

Telephone +64 4 472 2065

Facsimile +64 4 499 5364

www.fulbright.org.nz

E-mail info@fulbright.org.nz

Can the US Import "Sunlight" from New Zealand?: An Assessment of New Zealand's Model for Corporate Financial Disclosure

Prepared by **Jonathan F. Karp**

With funding from the sponsors of the Ian Axford (New Zealand) Fellowships in Public Policy

August 2011

© Jonathan F. Karp 2011 Published by Fulbright New Zealand, August 2011

The opinions and views expressed in this paper are the personal views of the author and do not represent in whole or part the opinions of Fulbright New Zealand or any New Zealand government agency.

ISBN 978-1-877502-28-6 (print) ISBN 978-1-877502-29-3 (PDF)

Ian Axford (New Zealand) Fellowships in Public Policy

Established by the New Zealand Government in 1995 to reinforce links between New Zealand and the US, Ian Axford (New Zealand) Fellowships in Public Policy provide the opportunity for outstanding mid-career professionals from the United States of America to gain firsthand knowledge of public policy in New Zealand, including economic, social and political reforms and management of the government sector.

The Ian Axford (New Zealand) Fellowships in Public Policy were named in honour of Sir Ian Axford, an eminent New Zealand astrophysicist and space scientist who was patron of the fellowship programme until his death in March 2010.

Educated in New Zealand and England, Sir Ian held Professorships at Cornell University and the University of California, and was Vice-Chancellor of Victoria University of Wellington for three years. For many years, Sir Ian was director of the Max Planck Institute for Aeronomy in Germany, where he was involved in the planning of several space missions, including those of the Voyager planetary explorers, the Giotto space probe and the Ulysses galaxy explorer.

Sir Ian was recognised as one of the great thinkers and communicators in the world of space science, and was a highly respected and influential administrator. A recipient of numerous science awards, he was knighted and named New Zealander of the Year in 1995.

Ian Axford (New Zealand) Fellowships in Public Policy have three goals:

- To reinforce United States/New Zealand links by enabling fellows of high intellectual ability and leadership potential to gain experience and build contacts internationally.
- To increase fellows' ability to bring about changes and improvements in their fields of expertise by the cross-fertilisation of ideas and experience.
- To build a network of policy experts on both sides of the Pacific that will facilitate international policy exchange and collaboration beyond the fellowship experience.

Fellows are based at a host institution and carefully partnered with a leading specialist who will act as a mentor. In addition, fellows spend a substantial part of their time in contact with relevant organisations outside their host institutions, to gain practical experience in their fields.

The fellowships are awarded to professionals active in the business, public or non-profit sectors. A binational selection committee looks for fellows who show potential as leaders and opinion formers in their chosen fields. Fellows are selected also for their ability to put the experience and professional expertise gained from their fellowship into effective use.

We acknowledge and thank the following government and corporate sponsors that support the Ian Axford (New Zealand) Fellowships in Public Policy programme:

- Department of Building and Housing
- Department of Corrections
- Department of Internal Affairs
- Department of Labour
- Department of the Prime Minister and Cabinet
- Mighty River Power
- Ministry for Culture and Heritage
- Ministry for the Environment
- Ministry of Agriculture and Forestry
- Ministry of Defence
- Ministry of Economic Development
- Ministry of Education
- Ministry of Fisheries
- Ministry of Foreign Affairs and Trade
- Ministry of Health
- Ministry of Justice
- Ministry of Science and Innovation
- Ministry of Social Development
- New Zealand Customs Service
- New Zealand Police
- State Services Commission
- Te Puni Kōkiri (Ministry of Māori Development)
- The Treasury

ACKNOWLEDGEMENTS

This report would not have been possible without the collaboration of many people in New Zealand and the US.

I want to thank Laura Nakatani, who encouraged this effort when it was just a twinkle in my eye. The early conception of the project was then nurtured by Alastair Boult, Bronwyn Howell and Justin Hygate in New Zealand, and in the US by Tom Bayer, Jeff Heslop, Cynthia Plisch, Jayne Seidman, and Stephan Sylvan. Without them this project would never have gotten off the ground.

Michael Brosnahan served as chief mentor for this project at the New Zealand Ministry of Economic Development (MED). Working with him was like getting another university degree, and I owe him a great debt. In addition to his own contributions, he also arranged for key contributions from multiple MED staff, including Phil Day, Jeremy Dickson, John McPherson, Liz Thompson, Peter Weir and Lawrence Wells.

During the course of this study I was privileged to observe the merger of the New Zealand Securities Commission into the new Financial Markets Authority (FMA). I owe special thanks to everyone there who took time out from an intensive transition period in order to accommodate this project. In particular, I want to thank Debra Blackett, Jane Diplock, Sanjiv Jetly, Jeromy Meerman, Paul Nagy, Nisha Patel, James Sime and Peter Wallwork for all their help. Frank McLaughlin also provided great insight from the perspective of the FMA Establishment Board.

At the US Securities and Exchange Commission, Lew Walker served as a mentor and anchor, always encouraging me to think creatively about the agency's serious challenges, and pushing me to explore what New Zealand has to offer the US.

I also want to thank Andrew Reamer from The George Washington University, and Dawn Lorimer from Victoria University of Wellington, for helping me broaden the scope of the original project.

Glenn Chinery ably managed the transportation needs for this project.

Lastly, I want to thank Laura Nakatani again, who patiently edited her way through the final drafts of this report while providing me with excellent homemade soup.

Jonathan Karp Wellington, August 2011

EXECUTIVE SUMMARY

US Supreme Court Justice Louis Brandeis famously articulated the notion of transparency as a kind of metaphorical "sunlight," remarking that it was "the best of disinfectants." In the US, the Securities and Exchange Commission (SEC) is responsible for ensuring sufficient public transparency in the corporate arena. Its mission is to protect investors while simultaneously promoting efficiency, competition and capital formation. Balancing these competing objectives has become a critical challenge for the SEC.

New Zealand makes use of a different regulatory structure to address the very same challenge. But in New Zealand, the disclosure programme is housed as a quasi-independent, self-funded service delivery operation under the Ministry of Economic Development. Under this structure, New Zealand has constituted its disclosure operation as an economic development endeavour rather than merely as a necessary burden for the purpose of investor protection. New Zealand allows market participants to file quickly and efficiently with its Companies Office, then makes their information available to the public in a free, highly accessible, and increasingly machine-readable manner. Arguably, New Zealand's approach to corporate disclosure gives it an advantage in managing the trade-off between investor protection and economic development.

Criticisms of the SEC often focus on (1) the complexity of the disclosure process, along with the impact of complexity on market efficiency and fairness, (2) the level of advancement in the agency's disclosure technology, and (3) the role of legal work within the agency. As it happens, these are areas in which the Government of New Zealand has introduced specific innovations. Indeed, comparative assessments of regulatory regimes frequently rank New Zealand ahead of the US.

From a US perspective, New Zealand's organisational design for regulation of corporate financial disclosure has four very interesting characteristics. First, New Zealand separates its regulatory regimes into banking-oriented and investor-oriented regimes, setting a general economic environment of clarity in regulatory roles. Second, New Zealand further clarifies regulatory roles through formal separation of legal policy work from service delivery work. This "separation of steering versus rowing" allows lawyers in policy roles to set broad organisational objectives while allowing operations staff to focus on their more factory-style, customer-oriented work. Third, along similar lines, New Zealand now separates its disclosure work from its enforcement work. The consolidation of enforcement work at the Financial Management Authority (FMA) not only empowers the enforcement programme, but also allows the disclosure programme to focus more straightforwardly and transparently on its core mission. The separate funding of heavy enforcement work also allows executives to respond to crisis-driven demands for increased litigation and other reactive measures without disrupting the core work of disclosure. And fourth, within the service delivery operation for disclosure, systems follow a de facto international standard for business registry operations. Each of these organisational design decisions aims to clarify the roles of regulators and focus them effectively on their assigned tasks.

The financial structure of the disclosure operation is carefully designed to define and incentivise all of these approaches, and allows stakeholders to understand how financial resources are balanced against service delivery requirements. Self-funding entails a "bottom line" comparable to that of a private sector business, and executives must manage to that bottom line by balancing expenses against revenue. Filing fees are itemised to make costs transparent to all stakeholders, and are set according to the principle of "user pays." Notably, fees are much higher for paper-based filings, incentivising filers to make more efficient decisions about how to file.

New Zealand's disclosure operation also leverages a sensible, cost-effective set of information technologies based on design principles of architectural transparency, data interoperability, code standardisation and functional reusability. An N-tier architecture allows system modules to work together in an integrated manner, while also allowing them to be separately implemented, maintained, and upgraded. The design limits failures, improves scalability, improves performance, and facilitates reusability. A set of commercial off-the-shelf components helps to control costs while improving performance.

The architecture also makes significant use of web services to provide the public with direct, high-volume, machine-to-machine access to disclosure data. This greatly augments the accessibility of disclosure data within the financial markets. Organisations in the private and public sector leverage the web services to consume the disclosure data directly and transparently, without intermediaries and the errors and end-user costs they can introduce.

Care should be taken, of course, when comparing the regulatory regimes of any two countries. Differences in scale and scope limit the comparability of these two particular regimes. New Zealand's model has its own risks, and its work is often much more challenging in practice than on paper.

Still, the New Zealand model mitigates some of the naturally occurring trade-offs between regulatory compliance and economic development, providing a framework for a clearly missioned, transparently resourced, technologically advanced disclosure operation. As the US SEC and its stakeholders seek to improve the levels of transparency and accountability in their own corporate disclosure regime, they should consider approaches based on the New Zealand model:

Recommendation A: Organisational Model

Consider the suitability of adopting a tested alternative model, such as a performance-based organisation (PBO), or other model previously adopted for other US agencies, to organise disclosure work as a quasi-independent, self-funded service delivery operation budgetarily separated from legal policy work and from enforcement and compliance work. If it is not feasible to implement a more suitable organisational model for disclosure operations under the SEC, then agency stakeholders may consider transferring selected disclosure functions to non-SEC organisations, such as the Department of the Treasury's Office of Financial Research.

Recommendation B: Direct Public Access

Take steps to disintermediate the provision of public access to disclosure data:

- 1. Provide the public with ad hoc, high-volume, machine-to-machine access directly from the SEC at no charge. Make use of cost-effective technologies, such as web services, to improve direct transmission of all disclosure data, irrespective of format or type, and irrespective of the status of various initiatives to improve accounting rules or data formats.
- 2. Eliminate any real or perceived requirements to review, redact, edit or otherwise prepare disclosure data for public access. Issue formal guidance clarifying that disclosure filers are legally liable for public viewing of data filed publicly, including any information considered private or confidential, whether requested by the agency or not, whether filed directly or by proxy.
- 3. Over time, eliminate the post-intervention concept of "dissemination" and replace it with a registry-style disclosure model reflecting the primacy of direct public access.

Recommendation C: Fee Itemisation

Itemise disclosure filing fees so as to provide each filer with an itemised transaction receipt for each fee. This itemisation ought to be based on a principled, transparent and auditable methodology that credibly reflects the operational costs associated with each filing.

Recommendation D: Fee Incentives

Charge different fees for different filing transaction types based on the impact of those filings on estimated current operational costs. Specifically consider charging, in a revenue-neutral manner, lower fees for electronic filings than for paper filings.

Recommendation E: Funding of Public Access

Fund the dissemination of disclosure data through disclosure filing fees, or at least in a manner that is entirely separate from the agency's contractual arrangements with its internal systems developers.

Recommendation F: Backward Compatibility

Seek to remove backward compatibility as a cause or rationale for technological inertia. Incubate a separate, parallel disclosure arrangement that eliminates most or all requirements for backward compatibility, by making focused investments that are very clearly separated from antiquated disclosure rules, processes, forms and systems. Institutionally insulate this arrangement from any operational authority or rulemaking authority that has responsibility for maintaining backward compatibility.

Recommendation G: Collaboration Across Disclosure Programmes

Make use of professional development opportunities to improve the ability of the disclosure programme staff to leverage approaches, including the use of the standard registry model, developed in other countries. It is important that this professional development not be confused with training in accounting, training in EDGAR (Electronic Data Gathering, Analysis and Retrieval) systems, or training in specific data-oriented technologies such as XBRL (eXtensible Business Reporting Language) or XML (eXtensible Markup Language).

TABLE OF CONTENTS

AC	KNOWLEDGEMENTS	iii
EX	ECUTIVE SUMMARY	v
PRI	EFACE	1
INT	TRODUCTION	3
1	THE CHALLENGE OF SUNLIGHT	5
	How Transparency Makes a Difference in Securities Markets	5
	Balancing Investor Protection and Economic Development	6
	Criticism of Transparency in US Disclosure Operations	7
	A Brief Overview of Recent US Reform Efforts	12
2	WHY SHOULD THE US LOOK TO NEW ZEALAND?	15
	Strong Results from Disclosure	15
	A Grounding in Democratic Tradition	17
	A Successful History as an Incubator	17
3	ORGANISATIONAL DESIGN	21
	Separation of Regulatory Regimes	22
	Separation of Policy Work from Service Delivery	24
	Separation of Disclosure and Enforcement	26
	Adherence to a Standard Registry Model	29
4	FINANCIAL STRUCTURE	33
	The Principle of "User Pays"	33
	The Memorandum Account	34
	Transparent Itemisation of Fee Transactions	35
	Use of Fee Incentives	36
5	TECHNOLOGY HIGHLIGHTS	39
	N-Tier Architecture	39
	Off-the-Shelf Components	41
	Web Services	42
6	RISKS IN THE NEW ZEALAND MODEL	45

	Fraud and Money Laundering	45
	Collaboration Between Service Delivery Staff and Policy Staff	45
	Collaboration Between the Companies Office and the FMA	46
	Machine-Readability of Data	46
CON	NCLUSION AND RECOMMENDATIONS	49
	Recommendation A: Organisational Model	49
	Recommendation B: Direct Public Access	49
	Recommendation C: Fee Itemisation	50
	Recommendation D: Fee Incentives	50
	Recommendation E: Funding of Public Access	50
	Recommendation F: Backward Compatibility	50
	Recommendation G: Collaboration Across Disclosure Programmes	50
BIBI	LIOGRAPHY	51
	PENDIX A: HIGHLIGHTS IN THE HISTORY OF NEW ZEALAND'S CORPORATE ANCIAL DISCLOSURE OPERATION	55

PREFACE

This work is aimed primarily at stakeholders in the US corporate financial disclosure regime, including US regulators, company directors, shareholders, and public consumers of corporate financial information. The report represents solely the work of its author and does not reflect the opinions or judgments of the US Securities and Exchange Commission or its staff, nor any other public or private entity in the US or New Zealand.

INTRODUCTION

This report is concerned with improving the transparency of the US financial markets. Many government interventions make contributions to the overall transparency of the markets. But this report focuses specifically on the regulation of corporate financial disclosure, because transparency is in fact the core objective for disclosure regulation.

Specifically, this report examines the operational design of New Zealand's disclosure regulation in order to develop ideas for improvement of the US disclosure operation. Within the disclosure arena, the report focuses on the design of organisational and technical mechanisms used in regulation, and deliberately sets aside considerations of specific accounting rules or accounting practices. This focus reflects the author's thesis that the operational design of the regulatory apparatus is fundamental to the sustained effectiveness of regulatory work, and that the work of regulatory service delivery ought to be interoperable with a wide range of accounting data, and indeed with any data that a regulator may decide to collect or analyse. While many financial market stakeholders offer competing ideas for reform of disclosure rules and accounting data standards, far fewer focus on ways to improve the underlying disclosure operations. This report acknowledges the importance of those operations.

Chapter One of the report briefly describes the need for transparency in the securities markets, and outlines major issues facing the US in seeking to ensure that transparency. Chapter Two lays out some of the reasons for US policy makers to consider the approaches taken by New Zealand as it seeks to enhance transparency in its own markets. Chapters Three, Four and Five investigate some of the approaches that New Zealand has taken in organisational design, financial structure, and information technology architecture. Each of these areas is evaluated in some detail, followed by an assessment in Chapter Six of key risks that New Zealand faces with its particular approach. Finally, based on this assessment of the New Zealand model, the report concludes by laying out recommendations for improvements to US disclosure operations.

1 THE CHALLENGE OF SUNLIGHT

US financial historians generally credit Justice Louis Brandeis with leading the public charge towards greater market transparency in the early part of the twentieth century. In 1913 Brandeis famously articulated the notion of transparency – what he called "publicity" – as a kind of metaphorical sunlight:

Publicity is justly commended as a remedy for social and industrial diseases. Sunlight is said to be the best of disinfectants; electric light the most efficient policeman.¹

But it was not until the Great Depression of the 1930s, several years after the Wall Street collapse of 1929, that federal legislators finally established the US Securities and Exchange Commission (SEC) and charged it with ensuring sufficient transparency in the corporate arena. The SEC now houses this transparency mission in its disclosure programme with the express public purpose of ensuring fair and efficient markets. During the twentieth century, as countries like New Zealand implemented similar disclosure regimes, transparency – or "sunlight" ensured by government regulation – has emerged as a key building block of a modern market-oriented economy.

How Transparency Makes a Difference in Securities Markets

From an economic standpoint, what exactly is the rationale for government to require businesses to disclose their finances to the public? What is the point of making financial markets transparent in the first place?

Modern economic theory recognises that investors require readily accessible and reliable information in order to make intelligent investment decisions. In the aggregate market, more perfect information leads to a more efficient set of market outcomes. But when market participants differ greatly in their access to basic company information, some participants will be able to take advantage of other participants. Persistent differences in access to current and reliable information can lead to socially unacceptable trading practices. Moreover, if a number of investors come to view these differences as fundamentally inequitable, they may withdraw from market participation, causing markets to shrink.

Economists call this phenomenon the problem of "information asymmetry." To compensate for the risks posed by information asymmetry, government can intervene to require market participants to make appropriate information more transparent to investors. By making this information available to investors in a broad and readily accessible manner, government can ensure that markets run more efficiently over the long term.²

In the US, the challenges posed by information asymmetry form the classic rationale for regulation of corporate financial disclosure. For some time now, reformers from across the US political spectrum have called for further "correction of information asymmetries" in the US financial markets.³

¹ Brandeis (1913)

² For a useful overview of economic theory in this area, see for example Healy and Palepu (2001)

³ See for example Committee on Capital Markets Regulation (2009)

But transparency of corporate business information can do more than just address the challenge of information asymmetry. Broad and even-handed transparency can also help businesses find other businesses to work with, reducing transaction costs along the way. Or, conversely, transparency can help businesses find out who they happen to be competing with, thereby reducing their market research costs. By raising the general level of market information available for and about various industries, the right kind of public disclosure can facilitate economic development.

Transparency also plays an important role within a government's disclosure operation itself. Taxpayers gain confidence in an agency's regulatory work when that agency's internal operations operate in the sunlight. Regulators are therefore often subject to "open government" requirements to ensure the transparency of their internal operations. Indeed, public expectations for operational transparency can be especially high in an agency charged with ensuring public transparency as a core part of its regulatory mission.

Lastly, and perhaps least well understood, is the role that transparency can play in improving government efficiency. The traditional bureaucratic view of open government rules is that they impose measurable, immediate costs on the public purse but do not result in measurable, immediate benefits. In this view, open government is considered a necessary impediment to operational efficiency.

But when government operations are structured to enlist the public more deliberately in data analysis efforts, the efficiency gains can be significant. A notable modern example is the US Patent and Trademark Office's Peer-to-Patent programme, which allows that agency to leverage highly knowledgeable volunteers in a way that augments the routine analysis of paid professional regulators. This arrangement allows greater scrutiny of corporate filings using the same level of internal staff resources. Advocates of this approach to regulatory transparency argue that it not only improves operational cost-efficiency but that it also enhances public confidence in the regulatory structure.^{4,5}

Balancing Investor Protection and Economic Development

In the US, the Securities Act of 1933 and the Securities Exchange Act of 1934 charged the SEC with protecting investors and looking after their particular needs in the markets. Successive SEC chairmen have reiterated over the years that the SEC's ultimate purpose in enhancing market transparency is in fact the protection of investors. Former Chairman Arthur Levitt, for example, emphasised the historical continuity of this line of thinking when he re-articulated the words of the SEC's illustrious former chairman, William O. Douglas:

One of my predecessors, later Supreme Court Justice, William O. Douglas described our special role in this way: "We've got brokers' advocates; we've got exchange advocates; we've got investment banker advocates; and we are the *investor's* advocate."

⁵ Brabham (2008)

⁴ Noveck (2009)

⁶ Levitt (1995)

And yet, at the same time, the Securities Act also seeks to ensure that the SEC carries out this investor-oriented mission with due regard for the needs of economic development:

Whenever pursuant to this title the Commission is engaged in rulemaking and is required to consider or determine whether an action is necessary or appropriate in the public interest, the Commission shall also consider, in addition to the protection of investors, whether the action will promote efficiency, competition, and capital formation.⁷

Thus one of the challenges facing the SEC – perhaps even the central challenge – is how to strike an appropriate balance between investor protection and economic development, and to manage the trade-offs between those two key objectives. Given the significant costs of corporate compliance imposed by a disclosure regime, how much corporate transparency should the SEC reasonably require to meet its objective of investor protection?

New Zealand makes use of a different regulatory structure to address the very same challenge. New Zealand's institutions are similarly market-oriented, and its regulatory regime makes use of market-based approaches much in the same way that the US regime does. But in New Zealand, the disclosure operation is housed as a quasi-independent, self-funded service delivery operation under the Ministry of Economic Development. Under this structure, New Zealand has taken steps to constitute its disclosure operation as an economic development endeavour rather than merely as a necessary burden for the purpose of investor protection. Meanwhile, most of the enforcement-related work of investor protection is housed separately under the Financial Markets Authority, an independent Crown entity.

New Zealand allows market participants to file quickly and efficiently with its Companies Office, and then makes their information available to the public in a free, highly accessible, and increasingly machine-readable manner. By doing so, New Zealand explicitly aims to have companies contribute simultaneously both to investor protection and to economic development. Businesses use the information from the Companies Office registry to find one another, to research one another, to automate services to one another, and even to report one another if filings look suspicious. Thus, while disclosure filings in New Zealand do impose some compliance costs on the market participants required to register, these costs come in for far less criticism than one finds in the US. Arguably, the New Zealand approach to corporate disclosure gives New Zealand an advantage in managing the trade-off between investor protection and economic development.

Criticism of Transparency in US Disclosure Operations

The SEC is a frequent subject of coverage in the US news media. For a relatively small US agency, it maintains a high public profile. Perhaps for this reason one does not need to look far to find criticisms of the agency, and of its disclosure regime in particular. A brief review of such criticisms will help to illuminate the rationale for US policy makers to examine elements of the New Zealand model.⁸

⁷ Securities Act of 1933, Section 2(b)

⁸ This report is not intended as a comprehensive review of the challenges facing the SEC. Readers seeking such an assessment are referred to recent studies and articles that focus exclusively on the SEC, including those listed in the bibliography.

The most widely publicised and prominent criticisms of the US regime tend to come from legislators who oversee the agency, from political appointees at the agency, and from the agency's former senior officers. Their most common criticisms focus on (1) the complexity of the disclosure process, along with the impact of complexity on market efficiency and fairness, (2) the level of advancement in the agency's disclosure technology, and (3) the role of legal work within the agency.

In 2006, then-SEC Chairman Christopher Cox asserted that "if the SEC is truly to succeed in helping investors with more useful information, we'll need one more ingredient: an all-out war on complexity.... The complexity of the disclosure and accounting mandated by our rules too often adds nothing to function." In 2009, as the SEC found itself on the front lines of the global financial crisis, former SEC Chairmen Harvey Pitt echoed this same sentiment, noting that "Although the SEC receives many filings of different sorts, it does very little to collect significant data, analyse it, and then disseminate it to other government agencies and the marketplace.... This can lead to ill-informed markets, and ill-informed markets can lead to panic when things get rough, as we've seen over the past year and a half." Later he observed that "Markets that lack important data wind up manufacturing it, producing full-scale panic, which is exactly what we've witnessed recently. The more transparent our markets are, the more efficiently they'll operate."

In 2010, as the SEC continued its efforts to reform disclosure operations, members of Congress began calling publicly for legislative reform of the regime. Perhaps the most high-profile criticism emerged from Congressman Darrell Issa, then the minority ranking member of the US Congressional Committee on Oversight and Government Reform, ¹² who directed his staff to publish this view of the disclosure regime:

The Commission's complex disclosure rules and forms have sapped staff resources, made technological innovation difficult, and overloaded the Commission with lawyers. They have also made raising capital ever-more expensive for public companies. However, the most important consequence of unnecessary complexity in securities disclosures is that it runs counter to the Commission's basic philosophy of investor protection through transparency. Sunlight cannot serve as disinfectant if investors cannot easily understand or use the information they receive. ¹³

The report observes, in rather assertive language, that a "Byzantine" level of complexity in the disclosure programme "prevents technological innovation" and that for this reason "The Commission's securities disclosure processes are technologically backward." The report goes into some detail on the Commission's disclosure processes, concluding that "The Commission's disclosure technology is clearly inadequate to ensure investor protection."

¹⁰ McGinty and Scannell (2009)

⁹ Cox (2006)

¹¹ Pitt (2009)

¹² With the elections of November, 2010, Congressman Issa became majority party chairman of the Committee.

¹³ Minority Staff Report (2010), p. 27

¹⁴ Ibid. p. 25

¹⁵ Ibid. p. 11

¹⁶ Ibid. p. 14

In March of 2011, the Boston Consulting Group (BCG) published the results of a Congressionally mandated independent study of the SEC. The study is direct in its criticism of the SEC's disclosure operation. It particularly criticises EDGAR, the Electronic Data Gathering, Analysis and Retrieval system used to run disclosure operations.

In the mid-1980s, EDGAR was the system that revolutionised disclosure, allowing filers of regulatory information to submit many of their required documents to the SEC in electronic format. In 1995 the SEC made the system available on the internet, enabling investors to read those filings online. Today, the BCG study notes, "In many ways, EDGAR is the public face of the SEC. For most filers and investors, EDGAR is the only direct contact they will have with the SEC."

But the BCG study notes that EDGAR has not undergone significant modernisation since 1997, and that this "has resulted in a more limited use of EDGAR data in internal SEC analysis and workflow, increased support and development costs, and sub-optimal filer usability." The study observes that "EDGAR – a flagship application for storing and disseminating filings – is overly complex.... EDGAR currently has duplicative components, lacks standardisation in data formats and business logic, and provides a sub-optimal end-user experience through a proliferation of filing forms and inconsistent processes." The study notes the SEC's three main IT systems – Hub, TCR, and EDGAR – and praises only Hub and TCR, two systems associated with enforcement and not disclosure, as emerging examples of effective collaboration across organisational silos. On the disclosure side, by contrast, the multiple regulatory divisions that provide requirements to EDGAR have little incentive to collaborate. The study criticises the resulting EDGAR design at length, ultimately noting that it has "several functional and architectural shortcomings."

Perhaps the most common criticism of the disclosure programme's complexity is the argument that it imposes significant compliance costs among registrants. Complex accounting rules require expensive pre-filing review by accountants and lawyers. Because EDGAR is so tightly coupled to these rules, the processes for filing disclosures on EDGAR have become extremely complicated for filers. The question of "how to file" is so mixed together with the question of "what to file" that many filers are sufficiently confused that they end up paying additional fees to third parties to submit filings on their behalf.

To varying degrees, critics cite the complexity of the disclosure programme as an unnecessary burden on existing filers, a barrier to entry for smaller firms, or an incentive for entrepreneurs and would-be filers to remain unregulated. Without digressing into a lengthy analysis of the size and quality of various estimates of compliance costs, it is enough to observe that the complexity of disclosure requirements is commonly acknowledged as a significant cause of those costs.

¹⁹ Ibid. p. 60

¹⁷ Boston Consulting Group (2011), p. 218

¹⁸ Ibid. p. 219

²⁰ Ibid. p. 61

²¹ Ibid. p. 219

In addition to compliance costs, the complexity of the disclosure programme is also criticized for raising the costs of implementing new rules, even when those rules seek to simplify disclosure, and even when many stakeholders agree that the rules are theoretically desirable. Congressman Issa's report makes this "path dependence" argument very assertively, arguing that "the disclosure rules have become so complex that they can only be understood by specialised lawyers who work for the Commission and private law firms and investment banks. Some members of this elite group circulate back and forth between the Commission and the firms. Maintaining the complexity of the system is in their financial interest." By this reckoning, in trying to mitigate information asymmetries in the market, the disclosure programme may unintendedly create other asymmetries, and in the process incentivise a small group of insiders to maintain inefficiencies in the programme. Again, legitimate questions about "what" to file get mixed together, in an adverse manner, with what ought to be clear mechanical questions about "how" to file.

One encounters similar criticisms about the unintended impacts of complexity at the other end of the disclosure programme, in the dissemination of data from the SEC out to the public. The SEC disseminates raw disclosure data to average investors for free through its public website. But critics question whether this data is sufficiently intelligible, structured, comprehensive, or accessible to be truly useful. The SEC's 21st Century Disclosure Initiative describes the cumbersome process currently in place for any investor seeking to analyse disclosure data:

At present, an investor seeking a particular piece of information about a company must first find the correct document, which is frequently complicated by the filing of amendments to the original document, and then review an often lengthy static file. The basic search option is a plain-text search. All complex analyses and comparisons between different periods or companies require the investor to manually extract the underlying information or use a third-party service that has done so.²³

SEC's website statistics substantiate this concern, indicating that too often these users are unable to navigate directly to the disclosure data they need.

There exists a separate dissemination arrangement for industry professionals and others with the means to pay for much more useful versions of the same data. When the SEC's contractor transmits the collected disclosure data out to the public, it does so by sending a feed to a limited set of subscribers, private firms who serve as redisseminators to the public.²⁴ Former Chairman Cox's description of the arrangement is worth quoting at length:

With today's SEC reports, an investor or analyst who is looking to compare, say, data on annual capital expenditures of two companies, has to search through perhaps hundreds of pages of the filings of each company page-by-

²² Minority Staff Report (2010), p. 27

²³ 21st Century Disclosure Initiative (2009), p. 11

²⁴ In the early 2000s, only a handful of private firms received the feed, and dissemination went out to the public at least twenty-four hours later. The SEC reduced this delay after some negative press about the practice (see DiCarlo, 2000). As of November 2009 there were twenty-two subscribers to the feed. Still, a private firm determines who becomes a subscriber, and the set of subscribers is not made public. It is unclear from available research whether the current state of this arrangement results in any oligopolistic behaviour or introduces significant market asymmetries.

page. Not surprisingly, the burden of this time-consuming, tiresome task has led to the creation of a cottage industry in re-keyboarding the information in SEC reports, so that it can be downloaded into spreadsheets and other software. Investors, or more precisely the intermediaries whose fees they pay, can then buy this information from both domestic US firms and overseas providers to whom the drudge work has been outsourced. Once the information is manually input, it is often first sold to third or fourth parties for further reduction and analysis before it eventually is made available to an individual investor. One hates even to think of the human error and data corruption that inevitably occurs in this process. We know from experience that the error rate is unacceptably high.²⁵

This "cottage industry" of re-disseminators and their affiliates, artificially fertilised by the complexity of the disclosure operation, not only introduces real errors in disclosure data, but also results in real intermediary fees that many investors and analysts would not have to pay under a simpler model of public access. Just as the complex tax code generates billable hours for tax preparers, tax advisors, and tax attorneys, the complex dissemination process spawns its own set of clerical workers who, for a fee, try to make basic disclosure data more accessible for those who can pay.

Criticisms of the US disclosure regime are not limited to business process challenges and technological concerns. Organisational culture is also a common concern. Former Chairman Harvey Pitt observes that "the SEC has for quite some time been an overlawyered agency."26 Former SEC Secretary Jack Katz takes this argument further and argues that "the SEC is a reactive regulator," that its culture "reflects the traditional perspective of a lawyer: a preference to wait for 'cases and controversies,'"²⁷ and that ultimately this reactive orientation "diverts attention from what may be on the horizon."28 According to Katz, this problem is not limited to enforcement but extends to the disclosure programme as well, where the staff "suffers from a daily workload of routine actions.... The demands of addressing this workload require the staff to focus on what is submitted to the SEC."²⁹ Congressman Issa's report repeats this argument about the SEC's "reactive, overlawyered approach." It then goes on to observe that SEC lawyers are generally "familiar with, and sympathetic to, the needs and desires of large corporate securities issuers, but much less likely to understand the perspectives of small issuers or investors."31

Ultimately, the majority of criticisms of the SEC's disclosure process focus on its complexity, its level of technological advancement, and its lawyer-oriented culture. As it happens, these are the very areas in which the Government of New Zealand has introduced specific innovations: to manage the complexity of its disclosure programme, to incentivise IT innovation, and to clarify the roles of its legal staff with respect to operationally oriented work. For US regulators interested in disclosure

²⁵ Cox (2006)

²⁶ Cook (2009)

²⁷ Katz (2010), p. 497

²⁸ Ibid. p. 499

²⁹ Ibid. pp. 499-500

³⁰ Minority Staff Report (2010), p. 20

³¹ Ibid. p. 22

reform, New Zealand's approach to disclosure provides a compelling view of possible alternatives.

A Brief Overview of Recent US Reform Efforts

In 2005, SEC Chairman William Donaldson launched a voluntary filing programme that enabled registrants to submit disclosure data in a more structured and analysis-ready format. He also established an Office of Risk Assessment (ORA) in order to enhance the agency's ability to perform forward-looking risk analysis. In 2008 Chairman Christopher Cox built upon this effort, creating the 21st Century Disclosure Initiative, the "Interactive Data" initiative, and the Office of Interactive Disclosure (OID). In 2009, Chairman Mary Schapiro combined OID, ORA and several other small offices to form a major new division, the Division of Risk, Strategy and Financial Innovation (RSFI), with an expanded mandate and staff. RSFI now houses the Interactive Data initiative as part of its broad mission to innovate across existing SEC divisions and offices.

In 2009, a select set of SEC staff, primarily from within RSFI, published a report observing that "because EDGAR is essentially a document-based disclosure system containing information that is searchable but not interactive, it is no longer leading-edge technology." The public report went on to note that "The need to improve transparency is evident. As disclosure documents have continued to grow longer, reflecting more complex business arrangements and new disclosure obligations, plaintext format may not always be the most efficient in meeting investor needs. The financial crisis of 2008 revealed the dangers of opaque, complex, financial instruments that are difficult to understand and analyse."

The Interactive Data initiative continues apace from within RSFI. One of the key challenges for the initiative is to reconfigure a wide array of data and yet to do so without introducing additional complexity into the disclosure operation. Indeed, simplification of the SEC's disclosure operation is a supremely challenging endeavour, requiring complex restructuring of operations, as well as significant investment and coordination among multiple vested stakeholders, processes, and systems across the industry.

Given this monumental challenge, it seems reasonable to ask how much the SEC can really achieve under its existing organisational structure, even with the best of intentions. The Congressionally mandated independent study raises this question in a serious manner, recommending that agency stakeholders "systematically redesign the organization" if the SEC is to achieve its mission.³³ If the SEC cannot do so, there is always the chance that the agency's stakeholders will transfer responsibilities from the SEC to other regulators. For example, the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act establishes a new Office of Financial Research within the US Department of the Treasury, giving it a broad mandate to standardise the collection and dissemination of financial data. It remains to be seen whether organisations like the Treasury will have an opportunity to enhance, or even replace, some of the SEC's disclosure functions.

³² 21st Century Disclosure Initiative (2009), pp. 4, 12

³³ Boston Consulting Group (2011), p. 6

As the SEC seeks to redesign its organisation, it will help to look to its New Zealand counterparts to see what has worked for them.

2 WHY SHOULD THE US LOOK TO NEW ZEALAND?

Despite its smaller size, New Zealand's economy is quite similar in market structure and orientation to that of the US. Its business climate mirrors that of the US, and its regulatory regimes rely on similar market-based solutions. Indeed, when it comes to financial market regulation, New Zealand faces many of the same issues as the US.

Chapter One of this report noted the challenge that the US faces in balancing the mission of investor protection, on the one hand, with the needs of economic development on the other hand. New Zealand faces a similar challenge. However, by some measures, New Zealand is performing better in meeting this challenge.

Strong Results from Disclosure

It is notoriously difficult to measure the overall economic results of disclosure regulation, or the amount of risk mitigated by a regulatory regime. But New Zealand ranks favourably against the US in those studies that seek to make assessments in related areas.

Perhaps the most important overall objective of regulation is public confidence in financial institutions. New Zealand has performed comparatively well in this regard. One can look to surveys such as the Gallup World Poll, for example, which ranks the percentage of the national population who are confident in their financial institutions, including banking and non-banking institutions. Its 2009 survey assessed confidence in New Zealand's financial institutions a score of 72.68 out of 100, versus 45.93 for the US.³⁴

Still, public confidence has many causes, and it is difficult to know the extent to which confidence in the disclosure regime contributes to public confidence. A more direct assessment would examine the quality of protection afforded to investors.

In 2010 the International Finance Corporation (IFC), a subsidiary of the World Bank Group, published its latest study of business regulation across 183 different countries.³⁵ Table 1 summarises its ranking of New Zealand and the US in key areas (with "1" being the best possible ranking).

Table 1. Comparison of business regulatory environments in New Zealand and the US

	Overall Ease of Doing Business	Starting a Business	Dealing with Construction Permits	Registering Property	Getting Credit	Protecting Investors	Paying Taxes	Trading Across Borders	Enforcing Contracts	Closing a Business
New Zealand	3	1	5	3	2	1	26	28	9	16
United States	5	9	27	12	6	5	62	20	8	14

According to the IFC, New Zealand has been consistently outperforming the US in protection of investors for some years now. The IFC bases its assessment on the work of an interdisciplinary team from Dartmouth College Tuck School of Business, Harvard University, and EDHEC Graduate School of Management.³⁶

³⁴ Gallup World Poll (2009)

³⁵ Doing Business Project (2010)

³⁶ Djankov et al. (2008), pp. 430-465

In the chart above, note the two columns highlighted for our purposes here. The IFC study ranks New Zealand's regulatory regime ahead of that of the US not only in providing investor protection, but also in facilitating the starting of businesses. This is important because, as the Securities Act of 1933 acknowledges, the need for investor protection in the US must be balanced by the need for economic development. In evaluating a financial disclosure regime, it is important to look at both criteria because of the compliance burden that a regime may impose. Among other things, a comparatively lower compliance burden generally means that nascent businesses will choose to enter the formal disclosure regime more readily, rather than remain unregulated on the sidelines. Compared with other countries, New Zealand does extremely well in companies registered per capita, with roughly 570,000 companies registered out of a population of about 4.3 million.

Laissez-faire economists generally agree with the IFC's assessment of the ease of starting a business in New Zealand. The Fraser Institute ranks New Zealand third in dealing with business regulations, out of 141 countries surveyed, while ranking the US as twenty-sixth.³⁹ Similarly, a study by the Heritage Foundation and The Wall Street Journal rates New Zealand's level of "financial freedom" at 80 out of 100, versus a score of 70 for the US, noting that in New Zealand "regulation is efficient and transparent in accordance with international standards.... Capital markets are small but well developed, and stocks are traded actively.... The financial system has weathered the global financial turmoil relatively well...."

When transparency is defined in another way, in terms of open and accountable government, New Zealand performs similarly well. The most widely cited assessments in this area come from the non-profit advocacy organization Transparency International. The organization ranks New Zealand as first in the world (tied with Denmark and Singapore) in its most recent routine assessment of perceptions of transparency and accountability across 178 different countries. By contrast, the same group ranks the US as number twenty-two, just behind Chile.⁴¹

Finally, New Zealand's disclosure programme has a strong reputation within New Zealand itself, among the people who deal with it every day. In its most recent study of business compliance efforts in New Zealand, accounting firm KPMG ranked the Companies Office as the "most helpful government agency" in New Zealand and the only government agency categorised as "excellent." Along the same lines, the competitive intelligence company Hitwise, a subsidiary of Experian, ranked the Companies Office as number one in its "business information" category, based on feedback from individuals and companies across the country.

³⁷ The assessment methodology is documented by Djankov et al. (2002)

16

³⁸ Taking all nine factors into account for overall ease of doing business, the IFC ranks Singapore and the Hong Kong SAR ahead of New Zealand. The United Kingdom ranks fourth overall, ahead of the US but behind New Zealand.

³⁹ Gwartney et al. (2010), pp. 10-11

^{40 2011} Index of Economic Freedom (2011)

⁴¹ Transparency International's most recent "Corruption Perceptions Index" scores New Zealand at 9.3 out of 10, placing it first in the rankings (tied with Denmark and Singapore). The study scores the US at 7.1 out of 10.

⁴² Business NZ and KPMG (2008), p.5

⁴³ Hitwise Top 10 Online Performance Awards (2008)

A Grounding in Democratic Tradition

Modern financial markets rely upon broad perceptions of transparency and legitimacy in order to operate effectively. Within New Zealand, the popular political concept of "egalitarianism" provides an environment of democratic legitimacy highly suited to disclosure regulation. Upon leaving office in 2008, Prime Minister Helen Clark articulated the concept in her own characteristic way:

I've always been very proud of New Zealand's egalitarian traditions. Deep in our country's roots is the ethos that Jack is as good as his master and, these days, we must say that Jill is as good as her mistress. Many of our forebears came to this land to escape the class-bound nature of Britain, where their place in the economic and social order was largely prescribed from birth and could not be escaped from.⁴⁴

Popular opinion polls generally concur that egalitarian objectives are central to New Zealand public life and that, even if such objectives have recently become more difficult to achieve in practice, the populist ideal of economic fairness nonetheless remains a powerful element of political discourse.

In the New Zealand regulatory structure, such traditions reveal themselves as various rules and practices aimed at curbing abuses of economic power and protecting less powerful market participants. To work for greater transparency is to work, under this understanding of egalitarianism, in the service of New Zealand's core founding traditions. To be sure, other countries – Singapore, for example – may have regulatory regimes just as technically proficient as New Zealand's, perhaps even more so. But in New Zealand the technical mechanisms for ensuring market transparency are readily able to ground their political legitimacy in a longstanding historical ideal of egalitarianism.

Egalitarian economic practices are also likely to have a beneficial effect on a country's position in international trade. Over the last several years, researchers from Harvard Business School and Hebrew University of Jerusalem have compiled persuasive evidence that such practices tend to encourage confidence among market participants residing outside the country, thereby bolstering cross-border investment flows.⁴⁵

Transparency is a fundamentally democratic concept because it entails broad citizen access to information that ought to be public. As US policy makers evaluate various models for improving their regulation of corporate financial disclosure, they encounter in New Zealand a model for transparency that is not only technically intriguing but also deeply grounded in democratic historical tradition.

A Successful History as an Incubator

The US has a long tradition of looking to New Zealand as an incubator of organisational innovation. Journalist Henry Demarest Lloyd began writing about New

⁴⁴ Clark (2009)

⁴⁵ Siegel et al. (2011)

Zealand's approach to industrial organisation in 1903, and over the next decade his populist writings profoundly influenced the emerging anti-trust movement in the US. 46 For the next several decades, US reformers often referenced New Zealand as a kind of "offshore laboratory," a forward-looking nation of educated frontiersmen able to produce more than their share of contributions in industries such as aviation, agriculture, science, and health care. The US has successfully adopted innovations in many of these areas.

In New Zealand, a prime minister whose party commands a legislative majority has a decent chance of moving major reforms through the political system. In the mid-1980s, following a period of sustained economic difficulties, the New Zealand Government began a radical reorganisation of its entire public sector. By the early 1990s, New Zealand's improvements in public sector service delivery began to catch the eye of policy makers in the US. US reformers from across the political spectrum began to put forward their own reform proposals based, in large part, on the New Zealand model.⁴⁷ The first major legislative overhaul based largely on New Zealand concepts came about in 1998, when the US Congress reorganised the Department of Education's Office of Student Financial Assistance (OSFA).

In late 1998, Congress amended the Higher Education Act to allow OSFA to operate as a "performance-based organization," or PBO. The PBO model incorporated multiple concepts adopted successfully by New Zealand: separation of service delivery work from policy development work, self-funding of public services through user fees, and establishment of a new Chief Operating Officer position empowered with greater management flexibility to achieve productivity improvements. Congress followed this up in 1999 by reconfiguring the US Patent and Trademark Office as a similar kind of New Zealand-inspired PBO. Next, in 2000, President Clinton acted by executive order to reconstitute the Air Traffic Organization as a PBO.

Under the US political system, with all of its checks and balances, these kinds of reforms can be very difficult to bring about. They can be even more difficult to orchestrate when new legislation is required. But they appear to have worked reasonably well where they have in fact been implemented. Moreover, as the case of the Air Traffic Organization demonstrates, new legislation is not necessarily required to achieve such reforms.

After the election of 2000 and the terrorist attacks of 2001, the new Congress and new Administration confronted other priorities in the US, and these particular kinds of New Zealand-inspired reforms faded from fashion. However, other countries, particularly around the Pacific rim, continued to look to New Zealand for innovations in public sector management.

Care should be taken, of course, when comparing the regulatory regimes of two countries. In 2010, New Zealand's registry included around 570,000 companies, of which only 6,000 – or less than one per cent of the total in the US – were required to report under the Financial Reporting Act. New Zealand's regulatory apparatus is similarly scaled down, which allows it to introduce new ideas and new approaches

⁴⁶ Lloyd (1903)

⁴⁷ Eggers (1997)

with comparative agility. Moreover, New Zealand's political system is structured in a way that allows its public leaders to make changes more quickly than the US typically can. These differences raise a note of caution for anyone seeking to draw recommendations for the US based on the New Zealand model. This report therefore attempts to identify only selected New Zealand approaches that may, in fact, be scalable and suitable for the US model.

3 ORGANISATIONAL DESIGN

In 1860 New Zealand enacted the Joint Stock Companies Act, following an English statute that consolidated legislation passed there from 1844 to 1860. The Act established a Registrar of Companies at a Companies Office and provided for the incorporation of limited liability companies and their liquidation. In return for this limited liability, a filer disclosed a basic set of information about his business, including the purpose of the business, the capital involved, the number of shares, and the articles of association regulating internal procedures. The public was able to view these filings at the Companies Office.

New Zealand updated the Companies Act from time to time over the years. But it always maintained the same basic concept of transparency: the economy benefits when businesses disclose basic information about their interests to the public. Public availability was the key to the system; any internal government review was ancillary to the need for public scrutiny.

In the twentieth century, as the public sector's role in economic development grew, the New Zealand Government established its Ministry of Economic Development (MED). The Ministry created a home for the Companies Office in MED's Business Services Branch (BSB), as part of its Business Registries Group (BRG). Effectively, this allowed the Companies Office to expand its registry-oriented services to multiple regulatory needs without departing from its core disclosure mission. As the parent organisation of the Companies Office, BRG took on responsibility for registry-related activities not specifically within the core disclosure operation, including a client contact centre and an IT vendor management shop (see figure 1).

Because the Companies Office preceded the establishment of its parent BRG, BRG is often branded as the "Companies Office" as well. The legal policy shop that manages rulemaking for the Business Services Branch also can come under the "Companies Office" brand. Colloquially, the "Companies Office" refers to more staff than fit strictly within the Companies Office budget.

From a US perspective, New Zealand's organisational design for regulation of corporate financial disclosure has evolved to take on four very interesting characteristics. First, New Zealand separates its regulatory regimes into banking-oriented and investor-oriented regimes, setting a general economic environment of clarity in regulatory roles. Second, New Zealand further clarifies regulatory roles through formal separation of its policy work and its service delivery work. Third, along similar lines, New Zealand now separates its disclosure work from its enforcement work. And fourth, within the service delivery operation for disclosure, systems follow a de facto international standard for business registry operations.

Each of these organisational design decisions aims to clarify the roles of regulators and focus them effectively on their assigned tasks. Let us examine each of these decisions in turn, beginning with the broad environment of financial regulation, then focusing on the disclosure operation more specifically.

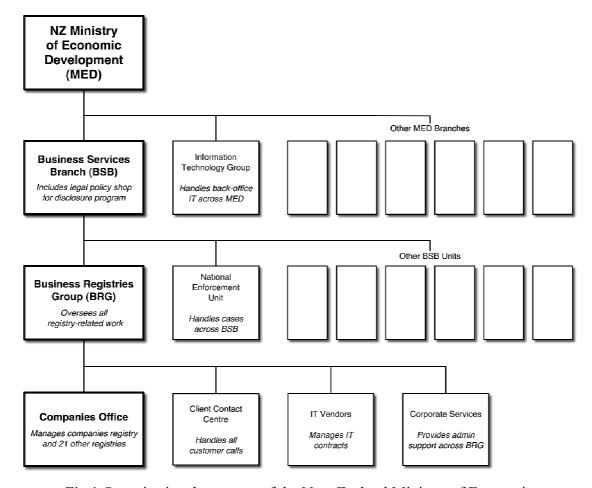


Fig.1 Organisational structure of the New Zealand Ministry of Economic Development showing the Companies Office within the Business Registries Group.

Separation of Regulatory Regimes

The "twin peaks" model of financial regulation is generally attributed to Michael Taylor, a former officer of the Bank of England, who popularised the concept in a series of lectures and publications in the mid-1990s. The model consolidates all financial regulation under two government bodies, or "peaks," one responsible for regulation of any activity requiring prudential regulation (e.g., banking) and one responsible for market and disclosure regulation of financial products offered to consumers. One of the basic objectives of the twin peaks model is to strike a balance between integration versus specialisation of regulatory entities. The goal is to give regulators sufficient clarity of mission to be able to succeed, while also giving them each the consolidated power and resources to be able to pursue that mission.

In 1996, Australia's Wallis Inquiry proposed the twin peaks model for reform of Australia's regulatory structure, and over the next two years Australia went about implementing the model.⁴⁹ Although Australia's experience with twin peaks has not been without its critics, the model has so far proven to be reasonably effective in helping Australia's financial system weather the global financial crisis.

⁴⁸ Taylor (1995)

⁴⁹ For a primer on the twin peaks model, see Cooper (2006)

New Zealand adopted a slightly modified and somewhat lighter version of the Australian financial regulatory model, and in 2011, against the backdrop of the global financial crisis, New Zealand brought its model even more closely in line with Australia's. The Reserve Bank of New Zealand, in addition to its traditional monetary policy duties, continues to regulate all banks, non-bank deposit holders, and insurance companies, performing a regulatory function similar to that of the Australian Prudential Regulation Authority. Very separately, New Zealand has now established a Financial Markets Authority (FMA) with a broad mandate to oversee all sellers of financial products and services to consumers, including all issuers and all financial services providers. In May of 2011, the FMA replaced the New Zealand Securities Commission and the Government Actuary, taking on new powers and tools, and incorporating some law enforcement staff formerly associated with the Companies Office and the Serious Fraud Office (SFO). The FMA is legislatively structured to play a more assertive role in enforcement of the securities laws.

The consolidation of financial services regulation under the FMA has not been absolute. The SFO continues to focus on fighting financial corruption, including matters such as bribery, multi-victim frauds of over two millions dollars, or frauds involving lawyers or others in a position of trust. The SFO effectively offloads much of the most controversial enforcement work from the FMA and Companies Office. Likewise, the Companies Office continues to run its core financial disclosure operation in a manner largely untouched by this consolidation. MED's enforcement group had always existed somewhat apart from the core operational work of disclosure at the Companies Office. As a consequence, the consolidation of financial regulatory enforcement under the FMA has not fundamentally disrupted the core disclosure operations at the Companies Office. S1

One can readily observe at least three reasons why the New Zealand Government chose not to consolidate the Companies Office, or at least its disclosure operation, into the FMA. First, the Companies Office has earned a deservedly solid reputation as a high-performing service delivery organisation. The reputation extends across the New Zealand policy community, across the regulated population, and across international boundaries. Second, the Office is structured as a factory-style production facility deliberately set apart from the political intrigues of policy development. This relatively benign position in the political environment appears to have limited the need for post-crisis political intervention. And third, the Office provides a single IT platform for common business services across a number of economic sectors, not just the financial services sector. This economy of scale improves cost-effectiveness to the point where it would be impractical to slice off and maintain a separate silo just for financial services regulation.

Clarity of mission is fundamental to the success of any regulator. The twin peaks model seeks to clarify regulatory missions by balancing the need for regulatory specialisation against the need for regulatory integration. New Zealand's latest version of the model brings greater clarity to the regulatory regime by consolidating the role

⁵⁰ Over the course of this study, the author had the privilege of witnessing this transition firsthand.

⁵¹ One additional financial regulatory entity, the Takeovers Panel, continues to operate under its own separate legislation to evaluate corporate takeovers. A relatively small, specialised entity, it functions much in the same way that offices within the US Federal Trade Commission and US Department of Justice evaluate proposed corporate mergers in the US.

of the FMA as one of two "peaks" in a policy framework already well-tested across the Tasman. At the same time, New Zealand's approach makes pragmatic accommodation for specialist regulatory organizations, allowing the Companies Office to continue performing its specialised regulatory role of enhancing market transparency.

In the US, financial regulators work within a patchwork of different agencies. Few would argue that the roles of US regulators are actually clarified and enhanced by this environment, and respected reformers in the US have proposed a regulatory approach based on the twin peaks model. ⁵² But this study does not attempt to assess proposals for comprehensive reform in the US. We will simply note that that New Zealand has taken a different path, and that New Zealand policy makers interviewed over the course of this study were generally optimistic about the new FMA and New Zealand's new regulatory environment.

Separation of Policy Work from Service Delivery

In the late 1980s the New Zealand Government undertook a series of dramatic changes to improve efficiency and accountability in the public sector. Among other things, it established the organisational principle of separating legal policy work from service delivery work in most public sector entities. This "decoupling" had several objectives. First, it sought to prevent the service delivery unit from biasing its policy advice towards overinvestment in administrative overhead and other areas that do not contribute directly to service delivery. Second, it aimed to reduce the conflict that arises when the same agency is involved in both policy and service delivery. And third, it sought to enhance the focus of senior executives, by holding them to specifically contracted outcomes while providing them greater organisational flexibility in achieving those outcomes. Although these new organisational arrangements did not prove to be practicable in certain areas of government, such as defence, the changes ultimately resulted in significant performance gains for many public entities over the next several years.

The New Zealand Ministry of Economic Development maintains this kind of separation between its senior policy shop and the service delivery work of the Companies Office. This "separation of steering versus rowing" allows lawyers in policy roles to set the broad organisational objectives desired for the disclosure operations of the Companies Office, to promulgate rules, and to develop legal advice for the Minister and Cabinet, without worrying about the engineering details of the service delivery operation. At the same time, the separation allows Companies Office staff to focus on the factory-oriented work of service delivery. The work of the Companies Office is structured as a business-style operation with intensive engineering requirements and a bottom line to meet. The Office is staffed primarily by technology-trained workers rather than lawyers.

The Registrar has the unilateral authority to mandate new filing procedures when necessary. He is not required to go through the public rulemaking process or through the Ministry for procedures that are inherently associated with the mechanics of

⁵² Committee on Capital Markets Regulation (2009). Also see Volcker et al. (2008).

⁵³ Ormsby (1995)

⁵⁴ Osborne and Plastrik (1997), pp. 203-240

specific filings. Although this authority is used for low-level procedures, occasionally these procedures have significant implications for filers. Perhaps the most significant recent exercise of this authority was in 2008, when the Registrar declared that paper registrations of company incorporations would no longer be allowed, and that all filers would need to move online. In mandating this change, the Registrar coordinated with the Ministry and its policy shop. But ultimately the Registrar was accountable for the decision.

The separation between legal policy work and service delivery is not absolute. In MED's Business Services Branch, the policy staff are co-located with the Ministry's internal IT support group. This gives policy lawyers close access to another form of IT expertise, so that policy is not developed entirely in a technology vacuum. At the Companies Office, the operation maintains a small staff of three lawyers who focus on the legal interpretation of operational policies that apply directly to specific business procedures. Lawyers from the Ministry's high-level policy staff do not routinely need to parachute into these kinds of decisions, though they remain available to provide legal advice from time to time.

One obvious benefit of decoupling has been the attentiveness of the Companies Office staff to the usability of their disclosure system. While policy staff set the desired organisational outcomes for disclosure services, they are generally not trained in the detailed IT-oriented work required for effective service delivery. They understand this, and generally do not play a role in introducing specific improvements in system usability for the public. Instead, usability improvements tend to come from the IT staff on the shop floor as they interact daily and directly with public end users.

Public filers provide ideas directly to service delivery staff through the Office's blog, its online customer surveys, and its Facebook page. They also provide feedback through the client contact centre, which aggregates and analyses call data in order to inform the next set of system enhancements. Other website users and consumers of registry data make their needs known in the same way. There is no need for the Office to issue position papers or policy memos, or to hold lengthy conferences mediated by lawyers and accountants and advisers, in order to generate ideas for useful system upgrades. Service delivery staffers are clearly and transparently accountable to the public for the usability of their disclosure system.

Another benefit of decoupling can be seen in the performance management regime for the disclosure programme. Senior policy makers commit to long-term programme objectives, and to performance metrics supporting these objectives. Managers at the Companies Office publish an annual plan that sets out how they aim to achieve those objectives. The published plan provides a systematic instrument for holding service delivery managers accountable to goals negotiated by the policy staff. Likewise, decoupling means that service delivery managers are accountable for meeting the plan's published objectives. While there is room for negotiation, and while the planning process is not always perfect, the process appears to be taken quite seriously, and the resulting plan has credibility as a legitimate measure of management success.

Within the Ministry's policy shop, policy lawyers report that the performance

_

⁵⁵ Companies Office Profile 2009-2010

management regime provides good feedback for their policy work, and bolsters confidence in their decisions. Within the Companies Office, managers report that they feel free to manage their staff's productivity without having to spend much time managing overtly political relationships and running interference on policy controversies, since those are handled by the legal policy shop.

It is legitimate to wonder whether a similar sort of decoupling could work well for the US SEC's disclosure programme. In its assessment of the SEC's examinations programme, an enforcement-oriented programme, the BCG study observed that a similar kind of decoupling actually seems to impede the overall examinations programme. The concern there is that examinations policy is less informed, and examiner career paths are stymied, when line examiners are managed in an office entirely separate from the division that sets their examination policies. In this particular case, decoupling may not have worked well. But on the other hand, the same BCG study goes into some detail about "role ambiguities" in the agency's internal staff reporting relationships, including the disclosure programme. The study recommends that the SEC "systematically redesign the organisation" but, like many independent observers of the SEC, is largely silent on the question of how precisely the SEC could improve the management of EDGAR.

It is not within the scope of this study to determine whether the SEC's disclosure programme has sufficient clarity of "steering versus rowing," or which specific management arrangement might constitute the most productive, accountable and transparent division of duties. But it is legitimate to ask whether decoupling is a worthwhile strategy for the SEC's disclosure programme. Decoupling may not be legitimate for certain SEC programmes, such as examinations. But it may have serious advantages for a programme like disclosure, where service delivery staff have little aspiration to work in legal policy roles, and where technology work does not necessarily make for better policy lawyers.

Separation of Disclosure and Enforcement

In 1978, after the high-profile collapse of finance company Securitibank Limited, New Zealand established an independent Securities Commission to oversee the securities markets. The Commission was responsible for the authorisation of market participants, the monitoring and oversight of the securities markets, and the enforcement of the securities laws.

Over time, enforcement took on an increasingly large role for the Commission. But after a string of fifty finance company failures from 2006 to 2010, the government chose to consolidate and strengthen enforcement authority by absorbing the Securities Commission into the new Financial Markets Authority, giving it new powers, including search and seizure powers as well as the authority to wind up entities requiring liquidation.

The Companies Office keeps some enforcement-related authority under the new financial regulatory regime. The Office retains a small compliance unit that works to

_

⁵⁶ Boston Consulting Group (2011), p. 42

⁵⁷ Ibid. p. 95

ensure the validity of registrations, an important first line of defence in the prevention of money laundering. The Office can also leverage the Ministry's National Enforcement Unit to investigate instances of non-compliance with the Companies Act. Moreover, the Office also retains the authority to issue "infringement notices." If the Registrar deems a registered entity to be in violation of the Companies Act, he is empowered to issue a notice instructing the filer to remove the faulty information from the registry. In serious cases of filer non-compliance, he can unilaterally impose a formal infringement notice. Infringement notices come with stiff fines that increase with the number of directors associated with the filing entity. They function very much in the same way that parking tickets function in the US, only for infractions of the financial disclosure rules. Although the Registrar rarely uses this authority, it is important for him to have it, if only as a sheathed sword to deter potentially fraudulent filings. If the Companies Office discovers evidence of major fraud, it can of course make a referral to the FMA for enforcement. In practice this is much more common.

The decision to separate enforcement from disclosure is somewhat similar to the formal decoupling of policy and service delivery, though the new approach is perhaps less intense than outright decoupling. Both approaches seek to clarify the missions, roles, performance indicators, and lines of reporting for all regulators involved. The separation is not rigid, and there remains much room for collaboration across the regulatory continuum from disclosure to enforcement. Time will tell whether regulators are able to collaborate effectively across two organisations with freshly clarified missions.

Does the recent strengthening of enforcement necessarily mean a reduction in disclosure capabilities? After all, disclosure is a fundamentally preventive approach to financial market regulation. It aims to take a long-term view of the markets and head off market risks before they become more costly to address. Enforcement, on the other hand, is necessarily much more reactive in nature. Enforcement focuses on the costly legal work of building cases in response to identified infractions. Does investment in enforcement lawyers require disinvestment from disclosure technologies?

Early indications are that this trade-off is not required. Under New Zealand's latest restructuring, the consolidation of enforcement work at the FMA has not only empowered the FMA, but has also greatly clarified the mission of the Companies Office as primarily a disclosure organisation. Disclosure fees can now be more fully targeted at financing disclosure per se, and managers no longer have to carve off a large chunk of fee revenue in order to finance major investigations. Key performance indicators can focus more on service delivery and software development productivity rather than on legal casework. The Companies Office can focus more straightforwardly and transparently on its core mission. Managers in both the FMA and the Companies Office have described the consolidation of financial services enforcement under the FMA as a "very pragmatic" decision.

A common expression in Wellington, attributed to health reformer Truby King, is that "It is better to put a fence at the top of a cliff than an ambulance at the bottom." In New Zealand, the self-funded nature of the Companies Office allows for the maintenance of a more solid fence, even when market crises demand that others place more ambulances at the bottom.

The situation is markedly different in the US. In the US, the SEC houses the financial disclosure regime and the securities enforcement regime under the same budget authority. Over the decades, policy makers had hoped that these two specialised regulatory functions could obtain some synergies by living in cohabitation and sharing some administrative support staff. By most accounts, however, the SEC's structure allows for minimal collaboration across the two functions. Former Secretary of the Commission Jack Katz went so far as to compare the cohabitation of these disparate functions to "Germany prior to Bismarck," arguing that attempting to manage these functions as separate silos under one roof severely impedes the SEC's work.⁵⁸

For advocates of disclosure reform, it can be quite difficult to find a popular constituency for even the most basic of reforms. In a market crisis, the single budget authority for SEC's disparate enforcement and disclosure operations confronts agency leaders with unenviable resource trade-offs, making it even more difficult to reform disclosure. It is difficult for an agency to justify investing in preventive measures when popular sentiment demands that the very same resources be applied to the more immediate, crisis-propelled work of investigators and litigators. As former SEC Secretary Katz noted, "if the SEC receives additional resources, there will be a tendency to apply them all to examinations and enforcement. This has been the pattern in the past, and it... would be a mistake." The SEC budget structure often yields a reactive shift in investment, away from risk reduction operations, like disclosure, and toward improvements in enforcement (including more attorneys, more support staff, and more IT investment) along with heightened demands for greater accountability from enforcement staff.

When market crises escalate to the point where they affect broad public opinion, the agency's senior leaders, regardless of their management inclinations, encounter very little room to negotiate this resource trade-off. In early 2011, the Academy of Motion Pictures awarded the prize for Best Documentary to *Inside Job*, for its depiction of the SEC and its sister regulators as hopelessly captured by the industry they purport to regulate. More recently, the pop culture magazine *Rolling Stone* also asserted that the SEC has been captured by the industry it regulates. As such virulent criticisms continue to penetrate forms of popular entertainment, whether one agrees with them substantively or not, they leave the public with even less patience for high-minded ideas about reforming complex disclosure operations.

The global financial crisis has had very different results for the disclosure regimes in New Zealand and the US. For New Zealand, the institutional separation of disclosure operations and enforcement capability makes this kind of management trade-off less acute. The pragmatic separation of the New Zealand's disclosure operation from enforcement work, along with the strong reputation of the Companies Office operation, allows policy makers to respond to the market crisis without having to confront stark investment trade-offs between enforcement and disclosure.

⁵⁸ Katz (2010), p. 503

⁵⁹ Ibid. p. 509

⁶⁰ Taibbi (2011)

Adherence to a Standard Registry Model

The term "business registry" implies a routine set of operating processes and technologies commonly used across multiple industries and countries. The concept is straightforward: a government requires firms to register basic information about their business, just as it might require registration of land claims. It then validates that information for compliance with processing rules, but not necessarily for content. It then shares the data with the public. Government staff may review the information for actionable content, and may refer it for scrutiny by compliance and enforcement professionals. But government staff generally make a point of not impeding the flow of disclosure data, and the speed of end-to-end processing is generally an important performance metric.

In New Zealand, the Companies Office operates a standard business registry, along with multiple other standard kinds of registries. A business becomes a formal public entity when it registers with the Companies Office. To do so, the business simply registers through the online registry system. Financial service providers, as well as other businesses with additional regulatory requirements, register additional business information through the same Office.

One advantage of a standardised registry model is that the government can use the same business platform for any set of public services requiring a registry. In New Zealand, twenty-two different public registries make use of the same basic registry platform maintained by the Companies Office:⁶¹

Building Societies Limited Partnerships (Overseas)

Charitable Trusts Motor Vehicle Traders

Companies Other Bodies

Credit Unions Overseas Issuers

Financial Services Providers Participatory Securities
Friendly Societies Personal Property Securities

Incorporated Societies Radio Spectrum Management

Industrial & Provident Societies Retirement Villages
Insolvency & Trustee Services Superannuation Schemes

Limited Partnerships (NZ) Unit Trusts

For filers who work in multiple regulated fields, the similarity of business processes across the registries means that filing processes are easier to understand and use. For consumers, this standard arrangement allows for more efficient search and more coherent analysis of disclosure data. For government staff, the standardised business process framework allows for the sharing of IT expertise across multiple Ministry functions and reduces the operational costs per transaction.

The registry model is popular in other countries, and at this point is emerging as a de facto international operating standard. For regulated firms who have already filed in another country with a similar standard, chances are that filing in New Zealand will be a straightforward process. For registry workers in New Zealand, adherence to an international standard means greater opportunities to adopt innovations from overseas.

⁶¹ The countries of Tonga and Niue also run their registries on New Zealand's platform.

At conferences like the Corporate Registers Forum, for example, one finds dozens of governmental entities sharing ideas, collaborating on strategies, and evaluating the mature set of commercial off-the-shelf software products that have emerged over time to support them. By cross-fertilising its own approach with emerging international standards, the Companies Office is able to leverage work from across a network of countries and reap gains from that collaboration.

Over the past few years, the steadily increasing interoperability of registries at the operational level has encouraged registry staff to abstract their platform from the various accounting rules and data formats that are specific to New Zealand's accounting regime. One platform now accommodates many kinds of accounting data. Thus, as accounting rules and formats change over time, for whatever reason, the registry is reasonably prepared to accommodate those changes. By encouraging data interoperability, standardisation at the operational level serves the enlightened long-term interest of New Zealand's accounting regime, and tends to support the principled separation of policy work from service delivery.

US citizens will be familiar with the concept of a business registry from their interaction with government at the state and local level. In the US, many states and localities make use of a registry-type model for delivery of motor vehicle services, management of vital records, licensing of professions, and so forth. US firms incorporate at the state level, typically through some form of business registry. Among other things, this allows a registry to track the history of a business from its inception. But within the federal government, where institutional arrangements are often a product of historical accident, and where the Madisonian system of checks and balances can impede efficient operations, the concept of a singularly empowered business registry is poorly understood. In the US, the federal government does not directly use a business registry for its disclosure operations. Instead, it uses EDGAR.

EDGAR can be fairly described as a highly specialised, one-of-a-kind, confederated arrangement of disparate but tightly coupled systems. This makes the arrangement difficult to use, both for those who need to file and for those seeking disclosure data from the SEC. Moreover, the group of workers who understand this unique, non-standard arrangement is extremely small, both within the SEC and among private sector contractors. Arguably, the small size of EDGAR's potential workforce can impede innovation. Vendor lock-in can be a serious risk. Professional development of the EDGAR workforce can be another risk. Workers can of course seek out skills that help with aspects of their EDGAR work, and they can always attend generalist IT conferences. But because of the *sui generis* nature of EDGAR, those who work on the system have little reason to interact with, learn from, or compete with workers associated with other public registries.

Perhaps the closest thing that the US disclosure regime has to a classic business registry is IARD, the Investment Adviser Registration Depository. Compared with EDGAR, IARD is a more straightforward implementation of a standard business registry, more along the lines of the internationally accepted model followed by New Zealand and others. But IARD is not actually part of the US Government. Rather, the SEC delegates certain aspects of regulation, including the operation of IARD, to the Financial Industry Regulation Authority, or FINRA, a self-regulatory organisation. FINRA operates IARD "on behalf of the SEC" as a registry of investment adviser

firms. Ultimately, FINRA operates IARD with sufficient independence from the government that the system exerts little influence on the design or operation of EDGAR.

The US disclosure operation is certainly large enough to afford its own custom system. The US is in an economic position to act as a leader in technological innovation rather than a follower, and does not necessarily need to adopt the operational framework of other countries purely for reasons of cost-efficiency. But in setting its own path, the SEC should understand that it may forego certain advantages that come with following international standards and leveraging off-the-shelf technologies.

4 FINANCIAL STRUCTURE

Under the reforms of the late 1980s, New Zealand converted a number of public sector entities into semi-autonomous, self-sustaining public sector entities funded entirely through user fees. A major aim of these reforms was to clarify the mission of each entity and to make each accountable for meeting its own mission with a specific set of resources. A self-financed public entity has a bottom line comparable to that of a private sector business, and must manage to that bottom line by balancing its expenses against its revenue.

The Principle of "User Pays"

As a self-funded operation, the Companies Office sets user fees according to guidelines set out by the New Zealand Treasury. According to the Treasury, user fees should encourage "decisions on the volume and standard of services demanded and supplied that are consistent with the efficient allocation of resources generally, and also the outcomes the government is seeking in providing the service." Fees should also focus on "minimising the cost of supply," "keeping transaction costs low," "reducing reliance on funding from general taxation," and "dealing equitably with the taxpayer, those who benefit from the service, and/or those whose actions give rise to it." The fees serve as an instrument for achieving public objectives, much in the same way that market pricing in the private sector seeks to accomplish market objectives for private industry. In accordance with Treasury guidelines, the user fees of the Companies Office pay the cost of the entire disclosure operation, including all staffing costs, all technology costs, and all administrative costs.

In the initial years of the operation, investors seeking disclosure data from the public website paid a small fee for each company query. But the Companies Office phased out this particular fee several years later as technology changed and cost per query declined to a negligible level. Since then only filers have paid fees. This is a reasonable approach, because zero-fee queries align with the Office's transparency mission. Like a census bureau that succeeds when more people can use its census data, the Companies Office helps with economic development when more people can use its disclosure data.

Fees are adjusted every few years to reflect the changing costs of services and any changes in the mission or the market. Fees are set by a public rulemaking process that requires fairly extensive vetting by MED and Treasury to ensure that the fees credibly reflect the costs of the services provided. MED generally requires three to six months to develop a reliable cost allocation model, typically with help from an independent consultant. The model then goes through the Minister, then out for public consultation. The Cabinet ultimately sets the final fee. The entire process, including the development of the cost model, typically requires nine to eighteen months.

The systematic and public nature of the rulemaking process helps to ensure that the ultimate fee structure is transparent not only in its final application, but also in its development. Indeed, Audit New Zealand requires that, in setting a fee, a public entity must make sure to have "a sound cost-allocation process" and a "clear audit trail

⁶² New Zealand Treasury (2002), p. 3

showing the assessment of costs incurred and forecast demand, and how the fees have been arrived at..."⁶³ Fee structure and development is, of course, subject to audit.

For the financial regulatory regime, one of the implications of a self-funded disclosure operation is that the government has been able to carry out reform of enforcement without necessarily having to consider compromises to the disclosure programme budget. Disclosure is funded entirely through its own user fees, while enforcement of financial services providers is funded partly through separate user fees and partly through Crown funding from general tax revenues.

The Memorandum Account

Under the self-funding arrangement, the Companies Office is expected to match its fee revenues to its expenses, producing neither a surplus nor a deficit. It can be difficult to achieve this balance within a given year, because fee revenues change with the economy. Filing activity tends to increase during an economic boom and tends to decline during a recession. The Office makes use of a "memorandum account" to address this issue.

The memorandum account tracks the Office's net financial surplus or deficit from one year to the next. Technically, the account is not composed of actual money. It merely reflects a memorandum of understanding between MED and the Treasury as to the financial position of the Companies Office over time. But for all intents and purposes, Treasury allows the Companies Office to use the memorandum account as a banked equivalent of funds from one year to the next.

The memorandum account allows the Companies Office some flexibility in managing its bottom line. Effectively, the Office can run a surplus or a deficit for a few years, and then incrementally bring its fee revenues and its expenses back into alignment over time. As a consequence, the Office does not need to make radical adjustments every year, either to fees or to expenses.

If fee revenue drops, then the Office may take its memorandum account into a temporary deficit. But if fee revenue continues to decline over a period of several years, then Treasury eventually will insist that the memorandum account be brought back toward zero. This means that the Office will need to consider seriously whether to make cuts in staff or technology or other expenses. While the Office can increase fees, the Minister, an elected official accountable to his constituents, often has much to say about fee proposals.

Ultimately, it would be a mistake to imagine that the self-funded arrangement allows Companies Office managers such autonomy that they can wander away from their Minister's directives. The requirement to bring the memorandum account into balance over time imposes a significant degree of fiscal discipline on the Office, and managers have to monitor their costs very closely. In fact, whenever they are asked about their costs, they have that information at the ready.

The memorandum account serves as a kind of high-level performance indicator, not

_

⁶³ New Zealand Controller and Auditor General (2008), p. 26

only for managers, but for the public at large. It reveals, at a glance, the overall the fiscal health of the Companies Office. Just as a public firm declares a profit or a loss for a given year, the Companies Office publicly reveals either an increment or a decrement in its memorandum account. Legislators, policy makers, and taxpayers can readily view the financial health of the Office without having to dig into nuanced sets of data. In this way, the memorandum account contributes to the public transparency and accountability of the service delivery operation.

Transparent Itemisation of Fee Transactions

When a large financial services provider registers with the Companies Office, that transaction results in a set of itemised fees for the provider. For example, a financial services provider registering in 2011 might encounter the following fees:

- \$357.78 for registering as a financial services provider. The fee goes to the Companies Office to fund the registry operation;
- \$40.25 for a criminal history check. The fee goes to the Ministry of Justice to check that the filer has no criminal record;
- \$30.67 for dispute resolution. The fee goes to the Ministry of Consumer Affairs to fund its administration of a dispute resolution scheme that applies to all registrants in case of a filing-related dispute; and
- \$4886.22 for registration as a qualified financial entity. The fee goes to FMA to manage the regulation of large financial services providers. Under the Financial Advisers Act, a business with employees and representatives who provide financial advice may choose to be licensed as an entity instead of having all advisers individually authorised.

The itemised nature of the transaction has several salutary effects. It consolidates transactions for multiple agencies into a single transaction, allowing the filer to utilise multiple services in a one-stop shop. It provides the filer with useful information about how much his transaction is helping to fund each government entity. It compels those government entities to monitor their costs in a standard manner, to associate those costs with legally required activities, and to make those costs transparent at a transactional level. It sends price signals that, it is hoped, will ultimately help to move supply and demand for public services in an economically appropriate direction.

In the US, consumers are accustomed to this kind of itemised transaction when they make purchases in highly regulated industries. The purchase of an airline ticket, for example, will typically show a base fee, and any state and local taxes, airport services fees, federal fees for transportation security, or (for international fares) border control fees or customs fees. The airline has an incentive to shine sunlight on all these fees, in order to show customers that its own fees constitute only a portion of the total charges.

In the US public sector, user fees are much more common at the local level than at the federal level. Citizens are accustomed to paying fees for public amenities like parking spaces, swimming pools, campgrounds, and waste disposal facilities. While there are examples of user fees at the national level, most federal fees are not part of a self-funding arrangement. Congress has traditionally preferred to use its annual

appropriations process to set agency budgets. While this may help to keep more granular control in the hands of legislators, it can reduce the agency accountability that comes with a self-funded arrangement. Indeed, it is extremely rare for any US agency funded through annual Congressional appropriations to claim that it has all the funding that it needs. By contrast, as a transparently self-funded operation, the Companies Office has a strong incentive to bring its resources and its mission requirements into alignment, and to keep costs at a practical level.

Use of Fee Incentives

The Companies Office has made strategic use of user fees over time to aid in the conversion of their users from paper-based filings to electronic filings. In the late 1990s, the Office developed a credible cost model that identified paper-based filings as a major cost driver. It then adopted a new fee structure that charged a full fifty per cent less for annual returns filed on online than for those filed on paper. Over time, most filers responded to the change in fees (and to improvements in ease of online filing) by moving off of paper filings. Several years later, the Office eliminated that particular fee altogether. Fees for paper annual returns remained in place, however, and the remaining filers of paper returns faced an even greater incentive to move online.

The process of transitioning from paper to electronic media also provided a critical opportunity to restructure the data from those filings, and to integrate the data into a centralised repository. Without that incentivised transition to new media, there would have been much less opportunity to restructure or integrate the data itself.

One of the challenges that can arise with the user pays principle is that it does not always allow the Companies Office to set the incentives that it might desire. For example, if the Office wants to incentivise filers to use a pricey new IT system when the old system has already been paid for, then it may be difficult to justify a lower fee for the new system. As a consequence, the task of cost modeling requires some circumspection. Modellers may need to take extra care to quantify user activities, and not just hardware or software, that drive the Office's costs.

One counterweight to this issue is the Registrar's authority to mandate process changes. Under the Companies Act, the Registrar of Companies has the authority to mandate, for example, the elimination of a paper filing. In fact, the Registrar used this authority in 2008 to mandate that all companies use the online registration process, originally launched in 2002, to register their incorporation data.

In general, however, the use of the fee structure to transition off of paper has allowed the Companies Office to move most filers online in a gradual manner, avoiding the need for mandates in all areas of filing. The fee structure has proven itself to be a very useful tool for helping to achieve the objectives of the Companies Office.

By contrast, the US SEC makes no real financial linkage between fees and internal resource levels. The incentives for users and regulators to move away from antiquated filing processes are limited to usability improvements. But the agency cannot charge users to recoup the cost of those improvements, so the rationale for improving usability must come from elsewhere, if at all. The result is that many filings still

remain on paper.

Although many SEC filings have transitioned to electronic format, the remaining paper-based filings are much more prone to error and incur significant costs for the agency. The agency must still dedicate labour hours to handle and process those filings. For many filings the agency also pays a private firm to develop images and make them available externally. As it happens, the same firm charges the public, on the other end, for the privilege of searching the public filings.

As a self-funded entity, the Companies Office has been able to use fee incentives to transition away from paper filings over time. Without that toolset, the SEC will find it much more difficult to eliminate its remaining paper-based filings or make usability improvements for disclosure filers.

5 TECHNOLOGY HIGHLIGHTS

For most of the twentieth century, the Companies Office functioned as a paper-intensive organisation scattered among multiple regional sites across New Zealand. These sites provided opportunities for consolidation, and the rewriting of the Companies Act in 1993 paved the way for the centralisation of functions by means of information technology. By 1996 the Companies Office developed a website that provided access to all company-related data from one location. Public transparency, rather than ease of filing, was the initial focus. But soon, by 1998, companies were able to register through the website.

By 2000, all companies were required to file their annual returns online. This in turn paved the way for rules that required continuous disclosure. All companies listed on the New Zealand Stock Exchange were required to report immediately any events likely to affect share price. The reported data was instantly available to the public on the website.

In 2002 the Personal Properties Securities Act of 1999 came into force, establishing a register of security interests for nominal registration and search fees. The register would not have been feasible as a paper-based service, and was conceived as an online service from its inception. The success of the register galvanised the movement to shift to fully online systems for all registries, and underscored the need for a reusable, interoperable platform to support multiple registries and multiple kinds of data. IT architects began laying out plans for web-based services for all New Zealand registries.

The vast majority of New Zealand businesses are small businesses. Over ninety per cent employ ten people or fewer, and few businesses can afford the luxury of an IT development shop. Managers at the Companies Office therefore understood that they needed to be circumspect in imposing requirements for automated submissions. They also understood that, as economic activity moved increasingly online, user expectations for searchability were escalating rapidly. To get users online, the overriding concern would have to be the system's ease of use for small businesses and individuals, for filers and for search users.

The Companies Office laid out architectural plans to do just that, based on design principles of architectural transparency, data interoperability, code standardisation and functional reusability. By 2003 the Office was able to require all director information to be filed online. In 2008 it required all company incorporations to be filed online. In 2009 the Office made the companies register available on a searchable mobile platform. In 2010 it moved to a web services-enabled platform, not only improving internal maintainability, but also vastly expanding the consumability of the data acquired in the first place.

N-Tier Architecture

The reusable registry platform makes effective use of technologies that have become widely available and accepted across the IT industry. The Office does not have the resources to lead the world with new investment in high-risk R&D, or to experiment with revolutionary standards or "bleeding edge" products. Rather, the Office has

developed its architecture in an evolutionary manner over time, using self-funded resources as it goes. As a consequence the architecture leverages straightforward, sensible technologies that will be recognisable to anyone familiar with the current state of the art in 2011.

The platform makes use of a distributed architecture with three major tiers to manage presentation logic, application processing, and data management. The layers are logically separated from one another and communicate via a standard interface composed of web services. The tiered structure of the architecture has several advantages:

- It limits failures. A change in one tier does not affect the entire system, because components are compartmentalised;
- It allows for greater scalability. As the Office takes on responsibility for more data processing or more registers, each tier of the system can be scaled up, and its supporting infrastructure can grow in a flexible manner;
- It allows for performance improvements. It enables the Office to optimise the function of each layer independently and to standardise interactions among layers; and
- It facilitates development of reusable solutions. The Office can accommodate new disclosure processes in a single tier and then use the new functionality in more than one application.

It is tempting to argue that the straightforward N-tier architecture of the Companies Office system recapitulates, as it were, the separation of policy work and service delivery work seen at the higher organisational level of the Ministry. But any similarities are purely notional and unintentional. N-tier architecture is, very simply, a widely accepted practice in the IT industry, and for good reason. It is a mature, tested model for improving scalability, flexibility, and reusability, while reducing risk and improving technical performance.

By contrast, the complexity of the SEC's technology architecture confronts US regulators with a much more difficult situation. As the 2011 BCG study notes, over time the agency's fragmented disclosure rules have resulted in a patchwork of systems and processes that few can understand. The costs of maintaining the SEC's technological Leviathan are extremely high.

The costs of proposed "modernisation" are likely to be even higher. A large number of other entities across the financial services industry now find their systems tightly linked to the SEC's. Because of the SEC's idiosyncratic submission and redissemination arrangements, any intention to "modernise" the disclosure system internally must immediately confront the implications for this external installed base. Effectively, the disclosure architecture now extends beyond the boundaries of the SEC itself, forming tight, vested linkages of disparate components outside the control of the agency.

In seeking to automate its information flows over the last several decades, the SEC has had to sort through innumerable paper-oriented disclosure rules, each with its own set of antiquated paper-based processes. Any investments in disclosure technology

had to divert major resources to ensuring that future systems maintain the core functionality of older paper-based systems. This need for backward compatibility frequently impeded technological advancement.

Economists like Paul David and Brian Arthur describe phenomena such as technological lock-in and path dependence that can, in certain circumstances, lead to adverse persistence of an outdated technology even after technically superior competitors emerge: the QWERTY keyboard, for example, or the light-water nuclear reactor, or the standard railway gauge. The SEC's disclosure technology from the 1980s constituted a breakthrough and found wide acceptance. But as with those other technologies, this led to a nationwide installed base of interlocking systems and users, and requirements for backward compatibility took on ever-greater importance. This kind of arrangement becomes very difficult to improve without some sort of shift in the supporting institutional paradigm. SEC stakeholders are justified in wondering whether the SEC's current organisational design will actually allow the agency to improve its disclosure technology, or whether more resources for disclosure technology will simply reinforce the complexity of the existing architecture.

Off-the-Shelf Components

The Companies Office system leverages a commercial off-the-shelf product suite for its registries. This product suite, in turn, incorporates several off-the-shelf components.

One key component of the system is its business rules engine. A business rules engine is a software system that executes one or more business rules in a runtime production environment. The rules themselves are derived from the disclosure filing rules. The engine allows the Office to manage the filing rules and other lower-level operational decisions separately from the application code for the registries. The rules are individually defined, classified, tested, maintained, and executed, all within the rules engine. The rules engine thus supports all of the registry applications in a reusable, cost-effective manner.

Another key component of the system is its workflow engine. Because disclosure operations are workflow-intensive, this component allows the system to interpret events and to act on them according to previously defined processes. For example, the workflow engine takes care of routing all process exceptions from incoming disclosure data to appropriate staff for subsequent review. The workflow engine uses defined routing procedures to orchestrate the movement of filings, and their associated tasks, around the Office.

A third important part of the system is the registry development environment. This is not a component of the core system, but rather a set of tools for creating a registry from historically received implementations. Its primary purpose is to take existing paper-based registry forms and convert them to HTML screens, without losing important processing information along the way. The tools do this by taking each legacy paper form through a step-by-step process of defining the tasks associated with

_

⁶⁴ David (1985), pp. 332-337

⁶⁵ Arthur (1994)

the form, including the approvals required for processing the form, the roles involved in that processing, the required fees, the possible reasons for rejection, and other processes. Along the way, the data from the form is associated with the existing data structure for the appropriate registry. The registry development tool suite allows the Office to transition its remaining set of paper-based forms into the electronic system, and to consolidate forms and filing processes along the way.

Alongside the core disclosure operation, the Companies Office leverages social networking and communications technologies to make disclosure data more accessible and to manage its relationships with filers and investors. Investors can easily search the filings through the Office's public website, or on their mobile devices, or through the Office's Facebook page. On the Office's blog, one can follow news and updates about the registry, find help and support, and comment on the activities of the Office. Users can use RSS and Twitter to subscribe to posts. Alternatively, users can simply subscribe to the Office's newsletter via email. The Office uses all these technologies in an inexpensive, off-the-shelf manner in its regular course of business.

The system also incorporates other off-the-shelf components, including a content management system, a payment processing and fee management module, a correspondence management module, a document management and scanning module, a search module, a mobile services module, a reporting module, and user authentication and authorisation modules. The N-tier architecture allows all the modules to work together in an integrated manner, while also allowing them to be separately implemented, maintained, and upgraded.

Web Services

The disclosure platform makes cost-effective use of a mature technology known as web services. Web services are pieces of standardised software code that enable systems to interoperate over a network in a machine-to-machine manner. Internally, components of the Companies Office architecture communicate through standard web services protocols. This services-oriented architecture allows the different components of the N-tier architecture to work together in a flexible, loosely coupled arrangement. Externally, the architecture uses web services on its public website to transmit disclosure data in a way that allows others to process it in a machine-to-machine manner. This latter capability augments the accessibility of the disclosure data within the financial markets.

Users of the Companies Office website are able to access data on a "retail" basis, by means of individual manual queries. But increasingly, query traffic comes from organisations making "wholesale" acquisitions of the data, through machine-to-machine connections to the site. The cost per query of machine-to-machine access through web services is far less than the historical cost per query of manual interfaces. Thus, by improving the cost effectiveness of the outbound transmission process, the external web services ultimately improve the transparency of disclosure data in the economy.

Because the public can access all the disclosure data directly from the site, without having to go through infomediaries, the Office's metrics for public access are much

more reliable than they would be if the operation did rely on private, non-transparent infomediaries. Like a public library, one measure of the Office's success is the volume of data consumed by the public. The inexpensive use of web services facilitates this direct public access model, which in turn allows the Office to track public consumption of the data more reliably over time. In 2010, the registry tracked 12 million successful searches across its 570,000 registered companies.

The Australian Government makes use of web services to manage its data interchange agreement with New Zealand. A number of local authorities in New Zealand also use web services to consume disclosure data from the Companies Office website. This capability reduces the labour they need to acquire the data, and allows the local authorities to pass the data straight through to their own automated processing.

Private firms also consume the disclosure data via web services. A big four accounting firm consumes the data for the analytic tools it sells to clients. An energy firm consumes the data as a way of expediting its power supply services to companies on the registry. A credit reporting firm consumes the data and mashes it up with its existing data on payment histories and credit defaults. A software firm consumes the data to prepopulate company profiles in its online accounting software. A non-profit advocacy group is planning to consume the data to develop analytic tools for citizen scrutiny of companies.

In the IT industry there exist degrees of machine-readability. Some data is accessible on a machine-to-machine basis but not readily machine-readable. Other data is accessible and readable by machine, but still requires manual intervention to prepare it for computation. Other data is more profoundly machine-readable, and can be accessed and analysed and re-used without any manual intervention.

In terms of public data accessibility, the Companies Office has pursued an implicit strategy of "breadth before depth." That is, the web services platform ensures that the disclosure data is accessible at little cost to the broadest array of external organizations and investors. All data is accessible on a machine-to-machine basis, even if some of it requires subsequent manual intervention to prepare it for analysis. The Office is now planning to convert its remaining text-only filing data to XML (eXtensible Markup Language), a more structured format. The more structured format facilitates deeper analysis of the data.

The wholesale data services, enabled by a mature web services technology, provide New Zealand with a broadly accessible and highly transparent platform for disclosure data. On the one hand, the public access platform enhances public scrutiny of the data, and sidesteps the risk of information asymmetry that can arise when only certain professionals have cost-effective access to disclosure data. At the same time, the platform supports economic development, by providing private firms, universities, and regulators with analysis-ready data suitable for financial research.

In the US, federal agencies such as the US Census Bureau and the Bureau of Labor Statistics have made use of web services technology to provide improved data access to the public as well as to other federal agencies. The US SEC has yet to leverage this technology, though the opportunity remains promising. Using corporate filings obtained from EDGAR, academics have been able to analyse disclosure data to reveal

evidence of misconduct in the markets such as collusion among market makers⁶⁶ and backdating of options.⁶⁷ The SEC could greatly facilitate this kind of voluntary professional analysis by making filing data available on a wholesale, no-fee basis.

To date, the SEC's Interactive Data initiative has focused on improving the format of disclosure data, as well as the submission and processing of that data, while leaving intact EDGAR's private-firm funnel of re-disseminators. By contrast, the Companies Office has taken an approach to transparency that broadens the availability of data across the public, as it gradually works to improve the structure of that data. Over time, this approach has led to the growth of a solid, broad-based public constituency for high-quality disclosure data. This constituency, in turn, provides public support for ongoing improvements in the structure of the data.

 ⁶⁶ Christie and Schultz (1994), pp. 1841-1860
 ⁶⁷ Lie (2005), pp. 802-812

6 RISKS IN THE NEW ZEALAND MODEL

New Zealand's model for corporate financial disclosure poses its own particular risks. Four major areas of risk were identified in the course of this study.

Fraud and Money Laundering

The Companies Office has simplified and streamlined its filing processes to the point where bad actors are tempted to use the system to commit fraud. As in many countries, the challenge for New Zealand is to raise impediments for a small group of potential fraudsters while reducing impediments for the vast majority of filers.

The Companies Office recognised this challenge early on and has taken steps to mitigate risks. The National Processing Centre is trained to refer evidence of non-compliance to the National Compliance Team. They in turn are trained to identify evidence of fraud. They make referrals to the FMA (for fraud in financial services) or to the National Enforcement Unit (for other forms of fraud). The FMA has a well-staffed anti-money laundering unit that coordinates efforts with other regulators.

Given existing data, it is difficult to quantify the risks of actual fraud, the vulnerabilities of the disclosure operation to the threat, or the effectiveness of the controls in place. The Companies Office is in the process of improving its measures of risks, vulnerabilities, and controls in this area.

The Companies Office is considering whether additional filing data will be needed to identify evidence of fraud. The FMA is considering a requirement to have financial services providers file additional data for monitoring purposes, and this initiative should be coordinated with anti-money laundering efforts within the Companies Office. The two organisations should make use of objective measures of risks, vulnerabilities, and controls when evaluating proposals for further controls. The two organisations may also want to consider how to leverage machine-readable data formats to improve the efficiency of fraud identification efforts.

Collaboration Between Service Delivery Staff and Policy Staff

The quasi-autonomous, self-funded nature of the Companies Office raises the question of whether MED's policy staff have the means to exert sufficient oversight over the operation. In order for disclosure to run as the Minister intends, a good deal of hierarchical communication is required between the Ministry's senior policy attorney and the managers in charge of disclosure operations. The policy shop needs to be sufficiently competent to set real direction for the operation.

From all appearances, the current arrangement effectively mitigates the risk of maverick work by the Companies Office. First, the lines of communication between the policy shop and the service delivery operation are very clear, so the Minister is readily able to hold key people accountable for the required communication. Second, due care has been taken to ensure that the accountable positions are staffed by competent individuals. Third, the responsibilities of the Companies Office are transparently documented in its Statement of Intent, its Annual Report, and its technology plans and records, all of which are subject to audit. And lastly, the policy

staff and the service delivery staff have few organisational incentives to part ways, because the operational mission is sufficiently clear and lines of reporting are well-defined.

Collaboration Between the Companies Office and the FMA

The FMA is an independent Crown entity and, while it reports administratively through MED for certain purposes, it does not take substantive direction from MED. This separation of two key regulators is a pragmatic one, because it allows the FMA to charge ahead with reinvigoration of enforcement without disrupting the factory-oriented disclosure work of the Companies Office. But it does run the risk that the two organisations will move in different directions.

Historically, there has been minimal collaboration between the Companies Office and the Securities Commission, the FMA's predecessor. The Securities Commission made use of the Companies Office registry platform to register financial services providers, but extensive collaboration proved elusive. In early 2011, for example, officials at the Securities Commission were unable to obtain from the Companies Office an ad hoc reporting capability that could provide a comprehensive listing of all regulated entities. This complicated the Securities Commission's review of public offerings, among other things. On the other hand, the Securities Commission had only one IT staffer available to work on matters associated with disclosure, making it very difficult for the Commission to articulate all of its IT needs or handle its end of any IT collaboration. Thus the FMA inherited little in the way of IT expertise from its predecessor institution.

Although MED and the new FMA appear to have been able to collaborate so far at the policy level, it remains to be seen how well they can institutionalise this collaboration at the operational level. The FMA has committed to investing in IT capabilities, and by all accounts this is a good thing for the FMA. But there remains a risk that, with more IT staff, the FMA may seek to part ways with the Companies Office. For example, certain FMA staffers have proposed to construct their own IT system to monitor financial services providers. While this proposal has not yet gone forward, it illustrates the difficulty of joint operational planning between the FMA and the Companies Office. If the FMA ultimately develops a duplicative silo system, one that mirrors the prior efforts of the Companies Office, then the government is likely to pay more and get less than it could through effective collaboration across the regulatory regime.

As the FMA gets under way, policy staff within MED and FMA are monitoring interagency collaboration at the policy level. They will need to monitor the issue at the operational level as well.

Machine-Readability of Data

The Companies Office has actively made its filings accessible to the broadest array of external users possible, while reducing costs along the way. Its strategy has included the total elimination of query fees, the near-elimination of paper filings, and the provision of machine-to-machine access via web services. All of this has reduced costs while obviating the need for infomediaries. But the Office has taken a much

more cautious approach in transitioning to machine-readable data formats. It is converting all remaining paper filings into XML, but does not yet have in place a comprehensive plan for machine-readability across the entire operation.

If disclosed data is to become truly useful to investors, the Office will need to bring all its data onto a machine-readable standard. If the Office cannot do so, it may eventually compromise its ability to find and analyse evidence of fraudulent activity such as money laundering. It may also compromise its ability to interoperate with other organizations that have adopted such a standard.

XML is rapidly emerging as an international standard. The eXtensible Business Reporting Language, or XBRL, is a specialised subset of XML that is gaining popularity, particularly for sharing information across the financial services industry. Comprehensive conversion to such machine-readable standards will require a sizeable investment. But it is not yet clear whether the Office will be able to justify the necessary investment under its routine funding model. Ultimately, the Office may need to consider whether to fund machine-readability as a public good. Under New Zealand's costing guidelines, the classification of machine-readability as a public good would allow for greater flexibility in financing.

The Companies Office will need to continue monitoring its progress towards greater machine-readability, and may need to incorporate the issue more explicitly into its annual planning process.

CONCLUSION AND RECOMMENDATIONS

An assessment of the New Zealand model for corporate financial disclosure reveals some useful approaches for addressing a number of activity trade-offs. For regulated entities, these approaches mitigate some of the naturally occurring trade-offs between regulatory compliance and economic development. For operations staff, the systematic separation of high-level policy roles from ground-level service delivery helps to make operations more customer-oriented and more accountable for measurable results. The self-funded disclosure budget allows executives to make ongoing investments in disclosure technology and other preventive measures, while the separate funding of heavy enforcement work allows executives to respond separately to crisis-driven demands for increased litigation and other reactive measures. The financial structure of the disclosure operation is carefully designed to define and incentivise all of these approaches, and allows stakeholders to understand how financial resources are balanced against service delivery requirements.

While these approaches are often much more challenging in practice than on paper, they do provide a framework for a straightforward and clearly missioned operation. Under this framework the disclosure operation has been able to focus intently on its core work of improving transparency and accountability. US policy makers seeking to improve the levels of transparency and accountability in their own financial regulatory regime will indeed be able to find opportunities to import "sunlight" from New Zealand.

Recommendation A: Organisational Model

Consider the suitability of adopting a tested alternative model, such as a performance-based organisation (PBO), or other model previously adopted for other US agencies, to organise disclosure work as a quasi-independent, self-funded service delivery operation budgetarily separated from legal policy work and from enforcement and compliance work. If it is not feasible to implement a more suitable organisational model for disclosure operations under the SEC, then agency stakeholders may consider transferring selected disclosure functions to non-SEC organisations, such as the Department of the Treasury's Office of Financial Research.

Recommendation B: Direct Public Access

Take steps to disintermediate the provision of public access to disclosure data:

- 1. Provide the public with ad hoc, high-volume, machine-to-machine access directly from the SEC at no charge. Make use of cost-effective technologies, such as web services, to improve direct transmission of all disclosure data, irrespective of format or type, and irrespective of the status of various initiatives to improve accounting rules or data formats.
- 2. Eliminate any real or perceived requirements to review, redact, edit or otherwise prepare disclosure data for public access. Issue formal guidance clarifying that disclosure filers are legally liable for public viewing of data filed publicly, including any information considered private or confidential, whether requested by the agency or not, whether filed directly or by proxy.

3. Over time, eliminate the post-intervention concept of "dissemination" and replace it with a registry-style disclosure model reflecting the primacy of direct public access.

Recommendation C: Fee Itemisation

Itemise disclosure filing fees so as to provide each filer with an itemised transaction receipt for each fee. This itemisation ought to be based on a principled, transparent and auditable methodology that credibly reflects the operational costs associated with each filing.

Recommendation D: Fee Incentives

Charge different fees for different filing transaction types based on the impact of those filings on estimated current operational costs. Specifically consider charging, in a revenue-neutral manner, lower fees for electronic filings than for paper filings.

Recommendation E: Funding of Public Access

Fund the dissemination of disclosure data through disclosure filing fees, or at least in a manner that is entirely separate from the agency's contractual arrangements with its internal systems developers.

Recommendation F: Backward Compatibility

Seek to remove backward compatibility as a cause or rationale for technological inertia. Incubate a separate, parallel disclosure arrangement that eliminates most or all requirements for backward compatibility, by making focused investments that are very clearly separated from antiquated disclosure rules, processes, forms and systems. Institutionally insulate this arrangement from any operational authority or rulemaking authority with responsibility for maintaining backward compatibility.

Recommendation G: Collaboration Across Disclosure Programmes

Make use of professional development opportunities to improve the ability of the disclosure programme staff to leverage approaches, including the use of the standard registry model, developed in other countries. It is important that this professional development not be confused with training in accounting, training in EDGAR systems, or training in specific data-oriented technologies such as XBRL or XML.

BIBLIOGRAPHY

2011 Index of Economic Freedom. The Heritage Foundation and The Wall Street Journal. Retrieved 14 July 2011 from http://heritage.org/index/explore

21st Century Disclosure Initiative (2009), *Toward Greater Transparency: Modernizing the Securities and Exchange Commission's Disclosure System*, Washington, DC: Securities and Exchange Commission, pp. 4 and 11. Retrieved 14 July 2011 from http://www.sec.gov/spotlight/disclosureinitiative/report.pdf

Arthur, W. Brian (1994), *Increasing Returns and Path Dependence in the Economy*, Ann Arbor, Michigan: University of Michigan Press

Boston Consulting Group (2011), US Securities and Exchange Commission: Organizational Study and Reform, Washington, DC: US Securities and Exchange Commission, pp. 6, 42, 60, 61, 95, 219

Brabham (2008), 'Crowdsourcing as a Model for Problem Solving: An Introduction and Cases', Convergence: The International Journal of Research into New Media Technologies, 14(1), pp. 75-90

Brandeis, Louis D. (1913), 'What Publicity Can Do', Harpers' Weekly, 20 December

Business NZ and KPMG (October 2008), 'Summary Report of the Business New Zealand – KPMG Compliance Cost Survey', p. 5

Christie, William G. and Schultz, Paul H. (1994), 'Why Do NASDAQ Market Makers Avoid Odd Eighth Quotes?', *Journal of Finance, Volume. 49, No. 5*, December, pp. 1841-1860

Clark, Helen (2009), 'Valedictory Statement', 8 April, Parliamentary Debates, Wellington: Hansard

Committee on Capital Markets Regulation (2009), *The Global Financial Crisis: A Plan for Regulatory Reform*, Cambridge, Massachusetts: Committee on Capital Markets Regulation

Companies Office Profile 2009-2010 (n.d.), Companies Office. Retrieved 26 July 2011 from: http://www.business.govt.nz/companies/about-us/strategic-plans-annual-reports

Cook, Peter (interviewer), (3 September 2009), Bloomberg News interview of Harvey Pitt, Bloomberg TV (producer)

Cooper, Jeremy (2006), The Integration of Financial Regulatory Authorities: The Australian Experience, paper presented to the 30th Anniversary Conference of the Securities and Exchange Commission of Brazil, 4-5 September 2006

Cox, Christopher (2006), 'Improving Financial Disclosure for Individual Investors', Testimony, 3 May 2006, US House Committee on Financial Services, Washington, DC: US Securities and Exchange Commission

David, Paul A. (1985), 'Clio and the Economics of QWERTY', *American Economic Review, Volume 72, Number 2*, p. 332-337

DiCarlo, Lisa (2000), 'SEC Policies Create Uneven Playing Field for Investors', *Forbes Magazine*, 19 July. Retrieved 14 July 2011 from http://www.forbes.com/2000/07/19/feat.html

Djankov, Simeon et al. (2002), 'The Regulation of Entry', Quarterly Journal of Economics, Volume CXVII, Issue 1, February

Djankov, Simeon et al. (2008), 'The Law and Economics of Self-Dealing', *Journal of Financial Economics, Volume 88*, June, pp. 430-465

Doing Business Project (2010), *Doing Business 2011: Making a Difference for Entrepreneurs*, Washington, DC: World Bank

Eggers, William D. (1997), 'The Wonder Down Under', Government Executive, 1 March

Gallup World Poll (2009), The Gallup Organization

Gwartney, James, Joshua Hall and Robert Lawson (2010), *Economic Freedom of the World: 2010 Annual Report*, Canada: Fraser Institute, pp.10-11 (component 5C)

Healy, Paul M. and Krishna G. Palepu (2001), 'Information Asymmetry, Corporate Disclosure, and the Capital Markets: A Review of the Empirical Disclosure Literature', *Journal of Accounting and Economics, Volume 31, Issues 1-3*, March, pp. 405-440

Hitwise Top 10 Online Performance Award, (2008), Experian Hitwise. Retrieved 14 July 2011 from http://www.hitwise.com/awards/popup.html?market=nz&sDomain=www.companies.govt.nz&iDate=2008&iCatnum=61&Cal=1

Katz, Jonathan G. (2010). 'Reviewing the SEC, Reinvigorating the SEC', *University of Pittsburgh Law Review*, vol. 71, No. 3, pp. 497, 499, 500, 503 and 509

Lie, Erik (2005), 'On the Timing of CEO Stock Option Awards', *Management Science*, *Volume 51*, *No. 5*, May, pp. 802-812

Levitt, Arthur (1995), 'The SEC at 60', General Counsel Briefing, National Legal Center for the Public Interest, Washington, DC, 29 March, 1995

Lloyd, Henry Demarest (1903), Newest England: Notes of a Democratic Traveller in New Zealand, New York: Doubleday, Page & Co

McGinty, Tom and Kara Scannell (2009) 'SEC Plays Keep-Up in High Tech Race', *The Wall Street Journal*, 20 August 2009

Minority Staff Report, US House of Representatives Committee on Oversight and Government Reform, *The SEC: Designed for Failure*, 18 May 2010, pp. 11, 14, 20, 22, 25, 27

New Zealand Controller and Auditor General (June 2008), *Good practice guide:* Charging fees for public sector goods and services, Wellington: Office of the Auditor General, p. 26

New Zealand Treasury (December 2002), Guidelines for Setting Charges in the Public Sector, Wellington: The Treasury, p. 3

Noveck, Beth Simone (2009), Wiki Government: How Technology Can Make Government Better, Democracy Stronger, and Citizens More Powerful, Washington, DC: Brookings Institution Press

Ormsby, M. J. (1995), *The Policy/Services Delivery Split: Impacts on Policy Advice*, Wellington: New Zealand State Services Commission

Osborne, David and Peter Plastrik (1997), *Banishing Bureaucracy: The Five Strategies for Reinventing Government*, Reading, MA: Plume, Chapter 7, pp. 203-240

Pitt, Harvey L. (2009), 'How We Got Here', Speech to the New York Chapter of the National Investor Relations Institute, New York City, 17 November 2009

Securities Act of 1933, 15 USC § 77a (1933), Section 2(b)

Siegel, Jordan, Amir Licht and Shalom Schwartz (2011), 'Egalitarianism and International Investment' *Journal of Financial Economics*, accepted manuscript

Taibbi, Matt (2011), 'Why Isn't Wall Street in Jail?', Rolling Stone Magazine, 16 February

Taylor, Michael (1995), 'Twin Peaks': A Regulatory Structure for the New Century, London: Centre for the Study of Financial Innovation

Volcker, Paul et al. (2008), *The Structure of Financial Supervision: Approaches and Challenges in a Global Marketplace*, Washington, DC: Group of Thirty

APPENDIX A: HIGHLIGHTS IN THE HISTORY OF NEW ZEALAND'S CORPORATE FINANCIAL DISCLOSURE OPERATION

- 1860 Enactment of the Joint Stock Companies Act. The Act establishes a Registrar of Companies at a Companies Office and provides for limited liability, a government-sanctioned debt limitation arrangement.
- 1862, 1903, 1908, 1933, 1955 Companies Act rewritten and updated.
- 1978 Enactment of the Securities Act after the collapse of a major finance company. The Act requires prospectuses to be filed with the Companies Office for vetting. The Act establishes the Securities Commission and moves to regulate entities by economic function rather than by corporate form alone.
- 1986 Issuers of securities are required to issue an investment statement providing key information to non-expert investors. This forms the primary disclosure document and the primary marketing document.
- Major collapse of the share market in New Zealand. Parliament subsequently passes legislation to address the challenges posed by substantial securities holders, insider trading, and similar concerns.
- 1993 Companies Act rewritten to provide rules for internal procedure, and all companies are given full capacity unless restricted in a constitution.
- 1993 Takeovers Code established.
- 1996 Searchable website established for the companies register.
- 1998 Companies are able to incorporate through the website.
- 1999 Personal Properties Securities Act enacted.
- 2000 All companies required to file annual returns online.
- 2001 Takeovers Code comes into force.
- 2002 Continuous disclosure required for all companies listed on the New Zealand Stock Exchange. Companies must disclose immediately any events likely to affect share price.
- 2002 Personal Property Securities Act of 1999 comes into force. Charges against companies are now recorded on an online register of securities interests.
- 2002 Companies register declared to be fully electronic, with exceptions limited to substantial registrations such as prospectuses and amalgamations. All disclosure data must be searched electronically; paper searches eliminated.
- 2003 All director information required to be filed online.
- All company incorporations required to be filed online. Paper registrations no longer allowed.
- 2009 Companies register provided on searchable mobile platform.
- 2010 Companies register launched on new platform with enhanced functionality.
- Financial Markets Authority established in response to a series of finance company failures. FMA replaces the Securities Commission and reorganizes securities enforcement under a new regime.
- Policy makers expect to move to a short-form disclosure document, stated in plain English, to go to every investor, replacing the prospectus and investment statement. An "issuers register" will make all basic information about an issuer available directly to the public at no charge.