enterprises — may be hurt as a consequence. A government (the legislative) that formulates rules in very broad terms, without giving guidance about their interpretation, may be said to fail.

Broad rules may prevent over-inclusion or under-inclusion of situations in a category of events to which a rule applies as very specific rules may "suppress relevant similarities and differences" (Sullivan 1992, 66). Broad rules (or standards, such as "reasonableness" or "efficiency") are open-ended and allow for more discretion and flexibility but are possibly more costly to *apply* as a substantial amount of information needs to be gathered and processed for each case at hand. Specific rules, on the other hand, remove from consideration specific kinds of circumstances, thus allowing for (more) direct application. Yet, specific rules are costly to promulgate, as a government setting such a rule needs to consider *a priori* what kinds of circumstances are to be ignored and what the consequences of such ignorance will be for the decisions made, and allow for less flexibility. In particular when events to be regulated are rather heterogeneous or change rapidly, broader rules may be preferred. Decision makers may then feel more compelled to explain their judicial decisions.

Arbitrary Rules

A government that sets out rules for society and the economy of an arbitrary kind is what Margalit (1996) calls an indecent society. It is a society that humiliates its citizens (burghers) but that also stifles commerce, which is exactly what the Magna Carta of 1215 was to curb. Arbitrary rules, disrespecting people's rights as elaborated upon in rules, increase uncertainty in the economic realm as well (cf. Sen 1999). The likelihood that returns on an investment can actually be enjoyed are reduced when rules set by government are arbitrary. Investment levels will be lower.

Conflicting Rules

Any practice in society is likely to have multiple dimensions and may then be affected by rules set out by government promulgated to address each differing, specific issue. What behavior may be deemed desirable as stipulated by one set of rules, may be behavior that is undesirable from the perspective of another set of rules. If and when the behaviors in the practice are inseparable, the actors involved in the practice may find themselves in a bind. Uncertainty increases as the conflict sharpens.

The argument so far assumes that government is a homogenous entity, ignoring the Trias Political of the legislative, the executive and the judiciary powers and especially the different levels at which government agencies operate. If government is not a homogenous entity, governments will be more prone to fail. Their promulgation of rules can in particular contribute to government failure due to rule conflict.[7] The four ways in which governments may fail can, in actual fact, relate to each other, of course, and will come out best in analyzing a situation where two sets of rules conflict. The four ways in which government may fail are, to a degree, unrelated to what Boulding (1982, 422) has mentioned as one of two preconditions for "good government": competence in decision-making.[8] Government failure can occur despite competent decision making. Attributing government failure to incompetence at decision-making, alternatively, can be perceived as semantically black boxing the problem.

Policy: Innovation and Competition

The relation between innovation and competition is unclear theoretically as well as empirically: some studies indicate that competition stimulates innovation, while others hold that competition will hamper innovation, and still others find a non-linear relationship (see Dolfsma and van der Panne 2008, 2010). Partly, the confusion is due to the empirical approach adopted, with authors either taking an approach inspired by the Structure-Conduct-Performance perspective from the industrial organization literature, or emphasizing the dynamic nature of competition in an industry. Whatever the issue theoretically or empirically, the themes of innovation and of competition are considered vital areas for government policy.

Government policy thus is involved in setting out rules that affect both sides of the equation. Each of these sets of rules also affects other policy goals. Competition is stimulated most pertinently by proper anti-trust laws (Baker 2003; Schinkel and Tuinstra 2006). Anti-trust laws seek to limit the extent to which a single firm may control a market and thus set monopoly prices, or at least prices (substantially) higher than what would otherwise be the case. The level of competition in an industry or an economy is thus at least partly the result of anti-trust law. The level of competition affects the likelihood that firms will innovate. One pertinent set of rules meant to stimulate innovation is intellectual property rights (IPRs). The extent to which this is motive for having a system of IPRs actually makes sense empirically, however, is disputed (see Dolfsma 2005, 2008 for a discussion). At the same time, of course, IPRs

are to stimulate diffusion of newly developed knowledge by requiring publication of knowledge if it is to receive protection. IPRs give right-holders the exclusive right to commercially exploit the material they can claim property rights over. While this may not in fact be a monopoly, it could give right-holders the possibility to charge higher prices and recoup investments in both R&D efforts and production capacity. IPRs, meant to stimulate innovation, thus affect the level of competition in an industry too. These two sets of rules thus conflict. This paper does not extensively discuss the nature or extent of the conflict between the rules from these different policy domains for lack of space.

The extent to which these two sets of rules conflict has changed over time. The general direction that these sets of rules have moved into has produced a situation in which tensions between them have increased, however. In the past, anti-trust laws in Europe, for instance, have been promulgated with a view to protect incumbent firms rather than protect or even stimulate small firms and entrants into a sector (Pace 2007). As the latter concern has become more relevant, the impact of anti-trust law on prospects for innovative activities has increased. IPR rules have also changed over time (cf. Dolfsma 2005). It is by now widely recognized that the likelihood of government failure as the rules for IPR are overly broad loom large (Jaffe and Lerner 2004).

The discussion in anti-trust issues about specific versus broad rules is better known as that between the "per se rule" and the "rule of reason" (Beckner and Salop 1999). There are several ways in which (the potential for) anti-competitive behavior can be detected (see Adams, Johnson and Pilloff 2009). A prominent test is the *Small but Significant Non-Transitory Increase in Price* (SSNIP) test, also called the *Hypothetical Monopolist Test*. Given a proper definition of the relevant market — no small feat — the effects of a hypothetical increase in the price of one good by some 5 to 10 percent is determined. If a player can do so permanently without seeing its customers move to a competitor, that player is a monopolist. At issue is what value cross-price elasticities have between a good that one agent offers on the market and other goods. This widely used test employs a number of specific assumptions, which result in a situation where government failure due to too specific rules is likely.

The test takes the demand side of a market into consideration, focusing only on price competition between relatively homogenous goods. An industry's history as a monopoly where higher than usual prices are charged already cannot be indicated with the SSNIPP test as only changes with regard to the status quo can be indicated. In addition, the industry may face potential entry and thus be contestable without being actually contested (Baumol 1982). It is unclear if and how the contestability of a market will show in a SSNIP test.

Agents in an industry that behave in the way in which a monopolist with market power would may show other behaviors than the ones detected by the SSNIP test. Firms can, for instance, employ limit-pricing as a strategy to both keep prices higher than would be the case while at the same time stifling competition as the price set is lower than an entrant could possibly hope to charge given the lower economies of scale (and thus higher average costs per product) that an entrant can expect in the first

phase after entry. The overly specific SSNIP test to detect anti-competitive behavior cannot detect such behavior. Such behaviors can have real, negative effects on both consumers and (potential) competitors, and may thus be deemed undesirable.[9]

In some respects the SSNIP test to detect anti-competitive behavior is too specific to detect certain behavior, but in others the test classifies behavior as anti-competitive behavior that need not be anti-competitive. Under-inclusion as well as over-inclusion can be a result of government failure due to too specific rules. Take the example of newspapers made available free of charge. The price they charge – €0 – may be deemed a limit price to deter entry. Doing so would, however, ignore the nature of this market as a two-sided market (Dolfsma and Nahuis 2006; Rysman 2009). Firms in this industry offer goods on a market that actually cater to two markets at the same time. Readers are interested in (free of charge) newspapers to consume both news and possibly advertised product information as well. Advertisers are interested in getting attention for their products. The lower the price charged by the producer of a newspaper, the larger the number of consumers will be and thus the audience for the advertisers. The income for the producers of free newspapers comes from one side of the market only. Conceiving of the €0 price charged as a limit price would in this case be unreasonable.

A rule to detect anti-competitive behavior might in particular point to unbecoming behavior that is allowed or even stimulated by current IPR law. A firm's innovative efforts that have led to patentable knowledge receives protection from competition at least to the extent that the other firms may be prevented from using the patented knowledge. If and when such knowledge is used in producing goods and services for which there is a market, the price charged in that market might be substantially higher than marginal cost. IPR has, however, continued to broaden in recent years (Dolfsma 2005; Schmidt et al. 2007). An example of IPR having broadened is allowing patents for software and business models in the United States. The duration for the protection that patents and particularly copyrights offer has extended. Making available technical means that could help people circumvent encryption of works of art has come to be prohibited by copyright law, even if such technical means could be used for legal purposes. These and other examples of broadening of IPRs have led to a situation where IPRs are now overly broadly formulated, giving rise to government failure (Jaffe and Lerner 2004).

While IPR laws can be considered too broad, anti-trust law may be argued to be too specific. Where IPR and Anti-Trust law interface, however, this may lead to additional concerns. Stimulating the use of Intellectual Property (IP) by many a government may give rise to anti-competitive behavior by firms (see classic studies by Bittlingmeier 1988; Mueller and Stilton 1969). The anti-competitive behavior may go unnoticed, however, as anti-trust law is rather specifically formulated. Which set of rules is to apply in particular cases when the two policies seem to conflict? Will the prevalence of any of the two over the other not be arbitrary? Players involved may be left in uncertainty – government failure due to policy conflict may be exacerbated by the arbitrary way in which the conflict may be addressed by government.

Since both too specific as well as too broadly formulated rules can be a source of government failure, a generic answer to the question of how specific government should set its rules cannot be given. Contingent on the practice to regulate, and depending on the speed with which changes occur, government should promulgate rules of differing specificity.

Conclusion

This brief paper endeavors to venture into the fields of (philosophy of) law and economics, starting from institutional economics. The paper looks at the role of government as a rules setting agent. This paper suggests that, in promulgating rules, there are four ways in which a government can fail. The rules a government imposes on society and the economy can be (1) too specific, (2) too broad, (3) arbitrary, or they can (4) conflict. When a government fails in such a way, the costs to economic actors is real. Such a perspective on government failure explicitly points to long-term effects of the possible breaches of trust involved that a richer understanding of the economy, government and the economic agents implies.

It would appear that arbitrary rule setting by government can be easily dismissed. Yet, to paraphrase Keynes, when the circumstances change, government needs to change its rules, and this may lead to a degree of arbitrariness.[10] In modern society policy conflict can be inevitable. Contingent on the practice to regulate, and depending on the speed with which changes occur, government should promulgate rules of differing specificity, being aware of the possibility of its own failure.

Notes

1. From: Article III (Statement of Principles) of the Constitution By-Laws and Resolutions of the American Economic Association, *Publications of the American Economic Association* 1, 1 (March 1886): 35-46.
2. Wolf (1997, 64 ff), however, perceives of non-market failure as circumstances that lead to a rise in the price of the services it offers. He thus seems to follow the logic of determining market failures — externalities, public goods, increasing returns, and possibly merit goods — that are also apparent by their effect on what would otherwise be a "natural" price.
3. The terms laws, rules, and standards will be used interchangeably and discussed as (formal) institutions (cf. Dolfsma 2004, 2009).
4. Such a perspective entails a much different view of the economic agent (Davis 2003), and of how economy and society relate, yet does not dismiss agency or neglect institutional change (Dolfsma 2009).
5. For the sake of clarity, the paper discusses government as if it is a homogenous entity that is capable of formulating a well-ordered preference function and to act upon it by formulating and enforcing rules.
6. A practice is ". . . any form of activity specified by a system of rules [institutions] which defines offices, roles, moves, penalties, defenses, and so on, and which gives activity its structure" (Rawls 1955, 3; see also Dolfsma 2009).
7. The author is particularly grateful to an anonymous reviewer for pointing this out.
8. The other is "sensitivity to the participation of the governed" (Boulding 1982, 423).
9. Another measure of anti-competitive behavior, the so-called Lerner index that simply tries to fathom directly the extent to which a firm in an industry is able to charge a price well in excess of marginal costs (cf. Boone 2000), may be problematic because it is too specific as well. Such a test would

pinpoint as undesirable a kind of behavior that might well be entirely fair, such as bundling or rebates (Anonymous 2009).

10. "When the facts change, I change my mind. What do you do, sir?" as quoted in Malabre (1994, 220).

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