New Zealand Treasury

New Zealand Financial Markets, Saving and Investment

Linda Cameron, Bryan Chapple, Nick Davis, Artemisia Kousis & Geoff Lewis

New Zealand Treasury
Policy Perspectives Paper 07/01

October 2007

THE TREASURY
Kaitohutohu Kaupapa Rawa

New Zealand Government

NZ TREASURY POLICY PERSPECTIVES PAPER 07/01

New Zealand Financial Markets, Saving and Investment

MONTH/YEAR

October 2007

AUTHORS

Linda Cameron New Zealand Treasury	Email Linda.Cameron@treasury.govt.nz Telephone 64-4-917 6189 Fax 64-4-473 0537
Artemisia Kousis New Zealand Treasury	Email Artemisia Kousis@treasury.govt.nz Telephone 64-4-917 6924 Fax 64-4-473 0537
Geoff Lewis New Zealand Treasury	Email Geoff Lewis@treasury.govt.nz Telephone 64-4-917 6203 Fax 64-4-473 0537
Bryan Chapple Ministry of Economic Development PO Box 1473 Welington 6015 New Zealand	Email Bryan.Chapple@med.govt.nz Telephone 64-4-474 2933 Fax 64-4-462 4206
Nick Davis Martin Jenkins PO Box 5256 Welllington 6015 New Zealand	Email Nick@martinjenkins.co.nz Telephone 64-4-499 6130 Fax 64-4-499 6133

ACKNOWLEDGEMENTS

Input has been provided to this paper by the following people within the Treasury: Peter Martin, Sid Durbin, Brian McCulloch, Vivien Wynne and Steve Mack, and from the Ministry of Economic Development: Clinton de Bruyn, Roger Procter and Andy Wood.

NZ TREASURY

New Zealand Treasury
PO Box 3724
Wellington 6015
NEW ZEALAND

Email information@treasury.govt.nz
Telephone 64-4-472-2733
Website www.treasury.govt.nz

DISCLAIMER

Summary

This paper is based on a joint project by The Ministry of Economic Development and Treasury to examine the link between New Zealand's financial system and economic performance. Overall economic performance is influenced by a wide range of factors including the financial system. There is strong evidence that the level of development of a country's financial system has a positive influence on economic growth and productivity. The relationship is bi-directional with economic growth also contributing to financial sector development.

Our preliminary assessment is that a lack of development in certain parts of New Zealand's financial system could be imposing a moderate constraint on the growth and performance of New Zealand firms. The level of development of New Zealand's financial system is patchy: a large, efficient and sound banking system sits alongside equity, venture capital and debt markets that in size, depth, liquidity and skill base are relatively under-developed. Private equity is currently increasing in importance – an international trend; and there are quite high levels of informal financing activity. As a consequence, firms are unlikely to have access to a comprehensive menu of financial services through all stages of their development. New and emerging firms may face particular difficulties accessing finance and related services.

Some of the likely causes and consequences of the current features of New Zealand's financial system include: the low level of national saving; the imperfect substitutability between foreign and domestic saving; the relatively high cost of capital and potentially limited demand for capital.

The recent announcement by the Government of the KiwiSaver enhancements and reduction in taxation of collective investment vehicles, represent a major development in savings policy that has the potential over time to lead to a marked increase in household saving, held in the form of financial assets, and some increase in national saving. Based on international experience (e.g. Chile and Australia), a sustained increase in national saving (over 10-15 years) could significantly enlarge and deepen the New Zealand financial system with knock-on effects for firm growth and productivity.

Further measures may be justified but need to be based on a good understanding of the factors responsible for financial system under-development, and sound analysis of the benefits and costs of specific interventions. There is also a need to continue adding to our knowledge on trends in the financial system including for example, the effect of regulatory settings on our capital markets and determinants of firms' access to finance and their location decisions, including listing and delisting from the New Zealand stock market.

Contents

New Zealand Financial Markets, Saving and Investment

Introduction

This paper is based on a project which explores the link between New Zealand's financial system and economic performance

Economic performance is influenced by a wide range of factors including the level of development of the financial system. This paper is based on a joint project by The Ministry of Economic Development and Treasury to examine the link between New Zealand's financial system and economic performance. This builds on earlier work undertaken by Treasury on financial systems and economic growth[1].

The aim of the current project is to explore the proposition that: "*among other factors, a lack of saving and financial development may be constraining the growth and productivity performance of New Zealand firms*".

Until recently the focus was on ensuring the fundamentals were in place

Until recently, policy orthodoxy in relation to financial system development has largely focussed on ensuring that the fundamentals were in place - a stable macroeconomic policy and sound tax and regulatory policies. While our work does not challenge the importance of these policies, it does begin to question whether these policies are sufficient by themselves and whether more emphasis should be given to pro-savings policies and other policies specifically aimed at financial sector development.

KiwiSaver and recent tax changes represent a significant development in savings policy

The announcement by the Government of the KiwiSaver enhancements in Budget 2007 and the recent reduction in taxation of collective investment vehicles represent a significant development in savings policy. A background paper on saving recently released by the Treasury (2007)[2] is complementary to this study.

This paper discusses:

- The role of the financial system and the features which are important for economic growth.
- Our preliminary assessment[3] of the strengths and weaknesses of New Zealand's financial system based on available evidence.
- Some of the factors contributing to underdevelopment of New Zealand's financial system including: New Zealand's low saving performance; high degree of foreign ownership; lack of very large firms; a relatively high

---

1 Refer Claus, I., V. Jacobsen and B. Jera (2004) 'Financial Systems and economic growth; An evaluation framework for policy', Treasury Working Paper 04/17.

2 Refer Treasury (2007) 'Saving synopsis of theory, evidence and recent Treasury analysis on saving'.

3 This is a preliminary assessment and is by no means fully comprehensive. There are other factors which could also be impacting on financial system development such as the small size of the New Zealand economy.

incidence of co-operative and state-owned enterprise governance structures; relatively high cost of capital and potentially limited demand for capital.

- The benefits of sustained national saving for financial system development and potential knock-on effects for firm growth and productivity.
- Policy options for promoting financial system development.

Role of the financial system

The role of the financial system is to transfer savings, transform risk and help achieve productive investment at least cost

A financial system provides the means to transfer savings from those with surplus capital to those in need of capital – and to transform risk – to help achieve productive investment at least cost over the investment horizon. That transfer may be undertaken publicly or privately, with the price of exchange set by financial intermediaries and/or individuals. A key role of the financial system is to minimise the problems of asymmetric information, which arise because borrowers generally know more about their investment projects than lenders.

The financial system comprises a myriad of financial instruments and services

A country's financial system comprises a myriad of financial instruments and services offered to firms (and investors) by a range of markets, organisations (e.g. financial institutions) and individuals. Governing that system is a complex set of legal institutions (e.g. securities law) and norms (e.g. lending policies). Key components of New Zealand's financial system include: the banking sector; the venture capital/private equity market; the corporate bond market; the public equity market (both primary and secondary); non-bank financial institutions; and the foreign exchange market.

A good financial system performs seven functions

In broad terms, a good financial system performs the following seven functions[4]:

- mobilises savings;
- allocates resources and funds new investment;
- promotes the production and discovery of information;
- monitors managers and exerts corporate control;
- promotes flexibility and innovation in the use of technology and financial instruments;
- facilitates the trading, hedging, diversifying and pooling of risk; and
- facilitates the exchange of goods and services.

The level of financial development refers to the effectiveness and efficiency with which these seven functions are performed

Specific market frictions (e.g. transaction costs and information problems) motivate the emergence of specific financial markets and specialist intermediaries that provide these seven functions. The level of financial development refers to the effectiveness and efficiency with which these

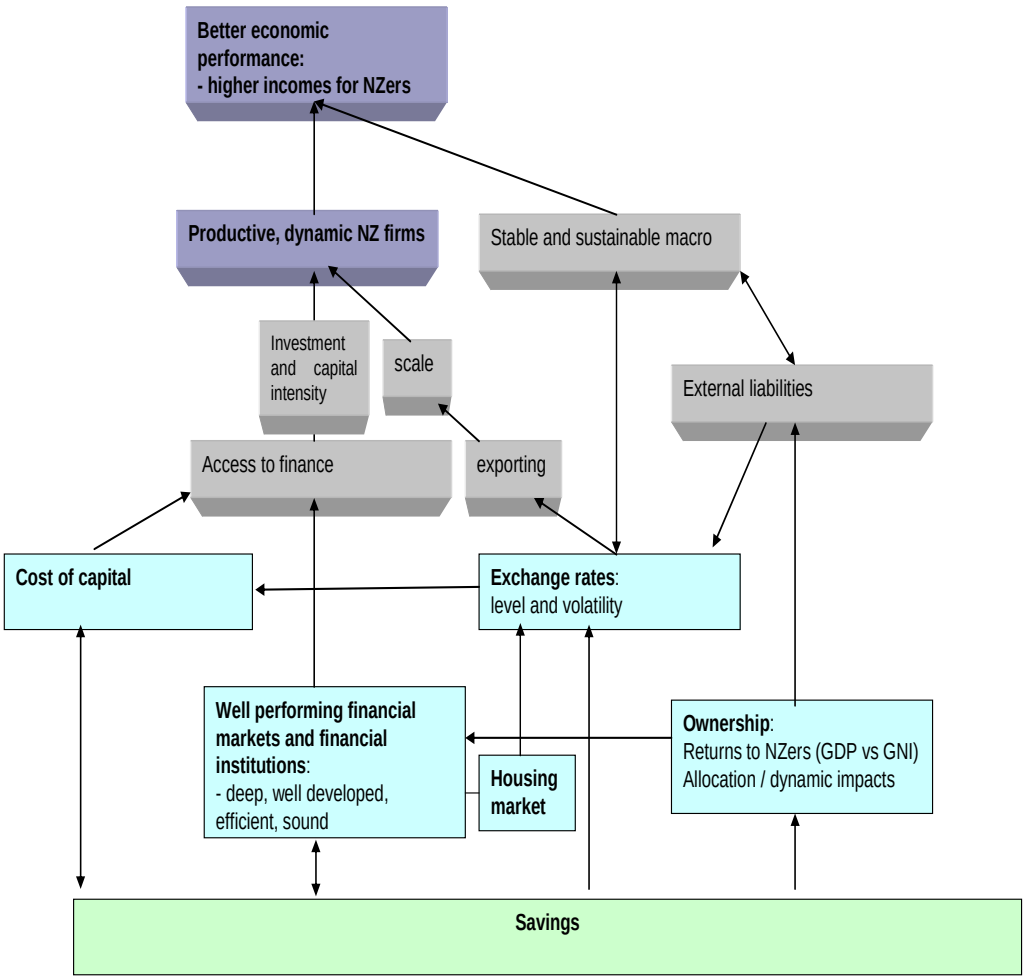
[4] Refer for example to OECD (Leahy *et al* 2001) and Corbo and Schmidt-Hebbel (2004)

functions are performed (in a collective sense) by the various financial instruments, markets and intermediaries that make up the financial system. These in turn improve the allocation of resources (in both a static and dynamic sense), the quality of governance, the rate of capital accumulation and technological innovation, and the long-run rate of economic growth. An effectively functioning financial system does not imply that all agents in need of funds necessarily receive funds (i.e. a crucial function of the system is to withhold funds from investments deemed 'undeserving' by informed investors).

The financial system sits in the wider economy with a range of links and complex interdependencies

The financial system sits in the wider economy, in which the saving of households, firms' investment and the operation of fiscal and monetary policy all impinge on and are influenced by one another. Figure 1 illustrates some of the possible links and complex interdependencies connecting the financial system, saving and investment with improved firm performance and higher incomes for New Zealanders. Many of these have been subject to empirical and theoretical investigation. The diagram should be seen as indicative only, to prompt thinking about system linkages. It does not purport to be a rigorous economic model.

Figure 1 – Financial System Linkages



There is good evidence that financial-system development has a positive effect on economic growth

A key point has emerged from recent economic research on financial system development. There is strong theoretical reasoning and empirical evidence[5] that the causal relationship between financial system development and economic growth is bi-directional. That is while strong corporate performance and associated investment demand contributes to financial system development, causality also runs from financial-system development to economic growth.

In theory, as the financial system develops and growth responds positively, there will be a point beyond which further development has a zero or negative impact on welfare. But this point is unlikely to have been reached in countries with under-developed financial systems. In their search for policies that are growth enhancing, it would therefore be sensible for such countries to consider policy options to increase their financial-system development. We turn next to an assessment of the state of development of New Zealand's financial system.

Assessment of the New Zealand financial system

New Zealand's banking sector is sound, efficient and well-developed. Many other parts of the financial system (with the exception of the foreign exchange market[6]) are relatively under-developed[7] i.e. are small and lacking in depth and liquidity.

Firm financing is largely in the form of debt finance with equity finance playing a much lesser role

In the New Zealand financial system firm financing is largely intermediated by banks which are the single largest provider of debt finance, with equity finance playing a much lesser role (SNZ, 2004). Existing owners are the single largest source of new equity followed by other informal sources (e.g. family, friends and angel investors). This is reflected in a small and relatively illiquid stock market, an extremely small domestic corporate bond market and a venture capital market that is growing but remains relatively immature. Figures 2 to 4 illustrate this by looking at the relative sizes of New Zealand's banking sector, stock market and venture capital investment.

Because of this firms are unlikely to experience a comprehensive menu of financial services through all stages of their development. Possible reasons for under-development of the New Zealand financial system include:

- New Zealand's low national saving rate with private saving tilted towards housing.
- Heavy reliance on foreign lenders and owners.

---

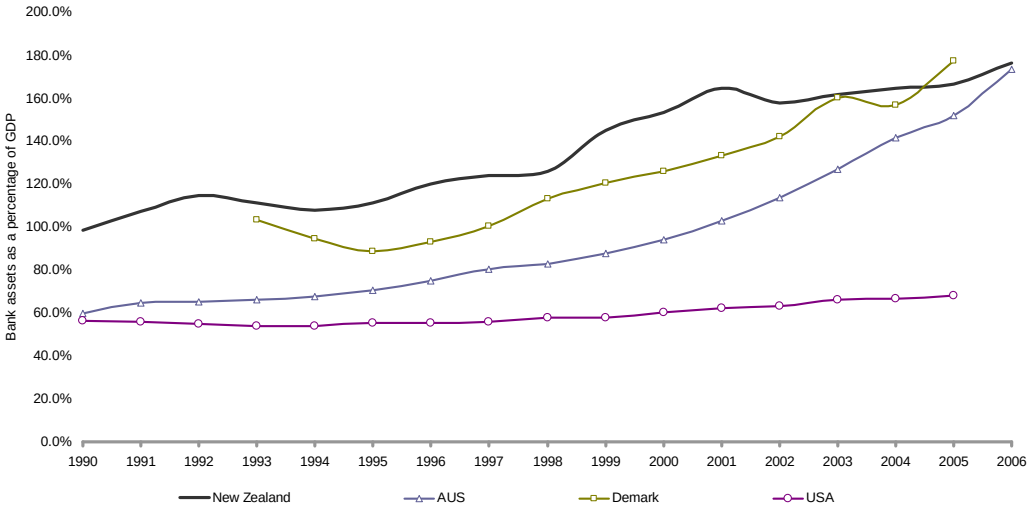
5 Levine (1997 and 2005) and OECD (Leahy *et al* 2001)

6 The foreign exchange market is relatively deep and liquid.

7 de Serres *et al* (2006), Price Waterhouse Coopers (2003), Kousis and McCulloch (2007)

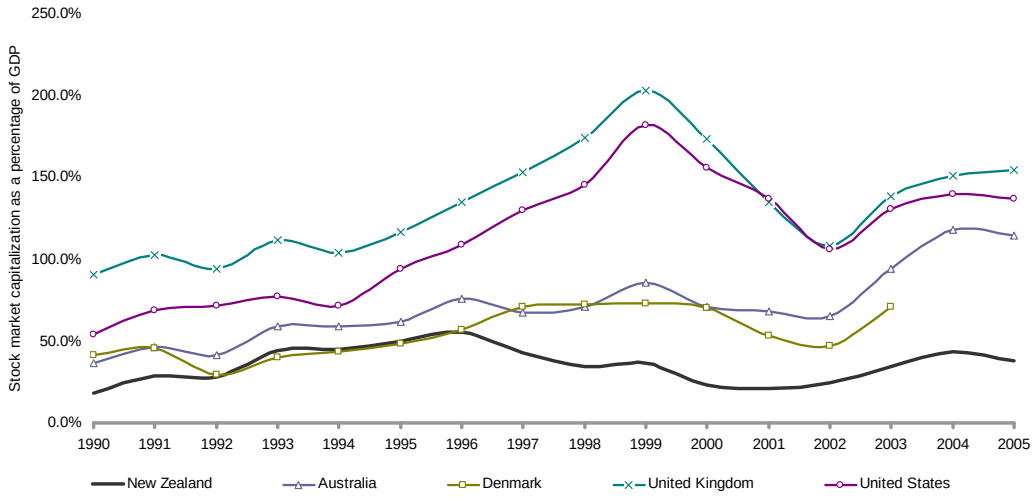
- The lack of very large firms that support the local equity market.
- Co-operatives and state-owned enterprises that don't raise capital on the local equity market.
- The lack of growth ambition within New Zealand firms and potential lack of profitable opportunities that could be restricting the demand for capital.
- The small scale of the New Zealand economy which is reflected in high costs relative to other countries of undertaking "due diligence" and investment analysis.

Figure 2 – Size of banking sector: selected countries



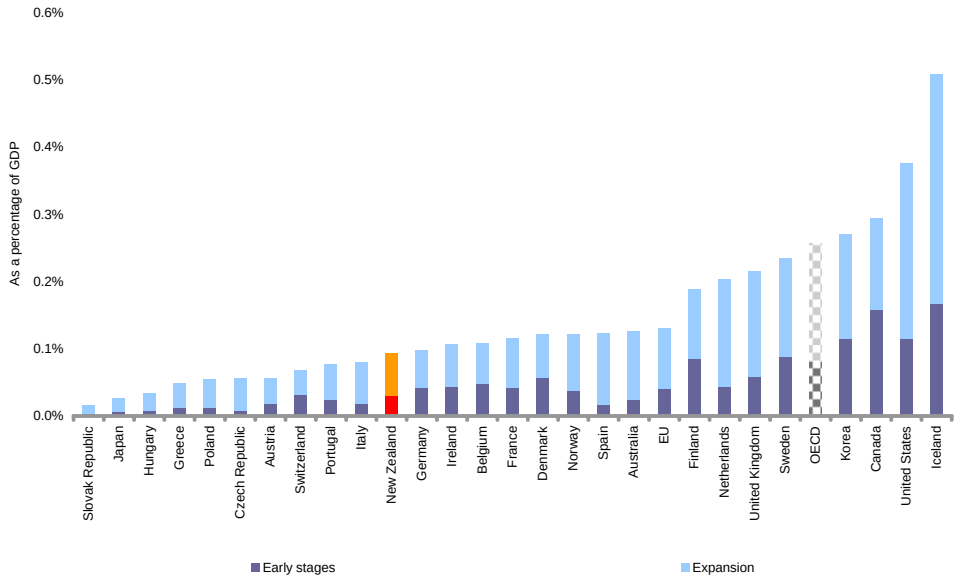
Source: OECD Factbook 2007, Denmark National Bank, Reserve Bank of Australia, Reserve Bank of New Zealand, Federal Reserve Board

Figure 3 – Stock market capitalisation: selected countries



Source: World Federation of Stock Exchanges, OECD Factbook 2007

Figure 4 – Venture capital investment (2000-2003): selected countries



Source: OECD

Availability of capital

A key question is whether under-development of the financial sector is affecting the availability and cost of capital (particularly equity capital), thereby constraining the investment and expansion of New Zealand firms.

There are few New Zealand studies that look for evidence of firm capital constraints - such problems are difficult to observe

There are few empirical studies in New Zealand that look for evidence of firm capital constraints and, in any case, such problems are inherently difficult to observe. The Business Finance Survey (Statistics New Zealand, 2004) suggests there are few problems with firms obtaining finance, but such surveys are not in themselves direct tests of finance constraints and are subject to survival bias[8]. A report by Buckle *et al* (2000) found that firms' investment intentions are influenced in part by the strength of their balance sheets and small firms are more affected by changes in their financial position. This result suggests that financing constraints may affect firm expansion, although the study has some limitations due to weaknesses in the data. In contrast, a more recent MED study (Fabling & Grimes, 2004) finds little or no evidence that perceived finance constraints cause poor firm performance and concludes instead that poorly performing (relatively unprofitable) firms find access to capital difficult. It is to be expected that a good financial system would deny weak firms access to capital. Overall however, it may be that the likelihood of finding significant problems is low during the expansion phase of the business cycle, when capital is more readily available. To draw firm conclusions, further investigation would be required.

[8] The SNZ survey did not include firms that had recently exited possibly due to a lack of finance.

Certain firms are more likely to have difficulty accessing capital e.g. new and young firms lacking collateral

Certain firms are more likely to have difficulty accessing capital (e.g. young firms with limited cash-flow, those with intellectual property or highly specific assets that can't be used as collateral and highly geared companies). For these firms, equity finance (including venture capital) is a more appropriate and likely option than debt finance (Statistics New Zealand, 2004; LECG, 2005). However, access to risk capital could potentially be a problem given that the early-stage equity market is still young and relatively underdeveloped by international standards. An assessment of the Venture Investment Fund suggests that this government initiative is having a positive impact on development of the market in New Zealand, but that significant development of the industry is expected to take time (LEGC, 2005).

Demand for capital

Possible lack of demand for finance amongst small to medium sized firms

Regardless of the availability of capital, there could be a lack of demand for finance of any kind among many of New Zealand's small to medium sized firms (Hamilton & Fox, 1999)[9] and this could be affecting firm performance. A survey indicated that 93% of respondents (especially long established firms) had no intention of growing their business. This has implications for financial sector development and more importantly for productivity and economic growth.

A range of factors could be influencing firms' demand for finance including:

- Few profitable opportunities – New Zealand firms have dividend payout ratios that are significantly higher than other countries, which could signal a lack of investment opportunities (CRA, 2003). It is plausible, however, that other factors could be contributing to high dividend yields such as widely held ownership and New Zealand's dividend imputation system, which provides little tax advantage for companies to retain earnings unlike the case in many other countries[10].
- Entrepreneurs fear the loss of control associated with diluting their equity, even if the new investment is expected to lead to significant growth (Austin, Fox & Hamilton, 1996).
- The quite common use of private homes as collateral for business borrowing gives rise to the risk of double jeopardy (loss of home and job) for business owners, which may make them less inclined to take on additional risk in their business ventures (Hamilton & Fox, 1999; Cameron & Massey, 1999).
- The cost of capital is also high relative to most other OECD countries. This is discussed in the next section, although evidence is unclear on how responsive investment would be to a fall in the cost of capital.

---

9 It is possible that a high rate of foreign ownership may similarly restrict demand for external capital for large firms operating in New Zealand.

10 This may help to explain New Zealand companies' high dividend payout ratios but is not necessarily in itself a reason to provide tax advantages for reinvested earnings. Nevertheless, the reduction in the company tax rate to 30% announced in Budget 2007 will modestly increase companies' incentives to re-invest earnings.

Cost of capital

The cost of capital in New Zealand is high relative to other countries

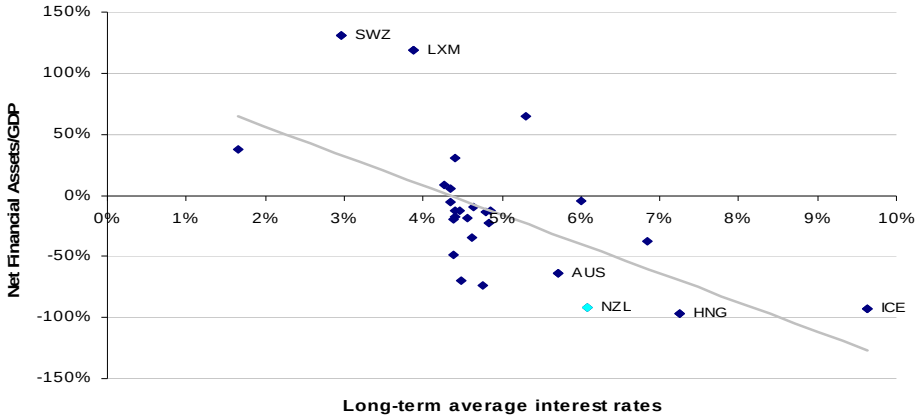
Long-term real interest rates have declined in New Zealand since 1996. While international differentials in real interest rates have narrowed, partly due to lower government debt levels, New Zealand's long-term real interest rates are high compared to a broad cross-section of OECD countries. In particular, there remains a significant currency and liquidity premium vis-à-vis the United States and some other OECD economies. Hawkesby, Smith and Tether (2000) estimate the liquidity premium to be around 50 basis points relative to the United States, although it is questionable whether the United States is the most appropriate comparator[11]. New Zealand's long-term real interest rates are similar to those in Australia. However, both Australia and New Zealand have high net external liabilities, which may partly explain their high costs of capital relative to other countries.

New Zealand's high foreign indebtedness could be a driving factor behind the country's persistently high interest rates

A country's net foreign asset position features prominently in most stories of interest differentials reflecting a premium imposed by foreign investors (figure 5 plots a simple graph between the two variables across countries). Plantier (2003) has tested whether New Zealand's relatively high foreign indebtedness, as measured by net foreign asset positions as a percentage of GDP, might in fact be a driving factor of the country's persistently high real interest rates. His main result confirms that OECD countries' net foreign asset positions correlate well with the gap between domestic-currency real interest rates and those in the rest of the world. Further, this work suggests that not only does the size of a country's net foreign asset position relative to GDP matter for interest rate differentials, the composition of this position matters as well. In particular, government indebtedness appears to have a larger effect on the interest rate differential than private indebtedness. In the case of New Zealand, Plantier's results suggest that reductions in the net indebtedness of the New Zealand government since 1994 have lowered real interest rates by almost 1 ½ percentage points, though this has at least partly been offset by increases in household indebtedness.

[11] Because of the large size of the U.S. economy and the central role of the USD in facilitating international trade, demand for U.S. assets is sufficiently high as to imply a negative liquidity risk premium. In other words, U.S. long term interest rates are persistently below the levels predicted by economic fundamentals.

Figure 5 – Net liabilities and interest rates



Source: Net foreign assets from 2004 - Milesi-Ferretti & Lane (2006), Long term average interest rates over last 10 years – OECD Economic 80 Outlook database

The cost of capital appears to be more sensitive to changes in government debt than private sector debt

If investors' perceptions of NZ dollar risk have been influenced by the high level of external debt, the resultant currency risk premium attached to New Zealand investments will have adverse consequences for the cost of borrowing for New Zealand firms. Lowering household debt levels (by increased saving) may help to reduce the currency risk premium paid by New Zealand companies. However, since the cost of capital appears to be more sensitive to changes in government debt than private sector debt, the dollar-for-dollar gains of a lower level of private external obligations are expected to be smaller than those reaped from lowering public sector debt in the 1990s.

Estimates indicate that interest rates have a moderate effect on investment

There is also some controversy about how much the real cost of capital matters for investment and, therefore, GDP growth. International evidence suggests a wide range of estimates of the elasticity of business capital formation to its user cost. Most recent estimates, using large firm-level data sets, tend to find relatively low elasticities (e.g. Chirinko et al (2002) estimate the user cost elasticity at -0.40), suggesting a moderate effect of interest rates on investment.

Taxation and regulatory structure

New Zealand's current financial sector development may have been influenced by the regulatory structure and past tax settings.

Past tax settings may have limited New Zealand's current financial sector development

With regard to taxation for example, housing is less taxed than some financial investments, contributing to unbalanced household portfolios. In addition, the taxation of savings used to be applied on a Taxed-Taxed-Exempt (TTE) basis. This was unusual compared with practice in other OECD countries. The introduction of KiwiSaver and the recent tax reductions for collective investment vehicles have moved New Zealand closer to standard OECD practice for taxation of savings.

Another tax issue is the use by banks and others of offshore branches to issue debt in order to avoid the approved issuer levy (AIL). This appears to

have inhibited the development of a domestic debt market. AIL is currently being reviewed through the international tax review. Furthermore, New Zealand's unusual method of taxing offshore subsidiaries could be affecting firm location choices. Budget 2007 announced changes to the tax treatment of offshore subsidiaries to bring it into line with international practice.

Overall, New Zealand's investor protection and financial-system regulation are good by OECD standards, although there is scope to enhance the regulatory framework

Overall, New Zealand's investor protection and financial-system regulation are regarded as comparatively good by OECD standards (de Serres *et al,* 2006). In addition, a recent study by Cameron (2007) has shown that New Zealand rates well in terms of private protection measures that seem to matter for stock market development[12]. As a result of the current Review of Financial Products and Providers (RFPP) an enhanced regulatory framework is being developed that will increase investor confidence in areas including collective investment schemes, non-bank deposit takers and the advice available from financial advisors.

There is a need to further explore whether the regulatory environment is contributing to New Zealand's poor saving performance and lack of development in certain parts of the financial system. Financial liberalisation has been beneficial in terms of increasing access to finance, but a negative consequence has been higher household debt levels and lower saving rates.

Low domestic savings/reliance on foreign savings

Some measures show New Zealand has a consistently lower rate of household saving compared to other OECD countries

The level of saving influences the development of the financial system. According to Statistics New Zealand's (SNZ) Household Income and Outlay Account New Zealand's household saving rate is negative and historically has been low relative to a number of other comparator countries (Hodgetts *et al,* 2006). However, SNZ classifies the data as "experimental" rather than official and there are questions about its accuracy[13]. Alternative flow measures of household saving are either less negative or, in one case at least[14], still positive. Nevertheless, the overall picture is one of a consistently lower rate of household saving compared to other OECD countries.

The national saving rate is positive but low compared to most other OECD countries

National saving is the sum of household, business and government saving. New Zealand's national saving rate is positive but low compared to most other OECD countries and has been declining in the last few years. In 2005 national saving was 4% of national disposable income, while in 2006 it was 1.6%. New Zealand's persistent trend of current account deficits and high level of net external indebtedness also point to a relatively poor

---

12 Measures of investor protection have been developed by La Porta and co-authors (2006). Private investor protection measures are based on standards for information disclosure and transaction approval, and the ability of minority investors to take court action (typically against firm "insiders", such as controlling stakeholders, managers and their agents).

13 SNZ, Treasury and the RBNZ are working to develop higher quality official measures.

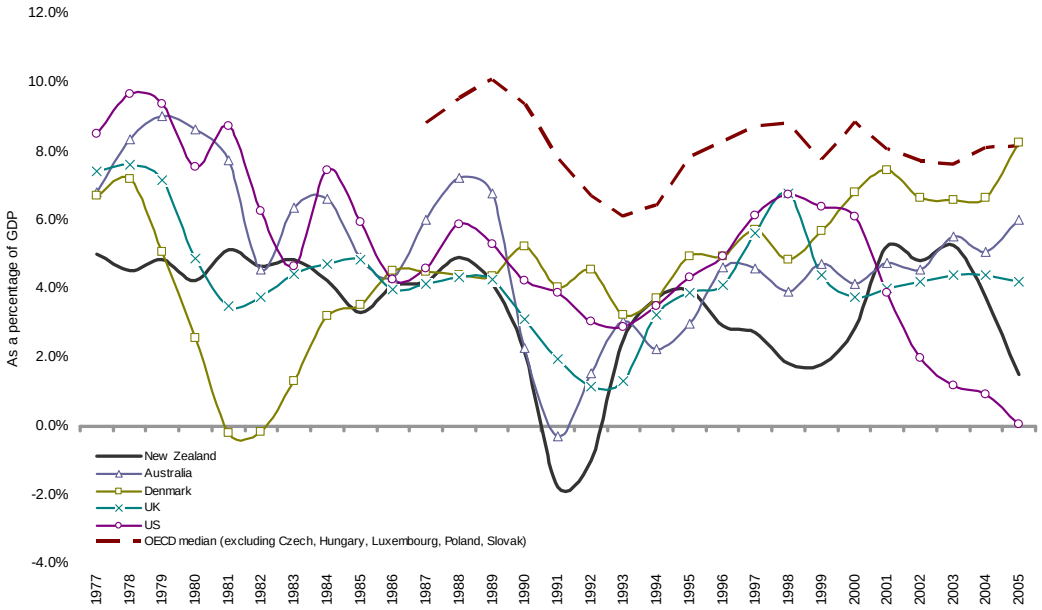
14 Van Zijl de Jong, M. and G. Scobie (2006) 'Housing: An analysis of ownership and investment based on the household savings survey'.

national saving record. The deficits have been funded by capital inflows from abroad.

New Zealand's reliance on foreign savings has increased to the point where we have one of the highest current account deficits and net external liability positions in the OECD

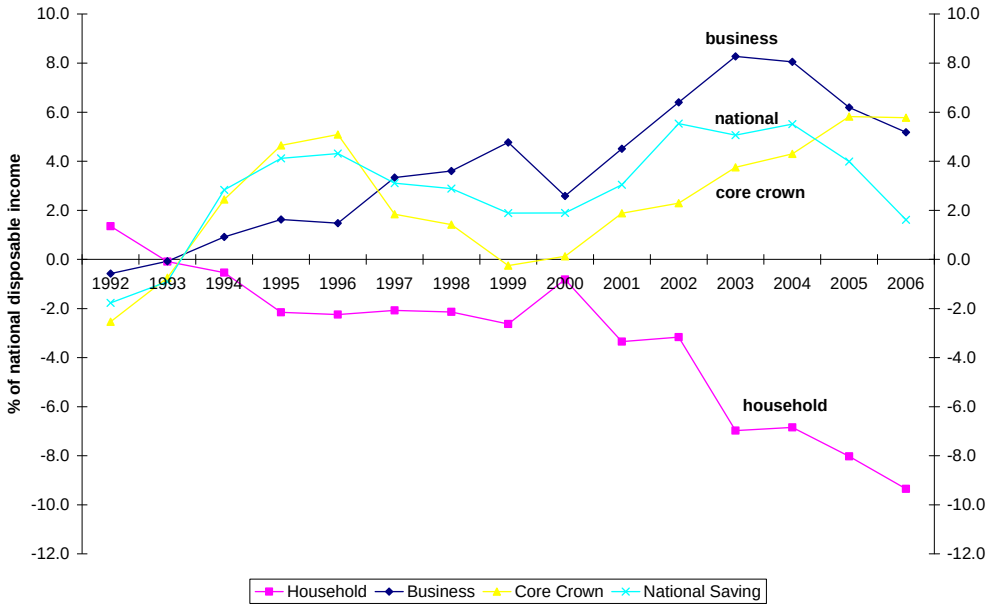
At a rate around 10% of GDP in recent years, net national investment has been significantly greater than national saving. New Zealand's reliance on foreign savings has increased to the point that New Zealand has one of the highest current account deficits and net external liability positions in the OECD. While the present very high current account deficit reflects a number of unusual cyclical influences, the underlying trend remains high relative to other countries. A key question is whether New Zealand's high reliance on foreign savings has implications for financial system development and investment. This is discussed in the next section.

Figure 6 – Net national saving rates: selected countries



Source: OECD Factbook 2007

Figure 7 – Sectoral composition of savings



Source: Statistics New Zealand's National Accounts, RBNZ calculations

Substitutability of foreign and domestic savings

The source of saving can also influence the development of the financial system. Standard neo-classical theory predicts that New Zealand's heavy reliance on foreign savings should not matter for growth since foreign savings are perfectly substitutable for domestic savings. However, this theory relies on strong assumptions (e.g. perfect intermediation, complete/frictionless markets and rational behaviour) that are unlikely to hold, even with highly integrated financial systems.

There is considerable evidence suggesting that foreign and domestic saving are not perfect substitutes

There is now considerable evidence[15] suggesting that foreign and domestic saving are not perfect substitutes and that geography (particularly distance) and the size of the economy are important determinants of international financial flows. Information asymmetry (between investors and savers) is important and the extent to which it matters is a function of the physical distance between them, the size of the financial system and the efficiency of financial intermediation. Barriers relating to cross-border investment can include language, institutional and regulatory differences, high costs of acquiring information about small markets and behavioural considerations such as home bias[16].

Foreign investors prefer debt and direct investment

There appears to be a ranking of different forms of international capital flows with debt being less susceptible to information asymmetry, followed by direct equity investment then portfolio equity investment (Razin *et al* 1996). Consequently, New Zealand is more likely to attract foreign capital in the form of debt and direct equity rather than portfolio equity. Recent

15 For example Tesar & Warner (1995) and Portes & Rey (1999).

16 Investors are more likely to invest in areas close to where they are located in order to increase the information available and consequently lower the risk.

(net) financial account flows for New Zealand are in line with this claim. While falling short of proof, the data are thus consistent with the notion that differences in the availability of information influence international investment patterns[17]. Since 2000, the bulk of net inflows have been dominated by debt. While New Zealand does not appear unusual in terms of the debt/equity structure of external liabilities, the share of direct equity investment to total foreign equity investment is high (i.e. portfolio equity investment is low).

Although New Zealand has an open financial system, its small size and large distance from major international markets, could make it particularly susceptible to differences in the availability of information across borders. The higher levels of direct equity investment mean that fewer companies are likely to be listed on the NZX and the development of the stock exchange is therefore less than it would be otherwise. This may have an adverse effect on firms starting up that rely on a well developed local financial system. These problems are more likely to be evident for equity than debt, with young and small firms seeking equity finance most likely to be adversely affected.

Sustained national saving and financial system development

A sustained increase in national saving (10-15 years) could have significant impacts on financial system development with knock-on effects for firm growth and productivity

Based on international experience, a sustained increase in national saving could have significant impacts on financial system development. However, the experience of Australia and Chile suggests that the full benefits of increasing saving are likely to accrue slowly over time. After a sustained period (say 10-15 years), material increases in saving could produce significant financial system development with knock-on effects for firm growth and productivity.

Enlarging and deepening the financial system through higher savings

International evidence suggests that sustained increases in national savings, for example brought about through the introduction of compulsory superannuation schemes, can enlarge and deepen the financial system.

- Corbo and Schmidt-Hebbel (2004) describe the main effects of the Chilean pension reform on its capital markets. They highlight the contribution of pension reform and increased savings to the quality of regulation, improvements in corporate governance and transparency, increased specialisation, innovation and the creation of new financial instruments, as well as secondary effects on the structure of the financial system and other markets (e.g. insurance, mortgage markets etc). In

[17] Cross country studies typically exclude New Zealand but do include Australia.

terms of quantitative effects, they argue that pension reform significantly increased the breadth and depth of the financial system.

- Gizycki and Lowe (2000) describe key changes in the Australian financial system in the 1990s following, firstly, the privatisation of government-owned assets and financial deregulation and, subsequently, the introduction in 1991 of compulsory retirement savings. They argue that these changes have resulted in a major transformation of the household sector's balance sheet, which has reshaped the financial system[18] [19]. In particular, the increase in financial assets has led to the development of markets in a wider range of securities, a proliferation of investment products, and a more important role for institutional investors. It has also helped prompt changes in the nature of financial regulation.

The development of contractual saving institutions can improve the functioning of the financial system

There is further evidence to suggest that the development of contractual saving institutions (e.g. superannuation funds) can improve the functioning of the financial system in a variety of ways, including deepening stock and bond markets (Catalan et al, 2000; and Impavido et al, 2003). Vittas (2000) argues that "institutional investors can potentially act as a countervailing force to the dominant position of commercial banks and thus promote competition and efficiency in the financial system. They can also stimulate financial innovation, modernise capital markets, enhance transparency and information disclosure, and strengthen corporate governance, and improve financial regulation." Specifically, institutional investors:

- provide an institutional framework that favours the accumulation of long-term capital;
- foster competition for savings thereby lowering management fees;
- foster competition for investments thereby lowering the cost of capital;
- promote financial innovation by demanding new securities and products in order to diversify portfolio risks; and
- promote market discipline through their demands as shareholders for greater transparency and accountability.[20]

---

[18] Households' superannuation assets as a proportion of GDP almost quadrupled as a proportion of GDP between 1882 and 2002. In terms of net average flows, Australian households' flows into superannuation grew from an average of 2.8% of GDP in 1989-95 to 4.6% over 1996-2002, while the stock of savings increased from 36.6% of GDP (December 1988) to 69.9% of GDP (December 2002) – Refer Connolly and Kohler (2004).

[19] The holdings by New Zealand households of superannuation assets were $18.195 billion in December 2005, ie.11.8% of GDP – Refer Government Actuary (2006), Appendix 7.

[20] Impavido et al (2003) argue that the impact of contractual savings on capital markets depends on various factors: impacts may not materialise until a 'critical mass' of savings has been mobilised; impact may depend on whether the development of contractual savings institutions is linked to any change in the aggregate supply of long-term savings; asset allocation and investment strategies of pension funds may affect the way capital markets develop; and whether contractual savings institutions stimulate increased demand for domestic securities may depend on the regulatory regime.

Other possible benefits

Although supported by less evidence, there are a range of other possible benefits linked to financial system development that could flow from a sustained increase in savings in New Zealand:

- Domestic investment may increase, depending on the extent to which firms currently face finance constraints.
- Existing and potential exporters may benefit through a reduction in the current account deficit and the exchange rate, although the precise adjustment paths to a new equilibrium exchange rate are not predictable.
- A reduction over time in New Zealand's external liabilities would in turn lower the country risk premium and reduce the cost of capital.
- A reduction in the tendency of the housing market to overheat and create excess demand and rising debt in the economy.
- Increased New Zealand ownership of New Zealand based firms, helping address concerns around "hollowing out".
- Increased ownership of offshore assets in line with sensible portfolio diversification, potentially narrowing the gap between Gross National Income (GNI) and GDP.

Policy options

Until recently good fundamentals were seen as necessary and sufficient for optimal performance of the financial system

Until recently, policy orthodoxy in relation to financial system development largely entailed a focus on ensuring stable macroeconomic policy and sound tax and regulatory policies. In essence, good fundamentals were seen as necessary and sufficient for optimal performance of the financial system.

Our work does not lead us to challenge the importance of stable macro policy or good tax and regulatory policies for financial system development. However, it does begin to question whether these policies, by themselves, are sufficient to ensure the most effective operation of the financial system.

Pro-savings policies and other policies aimed at promoting financial market development may also be important.

While tax and regulatory policies and an environment conducive to the identification of sound investment opportunities are the dominant determinants of financial development, pro-savings policies and other policies aimed at promoting financial market development may also be important.

New Zealand's financial regulations compare favourably against international best practice, although there is scope to enhance the regulatory framework in areas including: disclosure of information to savers, stronger supervision of non-bank deposit takers and collective investment

schemes, and licensing of financial advisors. A review[21] of these areas is currently in progress. The government recently announced its decisions in some of these areas and will be taking legislative action.

KiwiSaver combined with recent tax changes has the potential to significantly increase household savings held in the form of financial assets

Similarly, the announcement by the Government of enhancements to KiwiSaver in Budget 2007 represents a significant development in savings policy. We believe that KiwiSaver has the potential to lead to a significant increase in household savings held in the form of financial assets. Some increase in national savings is also likely, although the extent will depend on how government funds its expenditure on KiwiSaver[22]. Another important measure is the recent set of changes that reduced the tax disadvantages to saving in the form of holding New Zealand and foreign equities through collective investment vehicles such as superannuation funds.

There could be a role for government to complement the market

Our work also suggests that there may be a role for government to promote financial system development more directly and set this as an explicit goal. Some government initiatives have already been taken relating to export finance and venture capital[23]. While the policy levers for further promoting financial system development are less clear, we believe that further investigation in this area is warranted.

It is important to take a dynamic view of the financial system because the market has considerable capacity to evolve and adapt

It should be recognised, however, that the market itself has developed over time to overcome inefficiencies within the financial system (e.g. through contractual arrangements and collateral requirements associated with debt financing). Because of this, we are cautious when it comes to considering policies to intervene in financial markets. Given the fundamental importance of the financial system in the allocation of resources within the economy, the risk of introducing distortions – including unintentionally - should be weighed very carefully. In doing this it is important to take a dynamic view of the financial system, in particular noting it has considerable capacity itself, to evolve and adapt to changing conditions.

As the financial system is a critical enabler of economic growth, we should continue to investigate its strengths and weaknesses

Nonetheless, the financial system is also susceptible to problems that may not be self-correcting. As the effective operation of the financial system is a critical enabler of economic growth, we should continue to investigate its strengths and weaknesses. In particular the work should focus on the performance of those parts of New Zealand's capital markets that seem underdeveloped, and are important for growth such as the equity market. A key aim would be to better understand the importance of local capital markets for a number of aspects of firm performance including: firms'

---

21 The Review of Financial Products and Providers

22 The impact on national saving will depend on what the Government would otherwise have done with the money it contributes to KiwiSaver. For instance, the impact on national saving is likely to be greater where a large proportion would otherwise have been spent on government consumption, tax cuts or transfer payments (most of which would be consumed), while the impact on national saving would be lower if the Government would otherwise have saved a large proportion by paying off debt or building up financial assets. See also Treasury (2007).

23 The New Zealand Venture Investment Fund (NZVIF) was set-up in 2002 and has since been expanded to include support for angel and other early stage investment. The Limited Partnership regime is being implemented by 2008.

access to finance; what the features of well functioning capital markets are from the perspective of firms; and how New Zealand's markets compare with best practice in other small developed countries. The dimensions include:

- the regulatory settings around our capital markets and whether there is a role for government in further improving their development and function;
- further investigation of evidence on firms' access to finance;
- the reasons behind firms' location decisions;
- encouraging the entry of institutional funds in the venture capital market; and
- ensuring that tax and other barriers do not discourage the development of the corporate bond market.

Conclusion

Financial system development contributes to economic growth

The economic performance of New Zealand firms is influenced by a wide range of factors. The role of the financial system is one, but only one, of these. There is robust evidence that the level of development of a country's financial system has a positive influence on economic growth and productivity. The relationship is bi-directional with economic growth also contributing to financial sector development.

The level of development of New Zealand's financial system is patchy and could be imposing a moderate constraint on firms' growth

However, in our assessment, the level of development of New Zealand's financial system is patchy: a large, efficient and sound banking system sits alongside equity, venture capital and debt markets that in size, depth, liquidity and skill base are relatively under-developed. We have therefore concluded that this lack of development in certain parts of New Zealand's financial system is probably imposing a moderate constraint on the growth and performance of New Zealand firms.

Any Government action needs to be based on a good understanding of the factors responsible for under-development

Any action by government to try to improve the situation ought to be based on a good understanding of what factors are responsible for under-development of the financial system, and the benefits and costs of specific interventions. Possible factors that could be contributing to this under-development include: New Zealand's low saving performance; high degree of foreign ownership; lack of very large firms; and co-operatives and state-owned enterprise governance structures. The small size of the economy causes the cost of due diligence and investment analysis to be relatively high. In addition, the cost of capital is high relative to other OECD countries. While there is little direct evidence of capital constraints, the demand for capital could be limited due to a lack of firms' growth ambition and profitable opportunities.

KiwiSaver and recent tax changes have the potential to significantly increase household savings held in the form of financial assets

The recent announcement by the Government of enhancements to KiwiSaver represents a significant development in savings policy that has the potential over time to lead to a significant increase in household saving, held in the form of financial assets, and some increase in national saving. Another significant measure is the recent changes which reduced the tax disadvantage to saving in New Zealand and foreign equities through collective investment vehicles, including superannuation funds.

Further measures may be justified but in-depth investigation is required to determine whether they are worthwhile in cost-benefit terms

Further measures may be justified but need to be based on sound analysis to determine whether they are worthwhile in cost-benefit terms. In addition, there is also a need to continue to add to our knowledge on trends in the financial system including for example, the effect of regulatory settings on our capital markets and firms' access to finance and factors driving firms' decisions on whether to list or de-list from the New Zealand stock market or even in which country to locate their various activities.

References

Austin T., M. Fox and R. Hamilton (1996) 'A study of small and medium-sized business financing in New Zealand', Ministry of Commerce, Wellington.

Buckle R. A., D. Haugh and P. Rodway (2000) 'What determines firm investment decisions? Micro and macro analyses using Business Survey Data', Chapter 15 in Oppenlander, K.H., G. Poser and B. Schips (eds) *Use of Survey Data for Industry, Research and Economic Policy,* Aldershot, Ashgate, 2000, 291-309.

Cameron A. and C. Massey (1999) 'Small and medium-sized enterprises: A New Zealand perspective', Longman.

Cameron L. (2007) 'Investor Protection and the New Zealand Stock Market', Treasury Policy Perspectives Paper 07/02

Catalan, M., G. Impavido and A. R. Musalem (2000) "Contractual savings or stock market development - Which leads?," Policy Research Working Paper Series 2421, The World Bank.

Charles Rivers Associates (2003) 'A study of New Zealand's capital markets', Submitted to: Knowledge Wave Trust, Ministry of Economic Development and Deloitte Touche Tohmatsu, Wellington.

Chirinko R., S. Fazzari and A. Meyer (2002) 'That elusive elasticity: A long-panel approach to estimating the price sensitivity of business capital', United States. http://econpapers.repec.org/cpd/2002/80_Chirinko.pdf

Claus, I., V. Jacobsen and B. Jera (2004) 'Financial systems and economic growth: An evaluation framework for policy', Wellington, Treasury, Working Paper 04/17. <http://www.treasury.govt.nz/workingpapers/2004/04-17.asp>

Connolly, E. and M. Kohler (2004), 'The impact of superannuation on household saving', Research Discussion Paper 2004-01, Economic Research Department of the Reserve Bank of Australia.

Corbo, V. and K. Schmidt-Hebbel (2004) 'Macroeconomic effects of pension reform in Chile', Paper, Massachusetts Institute of Technology.

de Serres A., S. Kobayakawa, T. Slok and L. Vartia (2006) 'Regulation of financial systems and economic growth', OECD Economics Department Working Paper No. 506, Paris.

Djankov S., R. La Porta. F. Lopez-de-Silanes and A. Shleifer (2006) 'The law and economics of self-dealing'. Harvard Institute of Economic Research. http://www.economics.harvard.edu/faculty/shleifer/papers/selfdeal.april13.pdf

Fabling R. and A. Grimes (2004) 'Brother, can you spare a dime? Finance constraints and firm success', Wellington, Medium-Term Strategy Group, Ministry of Economic Development, Motu, and University of Waikato.

Gizycki, M. and P. Lowe (2000) "The Australian Financial System in the 1990s", Reserve Bank of Australia.
http://202.14.156.68/PublicationsAndResearch/Conferences/2000/GizyckiLowe.pdf

Government Actuary (2006) 'Report of the Government Actuary for the year ended June 2006', Appendix 7, Presented to the House of Representatives, Wellington, New Zealand
http://www.isu.govt.nz/templates/MultipageDocumentTOC____23683.aspx

Hamilton R. and M. Fox (1999) 'The financing preferences of small firm owners', International Journal of Entrepreneurial Behaviour and Research.

Hawkesby C., C. Smith and C. Thether (2000) 'New Zealand's currency risk premium', Reserve Bank of New Zealand, Bulletin Vol 63, No 3, Wellington

Hodgetts B., P. Briggs and M. Smith (2006) 'Household saving and wealth', Economics Department, Reserve Bank of New Zealand, Wellington.

Impavido, G., A. R. Musalem and T. Tressel (2003)."The impact of contractual savings institutions on securities markets," Policy Research Working Paper Series 2948, The World Bank.

Kousis, A. and B. McCulloch (2007) 'Capital market development : New Zealand case study', Prepared for the *APEC Policy Dialogue Workshop on Financial Sector Reform*, 9 May 2007.
http://www.treasury.govt.nz/apec/capital-market-dev-paper.pdf

La Porta, R., F. Lopez-de-Silanes and A. Sheifler (2006) 'What works in securities laws?' *The Journal of Finance* Vol. LXI, No. 1: 1-32.

Leahy M., S. Schich, G. Wehinger, F. Pelgrin and T. Thorgeirsson (2001) 'Contribution of financial systems to growth in OECD countries', OECD Economics Department Working Papers, No. 280, Paris.

LECG (2005) 'A study of New Zealand's venture capital market and implications for public policy', report prepared for the Ministry of Economic Development, Wellington.

Levine, R. (1997) 'Financial development and economic growth: views and agenda', *Journal of Economic Literature,* Vol. XXXV, June 1997: 688-726.

Levine, R. (2005) 'Finance and growth: theory and evidence', in 'Handbook of Economic Growth', P. Aghion and S. Durlauf (eds), Elsevier.

Mayer C. (2001) 'Investment and growth: the role of corporate governance', in 'Economic Growth and Government Policy', HM Treasury, London.

Milesi-Ferretti G. and P. Lane (2006) 'The external wealth of nations mark II: Revised and extended estimates of foreign assets and liabilities,

1970-2004', IMF Working Papers 06/69, International Monetary Fund.

Ministry of Economic Development and the Treasury (2005), 'Economic Development Indicators 2005', Wellington.

New Zealand Venture Investment Fund Limited (2007) 'Early stage investing in New Zealand: Solving the funding gap', NZVIF Briefing Paper.

Plantier C. (2003) 'New Zealand economic reform after 1984 and the neutral real rate of interest', Reserve Bank of New Zealand, Wellington.

Portes R. and H. Rey (1999), 'The determinants of cross border equity flows', Centre for Economic Policy Research Discussion Papers 2225, London.

Price Waterhouse Coopers (2003) 'Bank lending practices to small and medium sized enterprises', report prepared for the Ministry of Economic Development, Wellington.

Razin A., E. Sadka, and C. Yuen (1996) 'A pecking order theory of international capital flows', National Bureau of Economic Research Reprint No. 5513.

Statistics New Zealand (2004), 'Business finance in New Zealand 2004', Wellington.

Tesar L. and I. Werner (1995) 'Home bias and high turnover', *Journal of International Money and Finance* Vol 14 August 467-492.

Treasury (2007) 'A synopsis of theory, evidence and recent Treasury analysis on saving', Treasury Report T2007/654, Wellington. http://www.treasury.govt.nz/release/savings/synopsis/

Van Zijl de Jong, M. and G. Scobie (2006) 'Housing: An analysis of ownership and investment based on the household savings survey', Treasury Working Paper 06/07, Wellington. http://www.treasury.govt.nz/workingpapers/2006/wp06-07.asp

Vittas, D. (2000) 'Institutional investors and securities markets: Which comes first?' World Bank Working Paper No. 2032, The World Bank.