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DISCUSSION PAPER 2005 / 1

Home is where the money is:

The economic importance of savings

DAVID SKILLING FEBRUARY 2005



The New Zealand Institute

The New Zealand Institute is a privately funded think-tank that aims to introduce new and creative thinking into the economic and social policy debate in New Zealand. We are committed to the generation of debate, ideas, and solutions that creatively address New Zealand's economic and social priorities - in order to build a better and more prosperous New Zealand for all New Zealanders.

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'Home is Where The Money is' is the third paper in a series that forms part of the New Zealand Institute's initial research program on Creating an Ownership Society. This paper follows on from our first two papers, 'The Wealth of a Nation', and 'It's Not Just About The Money'.

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FOREWORD: CREATING AN OWNERSHIP SOCIETY

Asset ownership is increasingly important for meaningful participation in society and the economy. Ownership enhances the ability of people to access opportunities and to invest in the future – by buying a house, financing education, and so on – and allows people to cope with shocks. Assets provide greater security, control, and independence. A broad distribution of ownership also generates enhanced social cohesion at a national level, and ensures that more New Zealanders obtain the benefits of economic growth. So helping all New Zealanders acquire assets will make a significant contribution to New Zealand's economic and social future.

In recognition of the increasing importance of asset ownership, many countries are introducing and expanding 'asset based policies' that assist and encourage people to accumulate wealth. Creating an ownership society, in which ownership of assets is broadly distributed through the population and in which all people are able to accumulate wealth over their lifetimes, is a policy priority across many countries. And such policies are advocated by governments and political parties from across the political spectrum; it is not a policy solely of the left or of the right.

However, many New Zealanders do not have any real wealth holdings. And many New Zealanders – particularly young New Zealanders – are finding it increasingly difficult to advance financially and build an ownership stake; rising house prices and declining home ownership rates, student loan debt, and an emerging debt culture, all make wealth accumulation harder. Further, New Zealand's overall level of household wealth is substantially lower than in most other countries, and this is likely to constrain domestic investment, productivity and growth.

Although New Zealand has historically had policies that assisted people to accumulate wealth – like assisted home ownership – these policies have been removed over the past two decades, and there are currently no deliberate policies that assist New Zealanders to build an ownership stake. This sets New Zealand apart from the international policy mainstream, and increasingly so as countries pursue asset based policies to encourage ownership.

We have chosen 'Creating an Ownership Society' as our initial work program because increasing the number of New Zealanders with an ownership stake – and increasing the overall level of asset ownership in New Zealand - will have a profound effect on New Zealand's economic and social future. We also believe that New Zealand policy settings in this area are increasingly out of date and we want to contribute new and creative thinking to the New Zealand debate, drawing on developments in international policy and thinking. Our focus is on identifying ways in which New Zealanders can be assisted to acquire assets over their lifetime.

So over the next several months, we will be releasing a series of papers examining different aspects of this issue, discussing these issues with New Zealanders, and developing recommendations as to how government, business and community organisations can assist many more New Zealanders to build an ownership stake.

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EXECUTIVE SUMMARY

Many New Zealanders do not have a meaningful ownership stake in the New Zealand economy. Statistics New Zealand estimate that the median household wealth in New Zealand is just \$68,300 and that 800,000 adult New Zealanders own less than \$20,000. Household wealth is also heavily concentrated among the wealthiest 10% of New Zealand households.

Household savings and financial wealth are low in New Zealand

At an aggregate level this means that New Zealand households have lower levels of wealth than households in other Anglo countries – Australia, Canada, the UK and the US. This difference in total household wealth is due in large measure to significantly lower levels of household financial wealth. The investment of New Zealand households in housing, as a share of disposable income, is approximately the same as in other Anglo countries but New Zealand households have significantly lower levels of financial wealth than households in other countries.

Moreover, New Zealand is one of the only developed countries where household financial wealth has reduced over the past decade, from 112% of disposable income in 1993 to 44% in 2003.

This has occurred because household debt has increased strongly while holdings of financial assets have remained relatively constant, even as home ownership rates have reduced sharply. This contrasts with other Anglo countries, where household ownership of financial assets has increased to more than offset the strong increase in household borrowing in these countries – even as home ownership rates have also tended to increase.

A significant cause of this declining household financial wealth is New Zealand's low household savings rates, which have consistently been among the lowest in the OECD and have declined significantly over the past decade or so. These low household savings are offset to some extent by high rates of public savings, as the government has run fiscal surpluses, but overall New Zealand has low rates of national savings.

The low levels of household wealth and savings in an aggregate sense matter significantly for the performance of the economy as a whole – in addition to the profound financial and nonfinancial benefits that asset ownership confers on individuals and communities.

The low level of domestic savings constrains the level and type of investment in New Zealand

The low level of New Zealand household savings means that New Zealand is heavily reliant on foreign savings to finance investment and borrowing. This reliance on foreign capital has significant consequences for the behaviour and performance of the New Zealand economy. The international evidence shows clearly that foreign savings are not a perfect substitute for domestic savings, and that domestic savings and domestic investment remain heavily correlated. Despite the globalisation of capital markets, much investment remains heavily local.

And to the extent that international capital does cross national borders, it is attracted disproportionately to proximate, large markets. This is because information about investment opportunities is often local, creating a home bias for investing, and because the scale of the available market is a key factor in determining the available return opportunities.

Because New Zealand is both small and remote from other markets, the low level of domestic savings is likely to be more of a problem for New Zealand in terms of financing investment than it is for larger economies.

Indeed, New Zealand's business investment rates have been consistently lower than they have been in other developed countries. And although New Zealand has attracted substantial amounts of foreign capital over the past few decades, only a relatively small proportion of this has gone into enhancing the productive base of the economy. Foreign capital has generally financed the purchase of existing assets rather than new investments, has been focused on the domestic economy as opposed to the export sector, and increasingly has financed household borrowing for mortgages and consumption.

New Zealand is an indebted country

New Zealand's low level of savings has generated persistent and large current account deficits. This has led to New Zealand accumulating one of the highest levels of external debt in the OECD as a share of the size of the economy. This large stock of external debt has significant economic implications. First, it means that about 5% of New Zealand's GDP is consistently exported to foreign savers as the return on their New Zealand investments.

Second, foreign lenders demand a risk premium when lending to New Zealand borrowers because of the highly indebted nature of the New Zealand economy. This is reflected in the high cost of capital that New Zealand borrowers face as seen, for example, in the high cost of mortgage borrowing in New Zealand compared to other Anglo countries.

Increasing household savings is likely to generate improved economic performance

The IMF and the OECD both identify New Zealand's low levels of business investment as an important reason for lower productivity and income in New Zealand. A key challenge in improving the New Zealand economy is to move from a consumption led economy to an investment and productivity led economy. New Zealand cannot spend its way to prosperity, but rather needs to increase investment in the productive base of the economy in order to improve its economic performance.

Foreign savings can be used to finance a portion of this increased investment, but it is unlikely to be sufficient. Increased savings by New Zealand households are also required to finance this investment, because a small, distant country like New Zealand will struggle to attract substantial amounts of productive investment from foreign



investors. To finance more investment in New Zealand, home is where the money is.

Indeed, increasing household savings is important for growth in New Zealand in a way that it may not be in other countries. This is because of New Zealand's unique combination of very low levels of household savings and financial wealth, a particular need to increase its low business investment rates to enhance economic growth, and the constraints that face a small, remote economy in attracting foreign savings to finance productive investment. Moreover, increased household savings will reduce New Zealand's level of external debt and will place downward pressure on interest rates. Given New Zealand's highly indebted position and its high interest rates, this is also a particular priority for New Zealand.

These economic benefits provide a powerful case for deliberate action to raise savings by New Zealand households, additional to the social and community benefits that are generated by asset ownership. Together, these social and economic arguments create a compelling case for action to raise the level and broaden the distribution of asset ownership by New Zealanders.

1. INTRODUCTION

Many New Zealanders do not have a meaningful ownership stake in the New Zealand economy. Statistics New Zealand estimate that the median household wealth in New Zealand is just \$68,300 and that 800,000 adult New Zealanders own less than \$20,000. Household wealth is also heavily concentrated among the wealthiest 10% of New Zealand households.

The absence of ownership by New Zealand households is particularly acute with respect to financial wealth. And New Zealand household savings are significantly lower than in almost all other developed countries.

The lack of an ownership stake has profound effects on the financial and non-financial well-being of both individuals and the communities in which they live (Skilling (2004)). And at an aggregate level, low household savings and household wealth have significant effects on the behaviour and performance of the New Zealand economy. In particular, it means that New Zealand is very heavily reliant on foreign savings to finance investment and spending, and this has generated large, persistent current account deficits.

This paper focuses on the economic implications of the low level of household wealth in New Zealand, and particularly the low level of household financial wealth and the low level of household savings.

A few key questions are examined.

First, what is the impact of a heavy reliance on foreign savings on the level and type of investment in the New Zealand economy? To what extent are



foreign savings a good substitute for domestic savings with respect to financing investment? Can New Zealand attract substantial foreign savings to finance investment in the productive economy to compensate for the relatively low level of domestic savings?

Second, what are the implications of a large stock of external debt in terms of the cost of servicing this debt and on the cost of capital paid by New Zealand borrowers?

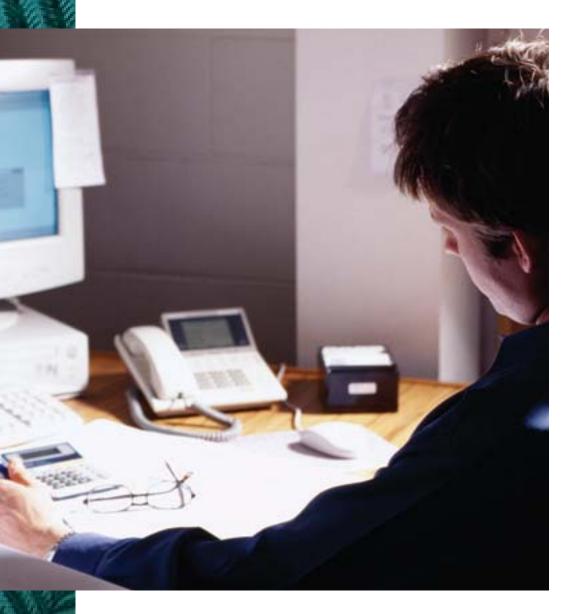
And third, should efforts to increase household savings to increase productive investment and reduce New Zealand's external debt be treated as a priority for policy action? Or can policy makers be relaxed about these outcomes because they are simply the result of a series of deliberate private actions by individuals and companies?

2. HOUSEHOLD SAVINGS AND FINANCIAL WEALTH IN NEW ZEALAND

INTRODUCTION

Many New Zealanders do not have a meaningful ownership stake in the New Zealand economy. And the level of household wealth is much lower in New Zealand than in many other countries, including Australia.

The lower level of household wealth in New Zealand is particularly acute with respect to household financial wealth. Reserve Bank analysis suggests that the level of New Zealand household investment in real estate is broadly in line with that in other Anglo countries (Thorp & Ung (2000)), and that the key cause of the household wealth gap is lower levels of household financial wealth. Claus & Scobie (2001) concur, concluding that "the ratio of real assets to disposable income in New Zealand is close to OECD levels", although households in Anglo countries tend to have more real estate wealth than households in, say, Continental European countries.



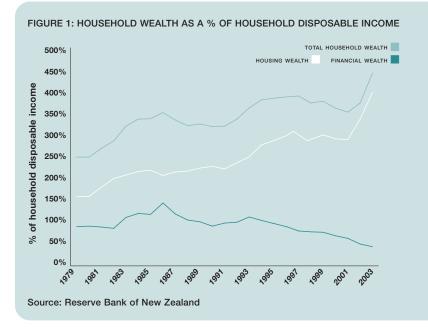
This means that the composition of New Zealand household wealth is different from that in other countries, with a relatively high share of New Zealand household wealth invested in housing rather than financial assets. This difference is not due to New Zealand households owning huge amounts of real estate wealth but rather is due to a relative absence of household financial wealth. As can be seen from Figure 1, the share of housing wealth has become even more pronounced over the past few years as real estate prices have risen strongly and financial wealth has declined.

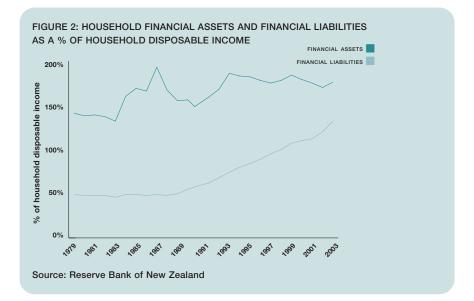
And it is household financial wealth that is likely to have more of an economic impact than real estate wealth, as financial wealth can be invested in productive assets. For this reason, this paper focuses on household financial wealth rather than on overall household wealth.

Household financial wealth

Household financial wealth in New Zealand has declined steadily over the past decade or so, as described in Figure 1, from 112% of household disposable income in 1993 to 44% in 2003. New Zealand households are distinctive in having a low level of financial wealth - it is common for household financial wealth to exceed 200-300% of disposable income in OECD countries - and also to have experienced a decline in financial wealth over the past decade. New Zealand appears to be the only Anglo country where household financial wealth has reduced over the past decade.

It is readily apparent from Figure 2 that the reason for the decline in household financial wealth is due to the steady increase in household borrowing over the past 15 years. Whereas financial assets as a share of disposable income





have remained more or less constant over the past decade or so, household debt has increased strongly over this period. Reserve Bank data suggest that much of this is due to increased mortgage borrowing, with increased borrowing for personal credit and student loan debt also contributing.

Household borrowing has also increased steadily in other Anglo countries. Indeed, the path of household debt in New Zealand looks very similar to that observed in other countries, with household borrowing increasing strongly after credit markets were deregulated in these countries. At about 130%, the ratio of household debt to household disposable income is about the same in New Zealand as it is in countries like the UK and Australia (Debelle (2004)).

However, although household debt has increased in other Anglo countries, household holdings of financial assets have also increased in these countries so as to more than offset the rise in borrowing. This is not the case in New Zealand, where financial assets as a share of household disposable income have remained approximately constant.

So the key reason for the difference in the level and trend of household financial wealth is due to household behaviour with respect to financial assets. New Zealand households seem to borrow in much the same way as households in other Anglo countries, but do not seem to invest in financial assets.

Part of the reason for New Zealand households' relatively low financial wealth is due to the public provision of retirement income – New Zealanders do not need to save as much in their personal capacity as citizens in some other Anglo countries. But much more is going on, given that household financial wealth has declined over the past decade or so while the generosity of public provision has also tended to reduce.

Rather, the key reason for these outcomes seems to be that while household debt accumulation has been made

considerably easier in New Zealand over the past 15 years, New Zealand is distinctive in having no policies to deliberately encourage and assist household savings and financial asset accumulation (Skilling (2004)).

Household savings

The absence of growth in financial assets as a share of disposable income is due in significant measure to the consistently low levels of household savings in New Zealand. Figure 3 shows that New Zealand's household savings rates have been consistently lower than in other Anglo countries¹. Indeed, New Zealand households have consistently generated significantly negative household savings rates, which make New Zealand stand out among Anglo countries (and OECD countries more broadly).

Although household savings have tended to reduce across the Anglo world, New Zealand is a particularly acute

manifestation of this trend. And the Reserve Bank project that household savings as a share of household disposable income will worsen further to -11% by 2006 (Reserve Bank (2004a)).

New Zealand's household savings performance over the past decade is particularly troubling given the many factors that were conducive to household savings over this period. Economic growth has, at least by New Zealand standards, been strong over the past decade or so, and higher incomes should act to lift savings. The demographic situation was also favourable to household savings, with many New Zealanders in their prime working (and saving) years. And New Zealand experienced low and stable inflation, high real interest rates, reducing generosity of the public provision of retirement income, health and education, and some tax cuts in the mid-late 1990s, all of which should have impacted positively on household savings.

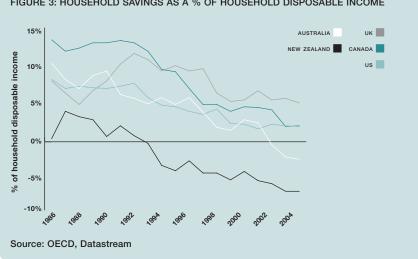


FIGURE 3: HOUSEHOLD SAVINGS AS A % OF HOUSEHOLD DISPOSABLE INCOME

¹ Household savings rates in European countries are significantly higher than in Anglo countries, frequently in excess of 10% of household disposable income, which is largely a function of lower home ownership rates and more regulated credit markets.





Further, with home ownership rates declining sharply over the 1990s, investing in financial assets was the obvious alternative. However, there does not seem to have been a substitution from housing into financial assets – and in other Anglo countries, home ownership rates have been increasing over the past decade at the same time as household financial wealth has also risen.

Moreover, although public savings have been strong over the past decade, with the government consistently running fiscal surpluses, this cannot explain New Zealand's relatively low rate of household savings over this period in any great measure. Indeed, public savings have been strong in many countries with higher rates of household savings than in New Zealand – such as the US, the UK, and Australia. Taken together, this suggests that households are not simply adjusting their private savings behaviour to adjust for variation in public savings.

For these reasons, it seems unlikely that New Zealand's low household savings rates over the past decade are simply a temporary phenomenon. There are no obvious signs that New Zealand's household savings rates will increase and will converge to those of other Anglo countries in the foreseeable future. Indeed, some new pressures on household savings in New Zealand are likely to emerge – like an aging population.

A key driver of the low household savings has been very strong consumption growth, and this appears to be more of a structural issue. Although household incomes have been growing, in general households have chosen to spend rather than to save. Indeed, households have been borrowing to finance additional consumption spending.

Private consumption growth has grown strongly over the past decade, and has consistently out-stripped income growth. Retail spending in New Zealand has grown at about 6-7% per annum over the last few years, a rate in excess of the rise in household income, which is suggestive of household borrowing to finance this consumption.

Indeed, 'housing equity withdrawal' is thought to be common, where households increase borrowing or delay mortgage repayment on the strength of capital gains on real estate. Westpac estimate a 'marginal propensity to consume' out of housing wealth of about 8% in New Zealand.

Housing equity withdrawal appears to have been an important factor in driving

household borrowing and consumption in New Zealand, as has been the case in other countries (Catte et al. (2004)).

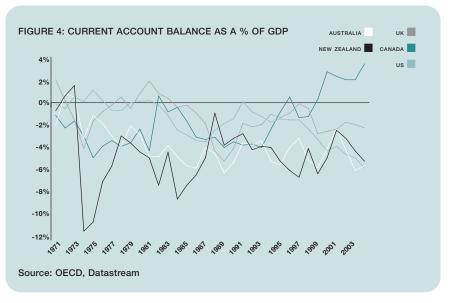
In sum, it seems that low rates of household savings and a lack of financial asset accumulation have much less to do with an appetite for investment in real estate and much more to do with the tendency of New Zealand households to borrow and spend rather than to save. And whereas other countries encourage savings, and make it easier to convert income growth into wealth, New Zealand has no such policy encouragement and assistance.

External balance

New Zealand's overall national savings are higher than the household savings rates, and have tended to increase over the past few years (Treasury (2003)). This is largely because of high levels of public savings and also business savings. However, national savings still tend to be lower than in other Anglo countries because of New Zealand's very low household savings.

At an aggregate level, New Zealand has been dis-saving for the past three decades, with national spending well in excess of national savings. This is reflected in the current account deficit. The current account deficit needs to be financed by capital from overseas. Where New Zealand does not save a sufficient amount to finance domestic investment, it needs to import capital from foreign savers².

² Although there are measurement issues around New Zealand's household savings rates, the current account balance, which is better measured, provides a useful cross-check on New Zealand's overall savings performance. The combination of these measures confirms that New Zealand does have a relatively poor savings record.



As described in Figure 4, New Zealand has run a current account deficit every year since 1974. This performance makes New Zealand an outlier. No other developed country has this record – with the exception of Australia, who has run persistent, albeit smaller, current account deficits over this period.

New Zealand's current account deficit for the 12 months to September 2004 was \$8.25 billion or 5.8% of GDP, and the Reserve Bank (2004a) estimate the current account deficit will widen to about 6.5% of GDP by 2007. This is one of the largest deficits in the OECD.

As a consequence of these persistent, large current account deficits, New Zealand has a highly negative 'international investment position'. This measures foreign debt and equity claims on New Zealand assets less the foreign investments of New Zealanders. As at 30 September 2004, New Zealand's international investment position was -\$118 billion or about 82% of GDP. This equates to just over \$29,000 of external liabilities for every New Zealander.

At 82% of GDP, New Zealand's stock of net external liabilities is among the highest in the OECD. Even Australia, the other OECD country that has recorded large and persistent current account deficits, has accumulated considerably less external debt than has New Zealand (about 60% of GDP). And the US, about which much has recently been written, has a stock of external liabilities of only about 25% of GDP, much lower than is the case in New Zealand. Indeed, "most mature and highly developed economies in Europe and North America are either net lenders to the rest of the world, or have financing from abroad equivalent to only 20-30% of GDP" (Brash (2002)).

And there is little precedent for the position that New Zealand has generated. As Woolford et al. (2001) note, "New Zealand's dependence on international capital (both debt and equity) has

increased substantially, to the point that New Zealand is more dependent on net external capital than any other developed country is currently, or probably has been at any time in recent decades" (p. 6).

SUMMARY

New Zealand households have low levels of financial wealth relative to other Anglo countries, and have consistently generated low savings rates. This has caused significant current account deficits and has led to New Zealand accumulating one of the largest stocks of external liabilities in the OECD. These outcomes show no sign of converging to those generated in other Anglo countries.

Although New Zealand's national savings are more in line with OECD countries

– although still lower than average – the low household savings are the main focus of this paper. Going forward, increases in household savings seem the most likely source of increased savings for investment – given that public and business savings are already high by international standards, and it is household savings that are very low.

The remainder of this paper examines the extent to which New Zealand's low levels of household savings and financial wealth have economic consequences. To what extent does the low level of household savings constrain investment, productivity and growth in New Zealand and what are the economic effects of the large stock of external liabilities?



3. THE LINK BETWEEN SAVINGS AND INVESTMENT

INTRODUCTION

A fundamental economic identity is that, in aggregate, savings have to equal investment. But for countries that can access international capital, this does not mean that domestic investment is necessarily constrained to the level of domestic savings. Rather, domestic investment can be financed through a combination of domestic and foreign savings.

For this reason, it is often argued that the low level of household savings does not constrain domestic investment and is of no great consequence for productivity or economic growth (Claus et al. (2001)). In an open economy with access to international capital markets, New Zealand firms or households who require financial capital will be able to finance any profitable investment. Foreign savings can be treated as substitute for domestic savings.

Moreover, in this view, a large current account deficit or a large stock of external liabilities does not matter as long as it is the result of households and companies making rational decisions in an environment that is free of major policy distortions. Put more bluntly in the words of former US Treasury Secretary Paul O'Neill, the current account is a "meaningless concept".

This view obviously has some validity. Indeed, over the past three decades, New Zealand has imported substantial amounts of foreign savings to finance its large current account deficits and New Zealand's investment rates have consistently exceeded the level able to be financed by New Zealand savings. Claus & Scobie (2002), for example, estimate that about two thirds of New Zealand's investment in 2001 was financed by foreign savings.

But there is more to it than this. The international evidence clearly shows that, despite the globalisation of capital markets, domestic investment is still strongly affected by domestic savings, and that foreign savings are not a perfect substitute for domestic savings in terms of financing investment. National borders continue to exert a profound effect on international capital flows, just as they do for trade in goods and services.

There are two ways in which foreign savings do not provide a perfect substitute for domestic savings. First, the low level of domestic savings is likely to constrain the level of domestic investment. And second, foreign savings are likely to finance different types of investments than are domestic savings.

THE LEVEL OF INVESTMENT

One of the best documented empirical regularities in the economics literature is the strong relationship between domestic savings and domestic investment. This relationship was initially documented by Martin Feldstein and Charles Horioka, who found a robust correlation of about 0.9 between domestic savings and domestic investment in OECD countries during the 1960s and 1970s (Feldstein & Horioka (1980)). They interpreted this result to mean that "most of the incremental saving in each country would remain there".

This Feldstein-Horioka coefficient has reduced over the past couple of decades as international capital markets have grown and developed. Obstfeld &

Rogoff (2000), for example, estimate a coefficient of 0.6 for 24 OECD countries for the 1990-1997 period, but comment that this is "still larger than one might expect in a world of fully integrated capital markets where global savings should flow to the regions with the highest rates of return" (p. 11).

This relationship appears to be weaker for smaller countries. However, the available evidence does not suggest that New Zealand is much different than other OECD countries. Claus et al. (2001) estimate a coefficient of 0.55 between savings and investment in New Zealand over the past few decades.

Now of course correlation between domestic savings and domestic investment is not the same as causation, where a change in the level of savings leads to a change in investment. It may be that a third factor, like changes in economic growth, lead to simultaneous changes in both savings and investment. Indeed, the evidence suggests that savings do respond to changes in income and in investment. But there does seem to be a causal relationship from domestic savings to domestic investment, and the consensus seems to be that explanations that appeal to some third factor that simultaneously affects savings and investment do not fit the facts well.

In sum, although there have been many attempts to explain away the correlation between domestic savings and domestic investment, the correlation has survived and is a robust finding (Obstfeld & Rogoff (2000)). One reason that may explain why low domestic savings constrain domestic investment relates to informational barriers to international capital flows. Domestic savings may be more likely to finance domestic investment than foreign savings because residents feel more comfortable investing in a market they have some understanding of. In this view, foreign savings are not a perfect substitute for domestic savings. This can be observed in terms of the composition of international capital flows – the types of investments that foreign savings tend to finance.

THE COMPOSITION OF CAPITAL FLOWS

Another persistent puzzle in the international economics literature is the so-called 'home bias' puzzle, in which there is a pronounced tendency for investors to invest in their home country market rather than invest internationally. The home bias in equity portfolios was first documented by French & Poterba (1991), who found that US investors held about 94% of their equity portfolio in the US market, with Japanese and British investors allocating 98% and 82% respectively to domestic assets.

The extent of home bias is reducing slowly through time, and seems to be lower for investors in small countries for whom the benefits of international portfolio diversification are much greater (Tesar & Warner (1998)). However, a substantial home bias remains, even for large, sophisticated investors. Many large pension funds in the US, for example, have portfolio allocations that are strongly tilted towards US assets rather than

"But not only is the human population anchored, so, notwithstanding all the hyperbole about globalisation, is the vast bulk of its capital. By and large, people will invest their savings where they think they will be safest. People who live in stable, prosperous countries believe their investments are safest at home...Their next favourite destination is other rich countries, with similar behaviour, values and institutions to their own."

foreign assets. So although estimates of home bias have reduced over the past decade, the relationship between the location of the investor and the location of the investment remains surprisingly strong.

A key reason for this persistent bias relates to access to information. Investors feel more comfortable investing locally because they have more opportunity to find out about the companies, the markets, and the products. This suggests that much investment will be heavily local, because investors know much more about the investment opportunities (Merton (1987)). As Alan Greenspan notes, "familiarity breeds investment".

And Martin Feldstein observes that "the primary reason why capital tends to remain in the country of origin is the preferences of the owners of that capital and, at least as important in practice, of their agents who are responsible for managing institutional pools of capital. The combination of risk aversion, ignorance, and prudence causes capital to remain where the initial saving occurs" (1995, p. 416).

The intuition that investors invest in the securities that they know more about receives consistent empirical support. Kang & Stulz (1997), for example, find that foreign investors in Japan "underweight small, highly levered firms, and firms that do not have significant exports" and "hold disproportionately more shares of firms in manufacturing industries, large firms, and firms with good accounting performance, low unsystematic risk and low leverage" (p. 3) because foreign investors are more likely to know about such firms.

More generally, distance is a powerful determinant of international capital flows. Capital flows are disproportionately attracted to proximate investment destinations rather than seeking out returns the world over. This is because information flows tend to reduce with distance – it is more difficult to identify and evaluate distant investment opportunities than local ones. This phenomenon is also observed in the context of international flows of goods, services, and ideas, where flows reduce sharply with distance, because less is known about distant markets (Redding & Venables (2002), Keller (2004)).

Portes & Rey (1999) find that large countries attract more equity capital and distant countries attract less equity capital and conclude that "the geography of information heavily determines the pattern of international transactions". Similarly Tesar & Warner (1995, p. 485) conclude that "geographic proximity

seems to be an important ingredient in the international portfolio allocation decision" and that trade linkages and a common language also matter significantly. For example, some of the biggest destinations for US FDI are Canada and Mexico.

Redding & Venables (2002) find that equity portfolio flows and FDI flows are highly sensitive to distance, estimating that equity portfolio flows over a distance of 2000km are only 55% of the volume of flows at 1000km (and equity flows over 8000km are just 17% of their volume at 1000km).

And there is evidence of home bias even with developed countries. Coval & Moscowitz (1999) find that "US investment managers exhibit a strong preference for locally headquartered firms, particularly small, highly levered firms that produce non-traded goods" and conclude that "informational asymmetries between local and non-local investors may drive the preference for geographically proximate investments". Investors have easier access to information about firms closer to them, which may confer a competitive advantage, and these factors strongly influence investment decisions.

Some types of capital flows are likely to be less subject to home bias because they are less dependent on local knowledge. For example, because debt contracts are simpler than equity contracts (Hart (1997)), as they are more secure and require less monitoring, distance may have less impact on debt financing than on equity financing³.

"Virtually all of our trading partners share our inclination to invest a disproportionate percentage of domestic savings in domestic capital assets, irrespective of their differential rates of return. People seem to prefer to invest in familiar local businesses even where currency and country risks do not exist. For the United States. studies have shown that individual investors and even professional money managers have a slight preference for investments in their own communities and states. Trust. so crucial an aspect of investing, is most likely to be fostered by the familiarity of local communities." ALAN GREENSPAN, MARCH 2004

"In the home-trade his [the merchant's] capital is never so long out of sight as it is frequently in the foreign trade of consumption. He can know better the character and situation of the persons whom he trusts, and if he should happen to be deceived, he knows better the laws of the country from which he must seek redress"

ADAM SMITH, THE WEALTH OF NATIONS, 1776

And indeed, there is evidence that distance affects different types of capital flows in systematically different ways. Claus et al. (2001) note evidence that the home bias in debt securities appears to be lower. This may be due to the lower informational demands of investing in debt securities, particularly government

³ Similarly. geographical proximity has a greater impact on trade in differentiated products than on trade in standardised commodity products, because of differences in the informational complexity of the two classes of goods (Rauch (1999)).

debt, but may also be because of the greater size and sophistication of the average fixed interest security investor.

Home bias is particularly strong in the context of the venture capital market, where investors are financing small start-up companies. Physical proximity to the investment is important because the investors need ready access to these companies to monitor them and to provide assistance. Indeed, in the US, venture capital firms and concentrations of innovative activity are frequently co-located, and companies located in areas where there are no venture capital firms find it much more difficult to access venture capital financing (Lerner (1995)).

The size of the domestic market also affects the ability of countries to attract foreign capital. Numerous studies find that flows of FDI and portfolio equity flows are strongly influenced by market size and by proximity to other markets (Hausmann & Fernandez-Arias (2001), Lane & Milesi-Ferretti (1999, 2000), de Menil (1999)). This is because larger markets tend to offer more significant return opportunities and are therefore more attractive to foreign investors.

IMPLICATIONS FOR NEW ZEALAND

This preference to invest in home markets, and then in large, proximate markets, reduces the amount of productive capital that New Zealand is likely to receive. Although New Zealand is a stable developed country, with high quality political and legal institutions, investments in the New Zealand economy may simply not receive share of mind from foreign investors.

New Zealand is a small economy, distant from major markets, which limits the economic return from investing in the productive base of the New Zealand economy relative to investing in larger or more proximate markets. And the small size of the New Zealand market affects the incentive of foreign investors to incur the cost of acquiring knowledge about investment opportunities in New Zealand.

For this reason, New Zealand is unlikely to attract the large scale investment inflows into the export sector that other countries – such as Ireland and Singapore, for example – can expect to receive because of their proximity to major markets. BCG (2001) contains numerous anecdotes about the difficulty of attracting foreign direct investment into New Zealand. This reflects a combination of the more restricted return opportunities in a small economy, combined with a relative lack of information about investment opportunities.

Many of the larger New Zealand companies, in which foreign companies are more likely to be interested, operate in the domestic sector of the New Zealand economy – banks, utilities, insurance companies, and so on. And these companies are in businesses that may be relatively familiar to overseas investors who operate in that sector. To this extent, foreign investors will be more likely to allocate their capital to the domestic sector of the New Zealand economy than to the export sector.

Small New Zealand companies may find it particularly difficult to access foreign

capital, as there is even less publicly available information about smaller companies and their size may mean that they do not merit the fixed costs of investigation. These small companies are also likely to be riskier than are larger, more established companies, which may generate a further bias away from these companies. And 91% of New Zealand companies employ less than 20 full time employees; for these companies, local investors are the most likely source of financing.

This is not to say that New Zealand will experience difficulties in attracting foreign capital per se. Indeed, New Zealand has been remarkably successful over the past few decades in being able to finance large and persistent current account deficits – New Zealand had accumulated \$205 billion in external liabilities as at September 2004, a significant increase from \$51 billion in 1989. But the suggestion is that this capital is less likely to be directed into productive, growth-enhancing investment relative to larger developed countries. In particular, it is likely that equity investments in New Zealand companies, particularly small companies, are less attractive to foreign investors than purchasing New Zealand government debt securities or advancing money through New Zealand banks. Thus while investment in some parts of the economy may not be constrained by the level of domestic savings, foreign capital may be less readily available for investment in the productive economy in a way that will increase New Zealand's longterm economic growth rate.

THE NEW ZEALAND EXPERIENCE

New Zealand has imported substantial amounts of foreign savings over the past few decades to finance its current account deficits. So what have these foreign savings financed? To what extent have foreign savings been invested in the productive base of the New Zealand economy?

It is standard to split foreign investment into three categories:



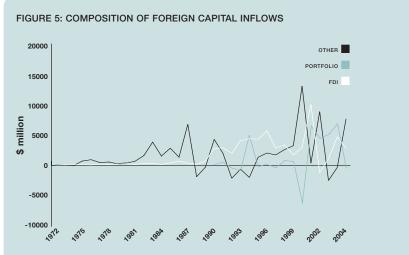
- Foreign direct investment (FDI): debt and equity transactions that take place where the non-resident investor owns more than 10% of the enterprise.
- Portfolio investment: debt and equity transactions where the non-resident ownership stake is less than 10%.
- Other investment: includes foreign exchange liabilities of banks and government borrowing.

Figure 5 shows that there have been significant changes in the composition of the capital flows that New Zealand has received over the past three decades⁴.

From 1973 to the late 1980s, the government was the major borrower as it sought to finance budget deficits and major investment projects, such as Think Big. This borrowing was often in excess of 4% of GDP each year. In comparison, FDI inflows and private sector borrowing were limited, averaging about 1% of GDP, reflecting the relatively closed nature of the New Zealand economy over this period.

It is much easier for a sovereign borrower to attract foreign capital, because of the relatively risk-free nature of the investment. Irrespective of the quality of the use of these funds, the government retains the power to tax and so is in a good position to satisfy any obligations. Foreign investors are likely to require less New Zealand-specific information before being willing to advance their capital to the New Zealand government.

But from the early 1990s, the government began a process of fiscal consolidation that resulted in it becoming a net lender rather than a net borrower, as the government ran fiscal surpluses on a consistent basis. This is reflected in the



Source: Statistics New Zealand

Note: These are annual data, except for the last observation that covers the 6 month period to 30 September 2004. The method of calculating these data changed from March 1993, so the series before and after 1993 are not strictly comparable. A key change was to shift the FDI threshold from 25% to 10%, which had the effect of raising the flows counted as FDI flows and reducing those counted as portfolio flows.

⁴ For related discussions of the composition of capital flows, refer to Haugh (2001) and Claus et al. (2001).

reduction in 'other' borrowing in Figure 5.

As the government's financing requirement reduced, the private sector became the major destination for foreign capital. FDI inflows rose significantly from an annual average of 1-2% in the years until 1990 to about 5% of GDP by 1995. This rise in foreign investment was partly due to the privatisation of some significant state owned assets – like Telecom and the Bank of New Zealand – as well as the opening up of the New Zealand economy and foreign investor confidence in New Zealand.

There are two distinctive features of the FDI inflows that New Zealand received. First, little of the FDI was 'greenfields' investment in which, for example, new manufacturing plants are established with a direct employment and output gain (BCG (2001)). Rather, the FDI inflows were largely in the form of purchasing existing enterprises ('mergers and acquisitions'). Although this investment brought significant benefits to New Zealand in terms of greater efficiency, the introduction of new management practices and so on, it was not a direct addition to the productive base of the New Zealand economy.

Second, the FDI inflows were concentrated in the domestic sector of the New Zealand economy. Haugh (2001) notes estimates that 75-85% of FDI flows were directed into the domestic economy; for example, finance, property, utilities, and communications. Very little foreign capital was invested in New Zealand's export sector.

However, after this surge of FDI in the

early-mid 1990s, FDI flows into New Zealand reduced sharply and the past few years have only seen nominal new inflows. This reduction in FDI in the late 1990s took place in a period where global FDI flows were increasing rapidly (BCG (2001)).

To the extent that positive FDI flows have been recorded over the past few years, this has largely been due to increases in the value of existing investments (e.g. because of retained profits in the enterprise) rather than because of ongoing investment transactions. Many of the large international transactions in recent years have been between existing foreign owners of New Zealand based assets.

There have been a couple of surges in portfolio investment inflows in the mid-1990s and again from 2001. These portfolio inflows were mainly the result of purchases of government debt securities by non-residents, with a much smaller amount of equity portfolio inflows. Non-residents currently own over 60% of the stock of government debt securities. Foreign demand for government debt securities seem largely to be driven by the relatively high interest rates on offer in New Zealand, with most inflows occurring during periods when the gap between interest rates in New Zealand and other countries increased.

From the late 1990s, significantly increased lending to the household sector became a major destination for foreign capital as household savings continued to fall. Much of the increase in New Zealand household borrowing over the past decade has been financed by foreign savings. As a result, much of

the current account deficit is financed by foreign capital being intermediated through the New Zealand banking sector, who then on-lend to New Zealand borrowers.

This is reflected in the strong increase in inflows of 'other investment'. Other investment is dominated by flows into New Zealand banks (and is offset by government savings), who were increasing their offshore borrowing to fund lending to households. Indeed, bank borrowing from overseas rose from \$20 billion in 1995 to \$51 billion in 2000 to \$87 billion in 2004.

This trend has been pronounced over the past couple of years. Indeed, for the 12 months to September 2004, about half of the foreign capital inflows were in the form of other investment, mainly bank borrowing, with a further 30% due to portfolio inflows, mainly government debt securities. And in the three months to September 2004, almost all of the capital inflows were due to bank borrowing (\$8.9 billion) and increased non-resident holdings of government debt securities (\$4.4 billion).

The capital inflows into New Zealand over the past few decades have generated a stock of gross external liabilities of \$205 billion as at September 2004, which is equivalent to 143% of GDP. Of this stock, 33% was direct investment (two thirds of which was equity investment), 36% was portfolio investment (of which 80% was in the form of debt securities), with another 28% due to 'other' lending (largely bank borrowing).

Another feature of New Zealand's external liabilities is the high proportion

of debt liabilities relative to equity liabilities. As at September 2004, 71% of the total external liabilities were debt liabilities. This makes New Zealand a highly leveraged country. Across developed countries, the average leverage is estimated at about 50% and the median at 40% (Lane & Milesi-Ferretti (2000)). This external debt stock is dominated by private sector debt, with government debt only comprising 12% of total external debt. And the private sector debt is dominated by bank borrowing (57%) rather than direct corporate borrowing (31%).

From this evidence, it seems that New Zealand's heavy reliance on foreign capital to finance domestic investment has had a significant impact on the type of investment that is made. Much of the direct investment that has been observed has been in the domestic sector, rather than in the export sector that is so important for New Zealand's economic future. And much of the foreign capital received has been to finance government and household borrowing through debt securities.

Although this foreign investment has brought benefits, and has allowed New Zealand to spend and invest at a level that would not otherwise have been possible given New Zealand's low levels of savings, this pattern of investment may not be well suited to substantially lift New Zealand's economic growth rates.

For example, although debt capital is useful to New Zealand firms, small, high growth firms need equity capital as well – and this is the type of investment that is less likely to be forthcoming from foreign savers.



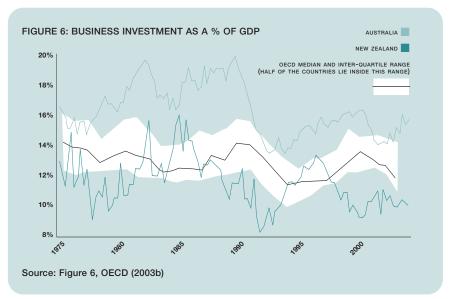
So while there is little evidence that there are significant problems in accessing credit through banks, such as mortgage borrowing, personal credit, or business borrowing, New Zealand has not secured significant equity investment in the productive base of the economy from foreign savers.

Going forward, what can be said about the likely composition of capital inflows? Although New Zealand has attracted a range of different types of foreign capital over the past few decades, and particularly since 1990, there were some one-off features that supported the surge in FDI and portfolio inflows that may not be able to be repeated.

In terms of FDI, foreign investors invested in some previously unavailable investment opportunities that provided attractive returns. Large parts of the domestic sector now have substantial foreign investment, and there may not be scope for substantial additional investment in the future unless greenfields investment opportunities are identified. Indeed, as noted above, there has been relatively little direct investment into the New Zealand economy over the past few years.

And in terms of the surge of debt and equity portfolio investment, there were elements of portfolio re-weighting, and obtaining an exposure to the New Zealand economy, as well as obtaining the benefits from high real interest rates offered on government debt securities. To continue to attract and retain this type of capital, New Zealand interest rates are likely to need to continue to be higher than in other countries.

The bulk of capital inflows are now intermediated through banks for household borrowing. Foreign savings flow disproportionately into financing consumption and residential mortgage borrowing rather than into domestic investment. In sum, foreign savings do not look likely to finance significant productive investment in the New Zealand economy going forward.



INVESTMENT IN NEW ZEALAND

The absence of domestic savings and the composition of capital inflows are likely to be major reasons for New Zealand's low rates of business investment. Although rates of residential investment in New Zealand look broadly in line with other developed countries, New Zealand's rates of business investment are considerably lower. Indeed, the OECD (2003b) note that New Zealand's rates of business investment have consistently been in the bottom quartile of the OECD, as described in Figure 6. The OECD (2003b) also report that New Zealand has relatively low levels of investment in research and development (R&D) and in information & communications technology (ICT), both of which are strongly linked to economic growth.

The IMF (2002) note that residential investment represents a significantly larger share of total investment in New Zealand than it does in Australia (46% compared to 35%) and that business investment in Australia has been consistently higher than in New Zealand. And this is not just due to differences in the nature of the economy; the IMF note that in every sector of the economy, there is a higher level of capital intensity in Australian firms than in New Zealand firms.

SUMMARY

The international evidence shows clearly that national borders continue to affect international capital flows and that domestic savings and foreign savings are far from being perfect substitutes. Because of this, the low level of savings in New Zealand does have a substantial impact on the level and type of investment that occurs in New Zealand.

New Zealand has attracted significant amounts of foreign capital over the past few decades, and has accumulated \$205 billion in external liabilities (143% of GDP). However, domestic investment would likely have been higher had household savings also been higher. And in particular, investment into the productive base of the New Zealand economy is likely to have been significantly constrained by the absence of domestic savings - much of this foreign capital has not gone into productive investment, but rather has financed borrowing for consumption, residential mortgages and so on.

And it is not obvious that things will change going forward in terms of being able to access foreign capital for productive purposes. As a small, distant country, New Zealand is not well placed to attract foreign savings to supplement domestic savings to finance domestic investment. For New Zealand investment, home is where the money is in regard to the financing of investment in the productive base of the New Zealand economy.

So although foreign investment in the New Zealand economy is necessary and valuable, it is insufficient in terms of financing growth in the economy. Rather, increasing New Zealand household savings is necessary for providing the capital to build the productive base of the New Zealand economy.

4. AN INDEBTED COUNTRY

INTRODUCTION

As was described in section 2, New Zealand has accumulated a large stock of external liabilities, which is very high by international standards, because of its persistent reliance on foreign capital.

Of course, just as is the case for individuals, households and companies, being in debt is not necessarily bad. It depends on what the debt is being used for. Debt can enable investments to be made, and for consumption to be smoothed, in a way that makes people and companies better off. Conversely, people can get into difficulties with debt if it is used in a way that does not generate future gains to offset the future debt servicing burden. The same intuition can be applied to countries, and this section explores some of these arguments in the New Zealand context.

Further, an indebted position may expose the borrower to risk - although it is commonly argued that New Zealand's external debt does not create any significant vulnerability. For example, Treasury (2003) notes that "while New Zealand's external position does represent an exposure, the policy frameworks in New Zealand (covering monetary, fiscal, financial sector, and exchange rate policy) provide a solid underpinning, and effective shock absorbers". The IMF concur, arguing that New Zealand "does not appear to face major economic vulnerabilities and remains well placed to manage adverse economic shocks" and the Reserve Bank's recent Financial Stability Report did not identify any major exposures (Reserve Bank (2004b)).

However, even if this is accepted, New Zealand's large stock of external debt does still have real economic costs in terms of a higher cost of capital in New Zealand. Just as highly indebted people and companies are charged more by lenders to reflect the greater risk profile, so too borrowers in indebted countries have to pay a higher rate of interest in order to continue to attract foreign capital.

INVESTMENT INCOME DEFICIT

Because foreign capital is being used to finance New Zealand's current account deficit, the returns from these investments also flow offshore to the people who have financed the deficit. As Don Brash (2002) notes "because we have been such heavy users of capital from foreign savers – so reluctant to save enough to provide our own investment capital – much of the growth in the New Zealand economy has accrued to those foreign savers".

This is measured in terms of the 'investment income deficit' – broadly, the returns that flow to foreign investors less foreign returns to New Zealand investors. Largely as a result of the high level of foreign claims on the New Zealand economy, New Zealand's investment income deficit is one of the largest in the OECD at approximately 5% of GDP.

New Zealand's investment income deficit is projected to remain at about 5% of GDP over the next few years. This is slightly better than it was over much of the 1990s, when the deficit averaged about 6% of GDP, but is still very high by international standards.

This means that about 5% of New Zealand's GDP is currently returned to foreign savers. This reduces New Zealand's gross national income (GNI) – the income earned by New Zealand residents – which is a better measure of economic well-being than GDP (roughly, the amount of output produced in New Zealand). In contrast, the GNI of net lender countries like Japan and Germany will exceed its GDP – its citizens have an additional source of income growth even if their domestic economy is not growing rapidly.

Indeed, in periods of strong economic growth, as has been the case in New Zealand over the past several years, there is upward pressure on the investment income deficit as foreign-owned companies in New Zealand become more profitable and more is returned to the foreign owners. This means that the foreign owners derive a significant portion of any increase in New Zealand's economic growth because of their asset ownership position.

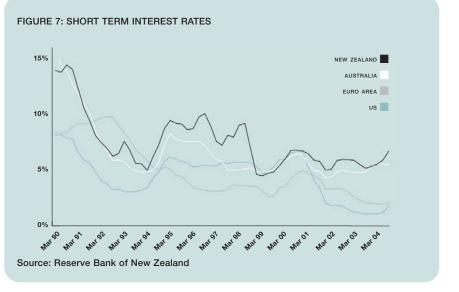
Now of course debt is not necessarily bad. Just as borrowing by a household or a business can make sense, it can make sense for a country as well. For example, borrowing can be used to finance profitable investment that cannot be financed out of current assets but that will generate a future return that outweighs the cost of servicing the debt.

Singapore, for example, ran large current account deficits in the 1970s, averaging around 11% of GDP, but used this foreign capital in a way that transformed their economy from third world to first world. Singapore now run one of the largest current account surpluses in the world – forecast to be about 25% of GDP in 2004 – and export their savings to other countries.

Ireland also ran significant current account deficits and imported substantial amounts of capital. But this foreign capital, much of which was in the form of FDI, was focused on the export sector and has generated a substantial increase in Ireland's economic growth rate and export earnings. Ireland's current account is now roughly in balance; it ran surpluses through much of the 1990s and is now running a small current account deficit.

However, this is not the case for New Zealand. Most of the foreign investment has either gone into the domestic sector, to the government, and now to households to finance mortgages and consumption. This is not the type of investment that is likely to generate economic returns in the future that will allow for the repayment of the debt (although the investment has generated benefits). It is difficult to identify a link between this investment and higher rates of ongoing income growth in the way that is evident in Singapore and Ireland.

Neither is there obvious consumption smoothing going on, where people borrow now to finance consumption, with an expectation of higher income in the future. As discussed above, the past decade has been a good time for New Zealand households to have been saving. It is not obvious that increases in New Zealand's income stream into the future will enable New Zealand to easily service and reduce this debt.



Indeed, it is interesting to note that the investment income deficit over the past 12 months is almost exactly the same size (at \$8.25 billion) as the current account deficit. This means that New Zealand is effectively borrowing from foreign savers to pay returns on the foreign capital already advanced to New Zealanders.

This pattern suggests that the investment income deficit will be with New Zealand for some time yet. There is no obvious need for consumption smoothing, and relatively little borrowing for productive investment. Nor is there anything about the New Zealand economy that makes it obvious why New Zealand should have such a heavy reliance on foreign savings and be amongst the most indebted developed countries.

COST OF CAPITAL

One of the costs of persistent household dis-saving, and a consequent high stock of external liabilities, is that the cost of capital is significantly higher in New Zealand than it is in countries in which the stock of external liabilities is lower. Just as lenders charge risky people and companies more when advancing capital, so too borrowers in indebted countries tend to be charged more to compensate for the risk. That means that New Zealand firms and other borrowers pay more to access capital.

New Zealand has significantly higher interest rates than many other developed countries, including Australia, as shown in Figure 7 that charts 90 day interest rates over the past decade. Although interest rates have tended to decline in New Zealand over the past decade, due to macroeconomic stability and deregulation, interest rates have also declined in other Anglo countries and there is a persistent difference between interest rates in New Zealand and those in other countries.

Lally (2000) estimates that the real cost of capital in New Zealand is higher than that of Australia by about a percentage point and higher than that of the United States by about two percentage points. Similarly, Coleman (1999) notes that "from 1990 to 1997, real short term interest rates in New Zealand have been 1.1 per cent higher than in Australia, 1.9% higher than in the UK, 3 per cent higher than in Germany, 4.3% higher than in the USA and 4.5 per cent higher than in Japan".

So what explains this persistent gap between interest rates in New Zealand and other Anglo countries? The most likely explanation for the New Zealand risk premium is the large stock of external liabilities, due to persistent national dis-saving. This stock of external liabilities is now almost entirely due to private borrowing.

In contrast, New Zealand's public debt levels are now low by OECD standards and the government's fiscal position is strong, having consistently run fiscal surpluses for a decade.

The intuition is that borrowers in indebted countries like New Zealand need to offer high interest rates to continue to attract foreign capital. For this reason, it is not surprising that Australia's interest rates are higher than those in the US and the UK, because Australia also has a large stock of external debt (albeit smaller than in New Zealand).

There is a substantial body of international evidence that confirms this intuition. Recent IMF research, for example, shows that a country's external liability position is directly linked to real interest rates, with estimates that a 10 percentage point reduction in net external liabilities leads to a 25 basis point reduction in interest rates (Lane & Milesi -Ferretti (2002)). Similarly Obstfeld & Rogoff (2000, p. 20) note that a 1% rise in the current account/GDP is associated with a 20-30 basis point change in the real interest rate.

In a New Zealand context, Plantier (2003) estimates that a 10 percentage point reduction in New Zealand's external debt would reduce the long term real interest rate by 25 basis points. Plantier notes that this "highlights the importance of persistent domestic imbalances between savings and investment in permanently changing the real long-term interest rate, even in a small open economy like New Zealand". Conway & Orr (2002) agree that the current account balance has an impact on interest rate differentials, and estimate that a percentage point increase in the current account deficit/GDP increases real interest rates by 19 basis points.

High interest rates can be expected to reduce the level of investment that occurs, although the relationship between interest rates and investment is not that strong and other factors seem to exert a bigger influence on investment. For example, Australia has consistently generated investment rates in the top quartile of OECD countries despite having relatively high interest rates.

But high interest rates may affect the type of investment decisions that are made. In particular, high interest rates may create a bias towards paying off the mortgage, rather than investing in financial assets. Paying off the mortgage generates an effective risk-free, post-tax return of 8-9%. It is hard to find a risk free return of 12-13%, which steers people towards paying off the mortgage.

INTERNATIONAL MORTGAGE RATES

It costs a lot more for people to borrow money in New Zealand than in many other OECD countries. One manifestation of this is in terms of residential mortgage borrowing rates.

Floating mortgage rates are currently offered in New Zealand at 8.75%, and fixed rate mortgages currently vary between about 7.5% and 8% depending on the mortgage term. These rates are significantly higher than in other Anglo countries.

In Australia, for example, variable mortgage rates are currently available from about 6.5-7%, with 1-5 year fixed rate mortgages also in this range. In the UK, mortgage rates are currently between 5 and 6%, with the exact rate depending on the term of the mortgage. In Canada, variable mortgage rates can be obtained at 4-4.5% and fixed rates between 5 and 6%. And in the US, mortgage rates range from 4-5%.

So mortgage rates in New Zealand are 3 or 4 percentage points higher than in the US and Canada and about a percentage point higher than in Australia. This is because of the higher cost to New Zealand banks of accessing funds for lending.

SUMMARY

New Zealand has one of the largest stocks of external debt in the developed world, because of its persistent national dis-saving. This has significant economic costs, and also makes New Zealand vulnerable to changes in the supply of foreign savings.

New Zealand has a substantial investment income deficit, which is currently running at about 5% of GDP. This reflects the return to foreign savers of their New Zealand investments. The current account deficit is about the same size as this investment income deficit, which implies that New Zealand is currently importing foreign capital to finance the returns on its existing borrowings.

Although the foreign investment has generated benefits, New Zealand has not invested this capital in a way that has significantly lifted its economic potential – as has been observed in countries like Ireland and Singapore.

New Zealand's large stock of external debt also means that New Zealand borrowers need to pay a high interest rate to continue to attract capital to New Zealand. There is a significant gap between interest rates in New Zealand and in other Anglo countries, which reflects New Zealand's relatively high stock of external debt.



INTRODUCTION

The decision of New Zealand households to consume rather than to save, and at an aggregate level to finance consumption and investment by drawing on foreign savings, is likely to constrain productive investment in New Zealand. The international evidence shows that foreign savings are not a good substitute for domestic savings in terms of financing productive investment.

This section explores the degree to which increasing investment and reducing external debt are priorities for action. What are the benefits from raising business investment in New Zealand and reducing external debt, and how will higher household savings contribute to this? Should encouraging higher household savings be a first order priority for policy action?

ECONOMIC GROWTH THROUGH INVESTMENT

As shown previously in Figure 6, New Zealand has low levels of business investment compared to other OECD countries. New Zealand's business investment rates have consistently been in the bottom guartile of OECD countries, whereas Australia's rates have been in the top quartile consistently. Although New Zealand's business investment and imports of capital equipment have risen over the past few years, this is partly a response to the current strong economic conditions and the tight labour market⁵. Significantly higher rates of investment will need to be sustained over a long period for New Zealand's capital

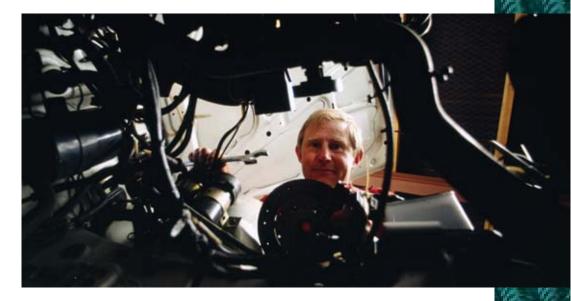
intensity to look more like those in other Anglo countries.

This low level of business investment is generally recognised as a key reason for the difference in the level of productivity and income per capita between New Zealand and other developed countries. The IMF, for example, attribute almost all of the substantial per capita income gap between New Zealand and Australia to New Zealand's lower levels of labour productivity and estimate that 75% of the labour productivity gap is due to lower levels of capital accumulation in New Zealand (IMF (2002)). Similarly the OECD (2003b) note that New Zealand's low level of investment and capital accumulation is likely to constrain New Zealand's economic growth.

It is well established that investment in physical capital, research and development and so on, leads to higher levels of productivity and income. The OECD in a major recent study on the determinants of growth, find that the rate of physical capital accumulation "is one of the main factors determining the level of real output per capita" and estimate that "on average a 1 percentage point increase in the investment share brings about an increase in steadystate GDP per capita of about 1.3%" (OECD (2003a)). This is consistent with many other studies that document a robust correlation between investment and income levels.

Of course, the investment needs to be of good quality and generate economic

⁵ During the 1990s, there was a marked tendency to expand output using labour rather than capital – partly because the cost of labour relative to capital fell sharply during the early-mid 1990s (Black et al. (2003)).



returns. As recent New Zealand history shows clearly, substantial investment in poor quality projects does not assist growth rates; the government's Think Big investments for example. Easterly (2001) warns correctly that 'capital fundamentalism', the notion that higher rates of investment will mechanically lead to higher rates of economic growth, is not strongly supported in the data, and observes that sustained growth results from productivity growth rather than simply investing in more machines or hiring more people⁶.

Indeed, in traditional models of economic growth, increases in investment only lead to temporary increases in growth rates. Diminishing marginal returns mean that higher growth rates can only be maintained for as long as there are higher growth rates in investment.

But recent theory and evidence shows clearly that investment is likely to have

a significant long-term effect on growth rates as well. Investment is an important way to access new knowledge and technology, which can be embodied in computers, software, plant and equipment, and accordingly investment can be a powerful tool for improving long-term economic growth rates. Because investment allows for the capture of greater benefits from technological progress, the OECD (2003a) note that this "may explain why countries with higher investment rates (relative to GDP) also tend to have higher rates of multifactor productivity growth".

Indeed, a common element of the experience of many small countries that have grown rapidly over the past few decades – like Singapore, Ireland, Finland, and Australia – has been high, sustained rates of investment. Investment has been used to transform their economies, and to enhance their productivity.

⁶ Easterly & Levine (2001) and Klenow & Rodriquez-Clare (2001) document the importance of productivity growth rather than factor accumulation in determining economic prosperity.

The classic examples of this are the 'East Asian tiger economies' (Singapore, Taiwan, Korea, and Hong Kong) who have grown very strongly over a sustained period of time. Although some initially attributed these high rates of growth simply to high rates of investment in physical capital and education (Young (1995)), more recent evidence suggests that productivity growth has played a very substantial role (Klenow & Rodriquez-Clare (2001)).

These economies converted significant investment rates into sustained productivity and output growth by systematically moving into increasingly capital intensive industries, rather than just producing the same set of goods using increasingly capital intensive methods of production (Ventura (1997)). The investment was a way of transforming their economies, rather than simply allowing for more capital intensive production of the same goods and services. Countries that make significant investments over a sustained period tend to observe their production and export structures changing towards more capital intensive industries as a result (Romalis (2004)).

This body of international evidence poses two challenges for New Zealand. First, New Zealand's investment rates have consistently been lower than in Australia and many other OECD countries, and this has negatively affected labour productivity and per capita income. In this sense, increasing business investment is important for raising New Zealand's productivity and income levels closer to those of Australia and other OECD countries. Simply put, for the New Zealand economy to grow at above average rates, and converge to the income levels of other OECD countries, above average rates of investment in the New Zealand economy will be required. Commenting on New Zealand's recent growth experience, US economist Mathew Shapiro noted that "the rate of investment is not high enough to accommodate an acceleration in productivity" and that "additional capital accumulation will be required if New Zealand is to grow faster" (Shapiro (2003)).

And second, higher rates of investment are an important means to increase New Zealand's long-term productivity and growth rates. The New Zealand economy has not changed substantially over the past few decades in terms of the composition of economic activity and exports, technological intensity in production and so on, relative to other small, developed countries.

Increasing investment is not simply about accumulating more capital to produce the same set of things, but is a vehicle for transforming the New Zealand economy by changing the mix of goods that are produced and allowing New Zealand to better access new ideas and technology.

Much of New Zealand's recent strong economic growth has been supported by consumption growth, the housing market, and commodity prices. The challenge is to transform the New Zealand economy into an economy driven by productivity growth, which can sustain high rates of productivity growth. A higher level of productive investment is an important part of making this transition.

WILL INCREASED SAVINGS LEAD TO HIGHER INVESTMENT?

So to what extent will increased household savings lead to more productive investment in the New Zealand economy? The evidence discussed above showed that domestic savings and domestic investment were linked. But how strong is this argument in the New Zealand context? Is there reason to expect that a substantial lift in household savings would be rapidly translated into a lift in business investment? Or will the increased household savings simply flow into investment opportunities offshore?

There are reasons that investment may be low in New Zealand that are independent of the savings rate such as, for example, the limited availability of profitable investment opportunities in a small economy. The size of the market affects the incentive to invest, and the absence of scale in the New Zealand economy is likely to constrain investment in New Zealand by New Zealand investors just as foreign investors may be dissuaded from investing in New Zealand because of its small size. Raising household savings will not directly affect this situation.

And there is some evidence to suggest that the absence of capital is not constraining the investment choices of some firms. For example, the dividend payout ratio of listed New Zealand companies is generally estimated to be significantly higher than in other developed countries. This may suggest that listed firms are not short of capital, or that their shareholders have other priorities than additional New Zealand investment. Further, surveys of New Zealand companies do not provide a consistent picture in terms of whether access to capital is a constraint on growth. Some companies regard access to capital as a major constraint, whereas others place this issue way down the list. However, given that only some companies need capital for expansion, and that many New Zealand companies have only modest plans for expansion, the absence of capital may not show up as a widespread concern in these surveys. It is however common to hear concerns about the absence of financing for young, start-up companies.

However, the fact remains that New Zealand's business investment rates are low relative to other developed countries. Investment needs to be increased if New Zealand's economic growth rates are to be increased, and this will require financing. The challenge is to expand return opportunities, and to generate an expanded pool of domestic savings in order to finance the increased investment given that foreign savings are unlikely to be sufficient.

So although savings are not the only constraint on investment, to the extent that there are investment opportunities – or these opportunities emerge in the future – foreign savings are much less likely to finance this type of investment than are domestic savings. That is, if New Zealand is to raise investment rates going forward, having access to domestic savings to finance this investment is very important. Because of this, increased household savings are likely to make an important contribution to New Zealand's investment and growth.





Of course, New Zealand savers may choose to invest in overseas investment opportunities – for example, through managed funds that are invested in foreign equities – rather than in New Zealand investments. However, the home bias effect suggests a pronounced tendency for savings to remain in the home market – and despite the small size of the New Zealand market, New Zealand savings are likely to flow disproportionately to local investment. This seems to have been the case in Australia. And, in any case, increased domestic savings are much more likely to be invested in New Zealand than are foreign savings.

Moreover, it is likely that an increased pool of domestic savings will contribute to the development of capital markets in New Zealand. This seems to have happened in Australia, with the introduction of compulsory savings, where the financial sector has developed significantly. Development of capital markets will increase the likelihood that domestic savings will be channelled into to domestic investment, as the industry becomes better at allocating funds to domestic opportunities.

REDUCING EXTERNAL DEBT

And even if the increased household savings flowed offshore rather than into domestic investment, this would still lead to an improved external balance. For example, much of the New Zealand Super Fund is invested offshore, which reduces New Zealand's investment income deficit - and potentially the cost of capital - even if it does not directly raise the amount of investment in the New Zealand economy. Reducing the stock of external liabilities, and the size of the current account deficit, will generate significant economic benefits independent of any increase in business investment in New Zealand.

In terms of the cost of capital, the evidence presented above demonstrates that the size of a country's external debt has a significant effect on the cost of capital. Increased national savings will place downward pressure on interest rates as the stock of external liabilities reduces, which will benefit borrowers in the New Zealand economy. A lower interest rate may also generate an increased risk premium that will attract capital into risky investments. There is currently not a significant reward for making risky investments, as people can do well putting money in the bank and earning high deposit rates or repaying the mortgage.

Increasing household savings will also reduce New Zealand's economic vulnerability to changes in the supply of

"During the past six years, about 40 percent of the total increase in our capital stock in effect has been financed, on net, by saving from abroad. This situation is reflected in our ongoing current account deficit, which, by definition, is a measure of our net investment in domestic plant and equipment financed with foreign funds, both debt and equity. But this deficit is also a measure of the increase in the level of net claims, primarily debt claims, that foreigners have on our assets. As the stock of such claims grows, an ever larger flow of interest payments must be provided to the foreign suppliers of this capital. Countries that have gone down this path invariably have run into trouble, and so would we. Eventually, the current account deficit will have to be restrained. The nation's economic potential will be brighter if that comes about through an increase in domestic saving rather than a reduction in domestic investment".

ALAN GREENSPAN, FEBRUARY 2002

foreign capital. Although there are no particular signs that New Zealand's external debt level will cause a crisis (Reserve Bank (2004b)), and New Zealand retains a top credit rating, a heavy reliance on foreign savings makes New Zealand vulnerable to changes in the supply of this capital.

For example, if savings rates across the world reduce, this may reduce the availability and increase the price of foreign capital. This would likely reduce

investment in New Zealand, perhaps significantly. Indeed, it seems likely that household savings across the developed world will reduce as their populations age over the next couple of decades – countries who have been net lenders may become net borrowers to meet these costs. The OECD estimate that household savings across the OECD countries could reduce by more than a half from current levels by the 2030's (Jackson (2002)).

Reducing external vulnerability deliberately and voluntarily through increased household savings is much better than having your hand forced. And at some stage, New Zealand's current account deficit will need to be restrained. As Alan Greenspan notes in the context of the US situation, it is better if this reduction in debt comes about from an increase in savings rather than from a reduction in investment.

SHORT TERM PAIN, LONG TERM GAIN?

One of the consequences of raising household savings is to reduce consumption spending. If more is being saved, or less is being borrowed, there is less available for spending on consumption. Given the importance of private consumption spending for New Zealand's recent growth experience, it is sometimes claimed that encouraging household savings will have a negative effect on New Zealand's economic growth.

The extent to which this claim is true depends heavily on the time period over which outcomes are evaluated. It is likely that higher household savings will dampen growth in the short term if consumption growth is reduced. However, the only way in which growth can be lifted in the medium and long-term is through higher rates of productivity growth – and increased investment is an important mechanism for achieving this.

The New Zealand economy cannot be sustained indefinitely on the back of household borrowing and consumption. Just as few people or companies spend their way to prosperity, but rather get ahead through investing and hard work, so too national economies cannot simply spend their way to economic prosperity – it requires investment. And higher rates of household savings in New Zealand are an important source of financing for this investment.

Raising New Zealand's long-term growth potential requires a shift from a consumption led economy to a production led economy. To achieve this, increased rates of household savings and investment in the productive economy are needed. So, higher rates of household savings are likely to make a positive contribution to New Zealand's growth going forward – given the importance of investment to New Zealand and the particular difficulties that New Zealand faces in terms of attracting foreign capital into the productive base of the New Zealand economy.

Such an approach is also more likely to be sustainable in the sense that growth is more likely to be pursued without generating inflationary pressures that trigger a rise in interest rates. Economic growth that is driven by savings and investment is much more likely to be able to be accommodated by the Reserve Bank than is growth that is

driven by consumption spending and demand side activity.

A ROLE FOR POLICY?

So there are likely to be significant benefits to the New Zealand economy from higher levels of household savings. But do these benefits create a case for deliberate government action, or can individuals and firms be expected to respond so as to obtain these economic benefits?

Much of the New Zealand policy debate around savings and external debt has taken a relatively relaxed view on the grounds that these outcomes are the result of private actions by individuals, companies and others, and that, in the absence of obvious policy distortions, these outcomes can therefore be assumed to be broadly appropriate.

However, two key objections can be raised to this argument.

First, it is well-established in the international evidence that people do not make systematically rational decisions with respect to spending and savings decisions, and find exercising self control costly⁷. Spending is easy, saving is relatively difficult. At an aggregate level, this translates into low levels of household savings and high levels of borrowing. Indeed, it is difficult to reconcile rational individual decisionmaking with the aggregate outcomes that New Zealand generates in terms of household savings and external debt.

It is not obvious why New Zealand households have very low levels of

financial wealth, or why New Zealand is close to the most indebted country in the developed world. As discussed above, this cannot be seen as borrowing to finance profitable investments or to smooth consumption. This is a particular puzzle given the positive environment that should have encouraged household savings in New Zealand over the past decade, such as strong economic growth, a stable macroeconomy, and favourable demographics.

Rather, it seems that the absence of policies to assist and encourage New Zealand households to save – of the type that are seen across other Anglo countries, and are widespread across OECD countries – is a key reason why New Zealand's aggregate outcomes are relatively poor. This suggests that deliberate policy action to encourage households to save is required.

And second, even if every individual savings or borrowing decision were made appropriately, given the individual's preferences and circumstances, the sum of these individual decisions can generate substantial costs that mean that the aggregate outcome is not optimal. This is because there are side-effects of people's decisions that people are unlikely to fully consider when making decisions. For example, the impact of households choosing to spend rather than to save on the lack of financing for domestic investment opportunities or on the high interest rates in New Zealand.

At best, individuals face blunt economic incentives to save more. This suggests that raising savings will require deliberate

⁷ Some of this evidence is summarised in Skilling (2004).

action because people do not fully consider these costs.

For both of these reasons, it seems unlikely that household savings will increase spontaneously in such a way as to materially reduce the stock of external liabilities and provide the financing for higher rates of investment, productivity, and growth. Given the policy interest in these outcomes, a case for action seems clear.

Indeed, many developed countries with much better records on household savings, the current account and external debt, have already moved to improve their performance in these areas. Given the absence of compelling reasons for why New Zealand households, and New Zealand as a whole, have such low savings rates and high debt levels, it seems reasonable to direct policy to raise household savings as all other Anglo countries have done.

SUMMARY

Increasing New Zealand's savings and investment rates is an important part of raising New Zealand's economic growth potential, and moving New Zealand from a consumption-led economy to a productivity driven economy. Just as few people or companies spend their way to prosperity, but rather get ahead through investing and hard work, so too national economies do not spend their way to economic transformation – it requires investment. And financing this investment will require increased household savings.

Although low household savings are not the only factor that constrain investment, the existence of a larger pool of domestic capital is important in the process of raising investment. Foreign savers will be far less likely to invest in these opportunities. Foreign capital should still be solicited, but the point is that this financing is likely to be inadequate and more domestic savings are also needed.

Although a portion of any increase in household savings is likely to flow offshore, as New Zealand investors seek to obtain benefits from portfolio diversification, much will stay onshore. And in any case, increased household savings are likely to reduce the size of the external debt, and this will have a range of positive economic effects – such as a reduced cost of capital and a reduced investment income deficit – even if it does not directly lead to higher rates of investment.

This requires deliberate policy action because individual decision-making is unlikely to be sufficient. At an individual level, people depart from rationality on a systematic basis – and New Zealand does not have the policies and institutions that are required to help individuals overcome the costs of self control. Indeed, it is difficult to reconcile rational individual decision-making with persistent household dis-saving and the large stock of external debt.

And at an aggregate level, individuals do not fully appreciate the costs that their individual decisions impose on the broader economy; for example, the impact of borrowing on interest rates and external debt.

This analysis suggests that increasing household savings is an important priority for New Zealand because of its current situation. In particular, the very

low household savings and the large stock of external debt, the current low levels of business investment, the need for growth through investment and productivity, and the difficulties that New Zealand is likely to face in terms of attracting investment into the productive economy because of its small size and distance from other major markets.

Although high household savings do not always translate into higher growth rates – there are many examples of high saving countries that have generated low rates of productivity and economic growth, like Germany and Japan, and countries whose savings rates have been at the low end and who have generated good economic performance, like Australia and the US – the New Zealand situation suggests that raising household savings will have a positive effect on growth.



6 CONCLUDING REMARKS

This paper has described why increasing household savings, and household financial wealth, is important for improving New Zealand's economic performance in terms of investment, productivity and income growth. There are several key messages in this paper.

New Zealand households have poor savings and financial wealth outcomes

New Zealand households have low levels of household savings and of financial wealth. A key reason for this is that New Zealand households have made decisions to spend rather than to save, with private consumption growth consistently outstripping income growth. This has generated large and persistent current account deficits and a very large stock of external debt, and these outcomes do not show any obvious sign of correcting themselves. These outcomes have significant implications for the performance of the New Zealand economy.

The low level of savings matters for investment and economic growth

The international evidence shows clearly that much investment remains local, and that foreign savings are not a very good substitute for domestic savings in terms of financing investment. And the New Zealand experience is consistent with this evidence.

Although New Zealand has attracted substantial amounts of foreign capital over the past few decades, only a relatively small proportion of this has gone into enhancing the productive base of the economy. Foreign capital has generally financed the purchase of existing assets rather than new investments, has been focused on the domestic economy as opposed to the export sector, and has financed government borrowing – and increasingly is financing household borrowing for mortgages and consumption.

Because of the difficulties that New Zealand faces in attracting foreign savings for productive investment, the low level of domestic savings is likely to have constrained the level of business investment in New Zealand. Indeed, business investment rates in New Zealand have been low compared to other OECD countries over the past few decades.

Improving investment in the productive economy is of critical importance for improving New Zealand's productivity and growth. A key challenge in improving the New Zealand economy is to move from a consumption led economy to an investment and productivity led economy. New Zealand can't spend its way to prosperity, but rather needs to increase savings and investment to raise its long term rate of economic growth.

Foreign savings can be used to finance a portion of this increased investment, but it is unlikely to be sufficient. Increased savings by New Zealand households are also required to finance this investment, because a small, distant country like New Zealand will struggle to attract substantial amounts of productive investment from foreign investors. To finance higher investment in New Zealand, home is where the money is.

Increasing household savings is important for growth in New Zealand in a way that it may not be in other countries. This is because of New Zealand's unique combination of very low levels of household savings and financial wealth, a need to increase its low business investment to enhance economic growth, and the constraints that face a small, remote economy in attracting foreign savings to finance productive investment.

Indeed, internationally, high household savings are not a guarantee of good economic performance – there are many high-saving countries whose growth performance has not been that impressive, such as Japan and Germany, and countries whose savings rates have been at the low end and who have generated good economic performance, like Australia and the US. But given the current New Zealand situation, raising household savings is likely to have a positive effect on growth.

Higher savings will reduce the costs of a large stock of external debt

Because of persistent national dis-saving, New Zealand's has accumulated one of the largest stocks of external debt in the developed world. This has some significant economic costs.

For one thing, New Zealand's high level of external debt is a key reason why the cost of borrowing in New Zealand is substantially higher in New Zealand than in most other Anglo countries. And second it means that New Zealand has a substantial investment income deficit, which means that New Zealand exports 5% of its GDP to foreign investors as the return on their New Zealand investments.



There is a strong case for raising household savings to improve New Zealand's current external debt situation so as to reduce the investment income deficit, the cost of capital, and to lower New Zealand's external vulnerability to changes in the supply and cost of foreign savings. Indeed, New Zealand's current external debt situation means that the economic case for raising household savings in New Zealand is stronger than in most other developed countries.

So, even if all of any increase in New Zealand household savings were invested offshore rather than in domestic investment, there would still be substantial economic benefits from increasing household savings.

Policy action is required to increase savings

A substantial increase in household savings to obtain these economic benefits is unlikely to happen spontaneously. For individuals, savings decisions are about overcoming selfcontrol. This is why policies that encourage and assist savings, and which make the savings decision easier for people, frequently generate significant increases in household savings. New Zealand is highly unusual in not having policies that promote household savings.

Moreover, people do not fully consider the significant economic side-effects of their individual savings decisions – for example, the impact on the financing of domestic investment or on interest rates. This means that the aggregate outcomes may not be optimal, even if each individual was making fully rational decisions (which, in any case, is unlikely). For these reasons, household savings is an area in which it may not be possible to simply rely on individual decisionmaking to generate optimal outcomes.

And there is a clear economic policy interest in these outcomes. Improving New Zealand's household savings performance, and raising the level of household financial wealth, is important for the behaviour and performance of the national economy. Savings, investment and capital markets are issues of first order importance for New Zealand's economic growth.

These economic arguments for encouraging asset accumulation complement the social case made in a previous paper (Skilling (2004)) – encouraging asset ownership among more New Zealanders is likely to generate significant benefits for individuals and communities, both financial and non-financial.

Taken together, the economic and social arguments create a compelling case for aggressive action to create an ownership society in New Zealand. There is a need to both broaden the distribution of asset ownership in New Zealand, so that many more New Zealanders have an ownership stake in the New Zealand economy, and also to raise the level of ownership so that more funds are available for productive investment in the New Zealand economy.

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