THE CURRENT ACCOUNT ISSUE REVISITED

W.M. Corden

With Comments By
Fred Argy, Heinz Arndt,
George Fane, John Pitchford

DISCUSSION PAPER NO. 345
MAY 1996
Centre For Economic Policy Research

Discussion Papers

The Centre for Economic Policy Research was established in 1980 as one of a number of University initiatives. It was given a mandate to foster policy oriented studies of the Australian economy. The Centre works closely with other economic research groups—both within the Australian National University and in other Australian universities.

The Discussion Papers of the Centre are intended to make available to a wider audience a series of economic research studies. These studies will have been either commissioned (for instance in conjunction with conferences held under the auspices of the Centre) or undertaken by research staff of, and visitors to, the Centre.

The Centre will also publish as Discussion Papers studies of relevance to economic policy which have been undertaken by individual academics attached to other research groups within the University—or where the Centre is able to act as a focal point for such research.

The Centre does not have any views on policy; individual authors do.

Requests for papers/lists of papers should be addressed to:

The Publications Officer
Centre for Economic Policy Research
Research School of Social Sciences
Australian National University
CANBERRA ACT 0200, AUSTRALIA

Tel: (06) 249 2247 Fax: (06) 249 0182
e-mail: ceb302@coombs.anu.edu.au

CEPR Executive Director: Dr Bruce Chapman
CEPR Publications & Conferences: Catherine Baird

THE CURRENT ACCOUNT ISSUE REVISITED

W.M. Corden

With Comments By
Fred Argy, Heinz Arndt, George Fane, John Pitchford

DISCUSSION PAPER NO. 345
MAY 1996
The Current Account Issue Revisited

W.M. Corden

In 1994 Australia had the highest current account deficit as a percentage of GDP of any OECD country other than Mexico, and OECD estimates for 1995 (in OECD, 1995) put Australia right at the top, at 5 per cent. It is followed by New Zealand at 3.7 per cent. For Canada, which has occasionally surpassed Australia in this respect, the estimate is 2.5 per cent. Australia's deficit averaged about 2 per cent of GDP from 1959-60 to 1990-81, but there was a sharp upward movement in the eighties, and from 1981-82 to 1993-94 it averaged 4.4 per cent. In 1994-5 it was actually 6 per cent. Finally, as a result of high current account deficits, Australia's net external liabilities rose massively from 10 per cent of GDP 1976-78 to 55 per cent in 1994-95. The increase was mainly in debt, not equity.

In view of these figures it is natural that some people are concerned.1 But difficult questions immediately arise. Does it not matter whether or not the accumulation of external liabilities has been matched by an accumulation of domestic assets—in other words, whether and to what extent the current account deficit has financed domestic investment? Does it matter whether the deficit resulted from public sector or private sector financial deficits? And, if there has been an upward trend or shift in the level of the deficit, how is one to tell whether the earlier, lower, level was the more desirable one? The fundamental question, of course, is whether—or to what extent—the deficit matters at all.

The subject is of particular interest because of the Mexican experience. In early 1994 Mexico ran a current account deficit of 8 per cent of GDP (with an average of 6 per cent 1991-93) and at the end of the year it encountered a major exchange rate crisis. It has been widely concluded that the high current account deficits that Mexico ran from 1991 to 1994 were very unwise.

I Four Views of The Current Account Problem

I asked "Does the Current Account Matter?" in Corden (1991). In that article I made a distinction between the Old View and the New View of the current account. The present paper will not repeat the distinction of these two views in any detail. Rather, the aim is both to improve on the rigour of the earlier analysis, and to display the relationships among various points of view, all of which seem reasonable. The conclusion must be to reject extreme positions. Four views will be distinguished, namely the Old View, the Modernised Old View, the New View, and the Strong New View. The main contribution of this paper is to distinguish two versions of the Old View and of the New View.

The Old View derives from an earlier era but has still influenced recent thinking in Australia and abroad. It is assumed that a country has to finance a current account deficit out of its own foreign exchange reserves or with temporary assistance from the International Monetary Fund, but the international capital market is not available to it. Essentially then, the level of reserves determines the sustainable current account deficit. There can be a temporary deficit, but strict limits are set by the reserves plus the availability of emergency lending. I have expounded this view in more detail in Corden (1991). Given high international capital mobility, it is obviously no longer relevant for Australia or any other country that has access to the international capital market. Hence, as in the earlier paper, I dismiss it.

The Modernised Old View will be expounded in detail below. This view allows for international capital mobility, so that financing of a deficit on the capital market is certainly possible and does take place. Nevertheless, for reasons to be given below, the current account matters and could be a serious problem. This view is widely held. The present paper is meant to provide a clear rationale for this view. In doing this I am influenced by the recent Mexican experience.

The New View is essentially as put in Corden (1991). The current account deficit is the net result of savings and investment, private and public, and what matters is the optimality (or movement towards or away from optimality) of these components—and further sub-components within them. The current account result is incidental and essentially irrelevant.

For example, if a country has inadequate savings and investment, a current account deficit that results from a reduction in savings is undesirable while one that results from an increase in investment is desirable. If savings and investment happened to increase to the same extent, so that the current account did not change, the result would nevertheless be desirable. The main message is that one must look at the underlying components that determine the deficit, and not the net result. In this view, neither private savings nor private investment are necessarily assumed to be optimal, but the nature of the problem—or whether there is a problem—is not revealed by current account figures alone. Nevertheless, a change in the current account can be a signal of underlying changes, which then need to be examined. For example, the current account deficit may increase because of a decline in private savings, the implications of which then need to be examined, and may call for some public-policy action.

Finally, there is the Strong New View. It distinguishes between the public and the private sector. It is assumed that private savings and investment are optimal—or, at least, changes in them cannot clearly be shown to be moving in a non-optimal direction—and that public-policy concern should therefore focus only on public savings and investment. In particular, the fiscal deficit is a matter of public policy concern, but not the private sector financial deficit (which is the excess of private investment over private savings).2

We have then four "Views". The first (the Old View) can be dismissed from further consideration. The basic idea of the third (the New View) is so simple and now widely understood and accepted in the economics profession that I need not expound it in any detail either. This leaves the Modernised Old View and the Strong New View, both to be discussed below.

Hence I proceed now to the Modernised Old View. In this approach, the current account matters even in a world of capital mobility. This view can be legitimated analytically with three distinct arguments, though it is a matter of judgement to what extent these arguments apply to Australia. (I shall discuss the application to Australia later). One can then develop

1 See, for example, Gruen and Gratton (1993, Ch. 9) which contains more information and discusses the issues comprehensively. Writings by Heinz Arndt of the ANU and Des Moore of the Institute of Public Affairs, have also emphasized the current account problem.

2 This view was put by UK Chancellor of the Exchequer Nigel Lawson in 1988, when commenting on the big increase in the UK current account deficit that clearly originated in a private sector consumption and investment boom, and it can also be said to represent John Pitchford's view in 1989 and later (see Pitchford, 1990), when Australia faced a similar situation, though he noted qualifications, especially the existence of distortions affecting private savings and investment (which should be removed). I advanced it earlier in Corden (1977).

Tony Makin has expounded this view with respect to the Australian current account in many publications. See especially Makin (1990, 1994, 1995, 1996). See also Pitchford (1995, ch. 10) where qualifications are discussed.
a comprehensive approach which combines the New View with the Modernised Old View: the New View, in effect, is subject to three possible qualifications.

II The Three Arguments Behind The Modernised Old View

Country Risk and the Market Perception Effect

The market (and that includes domestic as well as foreign residents) may believe that there is something called "country risk" which is independent of the underlying causes of a current account deficit. Whether an increase in the deficit is temporary or permanent, whether it arises from a consumption or an investment boom, or from a fiscal deficit or a private sector one, if the ratio of the deficit to GDP rises above a certain level, there will be an adverse market reaction. Presumably, the market fears default or forced rescheduling. Interest rates will rise severely and the exchange rate will depreciate.

One might argue that, if one believes that the deficit is actually soundly based (being caused by borrowing for sound investment or justifiable consumption smoothing) it is best to ignore this potential market effect until the interest rate actually does rise steeply and the exchange rate actually depreciates. The answer is that a sudden adjustment is particularly painful. If there is a threshold at which a market panic would set in, it is best to ensure that the deficit, or the gross or net debt, or external liabilities (or whatever the market watches most) stays below the threshold level. I am not suggesting that such a market perception effect is rational, nor that Australia is near it, but clearly it is this effect that many people who express concern about the Australian deficit, have in mind. Yet it is hard to believe that "the market" does ignore underlying factors.

The very fact that, so far, Australia has not encountered a crisis of this kind in spite of a prolonged high deficit-GDP ratio relative to the past and to other OECD countries, suggests that the market may be more rational than it is given credit for. Surely, for the market it is the probability of default that is most relevant. Australian governments have never, ever, defaulted (not even in the depression crisis), and the possibility of a future sovereign default is utterly remote. The risk of private defaults is, of course, greater, especially in the aftermath of a big boom, but this ought (if the market is rational and well informed) to be allowed for in the risk premiums charged to individual borrowers.

Excessive Foreign Ownership, Control, and Speculation Risk

Current account deficits build up Australia's net external liabilities (or assets). Australian residents invest abroad and foreign residents invest in Australia. Foreign residents tend to us by buying our debt and by buying equities or actually assuming control. If we do not like foreign control—-with all the good and (supposedly) bad it brings—we can go into debt instead, which of course we have been doing. Foreign investment brings in skills and technology, as well as overseas marketing relationships. Free entry for foreign firms is likely to make the domestic market more competitive. Above all, it allows Australians to share the risks of firms located in Australia with foreigners. All these are well known arguments, to set against the natural resentment that everywhere in the world a big increase in foreign ownership and control tends to bring. In any case the Australian issue is primarily a question of debt. The question then becomes the following: Does a current account deficit financed by debt, and a high net debt ratio, increase our exposure to the vagaries of the world capital market--that is, to "foreign speculators"?

The answer is doubtful, and probably negative. Specifically, the risk is created not directly by the current account deficit and the accumulated external debt, but by international capital mobility combined with the market's perception of the underlying fundamentals. Suppose that both the net externally held debt and the current account balance were both zero. But there is an open (or not easy-to-control) capital market. There is, of course, domestically issued and held private and public debt of all kinds. I make this assumption as an extreme case.

Now something changes. Foreign interest rates or investment opportunities rise. Australian-located companies are found to have over-borrowed, or the Australian terms of trade decline. Australians may then wish to send some of their funds abroad. Potentially, every Australian dollar held with a bank or other intermediary could be converted into US dollars. It must be remembered that the Mexican crisis was not set off in Wall Street but by Mexican residents who lost confidence in their government's debt and in their currency, and so sought to convert pesos into dollars.

Real Exchange Rate Reversal Effect

Consider the story of a typical spending boom. I assume at this point that the exchange rate floats. There is a spending boom, resulting from fiscal expansion or a boom in private consumption or investment. The interest rate rises, which draws in capital from abroad and appreciates the exchange rate. The current account worsens. If monetary policy aims to avoid domestic excess demand, there will be some monetary contraction, appreciating the exchange rate further. In any case, the real exchange rate appreciates. Alternatively, the story might start with a decline in foreign interest rates and reader availability of foreign capital. This will lower domestic interest rates, hence increase private spending and appreciate the exchange rate. Whether the disturbance originates at home or abroad, the net result is a real appreciation and a current account deficit financed by capital inflow.

At some stage the process goes into reverse, the boom being temporary. This might be because of fiscal contraction, domestic investment opportunities declining, or because of foreign interest rates rising. So the exchange rate will depreciate later. Provided domestic prices do not rise, there will be a real depreciation and the current account will improve. This appears to be a perfectly natural process. Domestic contraction owing to reduced spending will be offset (probably with a lag) by the expansionary effect of real depreciation. Looking at the whole process, perhaps exceptional investment opportunities were perceived in the country, or there was an international portfolio adjustment in favor of the country, and the net effect was a temporary investment and capital inflow boom, requiring first a real appreciation and then, when the boom inevitably ended, real depreciation.

The problem is that, while real appreciation is easy to bring about (though temporarily damaging import-competing and export industries), real depreciation may be more difficult to bring about. Real appreciation raises real wages, but once raised, they are hard to reduce again, so that the nominal depreciation that results from the cessation of the inflow leads to a price-wage spiral. But, in the absence of real wage rigidity (through formal or informal indexation), there should be no problem. In particular, if market participants can foresee the temporariness of the boom, both appreciation and subsequent depreciation will be modified.

The matter is rather different when the country pursues a fixed exchange rate policy, as Mexico did in 1994. The boom leads to a rise in the domestic price level (relative to trading partners), and hence to real appreciation. When capital inflow slows up or ceases, and
possibly even turns into outflow, domestic prices do not fall, so that there is no real
depreciation. The monetary authorities then face a choice. They may try to maintain
demand and the interest rate. This means they would sterilise the monetary effects of
reduced capital inflow. The current account deficit then continues, but it has to be financed
out of the foreign exchange reserves. This, of course, cannot go on very long. Indeed, before
the reserves run out there will be a run on the currency. This is the Mexican story of 1994.

Alternatively, the monetary authorities could have allowed the automatic adjustment
process to work. As the reserves fell owing to the slowing up of capital inflow, the money
supply would fall (the monetary effects would not be sterilised) and the domestic interest
rate would rise. Hence demand would fall, the current account would improve, and the
process would reach a new equilibrium when the current account deficit was down to the
reduced level of capital inflow. But, given the downward rigidity of prices and nominal
wages, this would lead to an inevitable recession.

The moral for the fixed exchange rate case is that, if both an exchange rate crisis and a
recession are to be avoided, the initial capital inflow and associated spending boom and
current account deficit should be moderated or avoided. The important point that follows
from the Modernised Old View is that it is not greatly, if at all, relevant what the nature of
the extra spending has been—consumption or investment, private or public. It is indeed the
temporariness of the current account deficit (or capital account surplus) as such that is
relevant.

I shall discuss later how applicable this is for Australia. The immediate conclusion is
that a fixed exchange rate commitment is most unwise in these circumstances. It is true that
a temporary boom, followed by a slump in spending and capital inflow, can cause
problems even when the exchange rate is flexible. This is because of the initially adverse
effect on import-competing and export industries and because of the possibility that there
is some real wage rigidity downwards owing to indexing. But, unless the real wage were
completely rigid, it is clear that a flexible exchange rate system would avoid the stark
choices that Mexico faced once capital inflow slowed down.

III The Strong New View

The trouble with the New View, as summarised in section I above, is that it is extremely
agnostic. It just makes the simple point that the current account should not be a target,
though it may be a signal. One should look at all the components that affect a current
account change before judging whether there have been desirable changes or not. In the case
of private spending booms, as happened in Australia and Britain in 1987 and 1988, and in
Mexico in 1992 to 1994, policy makers should still consider whether they are desirable (or
optimal) or not. And that raises many questions about the optimality of private and public
savings and investment.

The Strong New View goes further. Essentially it argues that levels of—and, more
important, changes in—private savings and investment can be assumed to be optimal in the
limited sense that private agents are more likely to make optimal choices with respect to
their decisions than governments. If there are particular distortions created by government
policies (such as tax distortions) they should be removed. But, apart from that, public
policy should be concerned with public spending, saving and investment, and leave private
agents to make their decisions in their own way, as if clearly identifiable externalities did
not exist. If there is no significant change in fiscal policy (or possibly even an
improvement), and the current account deficit increases because of a private spending
boom, as in the case of the Australian, British and Mexican episodes, then there is clearly
no problem if this view is accepted. Furthermore, if the current account deficit increases
because the budget deficit has increased, then the current account aspect is irrelevant: all
that matters is to ensure optimality (or a movement towards optimality) in public sector
decision-making. Compared to the New View, the Strong View thus narrows the task, focusing attention on the budget deficit and its components.

I now proceed to review various possible qualifications to the Strong New View. First,
there are the three elements in the Modernised Old View that I have discussed above.
Potentially they qualify both the New View and the Strong New View. I now consider
further qualifications that apply only to the Strong New View. Each could be significant. I
can be brief here, since they are all discussed or referred to in Corden (1991). In all cases I
have in mind the private spending booms of Australia, Britain and Mexico to which I have
referred above.

Moral Hazard and Other Distortions

Private borrowing may be non-optimal because of a variety of possible market distortions,
especially through the taxation system. There is no general presumption that distortions
would lead to over- rather than under-borrowing, but the bias of many tax systems in
favoring debt relative to equity has often been noted. Anyway, without pursuing this
further, the distortion that appears to have played an important role in Mexico is that of
moral hazard created by the expectation that borrowers or intermediaries—notably banks—
would be rescued by the government if they got into difficulties. The consequences of
moral hazard of this kind are meant to be overcome by bank supervision, which was
inadequate in Mexico. Moral hazard often interacts with euphoria, discussed below.

Contamination Effect

The bigger the debt in relation to debt-servicing capacity of any one borrower, the higher
the risk factor attaching to that borrower, and so the higher the interest rate he or she will
be charged. This effect is internalized and should moderate individual borrowing decisions.
It does not raise any public policy issue. But, in addition, there may be a form of
externality, leading to over-borrowing, and thus excessive current account deficits from a
national point of view. High debt by one private borrower may affect adversely (and thus
"contaminate") the reputation of another, or of the country’s borrowers as a whole. This
could be rational, but is more likely to be based on a lack of market information. It is
essentially the "country risk" point mentioned earlier. Furthermore, excessive or unwise
private sector borrowing can contaminate the reputation and hence borrowing ability of
the government. I leave aside the possibility of rescue here, and just focus on taxation. The
bigger a private company’s debt relative to its turnover or assets, the more likely is it that it
gets into difficulties, and thus the less tax it will eventually pay. Hence the risks of the
private sector are shared by the government.

Euphoria

Both foreign lenders and domestic borrowers may be subject to euphoria, a common feature
of market behaviour, and indeed human beings in general. They may ignore "obvious"

---

3 A fourth and early example of a current account deficit caused by a private spending boom, and with a fixed
exchange rate, was that of Chile 1978-82. As in Mexico later, it ended in crisis.
4 This was also important in Chile during its borrowing boom and real appreciation phase 1978-82.
5 See Pitchford (1995, Ch 10)
warnings and engage in herd behaviour. If full use were made of information available, including information in history books, a lending and borrowing boom might not be so large. Whether there is some rationality in such cycles has been much discussed. In any case, one has no difficulty in finding examples (at least with hindsight). Often this euphoria is shared by-and sometimes even encouraged by-politicians and officials. In any case, it is well to be aware of the possibility, and not to assume that private agents behave rationally at all times. If the government believes that a private spending boom is "euphoric" and hence will lead to losses not expected by the private sector, it would be rational for the government—which is likely to share the losses through reduced tax revenue and possible rescue costs—to seek to restrain the boom in various ways, and to strengthen its own resources through fiscal contraction.

**Interaction of Private and Public Savings**

The principles for determining optimal savings, bearing in mind, intergenerational equity, cannot be discussed here. Furthermore, even if particular private agents would save optimally from the point of view of themselves and their heirs if they had the necessary information, do they have this information to make their decisions? Here I just want to discuss briefly the interaction between private and public savings decisions. The central question is whether one can separate the two. This is really required for the Strong New View. Can one argue that public savings are a matter of public policy concern while private savings decisions can be left to private agents?

If there were no government social benefits (unemployment benefits, old age pensions, medicare, invalid benefits, etc.), then rational private agents would have to save more to provide for their own old age, future medical needs and other eventualities. Thus, leaving aside the next point, the benefits system will reduce private savings. If we take this as given, then the government must save sufficiently to fulfil its obligations.

But if the government does not save appropriately, it will have to raise taxes later to pay for the benefits. The choice is between higher taxes (or reduced expenditure) now to generate government savings, or higher taxes (or reduced expenditure) later. Alternatively, it will have to renege on its obligations of providing benefits. If private agents foresaw this eventuality—either that taxes would be raised later or that they would not get their benefits—they would save now in anticipation.

If one could rely on the private agents' knowledge of the situation or prospects and their foresight, then it would not be necessary for the government to save for these purposes. Optimal national savings (at least from this point of view) would take place in any case, because any shortfall in public savings would be made up by private savings. This argument is similar to the Barro-Ricardo argument that a bond-financed budget deficit (which implies higher taxation later) would generate higher private savings in anticipation, so that the expansionary effect of the budget deficit is offset by the contractionary effect of higher private savings. If this were so, it would not matter how much the government saved; national savings would not change.

In practice, it is highly unlikely (on the evidence) that private agents do have the knowledge and foresight to react in this way. The following assumption seems to me the most reasonable one. Private agents assume that current and promised benefit levels will be maintained, as will current tax rates. In that case there will be national undersaving unless the government itself does the necessary saving to ensure fulfilment of the obligations it has undertaken. Of course, national savings could be non-optimal (given some intergenerational social welfare function) for many other reasons. Here I focus only on the crucial public-private nexus.

It may be reasonable to assume that private saving is optimal, given that the government saves sufficiently so as to ensure fulfilment of its future obligations without raising tax rates in the future. In this way the Strong New View can be sustained. But if the government does not do so, then private savings will be too low because they fail to allow for the government's savings failure. It must be added here that short term variations in private consumption (and hence savings) are unlikely to be related to such factors. The consumption boom in Britain and Australia in 1988 and 1989 were caused by other factors, notably financial liberalisation which reduced or removed liquidity constraints and hence moved consumption behaviour closer to an optimum (ignoring the factors discussed above).

**IV Does The Modernised Old View Apply To Australia?**

I continue to believe that the issue should be analysed primarily in terms of the New View. One needs to look at the underlying factors, saving and investment, government and private. Are they too high or too low? I shall proceed to this shortly. But first one needs to consider whether the three qualifications which provide the basis for the Modernised Old View apply to Australia at all.

**Country Risk and Market Perceptions**

My own impression is that "the market" does not (in general) apply arbitrary current account criteria to its judgements, but does look at the underlying factors, though not always correctly. It certainly has allowed various countries, including Mexico and Argentina, to run high deficits for some time. In the case of Mexico, the decline in inflow in 1994 can be readily explained by higher US interest rates (and a declining interest rate differential) and by the gradual completion of the international portfolio adjustment in favor of Mexico. The crisis was clearly precipitated by the near-exhaustion of foreign exchange reserves. In view of the Mexican crisis, market participants may be more cautious in the future, but they may also realise what a big part the exchange rate regime and the unfortunate monetary policy reaction played in the Mexican case.

How would the market react to a rise in Australia's current account deficit ratio if it were clearly caused by a private investment resurgence that appears to be soundly based at the time? I think that such deficits would be thought acceptable. Nevertheless, it is best to err on the cautious side, and hence to aim at some reduction of the long-term deficit ratio, by raising national savings.

**Foreign Ownership and Speculation Risk**

For reasons given earlier, I would not place any weight on this argument, and, in any case, the foreign ownership issue cannot be pursued here.

**Real Exchange Rate Reversal Effect**

Fortunately, Australia has not--and I hope, never will--make a fixed exchange rate commitment. In this respect it has differed from Mexico, Chile and Britain during and after their crisis episodes. There is thus no likelihood of a crisis of the kind these three encountered. It is also relevant information that the market's depreciation of the Australian dollar 1985-86 did lead to a real and not just a nominal depreciation, of course, helped by the Accord. It is true that, if a sharp real depreciation were required, it would create
problems, as for all countries, essentially because of the wages reaction. But this problem would only arise when the current account deficit increases because of a short and unsustainable boom. The present Australian situation is of a more long-term nature; the current account may well improve gradually owing to gradual fiscal consolidation, and this could (other things equal) be associated with a gradual real depreciation.

I conclude that, for Australia, it is appropriate to continue with the New View as the fundamental approach, while bearing in mind a possible market (country risk) reaction if the deficit ratio rises for any length of time. In other words, the New View approach needs to be qualified by the market perception effect.

V. New View Analysis of the Australian Current Account

It would be over-ambitious if this paper tried to present a full New View analysis for Australia. These are just some notes. There is a considerable literature which analyses the various elements--savings, investment, public and private--that have determined the Australian current account outcome and trends. Particularly valuable are Whitelaw and Howe (1992) and Fitzgerald (1993). See also Flynn (1993) and Bartley and Phipps (1995).

I cannot summarise these here. But two generalisations seem to emerge. (Ratios are always relative to GDP.)

First, Australia's increasing current account deficits since the early seventies can be explained partly by a decline in the private savings ratio but mainly by a significant decline since the early seventies in the public savings ratio (with a temporary rise from 1987 to 1990). The investment ratio has gone up and down, but the trend has not been upwards. Thus, primarily, one must "blame" the higher fiscal deficits--explained by growth of public consumption and transfers rather than investment. These trends can also be found in most other OECD countries. In general, savings ratios have declined.

Second, when one compares Australia with other OECD countries (excluding Japan, at least), the national savings ratio has been about average, but the investment ratio has been above average. The higher investment ratio explains why Australia has had higher current account deficits. This refers to both public and private investment. There is also some evidence that investment (as indicated by a high capital-output ratio) has been relatively inefficient, so that a high investment ratio has been needed to achieve a modest per capita growth rate. Of course, some part of the higher investment ratio relative to other countries is explained by Australia's relatively high labor-force growth rate.

The main point to make is that these trends and international comparisons do not really provide much of a guide for policy. Our savings ratio may be no lower (and sometimes higher) than that of comparable OECD countries, but it is quite likely that all should save more. As for trends, how is one to tell whether an earlier or a later ratio is the more desirable one. There are various approaches to resolve the policy problem.

A common approach (which I do not favour) goes something like this. Start with a predicted labor-force growth rate. Then add a target rate of growth of per capita output. From this can be derived a required investment ratio desired to achieve the required rate of growth. Then add a current account target, hence obtaining a national savings ratio.

---

6 Fred Argy has pointed out to me, subsequent to the seminar where this paper was first presented, that fiscal deficits relative to GDP have not trended upward, because lower public savings have been offset by lower public investment.

requirement. The required national savings would be attained by a mixture of public savings and measures to compel or influence private savings.

The obvious question is where the two targets--the per capita growth rate and for the current account ratio--come from. My alternative approach would be something like the following--which is not far removed from what is actually happening.

First, make investment, private and public, as efficient as possible. This, presumably, is the (or one) aim of the various microeconomic reform measures affecting both the private and the public sector. Such improvements may increase or decrease private investment, but are more likely to increase it in the long run (and hence both increase the current account deficit and raise the growth rate). Increased efficiency is likely to increase profitability and so increase investment. The market, combined with the rate of labor force growth (influenced by the immigration rate), would decide the private investment ratio.

Second, ensure that public savings are sufficient for the government to be able to fulfill its various expected obligations without having to raise tax rates in the future relative to their current levels (which may need to be raised). I am convinced by Fitzgerald (1993) that substantially higher public savings are needed for this reason, and this is indeed accepted government policy.

Third, measures to raise private savings seem to be desirable because of a judgment about private (household) myopia. I admit that this is a disputable judgment. But measures of compulsory saving through superannuation have probably reached their limit. National savings will have to be raised mainly through the public sector.

Fourth, for public investment, I cannot in one sentence give a rule, other than the rather empty one that such investment should proceed until the expected marginal social rate of return is equal to the expected long-term rate of interest on the funds employed. The more enterprises are privatised, the more the investment decision can be left to the market (subject to the usual market-failure corrections).

What is the implication of this approach for the current account. The current account will "come out in the wash" as a residual. It is not actually a target. This is the essence of the New View. The current account deficit ratio may well decline owing to higher public savings (reduced budget deficits), but it may also rise if private investment becomes more productive and hence profitable. Of course, there are bound to be short-term investment booms, perhaps with a euphoria element, possibly calling for some short-term policy reaction.

Having said this in the spirit of the New View, I come to an important qualification. If the current account deficit increases so much (because of rising investment and perhaps a failure of savings to rise sufficiently) that a serious concern with market perceptions (country risk) becomes justified, there is no alternative but to raise public savings, and possibly reduce public investment--that is, to tighten fiscal policy further. In other words, the Modernised Old View comes into play. At present, in 1996, the case for raising public savings now (by raising tax rates or reducing benefits now) can be made for the reasons given earlier--to ensure that the government can meet its future obligations without having to raise tax rates or reduce benefits further later--and additionally as a prudent measure to avoid a potential threat from (possibly irrational) market perceptions.

---

7 Essentially this approach accepts for Australia the Strong New View with regard to investment, subject to the qualification that occasionally there may be a euphoria problem (as possibly in 1988-89), and it is always desirable to remove or moderate distortions.
References


Comment On Corden
The Current Account Issue Revisited
Fred Argy

Max Corden's paper helps to bring economists closer to a consensus on the critical issue of whether the current account deficit should be a target of policy. There are still important differences of opinion but we are much closer than we were, say, ten years ago.

Most economists would now agree with Pitchford that the existence of a large CAD is not necessarily a cause for worry per se, and that trends in saving and the CAD are a matter for policy concern only if

- they are a symptom of underlying factors distorting the choices between saving and consumption (such as public sector myopia or tax disincentives);
- there is market failure which prevents a smooth adjustment to external imbalance;
- or
- CAD's pose wider macro-economic risks (negative externalities) because of financial market perceptions.

Where we might disagree is on the importance of some of these underlying distortions. In my note I want to discuss some of these remaining disagreements.

(i) Market failure

Real exchange rate depreciation of an equilibrating kind is hard to bring about, even with a flexible exchange rate, because of real wage and price rigidities in the system and because foreign exchange markets do not always get it right, especially in the short-term. Eventually the market would correct a CAD "problem" but the process can be quite disruptive and this may justify some government intervention.

Given our flexible exchange rate system, Corden rules out a Mexican affair for Australia. This is true but I think he does not give enough weight to the very real risk of real wage rigidity in the present Australian environment.

(ii) Policy distortions

The policy environment does not offer the community a "neutral" choice between present and future consumption: we have a tightly targeted social security system which discourages saving and a tax system which favours consumption and produces one of the highest rates of tax on saving in the developed world (Pender etc, EPAC 1994). Ideally governments should deal with such saving disincentives at source. However there are strong social and political constraints and it may be necessary to address the problem through other means.

(iii) Macro-economic risks

A large and persistent CAD has an adverse effect on financial market perceptions (country risk), especially when a country's external debt levels are already high. A related complication is that if financial markets believe the underlying saving/investment imbalance will persist, they tend to over-react to economic shocks (such as a change in the terms of trade or unexpected political or policy developments), thus making the economy more prone to instability.
Such potential macro risks (negative externalities) are not adequately taken into account by people who make individual decisions to save, borrow and invest and may justify government intervention.

Corden reservedly accepts this, but many economists (such as Pitchford) remain sceptical. The counter arguments are that the country-specific risk premium (reflecting concerns about Australia's external position) is very small - less than 0.25% (correspondence between George Fane and Rory Robertson in Australian 12/95 etc); that financial markets should be able to distinguish between a benign and malign CAD and if they cannot they should be re-educated; and that government intervention may at times have worse effects on growth and stability than anything the financial markets can do.

These are all fair points and governments need to weigh carefully the balance of risks when considering major policy intervention to target the CAD.

(iii) Erosion of national sovereignty

Corden does not refer to the concern that high dependence on foreign capital can erode national economic sovereignty. In a world of integrated and highly sophisticated capital markets, with large volumes of hot, speculative money free to roam around the globe in a millisecond, no country (however powerful) has complete economic sovereignty any longer. But a country with an already high external debt such as Australia is particularly vulnerable, because sharp rises in interest rates or falls in currency impact not only on economic activity but also on debt servicing obligations. Thus, financial markets, which often have a narrow, short-sighted or self-interested perspective, can at times exercise an unwholesome influence on social and economic priorities in Australia (I have developed this theme in a paper to Conference of Economists, Adelaide 1995).

(iv) Public sector myopia

Corden argues that:

"Australia's increasing current account deficit since the early seventies can be explained...mainly by a significant decline in the public savings ratio...primarily one must understand the higher fiscal deficits" (p.11);

and that

"substantially higher public savings are needed...for the government to fulfill its various expected obligations without having to raise tax rates in the future" (12).

The implication of these observations is that public sector myopia has been a major distorting influence on our CAD. This is debatable.

It is true that the General Government's recurrent budget (especially at the Commonwealth level) has shifted from being predominantly in surplus to being in persistent deficit. Its contribution to national saving has moved from positive to negative.

However, there have been two offsetting developments. First, the public sector's overall capital needs have declined due to slower population growth, increased capital efficiency, increased use of user pricing, advances in technology, network completions for long-lived assets, privatisation etc. - and this is reflected in a sharp fall in infrastructure investment as a share of GDP since the 1970's. Second, Government Business Enterprises (state and federal) have tended to fund an increasing proportion of their investment needs out of internal saving rather than out of borrowings or subsidies from the budget.

As a result the net public sector borrowing requirement - i.e. the gap between government saving and investment - has not shown any notable trend increase over the last 20 years or so (Budget Statements 1995/6 page 2.22). Nor has net public debt shown any upward trend. It is not right therefore to attribute the blow-out in the CAD solely or principally to the decline in public sector saving. One could, as Pitchford has argued, more plausibly attribute the rise in the CAD to a widening gap between private investment and private saving. See Chart.

Nor is it clear that public sector borrowing is causing an inter-generational inequity - i.e. that we are transferring a debt burden or trap to our children and grand-children which will require them to pay more tax or consume less to support dependents.

The inflation-adjusted, cyclically-corrected public sector balance has generally ranged from a surplus to a small deficit (under 2 per cent of GDP) over the last 25 years and has averaged close to zero over the period as a whole (I am indebted to John Neville for this information). The outstanding debt of Australian governments has been falling over the last 40 years and has been more or less steady even in the last 15 years (when our net external debt has been rising). Moreover Australia's public sector deficits and public debt are low by world standards (Budget Papers 1995-6, pp.1-12).

All this does not suggest a major inter-generational budgetary problem in Australia. Research on this issue is still continuing (Ablett is currently refining his analysis), and we probably will not have a conclusive answer until we have a comprehensive form of generational accounting. In the meantime it is useful to remember that future generations are likely to be richer than the present one and that borrowing which is well invested could prove a positive bequest rather than a liability. Indeed countries with large budget surpluses such as New Zealand are beginning to wonder if they are being unfair to present generations.

In short, it is hard to argue convincingly that Australian governments have been myopic and have been distorting the CAD. But this does not reduce the need for firm fiscal discipline in the years ahead - for three reasons:
• at the peak of the cycle in 1995 we were still running a structural deficit even after correction for inflation (source: Neville) and we may not be leaving enough room for discretionary fiscal action in the event of a serious recession;
• there is a risk that if fiscal policy is not tightened the Reserve Bank might feel impelled to apply a stringent monetary policy, which would impede the adjustment process (because of perverse effects on the real exchange rate);
• it is difficult to find a fast and effective way of stimulating private saving (see below), so the onus has to fall heavily on government saving, even if this is not the main source of the problem; I agree with Corden that "measures of compulsory saving through superannuation have probably reached their limit. National savings will have to be raised mainly through the public sector"

Ability to control CAD
While I am broadly of the view that national saving is a legitimate target of policy for the reasons outlined earlier, and while I see medium-term fiscal policy as the main vehicle for this purpose, there is real question (often lost in the debate about targeting of the CAD) about whether governments can really control both economic growth and the CAD.

The impact of fiscal contraction on GDP growth and the CAD hinges greatly on the degree of flexibility of the economic system and in particular real wage flexibility, which is often lacking, especially in Australia. Its impact on national saving depends on the nature of the budgetary measures used. Tax increases or cuts in middle-class welfare are likely to lead to large offsetting cuts in private saving and in any case they are anathema to politicians. While cuts in welfare and social programs might have a greater impact on national saving (per budget dollar), they are hardly consistent with a decent, civilized society. As for the effects of fiscal contraction on investment they are completely unpredictable, as Corden himself acknowledges.

The uncertainties are enormous and economists should acknowledge that policy targeting of the CAD through fiscal policy is fraught with difficulty.

Bottom line
What does all this boil down to? I think Corden has it broadly right in his concluding summary; but in the final paragraph he seems to want fiscal policy to respond to any sudden mood changes of financial markets about country risk - and this worries me. I would argue that

• the Government should put in place a medium-term national saving strategy which is (and is seen to be) broadly consistent with both firm economic growth (3 to 4 per cent per annum) and with a lowering of current account deficits over time; this will require a structural fiscal tightening over the cycle and possibly further incentives for voluntary saving;
• it should then try hard to explain its underlying strategy to financial markets; and
• having done all that, the Government should let the CAD "come out in the wash" as a residual; if markets are occasionally crabby and destabilise interest rates and exchange rates (as in 1994), then so be it: the alternative of succumbing to the ill-based fears of markets is worse.

Comment on Corden
The current account issue revisited
Heinz Arndt

Max Corden has certainly moved quite some way from Pitchford's (and his own earlier) Strong New View. This is to be welcomed. But while he now concedes numerous objections, he treats them as mere qualifications. In the end, he dismisses them as unimportant: 'the current account will "come out in the wash" as a residual. It is not actually a target.' I remain unconvinced, for at least four reasons.

1. Meade, applying Tibergen's principle, taught us that in order to attain the two targets of macroeconomic policy, internal and external balance, we need two instruments: demand management and the real exchange rate (or, as Corden used to put it, expenditure-cutting and expenditure-switching). He now says that the current account is irrelevant. External balance is no longer a target of policy. It can be left to market forces, the floating exchange rate. This is very much like the pre-Keynesian view about internal balance: it can be left to Say's Law or at least to the rate of interest equating saving and investment.

2. A widely held view, only implicit in Corden's paper, is that use of the exchange rate as an instrument for external balance is no longer possible in a world of uncontrollable international capital mobility. A case can be made for this view, though I think it is too pessimistic. But it does not dispose of external balance as desirable and an important policy objective. We may not know how to achieve full employment without inflation, but this does not mean we can abandon internal balance as a target of policy. It is one thing to say that we no longer have any (or much) control over the vertical axis of the Swan diagram; it is another to say it is irrelevant. The fact that the current account deficit is identically equal to the excess of investment over saving (M-X = I-S) does not mean, as some supporters of the New View seem to think, that international competitiveness no longer matters.

3. In any case, do we really live in a world of floating exchange rates? How many countries operate a wholly clean float? Five or six? And why do most governments tie their currencies to anchors or in other ways manage their (nominal) floats? Because they think external balance is an important policy target which, because of all the externalities mentioned by Corden, cannot be left to a floating rate. Corden claims that the New View is 'now widely understood and accepted in the economic profession'. I doubt this. It is certainly not accepted by governments, politicians, central bankers, business and media commentators. So almost universal is the adherence of public and informed opinion to various shades of the Old View that the New View has a 'flat earth' quality about it.

4. Obviously, in some circumstances, as in Australia for much of the 19th century, a current account deficit accommodates capital inflow. But in others it is the result of deficient saving and/or competitiveness and has to be financed by borrowing abroad. On the New View, this is not a problem because, given the new international mobility of capital, the CAD can always be financed by drawing on other countries' savings. But is it realistic to assume an infinitely elastic supply of overseas capital? No doubt capital can still be obtained at a price, but the adjustment is liable to be painful.
Comment On Corden
The Current Account Issue Revisited
George Fane

In this comment I argue that sovereign default risk and foreign debt can interact to create negative externalities at the national level, thereby providing a possible justification for policies designed specifically to reduce foreign debt. In terms of Max Corden’s system for classifying views about the current account and foreign debt, this is the “modernised old view”. However, since the evidence surveyed below suggests that these externalities are of negligible importance in Australia, despite their considerable importance in many Latin American countries, my views about Australia’s foreign debts differ only negligibly from what Corden labels the “strong new view”, propounded most forcefully by John Pitchford. For those who share my position, and use Corden’s classifications, an aeroplane going from Latin America to Australia would be like a ‘phone box for Clark Kent: one would board as a modernised old worryer, but step out in Australia a strong new Pitchford.

A simple example can illustrate the externalities associated with sovereign risk and foreign debt. Ignore inflation; assume that the risk-free world interest rate is 5 percent; and consider a country with a 1 percent country-specific risk premium, which arises because there is some probability of partial default associated with national debt rescheduling. The additional default risk of individual private borrowers is ignored; and it is assumed that if national rescheduling occurs the government will ensure that private debts are rescheduled on the same basis, and in the same proportions, as public debts – this could be enforced by means of exchange control regulations.

To provide foreign lenders with the 5 percent expected return available on other loans, residents of the country will have to contract to pay an interest rate of 6 percent on foreign borrowings. In the absence of a tax on foreign borrowing, the expected private real cost of borrowing to domestic residents would also be only 5 percent, because they would allow for the possibility that national rescheduling might save them from having to repay the full amounts of their contracted foreign debts. But the social cost of foreign borrowing is higher than 5 percent, because the calculation of the social cost, unlike the private cost calculation, must take account of the fact that increased foreign borrowing raises the probability of partial national default, and therefore raises both the contract interest rate facing all domestic borrowers and also the probability that the country will incur default penalties imposed by its foreign creditors. These penalties might take the form of trade sanctions, seizure of assets, denial of trade credit, loss of reputation, and denial of future access to bond and equity markets. In the event of a national rescheduling many citizens may suffer these penalties, whether they have borrowed abroad, or not.

The gap between the social and private costs of foreign borrowing measures the marginal net external cost of foreign borrowing to residents, other than the borrower. Under strong simplifying assumptions, it is approximately equal to the country-specific risk premium. An optimal policy for internalising this externality is therefore to impose a Pigouvian tax on interest payments abroad equal to the country-specific risk premium. Similarly, the appropriate shadow interest rate for a riskless public sector investment project would be the 6 percent contract interest rate, not the 5 percent risk-free rate.

One way of measuring Australia’s country-specific risk premium is to compare the interest rates paid by the Australian government and by the lowest-risk borrowers, such as the World Bank, for loans of similar maturities, denominated in the same currency, US dollars. Craig Applegate and I noted that this premium was usually well below 0.5 percent in 1988-89; but, as I noted in a letter to The Australian (31/10/1995), it was above 1 percent throughout 1994. Rory Robertson, of BT Australia, subsequently wrote to The Australian to criticise this measure and advocate another - the excess of the average contract interest rate on bonds with the same Moody’s credit rating, Aa2, as Australia’s, over the average contract interest rate on bonds with the highest credit rating, Aaa. Moody’s estimate that this premium has recently been of the order of only 0.09 to 0.25 percent. The large discrepancy between these low estimates and my much higher estimate for 1994 is a puzzle, particularly since the Moody’s estimate is effectively derived as the average of a large number of individual premia of the type I had used. Why do investors in the US bond market snap up the apparently underpriced, high-yielding, Australian bonds?

If the Reserve Bank and the Treasury already know the answer, they could make an unusually cost-effective contribution to policy debate by explaining it to the rest of us. Perhaps part of it is that the outstanding quantities of Australian government bonds denominated in US dollars are now very small. In June 1994, the outstanding amount of the bond whose yield Applegate and I had been using for our comparison was only US$ 31 million. If this amount is widely held, it would be difficult to buy it in big enough parcels to be of interest to large institutional investors. And thinness may well command a premium of its own. If, as I now believe, this conjecture is roughly correct, the very small Moody’s-based estimate of Australia’s risk premium of only 0.09 to 0.25 percent is much more accurate than the 1 percent, or more, which I had estimated for 1994. In 1992, Applegate and I had argued that a risk-premium of less than 0.5 percent was too small, relative to collection costs and the other anomalies in Australia’s taxation of international capital flows, to justify the introduction of taxes to discourage capital inflow. Acceptance of the still lower Moody’s-based estimate substantially strengthens this conclusion.


[13] The bonds we compared were Australia 1985 11.25% maturing 28/05/2000 and J.B.R.D. 1985 10% maturing 15/02/2001. The yield data were taken from Datasource; the amounts on issue were taken from the 1994 Budget Papers.

[14] An alternative logically possible explanation is that Moody’s did not downgrade Australia nearly enough in the view of the US bond market. I think that this possibility is almost certainly wrong, although if it were correct it would invalidate my measure, rather than the Moody’s based estimate.

---

8 I am grateful to Anne Daly and Ross McCleod for helpful suggestions.


10 Throughout this comment, all interest rates and probabilities are expressed on an annual basis.
Economic Policies and Views of the Current Account

John Pitchford

Views about the current account and foreign debt mean little unless they include policy prescriptions, including amongst these that of no action. From the trade side a current account deficit can be defined as the excess of imports over exports plus net income paid abroad. If a country has pegged its exchange rate and faces limited mobility of international financial capital it might be forced to try to reduce a current account deficit by restrictive macroeconomic policies if it wishes to avoid a currency crisis and devaluation. Unless there is substantial excess demand, this is liable to be very costly in terms of growth and employment. A preferable option is to allow the exchange rate to be market determined, in which case this motive for policy disappears.

On the income/expenditure side of the national accounts a current account deficit is the excess of private investment over saving plus the fiscal deficit. Changes in real exchange rates and other variables, such as output, ensure that the two measures of the current account are equal. From now on suppose that the economy has a floating exchange rate and operates in a regime of highly mobile financial capital. There would seem to be no motive for policy action on a current account deficit as such. However, as the work of Fane and Applegate [1995] and Fane [1996] makes clear, there may be a case for intervention on the basis of the risk premium created by the possibility of government default on the foreign debt that has resulted from a run of current account deficits. In practice there would seem to be innumerable obstacles in the way of effective taxes to correct such an externality. Are they just confined to interest bearing debt, do they apply to capital outflows as well as inflows, won't they be easily evaded, can we be sure they produce a Pareto improvement when there are other distortions such as tariffs, what effect will they have on possible externalities from the flow of technical knowledge from foreign investment? In any case this seems to be the limit of policy action that has any direct relevance to the current account deficit as such.

There are plenty of other distortions in the Australian economy, and major variables in the Australian economy, including the current account deficit will be affected by them. Some see the fact that the current account is influenced by distortions as a reason for policy action. For instance, the fact that private saving appears to have fallen in Australia in recent years is regarded by some as a problem requiring some form of remedy. In itself, this is a subject that is worth investigating. However, labelling this a 'current account problem' adds nothing to the analysis of the question. Indeed it is liable to lead to errors such as associating some concept of a 'saving shortfall' with the current account deficit. If distortions, such as tax disincentives, can be identified then a case might exist for their removal. Such a case is in no way informed by knowledge of the behaviour of the current account deficit. Similarly, the search for an efficient and equitable pension system is a problem in its own right and exists whatever the state of the current account and the level of foreign debt.

Certainly, one aspect of the evaluation of fiscal deficits is government debt and its relation to the foreign indebtedness. However, again there is no simple relationship to the state of the current account that specifies a particular policy action. The significance of fiscal deficits depends on such factors as their influence on current macroeconomic conditions, their implications for the tax burden on future generations and their consequences for sovereign risk. These issues are obscured by approaching them from the viewpoint of particular current account outcomes. Again, they imply no policies in relation to the current account as such.

I find it a matter for concern that the starting point for policies on such issues of saving, pensions, fiscal outcomes or even the level of economic activity can be the state of the current account deficit. These problems either exist in their own right or they do not exist at all.

References


Fane G., (1996) (This paper)
Australian National University
Centre for Economic Policy Research
Discussion Papers 1995 - May 1996

CEPR Discussion Papers are available free of charge from The Publications Officer (Catherine Baird), Centre for Economic Policy Research, RSSS, Australian National University, Canberra ACT 0200. Papers marked * are out of print. Photocopies can be supplied at a cost of $10.00 per paper. Payment must accompany orders for photocopies (cheques should be made payable to CEPR ANU).
Orders may be faxed or e-mailed to
Fax: 06 249 0182; e-mail: ceb302@coombs.anu.edu.au; Tel. Enquiries: 06 249 2247.

1996

347 Kossoudji, Sherrie A. and Deborah A. Cobb-Clark
Coming out of the shadows: learning about legal status and wages from the legalized population

346 Tyers, Rod and Yongzheng Yang
Trade with Asia and skill upgrading: effects on factor markets in the older industrial countries

345 Corden, W.M.
The current account issue revisited
With Comments by Fred Argy, Heinz Arndt, George Fanen, John Pitchford

344 Gruen, Fred
The quality of life, the national interest and the role of economics

343 Castles, Francis G.
On income inequality and democracy: theories and findings in search of a viable data base

342 Haskel, Jonathan
The decline in unskilled employment in UK manufacturing

341 Cobb-Clark, Deborah A. and Marie Connolly
The worldwide market for skilled migrants: can Australia compete?

340 Will, Lou
Immigrant earnings change: the importance of Australian schooling

339 Corden, W.M.
Strategic trade and industrial policy

*338 Quiggin, John
Estimating the benefits of Hilmer and related reforms

1995

*337 Hilmer, Fred
Competition policy: underlying ideas and issues. (Keynote Address to the 1995 PhD Conference in Business and Economics, November, Perth.)

336 Apps, Patricia
Taxation of families: individual taxation versus income splitting

335 Wellington, Alison J. and Deborah Cobb-Clark
The labor-supply effects of universal health coverage: what can we learn from individuals with coverage through their spouses?

334 McKibbin, Warwick J. and Eric Siegloff
International macroeconomic policy coordination: implications for Australia

333 McKibbin, Warwick J. and Dominick Salvatore
The global economic consequences of the Uruguay Round and implications for Australia

*332 Gruen, F.H.
The Australian welfare state: neither egalitarian saviour nor economic millstone?

Saunders, Peter
The welfare state: a reply to Fred Gruen.

331 Sherrie A. Kossoudji and Deborah A. Cobb-Clark
Finding good opportunities within undocumented markets: US occupational mobility for Latino workers

330 Garrett, Geoffrey and Deborah Mitchell.