Is poor household saving the cause of New Zealand's high current account deficit?

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Preface

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NZIER was established in 1958 is also known for its long-established Quarterly Survey of Business Opinion and Quarterly Predictions.

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Abstract

The current account deficit in the balance of payments has frequently surfaced in public policy debate, with many commentators asserting that low household saving is a major cause of these deficits. Yet, in standard macroeconomic theory, both the current account balance and household saving are endogenous, so one can not 'cause' the other. For any country in any given period, they may be positively or negatively correlated, or uncorrelated, depending on what causative factors were dominant at the time.

Moreover, the current account balance is identical to the *difference* between national saving and investment. There is no general reason to expect it to move in lock step with the *level* of household saving. Consistently, pooled cross-country and time-series data indicate that simple correlations between the two variables are randomly scattered around zero.

In the absence of proper analysis, unsubstantiated assertions about the role of household saving mislead public debate and invite the adoption of welfare-reducing policies, which may not even 'improve' the balance of payments. The case for diverting attention from policies to lift economic growth to policies to 'improve' the balance of payments seems to be not so much unproven as unexamined.

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1. Introduction

New Zealand has been recording a deficit on the current account (CAD) in its balance of payments since 1974. Moreover, the deficit has grown much faster than GDP in the last decade. Currently, at -8.2 percent of GDP (2007), it is the third largest deficit in the OECD.

What is causing this outcome? Many politicians, policy makers, journalists, and even economists have unequivocally attributed the CAD to over-spending or under-saving by households. For example:

> *There has also been a widening in New Zealand's current account deficit -- the difference between what the country earns overseas from its exports and investments and what it pays for its imports and the investments foreigners have in New Zealand. These two developments largely share a common underlying driver -- very strong growth in spending, particularly by the household sector, much of which has been debt-financed. (Bollard, 2005)*

> *[Low household saving rates have] caused significant current account deficits and [have] led to New Zealand accumulating one of the largest stocks of external liabilities in the OECD. (Skilling, 2005)*

> *Our official savings rate suggests for every dollar households earn, they spend $1.15 on average. Alternative measures of saving are less negative, but still have an alarming downward trend. A stark reminder of this trend is our persistent current account deficits, currently around 9 per cent of GDP, among the highest in the OECD. (Cullen, 2007a)*

> *Balance of payments reinforces need for KiwiSaver.* (Cullen, 2007b*)*

Such (mis)diagnoses set the stage for policy failure by inviting the public and policy makers to infer that (1) the CAD is a problem in its own right and (2) policies to lift household saving will usefully reduce the CAD and make New Zealanders better off.

However, neither of these propositions is self-evidently true and we argue below the claim that a CAD is caused by inadequate household saving has little to commend it either in theory or in fact.

2. Theory

By definition, a CAD occurs when domestic investment exceeds national saving (see (8) below) or, equivalently, when total domestic spending on consumption and investment exceeds total income from domestic production (GDP) plus net income and transfers received from the rest of the world (see (9) below). Since domestic spending on non-tradables cannot exceed domestic production of non-tradables (stock changes aside) a CAD is also equivalent to domestic spending on tradables in excess of domestic production of tradables.

In national accounts statistics, the expenditure measure of GDP is estimated as:

(1) $GDP \equiv C + I + X - M$

where the components on the right-hand side are respectively national consumption, gross investment, (receipts from) exports and (expenditures on) imports.

Gross Domestic Expenditure (GDE) is represented by C+I, so

(2) $GDP - GDE \equiv X - M$

National disposable income is closely related to GDP:

(3) $NDY \equiv GDP +$ net investment & transfer income from abroad – consumption of fixed capital

National disposable income can be either consumed or saved:

(4) $NDY \equiv C + S$

From (1), (3) and (4):

(5) $C + S = GDP +$ net investment & transfer income from abroad – consumption of fixed capital

(6) $C + S = C + I + X - M +$ (net investment & transfer income from abroad) – consumption of fixed capital

Now the currrent account deficit in the balance of payments is defined by:

(7) $CAD \equiv -$ (X – M + net investment & transfer income from abroad)

So combining (6) and (7) gives:

(8) $CAD \equiv Net\ I - S$

where Net I is gross investment less depreciation (consumption of fixed capital).

Similarly, combining (2), (6) and (7) produces:

(9) CAD ≡ GDE − (GDP + net investment & transfer income from abroad)

(Note that equation (9) could be manipulated so as to net out expenditure and income from non-tradables from the right-hand side to show that the CAD is also the difference between expenditure on tradables and income from the production of tradables plus net investment and transfer income from abroad.)

It is clear from (8) and (9) that the CAD is not simply related to the level of household saving, or even to the level of national saving (S). Instead, its value is determined by the difference between two independent variables (say 'A' and 'B' where CAD ≡ A − B). For example, whether a rise in national saving would reduce the CAD depends on what would also be happening to net investment.

Given these identities, a concern that a CAD is too high must be reflected in a concern that variable 'A' is too high and/or that variable 'B' is too low. This is because if the values for variables 'A' and 'B' are optimal the value for the CAD must also be optimal. Moreover, a concern that a CAD is too high must also be a concern that the capital account surplus in the balance of payments that funds it is 'too high'.

Specifically, a concern that a CAD is 'too high' must be a concern that: (1) domestic investment is too high and/or national saving is too low; *and* (2) total domestic spending is too high and/or total domestic income is too low; *and* (3) domestic spending on tradables is too high and/or domestic production of tradables is too low. There would be a contradiction if all three of these pairs of concerns were not simultaneously present.

In addition, to justify this concern a case must also be made that overseas savers are investing too heavily in New Zealand for some reason. After all, if they thought New Zealanders were getting themselves too heavily into debt, they would lend less, the exchange rate might fall, production might shift to tradables, and spending, including on investment, might fall.

Any claim that New Zealand's CAD is 'too high' should tell a consistent story in all these respects. A simple assertion about inadequate saving tells us nothing in itself about the adequacy of incomes or the productivity of spending on non-tradables compared to spending on tradables. Otherwise one might as facilely 'blame' a CAD on business saving, government saving, investment, exports, imports, or a host of other factors.

Furthermore, all of the variables in the above equations are endogenous according to standard macroeconomic theory. This means that their values are simultaneously determined by more fundamental considerations. A high saving rate cannot cause a low investment rate or a low CAD. Instead the levels of investment and saving depend diversely on the underlying causative factors such as preferences, new technologies, taxes, government spending and regulation, and

world interest rates and prices (the overseas terms of trade). As a result, any observed correlation might be positive, negative, or zero depending on the nature of the dominant joint causes during the observation period.

Note that it is national saving, not household saving, that features in these identities. Household saving is one of three components of measured national saving (S), the other two being government and business saving. Something that lifts household saving will not necessarily also raise national saving. For example, government saving can be thought of as forced household saving, in which case an increase in government saving could induce households to cut voluntary saving while total saving could rise, fall or remain unchanged.

The next section presents some statistical evidence on the relationship between household saving and the balance of payments.

3. Evidence

Data for OECD countries show no clear association across countries or through time between the current account balance (CAB) expressed as a percentage of GDP and the household saving rate (HSR) expressed as a percentage of household disposable income. The relationship between these two variables ranges from strongly positive (Portugal and USA) to non-existent (Italy) to highly negative (Switzerland, Japan and Canada).

Table 1 Correlations between the current account balance and the household saving rate

	Low: -0.71 (Canada, 1970-2007)
Time series	High: 0.86 (USA, 1970-2007)
	Near zero: 0.04 (Italy, 1971-2007)
	Low: -0.23 (1974, 8 countries)
Cross section	High: 0.59 (1988, 16 countries)
	Near zero: 0.01 (2007, 21 countries)
Pooled sample	0.02 (619 observations)
	0.1 (taking into account fixed effects)
Source: OECD Economic Outlook	

For Japan, for example, the HSR declined steadily from 24.4 percent in 1974 to 2.9 percent in 2007, while the CAB rose from -1 percent to 4.8 percent of GDP.

Canada's measured HSR dropped from 13 percent of GDP in 1990 to 2 percent in 2007 while the same ratio in the USA fell from 7 percent to -1 percent. Yet Canada's CAB 'improved' from a deficit of 4 percent of GDP to a surplus of 2 percent whereas the US current account deficit 'deteriorated' by 5 percent of GDP.

Meanwhile, in 2007, Portugal combined a high HSR with a large CAD, both being recorded at 9 percent.

For the record, only 8 of the 21 countries saw a lift in their HSRs during this period and only half of these also saw an 'improvement' in their balance of payments. This is what we would expect if the relationship were random. Of the remaining 13 countries that recorded a decline in their HSRs, only 4 experienced a simultaneous 'deterioration' in their balance of payments.

Cross-sectional evidence is equally sketchy. The CAB and HSR can be highly correlated (1988, correlation = 0.59), negatively correlated (1974, correlation = -0.23) or seemingly unrelated (2007, correlation = 0.01). In a panel sample of 21 OECD countries over 38 years, the correlation between the CAB and HSR is virtually zero.

Figure 1 Current account balance and household saving rate
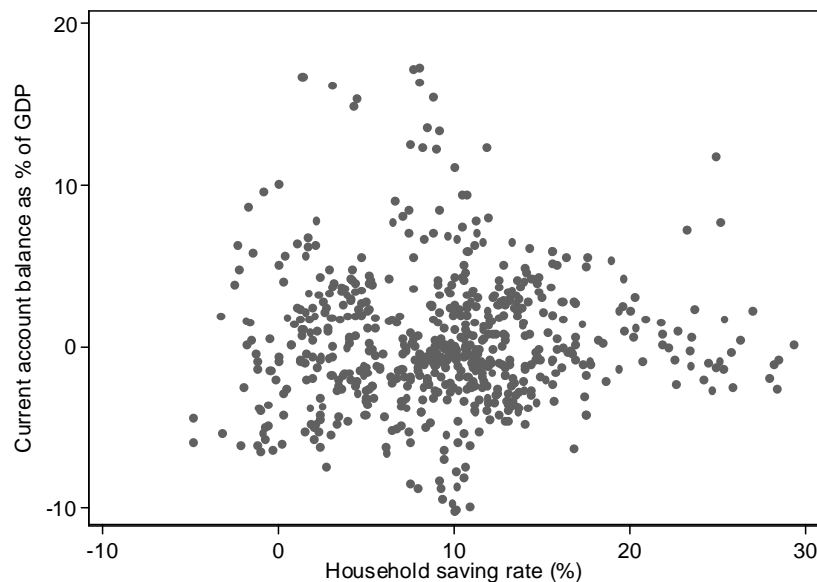
Source: OECD Economic Outlook

Note: Sample: 21 OECD countries. For each country, data were available for up to 38 years (1970-2007).

4. Discussion

This mixed evidence is consistent with the theory. Moreover, measurement errors are a serious concern because they can vary considerably across countries and through time. In the case of New Zealand, this is a particular concern since the HSR is estimated from 'experimental' Household Income and Outlay Accounts. Apparently due to their low reliability the New Zealand data on this variable are no longer published in the OECD Economic Outlook.[1]

The unsubstantiated assertions about causation undervalue the research that has been carried out on these issues.[2] For example, Munro and Sethi (2007) provided a rational explanation for the rise in New Zealand's CAD in recent years. The paper found that most of the variation in the CAB could be attributed to favourable shocks in technology, a cheap world cost of capital, and external valuation shocks (reflecting terms of trade and exchange rate developments) at longer time horizons.

Simplistic statements about the relationship between the CAB and household saving misdirect public debate and invite welfare-reducing policy responses. If policy makers are concerned about the relatively low level of prosperity of New Zealand households (compared, say, to Australian households) there is no good reason for them to blame household saving rather than the many obstacles to wealth creation and economic growth that reputable experts have identified (such as tax, wasteful government spending, poor quality infrastructure in some areas, and inefficient regulation).

There are real economic problems in New Zealand that need to be addressed. In particular, average incomes are undesirably low relative to Australia and other wealthy countries. Indeed, the current administration has long espoused the goal of lifting New Zealand's ranking into the top half of the OECD. If incomes are too low, saving (and consumption) are likely to be also too low. Those who are worried about low household saving could usefully focus on policies to reduce impediments to economic growth.

For example, it is beyond credible dispute that much general government spending in New Zealand is wasteful as far as the overall interests of New Zealanders are concerned. No serious case was made that the election spending in the last campaign (eg interest-free student loans) was justified from a national interest perspective. Of course such poor quality expenditure is not necessarily wasteful from the point of view of the politicians who are spending money to buy votes or from the point of view of the beneficiaries of this expenditure.

The OECD has made the point long ago that the value of 95 percent of central government spending is not rigorously and systematically examined. The lack of

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[1] Consequently, the above chart does not include New Zealand.

[2] Examples include Edwards (2006), Makin (2006) and Munro and Sethi (2007).

such a discipline increases the discretionary powers of politicians and protects the favoured constituencies. When general government is spending 40 percent of GDP without serious examination of overall value-for-money considerations, the scale of the waste is likely to be of economy-wide significance.

There is also much well-justified disquiet about the quality of government regulation. The Treasury has been unable to find productivity gains from recent increased health expenditure. The costs and delays in getting infrastructure projects underway are a widespread concern. The widespread acknowledgement of the poor quality of much regulation has led to many reviews in recent years, but the problem remains.

While policies to remove such impediments to higher overall living standards would not necessarily lower a CAD, those who wish to achieve this goal should consider this possibility. Indeed, to the degree that poor quality government spending and problems of low productivity are concentrated on non-tradables, the likely effect is to raise the real exchange rate, reducing the competitiveness of industries exposed to international competition and thereby worsening the CAD.

Current moves towards higher taxes to fund incentive for saving and ever more regulation of saving for ill-justified reasons will not necessarily achieve even their ostensible goals. By focusing on a speculative problem they distract attention from a real problem, and could well make it worse.

The wealth of a country surely depends in part on the ability of its people to correctly diagnose its problems. New Zealand no longer ranks as a rich country and its measured productivity growth rate has slumped in recent years as tax and regulatory burdens have risen. The current diagnosis of more of the same seems to have little to commend it.

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