Best Practice Regulation Setting Targets and Detecting Vulnerabilities

How good is our regulation? Are there opportunities for improvement through either materially rethinking how we regulate or a process of continuous improvement? Are there latent weaknesses in our regimes which may result in, for example, another 'leaky building' situation?

One of the problems we have in answering these questions is the lack of a shared understanding of the attributes of goodquality regulation. Arguably, a shared understanding would help mobilise and co-ordinate dispersed knowledge of how the law is working in practice, and give us a better appreciation at any point in time of the health of our regulatory regimes. This article identifies a set of best practice regulatory principles and associated performance indicators and, while recognising the limitations of hindsight, explores the possibility that applying these principles would have given us early warning of the weaknesses in the 1991 building control regime.

Regulatory regimes as experiments

We often have an idealised or optimistic view of regulation based on what we believe it will deliver by way of outcomes, be they economic, social or both. It is generally articulated, at least by the proponents of a particular regulatory approach, at the time that approach is being developed and implemented. However, the reality can fall short of the ideal, so much so on some occasions that the regulatory approach is considered to have failed and a new ideal is articulated. This pattern of optimism followed by disappointment followed by optimism can be observed over time and across different regulatory areas. It can also be observed in pendulum swings between different regulatory approaches, which often take the form of slogans – such as 'light-handed' versus 'heavy-handed', 'prescriptive' versus 'principles' or 'more' versus 'less' government.

But excessive optimism or pessimism, pendulum swings and slogans are not necessarily helpful to rational policy making. It would be better to reflect the reality that for the most part regulatory regimes are experiments: in other words, when a new regime is put in place we do not know in advance precisely how it will work in practice. It may well be that the assumptions and evidence on which the regime is based are robust, based on generally acceptable standards for the quality of policy advice. The regime might also work in the intended manner in most circumstance and most of the time. However, we must also acknowledge that the environment in which regulation operates, and that it is intended to influence, is highly complex and often unstable. For example, population groups are heterogeneous and what might work for one group may not for another. The performance of regulators themselves is influenced by a range of incentives and underlying capabilities (see Bardach and

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Kagan, 1982 for an analysis of factors which affect regulator performance). Over time societal expectations, technologies and markets all change, which means that regimes which may have worked at one point in time might not at another.

Anticipating all the circumstances that a regulatory regime is likely to encounter at any point in time, and over time, and predicting how the regime will work in those circumstances is beyond human capability. If we do accept, nevertheless, the proposition that regulatory regimes are experiments, and novel regimes even more so, then constant monitoring and evaluation over time are critical. How should this be done? I would like to propose three elements of a strategy.

The first is that there is a shared agreement within the regulatory and policy communities and with key stakeholders on the generic attributes of good-quality regulation. This goes further than simply agreeing on regulatory objectives and the means of achieving them. Within an experimental frame our interest is in those attributes that contribute to the robustness of the regime and to its durability. Secondly, there is timely feedback on how regulatory regimes are performing in practice, relative to these attributes. Thirdly, there is the capacity to evaluate the feedback - to sort the wheat from the chaff - and a willingness to act when the situation requires it, based on empirical evidence and sound judgement.

Within an experimental frame one aim is to improve regulatory regimes through a process of continuous improvement. We have also learnt from experience that an equally important aim is to minimise the risk of regulatory failure, with its associated social and economic costs.

Attributes of best practice regulation

What are the attributes of good-quality regulation? Drawing on a range of sources, including OECD and APEC documents, and guidelines and directives produced by many governments around the world,¹ the Treasury has codified a set of attributes in the form of principles and performance indicators (as set out Table 1).

The second of these attributes is *proportionality*, which is expressed as the

Table 1: Best practice regulation principles and indicators

The principles have been drawn from Treasury experience and cross-checked against OECD, APEC and World Bank principles, and principles that have been adopted in comparable jurisdictions such as the United Kingdom, Australia and the United States, and against earlier New Zealand principles, in particular the Code of Good Regulatory Practice.

| Attribute | Principle | Indicators |
|-----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Growth- supporting | Economic objectives are given an appropriate weighting relative to other specified objectives | Identifying and justifying trade-offs between economic and other objectives is an explicit part of decision making The need for firms to take long-term investment decisions is taken into account in regulatory regimes where appropriate Open and competitive domestic and international markets an explicit objective |
| Proportional | The burden of rules and their enforcement should be proportionate to the benefits that are expected to result | A risk-based, cost-benefit framework is in place for both rule-making and enforcement There is an empirical foundation to regulatory judgements |
| Flexible and durable | Regulated entities should have scope to adopt least-cost and innovative approaches to meeting legal obligations The regulatory system has the capacity to evolve to respond to changing circumstances | The underlying regulatory approach is principles- or performance-based, and policies and procedures are in place to ensure that it is administered flexibly Non-regulatory measures, including self- regulation, are used wherever possible Feedback systems are in place to assess how the law is working in practice Decisions are reassessed at regular intervals and when new information comes to hand The regulatory regime is up to date with technological and market change, and evolving societal expectations |
| Certain and predictable | Regulated entities have certainty as to their legal obligations, and the regulatory regime provides predictability over time | Safe harbours are available and/or regulated entities have access to authoritative advice Decision-making criteria are clear and provide certainty of process The need for firms to take long-term investment decisions is taken into account in regulatory regimes where appropriate There is consistency between multiple regulatory regimes that affect single-regulated entities where appropriate |
| Transparent and accountable | Rules-development, implementation and enforcement should be transparent | 1. Regulators must be able to justify decisions and be subject to public scrutiny |
| Capable regulators | The regulator has the people and systems necessary to operate an efficient and effective regulatory regime | Capacity assessments are undertaken at regular intervals and subject to independent input and/or review |

principle that the burden of rules and their enforcement should be proportionate to the benefits that are expected to result. Another way to describe this principle is that the emphasis is placed on a riskbased, cost-benefit regulatory framework and risk-based decision making by regulators.

Risk-based regulation requires consideration of the likelihood and consequences of an adverse event and the costs of mitigating the risk. It assumes that risk cannot be taken out of people's lives, and hence it sets a threshold for state intervention. Underpinning riskbased regulation is both evidence and judgement. In many situations the

competent and those who are expert, the latter being able to make accurate intuitive judgements in complex decision-making contexts where there is a high level of uncertainty (useful sources on expertise are Ross, 2006 and Ericsson et al., 2006). Experts are likely to have a minimum of ten years' experience, leading to the 'tenyear rule', but experience is only one of the conditions. K. Anders Ericsson of Florida State University has concluded that 'what matters is not experience per se, but "effortful study", which entails continually taking challenges that lie just beyond one's competence' (Ross, 2006). It is highly risky to implement a regime which requires expertise without an

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evidence we need is science-based, and this requires us to have particular regard to the linkages between the regulatory and science systems. But information is also required on the community's tolerance for risk, having regard to the cost of mitigating the risk (there is a rich risk literature (for example, see Bryner, 1994; Kraft and Vig, 1988; Vogel, 1986; Brown, 1987; Breyer and Heyvaert, 2000; Slovic, 1987; Sapolsky, 1986; HM Treasury, 1996)).

Judgement is necessary because evidence is often incomplete. The exercise of judgement is a cognitive process and in designing regimes that rely on judgement we must have regard to the characteristics of those who are to exercise it. The literature on expertise and wisdom provides signposts to what those characteristics are. For example, it makes a clear distinction between those who are assurance that the right sort of experts are involved in decision making.

The fourth of the attributes is certainty. This is the principle that the regulatory system should be predictable so as to provide certainty to regulated entities, and be consistent with other policies. Regulated entities require certainty because this reduces the costs and risks associated with compliance, not just now but into the future. Small and medium-sized enterprises are often singled out as those which particularly value certainty 'here and now'. The idea that regulatory regimes should provide certainty over time is also of particular importance to some regulated entities: for example, firms which have to make long-term investment decisions, either in innovation, markets or infrastructure, where the cost is upfront but the pay-off will be influenced by regulatory settings

or decision making at a future time. Regulators also value certainty as it makes clear what they have to enforce, and so the job of enforcement easier.

Indicators of a regulatory system which provides certainty are the availability of safe harbours and access to authoritative advice; decision-making criteria that is clear and provides certainty of process; and evidence that the need for firms to take long-term investment decisions is taken into account in the design of regulatory regimes.

The third attribute is *flexibility*. This is reflected in the principle that regulated entities should have scope to adopt least-cost and innovative approaches to meeting legal obligations. Indicators of a regulatory regime that is flexible are that the underlying regulatory approach is principles- or performance-based and policies and procedures are in place to ensure that it is administered flexibly, and that non-regulatory measures, including are used self-regulation, wherever possible.

There can be tension between the attributes of certainty and flexibility. Providing for safe harbours such as deemed-to-comply standards within a principles- or performance-based regime is intended to resolve this tension, but many would acknowledge that configuring a regulatory regime such that both attributes are optimally reflected is a challenge.

Closely associated with flexibility is *durability*: the principle that the regulatory system has the capacity to evolve to respond to new information and changing circumstances. Flexibility and durability can be two sides of the same coin. That is, a regime that is flexible is more likely to be durable, so long as the conditions are in place for the regime to 'learn'. Indicators of durability are that there are feedback systems in place to assess how the law is working in practice; decisions are reassessed at regular intervals and when new information comes to hand; and the regulatory regime is up to date with technological change. Adaptive efficiency and double-loop learning are amongst the techniques or systems that facilitate such learning (see

Driesen, 2004; Oregon State University, 2002; Smith, 2001).

The fifth of the attributes is jointly *transparency* and *accountability*. These are reflected in the principle that rulesdevelopment and enforcement should be transparent. In essence, regulators must be able to justify decisions and be subject to public scrutiny. The transparency and accountability principle includes nondiscrimination, provision for appeals and sound legal basis for decisions.

The sixth attribute is capable regulators: specifically, that the regulator has the people and systems necessary to operate an efficient and effective regulatory regime. A key indicator of a regime that provides an assurance of capability is that capability assessments are undertaken at regular intervals and subject to independent input and/or review.

There is a seventh attribute which is associated with a particular outcome, and hence to some extent differs from the previous six in so far as they could be seen as intermediate objectives. This is growth-supporting, the principle being that economic objectives are given an appropriate weighting relative to other specified objectives. These other objectives could be related to health, safety or environmental protection or consumer and investor protection. Economic objectives include impacts on competition, innovation, exports and compliance costs, and trade and investment openness. An indicator of a regulatory regime that embodies this attribute is that the identification and justification of trade-offs between economic and other objectives are an explicit part of decision making. It does not assume that growth should be given prominence over other important outcomes; rather it responds to a belief that growth as an objective is not always given due weight.

Best practice regulatory principles have value within an overall regulatory quality management system which treats regulatory regimes as experiments that require both ongoing monitoring and evaluation and consequential adjustments to ensure that the regimes continue to be effective and efficient. Such principles are a codification of knowledge that exists, but is not necessarily shared by those who have responsibility for monitoring and evaluating regimes and those who have responsibility for the delivery of regulatory outcomes. They are also not necessarily shared by those who may have knowledge of how regulatory regimes are working on the ground. Shared principles can have a normative and persuasive effect, but also act as benchmarks against which the many actors in the system – those who monitor and evaluate, regulatory policy beforehand, and the likelihood of ultimate failure lessened?

Novel regulatory regimes are inherently more experimental than established regimes, and the 1991 building control regime was particularly novel. Not only did it embody a novel regulatory approach – specifically, performance-based regulation – but it was also a uniquely pure application of a performance-based philosophy (May, 2003), compared with building control regimes in other countries which have retained quite a prescriptive character.

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agencies and regulators, and stakeholders – hold each other to account.

Can monitoring against best practice principles help reveal latent weaknesses in regulatory regimes?

Within an experimental frame, continuous improvement, or a drive to reach the regulatory best practice frontier, is an important objective. Equally important is the early detection of the potential for regulatory failure. Through a retrospective application of the best practice regulatory principles to the 1991 building control regime, this section explores the possibility that proactive monitoring against them would have revealed latent weaknesses in the regime.

Regulatory failure results when a regulatory regime does not deliver what society reasonably expects it to deliver. The costs can be very significant. The failure of the building control regime which was introduced by the Building Act, 1991 affects at least 42,000 homes at a cost of at least \$11.3 billion (PricewaterhouseCoopers, 2009). Could latent weaknesses in the 1991 building control regime have been identified

What makes performance-based regulation novel? I will highlight three features. The first is associated with its underlying regulatory philosophy. Performance-based regulation sets goals and is deliberately not overly prescriptive about how to achieve them. These goals can have varying degrees of specificity: in some cases they can be quite general, such as the need to achieve adequate levels of safety, but with no definition of what 'adequate' means. Therefore, a defining feature of performance-based regulation is that it is more reliant on expert judgment, at least relative to a prescriptive regime based on standards refined over time through a process of trial and error (Mumford, 2011, p.111).

Secondly, the case for performancebased regulation is often made on the basis that it will facilitate innovation, often technological innovation: for example, a new building technology. Innovation typically involves some degree of risktaking, and it is a reasonable conclusion that performance-based regulation is in many cases a policy experiment to facilitate technological experimentation. This was evident in the leaky-building example. The combination of monolithic cladding, untreated timber, complex building designs, adverse weather conditions, and a lack of sensitivity by building practitioners to the vulnerabilities of this combination resulted in a failed technological innovation, to such an extent that it resulted in the failure of the innovative regulatory regime.

The third feature is that performancebased regulation is often adopted as a reaction to prescriptive regulation revealed a regime that was vulnerable to failure.

By way of background, the 1991 Building Act put in place a performancebased building framework. The purpose of the act was to ensure that buildings were safe and healthy for those who used them, but an important objective of the new regime was to encourage innovation in the building and construction industry (Mumford, 2011, p.11). The way the regime reflected this objective was through

The passage of the 1991 Building Act presaged a new regulatory environment which shifted the responsibility for decision making from standards committees to territorial authorities, building certifiers, designers and builders and their advisrers.

(Mumford, 2011, pp.8-9). Prescriptive regulatory regimes are often highly pathdependent and deeply embedded. Such regimes are therefore familiar to those who administer them, and to those who are required to comply. They may not like the regime; they may find it heavy handed, costly and inflexible. But they are conditioned through experience to working with it and have developed relevant behaviours and capabilities.

The shift from prescriptive to performance-based regulation therefore is a material shift as it inevitably requires new capabilities and behaviours. These are required across the spectrum, from regulators to regulated entities, expert bodies, and consumers or investors. New institutions may also be required, to collect, assess and diffuse information and identify and reinforce appropriate behaviours. It should be noted that the challenges of regime change are not unique to performance-based regulation; but they are likely to arise in most if not all regime-change contexts.

It is argued here that monitoring of the 1991 building control regime against the best practice principles may have the performance-based building code and provision for both alternative and acceptable solutions. Acceptable solutions were the old prescriptive standards, and compliance with an acceptable solution was deemed compliance with the performance requirements in the building code. Alternative solutions were one-off designs, and territorial authorities were required to determine whether, on reasonable grounds, the designs met the sometimes quite general code requirements. In making their decisions, the territorial authorities could and often did draw on expert advice, and in situations of doubt or dispute they could seek a determination from the Building Industry Authority.

Buildings that leaked resulting in damage were not compliant with the performance requirements of the building code. In effect, the judgement exercised by territorial authorities when giving consent to monolithic-clad building designs, and inspecting such buildings in the course of construction, was wrong. However, the 1991 regime did not fail because some buildings leaked. The regime failed because a very large number of buildings leaked causing significant damage, economic cost and social hardship over an extended period of time.

Had we assessed the building control regime against the best regulatory practice principles in, say, the mid-1990s, we probably would have said that the growth-supporting objective was reflected in the regime. Innovation, and for that matter compliance-cost reduction, were important considerations in the administration of the regime. We would similarly have been comfortable, I expect, with the flexibility the regime provided through the alternative solutions route. We may have been comfortable with the certainty that was provided by deemedto-comply acceptable solutions, but could have picked up a concern that the lack of detail in consent applications led to uncertainty about whether plans and specifications did in fact meet the performance requirements in the Building Code (Government Administration Committee, 2003, p.31). It is doubtful that we would have identified significant issues in relation to transparency and accountability in the mid-1990s, although accountability issues were highlighted in the various analyses of the leaky building crisis (May, 2003, p.397).

We may have been less sanguine about proportionality. There was apparently no formal risk assessment of new building technologies, such as monolithic cladding, having regard to the state of the building sciences, information being volunteered by industry participants and drawn from overseas experience, the objectives of the Building Act and the performance requirements of the Building Code. To the extent that risk-based judgements were made, they were permissive rather than precautionary (Mumford, 2011, p.83). Another way of saying this is that the regulators put a lot of weight on the innovation objective and less weight on acquiring and weighing evidence on the efficacy of innovative building technologies.

We would also most likely have been concerned about durability, as it has been couched in the Treasury principles and performance indicators with their emphasis on the need for robust feedback Table 2: Retrospective assessment of 1991 building control regime against best practice principles

| Growth- supporting | Proportional | Flexible | Durable | Certain and predictable | Transparent and accountable | Capable regulators |
|-----------------------|--------------|----------|---------|-------------------------------|-----------------------------------|-----------------------|
| | | | | | | |

Grey = strong indication of concern; dark blue = possible area of concern; Light blue = no significant concerns

systems to monitor and evaluate how the law is working in practice. In the context of the building control regime, the assessment and associated feedback loops would have been against the primary purpose of the act, which was health and safety, and against the key objective of innovation in the building and construction industry. It should have taken into account how novel building technologies were performing in the field given uncertainties about how they would perform in all the circumstances of their use. It is clear in the building code case that there was not a robust monitoring and evaluation framework. As a consequence, important knowledge about the performance of new building technologies, and the implications of this for the consenting and inspection process, were not revealed and assimilated into the building control system in a timely manner (Mumford, 2011, p.83).

Another of the principles we would have been concerned about is capability. The passage of the 1991 Building Act presaged a new regulatory environment which shifted the responsibility for decision making from standards committees, who, for the most part, make changes at the margin to existing building standards on the basis of a consensus of technical experts and community representatives, to territorial authorities, building certifiers, designers and builders and their advisers. This was a material shift, given that the decisions that needed to be made required significant judgement, not just in relation to technical matters but also on the community's risk preferences. It demanded a higher level of technical expertise, as well as input from those in the community who were able to contribute to the judgements on what is an acceptable risk.

In the final analysis, it is clear that those who were required to make such judgements lacked the expertise to do so. This did not appear to have been recognised as an implementation issue for the regime, or, if it was recognised, not acted upon (Mumford, 2011, p.83).

Conclusion

I have briefly outlined two propositions. The first is that regulatory regimes are experiments, and novel regulatory regimes are particularly experimental. The second is that it is possible to codify a generic set of best practice principles and performance indicators that can be applied at the regime level as benchmarks for design and administration, and at the systems level to gauge how well policy experiments are working.

I have attempted to demonstrate, by reference to the failure of the 1991 building control regime, how treating the regime as an experiment and assessing it against the principles, having regard to the particular vulnerabilities of performance-based regulation as a class of regulation and the challenges of regime change, may have revealed weaknesses within the regime which increased the risk of failure.

Performance-based regulation is a particular class of regulation that reflects certain objectives and similar design features, and has certain vulnerabilities associated with these. A shared objective is a regulatory regime which facilitates innovation, and this is done through a regulatory design which values flexibility. A key vulnerability arises when innovation involves risk-taking; flexibility requires expert judgement, as the efficacy of such a regime depends on having the right people making the decisions, and robust feedback loops and a capacity to respond appropriately to that feedback. It is an increasingly popular class of regulation 2002; External Advisory (OECD, Committee on Smart Regulation, 2004).

So the 1991 building control regime was not unique, at least in relation to certain key attributes. It was unique in so far as it failed. Does this reduce its value as an analogy for other performancebased regulatory regimes? In other words, was the combination of factors that led to the failure specific to the built environment? The answer must be that while performance-based regulatory regimes may not necessarily fail, the building case demonstrates that they can fail, and as public policy advisers it is incumbent on us to minimise the risk of failure.

In complex decision-making contexts we often revert to heuristics, or 'rules of thumb'. In an experimental frame the two that we might emphasise are 'thinking ahead' and 'thinking along the way' (Amanda Wolf, personal communication). Thinking ahead in the regulation context means being aware of the many things that could go wrong, based on a good historical understanding of the strengths and weaknesses of different classes of regulation. Thinking along the way means taking a real-world approach by asking what is happening in practice and whether this is consistent with the objectives, and being prepared to adjust the regime as you go.

I will conclude with two questions. The Treasury initiative to describe a set of best regulatory practice principles and performance indicators assumes that we are able to apply these across the broad range of regulation as an initial diagnosis of whether there is potential for improvement within regimes - to shift closer to the best practice frontier - and to detect latent weaknesses which may result in regulatory failure. However, at one level regulatory regimes are not the same. While they may have a similar underlying philosophy, and performancebased regulation is an example of this, they have different design features and the context in which they apply is different. Is it possible that in applying a generic set of principles and indicators we miss

something fundamental to the efficacy of a regime?

My second question reflects an alternative view. In this highly complex world in which we live, will a set of partial indicators, which the best practice principles inevitably are, applied widely as benchmarks and an initial diagnostic and early warning device, cast more daylight on the performance of our regulatory regimes than would otherwise be the case?

1 For example, see OECD, 1995, 1997; President of the United States, 1993, 2011; Coalition of Australian Governments, 2007; APEC and OECD, 2005.

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