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Beyond Taylorism: Regulating for innovation

Some ideas for discussion for the National Innovation Agenda

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CAPABLE, INNOVATIVE, RIGOROUS

Industry Commission: Why do you specify that the compliance plates must be metal when there are now products - such as self-voiding plastic - which would be cheaper and more effective?

Federal Office of Road Safety: It's not that easy. We would have to do a regulatory impact analysis and that takes time and resources we don't have.[1]

[1] Public hearings for the Industry Commission inquiry into Vehicle and Recreational Marine Craft Repair and Insurance 1995. See Industry Commission 1996, p. 165.

Overview

Regulation can promote beneficial innovation where it addresses clear problems with markets. Thus, for instance, where it internalises the cost of pollution, regulation will send firms scurrying to find new ways to avoid those costs. The resulting market in pollution abatement will underwrite technology development and innovation more broadly directed towards pollution abatement. Where we are world leaders in such regulation, our firms stand to become world leaders in pollution abatement expertise – for they and the business ecosystem within which they operate will have first mover advantages.

Regulation can promote innovation more generally by intensifying the degree of competition within markets, which might otherwise become a cozy environment for a monopoly. As this report illustrates, regulation can also have a powerful effect in suppressing innovation. It will do so particularly where it is overly prescriptive and where it mandates particular inputs and particular processes rather than allow firms to get on with their business of delivering benefits to their customers.

This report does not survey specific areas of regulation in industries that are taken to be particularly innovative. Nor does it survey the vast literature on regulating pollution or regulating to promote competition. Rather, it offers a range of snapshots of the relationship between regulation and innovation.

It is important to recognise also that though the focus of the report is on the relationship between regulation and innovation, it does not focus uniquely on areas that are regarded as particularly propitious for innovation in the future. In our view, this would create the misleading impression that one can base one's regulatory priorities on such predictions. It would also perpetuate a mindset in which various agencies within government focus on specific agendas which are themselves represented by specific (and competing?) regulatory regimes. If we are to regulate well, it will be because we have found a general approach which can be applied effectively in specific areas.

In this regard, the institutions of 'minimum effective regulation' established since the mid-1980s are one focus for this paper. We look at examples of what has gone wrong and at concrete examples of what can be improved with a new approach to regulation which is more fully focused on continually optimising our regulatory systems in the way businesses continually improve their own production systems.

Regulation, regulation review and dynamic flexibility

In contrast to many areas of economic reform, few would argue that we have solved the problem of regulatory flexibility. Indeed, while 'deregulation' has been proceeding apace for over two decades, the bulk, complexity and compliance burden of regulation continue to grow.

There is wide agreement, endorsed in the terms of reference for this study, that the social objectives of regulation should be achieved in ways that maximise the operating flexibility of those who are regulated. Still, in addition to what we could call 'static flexibility', or maximising the flexibility of regulation when introduced, regulation should also be *dynamically flexible*. Like any complex system, regulation will not function well unless it is subject to the kind of continual improvement that good businesses so assiduously cultivate. Yet, few people would regard our regulatory system as dynamically flexible.

Indeed, over the last three decades, business has moved itself out of a 'Taylorist' mindset in which managers set policies, often in minute detail, and employees simply followed them. Regulation and regulation review agencies have yet to fully make this transition to 'post-Taylorism'.

The existing policy of 'minimum effective regulation' has established regulatory 'gatekeeping' institutions to enforce a quality hurdle for all new regulation. Thus, the major focus of regulation review falls on regulation *making* rather than on the *continual improvement* of regulatory systems. Though some emphasis is put on wholesale reviews of bodies of regulation, these are typically policy reviews from outside regulatory agencies rather than ongoing attempts to optimise the performance of regulation in achieving its objectives cost beneficially.

The result has been that regulatory systems are a model of unresponsiveness when it comes to the kind of often small-scale continuous improvement that is responsible for much productivity growth in business.

Recommendation 1: *Regulation and regulation review should be cast as far as possible in a 'post-Taylorist' mode. Further thinking should be done on the framework within which this could be achieved.*

Australia as a regulatory pace-setter: the example of greenhouse gas abatement

Though Australia's regulation must often be seen in the context of similar regulation in other countries, Australia can gain particular benefits and advantages over others by becoming a regulatory pace-setter at least in strategically chosen areas.

In the area of greenhouse gas abatement, for instance, Australia could pioneer a 'post-Taylorist' regulatory regime in own trading scheme. Whether or not it ratifies Kyoto, and whether or not it participates in the international carbon trade immediately, it could set up 'penumbral' carbon markets which, though they encompassed trading in carbon abatement that was not recognised within the Kyoto Protocol, were nevertheless based on sound science and verifiable and audited emission reductions.

There is a sound in principle case for such flexibility in most circumstances, but particularly in areas where technology is developing rapidly. Such an approach would make Australia a leader by example not just in greenhouse gas abatement. Where we had pioneered novel technologies of abatement, measurement, verification and/or audit, and novel regulatory approaches to accommodate them, our case for their inclusion in subsequent international standards and agreements would be vastly stronger both for our leadership and for our experience.

In addition to the economic advantages of abating more greenhouse gas at lower cost, there would be the benefits in fostering innovation-based industry development within Australia. Australia has particular expertise and industry development to offer, particularly in carbon abatement technologies relating to land management, examples of which are provided in the body of this report.

Recommendation 2: *Australia should become a pace-setter in outcome-based regulation and regulatory flexibility more generally. In addition to generating economic benefits for Australia and the world, Australian leadership will often advantage Australian firms at the forefront of new technologies which interface closely with regulation.*

Renovating request and response

At its outset, our regulatory review system did have a mechanism for continually optimising regulation as a result of specific complaints from business. However, the so-called 'Request and Response' procedure

did little to encourage feedback and much to discourage it, with extensive requirements for businesses to document problems and identify solutions with little certainty that their concerns would be adequately addressed.

Recommendation 3: *Request and Response procedures should be re-introduced with attention paid to encouraging feedback on regulation and addressing problems. Governments must make a credible commitment to address issues that arise and, if they can do so, business organisations should be prepared to contribute some funding to individual organisations wishing to use the facility.*

An advocate for innovation and regulatory flexibility

The experience of request and response highlights a more general problem. Businesses' business is business. Though businesses must comply with regulation, contributing to its improvement has so far proven a long, uncertain and generally unrewarding process. And if it is successful in improving regulation, a business will have done so for all its competitors!

As a consequence, individual businesses will not generally allocate resources to campaign against specific regulatory excesses. Even their industry associations will generally try to remain 'on side' with regulators. Public advocacy against specific regulatory excesses was one of the original roles of regulatory review agencies, but it has tended to fall away as regulatory review agencies have focused on educating regulators and therefore sought less adversarial relations with them. For this reason, it may be for the best that regulation review agencies do not perform this role. But the role seems worthy of support.

Recommendation 4: *Consideration should be given to greater public advocacy by regulation review agencies with regard to specific regulatory initiatives. If these agencies are reluctant to take on this role and/or that such activity should be more tightly focused than this, it might be restricted to some agency that has a pro-innovation and pro-investment stance. Existing investment facilitation agencies may be a possible home for such a function.*

Regulating for excellence and innovation: Delegated regulatory entitlement

Regulation typically seeks to vouchsafe some minimum standard of performance. Yet in doing so, not only does it do little to encourage adequate and good performers to do better, but its prescriptions will sometimes actually impede the best performers. To encourage excellence, we should seek to relieve firms whose internal systems can

demonstrate (and continue to demonstrate) their own excellence from more onerous obligations of general regulation.

Recommendation 5: *Regulators and legislators should be encouraged to extend the range of prudent experimentation with alternative compliance mechanisms.*

Regulating capital markets for outcomes

The way people choose investments has obvious relevance to the funding of innovation. Uncertainty and asymmetric information, both of which are rife in investment markets, often drive conservatism and conformism – both powerful enemies of innovation. Yet the massive increase in regulatory effort represented by financial services regulation has been directed almost exclusively at processes rather than outcomes.

Yet, as John Kay comments, "reputation is the principle means through which a market economy deals with consumer ignorance". To encourage better advice and more innovation – both within financial markets and in their funding of firms that innovate – we should encourage the regular publication of the performance of sample portfolios kept by advisors and stockbrokers so that their reputation can more accurately reflect the record of their own investment performance.

Recommendation 6: *It would be very positive for consumers and for the economic efficiency of the capital market – and, through this, for innovation – if regulation of investment advice and share-broking were directed more towards facilitating the emergence of high quality information on which reputations could be based, and less towards complex and expensive regulation of the process of advice.*

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I. Introduction

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II. Regulation and regulation review

It appears that in the area of regulation, as in other areas of economic policy, we have come a long way since the early 1980s. Twenty years ago, regulators were subject to parliamentary scrutiny – at least in principle though, in fact, not on the detail unless it created substantial controversy. They were also subject to general disciplines governing the behaviour of public agencies. But as regulation burgeoned, it was clear something was wrong.

Since 1986, when the then Prime Minister announced the policy of "minimum effective regulation", every government at both state and federal levels has established a specific institution dedicated to a variety of worthwhile tasks.

The Office of Regulation Review (ORR) – recently renamed the Office of Best Practice Regulation (OBPR) – at the federal level and equivalent bodies throughout the states seek to improve the quality of regulation. Their remit is to do so both by 'gatekeeping' – to prevent bad regulation from being passed – and by educating regulators. The OBPR's role is to make regulators aware of the economic aspects of regulation and, in particular, to inure them to a cost benefit framework in all their regulation.

And yet, in contrast to many areas of economic reform, few would argue that regulation review has improved outcomes greatly. Politicians are told of the excesses of over-regulation, and have put effort and resources into the establishment of institutions to deal with the issue. Yet, regulation continues to mount, and much of it is more complex and costly than it needs to be.

It is important to be clear about what this report is not. It is not a review of any specific area of regulation. Nor does it provide a comprehensive review of areas of regulation that are commonly regarded as having very direct implications for innovation – for instance, the regulation of stem cell research, renewable energy genetic modification or broadcasting, telecommunications and IT technologies. Each of these areas is sufficiently unique – including being politically fraught in its own way – to warrant its own review, though the principles along which such reviews might be conducted are suggested in this study.

There is not the space in this report to conduct a systematic review of what is driving excessive regulation or of a strategy to deal with it comprehensively. Rather, the purpose of this report is to begin a discussion by illustrating some of the pitfalls of current approaches and suggesting some building blocks towards a richer approach.

In short, the social objectives of regulation should be achieved in ways that maximise the flexibility with which those regulated can achieve them. Still, this piece of advice has become commonplace today. If a single sentence were to summarise the contribution of this paper to such practical policy problems, it would be this: In addition to being flexible when it is introduced – or having what we could call 'static flexibility', regulation should also be *dynamically flexible*. If opportunities arise for optimising regulation, mechanisms should exist to ensure that they are seized with alacrity. Today, despite twenty years of government policy directed towards improving regulatory performance, this is not the case.

III. Regulation as an exercise in sovereignty – the analogy with 'Taylorism'

From however far down the hierarchy of government it comes, regulation always remains in essence a form of sovereign command. Further, it is often promulgated to prevent some kind of perceived wrongdoing. Compare this with the 'command' of management within a firm. In each case, the source of command generally has sufficient power to enforce its commands, or to find someone who will.

Yet there is a powerful difference.

While there will always be minimum standards of conduct within the firm, good managers will mostly focus on encouraging and motivating employees to perform at their best. Often, good managers will not command at all. They understand that the firm they help guide is a complex adaptive system.

Good managers spend a lot of time trying to communicate corporate objectives to those they manage; they also seek to introduce systems to motivate employees, and to measure and reward their performance. When management does command, such commands will generally be both offered and understood as conditioned by their purposes. And good managers' instructions will often invite employees to solve problems and to add their own unique knowledge from the 'coalface' to the ongoing task of improving the firm's operations.

It wasn't always this way. In the world envisaged early in the twentieth century by Frederick Winslow Taylor, the author of *The Principles of Scientific Management,* managers would scientifically design the workplace and then instruct workers on their tasks in minute detail.

Table 1: Contrasting two production systems

	Taylorism	Post-Taylorism
Metaphor of Production System	A mechanism designed by engineers	A complex adaptive system
Role of Management	Funding and empowering professionals to design or buy in machinery, products, work routines and work incentives	Eliciting the expertise of all in the productive network (including outside the firm) Richness of feedback, to guide production and continual improvement, high morale and 'alignment' of employees with firm objectives
Means of Productivity Growth	Better management, and technology bought in or produced by internal R&D	Organisational learning, through continual incremental improvement at all levels

In important respects, the transformation from Taylorism has yet to be fully made in the area of regulation. Policies are decided upon, with or without appropriate consultation, and then, in being promulgated, receive the imprimatur of the sovereign. Though the purpose of the regulation can be of some significance when lawyers are interpreting the meaning of the regulation, what is generally required from subjects of the regulation is compliance with its specific commands, not with their purposes. Indeed, there is no requirement on regulators to specify the purpose of their regulation, and those purposes may not even be clear.

The Robens report on occupational health and safety regulation in the UK in the early seventies was a watershed in regulation. It 'blew the whistle' on regulatory 'Taylorism'. Robens argued that occupational health and safety regulation had become a mass of technical rules for workers to follow and inspectors to enforce that were so complex and ad hoc that they were often worse than useless. They could not be taken in and understood by workers and they undermined responsibility for safety throughout firms by inviting the impression that safety was imposed from outside the workplace.

Robens proposed the first attempt to move beyond what we are calling here 'regulatory Taylorism'. Firms were to be given general duties of care for their employees' occupational health and safety and they would discharge them by collaborating with their workforce in developing,

documenting, implementing and improving auditable safety management systems.

The new style of regulation seeks to use its power of command in a way that is more analogous to good management – it seeks to encourage excellence at the same time as putting a floor, below which performance shall not fall. It seeks to draw out the expertise of the regulated in improving outcomes. And, at least in intention, it takes those it regulates as being in charge of complex adaptive systems which may change over time. It seeks to regulate to improve outcomes rather than specify processes.

Occupational health and safety regulators have sought to follow this approach with some success. There is also some evidence of this approach in some areas of environmental regulation.

IV. Is regulation review Taylorist?

Another approach to the emerging regulatory morass was regulation review. It had its intellectual progeny amongst economic critics of regulation in the spirit of Adam Smith. One could argue that Smithian sensibilities were revived by George Stigler's pioneering studies of regulation in the 1950s and 60s, which illustrated how often regulation failed to achieve its assumed objectives – for instance, of reducing monopoly prices to the optimal level. This school produced a powerful critique of the political economy of regulation. It showed how often regulation could be 'captured' and the public interest subverted by vested interests.

With deregulation having been embraced in many areas of the economy, the policy of 'minimum effective regulation' was adopted in Australia in 1986. A recent succinct statement of its philosophy was offered by Gary Banks, the Chairman of the Productivity Commission (2003), as follows.

> To be 'good', regulation must not only bring net benefits to society, it must also:
>
> - be the most effective way of addressing an identified problem; and
> - impose the least possible burden on those regulated and on the broader community.

Where one might say that Robens' idea was directed towards moving regulation from Taylorist principles to post-Taylorist ones, 'minimum effective regulation' sought to constrain regulators to regulate as little as possible, consistent with still being effective. Regulatory 'gatekeeping' institutions were established to enforce a quality hurdle for all new

regulation. Regulators were required to produce adequate cost–benefit analysis of the regulation they introduced in the form of 'regulatory impact statements' which were to be available to cabinet along with coordination comments by regulatory review agencies.

Clearly, 'minimum effective regulation' is a worthy goal. Further, it would be wrong to present Robens style outcome based regulation as some antithesis to minimum effective regulation. Regulation review agencies themselves promote the idea that regulation should target outcomes rather than mandate processes.

Even so, in important respects, the policies of regulation review as we are practising them tend to partake of a Taylorist conception of regulation. The policy of minimum effective regulation delivered by regulation review agencies can be fruitfully thought of as regulating regulators – it puts in place specific requirements that regulators are required to comply with. And yet, those requirements relate to the *process* through which regulation is implemented, not to its *outcomes.* Regulation review is process regulation of regulators.

Also, regulation review agencies go through many of the dilemmas of regulatory agencies themselves. Should they see themselves as, principally, enforcers against errant regulation? Or should they seek to influence and educate those they regulate? Should they be public advocates for minimum effective regulation? Or would this undermine their influence with regulatory agencies?

Box 1. One view of Regulatory Impact Statements

I teach several hundred middle to senior public sector managers each year across many jurisdictions, and when discussion turns to Regulatory Impact Statements, they are often cynical about the process. In particular, they are unaware of the great potential value to them of the RIS process, as managers. Instead, the bottom line is a common view that RISs are a matter of 'ticking boxes', or selectively organising material in order to arrive at conclusions that decision-makers want independently of a serious and thorough RIS process. Options especially are treated very perfunctorily.

Professor Glenn Withers.[2]

Like regulators, regulation review agencies must also operate in an environment in which messages are often mixed. Though there is bipartisan in principle commitment to cut red tape, politicians and senior officials frequently respond to community pressure to 'do something' in response to one perceived evil or another. And, despite frequent

[2] Personal communication.

political commitments and multiple inquiries at both state and Commonwealth levels into cutting 'red tape', regulation review agencies retain their relatively low level of resourcing and status within our bureaucracies.

Box 2. Victorian Competition and Efficiency Commission

Established by the Victorian Government on 1 July 2004 under the State Owned Enterprises (State body - Victorian Competition and Efficiency Commission) Order 2004, the Victorian Competition and Efficiency Commission is an important and worthwhile attempt by a state government to elevate the status of regulatory review work.

Though it conducts general economic inquiries, it has a major focus on regulation and on administering regulatory review arrangements, and its board of commissioners is independent of government.

Like the Federal Productivity Commission, VCEC conducts economic reviews, administers regulation review and operates Victoria's competitive neutrality unit. Hiving these functions off to specially established independent body provides both greater resources and independence for the function of regulation review.

Perhaps, most important of all, the conception of regulation itself and that of regulation review in it partake of what we have called 'regulatory Taylorism'. Thus, the major focus of regulation review falls on regulation *making* rather than on the continual improvement of regulatory systems. Though some emphasis is put on reviews of regulation, these are typically policy reviews from outside regulatory agencies rather than ongoing attempts to optimise the performance of regulation in achieving its objectives cost beneficially. Indeed, as the head-quote to this study illustrates, regulatory review arrangements can even impede the continual improvement of regulation.

Table 2: Contrasting two approaches to regulation

	Taylorism	Post-Taylorism	Regulatory Taylorism (Regulation Review)	Robens-Style 'Output' Based Regulation
Metaphor of Production System (regulatory system)	A mechanism designed by engineers	A complex adaptive system	A mechanism designed by policy makers in consultation with stakeholders	A complex adaptive system
Role of Management (regulators)	Funding and empowering professionals to design or buy in machinery, products, work routines and work incentives	Eliciting the expertise of all in the productive network (including those outside the firm) Richness of feedback, to guide production and continual improvement, high morale and 'alignment' of employees with firm objectives	Analysing costs and benefits and resulting design of regulation	Elicit the expertise and participation of the regulated Richness of feedback to guide continual improvement, high morale and alignment of regulatory objectives with market forces and the objectives of those regulated
Means of Productivity Growth	New Technology bought in or from internal R&D	Organisational learning, through continual incremental improvement	Reviews of regulation to find improvements	Continual optimisation of systems and the way they are integrated with each other

V. The (hidden) ways regulation can obstruct innovation

Though studies can do a reasonable job of quantifying both the administrative and the immediate compliance costs of regulation, it is virtually impossible to quantify what is almost certainly the most significant cost of regulation. Rising costs of regulatory compliance often reduce the intensity of competition within industries as large organisations are disproportionately likely to have the skills and resources to consult with government in establishing regulatory regimes.

Smaller businesses with quite different ways of operating may not have been included in the consultation and so the regulation may obstruct the way they go about their business. Regulation can also drive smaller businesses out of operation and restrict competition, as has occurred recently as increasing compliance burdens have driven consolidation in financial planning.[3]

The need to comply with regulation also imposes 'second round' costs in the myriad ways it can obstruct innovation. Though personal computers have been commonplace for over two decades and the internet has been established for over a decade, many business practices are still to be properly migrated to the internet. The reasons are many-fold, but regulation clearly plays an important role.

In its submission to the recent Taskforce on Reducing Regulatory Burdens on Business, the Australian Banking Association identified at least eight different areas where electronic communication was either non-compliant with regulation or about which there existed serious uncertainty as to its compliance. In each case, it is hard to envisage a serious policy rationale for preventing such modernisation.

Indeed, one might argue that the very fact that such matters come before a high level inquiry into the regulatory system itself is an indictment of our ability to manage them at a lower and more appropriate level within our regulatory infrastructure. And yet, this is many years since the first government inquiries into facilitating e-commerce!

Box 3 provides a similar example in which regulation is not just adding costs but also obstructing further innovation – in particular, automation.

[3] Charles Rivers Associates, 2005, p. 52.

Box 3. Privacy and borrowers' Tax File Number (TFN)

Privacy Guideline 7 was no doubt drafted with the best of intentions. It requires that, where someone provides information containing a TFN for a purpose that is not tax related, they may remove the TFN from the communication and that those receiving the document shall not record or disclose the TFN to others.

However, consider this situation. Lenders require many borrowers to prove their income with documentation in the form of correspondence from the tax office. Borrowers typically provide this documentation to the branch of a lender or to its agent such as a mortgage broker without removing tax file numbers (TFNs) even though the number is of no use to the lender.

Where the document is supplied to the lender's branch, there is no need to remove the TFN because the document is not technically conveyed to a third party. In any event, all those dealing with the information in any business that receives it are bound by the same obligations to protect the privacy of the client, whether they were the ones directly receiving it from the client or received it from someone else in the production chain.

On the other hand, agents of lenders such as mortgage brokers or possibly franchisees of lenders are required by the guideline to remove clients' TFNs from all communications with others including the lender. The inconvenience to agents of the lenders may appear relatively minor. Yet it adds an important complication to automating document systems. It also diverts substantial management energy of both the regulator and the industry to dealing with the problem.

This illustrates the time and effort involved in dealing with relatively minor regulatory compliance issues. The industry association, the Mortgage Industry Association of Australia, has sought resolution of the impasse for over three years. It tried to work with the regulator for over a year until putting an '11th hour' submission into a review of privacy regulation, which appears to have been submitted too late to be considered. The MIAA then submitted the same material to the Banks Review which recommended that the issue be considered in a wider review (2006, p. 56). The guideline remains unamended with the regulator persisting in its interpretation of it.

Source: MIAA, 2005, and personal communication.

VI. Why didn't Australia produce the keyless car?

In an unsung success story of Australian innovation, Australian manufacturing industry was a world leader in car security technology from the late 1980s on. The situation arose in response to changes in demand conditions. In the wake of very high theft rates, NRMA mounted a high profile public campaign for better car security. Australia's vehicle and component manufacturers responded by racing to the forefront of the nascent market in the design and manufacture of automotive

security original equipment. The Australian manufactures and their component suppliers, particularly Bosch Australia, in Clayton, developed digital keypads, security engineering and engine immobilisation technology. Bosch became then (and remains) a major exporter of such technology.

This set the stage for Australia to develop and produce the world's first keyless production car. Why didn't it? There are, no doubt, many reasons. But one is Australian Design Rule (ADR) 25 which mandated mechanical door and steering locks. Of course, regulation may not have prevented the emergence of the keyless car. Although the prescriptive way the regulation was written renders a keyless car non-compliant, it is quite possible that if a firm had sought single-mindedly to secure some revision promising a bold new innovation, it would have been accommodated with some change in the regulation.

Yet, this relies on a 'heroic' idea of how innovation occurs – a linear path from some 'Eureka' moment in the mind of an inventor/entrepreneur. With such an understanding of innovation and a presumption of some flexibility from government, one might see ADR 25 as a relatively small obstacle.

But this model is a 'Taylorist' and linear one in which innovation treads a predictable path from conception through prototype, development and testing to mass production. If we understand innovation this way, then getting the regulation changed can be accommodated in the process – though the experience of the MIAA in having privacy guidelines amended for the handling of tax file numbers does not augur well.

But this linear idea of innovation is very often wide of the mark as a description of what innovation involves and as an explanation of what innovations firms do and do not adopt.

Box 4. A post-Taylorist approach to innovation: McCarthy et al. on New Product Development (NPD) as a Complex Adaptive System

Linear frameworks help explain how the organization and management of NPD processes relate to NPD performance, specifically to lead times and due dates. Yet this overriding focus on process structure, reliability, and control has tended to ignore the factors that govern the ability to innovate.

This myopia occurs because linear frameworks represent the NPD process as an ordered, sequential, and relatively predictable system of activities.

This leads to a mechanistic interpretation and focus on process efficiency, which is inclined to ignore how process factors such as flexibility, informality, feedback, and autonomy might influence innovation.

Consequently, researchers have responded by developing recursive and chaotic-based frameworks to understand better how these factors and resulting process behaviors are associated with different types of innovation.

McCarthy et al. (2006, pp. 437-8) and see references in this passage.

Organisations that innovate best are assiduous in cultivating an internal culture and, indeed, a culture between themselves and other institutions (like suppliers and customers) in which the search for new ways of doing things is actively supported (Medina et al., 2005). Tools used to support innovation include the use of teams, including development teams that bridge different functions (and sometimes different firms), and early supplier and customer involvement in production. As McCarthy et al. put it, "certain systems are able to learn and to create new rules, structures and behaviours at several interrelated levels (2006, p. 438; see also Morel and Ramanujam, 1999).

In fact, a great deal of innovation and firm learning is incremental, and relies on the coordination of a range of objectives, technologies, capabilities and people. Many of the standard hierarchical mechanisms of control used in both government and business can be inimical to such innovation (Pech, 2001). Not only do most possible innovations not proceed, but most that do proceed are not particularly successful. Consider the example of the keyless car. For such a project to be embarked upon, it would involve a substantial and risky commitment of resources.

Before it could be brought to the attention of the senior managers who would be required to sign off such a project, the idea would have to surface somewhere in the organisation. If it were produced by a relatively senior person, it would likely receive the consideration of his peers. But had the idea been proposed by a junior designer, it is quite likely they would have been 'set straight' by middle managers citing ADR

25's prohibition of the innovation tipping the scales towards focusing on solving some other problem, rather than tackling the keyless car.

Even if such a project were to get to senior management, a wide range of risks would still remain. Would the vehicle manufacturers and the component suppliers in Australia have the technical skills and creativity to bring the project off? If an overseas firm were to be involved, might it not be a better location for trialling the project? Might the technology turn out to be easily subverted by professional criminals? If all these hurdles were jumped, would the public and the insurance industry respond favourably to the car? The potential brick wall represented by the existence of ADR 25 would have been one more obstacle with the possibility of some revision being highly uncertain.

Note that under our existing system of regulation review, reviews of whole regulatory regimes are conducted from time to time. There is no specific mechanism to bring forward such a review upon the identification of the need for some small adjustment in the regulation. In any event, if by some chance a review had been underway when such a need was identified, such reviews often take a year or more to complete and a usually shorter but still considerable time for decisions to be made.[4]

Further, the returns to innovation are dependent upon secrecy to get the jump on competitors and upon the extent of the market which the innovation can service. If the ADR were to be subject to public review, it would compromise the secrecy. And, as far as global regulation is concerned, Australia is not far away from the position of the junior employee within a firm proposing a change to his superiors! So, the gains to the new investment would have been limited to the Australian market (with additional costs to homologate vehicles to export markets according to old systems) until such time as other countries amended their own design regulation. One can imagine many years passing before change occurred.

[4] Technically, the change is not secure until the period during which Parliament has a capacity to disallow the change has passed.

Box 5. Regulation, individual responsibility, urban myths and innovation

The finer points of much regulation – for instance, protections against spam, privacy, ensuring sufficient information is provided to consumers – make it virtually impossible to comply with the regulation by simply ensuring that one behaves commonsensically and with integrity and propriety.

Each firm must have their processes vetted by lawyers both when they are designed and whenever they are changed. The greatest expense from this state of affairs is unlikely to be the lawyers' bills or salaries but the (Taylorist) way in which such procedures absolve line officers from responsibility for their own conduct and placing those officers in the hands of outside agencies. It is easy to imagine such regulation taking a heavy toll of a culture of continual improvement within a workplace.

Where lawyers must be consulted in contemplating quite simple changes of procedures, it is not difficult to imagine that many simple ideas for improving processes may not be considered, and indeed that a culture develops in which change is frowned upon as being too much trouble.

Politicians and senior officials are frequently assailed by business people telling them of the evils of over-regulation. Often, when asked to cite chapter and verse, what the business person has claimed is not quite accurate and some course of action they claimed was prohibited by regulation turns out on closer inspection to be permissible at least in some circumstances.

This phenomenon might be attributed to ignorance or hostility to government. But there is also another explanation. Many 'urban myths' about regulation circulate within the highly regulated industries. In retail mortgage lending, for instance, where an error is made in documentation, this will frequently involve substantial delays as entirely new documentation is drawn up where a simple 'letter of understanding' might also suffice.

Our understanding is that the UCCC is not so prescriptive and would permit this. Yet, many officers within large organisations justify their existing procedures with claims that they are required under the UCCC.[5] It is easy to imagine such 'urban myths' being a powerful ally of the status quo, and an enemy of the culture of commonsensical and continuous innovation.

VII. Towards 'post-Taylorist' regulation

Lateral Economics considers that our current policy of 'minimum effective regulation' needs to be more 'post-Taylorist'. In a report of this limited scope, it is not possible to outline a blueprint for doing so. However, we outline below some policy suggestions that would be consistent with this broader strategy.

[5] Personal experience.

Current regulation review puts far more effort into seeking to prevent bad regulation from being implemented and to optimise the quality of the regulation in the first place than it does into the responsiveness of regulation to emerging needs and prospects for optimisation once it is passed. Thus, the lion's share of attention goes to addressing the way new regulation is made and, in particular, to administering, reporting on and encouraging compliance with the RIS system.

There is provision for review of regulation, and most regulation is indeed reviewed every few years, but the reviews are typically of whole systems of regulation and are typically done by outsiders. A post-Taylorist understanding of regulation would require a far higher order of responsiveness. It would certainly seek some means by which opportunities to improve regulations were identified continuously and then acted upon expeditiously.

Our regulation review system had just such a mechanism soon after it was introduced. But it was a failure. The response to the failure was instructive. The programme was cancelled rather than its deficiencies investigated and then remedied. The following subsection offers some views on these matters.

Recommendation 1: *Regulation and regulation review should be cast as far as possible in a 'post-Taylorist' mode. Further thinking should be done on the framework within which this could be achieved.*

VIII. Australia as a regulatory pace-setter

Australia has been a leading exponent of economic reform with an enviable record of economic growth to show for it. In addition to widespread deregulatory initiatives of the last few decades, Australian policy has proved its prowess in other areas.[6] Opportunities to excel in policy, including in regulation, arise constantly. This report has already provided a suite of examples. This and the subsequent section illustrate the potential gains to Australia from being a regulatory pace-setter.

The terms of reference for this paper comment on the importance of technological neutrality in regulation:

> Regulatory reform processes are particularly important for rapidly changing industries . . . . As novel technologies are developed . . .

[6] One of many examples that have been imitated in various forms around the world has been income contingent loans established in Australia under the Higher Education Contribution Scheme, or HECS. Other examples include the Child Support Agency and Australia's very successful public health strategy to prevent the spread of AIDS.

> increasing attention is required to ensure work is done now to both remove old/defunct regulation to ensure it does not prevent the uptake of new technologies or adversely biases investment decisions as well as plan for new regulatory frameworks to suit the new technology. Due to the pace of technology change, regulation that is technology-dependent can be quickly outdated. New regulation therefore needs to be de-coupled from specific technologies to avoid being readily surpassed.

This is a well-accepted notion and, at least in the absence of particular political objectives, discussed briefly below, most new regulation is intended to be technology neutral. Nevertheless, as previous sections have outlined, the stock of existing regulation continues to raise 'legacy' issues. This report has suggested some improvements to our system of regulatory review to address this.

However, in this section, we draw attention to the gains that might be had from Australia becoming a regulatory pace-setter at least in strategically chosen areas. If Australia's regulation of activities in which new technologies are emerging is better designed than regulation in other countries, not only will Australia enjoy the benefits of more cost effectively achieving its regulatory objectives. It is likely to encourage research, development and adoption of those technologies to expand in Australia.

Thus, for instance, more permissive regulation of stem cell research and genetic engineering would improve Australia's already strong position in biological science and technology. However, in many such areas, not least those just mentioned, regulation addresses specific ethical concerns of certain members of the community. As a consequence, political rather than scientific or economic concerns can often dominate public debate, with regulatory quality receiving short shrift.

In such situations, there may be some benefit in having institutions that seek to constrain regulation making as closely as possible to addressing specific hazards. Thus, for instance, we might decide to regulate research and development of genetic engineering technologies but insist that regulatory restrictions target irreversible risks – for instance, the escape of virulent strains of genetically engineered species – with specific risk management plans rather than blanket prohibitions. This too will be politically contentious, however, where some in the community believe deeper ethical issues are at stake.

Where these kinds of ethical considerations are absent, however, there can be real opportunities from regulatory pacesetting. The scope for such action is outlined by way of a pertinent contemporary example in the following section.

IX. The example of greenhouse gas abatement

The area of greenhouse gas abatement exemplifies the potential gains to Australia from regulatory pace-setting and lateral thinking in regulation, more generally. The regulatory task confronting us here is hugely complex and multi-layered. Against the background of continually emerging science and technology, nations must decide what greenhouse gases they will seek to abate, and what methods they will use. And they will do so in the context of negotiations with each other for acceptable common ground for international regulatory regimes to establish an international carbon market.

This section argues for a role for Australia as a regulatory pace-setter, both in its own interests and in the global interest in its relation with the evolution of global regulation under the United Nations Framework Convention on Climate Change (UNFCCC) and associated institutions. Generally, because of its much greater efficiency than the alternatives, we have in mind carbon tax and credit or trading systems both here and in other countries. Australia's relation to the Protocol is somewhat problematic but the principles that should govern the relationship between any Australian trading system and the international regime sanctioned by the Protocol are similar whatever our relation to the Protocol.

- First, we should continue to support comprehensiveness with regard to the gasses that are targeted, the countries that abate carbon, and the methods used to abate, measure, verify and audit the abatement of carbon. For the broader the base over which greenhouse gases are abated, the lower the cost of achieving any given level of abatement.

- Second, comprehensiveness is not something to be negotiated for once, with the result set in stone, but something for which, in the spirit of the post-Taylorist view of regulation outlined in this report, we should strive for with ongoing vigilance. We should vigorously promote regulatory design that maximises regulatory responsiveness to emerging opportunities provided by new science and resulting technologies for abating, measuring, verifying and auditing abatement.

- Third, where we are unsuccessful in negotiating such an outcome within the Kyoto Protocol and cognate agreements and institutions, and providing resulting markets and abatement prospects are of an adequate size to make our efforts cost-effective, Australia should develop alongside any Kyoto compliant greenhouse abatement effort a penumbra of activities which, though they may not qualify under the letter of the Protocol, nevertheless verifiably abate carbon according to well-accepted scientific consensus at the time.

Governments might underwrite a 'penumbral' emissions trading market or markets financially and/or in terms of supporting the development of standards. However, providing that the credits created are scientifically and administratively credible, they would acquire some commercial value amongst firms and other agencies seeking publicly to demonstrate their own contributions to greenhouse gas abatement.

'Penumbral' carbon markets could be established where the growth and regrowth of forests and woodlands was not compliant with the Kyoto definition of forests with the attendant environmental benefits of so doing above and beyond the carbon they managed to sequester. Likewise, we could facilitate abatement of greenhouse gases that are not currently within Kyoto – this may include ozone and some aerosols, providing the scientific case for including them were sound.

Note that contrary to many assertions, it is not even clear that there must be great certainty in the measurement of abatement outcomes. What is necessary is that the procedure has integrity – that it adequately constrains the scope to cheat. Thus, for instance, if we could only be certain within a tolerance of 30% of how much greenhouse gas abatement a particular project or a particular abatement technique used in a particular area would abate, it would increase the

comprehensiveness of our abatement effort and improve its cost-effectiveness to include it in our trading system, secure in the knowledge that:

1. it was making a beneficial and verifiable contribution to abatement;
2. agreed methodologies for measuring and verifying abatement were not biased and so, any error could just as easily produce better rather than worse environmental outcomes than the outcomes measured and claimed, and;
3. over time and over a large number of projects, such errors would tend to cancel each other out.

Even if such reasoning were regarded as too radical, it would still be far better to discount the project by the extent of any uncertainty rather than see its abatement potential go unfunded because it fell out of the carbon abatement market. However widely or narrowly we draw the trading net at the outset, an in principle commitment to extend it at the earliest practicable opportunity and 'post-Taylorist' regulatory institutions capable of so doing should be an important design element of our own system.

As earlier sections of this report have already argued, there is a sound in principle case for such flexibility in any and all circumstances unless there are specific reasons for suspecting that it is not cost-effective. But the issue takes on much greater relevance when one considers the importance of technological change in meeting our objectives. Such an approach would not just make Australia a leader by example in greenhouse gas abatement. Where we had pioneered novel technologies of abatement, measurement, verification and/or audit, and novel regulatory approaches to accommodate them, we could argue for their inclusion in subsequent international standards and agreements with greater credibility, having had experience with them ourselves.

There would be direct benefits from such an approach in fostering innovation-based industry development within Australia. To take one example, enteric fermentation in ruminant animals makes up nearly two-thirds of Australia's agricultural greenhouse gas emissions which themselves are a substantial contributor to Australia's total emissions. Various technologies exist now that provide promising means of reducing such emissions (Kerr, Andrew and Allen, 2001, § 4.51; O'Hara, 2003). The means range widely – from dietary changes to genetic engineering to inoculation (which teams at CSIRO have been exploring – see Bates, 2001, § 3.2.5.3 and Prime Minister's Science, Engineering and Innovation Council, 2002).

In addition to development and production, each of these technologies will throw up particular issues for delivery, measurement, verification and audit. If we know that a particular technique abates carbon, we will need to design systems that vouchsafe that the technique has been properly implemented in order to allow people to claim credit in carbon markets for it. The cost-effectiveness of such systems will often be crucial to the technologies chosen. And the sooner we can ensure that emission abatement using these technologies will be recognised either within Kyoto trading or within some trading system outside Kyoto, the sooner the technologies will be developed, produced, purchased and implemented by those on the ground.

Recommendation 2: *Australia should become a pace-setter in outcome-based regulation and regulatory flexibility more generally. In addition to generating economic benefits for Australia and the world, Australian leadership will often advantage Australian firms at the forefront of new technologies which interface closely with regulation.*

X. Renovating request and response

Following the announcement of the policy by Senator John Button in 1988, the Office of Regulation Review (ORR)[7] administered a mechanism called 'Request and Response' – effectively, a regulatory complaints mechanism for businesses that wished to initiate a review of regulation which they considered inappropriate and/or unnecessarily onerous.

Eliciting effective feedback within systems often requires effort and skill. Within 'Taylorist' organisations, feedback was sometimes elicited by suggestion boxes and often bolstered by rewards and recognition for good suggestions and by market research into consumer responses and needs. In post Taylorist organisations, a great deal of effort goes into facilitating continuous improvement using teams of employees and quality circles, and with a high degree of involvement of various kinds of suppliers and consumers.

In contrast, the operating assumptions of Request and Response seem to show a certain reluctance to receive feedback – a fear that the mechanism might generate a flood of inquiry and perhaps vexation.

[7] When the mechanism was launched, it was operated by the Business Regulation Review Unit (BRRU) and operated from within the Department of Industry Technology and Commerce. The BRRU became the ORR shortly afterward and it was moved to the Treasurer's portfolio and housed within the newly formed Industry Commission (now Productivity Commission).

Certainly, its documentation asked a lot of businesses for the privilege of using it. Request and Response was restricted to those businesses that could present a "well documented case to show that" a specific piece of "regulation is likely to have adverse effects – not just for the applicant but for the economy in aggregate (that is, taking into account any benefits that might arise from the regulation as well as the costs it causes".

Though, undoubtedly, a sensible framework from which to judge the ultimate value of regulation, this is too high a hurdle to apply to limiting the use of the request and response procedure. Applicants were requested to provide "information on the balance and distribution of costs and benefits of the present arrangements and any proposed changes. Costs should be quantified where possible, including those directly incurred by firms, and the government, plus indirect costs to firms and their customers".[8]

Feedback from those who are regulated as to what they find most vexing is extremely valuable in optimising the costs and benefits of regulation – it should not be discouraged with hurdles of this height. In any event, once a business was successful in jumping this hurdle, the relevant procedures noted that "well substantiated requests" would follow a procedure where "the responsible Department or Departments would examine, in consultation with the ORR, the request" and choose from a menu of options within three weeks. The menu of options included implementing or rejecting any requests and sending the matter off for independent review.

The process was very rarely used by business. So much so that it was activated on average around twice a year.[9] In the annual reporting of the Office of Regulation Review (ORR), only four such cases are documented – all in 1993-4. Of them, it is unclear whether the businesses using the procedures achieved more than what they would have done without it.

In summary, it seems fair to suggest that the Request and Response procedure was not a very satisfactory means of engaging those who are regulated with good feedback on the quality of that regulation and means of improving it.

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[8] ORR (Undated). The procedure noted that "The Government appreciates that not all the above matters may be easily delineated; however, comprehensive information accompanying requests facilitated any subsequent review".

[9] Internal Industry Commission Minute to Nicholas Gruen, 27 July 1995.

Businesses are wary of investing too much time in government liaison because they are naturally sceptical that large government bureaucracies and regulatory regimes that are the product of extensive expertise and political and bureaucratic negotiation will respond with any great alacrity to their specific concerns. And, if and when regulators do respond, the benefits of any regulatory changes are a public good. All the businesses that compete with the business that has invested time and resources in addressing the problem are likely to gain along with the initiating firm.

If a mechanism such as Request and Response is to be effective:

- once a reasonable prima facie case has been made by the party initiating action, collective resources should be brought to bear to tackle the issue. Business proponents of regulatory flexibility need an active *advocate.*

- How should such an advocate should be funded and resourced? Industry associations do provide services to their members to assist them in negotiating regulatory matters. And, given their public comments on the problems of regulation, one would imagine that they should fill this role. Perhaps, one of the larger better-funded industry associations or a group of them could resource an institute to provide ongoing services to business in tackling specific regulatory excesses. However, even outside the experience of Request and Response, the experience of the MIAA reported above regarding privacy guideline 7 provides some indication of the lack of incentive for action. Where they do devote resources to an issue, at present it appears that a great deal of time and effort may be required for little, if any, reward.

- once a bona fide case has been established that a regulation is not optimal, there should be some obligation imposed upon regulatory agencies to demonstrate that it is.

If vexatious use of the mechanism is a concern, it would appear better to roll out a 'user-friendly' request and response procedure in some limited way to gain experience with it before rolling it out more widely. If this is the case, one way of limiting access to the scheme, at least for an initial period, would be to constrain it to firms that are seeking to innovate in some important way and/or to firms that exhibit certain characteristics of innovation – for instance, the expenditure of some proportion of their sales as R&D or exports.

Recommendation 3: *Request and Response procedures should be reintroduced, with attention paid to encouraging feedback on regulation and addressing problems. Governments must make a credible*

commitment to address issues that arise and, if they can do so, business organisations should be prepared to contribute some funding to individual organisations wishing to use the facility.

XI. An advocate for innovation and regulatory flexibility

Lord Acton famously commented that rowing was the perfect preparation for public life because it allows one to move in one direction while facing the other. For decades now, we have seen people in public life agree with the call for less regulation, and yet at the same time support the introduction of new regulation and more regulation in various specific circumstances.

Perhaps, the problem lies with the public itself having similarly divided loyalties. Most of us are susceptible to a range of cognitive biases and heuristics which tend to lead us to overvalue the significance of ideas and events that are recent, vivid and salient. (Tversky and Kahneman, 1973, 1974). As a consequence, people will often agree that 'something should be done' about some social ill or other without fully considering the more abstract considerations which militate against doing something or which should influence the way we go about doing it more than they should.

Such a state of affairs discloses a role for some public champion of more abstract principles. To some extent, one can defend various constitutional arrangements and institutions that balance power between agencies as defences against some of our psychological foibles in overvaluing the salient. A proper trial before a judge is superior to a lynch mob partly because the judge is trained in ensuring that the particular case is decided in a way that is consistent with abstract principles.

By similar reasoning, one can argue that there is an important role for institutions to publicly champion the abstract principles of avoiding over-regulation. To some extent the ORR and to a greater extent the Productivity Commission take on this role in a general sense. Yet for various reasons, they have tended to offer their advocacy in a general way when the greatest need may be for them to do so in particular instances where specific regulation is being advocated and/or being developed.

To some extent, this was one of the original roles of the Business Regulation Review Unit (BRRU) which became the Office of Regulation Review (ORR) – now the Office of Best Practice Regulation (OBPR). As this report has argued, the OBPR and its predecessor bodies have had

to face some of the classic dilemmas of the regulator. One of those dilemmas has been the difficulty of both educating those one regulates and being seen to act either punitively or in advocacy against them. As a consequence of this, and perhaps of its limited resources, the ORR largely abandoned any high profile public advocacy role and has not, for some time, assisted individual businesses in resisting regulation that they see as unnecessary.

If its judgement is correct, it may be for the best that regulation review agencies do not perform this role. But the role seems worthy of support. As suggested in the previous section, if the proposal looks too open ended, it might be restricted to having some specifically pro-innovation remit.

Recommendation 4: *Consideration should be given to greater public advocacy by regulation review agencies with regard to specific regulatory initiatives. If it is thought that regulation review agencies should not take on this role and/or that such activity should be more focused than this, it might be restricted to some agency that has a pro-innovation and pro-investment stance. Existing investment facilitation agencies may be possible home for such a function.*

XII. Regulating for excellence and innovation: Delegated regulatory entitlement

> The staff . . . have structured the program to take action to improve safety performance before it falls below acceptable levels, and not to continually improve the safety margins that currently exist. The presumption that current nuclear industry performance is sufficient to assure public health and safety, versus regulating for excellence, however, is an unwelcome message to some external stakeholders and will limit increased public confidence in the program.
>
> The Reactor Oversight Process (ROP) Initial Implementation Evaluation Panel, U.S. Nuclear Regulatory Commission.[10]

Consistent with its provenance in tackling perceived social 'wrongs', much regulation seeks to mandate some basic level below which it is considered behaviour should not fall. Yet, if we are interested in improving outcomes – for instance, improved satisfaction of customer needs or improved safety at work – we should be keen for improvement, not just where it is unsatisfactory, but wherever it can cost effectively be made.

[10] Available at http://tinyurl.com/s8y28.

Yet, in putting in place a regime which has some influence on the worst performers, regulation will often impose costs, not only upon firms that have not been meeting minimum standards but also on those that have been exceeding them. Indeed, regulation to ensure that minimum standards are met can not only impose unnecessary costs but actually obstruct the achievement of higher standards. Thus, for instance, as a result of privacy regulation, firms which record incoming phone calls for quality assurance purposes now inform clients of this fact at the beginning of each phone call. The result is that firms that wish to have people answering phones instead of computer systems are replaced by computer systems, at least initially, while the caller is played a recorded voice warning them that their voice will be recorded. This is the case even where firms have well-documented and strong procedures for ensuring that recordings are not used in ways that compromise privacy before they are ultimately destroyed.

If we are to encourage excellence, should we give some thought to relieving firms which can demonstrate the superiority of their own performance from more onerous obligations of general regulation? To some extent, this has been done where (typically) large employers control large and unusual work sites. Thus, offshore health and safety is often handled by documented 'safety cases' whereby an elaborate auditable management system is implemented to monitor and protect workplace safety.

Project XL run by the United States Environmental Protection Agency (EPA) has a similar flavour. The project name stands for Excellence and Leadership and it "allows state and local governments, businesses and federal facilities to develop with EPA innovative strategies to test better or more cost-effective ways of achieving environmental and public health protection. In exchange, EPA will issue regulatory, program, policy, or procedural flexibilities to conduct the experiment".[11] Likewise, the Victorian Environmental Protection Act 1970 has an accredited licensee system that enables a firm able to show a high level of environmental performance to avoid prescriptive works approval and licensing requirements (Perton, 1997).

Nevertheless, such programmes have had limited scope and have not had a major impact on regulation more generally. Often, excessive risk aversion is shown in setting such programmes up. The officials involved have little to gain from their success and a lot to lose from any failure or perceived failure. Further, officials naturally and appropriately are wary

[11] See http://www.epa.gov/projectxl/file2.htm. Note, however, the EPA has ceased considering applications to use the programme since January 2003 – see http://www.epa.gov/projectxl/whatsnew.htm#news.

of either the appearance or the actuality of favouritism towards particular firms over others. The result is that, in the few places where they exist, alternative compliance mechanisms have often been sufficiently onerous that they stand little chance of more widespread adoption.

At least in specific areas of promise we should experiment in other areas. This is particularly the case where greater flexibility can foster more effective, more dynamically responsive private regulatory systems. For instance, the retail insurer AAMI developed its own 'customer charter' and had it launched over a decade ago by Professor Allan Fels when he was Chairman of the ACCC. It provides for rigorous auditing of a range of promises to customers with sanctions against AAMI for breaches. AAMI's performance against the charter is audited by KPMG and reported upon annually.

This private regulatory system anticipated and in many respects appears to exceed the minimum requirements imposed by both the regulation of the time and by subsequent regulation. Yet, the regulatory system operating within AAMI has a range of attractions less common in government regulation. Thus, though it has procedures in place to report against its promises in a rigorous way, its customer charter is also an important aspect of its own marketing. As a result, the benefits it generates for consumers are not 'taken for granted' but drive competition in the insurance market. Other firms have responded with charters of their own. Further, the regulation is dynamic and continually optimised from AAMI's perspective. Though the extract from AAMI's annual customer charter below is clearly written with a view to presenting AAMI in a good light, one can nevertheless appreciate the potential value of the process thus described:

Box 6. Extract from AAMI's annual report on performance against its customer charter for 2004–5.[12]

The AAMI Customer Charter grew out of a comprehensive consultation process, which is repeated annually, with customers, regulators, consumer advocates and staff, about how AAMI should conduct business. While not every aspect of AAMI 's activities is covered by a promise in the Charter, the essential elements are that fundamental consumer rights are acknowledged and reflected in our business activities, and also that the whole company is involved in a continuous process.

Each year, teams are drawn from different functions and levels throughout AAMI, which engage in a three-month review of issues and opportunities identified potential or modified Charter promises. They present their findings and recommendations at an annual two-day conference and delegates vote on their recommendations.

This process ensures that AAMI considers its business from an external perspective . . .

It is not the purpose of this section to promote AAMI.[13] However, providing it is able to demonstrate the success of its own initiatives and also use them to satisfactorily address any areas of government concern, should it not be left free to implement its policies to protect consumers in its own way? In fact, in complying with the new financial services reform regime, AAMI introduced internal systems costing over $1 million but is aware of very little improvement this expenditure produced in serving or protecting its customers. In some respects, it has made AAMI's service worse. Thus, where AAMI operators were able to make suggestions to customers on rules of thumb they may usefully follow in making product choices – for instance, in choosing between third party property and comprehensive insurance cover – it has now trained its staff to refuse to offer any such advice or comment for fear of attracting more onerous disclosure and record-keeping obligations required by the new regulation.

[12] AAMI, 2005.

[13] Declaration of interest. Nicholas Gruen knows senior management of AAMI and has participated on a pro bono basis in staff retreats. Lateral Economics has not received any payment from AAMI of any kind at any time. Lateral Economics is current in negotiations to sell certain intellectual property to AAMI but this does not relate to the matters raised above.

Recommendation 5: *Regulators and legislators should be encouraged to extend the range of prudent experimentation with alternative compliance mechanisms.*

XIII. Regulating capital markets for outcomes

"Reputation is the principle means through which a market economy deals with consumer ignorance".

John Kay (2004, p. 214).

The way people invest their money is of obvious and great importance. It is important to them as it underpins their future living standards and enjoyment of life. And it is important to the economy and particularly to the funding of the most promising innovation. This is because the more efficiently those managing capital allocate it, the more expeditiously unpromising ventures will be curtailed and more promising ventures funded.

The capital market is riddled with uncertainties, some of which are inevitable – no one has a crystal ball as to what investments will perform well – and some of which are due to information asymmetries. Managers generally know more about the prospects of their firms than shareholders. In fact, it is impossible to structure remuneration of managers or advisors in ways that are completely 'incentive compatible' with the interests of those whose money they manage or advise on. But in our own financial system, the incentives facing many advisors are very poor indeed.

Partly because the economic structure of their industry evolved from life insurance salesmanship, the incentives facing financial planners are frequently at odds with their clients. While representing themselves as advisors, they are frequently remunerated as sales agents of investment funds – with 'up front' and 'trail' commissions. Stockbrokers too are typically remunerated according to the volume of trades they arrange rather than according to the degree to which their advice has added value to their clients.

Because of the particularly invidious incentives in the financial planning industry, regulation has been ramped up substantially. Consistently, with so much regulation, the focus has fallen on providing certain minimum standards to consumers. Thus, under Financial Services Reform, planners must be licensed and firms must have in place a range of compliance procedures to ensure that appropriate risk analyses are provided for each client, that clients receive adequate written advice and that the products they are invited to invest in are adequately researched and described in 'product disclosure statements'. It is unclear how many

retail investors have the skills to understand such product disclosure statements well.

Yet, most of these measures mandate *inputs* to good advice. They have certainly raised costs substantially in the industry, causing many smaller firms to exit. Yet the extent to which they actually improve advice is far from clear, and is nowhere clearly measured in terms of the value the industry adds to its clients. Meanwhile, despite all these costs, remarkably little effort has gone into assisting consumers to help themselves by improving information about the quality of advice different advisors provide.

It is indeed remarkable, but true, that despite huge resources being invested by both government and business in regulatory development, administration and compliance with new financial services regulation, there is no simple and reliable way to find a share broker or investment advisor whose out-performance of the market can be demonstrated from an independently audited record of their actual investment performance. Yet, unlike some professions (psychotherapy, for instance), it is relatively straightforward to generate information which, over a period of time, can be a very good indicator of the quality of the advisors' investment skills.

Thus, for instance, if investment advisors and/or share brokers kept independently auditable 'sample portfolios' operated in 'real time', we could, over a period of time, measure their performance. The investments in these portfolios could be kept confidential – to protect what the practitioners were selling – their investment skill. But their performance – in terms of absolute and after-tax returns and the volatility of portfolio – could all be published.[14]

This might not require regulation at all if substantial sections of the industry could be persuaded to do it voluntarily according to agreed standards. If reporting standards were developed in consultation with the industry to ensure comparability of performance measures, some industry leaders might start self-reporting – to highlight their own good performance. And it would be sensible to give them the additional incentive that if they did commit to such output reporting, some of the more onerous requirements of the input regulation they are now subjected to would be relaxed.

The effect on the capital market efficiency and innovation could be substantial. Stock picking in asset markets is surprisingly conservative

[14] Practitioners would be free to keep several portfolios so long as the strategy of the portfolio (e.g., conservative low risk, aggressive high growth) were nominated at the outset.

in part because in a world where the owners of capital find it difficult to assess the quality of those who advise on and manage their money, there are substantial commercial risks to firms if they underperform benchmark indexes for even relatively short periods of time. This – and the penchant of legal and regulatory systems to appeal to what is 'normal professional practice' – increases the risk involved in trying new approaches. And yet, the efficiency of the capital market depends upon players within it being able to experiment with new approaches and insights. Paradoxically, but not surprisingly, the prospect of substantial out-performance is much hampered by excessive aversion to the risk of occasional underperformance.

A capital market that serves efficiency and innovation best will help facilitate the measurement of skill in proposing and making capital allocation decisions. It is a market in which reputations for consistently adding value gradually emerge as hindsight enlightens us as to past performance. The Australian market in capital for start up and development, and for innovative listed companies (particularly smaller ones) would be more efficient, perhaps very substantially so, if the means by which people could make reputations in managing others' capital were more fully subject to independent audit and publication of investment performance.

Recommendation 6: *It would be very positive for consumers and for the economic efficiency of the capital market – and, through this, for innovation – if regulation of investment advice and share-broking were directed more towards facilitating the emergence of high quality information on which reputations could be based, and less towards complex and expensive regulation of inputs to advice.*

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