

REGULATORY TAKINGS

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INTRODUCTION

The state can intervene in economic and social affairs in either (or both) of two ways: firstly, by direct intervention, that is to create authority for some person or persons to pursue given ends by employing some of society's resources. Alternatively, the state could regard ends as given and concern itself with designing, and implementing, institutions that will alter the costs and incentives with which individuals pursue their own ends. This article concerns interventions of the latter; especially the institutional implications of certain regulatory innovations (called regulatory takings) that affect property rights adversely.

Regulatory takings have become an increasingly important legal and economic issue in the USA, but also elsewhere, especially where compensation has been claimed. The South African literature (especially the economic literature) on this topic remains limited. The purpose of this paper is twofold: firstly, to stimulate the interest of economists in this topic, and secondly, to act as an early warning of an issue that is likely to rise in importance as government advances with its professed policy to “...*steer the economy* in the chosen direction towards knowledge-intensive, value-

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adding and employment-generating production” (Department of Trade and Industry, 2002: 28, our emphasis).

The first section introduces a set of criteria for evaluating the efficiency of regulatory innovations from the New Institutional Economics literature. This framework is used for discussing regulatory takings from an institutional perspective in section 2. The third section demonstrates the principle of regulatory taking with a recent domestic example, that is the government’s policy of beneficiation, with specific reference to the recent regulatory upheaval in the scrap metal industry, while the fourth section considers the proposed changes to the postal services act.

1. EFFICIENT INSTITUTIONS

Property rights are formally defined by North (1989: 661) as: “...the bundle of rights over the use and the income to be derived from property and over the ability to alienate as an asset or a source of income.” The institutions surrounding property rights are crucial, not only because it lowers transaction cost, but also because it defines who the actors will be in production and exchange, and also what incentives the decision maker will face (see for example, Alchian, 1987; Libecap, 1989; North, 1991).

The role assigned to property rights above requires not only that property be secured at a point in time, but also that the right will be durable. The economic value of property rights requires that the rights be enforced in fact, and the reasonable expectation that such

enforcement will continue over time. Since the resources spent in securing property rights are diverted from productive activity, uncertainty in property rights undermines the economy's efficiency. The definition, enforcement and protection of property rights, therefore have an important impact on the incentives for productive activity (de Alessi, 1990; Libecap, 1989).

At least historically, the transition to modern decentralised economies have required enforcement of property rights by an independent third party, that is the state². North (1981) located the rationality behind the state's role in property rights in the government's advantage in force, in his words: "...the essence of property rights is the right to exclude, and an organisation which has a comparative advantage in violence is in the position to specify and enforce property rights... here the key to understanding the state involves its potential use of violence to gain control over resources" (North, 1981: 21).

This power provides governments with the means of responding to market failures, through for instance regulation. Regulation alters the rules of the economic game and thereby the incentives faced by the decision makers. These incentives reflect the payoff embedded in the institutional constraints, and there is no reason to suspect that incentives themselves are necessarily efficient. Some government interventions may be rational if it enhances competition by regulating monopolistic

² North and Thomas (North and Thomas, 1973) provide an account of *The rise of the Western World* through the assignment of property rights.

behaviour. However, regulation may also hinder potential rivals, limit the scope for (or raise the cost of) contracting through prohibition or taxation, or by increasing the number and complexity of administrative procedures involved in contracting (Kasper and Streit, 1998; Weimer, 1997; World Bank, 2002).

Whereas the focus on institutions have opened the door for a rational consideration of more extensive government participation in the economy it has also undermined the sometimes uncritical belief in efficiency of governments. For example, the public choice literature has demonstrated the incentives for extensive “government failures” and this undermined the presumption that a centralised solution exists for every decentralised failure (Buchanan, 1986; 1999 [1979]). Further, the same power that allows government to define and maintain formal institutions is also sufficient to undermine those institutions over time. Credible policy requires a commitment mechanism for government, and the rule of law has long been accepted as an important part of the solution to the problem of credible policy in market economies (Hayek, 1973).

The rule of law prevents, or at least greatly hinders, the exercise of arbitrary power (including regulatory innovations) by the state which would undermine the credibility of many formal institutions³. This rule of law is

³ North (1991) mentions the logical possibility that government could establish credible institutions by simple exercise of “forbearance”, but adds that historically, this solution has not often been successful, and that it has more often been necessary to check the ruler’s power in order to ensure the credibility of formal institutions.

evidently a question of degree and reflects the balance that every society strikes between the costs of disorder and dictatorship with the combination of formal institutions in the institutional matrix⁴. Whatever the balance though, it is achieved by limiting government to protect private property (specifically) and a private sphere of influence (more generally) (Acemoglu, 2003).

The New Institutional Economics has focused attention on the efficiency of the institutional matrix and the prevalence and persistence of inefficient institutions. It has also helped economists to understand why economic prosperity has been so rare, and why economic policies cannot offer blueprints for development against different institutional backdrops⁵. Though there are no blueprints, efficient institutions do share some common characteristics, including (see for example, North, 1989): firstly their success in bringing stability and predictability in social interaction; secondly, cost efficiency; thirdly, incentive

⁴ In a recent article Djankov, Glaeser, La Porta and Shleifer (2003) represented the provide a graphical illustration of the trade-off between dictatorship and disorder on with a downward-sloping curve which they call the institutional possibility frontier. The content of the rule of law in any given society determines the position taken by that society on the institutional possibility frontier and represents the institutionalised choice between disorder and dictatorship. However, the trade-off emphasises that there are no unique solutions to the paradox of power, just as there are no unique institutional matrices for all economies and all times.

⁵ Mukand and Rodrik (2002) examine the question why economic performance is heterogeneous across the world if so much research has been done on economic convergence. They suggest that institutional solutions that perform well in one setting may be inappropriate in another setting because the supporting norms and complementary institutions may be absent.

compatibility; fourthly openness, and finally overall coherence. These criteria are used in sections three and four below to evaluate the uncompensated regulatory innovations in postal services and the scrap metal industry of recent vintage.

Stability and predictability

Institutions that facilitate predictable behaviour lower transaction costs in three ways: lowering information costs, increasing the mobility of capital and spreading risk (North, 1991). When behaviour is unconstrained by (formal and informal) rules, two parties to a transaction may have to expend significant resources in trustworthiness before exchange can take place. Formal institutions backed by the state render behaviour more predictable and diminishes the information requirements for a transaction.

Cost efficiency

Resources are required to define, monitor and enforce institutions. The benefits of an efficient institution (in terms of lowering the transaction costs) must, accordingly, exceed the implicit and explicit costs of that institution. The cost-benefit analysis is complicated by the interrelatedness of all the institutions in a country. Certain formal institutions may be efficient when combined with favourable informal institutions, but counterproductive for another informal institution (North, 1990). In this sense, efficient institutions must be evaluated against the background in which they were embedded (World Bank, 2002).

Incentive compatibility

Efficient institutions create incentives that encourage ‘good’ behaviour, i.e. behaviour consistent with the goal of the institution (World Bank, 2002). Institutions with built-in feedback mechanisms that penalise behaviour at variance with the rule, and reward consistent behaviour, are incentive compatible. Such institutions also gain credibility as the participants have an incentive to stick to the rules over time. In this way, incentive compatible institutions add to the predictability of behaviour, both by policymakers, firms and individuals.

Two further important aspects of incentive compatibility are the requirement for generality and certainty (or transparency) (Kasper and Streit, 1998). A reasonably efficient institution facilitates social interaction by providing rules and enforcement mechanisms, but not by biasing the outcome of social interaction. The offence of biased (or discriminatory) rules is not against justice alone, but also against efficiency, as it encourages rent seeking (Baumol, 1990). Likewise, if rules are not transparent, they cannot be incentive compatible, as it would be difficult to know when the rule has been broken. Incentive compatibility, therefore, requires general and transparent institutions supported by a feedback mechanism that encourages good behaviour.

Openness

A rational society embraces the critical method of trial and error; with its members proposing bold solutions to problems, but checking them against outcomes, and responding dynamically to the success or failure of the

experiments (Popper, 1966a; 1966b). Institutions, which are not open to criticism and change, are rarely efficient over time.

Government can arrest society's ability to respond rationally to change, by preventing its members from undertaking entrepreneurial experiments in the broadest sense, or by eliminating competition. Further, government can interfere with the dynamic adaptation of institutions by isolating the country from external influence and, more importantly, from external competition. Such isolation can take the form of trade restrictions, capital restrictions, or restrictions on the flow of people. That is to say, openness plays a crucial role in the ability of a society to adjust to change.

Overall coherence

A final requirement for efficient institutions is overall coherence of the institutions in a country. Institutions can undermine one another if unhappily paired. The lens of institutional evaluation must therefore not only reveal inefficiencies of particular institutions, but also consider the coherence of the institutions at a larger magnification.

Political economy considerations enter the analysis at this point, since the distribution of rights and power must not only be efficient in the manner described above, but also politically sustainable. In this regard James Buchanan (1975: 22) argued "... the whole institution of contract... rests on the possible shaky foundations of mutual agreement on individual rights, including agreement by an enforcing agent, a state, which must also limit its own

behaviour”.

2. REGULATORY TAKINGS

An efficient institutional matrix is never static; rather, it evolves over time as the institutional matrix shapes and is shaped by the historical development of society. The openness of efficient institutions implies scope for such evolutionary adaptation, and this holds for the regulatory functions of the state, too.

2.1 Regulatory risk and regulatory takings

However, such openness to change introduces a regulatory risk in the decisions of private agents though. Most private exchanges have a forward-looking component; either explicitly as in the case of an investment transaction, or implicitly in the assumption that the property rights on the exchanged goods are credible. A change in government regulation could, however, undermine the credibility of such property rights.

The definition – by North (1989) – of property rights used above had three central dimensions: firstly, property rights were about the use of property; secondly property rights were about a claim to the income from a property, and finally, property rights were about the ability to alienate the property in exchange. A change in government regulations could affect any or all three of these components and in that way lower the value of the property (see the detailed discussion with case histories in Fischel, 1995).

Regulations that affect the use, or possible exchange, of property are an exercise of the police power of the State. The police power of the State can be contrasted with the power of *eminent domain* according to which the state can "...*expropriate, acquire, condemn or take* private property, against just compensation, for public use..." (van der Walt, 1999: 279, emphasis in the original). What Van der Walt calls the police power of the State is called the role of the "protective state" in constitutional economics (Buchanan, 1975).

Compensation is usually paid when the State exercises its power of *eminent domain* over private property. However, the diminution of property due to the police power of the protective State is often uncompensated⁶. The legal term "regulatory taking" has emerged in response to the latter situation; that is, it expresses what van der Walt called: "...the argument that such an exercise of the regulatory policy power should be treated as a taking, which means that the owner should receive compensation⁷, even though the state does not expropriate the property in the narrow sense of acquiring or appropriating it for public use" (van der Walt, 1999: 277).

⁶ The contrast between compensated expropriation and uncompensated losses due to regulation is, for van der Walt (1999), the most important difference between the two cases when we are considering regulatory takings.

⁷ A regulatory takings case uses property rights (often implicitly or explicitly protected in the constitution) to appeal against a regulatory change. This legal strategy is distinct from alternative strategies such as appealing against the "fairness" of a regulatory change (van der Walt, 1999).

2.2 *Constitutional economics and regulatory takings*

From an economist's perspective a crucial difference between expropriation on the basis of *eminent domain* and a regulatory taking is that the former is a decision at the level of in-period politics⁸, whereas the latter is a decision at the constitutional level. Though this distinction was not relevant to Van der Walt's (1999) discussion, he identified two differences between expropriation and regulatory takings that are consistent with the distinction drawn above: firstly, expropriation acquires property in a comparable manner to an exchange transaction at the in-period level. Secondly, and more importantly, the expropriation is specific, whereas a regulatory change operates generally.

If this distinction is valid then economists can use welfare economics to contribute a further normative dimension to the question of regulatory takings to compliment the legal arguments based on constitutional property clauses as surveyed in van der Walt (1999). At the constitutional level the familiar Pareto criterion can be applied since the "constitutional attitude" of participants removes the debilitating effect of conflicting personal interests on the normative analysis.

⁸ In the liberal view of society there is an important distinction between two levels of political action: the constitutional level (where formal rules are constructed politically) and the level of in-period politics (where ends are pursued, given the institutional framework) (Hardin, 2001; Wagner, 1993).

The application of this normative criterion to the case of regulatory takings leads to the following question: Could the members of society agree unanimously to a regulatory change that reduces property rights in the manner described above? An adequate answer to this question must enjoy the requisite unanimity behind the veil of ignorance. The relevant considerations are: firstly, whether the objective of the new regulation is against anybody's interest? Secondly, whether the design of the new regulation harms anybody's interest?

In the case of a regulatory taking the answer is affirmative to both questions, and the Pareto-Wicksell criterion could be used to reject such regulations normatively. However, if the regulation is accompanied by a rule that requires compensation or regulatory takings then the answer to both questions could be negative. In other words, compensated regulatory innovations could in principle be used to move society from one efficient institutional setting to another, in a manner consistent with the Pareto-Wicksell criterion.

3. APPLICATION: BENEFICIATION AND SCRAP METAL

3.1 Introduction to the policy of beneficiation

The leading role of the ANC in the post-1994 Government of National Unity precipitated important changes in mining legislation ultimately leading to the Mineral and Petroleum Resources Development Act of 2002. The latter provided for the re-vesting of mineral rights in the State (Republic

of South Africa, 2002: Chapter 1, sections 2 and 3). Whereas these episodes raise interesting property rights questions in themselves, our focus is elsewhere in the Mineral and Petroleum Resources Development Act of 2002, where a new regulatory function for the State is created, that is: the promotion of beneficiation of minerals (Chapter 4, Section 26). The relevant clauses from section 26 are quoted below:

1. “The Minister [of Minerals and Energy] may initiate or prescribe to promote the beneficiation of minerals in the Republic.
2. If the Minister, acting on advice of the [Minerals and Mining Development] Board and after consultation with the Minister of Trade and Industry, finds that a particular mineral can be beneficiated economically in the Republic, the Minister may promote such beneficiation subject to such terms and conditions as the Minister may determine.
3. Any person who intends to beneficiate any mineral mined in the Republic outside the Republic may only do so after written notice and in consultation with the Minister” (Republic of South Africa, 2002).

The concept is meant to indicate the successive addition of value along the chain of production from the extraction of a mineral to the sale of the final good⁹. Be that as it may,

⁹ The White Paper on a Minerals and Mining Policy for South Africa suggested a definition for beneficiation: “... the successive processes of adding value to raw materials from their extraction through the sale of finished products to consumers...” (Department of Trade and Industry, 1998, section 1.5.1).

beneficiation is not a concept with distinct economic content which complicates an economic analysis of the policy. All production chains consist of successive processes that add value and it is both arbitrary and confusing to introduce a special concept for value added when the chain starts with locally mined minerals as opposed to any other raw material. What is more, this distinction could impact malevolently on the economy if it should be used to justify an increased scope for the regulatory state. Indeed, this danger has been recognised as a central issue in the discussion of beneficiation (for example, Dale, 1997), that is: whether a decentralised market facilitates beneficiation, or whether the state should intervene?

Further, if there is a role for the state in beneficiation, then the question as to the nature of that role arises: one type of intervention would be to help lower transaction costs, by contributing to macroeconomic stability, maintaining efficient infrastructure and so on. But the state could also reach beyond the market enabling functions and intervene directly with tax incentives for mines, subsidies for downstream industries, or even export control to prevent export parity pricing of minerals¹⁰.

On these important issues the Mineral and Petroleum Resources Development Act of 2002 seems to represent a step away from beneficiation in the market and the

¹⁰ Dale (1997) mentions that opposition existed to the idea of government interfering directly in the export market for minerals. This opposition was clear from the business sectors contribution to the White Paper on a Minerals and Mining Policy for South Africa (Department of Trade and Industry, 1998).

provision of efficient institutional support through the protective state, and a move towards defining a role for the productive state in mineral beneficiation. This progression is striking when section 26 of the Minerals and Petroleum Resources Development Act of 2002 is compared with section 1.5 (on mineral beneficiation) of the earlier White Paper on a Minerals and Mining Policy for South Africa (Department of Trade and Industry, 1998).

Whereas the earlier White Paper explicitly committed government to allowing “prices for minerals and processed mineral products ...[to] be determined by the market” (Department of Trade and Industry, 1998: section 1.5.4 ix), section 26(3) of the Mineral and Petroleum Resources Development Act establishes ministerial discretion over the ability to export minerals. Through this new authority the Minister gains the power to lower the price of any mineral domestically, by withholding export permission.

The Department of Trade and Industry has since moved further towards regulatory intervention as is clear from its more recent Integrated Manufacturing Strategy (Department of Trade and Industry, 2002). In addition to providing a stable environment and in addition to supply side measures to encourage benefaction, the DTI now regards “competitive input prices” as falling within the ambit of industrial policy.

This expanding role for the government seems to originate in an unfortunate application of Michael Porter’s (1990) now discredited thesis of the competitiveness of nations by the DTI. Accordingly, the DTI mistakenly argues that

“...most governments around the world are currently playing leading roles to advance the competitiveness of their national economies in the global environment” (Department of Trade and Industry, 2002: 25). From this, a simple syllogism leads to the DTI’s conclusion that it should act to ensure competitive input prices.

3.2 The DTI’s recent attempt to increase regulations on scrap metal exports

It is at this point, where government interferes with prices of raw materials for the sake of beneficiation that the possibility of regulatory takings arises. The DTI’s recent attempt to lower the domestic price of scrap metal is a practical example of the DTI’s intentions with this policy of beneficiation, and it is also an example of a regulatory taking.

Scrap metal is a tradable and fairly homogenous commodity with the result that an international (dollar) price is found for each grade and each metal type on the large international metal exchanges. The local price is then determined as the domestic currency equivalent of the international price (i.e. export parity pricing).

The business press in South Africa has, since the middle of 2001, reported on sharply rising domestic prices for scrap metal (Lourens, 2002a; 2003b), and these price fluctuations have become the proximate cause for the government’s new policy on export permits for scrap metal. The Business Day first reported on this issue in August 2002

where Lourens (2002a) mentioned that the South African Institute of Foundrymen had approached the DTI for regulatory assistance.

According to Lourens (2002a) the SA Institute of Foundrymen lobbied the DTI either to impose an export tariff of at least 25% on scrap metal or to assist the industry with tax relief. This was soon followed by a suggestion for a 30% export tariff on aluminium scrap by the Aluminium Federation of South Africa (Lourens, 2002b) in almost a textbook example of Stigler's economic theory of regulation¹¹. It is important to observe that none of the articles mentioned any price distortions; it was clearly understood that the fluctuations of the Rand's exchange rate had caused the volatility in the scrap metal prices¹² (for example, Lourens, 2003a).

¹¹ Stigler's hypothesis is that regulation can be explained as political transactions by rent-seeking firms (Stigler, 1971).

¹² Normally the case for government intervention is strengthened where there are market distortions (for example monopolistic market structures or market failures due to asymmetric information). But no evidence of such distortion have been presented here.

This is not to say that fluctuating scrap metal prices do not affect the planning and profitability of firms in metal consuming industries. Fluctuations in input prices affect firms in all industries, but there are also mechanisms for lowering the firm's exposure to this risk. For example, scrap metal consumers can hedge against the risk of fluctuating dollar prices by using term contracts and various derivative instruments available on the large metal exchanges. Likewise, firms can hedge against currency fluctuations by buying forward cover. Unexpected fluctuations in scrap metal costs for metal consuming firms reflect a failure in their procurement policies, not a distortion in the scrap metal market.

On the 6th of June 2003 the Business Day reported that Trade and Industry Minister Alec Erwin had signed a policy directive that, in the words of Trade and Investment South Africa (TISA) metals director Gerhard Nicolaus, aimed to "...place some restrictions on the export of scrap metal" (quoted in: Lourens, 2003b). The DTI persisted with this policy initiative despite an outcry from the scrap metal industry and in a subsequent statement the DTI justified the policy initiative with reference to the policy of beneficiation, in their words: "The objective of the new policy are to maximise value addition to scrap metal, which is seen as a national resource¹³" (Lourens, 2003c).

This policy initiative by the DTI is carried out in terms of the "International Trade Administration Act of 2002." Prior to this policy initiative the export of both ferrous and non-ferrous scrap metal was subject to quantitative control under section 2 of the "Import and Export Control Act," but the new policy represents a substantive tightening of those controls, including the following measures:

1. "The temporary prohibition of export permits for specific classes of scrap at times of shortages in the

¹³ This is a spurious argument. Scrap metal is working capital in the scrap metal industry, and is acquired from industries where scrap metal is a waste product in the normal course of business. There is no more basis for classifying scrap metal as a national resource than there is to apply that label to any other private property used as working capital.

- supply¹⁴ of these classes of scrap to the domestic industry”
2. Scrap metal must be held in stock before application for an export permit¹⁵
 3. A committee (including representative of metal consuming industries¹⁶) will decide on the granting of export permits.

In the pre-amble to these amendments the DTI mentions that the new policy responds to “various distortions in the domestic and international scrap markets,” though the nature of and evidence for these distortions are never presented. Further in a statement on the new policy, the DTI states that the objectives of the new policy are to: “maximise value addition to scrap metal which is seen as a national source,” that is: the new policy is an extension of the beneficiation policy.

The DTI expanded on this claim that scrap metal would be a “national source” by mentioning the role of scrap metal

¹⁴ This test based on “shortages of supply” or “local demand” is quite arbitrary, as these concepts are conditional on a market price. There is no quantity such as the shortage of scrap metal *per se* in South Africa. Accordingly, the DTI’s policy test is indeterminate: the test is based on a judgement that depends on a given price. But the judgement will, in turn, change the price and so require a new ruling in an open-ended process. A policy which creates open-ended decision rules, as opposed to known and certain rules, fails the test of predictability and stability for efficient institutions.

¹⁵ This is a disastrous regulation for a commodity such as scrap metal with a low value-to-weight ratio with accompanying high storage costs.

¹⁶ Representatives from these industries have a clear incentive to obstruct export permits for scrap metal dealers.

as an input in various industries, and, so the DTI claims, it is a “factor in determining investment, exports and employment levels.” Presumably the DTI employed some comparative static analysis which raised the DTI’s expectation that diverting a part of the exported supply if scrap metal would raise the quantity of scrap metal supplied domestically at every price, and other things equal, lower the domestic market price of scrap metal.

This new policy lowers the tradability of the working capital of the scrap metal firms and, by extension, the net worth of those firms. The substantial erosion of the net worth of scrap metal firms (especially those on the coast that had invested in plants aimed at the export market) is an example of a regulatory taking and since the DTI has offered no compensation for the scrap metal firms the policy fails both normative tests proposed above: the legal test based on the constitutional property clause and the economic test based on the Pareto-Wicksell criterion.

Additionally, the new policy contravenes the criteria for efficient institutions listed in section 1 on the following counts: Firstly, it reduces the predictability of transactions, by undermining the credibility of property rights not only in the scrap metal industry, but more broadly in the economy.

The mismatched incentives on the advisory committee compound the likely inefficiency of the new policy on scrap metal exports. Further, this policy initiative creates a pernicious incentive effect by encouraging rent-seeking. The DTI is attempting to achieve costlessly (through

regulation) what would otherwise have required government resources, an intuitive which could be called “fiscal illusion”¹⁷. The possibility of uncompensated regulatory takings creates an incentive for politicians, their constituencies and private decision makers to further their particular ends through the imposition of regulations.

For a new regulation to be cost efficient the expected benefits must outweigh the costs. There are many implicit costs to a new regulation, especially when it undermines decentralised decision making. The expected benefits of the policy are often considerably outweighed by the indirect costs, as per the Bush administrations recent steel subsidies (Francois and Boughman, 2003). Whereas the indirect costs are hard to estimate, the direct costs in terms of regulatory takings are less so, and the new regulation falls short on efficiency if these direct costs are uncompensated.

This regulatory taking also fails the test of openness: the openness of the entire decentralised system is compromised when ends are pursued through the political process rather than through the market. The political process does not have the same efficient feedback effect which supports the method of trial and error in the market. Finally, this uncompensated taking undermines the

¹⁷ Buchanan’s (1998 [1964]) and Vickrey’s (1961) use of the term “fiscal illusion” referred to the failure by private decision makers to internalise the implications of government debt and expenditure in their consumption and investment decisions. A symmetrical illusion could be defined for cases where government fails to internalise the costs it imposes on the economy via uncompensated regulations.

government's commitment to credible property rights, to trade liberalisation, (more generally) to a decentralised economy, and accordingly compromised the overall coherence of the local institutional matrix.

In summary: the government's policy of beneficiation creates scope for the DTI to implement regulations that lower the net worth of firms in certain industries. From an economist's perspective it would be preferable if the DTI eliminated policies which affected property rights adversely. Failing that, however, and given the risks posed by the beneficiation policy, the DTI should expect litigation for compensation for regulatory takings as such cases may find legal support from the constitution in South Africa (based on international precedent) according to Van der Walt (1999).

3. CONCLUSION

The risk of regulatory takings rises with increased involvement of the State in the economy. In this paper we argued that good economic reasons (both positive and normative) could be given for compensation for regulatory takings. This issue is likely to become increasingly important in South Africa given the Government's recent Integrated Manufacturing Strategy (IMS) as a key contribution to the Microeconomic Reform Strategy that is intended to complement the considerable success of GEAR at the macroeconomic level. Nor is the risk entirely abstract as was shown with a recent example of regulatory takings by the South African government.

REFERENCES

- ACEMOGLU, D. (2003): "Root Causes. A Historical Approach to Assessing the Role of Institutions in Economic Development," *Finance and Development*, 40, 27-30.
- ALCHIAN, A. A. (1987): "Property Rights," in *The New Palgrave: The Invisible Hand*, ed. by J. Eatwell, M. Milgate, and P. Newman. London: The Macmillan Press limited.
- BAUMOL, W. J. (1990): "Entrepreneurship: Productive, Unproductive and Destructive," *Journal of Political Economy*, 89, 893-921.
- BUCHANAN, J. M. (1975): *The Limits of Liberty. Between Anarchy and Leviathan*. Chicago: Chicago University Press.
- (1986): *Liberty, Market and the State: Political Economy in the 1980s*. Brighton: Wheatsheaf Books Ltd.
- (1998 [1964]): "Public Debt, Cost Theory, and the Fiscal Illusion," in *The Collected Works of James M. Buchanan. Volume I. The Logical Foundations of Constitutional Liberty*, ed. by J. M. Buchanan. Indianapolis: Liberty Fund.
- (1999 [1979]): "Politics without Romance," in *The Collected Works of James Buchanan. Volume I. The Logical Foundations of Constitutional Liberty*, ed. by J. M. Buchanan. Indianapolis: Liberty Fund.
- DALE, M. O. (1997): "South Africa: Development of a New

- Mineral Policy," *Resources Policy*, 23, 15-25.
- DE ALESSI, L. (1990): "Development of the Property Rights Approach," *Journal of Institutional and Theoretical Economics*, 146, 6-11, 19-23.
- DEPARTMENT OF TRADE AND INDUSTRY (1998): "White Paper: A Minerals and Mining Policy for South Africa," Pretoria: Department of Trade and Industry.
- (2002): "Accelerating Growth and Development: The Contribution of an Integrated Manufacturing Strategy," Pretoria: Department of Trade and Industry.
- DJANKOV, S., E. L. GLAESER, R. LA PORTA, and A. SHLEIFER (2003): "The New Comparative Economics," Boston, Ma.: NBER working paper, 9608.
- FISCHEL, W. A. (1995): *Regulatory Takings: Law, Economics and Politics*. Cambridge, Ma.: Harvard University Press.
- FRANCOIS, J. F., and L. M. BOUGHMAN (2003): "Cost to American Consuming Industries of Steel Quotas and Taxes," Washington: The Citac Foundation. Available online: http://www.tradepartnership.com/pdf/CITAC_steel.pdf.
- HARDIN, R. (2001): "Law and Social Order," *Philosophical Perspectives*, 15, 61-85.
- HAYEK, F. A. (1973): *Law, Legislation and Liberty. Volume 1: Rules and Order*. London: Routledge.
- KASPER, W., and M. E. STREIT (1998): *Institutional Economics:*

- Social Order and Public Policy*. Cheltenham: Edward Elgar.
- LIBECAP, G. D. (1989): *Contracting for Property Rights*. Cambridge: Cambridge University Press.
- LOURENS, C. (2002a): "Foundry Firms Hurt by Scrap Metal Squeeze," Johannesburg, Business Day, 12 August, 2002.
- (2002b): "Industry to Take Steps to Conserve Aluminium Scrap," Johannesburg, Business Day, 13 August, 2002.
- (2003a): "Metal Merchants Rush to Export Their Scrap," Johannesburg, Business Day, 27 June, 2003.
- (2003b): "New Policy to Help Regulate Scrap Metal Exports," Johannesburg, Business Day, 13 August, 2003.
- (2003c): "State to Retain Scrap Metals Policy," Johannesburg, Business Day, 18 June, 2003.
- MUKAND, S., and D. RODRIK (2002): "In Search of the Holy Grail: Policy Convergence, Experimentation, and Economic Performance," Boston, Ma.: NBER working paper 9134.
- NORTH, D. C. (1981): *Structure and Change in Economic History*. New York: W.W. Norton & Company.
- (1989): "A Transaction Cost Approach to the Historical Development of Politics and Economies," *Journal of Institutional and Theoretical Economics*, 145, 661-668.
- (1990): *Institutions, Institutional Change, and Economic Performance*.

- Cambridge, Ma.: Harvard University Press.
- (1991): "Institutions," *Journal of Economic Perspectives*, 5, 97-112.
- NORTH, D. C., and R. P. THOMAS (1973): *The Rise of the Western World*. New York: Cambridge University Press.
- POPPER, K. R. (1966a): *The Open Society and Its Enemies. Volume 1: The Spell of Plato*. Princeton, NJ.: Princeton University Press.
- (1966b): *The Open Society and Its Enemies. Volume 2. The High Tide of Prophecy: Hegel Marx and the Aftermath*. Princeton, NJ.: Princeton University Press.
- PORTER, M. E. (1990): *The Competitive Advantage of Nations*. London: Macmillan.
- REPUBLIC OF SOUTH AFRICA (2002): "Mineral and Petroleum Resources Development Act, Act 28 of 2002."
- STIGLER, G. J. (1971): "The Theory of Economic Regulation," *Bell Journal of Economics and Management Sciences*, 2, 1-21.
- VAN DER WALT, A. J. (1999): "Compensation for Excessive or Unfair Regulation: A Comparative Overview of Constitutional Practise Relating to Regulatory Takings," *South African Public Law*, 14, 273-331.
- VICKREY, W. (1961): "The Burden of the Public Debt: Comment," *American Economic Review*, 51, 132-137.
- WAGNER, R. E. (1993): "Parchment, Guns and Constitutional Order," in *Property Rights and the Limits of Democracy*, ed. by C. K. Rowley. Aldershot: Edward Elgar Publishing

Limited.

WEIMER, D. L. (1997): "The Political Economy of Property Rights," in *The Political Economy of Property Rights: Institutional Change and Credibility in the Reform of Centrally Planned Economies*, ed. by D. L. Weimer. Cambridge: Cambridge University Press.

WORLD BANK (2002): *World Development Report 2002. Building Institutions for Markets*. Oxford: Oxford University Press.