

Counting the Currency of Knowledge: New Zealand's Performance-Based Research Fund

Grant Duncan

Lyotard's concept of 'performativity' has proved itself to be especially applicable (if not prophetic) in understanding the major shifts in the institutional discourses of universities in recent times. The New Zealand government's Tertiary Education Strategy (TES) and Performance-Based Research Fund (PBRF) are exemplary. This chapter outlines some of the main elements of these new political devices, especially their use of a 'commodity' theory of knowledge. Attention is focused particularly on the PBRF. It is shown that the PBRF: Is being used to make claims about research productivity that do not meet the normative standards of research methodology; in effect, breaches the spirit of the Education Act's requirement to give effect to academic freedom; is being misused by university managers for disciplinary purposes; and promotes the perverse perception that the purpose of research is to make money (commodifying research *and* researchers), rather than institutional income being deployed to produce research for its own value.

Key words: Knowledge economy, research, universities, New Zealand

1. Introduction

The theme of this chapter revolves around two connotations of *currency*: the prevalence in a society of advanced knowledge (ideas that are "current"), as well as the monetary medium of exchange. This chapter will illustrate how up-to-date knowledge as a commodity may begin to act in a manner that resembles money, once it is translated into auditable units that attempt to account for the national and international recognition of those who produce it.

As the commodity theory of knowledge that informs the politics of the so-called 'knowledge economy' gathers greater 'currency' in political discourse, the imperatives of political strategy and economic competition lead to a desire to implement methods of 'accountability' that purport to 'count', to 'evaluate' and even to 'reward' the production of new knowledge. Several countries have now experimented with such audit systems within higher educational institutions in order to assess and to enhance the value of their knowledge-currency. The present chapter takes as its raw material the Performance-Based Research Fund, a funding evaluation scheme that has surveyed university staff in New Zealand in 2003 and 2006. It considers the

shifts in institutional values that correlate with this system, and then proceeds to examine the PBRF itself and the contradictions that it has produced. Close analysis of such a system is required in order to appreciate the effects it has on the values of research and scholarship and on academic subjectivity.

As the sheer mechanical power to collect and transfer information increases so dramatically, thanks to contemporary information and communication technologies, the problematics of knowledge become more pronounced. The production of new technologies, both hardware and software, is in itself a hugely lucrative business - but the ability to apply these technologies and to have them as widely used as possible by whole populations becomes a policy imperative. People must *know* about technology as a means to *knowing* what is current, and to discovering things as yet *unknown*. Hence, knowledge must be applied to knowledge itself and to its forces of production.

The processes of governing in the global economy are thus concerned more and more with knowledge as a commodity, and public policy promotes a utilitarian commodity-based epistemology. Traditional liberal-democratic ideas about the right to learn, the character-forming nature of education, or the emancipatory effect of knowledge ('knowledge liberates') give way to a concern with the instrumental effects of knowledge as a contributor to economic growth and innovation and to the management of social and environmental risks ('knowledge adds value'). The features of knowledge-as-commodity may be divided into two parts: product innovation and human capital. The former refers to knowledge that may be applied to the development of new products or enhancing the features of existing products, the provision of information to the consumer that improves the consumer's experience, or innovations that improve the efficiency of the production process. The latter refers to economically and socially useful skills 'invested' in the person through education, training or experience. In any case, knowledge is thus seen to add value to the processes of economic production and governmental risk management, and hence to advance the purposes of capital accumulation and fiscal responsibility.

Along with this redirection of strategic thinking around the concept of a knowledge economy, the discourse of the university has been changing. What was once conceived (albeit idealistically) as an institution without walls, dedicated to the pursuit of 'truth' by a community of scholars, evolves into an enclosed organisation dedicated to the competitive pursuit of 'excellence' - which may mean simply the maximisation of institutional income, power and reputation. Financial and public-relations concerns will be observed to dominate the actions of university managers when we examine the effects of the PBRF in New Zealand.

The power to manage information also leads to problems of secrecy or intellectual property (if knowledge must be enclosed from the public

domain) and of privacy regarding the distribution of information that may identify individuals. If information is “currency” and has a market-price, then popular trust in the networks that circulate it depend upon effective self-regulation within the system in order to protect the rights of the person. In New Zealand’s case, there is a Privacy Act 1993 that governs the use and exchange of information about private individuals by agencies. The legislation is based on a number of principles, especially the principles that the agency must disclose the purposes for which it is gathering personal information, and that it should restrict its use of such information to those purposes alone. The individual, moreover, normally has the right to retrieve private information about him- or herself that is stored by an agency. With the increased power of organisations to store, transmit and exchange data and personal information about individuals, the concerns about abuses of privacy have become more prominent, and such laws have been required to protect the rights and the privacy of the individual. The present chapter will also illustrate how the attempt to turn academic knowledge into a fungible currency, mediated by electronic data systems, leads to abuses of privacy and to an increase in the surveillance and disciplining of the academic community.

The education of the person is seen as vital for the knowledge economy, and hence the investment in the subject as locus of skills and portfolio of human capital must be counted, regulated and increased for the benefit of economic adaptation and growth and for the more effective performance of professions that manage social and economic problems. Further, the institutions that ‘produce’ educated persons are increasingly monitored and audited in order to assess the accumulation of human capital. Skills do become redundant, however, and the ‘currency’ of knowledge can never be relied upon to remain stable, so the obligation of the subject is to strive to avoid ignorance or obsolescence, and the obligation of the university is to be at the forefront of knowledge production. But knowledge, as a commodity, is now abstracted from the ‘knowing person’, as it would be preferable to manage information by machine if it were feasible and more efficient to do so. The ‘knowing subject’, construed as a person with virtue and character acquired through learning, is of less interest than the economic value of knowledge. Knowledge as commodity is thus conceived as a disembodied knowledge. But, in so far as knowledge-currency still requires a subject who ‘professes’ advanced knowledge, and especially if the professor’s esteem and reputation in his or her discipline can be assessed and audited as ‘performance’, the professor him- or herself is more likely to be perceived as a commodity in an academic labour market. Hence, performance-auditing systems like the PBRF succeed in commodifying research *and* the researcher.

2. Background

The idea of a 'knowledge economy' is now well embedded in the political rationality of the neo-liberal era¹ - in which I include the 'third way' variant. Knowledge is now considered to be a critical element in business innovation and international competitive advantage; and it has become a matter of policy orthodoxy for governments and international agencies to espouse the social and economic benefits of education and research. For those in higher education, this political development is a double-edged sword. On one hand, it allows us to promote the benefits of education and research in 'hard' economic, as well as social and cultural, terms. This gives greater political weight to arguments for enhancing student participation rates, investing in research, and maximising the commitment of public finances to tertiary education institutions. On the other hand, such a utilitarian economic discourse on the value of knowledge and higher education will undermine the traditional ideal of an impartial pursuit of 'truth', and hence pose a threat to academic freedom.

Nevertheless, the contemporary claims of international business that success lies in 'the application of knowledge to knowledge' - and hence in the more effective 'management' of knowledge in the innovation and production processes - must surely be subject to critical analysis within the discourses of the university. Applying knowledge to knowledge itself is, in philosophical terms, the concern of epistemology, which is as old as philosophy, and hence older even than the oldest universities. The university, as a community of scholars, has something to say about a 'knowledge economy', one would expect.² To complicate matters, though, the universities themselves become implicated in and transformed by the political rationality of neo-liberalism and the idea of a knowledge economy. Indeed, university managers may argue *for* their role in the knowledge economy; and government and industry come to view universities as key institutional instruments for the purposes of economic transformation. Political, economic and commercial strategy takes over as the very *raison d'être* of the university; and the languid atmosphere of impartial scholarship and scientific curiosity is infected by the competitive quest for money and power.

The consequent shift in the discourse of the university was effectively captured by Lyotard in his monograph published originally in French in 1979. He correctly perceived a shift from a discourse based on denotative statements (that assert that something is the case) to a discourse based on performative statements (that make something happen).

The production of proof, which is in principle only part of an argumentation process designed to win agreement from the addressees of scientific messages, thus falls under the control of another language game, in which the goal is no

longer truth, but performativity - that is, the best possible input/output equation. The State and/or company must abandon the idealist and humanist narratives of legitimation in order to justify the new goal: in the discourse of today's financial backers of research, the only credible goal is power. Scientists, technicians, and instruments are purchased not to find truth, but to augment power.³

The traditional disciplinary regimes of professional power - based in relatively autonomous, self-regulating peer-groups with knowledge-bases legitimated by university programmes - give way to a regime of performance management which seeks to codify and, if possible, computerise professional knowledge. The neo-liberal distrust of provider capture and rent-seeking behaviours deploys economic incentives and managerial techniques to control performance and knowledge in order to overcome the self-regulating autonomy of the professions. The 'disciplined' society evolves into the 'performance-audited' society.

This trend affects the academy as well. The academic profession - the professor as preserver, discoverer and disseminator of knowledge - must also 'perform', and be seen to 'perform'. As a producer of human capital - in the form of graduates - and of new knowledge, the professor is a commodity in an institution that is considered to 'add economic value' for society and that acts to maximise its own economic resources.

The present paper, then, seeks to link, by way of example, these broader generalisations to the local mechanisms of performance management and financial allocation in New Zealand's universities, particularly for the funding of research.

3. The Political Will to Know

The application of knowledge economy discourse to tertiary-education policy in New Zealand is expressed most clearly in the Labour-led government's two *Tertiary Education Strategy* (TES) documents published in 2002 and 2006.⁴ Elsewhere, I have analysed the rhetoric of the 2002 TES, its use of a commodity theory of knowledge and its imperative for universities to align themselves with governmental 'national goals', principally concerning the role of knowledge in economic and social development.⁵ Under the aegis of this policy strategy, the government wished to enhance the quality of research produced in higher-education institutions, particularly the country's eight universities, and a Performance-Based Research Fund (PBRF) was developed to achieve this.⁶

So, before describing the PBRF in detail, what kind of problems was it intended to address? It is well documented by independent research that the

level of public funding of universities had declined dramatically during the 1990s, while student fees increased,⁷ and that New Zealand's universities are presently funded at a level that is much lower (on a purchasing-power parity basis) than other comparable (or competing) nations.⁸ The funding model that had previously been adopted in the 1990s was determined by 'student choice'. Tuition subsidies and student fees were the main sources of income for the universities, and so funding was largely dependent on attracting student numbers. This favoured courses of low marginal costs and high through-put, and it did not encourage the highest quality teaching. In non-university institutions, a number of offerings of dubious quality were created purely in order to attract income.

Under this former 'quasi-market' model, research was supported financially either by an unacknowledged contribution from tuition-based funding, or by competitive tendering for external research funds. Much research and scholarship, therefore, that did not fit the criteria of public-good or industry-led research funds was not explicitly supported and was continued by academics dedicated to their own disciplines, as permitted by their teaching workloads. A significant anomaly within this approach arose from the fact that research-active academic programmes (in universities) were being funded at the same rate as those not engaged in research (mostly at polytechnics), and so the funding model did not fully recognise the efforts of universities to produce original scholarship and research. In addition, there was statistical evidence that New Zealand's aggregate investment in research and development, although gradually increasing, was low, as a proportion of GDP, in comparison with the OECD average.⁹

PBRF documentation does not explicitly say that these were the kinds of problems that it was designed to help solve, but this background is certainly relevant. The stated objective of the PBRF is "to ensure that excellent research in the tertiary education sector is encouraged and rewarded."¹⁰

While New Zealand's aggregate investment in research and development may be comparatively low, there was, to this author's knowledge, no investigation that showed that *universities* were *underperforming* in terms of research productivity or quality, and no target was set to indicate at what level that performance should be. Nor was there any evidence that university staff were mis-allocating their efforts between their various functions, including research, teaching, teaching-related scholarship (such as text-book or study-guide writing), thesis supervision, application of existing research, or community service. It appears to be simply assumed that knowledge in the form of research is an economic good, that one cannot produce too much of it, and that the more the universities' knowledge-base could be rated as 'world class' the better. However, New Zealand as a small nation of only four million people is always going to be a net importer of new

knowledge and technology, and so comparisons with the rates of investment in research in, say, the USA or UK - the countries most likely to define comparatively what 'world class' means - may be misleading. It has been suggested, for instance, that it may have been better to reward institutions for the *diffusion* of new knowledge, more than for original production.¹¹

So, the stated objective of the PBRF was to encourage the production of new knowledge by enhancing the quality of research, based upon national and international standards as judged by academic peers. The assumption seemed to be that more high-quality research was a good thing, but no goals were set to indicate an optimum output. There was, however, a commitment by government to redistribution of funding, as well as some further new funding, indicating an increase in public investment that would favour universities.

4. How it Works

The PBRF is a research-funding model that is based on an assessment of the quality and productivity of research at all participating tertiary education institutions (not only universities). It has redistributed some of the existing funds for tertiary education, and added some new public money, with the intention of rewarding and encouraging research. Research-active institutions, especially universities, thus have an incentive to gain the best possible rating in the assessment in order to secure for themselves the maximum possible share of the fund.

The assessment of institutions has so far been undertaken twice, in 2003 and 2006, with the next assessment planned for 2012. It is based on three factors. Twenty-five per cent is allocated on the basis of the institution's research degree completions (masters and doctoral degrees), 15 per cent is based on existing external research-contract income, and the major portion, 60 per cent, is intended to reward and encourage the 'quality of researchers'. This latter element of the fund has had the greatest impact on the academic community in New Zealand. Every eligible member of academic staff is assessed individually, with 'eligibility' determined by the undertaking of teaching at degree level and/or the undertaking of research. Each eligible member of faculty is required to complete an on-line evidence portfolio, consisting of a list of the previous six years' 'research outputs' (which may include creative products, such as exhibitions), a selection of the best four outputs (for example, articles in prestigious journals), evidence of 'contribution to the research environment' (such as training of new researchers), and evidence of 'peer esteem' (conference invitations, membership of editorial boards, etc.)

These individual portfolios are then assessed initially by an internal panel, and later by independent panels representing broad disciplinary

categories. On the basis of the evidence portfolio, the individual researcher is placed in a 'quality category': 'A' for internationally recognised, 'B' for nationally recognised, 'C' for research active but not qualifying as A or B, or R for 'research inactive'. In the 2006 assessment, an 'NE' could be added to the 'C' and 'R' categories to indicate 'new and emerging researcher'. Institutional PBRF funding is then allocated on the basis of a formula that takes account of the numbers of A, B or C-rated faculty, as well as other weightings for affirmative action reasons and to adjust for the greater costs associated with some disciplines.

Public documentation of the PBRF 2003 results was aggregated to the levels of institutions, academic units and nation-wide disciplines. In some cases, especially at the level of academic unit results, it was possible for individual scores to be inferred by anyone who knew that unit well enough. The two highest-scoring disciplines in the country were philosophy and anthropology, while many disciplines that one might associate most closely with the 'knowledge economy' (especially in business and technology faculties) scored relatively poorly.¹²

Sixty per cent of the PBRF is thus based on the aggregation of assessed 'performance' of individuals. The effects of this process on researchers therefore depend on the subsequent ownership and distribution of information about individuals deriving from the quality assessments, especially the individual quality scores. Despite protests from the academic community, the individual quality scores were issued not only to the individuals themselves, being 'personal information' covered by New Zealand's Privacy Act 1993, *but also to the institutions in which they are employed*. This was on the understanding that individuals' scores would not be used for purposes other than the PBRF. Quality scores should not, it was said, be used for internal personnel purposes (such as promotion or recruitment) unless individuals choose to disclose them. Universities issued 'privacy statements' regarding the PBRF, saying (to use Massey University's policy as an example) that the evidence portfolio was being used "to assess the research performance of the University", that it "will not be used for any other purpose and will not be released to any other party", and that the individual quality score "will not be a requirement for academic promotions." Nonetheless, it was clear that managers within the University would receive individual ratings. Such an arrangement was open to abuse, and abuses have indeed occurred, placing universities at risk of breaches of the Privacy Act.

5. Politics of Unintended Consequences

The PBRF has had the beneficial effect of shifting public funding into research-active institutions to acknowledge their contributions to scientific and scholarly inquiry. Many individual academics have found it beneficial also because it has meant that their department and faculty heads

now take a more active interest in developing their research careers. Nonetheless, the present chapter proceeds to outline some specific detrimental effects of this assessment and funding method.

First, the PBRF is used to make claims about research productivity that do not meet the normative standards of research methodology. Even before the results of the 2006 assessment had been released, the Ministry of Education confidently stated that the PBRF has “helped focus the effort of tertiary research on achieving excellence.”¹³ This is in spite of the fact that, on further inquiry by the author, the Ministry was unable to produce any evidence of this at that time, nor to operationally define “excellence.”

Naturally, it is tempting to make comparisons between the results of the 2003 and 2006 assessments to look for improvements in the quality-ratings of institutions and disciplines. But, because of the confounding effects of ‘window-dressing’, improved form-filling skills devoted to evidence portfolios, and more careful selection of ‘eligible’ academic staff into the census, it is not valid to make before-and-after claims about ‘research quality’ - that is, not if such claims are to withstand normative scientific scrutiny. Nevertheless, it is apparent from the above quote that the Ministry of Education was already anticipating improvements, even before the 2006 results were released. Upon the actual release of the results, however, the Tertiary Education Commission and the Minister for Tertiary Education were quick to make confident claims in their media statements. The former stated, to accompany the release of the results, that the Quality Evaluation “shows early signs of having a positive impact on tertiary education-base research.”¹⁴ On the same day, the Minister for Tertiary Education glowingly claimed: “The results . . . demonstrate that New Zealand is continuing to improve the quality of research.”¹⁵

These claims (which have the tone of Maoist propaganda about a ‘bumper harvest’) were based on comparisons between the 2003 and 2006 surveys which found, for example, that the number of staff who received ‘A’ and ‘B’ ratings had increased, and that all universities’ aggregate quality scores had risen. A closer reading of the summary of the actual results, however, showed that the Tertiary Education Commission was aware of the confounding effects that prevent us from making any credible claims about ‘improved research quality’ - even though they were confident that there had been a *quantitative* increase.

The *measured* improvement in research quality cannot be solely attributed to improvements in *actual* research quality as there are [sic] likely to be a number of factors influencing the results of the 2006 Quality Evaluation. Nevertheless, the increase in average quality scores, and

the marked increase in the number of staff whose EPs were assigned a funded Quality Category between 2003 and 2006 *suggests* that there has been *some increase* in the actual level of research quality.¹⁶

They noted that recruitment activities by institutions had contributed to the measured ‘improvements’:

. . . the major increase in “A”s in some subject areas could be traced to senior appointments from overseas - of the 218 staff whose EPs [evidence portfolios] were assigned an “A” in the 2006 Quality Evaluation, it was estimated that at least 48 were appointments from overseas.¹⁷

The TEC also noted that the assessment panels had generally commented upon an improvement in the presentation of evidence portfolios - although it claimed that this meant that the 2006 round more accurately reflected *actual* research efforts and quality. Nonetheless, much of the improvement in scores can clearly be attributed to improved skills among academics and their administrative assistants in filling out the on-line forms with suitably impressive details.

Furthermore, the universities themselves openly acknowledged that they had made more careful efforts in 2006 to exclude from eligibility for the survey those staff who were not research-active and who could be classed as ‘teaching-only (under strict supervision)’. Thus, the more research-inactive teachers whom one could thus exclude, the greater the aggregate quality score for the university. Universities had renegotiated the employment contracts of some staff in order to use the PBRF eligibility criteria to their advantage, resulting in accusations of manipulation of the system. A TEC audit found that about ten per cent of the sample of those who were eligible and provided evidence portfolios in 2003 were still employed in the sector in 2006, but had become ‘ineligible’ for the 2006 assessment as they no longer met the criteria.

Hence, if one were to apply the normative standards of scientific inquiry to these results, one would have to say that there were numerous confounding factors that made it impossible to conclude to what extent ‘research quality’ in New Zealand’s universities had actually improved between 2003 and 2006 (if at all). Indeed, the sample being surveyed between the two assessments had changed considerably, and not in a random way, due to the funding incentives created by the assessment itself, making comparisons invalid without careful statistical controls - which were not implemented. In short, the measurement system, and the manipulation thereof, created their own effects, giving the *appearance* of improvements in

research quality in 2006. Even the TEC was prepared only to say that the results ‘suggested’ some level of improvement in research quality, and they would not speculate about *how much* improvement did occur. In short, *the PBRF’s results produced no conclusive evidence about its effectiveness in encouraging ‘excellent research’*. Because the PBRF is both a measurement tool and an intervention that attempts to alter that which it is measuring, its validity as a measurement tool is strictly limited.

No evaluation of this kind could ever reach the standards of precision of the natural sciences, if only because the validity of any assessment of research quality is clearly dependent on the *a priori* definitions of ‘research’ and ‘quality’, and on the specific criteria for measurement that are chosen. Yet in order to gain the confidence of the very researchers who contribute to the assessment, it would be important for politicians, officials and university managers *not* to use the results in ways that could not be justified by the standards of research reporting in reputable journals.

The PBRF does at least successfully distinguish the research productivity of universities from that of polytechnics. The final quality scores of the eight universities ranged from 1.86 to 4.22, while the highest-scoring polytechnic scored 0.96. This confirmed the institutional distinction, based on research, between these two types of tertiary education organisations. On the other hand, given that there is in reality no objective criterion against which to measure ‘research quality’ (this being a construct invented by those carrying out the measurement), it would be of little statistical validity to draw fine distinctions between scores that are very close to one another. Indeed, the TEC’s results are not reported with a confidence interval partly because of the lack of any underlying objective criterion. What the PBRF results do, however, is to create a ‘league table’ of universities that, while of dubious validity, is nevertheless seized upon by reporters for public consumption as news. Such league tables are a common feature of the global university environment today; despite the fact that they are known to be of limited validity, the ranking implicit in them becomes an end in itself, with real effects that begin to reshape ‘in its own image’ the institutions that it purport to represent.¹⁸

Because of their effects on reputations, the relative rankings of the universities became an object of intense competitiveness between Vice-Chancellors. In 2003, the University of Auckland was ranked first; but, in 2006, first place was taken by the University of Otago, leaving Auckland second. But the differences in scores between the top three scoring universities in 2006 was very narrow: 4.22, 4.19, 4.10. Nonetheless, Otago’s Vice-Chancellor was quick to capitalise on his university’s score by claiming it as “New Zealand’s top university.” The University of Auckland had previously been running an advertising campaign, calling itself “New

Zealand's number one university", and it did not desist from doing so, using its ranking on the *Times Higher Education Supplement's* survey as alternative 'evidence'. An unseemly war of words ensued between the two institutions.

The fact that the PBRF, which is really only a governmental audit designed for funding purposes, is misused for political and public-relations purposes does little to raise its reputation among the very researchers upon whom it depends and whom it is supposed to 'encourage'. This is especially so if some of the claims made about the assessments' results are not deemed by the research community to have underlying validity. Yet such systems of performance management already contain within themselves the potential to become instruments of power, employed in ways that go well beyond their original stated objectives.

6. Compulsory Freedom

These considerations lead me to an examination of the PBRF's effects on academic freedom. Although academics in New Zealand are free to criticise government policies and to question received ideas, the PBRF nonetheless breaches the Education Act's requirement of government and of university councils to respect academic freedom. Section 161 of the Education Act 1989 defines academic freedom, and this includes "the freedom of academic staff and students, within the law, to question and test received wisdom, to put forward new ideas and to state controversial or unpopular opinions . . . [and] to engage in research." This is mediated by the requirements to abide by high ethical standards and permit public scrutiny and by "the need for accountability by institutions and the proper use by institutions of resources allocated to them." The following section of the Act includes the requirement that universities "accept a role as critic and conscience of society." Section 161 states that the universities, the Minister and all agencies of government "shall act in all respects so as to give effect to the intention of Parliament as expressed in this section."

Now, it would be an unfair exaggeration to claim that the PBRF represents a gross or blatant violation of Section 161, as New Zealand's academics are still free to criticise policies and to challenge orthodox ideas. Moreover, academic freedom does not exist in an ideal form, but is always shaped by, and contested within, local, historical contexts. Hence, peer-group norms, academic-disciplinary standards, competitive career objectives, etc. do shape intellectual expression and, from time to time, limit scientific progress. Nor is academic freedom a unique or distinctive liberty, as it sits alongside other democratic principles, such as freedom of speech, freedom of the press and parliamentary privilege. So, while there may never be an ideal institutional space, protected by the Academy's walls, that preserves an *unconditional* freedom of thought, the principle of academic freedom does at least provide a check against deliberate interference or manipulation.

Given, then, that the PBRF is, *by political design*, an attempt to shape the priorities of university researchers, it breaches the spirit of the Act concerning academic freedom. In the TES, the government explicitly states its intent to shape the teaching and research activities of universities in line with its own policy objectives, as a condition of securing public funding. The PBRF in particular seeks to shape research priorities and productivity - and hence the choices of individual scholars and scientists - in line with those national goals. Although I am not at all sure how this present 'research output' may be contributing to the government's goals, the Minister states that it should contribute to his government's priorities. Governmental and institutional documents are completely transparent about that. So, while not grossly interfering with my freedom as a scholar, this nevertheless represents a direct policy (indeed, political) intervention into my work. The level of monitoring and reporting of individuals' research productivity has consequently increased, and it should not be forgotten that surveillance in itself does alter behaviour. Activities that were once considered 'free', in the sense of unconstrained by any fear of political disfavour, become *required* in order to avoid a new form of discrimination. If one is not seen to produce research, one's position creates a financial risk to the university, and opprobrium will quickly follow.

Now, there is an obligation on any person who accepts the privileges of an academic post to exercise academic freedom actively by way of scholarly inquiry and scientific investigation. Many people in academic positions do not actively engage in research - a fact which was always known, and which has now been highlighted and quantified by the PBRF. To eschew research is, in the author's opinion, an unjustifiable misuse of the privileges of academic freedom. However, this same academic freedom, in turn, is currently undermined by a system of controls designed to 'encourage and reward' research - thus, in effect, making the exercise of one's freedom *compulsory and regulated*, as it goads the inactive into activity, and rewards 'active researchers' for doing what they formerly were motivated to do because of its intrinsic rewards and intellectual value. This paradox expresses itself daily among academics for whom the PBRF has become the *reason* for doing research, rather than remaining merely a funding mechanism that supports research which is already worth doing, either for its own sake or for its social and economic benefits. Individuals now make choices about their research priorities based on the effect it may have on their quality scores. So, for example, writing text-books, which do not rate highly in the PBRF definition of 'research', is now likely to be neglected in favour of articles for international journals. In effect, the autonomy of the academic community to determine for itself the balance between different forms of scholarship has been deliberately re-shaped by political means.

The very purpose and spirit of academic freedom is subtly undermined when the academic community begins to perform research for the sake of a governmental funding mechanism and their university's share thereof. Academic freedom becomes an academic treadmill. What was once had its source in intellectual curiosity and excitement, or was determined by professorial judgement, has come to be driven by performance anxiety and fiscal incentives.

Politicians and managers have claimed that the PBRF does *not* interfere with academic freedom - partially justifiable by the fact that the PBRF assessment makes no critical judgement about the content of one's publications. Hence, one may still act as "critic and conscience" and yet get a good quality score. This is a fair point, but a superficial one, as it neglects the more pervasive effects that the PBRF is having on academic customs and on the culture of scholarship. When each paper becomes a coin in the university's slot machine, the pressure comes on from above to shape the scholar's production of "the currency of knowledge," and academic freedom is quietly forgotten.

These politically and managerially organised efforts to control ("encourage and reward") the supposedly "free" pursuit of scholarly inquiry and scientific investigation by means of a system of extrinsic incentives (in the form of extra public funding) directly interfere with the very foundations of academic freedom. This is especially so in New Zealand's system wherein the individual scholar or scientist is the unit of assessment, and his or her score is known to managers. Hence, the New Zealand Government, its agencies and the universities themselves are failing to perform their duty to give effect to the academic freedom requirements of the Education Act when implementing the PBRF.

So, furthermore, the paradox of "compulsory academic freedom" becomes more starkly evident when we observe PBRF-related performance criteria being linked to employment and disciplinary procedures. Although the PBRF and its individual quality scores were officially intended only for the purposes of a governmental funding mechanism, they are now being misused by university managers for performance-management and disciplinary purposes. In short, the PBRF framework supplies a tool for bullying academic staff and for exerting greater managerial control over their jobs. In the case of Massey University, for example, there is the usual ineffectual "privacy" statement - which purports to ensure that information in evidence portfolios will only be used for the PBRF assessment, and for no other purposes - while, in fact, there is also a "research capability" policy, based on PBRF grades, which threatens academics with relegation to teaching-only posts if they fail to meet the PBRF's criteria of "research-active," and advises that employment selection procedures should be based on candidates' abilities to meet those criteria. Given that managers know the

quality scores of individuals anyway, this threat to individual academic employment conditions turns research away from an expression of academic freedom, and creates a “perform or else” imperative. Privacy of personal information is completely compromised.

Hence, one can also observe the commodifying effect of the PBRF. The PBRF inadvertently promotes the perverse perception that the purpose of research is to make money (commodifying research *and* researchers), rather than institutional income being deployed to produce research for its own value. Each research “output” now acts like a promissory note in a marketplace, creating the confident expectation of augmented institutional income. The active researcher - especially if rated “A” - becomes “hot property” in a competitive employment market; and university research policies are framed in terms of the competitive pursuit of money and the maintenance of financial viability, rather than the pursuit of knowledge and the maintenance of academic freedom. Academic freedom is no longer treated as the premise of the university’s research activities, but instead becomes an obstacle to be navigated in the course of managing “financial risk.” Furthermore, many researchers themselves buy into this commodification by stating that research activities are needed for, or will “look good” within, the PBRF assessment. Many who achieve favourable scores have actively used them to advance their own ambitions. One should not assume that individual academics are merely the “victims” of the new system, as there is a range of individual responses to it, depending, one could argue, on the advantage to be gained from it.

To give this commentary an ironic twist, then, the present chapter, and any other papers I may publish that critique the PBRF, can be entered into future PBRF assessments in order to augment my personal quality rating, and hence marginally to enhance the income of my university. The PBRF itself is impervious to the critical content of what I publish. Because the system cares only about the *appearance* of “quality,” and not about content, it can be claimed to preserve academic freedom to the extent that it does not suppress critical inquiry. But, as this example illustrates, it also co-opts critical inquiry. As a form of resistance to this, the best I can do is to ask editors not to place my university affiliation on my publications, and to reserve the right to withhold from university records any relevant information.¹⁹

7. Costs and Benefits

Due to complaints after the 2003 assessment about the costs of complying with the PBRF, the TEC decided that the 2006 assessment was “voluntary” for academics who had previously completed it and been rated in 2003, and for whom no changes were expected. In practice, some universities

decided to make it compulsory for all eligible staff to complete an evidence portfolio, for reasons that were not made very clear.

This illustrates two further interesting features of this system: the possibility that the cost of assessment exceeds the value of any improvement in research quality, and the arrogation of the government's funding audit for internal managerial agendas. On the former point, there is evidence that, once one factors in the costs of producing each PBRF point, the extra funds that the PBRF has so far supplied to the universities may be offset by the cost of performing and complying with the assessment itself. Hazeldine and Kurniawan calculated that the funding reallocation effected by the PBRF over the period 2003 to 2006 "would increase research output by no more than the transaction costs of implementing the new system."²⁰ This casts further doubt on the political claims about how the PBRF led to improved research quality. In so far as the measured improvements might have represented any real underlying improvement in research quality, one needs to account for the costs of producing such an improvement. Satisfactory results may have been achievable by simply giving the universities extra funding for research, without forcing them through a costly assessment at all. Anecdotally, at an individual level, staff were aware that the time they spent on complying with PBRF requirements could have been time spent in the production of more research. Universities that unnecessarily made the 2006 round "compulsory" were raising their internal compliance costs to a level not even required by the government. This does seem like a senseless waste of time, unless one allows for the hypothesis that the universities' top management have come to see the PBRF as their own instrument of internal control, and no longer as simply the government's audit for research funding purposes. When the TEC questioned the Vice-Chancellors about making its "voluntary" assessment compulsory, they were advised by the Vice-Chancellors that the matter was an internal "employment relations" matter in which the TEC had no right to interfere. It must therefore be asked who "owns" the PBRF: the government or the universities? The enthusiasm of the latter for the PBRF comes about because it represents a bigger slice of the public funding pie, as well as an opportunity to extend the reach and the effectiveness of managerial control.

8. Conclusion

New Zealand's PBRF system may be viewed as an attempt to "count the currency of knowledge": to increase the production of "leading-edge" or "world-class" knowledge, and to convert knowledge production into an auditable, money-like form. By making each publication a token convertible into a portion of the sovereign's budget - and indeed by making the research-active academic a source of a measurable sum of university income - this system partakes of and advances the commodification of knowledge that is

typical of the politics of the so-called “knowledge economy.” In doing so, academic freedom is forgotten and undermined, and new managerial capabilities for the control of academic staff are discovered and put into effect. The main objective now is that something reporting on research should *appear* and that it should *appear to be “excellent.”* The interest in research itself is superficial, if one takes the PBRF too seriously, as the importance and intrinsic value of knowledge is reduced to its mere *appearance* and its ability to generate cash. But, there is no firm evidence that the PBRF is achieving its avowed goals. To use the PBRF’s results as evidence for its own success, as politicians and officials have done, is invalid, as the incentives it creates and the consequent behaviours confound those results. Furthermore, the costs of compliance may actually cancel out any benefits produced.

University staff have been slow to assimilate and react to the effects of this new system, but this author’s impression is that sentiment among the academic community is turning against the PBRF, viewing it as a costly, time-consuming scheme with limited benefit for real research, and yet with many disadvantages, such as the rise in invidious competition and managerial control. The PBRF has succeeded in undermining much of what was left of the traditional “vocation” of scholarly and scientific endeavour, as embodied within the university community.

Notes

1. M Olssen and M A Peters, ‘Neoliberalism, Higher Education and the Knowledge Economy: From Free Market to Knowledge Capitalism’. *Journal of Education Policy*, vol. 20, May 2005, pp. 313–345.
2. G Duncan, ‘*Pouvoir et Savoir*: The Tertiary Education Strategy and the Will to Know’. *New Zealand Journal of Tertiary Education Policy*, vol. 1, no. 1, 2004, pp. 1–9, retrieved 6 March 2007.
<http://www.aus.ac.nz/publications/Ejournal/Vol1No1/Vol1No1.htm>.
3. J-F Lyotard, *The Postmodern Condition: A Report on Knowledge*, University of Minnesota Press, Minneapolis, 1984, p. 46.
4. Office of the Minister for Tertiary Education, *Tertiary Education Strategy 2002/7*, Ministry of Education, Wellington, 2002; Office of the Minister for Tertiary Education, *Tertiary Education Strategy 2007–2012*, Ministry of Education, Wellington, 2006.
5. Duncan, op.cit.
6. Performance-Based Research Fund Working Group, *Investing in Excellence: The Report of the Performance-Based Research Fund Working Group*, Ministry of Education and Transition Tertiary Education Commission, Wellington, 2002.

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7. WG Scott and HM Scott, *University Income and Student Numbers Between 1980 and 2002*, Association of University Staff of New Zealand, Wellington, 2004.
 8. Deloitte, *University Staff Remuneration & Resourcing - A Comparison of NZ and Selected International Data*, New Zealand Vice-Chancellors' Committee and the Association of University Staff of New Zealand, Wellington, 2005.
 9. Statistics NZ, *Research and Development Survey 2004*, Statistics NZ, Wellington, 2005.
 10. Tertiary Education Commission, 'Performance Based Research Fund', Tertiary Education Commission, no date, viewed on 20 July 2007, <http://www.tec.govt.nz/templates/standard.aspx?id=588>.
 11. B Opie, 'Tertiary Education and Research in New Zealand'. *Minerva*, vol. 42, 2004, pp. 299–307.
 12. Tertiary Education Commission, *Performance-Based Research Fund: Evaluating Research Excellence: The 2003 Assessment*, Tertiary Education Commission, Wellington, 2004.
 13. Office of the Minister for Tertiary Education, *Tertiary Education Strategy 2007–2012*, Ministry of Education, Wellington, 2006, p. 25.
 14. Tertiary Education Commission, 'Performance-based Research Fund Results', Tertiary Education Commission, 4 May 2007, viewed on 22 May 2007, <http://www.tec.govt.nz/templates/NewsItem.aspx?id=1925>.
 15. M Cullen, 'Promoting research excellence in New Zealand', New Zealand Government, 4 May 2007, viewed on 22 May 2007, <http://www.beehive.govt.nz/Print/PrintDocument.aspx?DocumentID=29188>.
 16. Tertiary Education Commission, *PBRF Quality Evaluation 2006 Release Summary*, Tertiary Education Commission, Wellington, 2007, p. 10, italics added.
 17. *ibid*, p. 72.
 18. S Marginson, 'Global University Rankings', in *Prospects of Higher Education: Globalization, Market Competition, Public Goods and the Future of the University*, S. Marginson (ed.), Sense Publishers, Rotterdam (forthcoming).
 19. To assist the reader with assessing my stance in this chapter, I was rated 'B' in 2003. As far as I know, I am the only member of academic staff in New Zealand who has deliberately *published* his PBRF quality score - information which is normally considered to be private - and I first did so in a magazine article in 2004. See: G Duncan, 'Avoiding Tick-box Compliance'. *New Zealand Education Review*, vol. 9, 28 April–4 May 2004, pp. 14–15.
 20. T Hazeldine and J Kurniawan, 'Impact and Implications of the Performance-based Research Fund Research Quality Assessment Exercise', in *Evaluating the Performance-based Research Fund: Framing the Debate*,

L. Bakker, J. Boston, L. Campbell & R. Smyth (eds), *Institute of Policy Studies*, Wellington, 2006, pp. 249–284, p. 278.

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